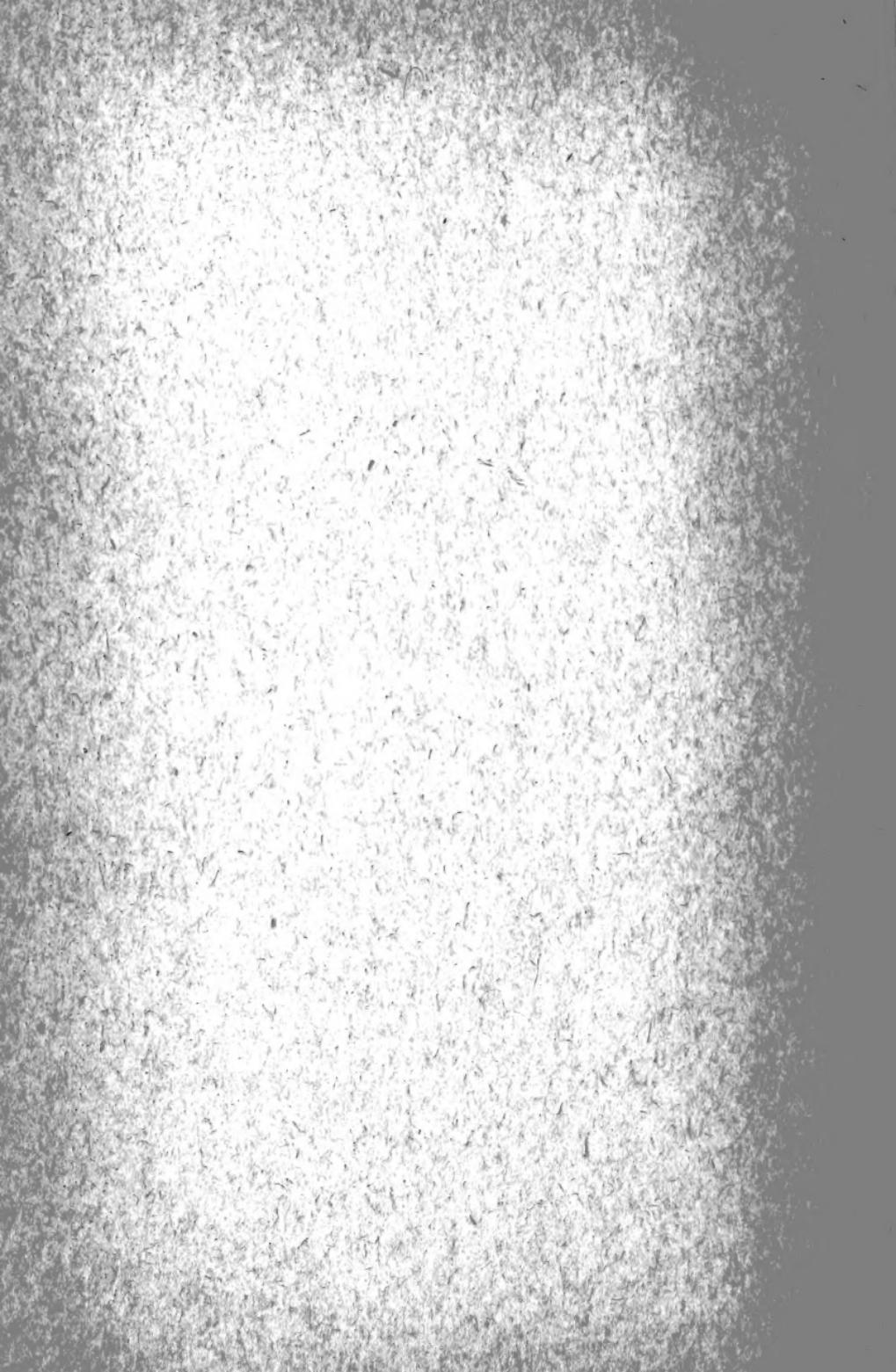


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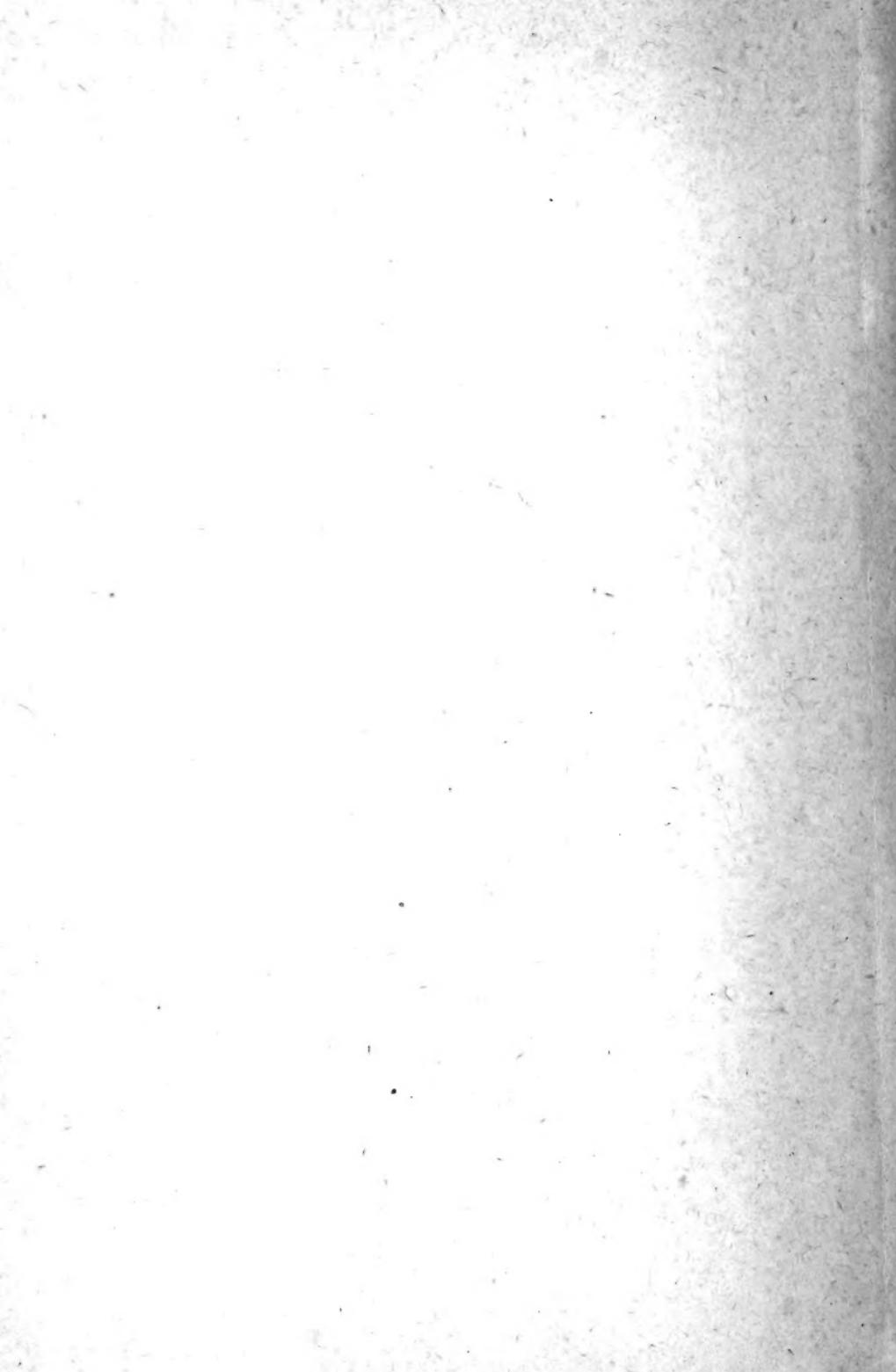


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GERMAN-ENGLISH DICTIONARY

for
ELECTRONICS ENGINEERS
and
PHYSICISTS

WITH A PATENT-PRACTICE VOCABULARY

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FIRST EDITION

1946

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To
Nelson M. Cooke
and
John Markus,

Authors of
Electronics Dictionary



PREFACE



"L'avenir de l'électricité, c'est dans le vide." (The future of electricity lies in the vacuum.) This remark, made before the Académie a generation ago by a famous French physicist, has proved to be prophetic. For the world has witnessed amazing developments in that branch of electricity which is based upon the employment of a vacuum: ELECTRONICS. Yet in spite of these great developments (or possibly because of them), and in spite of an increasingly urgent need for foreign-language dictionaries, students of electronics and allied problems have been forced to proceed without a lexicographical tool which brings together the terminologies of the two languages most vital to their work, German and English.

The authors believe that this volume will be welcomed by all electronics engineers and all physicists, notwithstanding certain limitations in size and scope which have been imposed by the war. It contains nearly 21,000 entries, representing most of the terminology current in 1939 and an appreciable number of terms introduced during the war years.

Owing to a lack of earlier German-English dictionaries in the general field of physics, the task of compilation has proved unusually difficult. The only outstanding reference books hitherto available for consultation have been Sattelberg's Wörterbuch der elektrischen Nachrichtentechnik (1926) covering the signal art in general, and Austin M. Patterson's famous German-English Dictionary for Chemists (1935). The bulk of the material in the present volume has been drawn from magazines, scientific journals, books, and patent literature. The definitions gleaned from other books have in most instances been amplified and re-worded.

A somewhat unorthodox policy has been followed by frequently adding explanatory annotations to the English-language expressions. This has been done in order to supply related terminology for the benefit of the reader who may be unfamiliar with a given subject. Ample cross-references have been inserted throughout. And for those who desire fuller information, source and reference books--including a number of outstanding works of British origin--have been listed in a bibliography. The authors recommend purchase of some of the items included in this list, particularly the Electronics Dictionary by Nelson M. Cooke and John Markus.

Indeed, the authors are deeply indebted to these authors and their book for much valuable information.

We also wish to express our gratitude to all those who have aided us in one way or another, especially to E. R. Weinmann, Arthur Worischeck, Walter Brunberg and Dr. G. Ornsen who assisted in the proofreading. We shall be equally grateful to those who bring to our attention such errors, imperfections, and omissions as are inevitable in the first printing of a work which is a pioneer in its field. A revised and amplified edition is being planned for a future date, and correspondence with the authors is solicited from those wishing to co-operate in the compilation of a revised text.

The Twelve Acres,
Stone Ridge, N.Y.
and
55 W. 42nd Street,
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August, 1946

Bernard R. Regen
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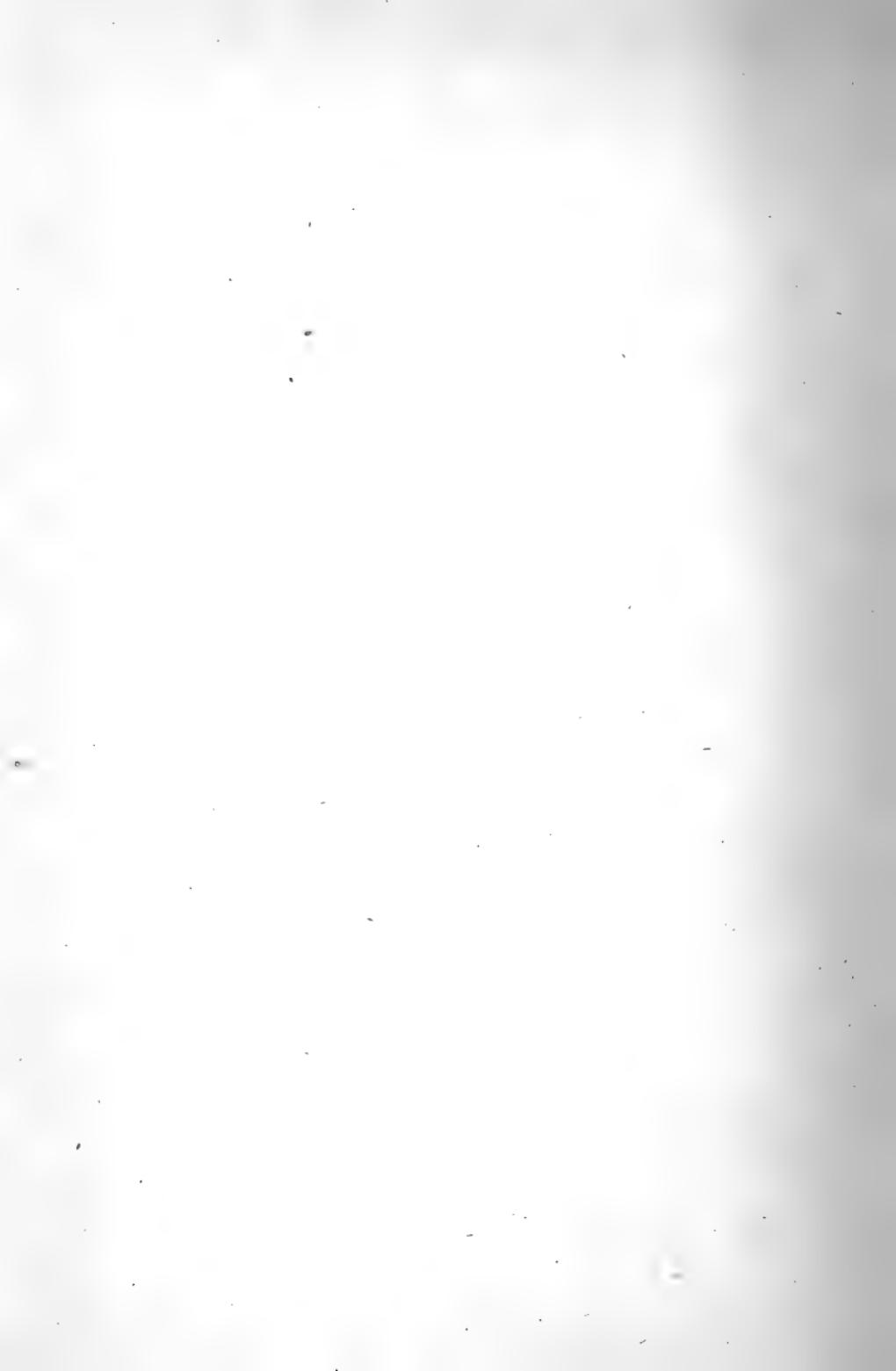
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Magazines covering radio, sound-film, television and related physical sciences and technological arts; foreign-literature reviews regularly appearing in some of them. Abstract journals such as Science Abstracts (A & B), Physikalische Berichte, etc. Patents.

ABBREVIATIONS

a-c; a.c.	alternating current	ldspk.	loudspeaker
ac.	acoustics	magn.	magnetism
a-m	amplitude modulation	micr.	microscopy
AF; a-f	audio frequency	m.p.	moving pictures
avc	automatic volume control	mus.	music
c.-r.; CR t.	cathode-ray tubes	obs.	obsolete
cer.	ceramics	opt.	optics
chem.	chemistry	phon.	phonograph
cr.	crystallography	phot.	photography
d-c; d.c.	direct current	phys.	physics
d.f.	direction-finding	q.a.v.c.	silent automatic volume control
el. engg.	electrical engineering	RF; r-f	radio frequency
el. opt.	electron optics	spec.	specifically
f-m; FM	frequency modulation	spectr.	spectroscopy
		telev.	television.



A

a.a.0. in the place cited, loco citato, quoted reference.

Abänderung change, alteration, modification, amendment.

Abänderungspatent re-issue patent.

abarten vary, degenerate.

Abbau decomposition, disintegration, degradation, attrition. **Frequenzfrequenzdivision** frequency division, f. submultipllication. **-mittel** disintegrant. **-verhinderndes Mittel** anti-disintegrant, stabilizer.

abbiegen bend off or away, bend angularly; turn off.

abbilden image, focus.

abbildende Ringlektrode focusing ring (el.opt.).

Abbildung imaging, imagery, image formation; figure(Fig.), illustration, drawing, sketch, cut.

Abbildung, geteilte split focus (Walton method of scanning). **-,** **komatische** comatic image. **-,** **konforme** conformable representation. **-,** **punktförmige** point image. **-,** **punktuelle** point focal vision or imagery.

Abbildungs-fehler defect of image, aberration(opt.). **-gegenstand** imaging object. **-optik** imaging "optic", focusing o. **-vermögen** resolving power (opt., micr.).

abblättern scale (off), shell, chip or peel off, descale, defoliate, exfoliate.

Abblendekapotte dimming cap.

abblenden (cf. abdecken) mask off, stop down (with masking diaphragm), occult, diaphragm, gate, blank, dowsing (a beam), wipe, dissolve, fade or black out.

Abblender, Strahl- means to mask, stop, dowsing, occult or eclipse

rays or a beam, blanking or blanketing means.

Abblendung, Iris- iris-ing out.

abbreiten stretch out, flatten.

abbremsen decelerate, retard, brake (electrons, etc.).

Abdeck-aufzeichnung masking recording, matting. **-blende** shutter, mask, shutter m. **-doppelzackenspur** duplex variable -area track **-einfachzackenspur** unilateral variable-area track.

abdecken (cf. abblenden) diaphragm, mask, eclipse (beam or pencil, by shutter, etc.), occult (a lens); uncover; cover; provide a resist coat (in metal etching).

Abdeck-flügel masking or shutter blade or vane. **-scheibe** shutter disk with spiral slot, stop disk with spiral slot cyclically co-operating with quadruple-spiral scanning disk apertures (telev.). **-seite** masked side (m.p.).

-streifen squeeze unit, barrier (m.p. film).

Abdeckung, Einfachzackenschrift mit unilateral variable-area track made with single-vane shutter.

Abdeckverfahren shutter mask method.

abdichten seal, pack, provide glands

Abdichtung tight seal, packing, hermetic plumbing.

Abdrift drift (off course, of air plane, etc.). **-visier** drift meter.

abdrosseln throttle, choke.

Abdruck copy, impression, print, cast, counterpart, replica.

Abdruck, Kontakt- contact print (phot.). **Probe-** proof, p.print, p.sheet.

abdrucken print, reproduce or copy (by printing or impression); stamp.

abdunkeln darken, cut off or dim (light), occult, eclipse, obscure, blanking or gating of spot (in telev.).

Aberkennung abrogation, abjudication, deprivation.

Aberration, Flächen- zonal aberration.

aberregen de-energize, de-activate.

Aberregung, Relais- de-energization of a relay.

abfachen classify; partition, form compartments.

Abfall drop, fall, droop, decline, descent; waste, scrap, refuse, discard.

abfallen fall or drop down or off, slope down, droop, release (a relay).

Abfallprodukt by-product, waste p.

abfangen capture, catch, intercept; pull (an airplane) out of a dive and level off.

abfasen chamfer, face.

abfasern lose fibers, fuzz.

abfassen frame, draft, prepare (text), write, draw up (a specification, etc.).

abfiltern (cf. **Filter**, **ausfiltern**) filter or strain off (by sieve, etc.).

Abfindungssumme indemnity, money paid in settlement (of claims, etc.).

abflachen flatten, smooth down, broaden, make oblate.

Abflachung bevel(ing), rounding off (a curve), leveling, flattening, smoothing, oblateness(at poles).

Abflachungsdrossel smoothing coil, s.choke.

Abfliegen outward course, flight away from airport.

abfliessen leak off, flow or drain off or away.

abfluchten align, line out.

Abflug, Ziel- flight away from object.

Abflugszeit outward flying time (away from airport, in ZZ landing).

Abfluss leak path (for grid current).
 -hahn discharge cock, drain c.
 -ventil discharge valve, drain v.

abfressen corrode, eat away or up.

Abföhladel pecker, selecting needle,

Abfuhr outlet (e.g., in water-cooled tube).

Abführung, Wärme- heat dissipation, h.loss, h."abduction", effect of carrying or conducting away heat.

abfuttern case, line.

Abgabe import duty, tax, fee, royalty; emission (of radiations, electrons, etc.).

Abgabefläche, Elektronen- electron emitting area.

Abgangswinkel angle of departure.

abgeflachte Spannung flat-topped potential(wave).

abgeglichen balanced, equalized, aligned; flush.

abgehender Strom outgoing current.

abgehende Wirbelbahnen trailing vortices(airfoil).

abgekantet chamfered, beveled, canted.

abgeklungene Emanation emanation with diminished or decaying radioactivity.

abgelagert aged, seasoned.

abgeleitete Grösse derived or subsidiary quantity or magnitude.

abgeschirmte Stelle dead spot, radio shadow.

abgeschlossen, in sich selbst self-contained.

abgeschmolzene Röhre sealed off tube.

abgeschrägt beveled, chamfered, canted.

abgesetzt offset.

abgestimmt, nicht- untuned, non-resonant, aperiodic, not in sympathy or resonated.

abgestumpft truncated, blunt-ended, with frustum.

abgewickelte Linie evolute.

abgezweigte Anmeldung divisional application (portion divided off

from original a.).	up microphonic device; standby circuit means.
abgleichen equalize, compensate, balance, trim, align, level.	abhören intercept, listen in; monitor.
abgleichend, selbst- self-balancing.	Abhören, Maschine zum - von Ton-filmstreifen machine for editing and rehearsing sound film.
Abgleich-fehler unbalance, balancing or alignment error, misalignment. -kondensator trimming condenser or capacitor, aligning c. -platte tuning spade, tuning plate, t. wand.	Abhören der Negative direct sound reproduction from negatives.
Abgleichung, Fehl- misalignment, faulty alignment.	Abhör-gerät (Flugzeug, etc.) airplane, etc., sound locator or detector; radio locator, Radar (using uhf waves and echo principle).
Abgleichvorrichtung, Phasen- phase balancer, p. shifter, p. changer, p. compensator network.	-lautsprecher monitoring loud-speaker. -raum mixing room, monitoring booth, "box". -tisch (und Schneidetisch) sound film editing machine.
Abgreifen der Entfernung measuring map range with dividers, etc.	Abhör-, Klebe- und Schneidetisch movieola.
abgrenzen mark off, bound, demarcate, define (the limits of), delimit, circumscribe.	Abisolierer wire skinner.
Abgrenzung und Einteilung, Wellen- frequency and wave-band designation: very low frequency (vlf) 10-30 kc; low f. (lf) 30-300 kc; medium f. (mf) 300-3000 kc; high f. (hf) 3-30 mc; very high f. (vhf) 30-300 mc; ultra-high f. (uhf) 300-3000 mc; super high f. (shf) 3000-30000 mc.	abkanten level, take off edge, chamfer, cant.
Abgriff tap.	abkappen lop off (peaks or crests), clip, limit amplitude.
abhängen depend on; lift off (receiver).	Abkapper amplitude or output limiter.
abhängig, druck- oder temperatur- be a function of pressure or temperature, pressure-or temperature-dependent or responsive.	abkehren turn away or aside, divert; sweep or brush off.
Abhängigkeit, Frequenz- frequency dependence, having f. effect, being affected by, or being a function of, frequency.	abklappen swing or hinge down, out or away, let down.
Abheber plow (to peel film from teeth).	abklingender Kurvenzug decay train.
Abhebestange damper rod (piano).	Abkling-kurve decay curve. -zeit decay period, die-out p.; quench p. (in super-regeneration).
Abhilfe remedy, redress, relief, cure, obviating a difficulty.	-zeitmesser(Fluoreszenz) fluorometer.
Abhörbox monitoring box.	abkneifen pinch off, nip off.
Abhorchen (von Flugzeugen) auditory locating, spotting, detecting, or fixing position (of aircraft, etc.) by sound locator devices.	abknicken bend or deviate (a ray, at sharp angle).
Abhorcherät monitor, check or pick-	Abkommen sight graticule or reticle (opt.), point of aim; agreement, convention, contract, arrangement; deviation.
	Ablagerung deposit, sediment.
	Ablagerungen, inselartige "island" deposits.
	Ablass, Wasser- draining or drainage of water.
	Ablauf expiry, expiration or lapse (of a period of time); rotation

or flight (of electrons); film feed (from magazine spool). -bahn runway, landing ramp (of airplanes).

ablaufen run down (of a spring), return (of dial switch); run off, drain; expire (rights, contracts, etc.).

ablaufen lassen release, let go or return (dial switch).

ablaufend(e) Kante trailing edge.

-er) Kurs course or direction away from airport (in ZZ landing), outward course.

Ablaufzeit return time (of a dial switch).

ablegen(Zeugnis) bear testimony or witness.

ablehnen decline, reject, refuse, challenge, dismiss.

ableiten derive, deduce; turn aside; draw off, let escape, lead or carry off, dissipate or abduct (heat, etc.), shunt, drain to earth.

Ableiter arrester, means to let a charge leak or drain away.

Ableiter, Kathodenfall- valve arrester.

Ableitung leakance (line constant), shunt conductance; derivation (with respect to), differential coefficient (math.); downlead, lead-in (of an antenna).

Ableitung, dielektrische dielectric leakance, conductance. **dritte, der Charakteristik** third differential of characteristic. **Antenne mit -** shunt-excited antenna.

Ableitung, Oberflaechen- surface leakage. **Wärme-** heat dissipation, h. evacuation, loss or abduction, the carrying away or conducting away of thermal energy. **Wasserdraining or drainage of water.**

Ableitungs-dämpfung leakance loss.

-glied shunt element. -strom leakage or stray current. -widerstand leak resistance, resistance leak (of a tube).

ablenken deflect, deviate, inflect, diffract; turn off or aside.

Ablenk-gerät deflection or deflector means, time-base. -kammer deflection chamber, d. space (in electron microscope). -platte deflection plate, deflector p. -spannungen, symmetrische equal and opposite or symmetric sweep voltages or deflection potentials. -spule deflection coil, deflector yoke.

Ablenkung, horizontale horizontal or line scan, sweep or deflection.

Ablenkung, Bild- frame or picture scan or sweep. **Bord-** aircraft error, distortion of bearings (due to ship's field, etc.).

Horizontal- horizontal or line scan, sweep or deflection.

Strahl- ray deviation, r. deflection; r. refraction. **Zeilen-** line scan, line sweep. **Zeit-** time base.

Ablenkungs-empfindlichkeit deflection sensitivity (reciprocal of d. factor). -generator deflection generator, sawtooth g., time-base g., sweep oscillator. -spannung sweep voltage. -spule deflecting yoke, sweeping y., s. coil. -wechsel, **Vertikal-** vertical deflection cycle, v. or frame d. or scan. -weite sweep amplitude. -winkel angle of deviation, a. of refraction.

Ablese-fernrohr reading telescope. -lupe reading lens. -marke index line, i. mark.

ablesen (Karte) read (off from) map or chart.

Ablesescheibe (Peilen) dial of direction-finder.

ableugnen deny, abnegate.

abliegen be spaced apart or away, differ from.

Ablösung, Phasen- phase switching (in polyphase operation of ignitor).

Ablösungs-arbeit, -energie des Elektrons total internal work function (amount of energy re-

quired by electron to break away from incandescence or other metal surface), excitation energy.	
Abmachung agreement, arrangement, convention, stipulation, contract.	
Abmass tolerance.	
Abnahme-elektrode output electrode, collector e. -magnet pickup magnet. -stelle, Ton- sound gate.	
abnehmen tap, transfer (potential, etc.), take off, pick up.	
Abnehmer-sprechkopf sound pickup head, reproducing h. -stelle, Ton- sound gate, s. pickup.	
Abnutzung abrasion, wear and tear, attrition.	
abplatten flatten, oblate.	
abprallen rebound, be reflected.	
Abprallwinkel angle of ricochet.	
abrechnen make an accounting, settle an account.	
Abrede, in - stellen deny.	
Abreiss-effekt (Schwingungen) discontinuity effect (oscillations).	
-kontakt arcing contact (of a switch). -methode adhesion method (used in surface-tension testing).	
-spannung stopping potential.	
abrichten fit, adjust, true, trim, dress.	
Abriss abridgment, abstract, synopsis.	
abrollen (über) ride (on), roll on or off, roll in contact; unroll.	
abrunden round out, r. off.	
Abrundungsradius contour radius.	
Abrutschen, seitliches side slip (of an airplane).	
Absatz wear and tear (of film); offset, reduction, recess, shoulder; subsection (in text).	
absatzweise intermittently, discontinuously, progressively, gradually, by steps, stages or degrees, with intervals, stepwise.	
absaugen (treat with a) squeegee.	
Absaug-feld positive field, suction f., f. designed to draw away, drive or concentrate electrons.	
-ring ring-shaped or annular collector.	
	abschaltbar disconnectible, severable, disengageable; adapted to be disconnected, switched off or cut off.
	Abschaltleistung (eines Schalters) rupturing, circuit-opening or circuit-breaking capacity (of a switch).
	abschattieren shade off.
	Abschattierungsstörsignal spurious signal, shading s. (in iconoscope operation, known also as "black spot", "tilt and bend", "shading", etc.).
	abschichten separate into layers, stratify.
	abschiessen (des Getter) set off, cause vaporization (of a getter).
	Abschirm-becher shield(ing) can.
	-koeffizient absorption coefficient (screening function).
	Abschleifmesser grinding blade or knife.
	Abschlusswand (Kondensator) end plate.
	abschmirlgeln abrade (with emory), grind off.
	Abschneiden (von Amplitudenspitzen) clipping or lopping off of amplitude peaks or crests (in a limiter). -(von Silben und Worten, in Telephonie) clipping, obliteration or mutilation of speech.
	abschrägen bevel, skew, scarf, slope, slant, taper, cant.
	Abschrift, beglaubigte certified or legalized copy.
	abschuppen scale or flake off.
	Abschützung shielding, screening.
	abschwächen reduce (contrast, phot.).
	Abschwächer attenuator.
	Abschwächungslösung reducer solution.
	Abschwörung denial under oath, abjuration.
	absedimentieren sediment, out.
	absehen (von) dispense with, disregard, let alone.
	Absehen sight graticule.
	Absenkung in den Höhen de-accentuation or attenuation of high fre-

quencies, using treble de-emphasizer means.

absetzen lay off or plot (on a map or chart), shape course for; deposit, put down; interrupt.

absitzen lassen allow to settle, deposit or clarify.

Absorptionskante, K- K edge. **Umkehr-** reverse absorption edge or limit.

Absorptionskonstante absorption coefficient. **-küvette** absorption cell. **-modulation** absorption or Heising modulation method. **-rohr** absorption column or tube. **-sprung** absorption discontinuity. **-streifen** absorption bands, a. spectrum.

abspalten cleave (cryst.).

abspannen relieve of tension or strain, relax, release; stay, strain back, dead-end or terminate (a wire).

Abspann-isolator terminal or strain insulator. **-seil** guy or span rope or cable. **-stange** stay terminal, strain pole or mast.

absperren (cf. sperren) shut off, cut off, confine, stop, stopper, seal off.

Absperrklappe, Drossel- throttle clack valve.

Abspieldose electric phonograph soundbox.

abspielen, direktes direct playback.

Abspielnadel phonograph needle.

Abspulen (cf. Ablauf) feeding film from magazine or feed spool.

Abstand nehmen (von etwas) refrain or desist from, dispense with.

Abstand, Augen- interocular distance. **Betrachtungs-** viewing distance. **Frequenz-** interference guard band, tolerance frequency. **Geräusch-** signal: noise ratio.

Hauptebenen- distance between principal planes or points. **Haut-** (focal) skin distance. **Knoten-** inter-nodal distance. **Netzebenen-**

grating constant (spectrometer), interlattice plane distance.

Pfeipunkt- singing, whistling or stability margin. **Wellen-** interference guard band, tolerance frequency. **Zeilen-** line separation, inter-line distance, pitch (telev.).

Abstand-halter spacer. **-isolator** stand-off insulator.

Abstands-messer, Augen- interpupillary distance gage. **-taste** spacer key, blank k.

absteifen strut, prop, stiffen, reinforce, support, shore, truss, stay.

Absteller automatic disconnector or cut-off device (for soldering irons, etc.)

Abstieg, Ballon- descent of a balloon.

Abstimm-änderung tuning drift (due to temperature effects). **-anzeige-** röhre tuning indicator tube, magic eye. **-bereichüberstreichung** scanning a tuning range. **-einrichtung** tuning device or means, tuning control, selector.

abstimmen tune, syntonize (circuits), shade off (phot.), harmonize.

abstimmen, auf Resonanz resonate, tune to resonance.

Abstimm-glimmröhre tuning indicator glow-tube, flashograph. **-kette** tuning arrangement comprising a plurality of oscillation circuits. **-kreis** tuned or tuning circuit, tank c. **-melder** tuning indicator (e.g., of c-r. tube or magic eye type). **-platte** tuning spade or plate, t. wand. **-schärfe** sharpness of tuning or of resonance condition, selectivity.

Abstimmung, feine sharp or fine tuning. **-, fühlbare** lazy tuning (condenser sensibly detained on passing carrier wave). **-, leise** silent tuning, quiet (avc) tuning. **-, rohe** broad tuning, coarse tun-

ing, flat tuning (with little selectivity). -, scharfe sharp, fine or precise tuning. -, schlechte mistuning. -, ungenaue off-resonance tuning. -, unscharfe broad or flat tuning.

Abstimmung, Falsch- mistuning.

Primär- pre-selector means.

Abstimmungs-aggregat tuning set, tuning unit (L and C). -kreuz tuning indicator (magic eye, etc.). -stromkreis, Still- silent (q.a. v.c) tuning circuit.

Abstoppen von Zeitdauern stopwatch measurement of time intervals.

abstossend, wasser- water-repellant, non-hygrosopic.

Abstossung, Coulomb- Coulombian repulsion. **Eigen-, der Elektronenwolken** repelling action of electron charges, negative space charge formation.

Abstossungs-kraft repelling force, repulsion. -potential repulsion potential.

Abstrahl reflected ray.

abstrahlen blast (with shot or sand); radiate, reflect.

Abstrahler radiator (ac., antenna).

Abstrahlfläche radiating, radiation or radiant surface (loudsp.); reflecting surface or area.

Abstrahlung, Schall- sound radiation or projection.

Abstrakte tracker, prolonge (organ).

Abstrebekraft centrifugal force.

abstreichen scrape or strike off, skin, strickle, lute (clay in brick mold).

abstreifen strip, wipe (off).

Abstrich downstroke or trailing edge (of an impulse).

abstufen grade (phot.), graduate, step.

Abstufung, empfindungsgerechte natural or subjective grading or spacing (in chromaticity or chromatic scale, etc.).

Abstufung, Licht- gradation of light. **Schwärzungs-** density

graduation. **Ton-** grading of tones, graduation of intensity.

abstumpfen neutralize, saturate (acids); truncate, blunt; dull, deaden.

Abstumpfungsfläche truncating face (cryst.).

absuchen search, sweep, scan, explore.

Abtast-band scanning belt. -blende (Farnsworth, etc.) scanning aperture or hole (in Farnsworth dissector, Nipkow disk, etc.). -dose electric or pickup soundbox.

abtasten scan, explore, sweep, pick up, probe, search.

Abtaster, Elektronen- electronic scanner, beam sweep, spot or lever electron brush or pencil.

Fernseh- televiser, video scanner.

Film- film scanner (in intermediate film system). **Kathoden-**

strahl- electron beam scanner.

Lichtstrahl- spotlight scanner, scanning brush or pencil, sweep, flying or exploring spot scanner.

Linsenkranz- lens drum scanner.

Oberflächen- surface analyzer (to record irregularities).

Personen- (mit wanderndem Licht) spotlight scanner for persons.

Abtast-frequenz scan frequency (= lines x frame f.). -geschwindigkeit pickup velocity, pickup rate (phon.). -scheibe (cf. Spiral-lochscheibe) Nipkow scanning or exploring disk, spiral disk.

-spalte, **Ton-** sound scanning slit.

-stelle, **Bild-** picture or film gate. -strahl, **Elektronen-** electron spot, e. beam, e. brush (iconoscope).

Abtastung scanning, scansion, exploration, sweeping out (of picture area).

Abtastung nacheinanderfolgender Bildpunkte sequential or progressive scanning of elementary areas. -, quadratische square-law scanning. -, sprungweise

interlaced scanning. -mit unsichtbaren ultraroten Strahlen noctovisor scan (using infra-red rays).

Abtastung, Fernseh-, von Kinofilm telecine scan of moving-picture film. Film- film scanning. Geschwindigkeits- variable-speed scanning. Schwingsspiegel- vibrating mirror scanning (in Mihaly Telehor). Strahl- electron beam scan, spotlight sweep or scan. Teil- partial or fractional scan, coarse scan. Ton- pickup of sound. Vielfach- multiple scan.

Abtastzeile scanning line, s. strip.

Abteilung, Berufungs- appeal division or department. Beschwerde- appeal dept., board of appeals. Nichtigkeits- annulment dept. (of G.P. Office).

abtonen, abtönen shade off, tint, tone down.

abtragen plot or lay off.

Abtragung disintegration, attrition, degradation.

Abtriebschmelze refining melt.

Abtrenner, Impuls- synchronizing separator, amplitude s., clipper.

Abtrennung severance, separation; division (of a patent application).

abtreten assign, cede, convey, transfer.

Abtretender assignor.

Abtretungserklärung declaration of assignment.

Abrift drift (of ships or air-planes). -messer drift meter.

Abtropf-schale jar, dish, drip, drainer. -ständер draining stand.

Abwägeschaltung comparator circuit organization.

abwalzen (cf. abrollen) ride on, roll.

abwandeln vary, change, alter, modify.

Abwärtstransformator step-down transformer.

abwassern (Flugzeug) rise or take off from water (airplane).

abweigig reden argue beside the point, tergiversate, dodge the issue.

Abwehr, Lärm-, Schall- noise abatement, n. suppression, n. attenuation, combating of n.

abweichen differ, vary, deviate, diverge, depart from; soak off.

Abweichung departure, difference, disparity, divergence, deviation, variation, declination, anomaly, swing, drift. -, seitliche sphärische transverse spherical aberration.

Abweichung, Farben- chromatic aberration. Flächen- zonal aberration. Frequenz- frequency departure, swing, deviation or drift, lilt (slow fluctuation). Kursyaw, deviation from course. Linsen- lens aberration. Nullpunkt- zero error. Rest- residual aberration. Seiten- lateral deviation.

Abweichungskorrektur achromatization (opt.).

abweisen (eine Klage) dismiss (a suit), non-suit.

Abweisungsmaterial anticipatory material or references, anticipations (in prior art).

abwenden avert, avoid.

abwerfen release (a keeper).

Abwerg waste tow or oakum.

Abwesender absentee.

Abwickelachse feed spindle.

abwickelbar developable.

abwickeln wind off, unwind, reel off; rectify (math.).

Abwickelspule feed spool, f. reel.

Abwickler, Film- magazine drum, feed reel.

Abwind down current.

abzapfen draw off, tap.

abziehbare Papier transfer paper.

abziehen print, copy; trim or true (a wheel); draw off or tap.

Abzug print, copy.

Abzug, Korrektur- proof sheet.

Abzüge machen take prints, print,

- copy, multigraph.
- Abzugsrohr** vent stack (of arc-lamp); waste or drain pipe or tube, vent p., outlet.
- abzweigen** (von Strahlen) split off or deviate (rays).
- Abzweigpunkt** tap, distributing point, branch-off point.
- Abzweigung** tap, branch-off, tie line, ramification; division (of a patent application).
- Abzweigwiderstand** leak resistance.
- Achromasie** achromatism, achromatization, degree of achromatic correction.
- Achse**, ausser extra-axial, abaxial. -, grosse major axis. -, kleine minor axis.
- Achse, Abwickel-** feed spindle. Dreh- axis of rotation, center of r., pivot, fulcrum, hinge. Drill- rotator (quantum theory). Flugzeuglängs- fore-aft line, major axis of airplane. Gegen- anti-axis. Halb- semi-axis. Haupt- prime or major axis, vertical axis (of rhombic crystal). Kristall- crystal axis, crystallographic a. Lande- correct bearing or line for approach or landing. Längs- longitudinal axis, fore-aft line (of air and water craft). Linsen- optical axis (of a lens). Makro- macro-axis (cryst.). Neben- lateral axis (of rhombic crystal), secondary axis. Säulen- prismatic axis. Spulen- bob or core of a spool (film).
- Achsenankerrelais** axial-armature relay.
- achsenentfernt abaxial, off axis.
- Achsenkreuz** coordinate system.
- Achsenrichtung, Kristall-** crystallographic axis orientation.
- achsensymmetrisch axially symmetric, in axial symmetry.
- Achsenwinkel** axial angle.
- achsig, ein- uniaxial. ein- und ein- orthorhombic (cryst.). zwei-
- biaxial.
- achsparallel** axis-parallel, paraxial (e.g., rays beside, or parallel to, axis).
- Achs-schenkel** axle journal. -stand wheel base.
- achteckig octagonal, eight-cornered.
- Achtelkreis** octant.
- Achtelkreisförmige Komponenten** octantal error components (df).
- achteraus, Backbord- port aft. recht- right astern. Steuerbord- starboard aft.
- Achterbündel** eight-wire core, quadruple twin.
- achterliche Kurslinie astern course, direct line away from transmitter, "come-from" indication.
- Achter-schraube** octet ring. -spule figure "8" coil.
- Acht-flach** octahedron. -polröhre octode, eight-electrode type of tube or valve.
- adaptiertes Auge, dunkel-** dark adapted eye.
- Adaption, Dunkel-** dark adaptation, scotopia.
- Adaptionszustand, Augen-** (state of) retinal adaptation.
- Adatom** adsorption atom.
- Adcocksystem (U-System)** (spec.) vertical aerial or Adcock system (U-system); also spaced aerial df system.
- additive Modulation** upward modulation, negative m.
- Ader, Zähl-** pilot wire, marked w., meter w.
- AEF (Ausschuss für Einheiten und Formeln)** Committee on Units and Formulae, Standards or Standardization Committee.
- "Aeo" Aufzeichnungslampe Aeo light, alkaline-earth oxide lamp, Aeo lamp.
- Aeols-glocke, Glas-** glass Aéolian bell. -harfe Aeolian harp.
- affinieren** refine.
- After-kristall** pseudomorph. -kugel spheroid.

Aggregat, Lampen-	bank or pillar of lamps, battens (used on stages).	screen.
Moleköl-	molecular cluster.	Alarm, Aktend-
Aggregatzustand	state of aggregation.	reel-end signal.
Agraffe	stud (piano).	Luft- air-raid alarm.- ende, Luft-
Ah. (Amperestunde)	ampere hour.	all-clear signal.
Ähnlichkeits-gesetz, -theorie	similarity principle, similitude theory.	Albedo albedo (reflection factor of diffusely reflecting surfaces, say, a planet).
Akkomodations-entspannung	relaxing of adaptation. -fähigkeit power of accommodation.	d'Alembert'sche Wellengleichung D'Alembertian wave equation.
akkomodationsloses Auge	unaccommodated or fixed eye.	Alhidade alidade, sight rule.
Akkordion-balz	accordion bellows.	Alkalimetall, Erd-
-griff	keyboard.	alkaline earth metal.
Akkordzitter	auto harp.	Alkalizelle alkali metal photo-emis-
Akkumulator, kochender	agitated or gassing accumulator (just disconnected from charger).	sive cell.
Akten, Anmeldungs-	file wrapper, application papers.	Allein-berechtigung sole or exclusive right. -inhaber sole owner or holder.
Aktenalarm	reel-end signal.	Allitieren coat with aluminum, aluminize.
Akten-zeichen	serial number, file n., docket n., reference n. -zeichnung drawing incorporated in docket or case records.	Allstromempfangsgerät universal receiver set.
aktinisch	undurchlässig. adiactinic.	Alphabet, Fünfer- oder Fünfströme-
Aktiniumemanation	actinon.	five-unit code.
aktive Masse	active paste.	Alt alto, counter tenor.
Aktivator, Schwermetall-	phosphogen (e.g., Mn, promoting phosphorescence).	Alt, tiefer contralto.
Aktivierung, Neu-	reactivation, rejuvenation (of a thoriated cathode, etc.).	Altersrank priority.
Akustik s.a. Schall, Ton, Klang, Geräusch.		alterssichtig presbyopic.
Akustik, Bau-	architectural acoustics, enclosure, space or room a.	Altposaune alto trombone.
akustisch(e)	Blendung aural dazzle.	Aluminium-knetlegierung malleable aluminum alloy. -töne aluminum reeds (accordion).
-(e) Empfindung	acoustic perception.	Ametall non-metal.
-(e) Gegenwirkung	acoustic reactance.	Ampere-stunde(Ah) ampere hour.
-(er) Kurzschluss	acoustic feedback or short-circuit.	-windungszahl number of ampere-turns(ats).
-(e) Ortung	sound location, acoustic orientation.	Amplitude, Bewegungs-, Geschwindigkeits- velocity amplitude. Membranschwing- diaphragm excursion amplitude. Stör- noise level.
-(er) Rückkopplung	acoustic feedback.	Amplituden-abschneider peak limiter, clipper, lopper. -anzeiger glow-tube amplitude, tuning or resonance indicator, flashograph t.i.
Widerstand	acoustic resistance; a.	-begrenzer peak limiter, clipper, lopper.
		amplitudengetreu of equal amplitude, with a. fidelity.
		Amplituden-glimmröhre glow-tube amplitude, tuning or resonance indicator, flashograph t.i. -schrift

variable-area (v.-width) recording or sound track. **-selektion**, **-sieb** amplitude filter, a. separator or selector, a. discrimination selector. **-spitzen**, **Abschneiden** der clipping or lopping off of amplitude peaks or crests, by limiter means.

Amt, Eich- gage or calibration office, standards bureau. **Not-** temporary or emergency exchange or office.

amtlicher Bescheid Patent Office action, decision, official notice or notification.

Amtsblatt official gazette or journal.

Amtverkabelung central wiring, office wiring.

Analysator, Suchton- heterodyne analyzer.

anarbeiten attach, join or work onto.

anätzen etch or cauterize superficially or slightly.

anbacken bake on, fix by firing, bake superficially.

anberauen, Termin zur Verhandlung einer Sache set or fix date for hearing a case.

Anblaston Aeolian tone.

anbohren tap, bore, drill.

Anbruch fracture.

Änderungsgeschwindigkeit remaining velocity (ballistics).

Androhung warning, caution, giving notification (of a threatened action).

Andruck-fenster pressure plate, aperture p. (m.p.). **-rolle, Gummি**- rubber-tired pressure or pad roll (m.p.). **-schiene** pressure pad, p. guide.

aneinander gesprengte Prismen broken contact (uncemented) prisms (closely fitted together).

anerkennen acknowledge, admit, recognize.

Anerkennungsurteil consent judgment.

Anfachraum generator or working space (beam tube).

Anfachung continuous excitation of waves (or point where oscillating begins); fanning, kindling.

Schwingungs- wave excitation, w. generation.

Anfachzeit building-up period (time required for oscillating to start).

Anfälligkeit, Stör- susceptibility to trouble, interference or noise.

Anfangs-drift initial drift (of photo-cell). **-geschwindigkeit** initial velocity; muzzle v. (ballistics). **-konzentration** (cf.

Vorsammellinse und Vorkonzentration) pre-focusing. **-strom** starting, initial, incipient or original current. **-wert** initial or early value. **-zustand** initial state or condition.

anfärben stain (superficially).

anfechten, Gültigkeit eines Patentes challenge validity of a patent, argue non-validity.

Anfechtungsprozess contested action.

anfeuchten wet, moisten or dampen (superficially).

Anflug approach (flight), coming f.

Anflug, Ziel- flight towards object or target.

Anflug-grundlinie approach of center of sector. **-kegel** sector of approach. **-manoeuvre** approach procedure. **-richtung** direction of approach, homing direction (of an airplane). **-richtungsfunk** runway localizing beacon (marker).

-schneise approach sector, corridor of approach. **-sektor** sector of approach. **-zeit** time for flight to airdrome.

Anflussgeschwindigkeit velocity of approach, afflux v. (of fluids).

anfressen corrode (superficially or slightly), eat away or eat at, erode, pit, attack, stain.

Anfressung, Rost- corrosion, honeycombing, pitting, tubercular or

channel-shaped corrosion.	emphasize, accentuate, underscore or favor (certain sounds or frequency bands, by tone-control or tonalizer means).
anführen quote, cite, mention.	
Angeber, Ton-, chromatischer chromatic pitch pipe.	
Angeklagter defendant, respondent.	Anhebung, Bass- bass boosting, b. compensation, tone-control means to accentuate low-pitch or b. range, b. emphasis.
angelagerte Elektronen trapped electrons.	anheizen heating up, initial h. (of a tube); kindle.
Angelegenheit case, matter, affair, in re:	Anheizzeit cathode heating time (till stable temperature is reached), thermal time constant (of a cathode), warming-up period.
angepasste Leitung matched line. -, nicht- mismatched line.	anisotropische Verzeichnung anisotropic distortion, shear d., d. of orientation.
angeregte Gruppe exciton (in dielectric breakdown).	Anker armature, keeper (of permanent magnet); anchor, stay, guy; es-capement.
angeschärften Enden, Verbindung mit scarf'd joint.	Anker, Doppel-T- shuttle armature, H-type a. Dreh- pivoted armature. Eichkatzen- squirrel-cage armature. Schwing- oscillating armature.
angezapfte Wicklung tapped winding. -, in der Mitte center-tapped winding, with midpoint tap.	Anker-gesperre anchor escapement. -relais, Schneide- knife-edge relay. -ruhestellung, Relais mit mittlerer neutraler neutral relay, relay with differentially moving armature. -umschlag armature travel, a. transit, armature excursion.
angiessen cast on, pour on; color (by coat of clay).	Anklang concord, accord, sympathy, tuned state.
Angleich, Farb- color matching, c. comparison.	Anklang finden find acceptance, become popular.
angleichen equate, correct, compensate.	Anklingen gradual rise or waxing (of vibrations, etc.), initial sounding, intonation.
Angleichung adjustment, adaptation, (approximate) matching (of brightness, color, etc.).	Anklingzeit starting or onset time (of a tone).
angrenzend border on, adjacent, adjoining, contiguous.	ankohlen char or carbonize (superficially, slightly or partially).
Angrenzung contiguity, adjacency, adjoining.	ankommender Strom incoming current.
Angriffspunkt point of engagement, attachment, action, application or attack (say, of a force).	anlagern combine, become added to, adsorbed or attached.
Anguss lug (cast on); feedhead.	Anlagerungs-reaktion addition reaction. -verbindung addition compound.
anhafrend adherent, inherent, be attached to.	
Anhallen building-up of acoustic energy.	
Anhaltspunkt clue, criterion, index; stopping point, fulcrum.	
anharmonische Terme anharmonic terms or constants.	
Anhäufung aggregation, accumulation, collection, damming up, concentration.	
Anhäufung, Korn- grain aggregation.	
Anhäufungszone zone of accumulation (in ultrasonic waves)	
anheben (von Tönen, Bändern, etc.)	

Anlass-anode starting anode (in arc rectifier). -beständigkeit tempering resistance.

anlassen start, turn on, let in; temper, anneal (glass, metal, etc).

Anlasstemperatur tempering temperature, annealing t., drawing t.

Anlauf pickup, start, acceleration. -beständigkeit resistance to tarnish, t.-proofness. -charakteristik transfer characteristic.

anlaufen become coated with oxide or moisture, tarnish, become dull or dim; start; buck against (a potential).

anlaufendes Flugzeug approaching airplane.

Anlauf-farbe temper color. -stromgebiet range or region of incipient current flow (say, at grid). -winkel angle of approach.

Anlege-kassette clamp-on dark slide. -punkt aiming point.

anlenken pivot, fulcrum, hinge.

Anlenkungspunkt pivotal point, fulcrum, hinge.

annetzen moisten, dampen (superficially).

Anmassung, Patent- usurpation of patent rights.

anmelden (ein Patent) apply for letters patent, file an application.

Anmelder applicant.

Anmeldung, abgezweigte divisional application (part divided off from the original case or docket).

Anmeldungsakten file wrapper, application papers.

Anmerkung annotation, memorandum, remark, comment, (foot, marginal) note.

Anmerkung, Rand- marginal note or annotation, marginalia. Streit- annotations of litigation.

Annahme acceptance, acceptation, adoption; assumption; supposition, presumption, conjecture, surmise.

Anode, Anlass- starting anode (to strike initial arc in Hg rectifier). **Auffang-** collecting or gathering anode (of multiplier);

catcher (of klystron). **Beschleunigungs-** gun anode. **Diaphragma-** aperture anode, anode stop. **Fang-** collecting anode, gathering a., (Farnsworth telev., multiplier).

Lochscheiben- apertured disk anode, ring a. **Nachbeschleunigungs-** second gun anode. **Netz-** plate fed from power pack. **Prall-** target anode, impactor a, reflecting electrode or dynode (of electron multiplier). **Sammel-** collector anode, gathering a. **Voll-** unsplit anode (in magnetron). **Vor-** first anode (c-r. tube); screen grid connected with cathode g. and acting as "fore-anode" in power pentode (Pierce circuit).

Anoden-absinkkurve anode or plate current curve. -ansatzpunkt spot on anode (of an arc). -aussortierung anode sorting. -blende (anode) diaphragm or partition (in cathode-ray tube), first anode, defining aperture (of telev. tube).

-fleck anode spot. -gleichrichtung plate-current rectification or detection, anode bend r.

-loch (cf. Anodenblende) gun (in cathode-ray tube). -rückwirkung anode or plate feedback, plate reaction. -schale anode segment (of magnetron). -schutzenetz screen grid, plate shield. -spannungs-aussteuerung plate voltage excursion. -strahlen anode rays, canal r., positive r. -stromaussteuerung plate current excursion. -unruhe fluctuation of plate or anode feed current. -verlustleistung anode dissipation.

Anomalie, Nullpunkt- origin distortion.

an Ort und Stelle in situ, in the site, on the spot.

anpassen match, adapt; accommodate, adjust, fit, suit.

Anpassung, Augen- adaptation (to change in distance or focus), accommodation (to change in light intensity). **Dunkel-** dark adapta-

tion, scotopia. **Falsch-** mismatching; defective focus. **Hell-** light adaptation, photopia. **Über-** overmatching. **Unter-** under-matching.

Anpassungs-dämpfung matching attenuation, non-reflection a. **-fähigkeit** adaptability, accommodation powers (of eye). **-netz** matching network. **-schaltung** circuit means designed to form or shape synchronizing signals. **-transformator** matching transformer.

anpeilen take bearings from or on (a radio station).

Anregung excitation, stimulation, stimulus, response, sounding (as of a Kundt glass tube).

Anregung, Kern- nuclear excitation.

Anregungs-energie excitation or stimulation energy (e.g., potential).

-faktor excitation factor. **-spannung** exciting or stimulating potential, pre-ionization p., p. to raise an electron to a higher level out of its atomic bond. **-welle** exciton (strictly: an electron in a crystal moving in the field of a positive hole).

anreichern enrich, strengthen, concentrate.

Anreicherungsfaktor concentration factor.

anreihen arrange in, or attach to, a series or row, align.

anreißen pluck (a string or chord).

Anriß cracking, critical break.

ansässig domiciled, residing at.

Ansatz side arm or appendage (of a bulb or tube); adapter (phot.); loss, extension, tail, ear, lug, nipple, shoulder; deposit, sediment.

Ansatz einer Gleichung laying down a formula or equation.

Ansatz, Lichtton- sound-film head.

Nadelton- sound-on-disk attachment or head.

Ansatzfläche des Objektivgewindes

screw shoulder, screw collar or seat of objective amount.

Ansatz-punkt contact point (airplane landing); spot (of arc, etc., on cathode or anode); point of attachment or insertion. **-stück** extension piece, adapter piece. **-bus** extension tube.

anschichten pile in layers, stratify.

anschiessen shoot into crystals, crystallize.

Anschlag limitation or buffer, stop, dog.

Anschlag, Auslösungs- trip dog, trigger means. **Begrenzungs-** back stop, limiting means. **Finger-** finger stop (dial switch).

Anschlagbund stop collar.

anschlagen touch (piano), strike (a string, in percussion instruments), sound or tap (a tuning fork).

Anschlag-linie striking line (piano). **-stelle** striking point.

Anschliff ground and polished surface (under microscopic examination).

Anschluss, Kopfhör- telephone jacks. **Sammel-** p.b.x. line. **Vollnetz-** (Radioempfänger) all-electric set (with mains supply).

Anschluss-berufung cross appeal.

-teil terminal part, connector.

-teilnehmer, Sammel- subscriber with several lines.

anschmelzen melt, fuse or join onto, join by fusion; begin to melt.

Anschmiegung, enge intimate or snug adhesion, adherence, engagement or fit, close contact, hug.

anschmoren scorch.

anschneiden intersect; determine a fix, obtain a bearing.

Anschmitt gating (foundry work).

Anschuss, Kristall- crop of crystals, crystallographic growth, crystallization.

Anschwingzeit build-up period (time required for oscillations to start).

Anschraubring lens flange.

ansetzen crystallize, effloresce; make up (a solution), prepare,

mix; start or strike (an arc).
an sich per se, basically or fundamentally speaking, in or by itself.
Ansicht, Gesamt- total view, general v., assembly v. **Hinter-** rear elevation, posterior view. **Seiten-** side or lateral elevation. **Vorder-** front elevation, anterior view.
Ansichtskopie release print.
anspannen strain, stretch, bend, tension, tense.
anspielen auf make allusion to, hint at.
Ansprache response; inception, onset.
ansprechen in freier Luft response in free space or air (of a microphone).
Ansprech-konstante sensitivity constant (microphone), m. responsiveness. -wahrscheinlichkeit (eines Zählrohres) efficiency of counter tube (likelihood to respond or register).
Anspruch (eines Patentes) claim (of letters patent).
Anspruch, Unter- sub-claim.
Anspruch geltend machen advance, prefer, raise or plead a claim or point.
Anstalt, Forschungs- research institution.
anstechen pierce, tap, open.
Anstellwinkel angle of attack; a. of pitch, blade a.
ansteuern take bearings from, keep on course, head for.
Ansteuerungsfeuer line of approach beacon; directional beacon.
Anstoss nehmen take exception to.
anstossen butt against, collide with, knock against, impulse (a circuit).
Anstrebekraft centripetal force.
Anstreichen stroking (a string), (initial) bowing (of a violin).
Anstrengung, Augen- eye strain.
Anströmrichtung direction of air flow.

Anströmungsgeschwindigkeit afflux velocity, approach v.
Anteil constituent, portion, share, component.
anteilig proportionate, in proportion, pro rata.
Anteilziffer. percentage share.
Antenne Siehe auch "Luftdraht"
Antenne, abgeschirmte shielded (download) antenna, anti-static antenna, screened a. - mit Ableitung shunt-excited antenna. -, ausgekurbelte reeled out, lowered or paid out antenna or aerial (through fairlead of airplane). -, eingebaute built-in antenna. -, eingefahrene retracted or drawn-in antenna. - einziehen reel in, haul in or retract antenna wire. -, künstliche artificial, mute or phantom antenna. -, vom Sender entkuppelte balanced antenna. - mit seitlichem Minimum directive antenna. -, ungerichtetete non-directional antenna.
Antenne, Baken- beam antenna, beacon a., radio range a. **Band-** tape antenna. **Beggerow-Zeppelin** Zeppelin antenna. **Behelfs-** temporary or makeshift antenna. **Boden-** ground or earth antenna; underground or buried antenna. **Dach-** gable roof antenna. **Doppelkegel-, Doppelkonus-** cage antenna, double-cone a., sausage a. **Doppel-V-** double-V antenna, doublet a. **Einfach-** plain antenna. **Erd-** ground or earth antenna; underground or buried a. **Ersatz-** artificial antenna, mute a., phantom a. **Fächer-** fan antenna, harp a. **Fischbauch-** fishbelly antenna (mast antenna in which maximum cross-section and minimum characteristic impedance are in middle). **Flächen-** sheet antenna. **Flossen-** skid-fin antenna (on airplane wing). **Frei-** outdoor antenna. **Gegengewicht-** screened aerial. **Gemeinschafts-** block antenna, communal or party a., centralized or shared a. **Gitter-** parasol-type

antenna. **Harfen-** harp antenna, fan a. **Hoch-** open outdoor antenna (installed at, or reaching, a point high above ground). **Innen-** indoor antenna. **Käfig-** cage antenna, sausage a., hoop antenna. **Kreuzrahmen-** crossed-coil antenna. **Kurbel-** reel antenna, trailing-wire a. **Lichtnetz-** light-socket or -circuit antenna. **Linear-** plain or straight one-wire antenna. **Mikrophon-** microphone boom or outrigger. **Nahschwund-** low-angle or short-range fading antenna. **Netz-** light- or power-circuit antenna, lamp-socket a.; a. adapter, a. eliminator. **Peil-** directional antenna. **Rahmen-** frame antenna, loop a., coil a. **Rauten-** rhombic antenna. **Reusen-** cage antenna, sausage a., hoop a. **Richt-** directional or directive antenna, unilateral a. **Richtungsgeber-** director. **Rundstrahl-** polydirectional antenna, omni-directional a., omni aerial. **Schlepp-** trailing-wire antenna. **Schwundverminderungs-** anti-fading antenna. **Spiral-** (flat) spiral aerial, extensible spiral or coiled antenna, s. loop. **Stab-** rod antenna, whip antenna, upright antenna stick. **Tannenbaum-** christmas tree antenna. **Unterwagen-** under-car antenna. **Weihnachtsbaum-** christmas tree antenna. **Wellen-** wave antenna, Beverage a.

Antennenableitung antenna lead (in), downlead. **-effekt** antenna effect (error in df). **-ei**, **-endgewicht** fish (of trailing antenna). **-gebilde** antenna array. **-nahfeld** vicinity or short-range field of antenna. **-ringleitung** multiple-receiver connection to antenna. **-schwingung** swaying or swinging of antenna. **-system**, **Peil-** directional antenna system. **-verkürzungskondensator** antenna

(shortening) condenser, aerial series cond., padding condenser. **-verlängerungsspule** serial-capacitance or loading coil. **-zuleitung** antenna lead, downlead, feeder line.

Antikathode target, anti-cathode (of X-ray tube).

Antragsteller applicant; petitioner.

antreten, Beweis offer evidence.

"Zum Tanz"- phase focusing, formation of groups of electrons in beam tube, bunching.

Antrieb, schlupffreier (cf. zwangsläufig) non-slip drive, geared d., positive d. **Druckluft-** pneumatic drive.

Antriebs-element motor element (of loudspeaker). **-zahntrommelwelle** drive sprocket shaft.

antworten answer, respond, plead, reply.

Antwortgeber revertive signal means, check-back or monitoring position indicator (of measuring instruments). **-schrift** answer.

A.N. Verfahren A.N. method (of instrument landing).

anvisieren sight, aim at.

Anwaltsgebühren counsel fee.

anwassern "land", alight or descend on, or make contact with, the water (airplane).

Anweisung, Fehl- incorrect indication or reading, misreading.

Anwuchs growth, increase, increment; accrescence, accretion.

anzapfen tap.

Anzapftransformer (center) tapped or split transformer. **-turbine** bleeder turbine.

Anzapfung, Mittel- center tapping, mid-tap.

Anzeige reading, indication, notice, notification, advertisement.

Anzeige, gedämpfte deadbeat, non-ballistic or aperiodic reading (measuring instruments). **-, un-** gedämpfte ballistic reading or

indication (measuring instruments).

Anzeige, Richtungs-, eindeutige unidirectional direction-finding (with sense finding). Standdeadbeat indication or reading (measuring instruments). Zuckballistic reading, flash or kick r. (of instruments).

Anzeigemarke, schwarze black dot pointer or mark (on dials) to observe or read bearings.

Anzeiger s.a. MELDER

Anzeiger, Amplituden- flashograph (and similar neon types of indicators of resonance and volume). Aussteuerungs- volume indicator (in sound recording). Fern- telemetric device (e.g., metrometer of GE Co. using impulse carriers).

Fernblitz- Keraunophone. Glimmlicht- flashograph, Tune-a-lite, neon tube, etc., tuning indicators. Höchstwert- crest indicator, peak i. Mindest, Minimumminimum (voltage) indicator.

Resonanz- resonance indicator, tuning i. Richtungs- direction-finder, df indicator. Schatten- shadow-type tuning indicator, shadowgraph. Seitenabratsch- side slip indicator. Spannungsspitzen- crest or peak voltage indicator, crest voltmeter. Stand- bearing indicator, direction-finder dial. Verhältnis- exponent (math.). Wanderwellen- surge indicator, klydonograph. Wellen- cymoscope. Windrichtungs- wind-direction indicator (say, of oscillatory-vane type).

Anzeige-röhre, Abstimm- tuning indicator tube (e.g., magic eye, etc.). -vorrichtung indicator device, visual reading instrument.

anziehen der Rückkopplung tighten feedback, make regenerative coupling closer.

anziehend, wasser- attracting water or moisture, hygroscopic.

Anziehung, Flächen- surface attraction, adhesion. Haarrohr- capil-

lary attraction. Massen- gravitation.

Anziehungskraft attraction, attractive power, adhesive force, gravitation.

Anziehungskraft, Erd- gravitational force.

Anzielen des Zielpunktes sighting of target.

Anzugsdrehmoment starting torque. anzünden ignite, kindle, light, start, strike (an arc).

anzweifeln call in question, doubt.

Aeols-glocke, Glas- glass Aeolian bell. -harfe Aeolian harp.

Apertur, Zwitter- split focus (Walton method of scanning).

Aperturblende aperture stop or diaphragm.

Apparate-gamma apparatus gamma. -zuleitung instrument lead, apparatus l.

Apparat-geräusch system noise (sound recorder). -patent apparatus patent.

Apparaturgamma apparatus gamma.

Aquipotentialfläche isopotential or equi-p. surface or plane.

Arbeit, Ablöse- total internal work function (energy acquired by electron to break away from incandesced surface). Reibungs- frictional work, magnetic hysteresis.

Arbeits-eichkreis working reference system. -fähigkeit capacity for doing work, energy. -gang working, operating or procedural step or stage, run, course of manufacture, working operation or schedule. -kennlinie operating curve, working c. or characteristic, performance characteristic. -kontakt marking contact, make or operating c. (closure occurs upon energization of relay). -kopie studio copy, s. print. -leistung work, task, performance, efficiency, output. -linie und -punkt load line and operating point. -punkt, Ruhe- Q point, quiescent p. (of a valve). -raum (Triftröhre) gener-

ating space, working s. (of drift or beam tube). -stellung operating position, working p. -strom watt current, working c. -strombetrieb open-circuit operation.

Architektur, Film- settings and composition.

arglistig fraudulent.

argumentierbar arguable.

arm (z.B. verlust-armes Material) low- (e.g., low-loss material).

Arm, Kontakt- wiper arm. Lampen-lamp bracket. Längs- line or series arm (network). Quer- cross arm, shunt arm (network). Tast-wiper (arm). Verhältnis- ratio arm (Wheatstone bridge).

Armatur, Mast- pole hardware or fittings, accessories.

armiert, stahlband- steel tape armored (cable).

Art (Besselfunktion) kind (of a Bessel function; e.g., J_n denotes Bessel function of first kind and order n).

Atelier studio, stage, teletorium, telestudio. Synchronisier- scoring stage. Ton- sound stage, studio.

Atelier-direktor studio manager.

-kamera studio camera. -szenen stage scenery, s. sets.

Atlas, Farb- color chart, c. scale (e.g., Munsell).

atmen breath, respire, throb, inhale, exhale.

Atmen des Films in and out of focus effect. -des Kohlemikrofons breathing of microphone (slow changes in resistance and response of carbon m.). -des Störgeräusches fluctuations, or waxing and waning of noise.

atmende Membran flexible or non-reflecting diaphragm.

atmendes Mikrofon breathing microphone.

Atmosphären-dynamo (Stewart) atmospheric dynamo.

Atmosphärilien atmospheric agencies, the elements.

atmosphärische Störungen atmospherics, statics, strays, "X's".

Atom, Rückstoss- recoil atom.

atombindende Kraft atomic combining power, valence.

Atom-formfaktor atom form factor, atomic scattering or structure factor. -gewicht atomic weight.

-gramm gram atom. -hülle atom shell. -modell (Rutherford-Bohr) R-B. atom model or conception.

-strahlmethode molecular or atomic ray method. -verrückung atom displacement. -zahl atomic number, nuclear charge number. -zerfall disintegration of atom, atomic d. -zertrümmerung atom splitting, nuclear transmutation, a. fission.

Atü (Atmosphärenüberdruck) atmospheric excess pressure.

ätzen corrode, etch, cauterize, treat with mordants.

ätzen, tief intaglio etching (whole metal coated with resist, pattern cut out with scriber).

Ätz-figur etch pattern, etching figure. -grund resist, protective coating, "ground". -schliff ground section prepared for etching of metals.

Audienz hearing, reception.

Audiogramm audiogram (gives hearing loss vs. frequency).

Audion, rückgekoppeltes regenerative grid-current detector, ultraudion.

-, selbstschwingendes autodyne.

Audion, Bremsfeld- electron oscillation detector or rectifier (negative anode connected with leak resistance and condenser). Gegen-takt- push-pull grid detector.

Kraft- power (grid-current) detector. Schwing- oscillating detector, autodyne.

Aufbau construction, structure, assembly, assemblage, mount, mounting, superstructure; synthesis or building up (line by line, of a telev. picture).

Aufbau, Ionisierungsspiel- Townsend structure or build-up. **Mikroskop-**

microscope mounting.	Auffrischen re-processing, renewing, reviving, restoring, regeneration.
Aufbauten superstructural parts; set (filmwork).	Auffrischer replenisher (film development).
Aufbauzeit , Funkenentladungs- formation time of spark discharge.	Aufführung , Privat- preview, private show.
aufbereiten prepare, work up, dress (ore), separate.	aufgeben abandon (an application or a patent), forfeit, discontinue, relinquish, renounce, waive, surrender.
aufblähen swell (up), bulge out, inflate, belly.	aufgelöste Linienbilder resolved line patterns.
aufblättern exfoliate.	aufgeschrumpft shrunk-fitted.
aufblenden dissolve or fade in (film-projection).	aufgeteilte Abbildung split focus (scanning method).
Aufblendung , Fächer- fan fade-in.	aufgewundener Exponentialtrichter twisted or coiled exponential loudspeaker.
Iris- iris-ing-in. Kulissen- side-curtain fade-in. Vorhang- curtain fade-in. Winkel- angle fade-in.	Aufgussverfahren infusion process.
aufblitzen flash (up).	Aufhängebügel loop hanger.
aufdämpfen deposit by evaporation, smoke or vaporize upon, distil (a coat or film) onto.	Aufhängung , Mikroskop- microscope mounting. Schneiden- knife-edge suspension. Spitzen- pivot suspension, point s.
aufdrücken impress (a potential upon).	aufheben lift, raise; preserve, keep; abolish, discontinue, terminate, revoke, abate, cancel, quash, reverse (a judgment), compensate; reduce (a fraction) to its lowest terms.
aufdrucken imprint, stamp upon.	Aufhebung abrogation, abolition, suspension.
Aufenthaltsort residence, domicile.	aufhellen spotlight.
auffallendes Licht incident light.	Aufheller Klieg light.
Auffanganode (cf. Auffänger) collecting or gathering anode (of Farnsworth device), target (in a multiplier); catcher (of Klystron).	Aufhellung schwarzer Stellen blooming, excessive brightness, loss of contrast (in picture).
auffangen pick up (a signal by antenna), collect, intercept, catch or capture (electrons).	Aufhellungsorgan intensity or brilliance modulation or control electrode (of c-r. tube).
Auffänger collector electrode (in Farnsworth dissector), target (of cyclotron), catcher (in beam tube or Klystron).	aufkeilen key on.
Auffänger-dicke target thickness.	aufklappbar capable of being swung open or raised (on hinges).
-käfig collector electrode (in Farnsworth dissector). -platte target plate, impactor p. (of multiplier), collector (electrode).	aufklappen open up on hinges, lift up, drop (a leaf).
-plattenverlustleistung collector dissipation (of multiplier).	Aufkohlung carburization.
auffasern separate into fibers, unravel.	Auflager abutment, seat, bearing surface, support.
Auffassung , indeterministische indeterministic conception or interpretation.	Auflaufen des Films take-up (by spool) of film strip. - der Gleichlauffehler compounding or integration of differences of synchronism.
aufflackern flare or flash up.	
aufflammen flame up, blaze, deflague.	

- Auflaufrolle** take-up reel.
- Aufleuchtdauer** illuminated or light period.
- aufleuchten** light up, flash up, shine, glow.
- Auflicht** azimuthal or top illumination, light from vertical sources.
- auflockern** loosen (up), relax, slacken, make less rigid or less compact.
- auflösen** resolve (into), solve, analyze, clear out; release, open (connections).
- auflösen (eine Gleichung nach n)** solve an equation with respect of n.
- auflösende Kraft** resolving power (opt.).
- Auflösung, Bild-** picture resolution, p. definition; scan.
- Auflösungsvermögen** resolving power (micr.); solvent power. Minimum minimum separabile (of eye).
- auflöten** solder on; unsolder.
- Aufmachung** scenery, settings, composition.
- Aufnahme** reception, detection; plotting (of graphs), pickup (telev. and film work), recording (sound), shooting or taking (of pictures), uptake or absorption (say, of a gas), sorption.
- Aufnahme, weitwinklige** magnascopic picture.
- Aufnahme, Augenblicks-** instantaneous photograph, snapshot. **Aussen-** outdoor shot, exterior shot or take, outdoor scene; phosphor screen pattern photographed with outside camera (in oscilloscope work). **Ball-** bulb exposure.
- Bild-, Kofferapparat** für box equipment, trunk unit. **Blind-** **strom**-drawing or taking wattless, idle or reactive current. **Doppel-** duplex shot. **Fahr-** running, follow or traveling shot. **Farben-** film- color photograph. **Farbraster-** color screen photograph. **Fern-** telephotograph, telephotographic work; long shot (m.p.).
- Flieger-, Flugzeug-** aerial or airplane picture or photograph.
- Freilicht-** outdoor or exterior shooting or shot. **Funkbeschik-** kungs- calibration of direction-finder. **Gas-** occlusion of gas, absorption of gas (in metals, etc.). **Gitterstrom-** drawing or taking of current by grid.
- Gleichtakt-** in-phase recording (on film). **Gross-** (big) close-up (m.p.). **Hoch-** vertical or upright picture. **Innen-** indoor or studio shot; oscilloscope directly recorded on photographic emulsion inside vacuum space (in oscilloscope work). **Kombinations-** combination exposure, composite shot (made by mask method). **Kurbel-** hand-driven shot. **Lichtton-** photographic sound-film recording. **Luftbild-** air or aerial photography. **Nach-** re-take. **Panorama-** panning shot, panoramic picture or view, pam or pan shot (studio slang). **Probetest** picture, trial shot. **Quer-** horizontal picture. **Raff-** time-lapse photography (low-speed take, high-speed projection). **Roentgenbeugungs-** X-ray diffraction exposure. **Roentgen (strahl)-** Roentgenography, X-ray picture, skia-graph. **Rundblick-** panoramic photograph, p. view, panning shot, "pam" or "pan" (studio slang). **Schall-** sound pickup, s. recording (in form of a track). **Schallband-** magnetic steel tape recording. **Sprach-** **Sprech-** speech, voice, vocal or dialog recording. **Stahl-** **band-** magnetic steel tape recording. **Stahldraht-** magnetic steel wire recording. **Strom-** current input, the taking of current (say, by a grid), current absorption. **Taucher-** submarine shooting. **Ton-, Kofferapparatur** für box equipment, trunk unit. **Verfolge-** running shooting. **Wieder-** re-take (m.p.); re-opening (of law case). **Zeit-** luppen-, Kamera für camera for

slow-motion or retarded-action picture projection work. **Zeitraff-** time-lapse photography (low-speed shooting, high-s. projection).

Aufnahmefähigkeit pickup performance (of antenna); absorbability, absorptiveness, absorptivity.

Aufnahme-fähigkeit, magnetic magnetic susceptibility. -**gelände** location (film work). -**kamera**, **Zeitlupen-** camera for slow-motion or retarded-action picture projection work. -**kamera**, **Zeitraff-** time-lapse camera (low-speed shooting, high-speed projection). -**lampen** studio lights. -**leiter** chief camera man, first c. -**magnet** recording or pickup magnet (in steel band or wire sound recording). -**platte** platter (16" electric transcription record). -**raum** studio (of broadcast station), teletorium, telestudio. -**stelle** location (film shooting); receiving or translating place (telegraphy). -**techniker** camera technician. -**verfahren** pickup method. -**verstärker** recording amplifier. -**wagen**, **Fernseh-** television or electron camera truck, video bus, pickup camera truck, televising car. -**winkel** shooting angle.

aufnehmen trace or plot (graphs); take (current); collect or pickup (waves, vibrations); record (sound); take or shoot (pictures); copy (messages); receive, accommodate, lodge.

Aufnehmer, Schall-, Ton- sound collector (microphone), pickup; recorder.

Aufprall (cf. **Prall**) impact, bombardment, impingement, striking (of electrons, etc.); bound, rebound.

Aufpunkt "space" point.

aufquellen swell (up), well up.

aufrauhen granulate, roughen or grind superficially, knurl, rag, produce a nap.

aufrecht upright, erect.

aufrechterhalten maintain, keep alive (an application or patent), uphold.

aufreiben ream, broach.

Aufrichtung, Bild- erection of an image, rectification of i., inversion (when left and right, top and bottom are simultaneously interchanged).

Aufrichtungs-blende erector stop. -**prisma** erecting prism.

Aufriss elevation, vertical section, sketch.

aufrührbar stirrable, agitable.

Aufsatz any part put or set on, attachment, head-piece, neck, top, dome.

Aufsatz, Geschütz- optical instruments for artillery. **Peil-** bearing plate (in direction-finder). **Photometer-** photometer head.

Aufschaukeln resonant rise, build-up or increase of amplification (of oscillations, in proper phase).

Aufschaukelzeit time-constant of resonant amplification.

aufschichten pile up, stack up, stratify, layer.

Aufschiebung postponement, adjournment, suspension, arrest (of judgment).

Aufschlemmung solution, suspension.

Aufschlemmverfahren floatation method.

Aufschlussraum part of prospected volume subject to current or displacement lines.

Aufschrumpfung shrunk-fit.

Aufschub adjournment, time-extension, grace of time, stay, postponement, prolongation, deferment, respite, suspension, delay, moratorium.

Aufsetzungspunkt (**Flugzeug**) landing point, ground-contact point.

Aufsicht plan or top view.

Aufsichts-betrachtung direct or frontal viewing (of television pictures). -**sucher** view finder.

Aufspaltung separation, split-up, cleavage, division, dissociation.

Aufspaltung, Dubletten- doublet separation. Spinbahn- spin orbit splitting.

Aufspaltungs-bilder splitting patterns (opt.). -faktor splitting factor.

aufspannen stretch or spread out, unfold.

aufstapeln pile up, stack up, store.

aufstäuben (einen Überzug) spray, dust or atomize (a coat, film, etc.) upon.

Aufsteck-glas slip-on lens segment. -glas, Okular- eyepiece correcting lens. -kappe slip-on cap. -spule plug-in coil.

Aufsteller, Bühnen- set dresser.

Aufstellpunkt location.

Aufstellung, Gitter-, Rowlandsche (Rowland's) mounting for concave grating.

Aufstieg, Ballon- balloon ascent.

aufstreichen spread on, brush on, stain (paper).

Aufstrich leading edge or upstroke (of an impulse).

Aufsuchen, Ziel- detection of target or object (by reflection of radar or sonar pulses).

Aufteilungs-filter crossover network (sound production). -verhältnis potentiometer ratio.

auftragen apply, charge (furnace), plot (curves), protract (geometry).

Auftrag-geber mandator, principal, client, customer. -rollen application rollers, inking r.

Auftreff-geschwindigkeit striking velocity. -winkel angle of impact.

aufreiben, das Loch enlarge, expand, broach, ream (a hole).

Aufreibер reamer.

aftrennen sever, rip up or open.

Auftrieb upward thrust, up-thrust, lift, buoyancy, ascendency.

Auftrieb, Luft- air buoyancy.

Auftriebmethode float method, buoyant-force m. (hydrometer).

auf "Vordermann stehen" be or

lie in the shadow of.

Aufwand, beträchtlicher, von Mitteln elaborate means or circuit organization, appreciable outlay.

Aufwand, Leistungs- power input, p. expenditure, energy dissipation. Mehr- additional or extra expenditure, outlay or means (used for circuits, apparatus, etc.), complement (of tubes).

Aufwärtstransformator step-up transformer.

Aufweiterung, Gitter- increase or expansion of lattice spacing.

Aufweitung expansion, bulge-out.

aufwickeln wind up, wrap up or upon, take-up (film); unwind, unwrap.

Aufwickelspule take-up reel.

Aufwind anabatic wind, upslope w.

aufzählen enumerate, list, itemize.

Aufzehrung, Gas- gettering, gas absorption, outgassing.

aufzeichnen (Stromlinien, etc.) map or plot (tubes or lines of force, etc., often in a tank).

Aufzeichner, Schall- sound recorder. Schallwellen- phonodeik (recording on film). Ton-, magnetischer magnetic sound recorder (magnophone, Blattnerphone, Poulsen telephone). Schwingungs- vibrograph (to record mechanical vibrations).

Aufzeichnung, Abdeck- masking recording, matting. Bild- picture recreation, p. delineation, p. tracing, p. synthesis. Vielkanal- multi-channel recording.

Aufzeichnungs-kammer recording chamber (in electron microscope). -kontrolle monitoring (of sound recording or sound tracks). -lampe, "Aeo"- Aeo light, alkaline-earth oxide lamp, Aeo lamp (variable-density sound picture recording work).- -objektiv recording objective. -schlitz, -spalt, recording slit or aperture. -träger record or track support (sound on film, disk, etc.); record sheet. -umfang re-

cording range.

aufziehen mount (a photograph); wind (a dial switch).

Aufziehhebel lever ratchet.

Augapfel eyeball, bulbus.

Auge, akkomodationsloses unaccommodated eye, fixed eye. -, **alters-sichtiges** presbyopic eye. -, **be richtigtes** corrected eye. -, **be waffnetes** aided eye. -, **dunkel adaptiertes** dark adapted eye. -, **entspanntes** relaxed eye. -, **fehl sichtiges** defectively sighted (ametropic) eye. -, **fernakkomo diertes** relaxed eye. -, **fern sichtiges** far-sighted eye, hyperopic eye. -, **kurzsichtiges** near- or short-sighted eye, myopic eye. -, **nachtblindes** night-blind eye, nyc talopic eye. -, **nahsichtiges** near-sighted eye, myopic eye. -, **rechtsichtiges** normal-sighted eye, emmetropic eye. -, **unbewaffnetes** unaided eye, naked eye. -, **weit sichtiges** far- or long-sighted eye, hyperopic eye.

Augen-abstand interocular distance.

-**abstandsmesser** inter-pupillary distance gage. -**adaptationszus tand** state of retinal adaptation.

-**anpassung** eye adaptation (to luminosity or wave-length of light), eye accommodation (to changes of distance or focus). -**anstrengung** eye strain. -**blicksaufnahme** instantaneous photograph, snapshot.

-**brechungs-messer** skiascope, retinoscope. -**eigenlicht** self-light, intrinsic light of eye or retina, eye's own l. (associated with photopsia). -**empfindlichkeit** intensity discrimination, contrast sensitivity (embodied in Weber-Fechner law). -**farbenempfindlichkeit** color or spectral sensitivity of eye, spectral response of eye.

-**höhle** socket of eye, orbit, orbital cavity. -**kreis** exit pupil.

-**lehre** ophthalmology. -**lichtemp findlichkeit** luminosity response of eye. -**linse** eye lens. -**lin-**

senfaserung fibrillation of lens.

-**messer** ophthalmometer, optometer.

-**muschel** eye cup. -**punkt** exit pupil, eyepit. -**spiegel** ophthalmoscope, skiascope. -**stäbchen** cones (of nerve endings). -**täuschung** optical illusion. -**zäpfchen** rods (of nerve endings). -**zerstreubilder** blur circles of eye.

ausätzen cauterize, destroy by caustic.

Ausbau demounting, taking apart or out, dismantling.

ausbauen disassemble, dismantle, de mount.

ausbauchen bulge, swell, hollow out, belly.

ausbeulen take out dents (in a metal part); swell out, round out.

Ausbeute yield, crop, output, gain, returns, efficiency.

Ausbeute, photoelektrische photo electric emissivity or yield.

Quanten- quantum yield or efficiency.

ausbiegen bend out, turn out.

ausbilden fashion, form; develop; educate, train.

Ausbildung, Fach- technical education, schooling or training.

ausbleien provide with a lead lining or coating.

ausblenden mask with apertured dia phragm or stop, limit the field (of beam, pencil, etc.), diaphragm out, cut down aperture of a stop, use a field stop, iris out, circle out.

Ausblend-mittel limiting aperture, screening, masking or stopping means (for rays and radiations).

-**steuerung** obturator or cut-off modulation.

Ausblickstutzen objective lens sock et (opt.).

ausbohren bore or drill out.

ausbreiten spread (out), extend, ex pand, diffuse, propagate (waves).

Ausbreitprobe hammering test (specimen).

Ausbreitung, Licht- distribution of

exposure (on film). Schall-, vertikale vertical spread or diffusion of sound (should be angle subtended by audience at loudspeaker).	ausfindig machen ascertain, trace, discover.
Ausbreitungs-geschwindigkeit velocity of propagation (of waves, etc.). -strom dispersion current. -vorgang propagation phenomenon or action. -widerstand diffusion resistance.	ausfliessen flow out, issue, discharge, emanate.
ausbringen yield, produce, bring out, take away.	Ausflockung (de)flocculation, coagulation.
Ausbruch, Gas- eruption, (violent) liberation or escape of gas. Sonnen- solar eruption.	Ausfluss outflow, efflux, discharge, emanation; mouth, outlet, drain.
ausdehnbar expansible, extensible, ductile.	Ausfluss-einschnitt contractio veneae. -röhre outflow tube, discharge pipe. -ton jet tone, slit tone.
Ausdehnung dimension, extent; extension, expansion; latitude, scope, range.	ausfransen fray.
Ausdehnung, Längen- linear expansion.	ausfräsen notch or recess (in milling machine).
Ausdehnungsmesser dilatometer, extensometer.	ausfrieren freeze out (e.g., in liquid-air trap).
Ausdeutung interpretation, evaluation, explanation.	Ausfrier-gerät freeze-out device.
Ausdruck expression, term (of an equation), denotation (of a factor).	-tasche liquid-air trap (vacuum pump).
Ausdruck, Fach- technical term, t. expression.	Ausführbarkeit practicability, feasibility.
ausdünnen thin (out).	Ausführung lead-in (wire).
auseinander-gehende Werte divergent values, discrepant v. -ziehen spread apart, draw a. or asunder.	Ausführungs-beispiel exemplified embodiment, form of construction (cited by way of example in patent specifications). -zwang compulsory working (of a patent).
Ausent-wicklung full development.	ausfuttern (ausfüttern) line, case, bush, pad, upholster.
ausexponiert fully exposed.	Ausgängen, Schalter mit 5 five-point switch.
Ausfall, elektrischer electric shock. Intensitäts- fading, fade-out (of radio signals). Strahlen-emergence of rays.	Ausgangs-funktion trial function.
ausfällen precipitate, deposit.	-gleichung starting or initial equation. -leitwert output admittance, output conductance. -material starting, raw, initial or parent material. -pupille exit pupil. -schlitz exit slit (spectrograph). -stellung home position (of dial switch).
ausfallender Lichtstrahl emergent light ray.	ausgefahrene Meterzahl paid-out or reeled-out yardage (of airplane antenna).
Ausfallapparat precipitator, precipitron (electronic).	ausgefressene Kontakte pitted or worn contacts.
Ausfallwinkel angle of emergence.	ausgeglichener Verstärker balanced amplifier.
Ausfertigung office copy, official c.	ausgehen go out, become extinguished; originate, start, emanate, issue from.
ausfiltern filter out, exclude.	

ausgepeilte Richtung bearing.
ausgeprägt distinguished, peculiar, characteristic, singular, particular, marked, decided, significant, excellent; salient (re: poles).
ausgespannte Saite stretched or tensioned chord or string.
ausgesteuerter Tonstreifen, schwach low-modulation sound-track.
ausgetuchtes Loch bushed hole.
ausgezackte Linie, ausgezahnte Linie jagged line, serrated l., notched l., dented l.. dentated l.
ausgezeichnet distinguished, marked, excellent, singular, significant, particular.
ausgezeichnet(en) Lichtweg, Satz vom law of extreme path. -(e) Punkte cardinal points (opt.).
ausgezogene Linie solid line, full line, unbroken line (in graphs, drawings, etc.).
Ausgibigkeit productiveness, fertility, abundance, yield(iness).
ausglätten (Kurven) smooth, flatten (graphs).
Ausgleich, Farb- color balancing (in color film). **Ladungs-** charge equalization. **Pegel-** level equalization, equalizing l. **Schrumpfung-** shrinkage compensation. **Schwund-** fading compensation, volume control.
ausgleichen balance, compensate, equalize, align, bias out (by counterforce), counterbalance.
Ausgleichen (von Schallwellen) neutralization of sound waves (prevented by baffles).
Ausgleichentzerrung complementary recording.
Ausgleicher, Dämpfungs- equalizing network, compensating n.
Ausgleich-fläche (der Erdkruste) isostatic surface. -getriebe differential gear. -schwung-scheibe rotary stabilizer (m.p. projector), impedance wheel.
-spannung transient voltage; compensating v. -strom compensating

current; balancing current (of a bridge). -transformator hybrid transformer, balanced t., differential t., 3-winding t.
Ausgleichung, Ladungs- charge equalization. **Schallwellen-** neutralization of sound waves (prevented by baffles).
Ausgleich-vorgang transient. -widerstand compensating resistance, balancing resistance, ballasting r., building-out r.
Ausguss lip, spout, outlet, drain, sink; delivery, effusion. -schnauze pouring lip, nozzle or mouth.
aushärten harden, set, indurate (thoroughly).
ausheizen heat, anneal, subject to (thorough) thermal treatment.
auskehlen channel, flute, groove.
auskeimen germinate; cease germinating.
auskellen ladle (out).
ausklagen (einer Geldstrafe) sue for a penalty.
ausklappbar capable of being swung out or dropped (on hinges).
auskleiden line, clothe.
ausklinken release, trip, trigger, disengage, throw out (of gear).
Ausknickung buckling, bending (at a sharp angle).
Auskopierpapier printing-out paper.
Auskoppelfeld output field, absorbing f., uncoupling f., delivery f. (in Hollmann's inverted cyclotron or electron turbine).
auskoppeln tune or balance out, neutralize, decouple (to suppress or lessen feedback).
auskurbeln (Antenne) reel out, lower, pay out the aerial (on airplane, through fairlead).
ausladend projecting, outrigging.
Ausladung projection, overhang, reach, length of action, working radius.
auslagern adsorb (at points of attachment).
Auslassventil escape valve, delivery v.

Auslauf von der Rolle point where film strip leaves drum.

Ausläufer tail, extension, streamers, off-shoot, satellite line.

Auslauf-kurve coasting curve, deceleration c. -spitze discharge tip.

ausleeren empty out, evacuate, drain.

auslegen (für jedermann zur Einsicht) lay open (say, a patent application for public inspection); design, plan, lay out; interpret, construe.

Auslegung (eines Gesetzes) interpretation or construction (of an act or a law). -, falsche misinterpretation, erroneous interpretation or construction.

Auslenkhärte deflection hardness (force required to deflect phonograph needle point 100 μ).

Auslesefähigkeit selectivity.

ausleuchten illuminate. flash (an image).

Ausleuchtung, gleichmässige even illumination.

Ausleuchtung und Tilgung extinction or quenching (of fluorescence), evanescence.

Ausleuchtung, Spalt- slit illumination.

auslöschen erase, extinguish, wipe out, quench, blot, obliterate, cancel, put out, (cause to) evanescence.

Auslöschmagnet obliteration magnet, obliterating pole piece (to wipe out sound record, on wire or tape, for re-use).

Auslöschung, Fluoreszenz- fluorescence quenching, evanescence (say, by poison).

Auslöschzone dead spot, region of silence.

Auslöse-arbeit (cf. Ablösearbeit) total internal work function, excitation energy. -daumen releasing cam, resetting cam. -hebel trip lever, detent l.

auslösen emit, give off (electrons, etc.); trip, trigger, disengage, render operative, release.

Auslöser, Ball- ball release.

Auslöserknöpf jack or escapement button, set-off button (piano).

Auslösespule trip coil.

Auslösung, Selbst- automatic release means, a. tripping action.

Auslösungs-anschlag trip dog. -fe-der escapement spring, release or trip spring. -knopf jack, escapement or set-off button or knob.

Ausmass amplitude, dimension, size, extent, quantity.

Ausmessung, Flächen- planimetry.

ausmultiplizieren eliminate by multiplication (math.).

Ausmündung orifice, outlet.

ausnehmen von except, exempt from.

Ausnehmung recess.

Ausnützungskoeffizient utilization coefficient.

auspressen press or squeeze out, express.

auspumpen pump out, exhaust, evacuate.

ausquetschen squeeze, crush or ring out, squeegee.

Ausrede plea, evasion, excuse, pretext.

Ausregelzeit decline period of control potential.

ausrichten orient, orientate, straighten, adjust, set (right).

Ausrichtung, falsche misalignment (of image or track).

ausrücken disengage, ungear, unmesh, throw out (of gear).

ausrunden round off.

Ausrundung fillet.

Aussage affidavit, allegation, declaration, assertion, affirmation, deposition, testimony, evidence, averment.

Aussagender declarant, deponent, affiant, witness.

Aussalzungskoeffizient salting-out coefficient.

ausscheiden (Teile einer Anmeldung) divide (an application for letters patent).

Ausscheidung precipitation, separation, elimination, deposit, efflorescence.

Ausscheidungs-effekt filtering, separating or excluding action or effect. -härtung precipitation hardening. -punkt point of separating out.

Ausschlag throw, excursion, deflection, deviation, kick, travel (re: a coil, diaphragm, instrument needle, beam, etc.); exudation, efflorescence, scum.

Ausschlag, Schall- displacement (of a particle) (ac.).

ausschleudern centrifuge, spin out. ausschliessen exclude, preclude, bar.

Ausschliesslichkeit uniqueness.

Ausschliessungs-gründe reasons for exclusion. -prinzip Pauli's equivalence principle (obs.), exclusion p.

ausschmelzen melt or fuse out, render, liquefy, purify by melting.

ausschmieden forge, hammer out.

Ausschnitt cutout, notch, hole, opening, cutaway portion, louver, aperture, recording window. Bild-frame (of a camera); image area (on scanning disk). Blenden-aperture, slit (of diaphragm or stop).

Ausschuss für Einheiten und Formeln (AEF) Committee on Units and Formulae, Standards or Standardization C.

Ausschwingstrom decay current, decaying c. (of transients).

Ausschwingung decay, dying out (of an oscillation).

Ausschwingungs-verzerrung decay (transient) non-linear distortion, facsimile transient d. (in form of tailing, or as overthrow or underthrow distortion). -verzug hang-over, tailing, excessive prolongation of decay of wave tail, in facsimile.

aus sedimentieren sediment out

Aussehen, verschwommenes foggy, bleary or blurred appearance (of an image).

Aussenaufnahme outdoor or exterior picture or shot, o. scene; (c-r.).

screen pattern photographed with outside camera (oscillography).

aussenden transmit, send (out), emit, give off, issue, dispatch, disseminate (of standard frequencies).

Aussen-gewinde male screw-thread, outside screw thread. -leiter "outer" (conductor or wire). -linie contour (line). -mass overall dimension, outside d.

aussenmittig eccentric, off center.

Aussen-schenkel outer leg, o. limb. -taster outside calipers. -welt external world, ambient.

ausser Achse extra-axial, abaxial.

ausserachsiale Strahlen extra-axial rays.

ausserachtlassen disregard, neglect, leave out of consideration.

Ausserfokusbild out-of-focus picture.

ausser-gerichtlich extra-judicial, out of court. -irdische Störungen extra-terrestrial or inter-stellar space noise or disturbances. -ordentliche Komponente extraordinary component (of rays). -Phase dephased, out of p. -Tritt fallen fall out of step or synchronism.

Äusserung, Kraft- manifestation or effect of force.

aussetzende Belastung intermittent load.

Aussetzer failure in ignition, slips (ignitron).

Aussetzung adjournment, discontinuance, deferment, stay (of proceedings), arrest (of judgment).

Aussichtsdichte reflection or specular density.

aussickern trickle out, ooze out, percolate.

aussieben filter out, exclude (by filter action); select, sift.

Aussiebung, Impuls- synchronizing separator (for sync and video signal separation), amplitude separator, clipper (in telev.).

Aussortierung, Anoden- anode sorting. **Phasen-** phase focusing, bunching (in klystron and other beam tubes).

aussparen recess, remove material from; set aside (say, marginal portions for sound track on film).

ausspringend salient, protruding, projecting, jutting.

ausspritzen squirt (out), wash by squirting, inject.

Aussprungwinkel angle of reflection.

Ausstattung scenery, settings, set, composition.

ausstellen (einer Urkunde, Vollmacht, etc.) execute (a document, power of attorney, etc.).

Aussteuerung, prozentuale percentage modulation.

Aussteuerung, Gitter- grid swing, g. sweep, g. excitation. **Lautsprecher-** operating condition in which input suffices to fully utilize loudspeaker power and performance; excursion of diaphragm. **Lichtstrahl-, maximale** clash point of light valve (in sound recording). **Röhren-** operating condition when signal (a.c.) voltage impressed on grid suffices in amplitude to swing plate current from zero to saturation; grid swing, g. excitation, amplitude of signal (a.c.) voltage. **Schirm-** full utilization of screen (up to its very border, in cathode-ray tube operation), sweeping out of screen.

Aussteuerungs-anzeiger volume indicator (sound recording). **-bereich** drive range (of a grid in an amplifier tube), grid swing, grid base, range below point where overload begins, that is, in straight portion of characteristic (maximum limit is 100 per cent modulation). **-grad** modulation percentage, depth of m., percentage m.; carrier amplitude (in telemetric or tele-transmission work). **-intervall** control range, drive range. **-kontrolle mit Neonröhre** neon tube volume indicator. **-kontrollgerät** modulation meter, load indicator.

Ausstrahlung radiation, irradiancy, emission of rays, radiations, os-

cillations, vibrations and waves (in general, including heat and sound).

ausstreichen cancel, strike out, cross out, delete.

ausströmen emanate, emit, flow out, stream out, effuse.

Ausströmerscheinungen effusion phenomena.

austasten cut off or gate (pencil or beam, on flyback), blackout (by blanking signal); key off (a carrier).

Austastimpuls blanking pulse.

austauschen exchange, interchange.

Austausch-integral exchange integral. **-kräfte** exchange forces, e. energies. **-operator**, Ladungscharge exchange operator. **-reaktion** substitute reaction, exchange r. **-werkstoff** substitute material.

austragen deliver, distribute, carry out, discharge.

austreiben expel, drive out, out-gas (gas or vapor), cleanup, get-ter.

Austreibung, Gas- gas cleanup, out-gassing, degassing, gettering.

austretendes Licht emergent light.

Austritts-arbeit (der Elektronen) work function (of electrons). **-blende** exit slit. **-geschwindigkeit** exit velocity, muzzle v., (re: guns); emergence v. **-pupille** exit pupil.

Austuchung bushing.

Ausübung (eines Gedankens, etc.) carrying into practice or effect, execute (an idea, invention, etc.).

Auswahl-prinzip, -regel selection principle, selection rule (in electron transition).

Auswandern shift of beam or beacon course.

auswechselbar exchangeable, interchangeable, replaceable, capable of substitution.

Auswechselung, Optik- optical system or assembly (comprising interchangeable intermediate lens barrel).

Auswertung evaluation, valuation, assay, analysis, appraisal, computation, interpretation; plotting (map).

Auswertung, punktweise point by point evaluation.

auszacken indent, notch, jag, serrate, dentate.

Auszeichnen, scharfes, einer Fläche durch Objektiv sharp focusing by lens of image in angle of field.

ausziehbar telescoping, extensible.

Ausziehtubus drawtube (re: microscope).

Auszug abridgment, extract, excerpt, synopsis, abstract.

Auszug, Balg- bellows extension.

Blau- blue record. **Farb-** color record. **Kamera-** camera extension.

Posaunen- telescoping or extension means (for tuning Lecher-wire or ultra-h-f systems, by short-circuiting bridge sliding along wires).

Auszugfilter, Farben- selective filter, s. screen.

Auto-elektronenemission auto-elec-

tronic emission, field or cold emission of electrons. **-frettage** cold drawing, auto-frettag.

-matenlegierung machining alloy stock. **-matik** automatic (sharp) tuning means; any automatically operable mechanism. **-matik, Fading-, Schwund-** automatic volume control means (avc).

automatisch(e) Gittervorspannung automatic or self-biasing of grid.

-(e) Kurssteuerung automatic or mechanical piloting. **-(er) Verschluss** automatic shutter.

A-Verstärker class A amplifier.

A W Zahl (Amperewindungszahl) number of ampere-turns (ats).

Ayrton'scher Nebenschluss Ayrton shunt, universal shunt (box).

Azetyl-film acetate film stock. **-zellulose** cellulose acetate.

Azid azide.

Azimuth, Funk-, missweisender magnetic bearing. **Funk-, rechtweiser** true bearing.

Azimuthwinkel azimuth angle.

Azoverbindung azo compound.

B

- Backbord achteraus** port aft.
-voraus port bow. -kurve port (left-hand) curve (in airplane manoeuvring and landing procedure).
- Backe** jaw, bit, die.
- Backe, Einspann-** clamping or gripping jaw, chuck jaw, grip (of a tester). **Schweiss-** welding die.
- backen, zusammen-** cake together, clinker.
- Bahn** path, orbit, shell (of an electron), trajectory, way, track, ecliptic (apparent path of sun); web (of paper, cloth, etc.).
- Bahn, Ablauf-** runway, landing ramp. **Blitz-, verschlungene** tortuous path of lightning flash. **Elektronen-** electron path, e. orbit, e. trajectory, flight of electrons. **Erd-** earth's orbit, terrestrial o. **Fahr-** track, runway (airfield), travel beam. **Film-** film track, f. channel. **Flächenstrom-** current sheet. **Gleit-** chute (film), slide (way), shoot. **Herz-** cardioid-shaped path (of electrons). **Kreis-** circular path, orbit. **Lande-** runway (for landing of airplanes). **Leit-** transit path. **Papier-** paper web. **Roll-** cycloidal path (of electrons); roller type conveyor; runway (airport). **Rosetten-** (der Elektronen) rosette-shaped path (of electrons). **Rückstoss-** recoil track. **Schwung-** sound take-off drum (m.p.). **Spin-** spin orbit. **Start-** runway.
- Tauch-(der äussersten Na-Elektronen)** dip orbit (of peripheral Na electrons). **Wirbel-, abgehende** trailing vortices (airfoil)
- Bahn-aufspaltung, Spin-** spin orbit splitting. **-durchmesser** diameter of orbit. **-elektronen** orbital electrons. **bahnen** beat, smooth, clear (a way or path)
- Bahn-ende, Mesonen-** mesotron track end. **-impuls** orbital moment. **-kreis, Roll-** cycloidal path of motion (of electrons). **-schling** orbital loop. **-spur** track. **-verlauf** ray path, r.tracing, trajectory.
- Bajonettverschluss** bayonet joint, b.union (as used in bayonet-type lamp holders).
- Beake, Gleitweg-** glide path beacon.
- Bakenantenne** beam antenna, beacon a., radio range aerial.
- Balancier** beam.
- Balg(en)** bellows.
- Balgenauszug** bellows extension.
- Balgfalten** bellows folds.
- Ballast-röhre** absorber tube or valve (operative during spacing periods). **-widerstand** ballast resistance, b.resistor.
- Ballaufnahme** bulb exposure.
- auslöser** ball.release.
- ballen** form into balls, conglomerate, cake.
- ballig** crowned, cambered.
- Ballon** carboy, balloon (flask).
- Ballon, Säure-** acid carboy.
- Ballon-abfüller** pump-equipped balloon flask. **-abstieg** balloon descent. **-aufstieg** balloon ascent. **-variometer** balloon statoscope.
- Ball-sender** re-broadcast station, repeating station, s. belonging to a network.
- Ballungsfähigkeit** coalescing, bal-

- ling or caking property, conglomeration, spheroidizing property (cryst.).
- Balsam, Kanada-** Canada balsam.
- Bananenstecker** split (banana-shaped) plug, b. plug.
- Band** ribbon, tape, band, strip, tie, strap, bond, belt, hoop.
- Band, besetztes** full band. am laufenden-fabrizieren conveyor-belt manufacture, large-scale production.
- Band, Führungs-** control strip (of a printer). **Lautschrift-** sound recording band, tape or strip (magnetic sound recording). **Loch-** scanning belt (telev.). **Übertragungs-** signal band.
- Bandabschattierung, nach rot oder violett** degradation of bands to red or to violet.
- bandagieren** fit with tires, tire; bandage, wrap or tie with ribbon or tape.
- Band-antenne** tape antenna. **-aufnahme,** Schall-, -aufzeichnung, Schall-magnetic steel tape recording of sound. **-breiteregler** band-width control.
- Bändchen-galvanometer** twisted strip or band galvanometer. **-mikrofon** ribbon microphone, velocity m.
- Band-einengung** squeezing or compression of band. **-eisen** hoop iron, strip i., band i.
- Banden, Ober-** overtone absorption bands. **Schwanz-** tail bands (in afterglow)
- Banden-besetzungsgrad** degree of filling of bands. **-kopf** band-head, band edge (spectral analysis). **-zug** band progression. **-zweig** branch, part of series of lines forming a band.
- Bandfilter** band selector (circuit), preselector.
- Band-filter von grosser Lochweite** broad band filter. **-förderer** band or belt conveyor **-führung,**
- Film-** aperture guide. **-haken** bridle wire, tie hook. **-kante** band edge, b. head. **-mikrophon** ribbon microphone, band m.
- mitte** mid band. **-öse** bridge guide. **-sperre** band-exclusion filter. **-umkehrung** speech band inversion (secret telephony).
- Bank, optische** optical bench.
- Bank, Prüf-** (lens) test bench (opt.)
- Bär** ram (of a press).
- Barkhausen** sprung Barkhausen effect or jump (abrupt changes in magnetization).
- Barometer, registrierendes** barograph.
- Barometer, Dosen-.** (Feder-) aneroid barometer. **Gefäss-** cistern barometer. **Gefässheber-** combination cistern and syphon barometer. **Heber-** syphon barometer.
- Barometer-korrektur** barometric check (df). **-säule** barometric column.
- barometrische Reglerdose** control aneroid.
- Baryumazid** barium azide.
- Basenbildner** base former, basifier, basifying agent.
- Basisentfernungsmesser** base range-finder.
- Bass-anhebung** bass boosting, b. compensation, tone control means to accentuate, emphasize or underscore b. or low-pitch notes, b. emphasis. **-balken** bass bar (string instrument). **-kasten** bass box (musical instruments).
- Bassin** tank, cistern, reservoir, basin, bowl.
- Bastler** amateur, fan, "ham".
- Batterie-glas** battery jar. **-klinke** battery jack.
- Bauakustik** architectural acoustics, theater and auditorium acoustics.
- Bauch (einer Schwingung)** loop or antinode, internode (of an oscillation).
- bauchig** bellied, bulgy,
- Baufehler, Kristall-** crystal defects.

Baukunst, Film-	setting and composition art.	-glaskolben Erlenmeyer flask.
baumähnlich	tree-like, arborescent, dendiform.	Becken cymbals. Tamborin- tambourine jingles.
bauschen	swell out, bag, bulge, puff up; refine (tin).	Bedämpfung (introduction of) resistance, damping, attenuation.
Bauteil	construction part, structural part or element.	Bedämpfung, Eingangs- input resistance, damping.
Bauten, Auf-	superstructural parts.	Bedarf need, demand, requirement.
beabsichtigen	intend, plan, contemplate.	Bedarf, Leistungs- power absorption, p.dissipation, p.requirements.
Beamter, Funk-	radio operator, station official.	Bedarfpegel, Leistungs- power reference level.
Beanspruchender	claimant.	bedeckt mit Cäsium caesiated.
Beanspruchung	stress, strain, load; claim.	Bedeckung surface coverage. -des Netzes coverage factor.
Beanspruchung, Prioritäts-	priority claim. Schlag- shock load or stress, blow l., impact l.	Bedeckung, Wandstoff- (cf Bekleidung) wall draping (ac.).
beanstanden	object, reject, criticize adversely.	Bedeckungsfaktor, Pol- pole arc, p. pitch percentage.
beantragen	apply (for), petition, make a motion.	Bedeutung import, importance, meaning, sense, significance.
Beantwortung, Klage-	reply, answer, defence (plea).	bedienbar, leicht easily manipulable or operable.
bearbeitbar	workable, machinable, processable, treatable.	Bedienbarkeit manipulability, manoeuvrability.
Bearbeitbarkeit, spanabhebende	free cutting machinability.	Bedienungsvorschrift service or working instruction, directions for use.
bearbeiten	work (on), tool, finish, dress, machine.	bedingen stipulate, contract for, condition.
bearbeiten, kalt	cold-work.	Bedingungsgleichung equation of condition.
, warm	hot-work.	Bedrahtungsplan wiring diagram.
Beaufschlagung	electric stress (placed on an insulator link or unit); acoustic action or sound pressure (brought on microphone); impacting (by electrons).	Beeidigung confirmation by oath.
Beauftragter	attorney, agent, delegate, commissioner, mandatory.	Beeinflussung influence, control action, modulation, interference.
Bebenmesser	seismometer, seismograph (device to measure and record tremors).	-, gegenseitige mutual action, interaction. Gitter- grid control, grid modulation. Sprach-voice control, modulation by voice.
Becher,	Abschirm- shielding can, can, shield. Zink- zinc case or cylinder (of dry cell).	Beeinflussungsöhre modulating tube, modulator t.
Becher-block	encased fixed tubular paper or mica wound or wrapped condenser, solid-dielectric fixed capacitor. -glas beaker.	beeinträchtigen impair, injure, prejudice, affect adversely, encroach upon, infringe, detract from.
Befehl, Einhalts-	injunction, interdict. Vollziehungs- writ of execution, warrant.	Befehl, Einhalts- injunction, interdict. Vollziehungs- writ of execution, warrant.

Befehls-rohr (cf Folgerohr) pilot or master thyatron (fires first, in a trigger circuit). -stelle control unit (airport). -übertragung zwischen Flugzeugen inter-aircraft voice or command communication.

befestigen secure, fasten, attach, fix; fortify, strengthen.

Befestigungsring ring fastener, securing ring.

befeuchten moisten, dampen, wet, water.

Befeuerung, **Flughafen-** airport beacon service. **Mast-** mast beacon. **Nachtstrecken-** route beacon for night flying service.

beflecken spot, stain, soil, blur.

befördern forward, further, promote, convey, aid, transport.

begehen inspect or patrol (lines, on foot).

begießen coat (film), wet, moisten, water, irrigate.

beglaubigte Abschrift certified, legalized, authentic or attested copy.

Begleit- concomitant, accompanying, attendant.

Begleiten zum Fernsehbild sound or audio action accompanying television or video program.

Begleiter associate, satellite, congener (if similar).

Begleiter, Eisen- elements accompanying iron, iron associates, congeners of iron (if similar).

Begleiterscheinung attendant, accompanying, or secondary phenomenon or action, satellite effect.

Begleit-körper accompanying substance or body, congener (if similar); impurity, foreign substance or admixture. -linien satellite lines. -salten accompaniment strings. -stoff accompanying body or substance, congener (if similar); impurity, foreign substance.

Begrenzer, Amplituden- peak limiter, p.clipper, p.lopper. **Verstärkungs-** output suppressor or limiter, gain spoiler.

Begrenzungsanschlag back stop, limiting means.

Begriff concept, conception, idea, notion, precept.

Begriff, Ober- preamble, introductory portion of German patent claim setting forth prior art.

begründen establish, found, constitute, substantiate, create.

Begründung (eines Einspruches) argumentation (in support of an opposition).

Begründung, Berufungs- arguments or grounds for appeal.

Begründungsfrist period for giving grounds or to argue a case.

BeGussmasse slip, engobe (cer.).

behafte Oberfläche, gas- gas-contaminated surface (gas adhering to or adsorbed by surface).

Behaglichkeitswert comfort value, c.factor.

behandelbar manipulable, tractable, workable, processable, treatable.

Behandlung treatment, processing, manipulation.

Beharrungs-moment moment of inertia, rotational i. -punkt center of inertia, c. of mass, centroid. -vermögen inertia. -zustand steady-state condition, permanence, persistence, freedom from transients, resistance (of a machine).

behaupten contend, allege, state, hold, affirm, assent, maintain.

Behelfsanntenne makeshift, temporary or emergency antenna or aerial.

beherrschen master, control, override, rule, overcome, dominate.

behinderte Rotation hindered or inhibited rotation (of molecules).

Behinderung hindrance, hindering, inhibition, restraint, impediment, obstacle.

Behinderung, räumliche steric hindrance. **Fliess-** inhibition of plastic deformation.

Behlöt fathometer, echo depth sounder; Behm sound ranging altimeter, sonic a.

beidäugig binocular.

beidrehen auf Anfluggrundlinie turn to or steer for center of approach sector.

Beikreis epicycle.

Beilage annex, schedule, supplement, enclosure.

Beilauf, Jute- cable filler, jute f. or compound.

beimengen, beimischen admix, add, intermix, intermingle.

Beintaste bone key.

Beisitzer aid, aide, assessor.

Beispiel, Ausführungs- exemplified embodiment (re: patent specifications).

beispieleweise by way of example, exemplified.

beistimmen accede, assent or agree to, acquiesce in.

Beiwert constant, coefficient, parameter, factor, co-ordinate.

Beiwert, Schluck- absorptivity.

Beiwerte (Peilung) correction values (to compensate bearing errors).

beizen corrode, mordant, cauterize, etch, pickle.

Beiz-brüchigkeit acid brittleness. -mittel mordant, corrosive, caustic. -tonung mordant toning.

bejahenden Sinnes in the affirmative (sense).

Bekämpfung, Geräusch-, Lärm- noise abatement, n.suppression, combating of n.

Bekanntmachung über Erteilung eines Patentes announcement of grant or allowance of a patent.

Bekanntmachungsgebühr lay-out fee, announcement f.

Beklagter defendant, respondent.

Berufungs- appellee. **Wider-** cross- or counter-claim defendant.

bekleiden clothe, cover, coat, line, face, box.

Bekleidung, Wand-, schallschlucken- de baffle blanket, sound-absorbent wall draping or lining, tormentor, gobo (consisting of portable wall covered with absorbent material, used in m.p. studios).

Bekräftigung, Wahrheits- affirmation (of testimony).

beladen, eine Oberfläche mit Was- serstoff, etc. activate, sensitize or charge a surface with H, form an H skin.

Beladung, Vor- pre-charge, preliminary c.(of sorptive in sorbent)..

Belag, Prioritäts- priority proof.

Spiegel- mirror coating, reflecting film, silvering. **Strom-** current coverage or distribution (amperes per centimeter of periphery).

Belagverlust surface leakage loss (dielectric).

belangen, gerichtlich bring legal action against.

Belastbarkeit, Hoch- high load or current-carrying capacity.

belasten load, charge, weight, burden.

belasten, punktförmig lump-load.

belastet, stark heavily or highly loaded.

Belastung, aussetzende intermittent load. **Querspulen-** leak load.

Belastungsspitze peak load, crest l., maximum l.

beledert leather covered, leather-lined.

Belegung coat (of condenser), plating, deposit, film, covering, density (of electrons in beam).

Belegung, magnetische magnetic induction, m.charge, m.field, seat of m.flux. **Kondensator-, beweg-** liche rotor plate.

Beleuchter light electrician; scaffold or top light controller.

Beleuchtung illumination, illuminance, irradiance (in lux or

meter-candle units).

Beleuchtung, gerade direct illumination. - , senkrechte scaffold lighting, overhead l., top l.
- , spaltfreie apertureless illumination.

Beleuchtung, Dunkelfeld- dark ground illumination. **Effekt-** effect light, spot or fancy l.
Gegen- background illumination.
Hellfeld- bright ground illumination. **Hinter-** Rembrandt illumination, half-back i.
Rampen- footlights. **Zweizweck-** dual-purpose illumination.

Beleuchtungs-brücke traveling light crane. -linse condenser lens, illuminating l., bull's eye l.
-messer illumination meter, i.photometer, illuminometer.
-mittel illuminant.
-stärke illumination (ratio luminous flux to area of element of surface, in lux units, etc.).
-stärkemesser illuminometer, illumination photometer.
-trommel exposure drum, recording d.(on which film is exposed to modulated light beam).

Belichtung, Logarithmus der log. exposure. **Mehrfach-** superimposing, multiple exposure. **Nach-** post-exposure. **Ruhe-** average lighting, steady l., unmodulated or no-sound l. (in sound picture recording). **Vor-** priming illumination (of a cell), pre-exposure, preliminary exposure, or i.

Belichtungs-bereich, Unter- toe gradient of characteristic H. & D. (Hurter & Driffield) curve, toe range of under-exposure. -fenster aperture (in a plate), gate, photocell window. -kanal film track, f.channel (camera). -lampe exciter lamp. -mass exposure level (of Decoutes). -messer exposure meter (e.g. with

barrier-layer cell, used in sound recording, photography, etc.), cinophot (m.p. film pocket photometer); brightness meter, turbidity m.
-rolle printing drum (in p.machine), sound recording drum; scanning point, translation p.(in sound film reproduction). -schieber exposure lid, e.shutter.
-spielraum latitude or range of exposure, e.range.
-stelle sound gate.
-tabelle exposure time table.
-teil,
Unter- toe region of under-exposure (film). -trommel exposure drum, recording d..(sound film). -zahntrommel printing sprocket, main s.

Belieben discretion, (at) random, selection, at will, ad libitum.
beliebig haphazard, (at) random, arbitrary, any...at all, any... whatever, optional.

Bemessung dimensioning, proportioning, choosing; size, dimensions or proportions.

Benachteiligter aggrieved party.

Benachteiligung der hohen Frequenzen de-accentuation, de-emphasizing, slighting or partial suppression of high frequencies, attenuation of treble or high-pitched frequencies.

benetzbar wettable, capable of being wetted or moistened.

Benetzungswärme heat of wetting.

Benutzung eines Patentes working or reduction to practice of a patent.

Beobachtungs-fehler error of observation. -fenster bezel, observation window, peep-hole.
-rohr observation tube (in electron microscope).

Beratung advice, consultation, counsel.

berechenbar calculable, computable, appraisable.

Berechnung, Bildkraft-. halbklassische semi-classical image-

force calculation.	Berieselungsapparat sprinkler.
Beregnungsversuch rain test, wet t. (of insulator).	Bernstein amber.
Bereich, Einfluss- sphere of influence, radius of action.	Berstdruck breaking limit, bursting l., explosion or cracking l.
Entzerrungs- frequency range of equalization. Klangintensitätsdynamic range. Lautstärke-, der menschlichen Stimme human voice intensity range. Mitnahmerange of forced oscillation, entrainment range, coherence r., pull-in-step range. Schwärzungsdensity range (Y) (say, from .3 to 3). Sperr- suppression range. attenuation r., exclusion band.	Berufshandkamera professional hand camera.
Bereich-filter, Frequenz- band-pass filter. -melder, Wellen-wave-band indicator. -schalter, Wellen- wave-band switch.	Berufung appeal, brief for appeal. -einlegen gegen eine Entscheidung bei höherer Instanz take an appeal from a decision to a higher court.
Bereinigung des Minimums (cf Enttrübungsräumen) zero clearing (df).	Berufungs-abteilung appeal division, a.department. -begründung arguments and grounds for appeal, confirmation of appeal. -beklagter appellee, defendant in appeals court, respondent in an appealed cause. -instanz, zuständig sein als to have appellate jurisdiction. -klage appeal. -kläger appellor, appealer, appellant. beruhnen auf based on, due to, derived from, conditioned by, predicated upon.
Berg, Energie- energy hill, e. barrier. Potential- potential barrier. Wellen- peak, crest or hump of a wave.	beruhigen quiet, steady, stabilize, smooth, calm, kill (melt).
Berg-fett mountain tallow, ozocerite. -fleisch mountain flesh (asbestos). -fluss colored quartz. -glimmer margarite. -harz mineral pitch. -kristall rock crystal. -öl petroleum. -pech mineral pitch, asphalt. -wachs ozocerite, mineral wax.	Beruhigung stabilizing (weight).
Bericht, zusammenfassender survey report, review, summarizing article.	Beruhigungs-flügel intermediate blade, anti-flicker b. -frequenz fusion frequency, critical no-flicker frequency (m.p.). -kapazität smoothing capacitor -spule, Eisenkern- smoothing choke, filter c. -vorrichtung arc-silencer (suppresses hum and frying noise). -widerstand steadyng resistance, ballasting r.
berichtigten correct, amend, adjust, rectify, redress.	berührend, doppelt- bitangent.
berichtigendes Glas correcting lens.	Berührende tangent.
berichtigtes Auge corrected eye.	Berührungs-ebene tangential plane.
Berichtigungs-gerät compensation means (cam, etc., in df).	-gefahr risk or hazard of electric shock. -linie tangent.
-walze adjustment drum (range finder). -wert correction value, c.factor.	-punkt contact point, touching p. p.of tangency or osculation.
berieseln cause to flow or trickle over, water, irrigate, douche, spray, scrub, wash, sprinkle.	-schutz protection against electric shock hazard.
berührungsicherer Stecker shock-proof plug.	berührungs- spannungsschutz protection against electric shock

hazard. -stelle place of contact, osculation point (between two curves).

besäumen hem, edge, border, shear, trim, square (sheets).

Beschallung radiate or cause sound or ultra-sound waves to act or impinge upon, acoustic irradiation.

Beschaltung wiring.

Bescheid, **abschlägiger** adverse action or decision, refusal, disallowing action of a Patent Office Examiner.

bescheinigen certify, attest.

beschichten coat (a film with emulsion), form a layer or a film, apply emulsion.

beschichteter Film, doppelt- double-coated film, sandwich f.

beschicken load (phot.), charge, feed.

Beschicker, Funk-, **automatischer** automatic radio quadrantal-error compensator or corrector means, cam compensator.

Beschickung correction or compensation (in df work), radio compass calibration.

Beschickung auf gleiche Temperatur reduction to equal temperature.

Beschickungsaufnahme, Funk- calibration of radio direction-finder.

beschießen bombard (with electrons, etc.).

Beschlag, Oxyd- coating or film of oxide.

Beschläge fittings (of metal), fixtures.

Beschlagnahme seizure, attachment, arrest, restraint, distress.

beschleunigen accelerate, expedite, hasten, speed up.

Beschleuniger, Resonanz- magnetic resonance accelerator, cyclotron, induction electron a., betatron, rheotron. **Vielfach-** cyclotron (type of) tube with two dees and spiral beam accelerating elec-

trons or ions in stages.

Beschleunigung, Erd-, Fall- gravitational acceleration, acceleration due to gravity. **Nach-** post-acceleration (by second lens) (in c.-r. tube).

Beschleunigungs-anode gun anode.

-einrichtung high-potential transformer and vacuum tube (for nuclear disintegration). **-elektrode** accelerator electrode. **-elektrode, Nach-** second or additional gun anode or accelerator electrode, post-accelerator after-accelerator (c.-r. t.).

-gitter accelerator grid (c.-r. tube); screen-grid (of tetrode)

-linse aus zwei Lochelektroden double aperture accelerator lens (c.-r. tube). **-messer** accelerometer. **-spannung** gun potential, accelerator p., beam voltage.

-stufe target stage, accelerator s. (of multiplier). **-system** gun system (c.-r. tube).

Beschluss action (of Patent Office), decision, decree, order (of a court of law).

Beschneideglas trimming glass, print trimmer.

Beschneidung clipping (loss of initial or final speech sounds).

Beschreibung specification (of a patent), description, outline, sketch, characterization.

-, weitgehende broad specification. **-von Bildern auf Schirm** picture tracing, re-creation or delineation on screen.

Beschriften making a record or sound track upon, impressing a film or blank with acoustic actions.

Beschriftung recording (on film).

Beschussprobe shooting or bombardment test.

Beschwerde-abteilung appeals department, Board of Appeal.

-einrede rejoinder (in an appeal).

-gericht court of appeals.

-schrift appellatory plaint, appeal papers. -verfahren appeal action or procedure.
beschweren load, weight, burden; complain.
Beschwörung impedance.
beschwören take an oath, sign an affidavit, declare under oath.
Beseitigung, Geräusch- (an Klebestellen) blooping elimination.
besetzen populate.
besetztes Band full band.
Besetzung cast (m.p.)
Besetzungs-grad der Banden degree of filling of bands. -verhältnisse size of audience in a play-house. -zahl (der Elektronen in einem Niveau) extent to which level is populated by electrons. -zahl, Höchst- maximum number of electrons in shell.
Besitzurkunde title deed.
Besonnung insolation.
Bespannung baffle cloth.
besponnen covered, braided.
Besprechung mit Eisendrossel modulation by voice action with magnetic modulator.
Besprechungs-anlage sound pickup outfit. -mikrophon sound pickup microphone, s. collector. -punkt point where sound action is impressed. -raum sound studio.
besprochener Modulator voice-impressed or voice-actuated modulator.
Bespulung provide with winding, coil or loading means.
Besselfunktion erster Art Bessel function of the first kind.
beständig stable, constant, durable, permanent, steady, fast (colors), resistant, proof; continuous, invariable.
beständig, feuer- resistant to fire or heat, fireproof, refractory.
flammen- flame-proof, flame-resistant. **frost-** freeze-proof, resistant to frost. **hitze-** stable or resistant to heat,

heat-proof, thermostable, refractory. **koch-** resistant, stable or fast to boiling (dyes, etc.). **lichtbogen-** arc-proof, arc-resistant. **säure-** stable to acid action, fast to a. **wasser-** stable in or towards action of water.
Beständigkeit, Anlauf- tarnish-proofness, resistance to t.
Raum- volume stability. **Temperatur-** temperature stability, unaffected by temperature (changes).
Bestandteil constituent, ingredient, part, component. **Fremd-** foreign or extraneous matter or substance.
Bestätigungsurteil confirmatory decision.
Besteck dead reckoning, ship's position; set of instruments or utensils. **Funk-** radio fix.
Besteckungskosten trimming expense (re :arc-lamps).
Bestimmung determination, definition, clause, provision, stipulation, ascertainment.
Bestimmung, Mengen- quantitative determination, q. analysis.
Bestimmungs-gleichung defining equation. -grösse determinant. -stück factor, parameter, operating datum.
Bestrahlung, Schall-, hahe high radiation (distribution) efficiency. **Sonnen-** insolation, ir-radiation by solar rays.
bestreichen wipe (over), sweep out, scan, explore (say, the picture area or screen with beam, pencil or spot); cover (a range), contact, stroke (a magnet).
bestreitbar disputable, contestable.
bestreuen strew or sprinkle (say, powder) over.
Bestwert optimum value, optimal v., most favorable v.
Betätigungsspule working coil, tripping c., differential c.
Beteiligter party concerned, interested or involved.

Betonung accentuation, emphasis, action or stimulus (brought upon).

Betrachtung, unmittelbare direct viewing. **Aufsichts-, Direkt-** direct or frontal viewing (of television pictures).

Betrachtungs-abstand viewing distance. **-apparat** viewing apparatus, kinetoscope. **-richtung** sight-line, line or direction of regard. **-tisch** film viewing machine. **-zeichen** reference letter, r. numeral, symbol.

betreiben run, work, operate, exploit.

betreiben mit Arbeitsstrom operate on open circuit. **-mit Ruhestrom** operate on closed circuit.

Betrieb, Schwer- heavy-duty operation or service.

Betrieblautsprecheranlage works or plant public address system (loudspeakers distributed throughout a factory, etc.).

betrieblich operational, operative, functional, working, concerning actual use in service.

Betriebsbuch station log.

betriebsfähig operable, workable, in (good) working order.

Betroffener aggrieved party.

betupfen dab, dip, tip, spot, stipple.

Beugungs-aufnahme, Roentgen- X-ray diffraction exposure or pattern. **-bild, -figur** diffraction pattern, picture or image.

-fransen diffraction fringes.

-gitter diffraction grating.

-scheibchen diffraction disk.

-winkel diffraction angle.

beurkunden authenticate, legalize, record.

Beutel-filter bag filter. **-sieb** bolting sieve, bolter.

Bevollmächtigter attorney, agent, proxy, assignee, mandatory, mandatary.

bevorzugte Kristallachsenrich-

tung preferred crystallographic axis orientation. **-Orientierung** non-random orientation, privileged o.

bevorzugte, nicht- Orientierung randomly oriented, with non-preferential or non-privileged orientation.

Bevorzugung (von NF oder HF) accentuation or emphasizing (of AF or of RF and de-accentuation or de-emphasizing of the other).

Bevorzugung, energetische energy preference.

bewaffnetes Auge aided eye.

bewähren prove useful or good, give satisfactory results, prove (itself).

bewegliches, entfesseltes Mikrophon following microphone.

Beweglichkeit mobility, fluidity (being the reciprocal of dynamic viscosity).

Bewegung motion, movement, stir, travel, action (in film projection).

Bewegung, forschreitende progressive motion. **-, hin- und hergehende** reciprocating movement, to-and-fro m., rocking m., oscillating m., shuttling motion. **-, rein sinusförmige** plain harmonic or sine movement. **Brown'sche** Brownian movement. **Kreis-, Kreisbahn-** circular motion, gyration, movement in an orbit, orbital m. **Leitbahn-** transit path motion. **Rollbahnbahnkreis-** cycloidal path motion. **Rotations-** rotational motion, rotary m.

Bewegungs-amplitude velocity amplitude. **-eindruck** sensation of motion, illusion of m. **-elektrizitätslehre** electrokinetics.

-empfänger velocity microphone; pickup or detector of motion.

-energie kinetic energy, motional e. **-gleichung** equation of motion.

-grösse kinetic or motional quantity or magnitude, impulse,

momentum. -impedanz motional impedance. -kraft motive force, m. power. -lehre mechanics (re: machines), kinetics (re: motion of bodies and forces acting thereon), kinematics (re: motion in the abstract), dynamics (re: force action on bodies). -mikrophon velocity microphone, pressure-gradient m. -rohr mobility tube. -stufe stage of motion, phase of progress. -übergang motional transient. -vorgang motional action, cinematographic action.	Bezieher, Piano- piano stringer. Beziehung, Wechsel- interrelation, correlation, reciprocal or mutual relationship. beziehungsweise and/or;...or...or both; and; or; as the case may be, respectively, or rather.
bewehrt, stahlband- steel-tape armored.	Bezirksgerichtshof district court.
Bewehrung re-inforcement, armoring, fittings (hardware, of an insulator), sheathing.	bezogene Farben related colors.
Beweis, der Gültigkeit eines Patentes Abbruch tut evidence impeaching, or prejudicial to validity of, a patent.	Bezugsdämpfung volume loss, volume equivalent. Rückhör- side-tone reference equivalent.
Beweis, Neben- secondary proof, collateral evidence, circumstantial e.	Bezugs-ebene datum level, d. plane, reference l., fiducial l. -punkt reference point, fiducial p., datum p. -stromkreis reference circuit. -system reference system, standard or norm (used for comparison). -wert relative value. -zeichen reference symbol (numeral or letter).
Beweis-beschluss direction or order for evidence. -kraft conclusiveness, evidential value.	bezw. s. beziehungsweise
Beweislast onus of proof, burden of p.	bezweifeln call in question, doubt.
Beweismaterial (documentary) evidence, evidential material, testimony, proofs. als- vorlegen tender in evidence. -recht law of evidence. -stück exhibit, document, proof. -wert evidential value.	Bibliothekar librarian.
bewerten weight.	Bidipentode duodiode tetrode with suppressor grid; duodiode pentode (with bifilar filament).
Bewertungsfilter weighting network.	Biegekristall "bender" crystal.
Bewetterung air conditioning.	biegen bend, flex, curve, warp; diffract; refract.
Bewilligung grant, allowance, permission.	Biegemoment flexural moment, bending m., flexural torque.
Bezeichnung marking, denotation, notation, sign, symbol, designation labeling (for identification), color coding (of conductors).	Biege-probe, Schlag- shock, blow or impact bending test piece or specimen. -versuch, Dauer- bending fatigue test. -wechsel-festigkeit alternating bending strength.
bezichtigen accuse of, charge with.	biegsam flexible, pliant, pliable, bendable, ductile, supple. -machen ductilize (as a tungsten wire).
	Biegungsschwingung flexural vibration.
	Bienen-harz bee glue, propolis.
	-korblampe beehive neon lamp.
	Bifilar draht bifilar wire, twisted pair. -wicklung bifilar winding, Ayrton-Perry winding.
	Bild, aufgerichtetes, aufrechtes

erected image, erect i., rectified i. - , detailreiches contrasty picture (rich in details and contrasts). - , flaches very soft picture, flat picture (lacking contrast). - , flaves non-contrasty picture or image (presenting a limy condition or fuzziness, contrast often impaired by white tint permeating whole picture). - , hartes contrasty, crisp or harsh picture or image. - , hochzeiliges high-definition (television) image or picture. - , lichtschwaches low-luminosity picture, p. with low brightness. - , reelles, umgekehrtes real reversed image. - , ruhendes still, still picture, unanimated p., ordinary photograph. - , scharf eingestelltes sharp picture, sharply focused image. - , tönnungsreiches picture with proper shading values and contrast. - , umgekehrtes reversed or inverted image. - , unbewegtes still picture, unanimated p. - , unscharfes fuzzy picture, ghosty p. - , unverzeichnetes, - , unverzerrtes orthoscopic image, undistorted picture. - , weiches (zwischen flau und normal) weak or soft picture (between flat and normal), uncontrasty p.

Bild, Stehen des-(es) steadiness of image. - , mangelhaftes Stehen jumping or unsteadiness of picture or image.

Bild, Aufspaltungs- splitting pattern (opt.). **Ausserfokus-** out-of-focus picture. **Beugungs-** diffraction pattern. **Durchsichts-** (cf Durchprojektion) transparent picture, glass transparency, diapositive, lantern slide; translux p. **Durchstrahler-** transmission image. **Eigenstrahler-** image obtained by self-emissive method (electron microscope). **Einzel-** unit frame, individual picture

(in pictorial sequence). **Empfangs-** recorded copy (facsimile). **Ersatz-** equivalent circuit diagram. **Feld-** field pattern, f. configuration or map (made in electrolytic tank). **Fenster-** window transparency. **Fern-** television picture, televised p.; telephoto. **Flugbahntrajectory diagram.** **Formel-** structural formula. **Funk-** photo-radio (transmission), radio picture, wired p., photo-radiogram, photo-telegram. **Gegen-** counterpart, antitype. **Geister-** ghost image. **Halbtön-** half-tone or mezzo-tinto picture (in black and white, with grey shading values). **Interferenz-** interference figure. **Klang-** sound pattern, acoustic p. **Klatschen-** beat picture. **Komik-** funny picture, "funnies," cartoon. **Koma-** comatic image. **Kontroll-** monitoring picture (telev.). **Koordinaten-** pattern of co-ordination. **Ladungs-** charge pattern or image (re : iconoscope). **Lauf-** animated, moving or motion picture (in a sequence or series of pictures or pictorial actions). **Licht-** photo-image, photograph. **Linien-, unaufgelöstes** unresolved line pattern. **Luft-** aerial image (formed in space). **Mehrfach-** multiple image, double i., ghost i. **Moment-** instantaneous picture, snapshot. **Nach-** after-image; copy, imitation, replica. **Neben-** ghost image, multiple or double i. (telev.). **Netzhaut-** retinal image. **Öffnungs-** aperture image. **Panorama-** panoramic view or picture, panning shot, "pan" or "pam" (studio slang). **Raff-** time-lapse picture, fast-motion p. **Raum-** space diagram; stereoscopic picture, plastic p. **Rechen-** nomogram. **Reihen-** sequence of pictorial actions or pictures, motion p. **Schatten-** silhouette.

Schau- diagram, graph. **Schwarz-** weiss- black and white (facsimile) picture or phototelegraphic transmission. **Sende-** subject or outgoing copy (in facsimile). **Sinn-** symbol. **Spalt-, optisches** slit image, optical slit. **Spiegel-** mirror or speculum image, flare ghosts or spots (camera), double or reflected (ghost) i. **Stand-, Steh-** still (film) picture, non-animated p., still. **Stimmungs-** key picture, sentiment p. **-dunkles** low-key picture. **-über-** helles high-key picture. **Sucher-** seeker or monitoring picture. **Teil-** (**Farbenauszug**) compound picture (color record). **Ton-** tonal pattern or spectrum. **Trick-** trick shot, t. picture. **Ursprungs-** original subject copy. **Weit-** **winkel-** wide-angle picture, "wide-scope" p. **Zeitlupen-** slow-motion picture. **Zerr-** distorted picture (made with anamorphotic lens). **Zerstreuungs-** image formed by divergent lens. **Zerstreuungs-, des Auges** blur circles of eye.

Bild-ablenkung frame or picture scan. **-abtaster** televiser, television scanning device. **-abtaster-** **röhre, doppelseitige** two-sided mosaic pickup tube with separate image anode, iconoscope with two-sided mosaic screen. **-abtaster-** **Röhre mit mechanischer Blende** Farnsworth dissector of electron camera, Dieckmann magnetic scanner. **-abtaststelle** picture or film gate (m.p.). **-abtastung** frame scan, picture s. **-anode** barrier grid mosaic. **-aufbau** picture synthesis, build-up of picture (line by line). **-auf-** **fänger, elektronischer** electronic scanning device. **-auflösung** resolution, picture definition, scan. **-aufnahme, Kofferapparat** für box equipment, trunk unit. **-aufnahme, Luft-** (cf **Luftbild**)

aerial photography, airplane picture. **-aufnahmeverbereitung** lining up for shooting pictures. **bildaufrichtendes Mikroskop** image-erecting microscope. **Bildaufrichtung** erection of image, rectification of i., inversion of i. (reversing in both axes simultaneously, right and left, top and bottom interchanged at the same time). **-aufzeichnung** picture re-creation, tracing or delineation. **-ausleuchtung** "flashing" of image. **-ausschnitt** frame (of camera); image area (on scanning disk). **-beschreibung** (auf Schirm) picture tracing, re-creation or delineation (on screen). **-bühne** aperture or film trap. **-bühneneinstellung** framing, racking (by framing device). **-charakter** key of a picture or image. **-drehung** image rotation. **-einstelllampe** framing lamp. **-einstellung** centering control, height c., horizontal c., framing (in telev., often with rack and pinion for focusing). **-empfänger** picture receiver, p. reconstructor, video receiver, telev. receiver, picture viewing tube, p. reproducing device. **-empfangsstelle** picture or facsimile (telegraphic) receiving station or office, recording point. **-entwerfung** formation of an image, imagery, imaging. **-entzerrung,** **Licht-** rectification of aerial photos. **Bilder-kasten-, Laternen-** lantern slide box. **-masken, Laternen-** lantern masks. **Bild-erzeugung** formation of an image, imagery, picture (re-) creation, p. tracing. **-fänger** video pickup camera, television c. **-fangröhre,** **Sender-** pickup tube, iconoscope, dissector tube (of Farnsworth) **-fehler** picture distortion, image defects. **-feinheit** detail, (degree

of) definition of p.

Bildfeld frame, picture area, image field. -**ebnung** flattening of image field, elimination of curvature (opt.). -**krümmung,-wölbung** curvature of image field. -**zerleger** picture scanner, p. dissector (Farnsworth), p. exploring means (telev.). -**zerlegung** image (field) definition.

Bild-fenster film gate, aperture or trap, picture g. (m.p.). -**fenster mit 2 Ausschnitten** film gate with two frames. -**fläche** image area, picture field, image plane (opt.). -**flachheit** flat, very soft or non-contrasty condition or quality of picture. -**flauheit** flat, soft or non-contrasty quality of a picture (contrast impaired by white tint permeating p.), limy condition, fuzziness. -**flieger** aerial photographer. -**folge** sequence or series of optic or pictorial actions (m.p.). -**format** picture format, frame size or format. -**frequenz** picture frequency, frame (repetition) f., repetition rate (telev.); video f., visual f. -**frequenzverstärker** amplifier for frame sawtooth time-base. -**funk** photo-radio, wired picture, facsimile transmission. -**geber** pickup camera. -**gerät, Spalt**-photographic soundhead (m.p.). -**geräusch** frame noise (m.p.). -**greifer** in-and-out-claw (of threading mechanism). -**grösse** size of picture, format of p. -**grösse und Brennweite, Linse** für veränderliche zooming lens for variable magnification and variable focus, "vario-objective". -**güte** (figure of) merit or quality of picture. -**helligkeit**, **Mittel-** average or background illumination, mean picture brightness. -**helligkeitssignale** video signals, shading-value signals (telev.). -**hintergrund** picture background. -**höhe** picture

or image height (opt.), frame height (of a camera). -**inhalt** picture content, p. subject-matter, "information". -**kadre, Normal-** standard picture frame. -**kantenschärfe** resolution on border. -**kippeinsatz** incipient frame flyback or beam return (telev.). -**kipper** frame time-base. -**kippschwingung** frame or picture time-base oscillation or impulse. -**kraft (zwischen Metall und Elektron)** image force, image potential (between metal and electron). -**kraftberechnung, halbklassische** semi-classical image-force calculation. -**linie** focal line, image line.

bildlos amorphous, non-crystalline.

Bild-meister director of photography, picture chief or director.

-**nachleuchten** afterglow, phosphorescence of picture. -**nachstellung** framing, phasing, racking (m.p.; telev.), centering control (telev.). -**nachstellung, falsche** misframing, out-of-frame condition.

Bildner, Basen- base former, basifier, basifying agent. **Korrosions-** corrosive, corrodent, corroding or rusting agent. **Schleifen-** loop setter.

Bildnis portrait, picture, photograph.

Bildplastik plastic effect, relief e., stereoscopic e.; distortion of telev. image in form of multiple contours of diminishing intensity, plastic effect.

Bildpunkt image point, picture p., picture unit or elementary area, point image (telev.). -**dunkelster** shadow. -**,hellster** highlight. -**,nachleuchtender** phosphorescent picture point. -**signal** video signal, electrical impulse resulting from elementary area. -**verlagerung** spot shift (causing plastic effect, in telev.). -**verteiler** picture scanner (at

receiving end).

Bild-raster (cf Raster) scanning field, picture raster (telev.). -raum image space. -reihe sequence of pictorial actions, frames or pictures (m.p.); strip mosaic (aerial phot.). -röhre, Elektronen- electron image tube. **bildsames Gleiten** plastic deformation.

Bildsamkeit plasticity, capability of being kneaded, fashioned, formed or molded (by pressure and/or heat application), formability, moldability, fictility.

Bild-schale image shell. -schallplatte sound and picture on disk. -schaltung feed or movement of frame (m.p.); frame ratcheting, frame timebase (telev.). -scharfere picture definition. -scherung shearing of an image. -schicht, Film- film emulsion or coat.

-schirm projection screen, picture s. -schreibröhre televiser tube, viewing tube, picture reproducing tube. -schreibröhre, Projektions- projector-type television receiver. -schritt frame gage. -schwingungen picture or video impulses or signals.

-seite image side (of a lens). -seitenverhältnis picture aspect ratio. -sender video transmitter; facsimile t. -signal video or picture signal. -spannung, Untergehen der swamping of video or picture signal. -speicherröhre image storing tube, charge or signal storage tube, normal iconoscope. -speicherröhre,

Bildwandler- super-iconoscope. -sprung picture repetition frequency, picture cycle; break or shift of vision. -spurzeit Watkins factor, development f. -stelle picture scanner.

Bildstrich-einstellung phasing or framing of picture. -einstellung, falsche misframing; out-of-frame condition. -geräusch frame line

noise.

Bildstrom video current, picture c. -stürzung toppled condition of pictures (turned an angle in relation to one another).

Bildsynchronisierungs-impuls frame synchronizing impulse, f. sync. pulse, low sync i. -impuls-verstärker frame synchronizing impulse amplifier, f. sync pulse a. -lücke synchronizing gap (between end of field or frame traversal and beginning of next known also as underlap or interstitial period during which sync signal is introduced).

Bild-tanzen unsteadiness or jumping of picture. -teile verschiedener Gliederung picture portions of dissimilar nature, composition or make-up. -telegraphie picture telegraphy, wired or radio photo-telegraphy, radio or wire transmission of pictures, facsimile, wire-photo. -transportrolle picture feed roller. -übertragung (elektromechanische und elektro-chem.) picture, photo or facsimile transmission by electro-mechanical or electrochemical means, writing or copying telegraphy, by telautograph, telectrograph, Bartlane device, etc. -umkehrung image reversion, image inversion (when in two axes, i.e., interchange of left and right, and top and bottom of image); polarization (reversal of gradation sequence due to over-exposure to light).

Bildungs-energie energy of formation. -wärme heat of formation, enthalpy.

Bild-unschärfe lack of picture definition. -verbreiterung image spread. -verfahren, Steh-lantern slide projection method. -verschiebung slow drift or hunting of image. -, seitliche lateral shift of image. -verstärkung image intensification. -verstellungs-knopf framing knob. -verstellungs-welle framing shaft.

-verwackelung frame unsteadiness.
 -verzerrung image or picture distortion, jiggers (in facsimile).
 -vorführung, Raum- stereoscopic picture projection. -vorschub- bewegung frame sweep scansion.
 -walze picture cylinder (in Bakeswell app.). -wand projection screen. -wand, Ton- transoral screen (m.p.). -wandler image converter, picture transformer, transducer (changes optic into electron image). -wandler- Bildspeicherröhre super-iconoscope. -wandleuchtdichte brightness or luminous density of screen.

Bildwechsel picture cycle.

-, stetiger continuous, steady or non-intermittent feed or motion of film. -frequenz, -zahl frame or picture frequency, repetition frequency (telev.), number of frames per second.
 -zeit feeding time, picture cycle, moving period (m.p.).

bildweise Filmschaltung intermittent film feed, discontinuous film movement.

Bild-weite distance between screen and lens, image intercept.

-wellenspannung video signal wave potential. -werfer picture projector. -wiederaufbau reconstruction (e.g., of a facsimile picture). -winkel angle of image, a. of view. -wirkung, plastische (cf **Bildplastik**) illusion of depth (of picture), stereoscopic effect. -wölbung curvature of image, c. of field. -wurf picture projection. -wurfelektrode target electrode. -zahl frame or picture frequency. -zähler frame counter, f. indicator.
 -zeile picture line, p. strip (telev.). -zeilendurchlauf line traversal. -zerdehnung radial image distortion. -zerdrehung rotational, tangential or orientational distortion, twist of image. -zerleger picture scanner

or explorer, dissector (of Farnsworth). -ziehen photographic travel ghost. -zittern unsteadiness of picture, jumping of p. -zusammensetzungsvorrichtung picture reproduction means, p. recreator or delineator, p. scanner.

Billigkeitsverfahren equity suit.

Billigung approval, approbation, consent, assent, acquiescence.

Bimetallstreifen bimetallic strip (consisting of two strips of dissimilar metals with different expansion coefficients), bimetallic trip or tripping gear (of a circuit breaker).

Binantenschachtel box with a two-segment electrometer system.

bindend, wasser- hydrophylic, water-absorbent.

Bindeton ball clay.

Bindung binding, bond, union, association, affinity.

Bindung, Dreifach- triple bonding. Gas-gettering. **Neben-** secondary union or bond, second-order linkage.

Bindungs-energie (Elektronen-Konzentration) binding or bond energy. -kraft (chemische) chemical linkage force. -stärke bonding strength.

Binode diode-triode (rectifier and AF or RF amplifier in one bulb, with joint cathode).

Binokularspule binocular (form of closed-field) coil.

Bitter'sche Streifen Bitter (magnetic powder) patterns, Bitter bands. **Bkw** reactive power, r. voltampere, var.

Blähungsgrad expanding or swelling property, degree of inflation or imbibition.

Blank, Zahlen- figure blank, figure space,

Blankfilm film base. -, gelatinebeschichteter gelatine-coated film base. -, unbeschichteter plain, uncoated film base.

Blank-seite cellulose face or side

(of film). -verdrahtung bare wiring.

Blasdüse blasting nozzle, gun, discharge n.

Blase, **Dampf-** steam-heated still; bubble of vapor or steam. **Glas-** (generally) bubble in glass, seed (when small), air bell (when of irregular shape). **Guss-** flaw or defect in a casting. **Schweiss-** arc crater.

blasen blast, blow, smelt (blast furnace), inject (steam).

Blasen, **Stahlkugel-** steel shot blast.

Blasenbildung blister formation, blistering (metal, phot., etc.); cavitation, occlusion of gases.

Bläser, **Flamm-** blowing magnet.

Blasinstrument wind instrument.

Blech- brass instrument.

Blatt leaf, foil, sheet, page, folio; blade (of knife switch), lamination (of a magnetic core).

Blättchen lamina, lamella, small leaf, flake.

blättchenartig lamelliform, laminiform.

Blattektrometer leaf electroscope.

Blätter-bürste laminated brush.

-kondensator foil condenser, tubular capacitor.

Blatt-feder leaf, plate or flat spring; reed, blade. -grün chlorophyll. -kurve folium.

Blauauszug blue record.

blauempfindlich blue sensitive.

Blaufilter blue filter, viewing filter (phot.).

Blech plate, sheet, foil, lamination of metal.

Blechblasinstrument brass wind instrument.

blecherner Klang tinny sound.

Blech-gestell chassis (of receiver set). -instrument brass instrument (mus.).

Bleicherde Fuller's earth.

Bleiglätte litharge.

Blende light-stop, diaphragm, aper-

ture (stop), slit; shield (with scanning aperture, in Farnsworth dissector); shutter (e.g., iris diaphragm, focal-plane blind, disk with cut-out sector for exposing film or plate, in m.p. work).

Blende, Abdeck- mask, shutter, shutter mask. **Abtast-(Farnsworth)** scanning aperture, hole (of dissector tube of Farnsworth).

Anoden- anode diaphragm or partition (re:cathode-ray tube).

Apertur- aperture stop, a. diaphragm. **Aufhell-** reflecting screen. **Aufrichtungs-** erector stop. **Austritts-** exit slit.

Blickfeld- field stop. **Einhänge-** inset diaphragm. **Einsatz-** interchangeable diaphragm. **Einschnü- rungs-** crossover aperture. **Ein- tritts-** input diaphragm or capacity disk (of klystron). **Fächer-** fan fading shutter. **Feld-** field stop. **Fenster-** apertural stop, a. diaphragm. **Gesichtsfeld-** field stop. **Halb-** half stop, scale.

Klang- tone-shading means, tone control, tone switch, tonalizer.

Kombinations- Goerz effect shutter. **Kreis-** iris stop or diaphragm.

Licht- light stop, diaphragm, light shield (in sensitometer).

Loch- stopping aperture, apertured partition, diaphragm, shield (in cathode-ray tube). **Noiseless-** bias or noise-reduction stop, shutter vane or gate. **Okular-**

eyepiece diaphragm, eyepiece stop. **Raster-** scan hole, scan aperture (Farnsworth dissector), raster screen aperture. **Reinton-** bias or noise-reduction stop, shutter vane or gate. **Schlitz-** slit stop. **Schluss-** final diaphragm.

Schnürspur- mask for making squeeze track. **Sehfeld-** field diaphragm, field stop. **Sonnen-** sunshade, black screen. **Spalt-** aperture stop, slit. **Sperr-** (blocking) light stop. **Steuer-** modulating

electrode, modulation shield or grid (cathode-ray tube). **Ton-** tone-control means, tonalizer; fader. **Trommel-** drum with scan apertures or scan holes, scanning d. **Vorhang-** curtain fading shutter. **Wechsel-** stop disk with spiral slot cyclically cooperating with quadruple scanning disk holes, auxiliary rotary shutter disk with spiral slot.

Zacken- triangular aperture (in film recording), vane with serrated or triangular edge. **Zerleger-** dissector aperture.

Zonen- stop to diaphragm out a certain zone or area. **Zusammensetzung-** picture receiver or p. reproducer scanning hole.

Blenden-ausschnitt aperture, slit. -ebene diaphragm plane. **-linse,** **Loch-** aperture disk lens. **-loch** anode aperture (cathode-ray tube). **-nachstellung** phasing of shutter. **-öffnung** aperture of diaphragm or stop. **-rohr** screening tube. **-scheibe** horizontal edge (film recording); auxiliary rotary shutter disk with spiral slot (for quadruple scanning). **-schirm** gobo (for sound absorption, in studio). **-träger** diaphragm support. **-trommel** scanning drum.

Blend-glas moderating glass.

-scheibe stop. **-schirme** gobos (for sound absorbing, m.p.).

Blendung glare, blinding, dazzle (of eye). **-, akustische** aural dazzling.

Blendverfahren diaphragm method (for pencil modulation).

Blickfeld field of vision, range of v., field of view (opt.). **-beidäugiges** binocular field of view.

Blick-feldblende field stop.

-linie line of vision, l. of sight. **-punkt** point of view. **-richtung** sight-line, direction of sight, d. of regard. **-winkel** angle of view.

Blind-buchse dummy socket or jack. **-komponente** wattless, idle, quadrature, reactive, or reactance component. **-landeachse** blind or instrument landing line or path. **-landedienst** beacon service (to assist in blind or instrument landing). **-leistung** reactive power, r. voltampere, var. **-leitwert** susceptance. **-schwanz** arrangement to make resistance alternately zero and infinite, in dipole feeder operation, stub. **-stecker** dummy plug. **-stromaufnahme** drawing or taking of wattless, idle, or reactive current. **-verbrauchszähler** reactive volt-amp.-hour meter, sine m., wattless component m., var-hour m. **-voltampere** var (unit of reactive power). **-widerstand**, **induktiver** inductive reactance, positive r., inductance. **-widerstand, kapazitiver** capacitive reactance, negative r., condensance.

Blinker, Zeit- chronographic camera, time recording c.

Blink-lampe flash lamp. **-schaltung** blinking arrangement, ratchet circuit scheme (in relaxation or sawtooth wave generator with R-C time-base and neon lamp).

Blitz (Film) statics (film).

Blitz, rücklaufender return lightning stroke.

Blitz, Kapsel- flashlight capsule. **Kugel-** flashbag; globular lightning, ball l. **Licht-** pulse or flash of light, scintillation.

Blitz-anzeiger, Fern- keraunophone. **-bahn, verschlungene** tortuous path of lightning flash. **-lampe** flashlight, flashlamp. **-licht** flashlight; flash bulb, magnesium light.

Block, Gitter- grid condenser; staircase-like structure of echelon grating. **Kopplungs-** fixed coupling capacitor.

Block-empfang party reception, block r., communal r. **-hahn**

- stopcock.
- Blockierung**, Gitter- negative biasing of grid, g. cut-off.
- Block-kondensator** fixed capacitor, blocking c., stopping c., insulating c. -kondensator, Wickel-tubular capacitor, paper c.; Mansbridge condenser (of fixed value). -zeichnung schematic or diagrammatic illustration, block diagram.
- Blut-farbemesser** plethysmograph (monitors color changes, etc.), electroarteriograph. -körperchenzähler haemacytometer, blood counter.
- Bock**, Lager- pedestal of a bearing.
- Boden**, gewölbter arched back (mus.).
- boden**, Resonanz- sounding board.
- Schrift- recording base.
- Boden-antenne** ground antenna, earth a.; underground or buried antenna.
- flugleiter ground control operator.
- funkstelle ground direction-finding station; aeronautical g. radio s. -funkstellen-Rufzeichen ground station call sign or signal.
- geschwindigkeit ground speed (of an airplane).
- peilapparat ground station direction-finder.
- peilstelle ground direction-finder station.
- welle ground wave, direct w. (which hugs earth's curvature).
- Bogen** bow, arc, curve, curvature, bend, arch, clip.
- Bogen**, Flammen- flame arc, electric arc.
- Grad- graduated arc, bow, protractor.
- Hochstrom- heavy-current arc, large-current arc.
- Kreis- arc of circle, circular arch.
- Pol- pole arc.
- Schwingungs- amplitude of oscillations.
- Voll- semi-circle rail (re: microscope).
- Bogenabstand** pitch or distance along anarc (of holes in Nipkow disk).
- bogenbildend**, nicht- non-arching (metal).
- Bogen-frosch** bow-frog (string instrument). -gitter, Kreis- arcuate grid. -lampe mit breitwinklig
- gestellten Kohlen scissors-type arc-lamp. -lampe, Freifall-gravity-feed arc-lamp. -lampe, Wolfram- tungsten arc-lamp, pointolite. -lampenabzugsrohr vent stack of arc-lamp. -linie arc line, arcuate l., curved l. -mass radian measure. -rückschlag arc-back.
- spektrum arc spectrum.
- Bohreinsatz**, -eisen bit.
- Bohrer**, Zwick- twist drill.
- Bolzen**, Knebel- toggle bolt. Ösen- eyebolt.
- Bolzen-mutter** nut. -scheibe washer.
- Bomben-sauerstoff** tank oxygen.
- flugbahn bomb trajectory.
- richtgerät, -visier bombsight.
- Bord-ablenkung** distortion of bearing on site (by re-radiation, etc., or by ship's field), aircraft error.
- effekt board effect, ship field error (in df work), quadrantal error (due to structural parts, metal, etc.).
- bördeln** bead over, edge, flange (an edge).
- Bördelrand** flanged or beaded edge.
- Bordsprechgerät**, -telephon inter-communication telephone, inter-phone.
- Bottich** vat, vessel, tub, tun, tank.
- Bottich**, Entwickler- developing tank.
- Box**, Abhör- monitoring box.
- Bramme**, Roh- slab, ingot.
- Brand-messer** pyrometer. -stein brick.
- Bratpfannengeräusch** frying noise.
- Bratsche** viola, tenor violin.
- brauchbar** usable, useful, serviceable, suitable.
- Brause** rose, douche.
- brechbar** frangible, fragile, breakable, brittle, refrangible, refractile.
- brechend**, doppelt- birefringent, birefractive.
- einfach- unirefringent.
- brechende** Brennfläche diacaustic (opt.).

Brechkraft refractive power (opt.).

Brechung, Strahl- refraction or splitting up of rays.

Brechungs-brennfläche diacaustic.

-einheit diopter, dioptry (unit of focal length). -exponent refractive index, refractivity.

-gesetz, Snelliuss'sches Snell's law of refraction. -indexbestimmung refractometry. -messer refractometer. -messer, Augendiascope, rétinoscope. -vermögen, Licht- optical refractive power, refrangibility (of light). -winkel angle of refraction, refracting a.

Brech-wert, Hauptpunkt- principal point refraction. -winkel angle of refraction, refracting a.

Breitbandempfänger broad-band receiver, wide-band r.

Breite width, breadth, latitude.

-, nördliche northern latitude.

Breite, Doppler- Doppler broadening.

Breiten-effekt latitude effect (cosmic rays). -höhe meridian altitude. -minute one minute of latitude. -wert azimuth value (of vision).

breitwinkliger Stellung der Kohlen, Bogenlampe mit scissors-type arc-lamp.

Bremsdynamometer Prony brake, brake dynamometer.

Bremse, Freilauf- free-wheeling brake, coaster b.

Bremselektrode reflecting electrode, retarding-field e. (in positive-grid tube).

bremsen brake, retard, check (motion), decelerate.

Bremsfeld reflecting field, retarding f. (in electron-oscillation tube). -audion positive-grid detector, electron-oscillation detector or rectifier (negative anode associated with leak resistance and condenser).

-elektrode reflecting electrode, retarding-field e. (in positive-

grid tube). -generator negative transconductance generator or oscillator, positive-grid or retarding-field o. -röhre retardation valve, Barkhausen-Kurz retarding-field tube. -schaltung retarding-field or positive-grid circuit scheme (operating with grid maintained at a higher potential than plate), Barkhausen-Kurz circuit organization, oscillating-electron or electron-oscillation scheme with reflecting electrode. .

Brems-gitter suppressor or cathode grid (in a pentode). -kreis negative-anode or negative-plate circuit. -moment (Zähler) brake or retarding torque (of a meter, etc.). -spannung negative-anode potential (in electron-oscillation tube). -strahlen rays caused by particle retardation.

Bremsung der Elektronen reflection (in Barkhausen-Kurz tube); deflection (in magnetron); deceleration or retardation of electrons.

Brems-vermögen stopping power (of photographic emulsion); braking or retarding power. -wirkung der negativen Raumladung repelling action of electron charge, negative space charge. -zylinder, Relais mit dashpot relay.

Brennebene, hintere back focal plane. -, vordere front focal plane.

brennen, dicht vitrify (cer.).

Brenner, Fischschwanz- fishtail burner, batwing b. **Schlitz-** batwing burner, slit b. **Schneid-** cutting torch. **Zirkon-** zirconium burner, z. filament.

Brennfläche caustic surface (opt.).

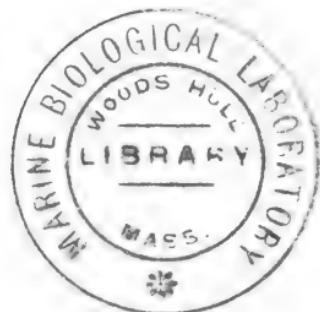
-, brechende diacaustic. -, reflektierende, -, rückstrahlende catacaustic.

Brenn-fleck (focused) spot. -glas burning glass, convex lens. -linie focal line, image l.

- punkt focus, focal point. -punkt, vorderer first focal point.
- schwindung shrinkage in firing (cer.). -spannung constant glow potential (is slightly lower than firing or striking p.); normal running p. (of glow tube, etc.).
- spiegel reflector sheet. -strahlhärtung flame hardening. -weite focal distance, f. length, convergence d. -weite, hintere back focal length. -weite und Bildgrösse, Linse für veränderliche zooming lens for variable focus and variable magnification, "vario-objective", zoom lens.
- Brennweitenmesser focometer.
- brennweitige Linse, kurz- short-focus lens. lang- long-focus lens.
- Brett, Misch- mixing panel, monitoring p. Objektiv- lens panel, objective board. Schall- baffle (board); sounding b. Verstärkeramplifier rack, a. panel.
- Brillanz (akustische Wiedergabe) "bounce" (in sound reproduction).
- Brille, Zweistärken- bifocal spectacles.
- Brillengläser, durchbogene meniscus spectacle glasses. -, punktuell abbildende point-focal glasses.
- Brisanz shattering power.
- Bristolkarton Bristol board.
- bröckelig brittle, friable, crumbly, fragile.
- brodeln boiling noise.
- Brom-öldruckpapier bromoil printing paper. -silberpositiv positive in silver bromide. -zahl bromine number.
- Brown'sche Bewegung Brownian movement.
- Brown Zungentelephon Brown reed-type telephone receiver.
- Bruch break, breakage, fracture, rupture, failure, fraction, fragment; scrap, waste.
- Bruch, Längen- longitudinal fracture. Vertrauens- breach of confidence.
- Bruch-dehnung total extension or elongation (to fracture), breaking tension, stretch (of paper).
- festigkeit ultimate strength.
- fläche surface of fracture.
- brüchig brittle, short, friable, fragile, cracky.
- Brüchigkeit, Beiz- acid brittleness.
- Bruch-methode, Ketten- method of infinite continued fractions (math.). -platten bursting disks.
- punkt brittle point (of glass).
- spannung ultimate stress, breaking s. -stücke fission products, fragments, fracture or rupture pieces. -teil fraction, fractional part, aliquot part. -versuch, Rot- hot breaking test.
- Brücke bridge, platform; rider (piano).
- Brücke, Beleuchtungs- traveling light crane. Kapazitäts- capacitance bridge, Wien b. Querleitungs-transconductance bridge. Thermokreuz- thermo-couple or thermo-junction, thermal cross. Verhältnisarme der ratio arms of bridge. Widerstands- resistance bridge, Wheatstone b.
- Brücken-ausgleichstrom bridge balancing current. -gleichgewicht bridge balance. -H-Schaltung, Entzerrungskette mit H-type attenuator network (balanced). -Scheitel bridge apex. -T-Schaltung, Entzerrungskette mit T-type attenuation network (unbalanced). -übertrager differential transformer. -verhältnisarme ratio arms of bridge.
- Brumm-kasten bass keys. -spannung hum potential, ripple potential. -spur, -streifen buzz track; hum (broad bands on screen of c.-r. tube). -tastenfeder spring for bass keys (accordion). -ton, Netz- motor boating (of a.c.), a.c. pickup.
- Brust-fernsprecher head and chest set. -mikrophon breastplate microphone.

Buch, Dreh- shooting script.
 Bücherei library.
 Buchgold leaf gold.
 Buchse sleeve, bush, socket.
 Buchse, Blind- dummy socket, dummy jack.
 Büchse, Fernrohr- telescope tube, barrel. Kompass- compass bowl, c. kettle. Lager- bearing bush.
 Buchse, Rad- wheel bushing. Schalt-jack.
 Büchse, Widerstands- resistance box.
 Bucht, Verstärker- amplifier rack, repeater rack or bay. Wähler- bay of selectors, selector rack, switch frame.
 Büffelleder buffalo skin.
 Bug bow.
 Bügel clamp, clip, strap, staple, bow; yoke (of a magnet); loop (of a magnetron); harness (of headphones); saddle bracket (microscope); bout (string instrument).
 Bügel, Aufhänge- loop hanger.
 Kopfhörer- harness, headband or strap (of headphone or headset).
 Stirn- head rest (of magnifier).
 Bügelhaken, Flaschenzug- block tackle.
 Bugwelle (eines Geschosses) nose wave (of a projectile).
 Bühne, Bild- aperture or film trap
 Bühnen-aufsteller set dresser.
 -einstellung, Bild- framing.

Bund, Anschlag- stop collar.
 Bündel beam, pencil, bunch, cone (of rays); wave packets.
 Bündel, Achter- eight-wire core, quadruple twins. Strahlen- bundle, bunch, beam or pencil of rays or radiations.
 Bündelung bunching (of electrons in Klystron), focusing, beaming, concentration, insuring beam or directive antenna effect.
 Bündig succinct, brief, concise, summarized, short, valid; flush, snug.
 Bunker (für Verstärker) bay or rack (of amplifiers).
 Bunsenphotometer Bunsen photometer, grease-spot p.
 bunte Farben hue colors, chromatic c.
 Bürde burden, load.
 Bürste, Blätter- laminated brush.
 Kontakt- contact-brush, wiper.
 Bürsten-entladung brush discharge (between glow discharge and sparking). -maschine, Zwischen-metadyne, metadynamo.
 Büschel tuft, bunch, cluster, brush (discharge).
 Bussole, Sinus- sine galvanometer.
 Bütte tub, vat, tank, chest.
 Büttenrandpapier deckle edged paper.
 Butzenscheibenlinse bull's eye lens.
 B Verstärker class B amplifier.



C

C Verstärker class C amplifier.

CW Schaltung capacity-resistance circuit scheme.

Callierfaktor (cf Kontraststeigerung) Callier factor (of print contrast).

cartesische Fläche Cartesian surface. caesiumbedeckt caesiated.

Centradian centraradian (one-hundredth radian).

Charakter, Bild- key of a picture.

Charakteristik s.a. Diagramm & Kurve.

Charakteristik, fallende drooping characteristic, falling c.

-, quadratische square-law characteristic. Anlauf- transfer characteristic. Herz- cardioid characteristic or space pattern.

Maschinen- speed-load characteristic. Nachglüh- persistence characteristic. Richtungs- directive or directional characteristic or

diagram, space pattern.

Chargengang heat run.

chargieren charge, feed, load.

Chiffrierung encipherment, coding.

Chor assembly of strings (mus.).

chörig, drei- trichord.

chromatischer Fehler chromatic aberration. -Schaum chromatic soft focus or bleeding.

Chromatisierung, Ortho- orthochromatic processing.

conphas in-phase (condition), in phase coincidence.

cotg α cot α , cotangent α .

Coulombabstossung Coulombian repulsion.

C Verstärker class C amplifier.

Cycloidhöhe (Magnetron) cycloidal height.

Cyclotron (cf Resonanzbeschleuniger) cyclotron, magnetic resonance accelerator using two dees and a spiral beam.

D

D Wert quadrantal error due to airplane fuselage, etc.
Dach-kapazität top (loading) capacity. -kohle upper coal.
d'Alembert'sche Wellengleichung d'Alembertian wave equation.
Damm margin or narrow strip of material between adjacent tracks or grooves of phonograph disks, barrier, land.
Dammarharz Dammar resin or gum.
dämmen stop up, dam up, curb.
Dämmerungs-effekt night effect.
-schalter twilight switch.
Dämmung, Schall- sound reduction or attenuation, s. deadening or absorption, silencing (of noise).
Dämmzahl, Schall- sound transmission characteristic.
Dampf, direkter live steam.
-, indirekter latent steam.
Dampf- auflösung volatilization.
-blase bubble of vapor or steam; steam-heated still.
dampfdicht steam tight, vapor tight.
Dampf-dichtemesser dasymeter.
-dichtung steam packing. -druckmesser manometer, steam gage, tensimeter. -druckzünder vapor-pressure igniter.
dampfacht fast to steam.
dämpfen attenuate, damp (out), dissipate, absorb (sound in air, etc.); muffle, deaden, silence, quench, die away, decay, mute (mus. instrument).
dämpfend, schall- sound absorbing, s. attenuating, s. damping or deadening.
Dämpfer mute (in string instrument), damper (of piano). -, rotierender rotary stabilizer (film feed).
Licht- silk, light softener (m.p.).

Schall- silencer, muffler, sound absorber, gobo (sound absorbing sheet) (m.p.).
Dämpferwicklung amortisseur winding, damping w.
Dampf-hülle steam jacket; vaporous envelope or sheath, vapor shroud.
-hunger steam avidity. -kolben steam piston.
Dampflampe, Quecksilber-, mit Heizkathode phanotron, tungar tube (with argon filling). -, Quecksilber, mit Steuerelektrode mercury-vapor tube with control grid (of thyratron, ignitron, etc., type).
Dampf-messer manometer, steam gage, tensimeter. -schale evaporating dish or basin.
Dämpfung attenuation, damping, loss (of energy), dissipation, drop; impedance. -, kilometrische attenuation per kilometer of line.
-, mechanische mechanical resistance, m. impedance.
Dämpfung, Ableitungs- leakance loss.
Bezugs- volume loss, v. equivalent.
Fehler- balance attenuation, return loss. Flüssigkeits- liquid or fluid damping or cushioning, dashpot action. Kenn- iterative attenuation constant. Klirr- correction of non-linear harmonic distortion. Leitungs- line loss, l. dissipation, l. attenuation.
Nebensprech- crosstalk transmission equivalent, c. attenuation.
Nutz- damping resulting in useful radiation or signal power, effective transmission equivalent.
Öl- oil damping means (re:sound recording vibrators); oil dashpot.
Pseudo- loss of selectivity by

parallel internal resistance.
Rückfluss- structural return loss.
Rückhörbezugs- side-tone reference equivalent. **Schall-** sound absorption, s. attenuation, s. deadening. **Schwingungs-** damping of oscillations or vibrations; shock absorption. **Sperr-** stop band attenuation. **Strahlungs-** radiation damping, r. resistance. **Übersprech-** crosstalk transmission equivalent. **Verlust-** damping resulting in outright loss or dissipation of energy (by ohmic resistance). **Vierpol-** image attenuation constant. **Wirk-** (cf Wirkwiderstand) transducer loss.
Dämpfungs-ausgleicher equalizing network, compensating network.
-dekrement, scheinbares logarithmisches equivalent logarithmic decrement. **-entzerrer** equalizing network, compensating n. **-Frequenzkurve** attenuation-frequency curve. **-gang** frequency response of attenuation, attenuation-frequency characteristic. **-glied** attenuation network or mesh.
-klotz damping plate. **-konstante, Wellen-** wave attenuation constant (real part of transfer c). **-mass** unit of attenuation (in decibels or in nepers); attenuation standard (denotes also real component of image transfer constant).
-messer transmission (efficiency) measuring device, decremeter.
-mittel, Schall- sound absorbing, attenuating, insulating, damping or deadening means or material.
-periode quench period. **-pol** damping pole (point of infinite attenuation or suppression); point of attenuation. **-reduktion** regeneration, gain, de-attenuation.
-spule damping coil, amortisseur c. **-verminderung** regeneration, gain, de-attenuation. **-verzerrung** frequency distortion; tone d.
-vorrichtung damper, dashpot.

-wert decrement, value of damping or of attenuation. **-wicklung** damping or amortisseur winding.
-widerstand non-reactive, effective, dissipative or ohmic resistance; attenuator. **-widerstand, Kenn-** iterative impedance, characteristic i. (for uniform line).
-winkel phase angle difference, loss a. **-wirkung** quench action.
Dampfwassertopf steam trap.
Darbietung entertainment (radio, acoustic or visual), program (material), offering.
Darmsaite gut string.
darren kiln, dry, kiln-dry; liqueate (copper).
darstellen represent, prepare, produce, make, manufacture, exhibit, display, describe.
Darsteller actor, character player.
Darstellung, vektorielle vectorial representation. **Spektral-** representation by spectra.
Darstellungsweise method of preparation; manner of representation, style.
darunterliegend subjacent, underlying.
Dauer, Leucht- illuminated period, light p., time of luminescence or fluorescence.
Dauer-biegeversuch bending fatigue test. **-bruch** fatigue fracture.
Dauerfestigkeit fatigue strength.
Kerb- notch fatigue strength.
Korrosions- corrosion fatigue strength.
dauerhaft durable, lasting, permanent, stable, fast.
Dauer-haftigkeit durability, keeping quality, stability, permanence, endurance. **-haltbarkeit** fatigue endurance. **-haltbarkeit, Verdrehungs-** endurance under torsion stress. **-prozess** d-process (in phosphorescence decay).
-registrierung long-period recording. **-riss** fatigue crack.
-schlagprobe continuous or fatigue

- shock or impact test (specimen). -schlagwerk continuous or fatigue impact test machine. -standfestigkeit (long-time) creep strength, creep resistance, static fatigue stress, creep limit. -standfestigkeitsprüfung (long-time) creep test. -standversuch creep test, fatigue test. -strich long dash, permanent note (N and A interlocking, in df). -strom persistent current. -ton permanent note, tone, sound or signal. -zustand steady state.
- Daumen** mechanical operating part resembling a thumb, as a cam.
- Daumen, Hebe-** cam, tappet, finger, disk with lobe. **Steuer-** sequence switch cam.
- Daumen-mutter** thumb nut. -rad sprocket (wheel). -scheibe cam (wheel), disk with lobes.
- Däumling** cam knob.
- dazwischenreten intervene.
- Debye-Scherrer-Ring** D.-S. ring or circle, powder pattern, Hull r.
- Decke** belly (of string instrument).
- deckeln** provide with lid or cover.
- Deckenprojektor** ceiling projector (to determine cloud height).
- Deck-fähigkeitsmesser (Farbe)** cryptometer (measures concealing power of paint). -glas einer Linse anterior surface of a lens.
- gläschen cover glass (of microscope). -kraft density (phot.), opacity, hiding, concealing or covering power (of paints).
- kraftmessер cryptometer. -mittel covering material, resist, protective coat (in etching work), "ground". -peilung alignment bearing. -plättchen cover slides.
- Deckung** registry, cover, covering, coincidence, congruence (geom.); intensity or coverage (of a negative, opt.), stereoscopic contact (in range finder).
- deformierte Fläche deformed surface, figured s.
- dehnbar machen ductilize (wire). **Dehnbarkeitsmesser** ductilimeter, dilatometer, extensometer.
- Dehner** expander (in volume-range control).
- Dehnung, Bruch-** total extension or elongation, breaking tension, stretch (paper). **Rück-dämpfung** capacity (re:metals). **Zeit-** high-speed camera shooting; time scale increase.
- Dehnungs-diagramm, Spannungs-** stress-strain diagram, stress-deformation d. -fuge expansion joint. -grenze yield point.
- messer dilatometer, extensometer, ductilimeter. -modulus modulus of extension, (often) Young's modulus of elasticity. -schlitz slip joint (Martin furnace).
- welle dilational wave. -zahl coefficient of expansion or extension.
- dekadische Logarithmen** common logarithms.
- dekonzentriert** de-focused, de-bunched, dispersed, out of focus.
- Dekoration** set (m.p.).
- Dekrement, Dämpfungs-, scheinbares logarithmisches** equivalent logarithmic decrement.
- Dekrementmesser** decremeter.
- Delta-Verfahren** "toe" negative method (phot.).
- Demodulation** demodulation, detection, rectification.
- demonstrieren** demount, disassemble, dismantle, take apart, knock down.
- Densitometer, Kugel-, integrierendes** integrating spherical densitometer.
- Densogramm, Mikro-** microdensitometer record.
- derb** solid, compact, dense, firm, rough, strong.
- Derbheit** ruggedness, robustness, solidity, strength.
- Desakkmodation, zeitliche** magnetic ageing (irreversible decrease of permeability with time).

detailreiches Bild picture rich in detail and contrasts, contrasty p.
Detektor, linearer linear detector or rectifier. quadratischer square-law detector or rectifier. **quantitativ arbeitender** integrating detector. **Fest-** contact detector, fixed crystal d. (with non-adjustable cat whisker). **hebel-** contact detector or crystal d. with cat whisker adjustable by lever action. **Pinsel-** contact or crystal detector with cat whisker. **Wellen-** cymoscope, wave or oscillation detector, coherer.

Determinante, Gleichungs-, für Leitungen determinant for line equations.

detonierender Verstärker heterodyne amplifier.

Deutlichkeit, Konsonanten- consonant articulation. **Sprach-** articulation, intelligibility of voice, clarity of speech audition. **Vokal-** vowel articulation.

Deuton deuteron.

Deutsche Industrie-kormen (DIN) German industrial standards.

Deutung explanation, interpretation, evaluation.

Dewargefäß Dewar vessel.

Dexel adze (cutting tool).

Dezentrierung decentration, decentering, eccentricity.

Dezimalstelle decimal place.

Dezimeterwelle micro wave (for w. below 20 cm), decimeter wave.

Diagonalbeziehungen diagonal relationships (in periodic system).

Diagramm see also **Charakteristik, Kurve.**

Diagramm, Doppelkreis- figure "8" diagram or space pattern. **Kreis-** circle diagram, circular loci.

Orts- locus or circle diagram.

Pulver- powder pattern. **Rückstrahl-** back reflection photogram.

Strahlungs- radiation diagram or characteristic, space or r. pattern. **Zeiger-** vector diagram.

Zustands- phase diagram.

Dialogpegel dialog level.

Diaphonie (cf Übersprechen) cross-talk; babble (when from a great number of disturbing channels).

Diaphragma diaphragm, stop, baffle, mask, membrane, shutter. -anode apertured anode, a. stop.

Diapositiv, Strich- line diapositive, line transparency.

Diapositiv-projektion lantern slide projection. -sender film transmitter.

Diaprojektion lantern slide projection.

dichroitischer Schleier dichroic or dichromatic fog, silver or red fog.

dicht dense, close, tight, firm, compact, thick, impervious, sealed, hermetic.

dicht, zu overdense.

dicht brennen vitrify (ceramics).

dicht, dampf- steam or vapor tight. **licht-** opaque, (sealed) light-tight or light-proof, not transmitting l. **luft-** hermetic(ally sealed), airtight, excluding air. **vakuum-** vacuum-tight, sealed to insure vacuum.

Dichte, Einsatz- number of stations (satisfactorily operable) in a given band and their closeness.

Leucht- luminous brightness, intrinsic brilliance, intensity or brightness of illumination or light in terms of stilb (sb) or apostilb (asb) units. **Lichtstrom-** luminous flux density (in lumens). **Massen-** mass density.

Dichte-gitter density grid, (charge) d. control or regulating g.

-messer, Flüssigkeits- liquid density meter, densimeter, hydrometer, areometer. -messer, **Gas-dasymeter.** -messung, photogr.

densitometry, photodensitometry, photographic density measurement. -modulation density modulation, charge-density m.

dichten make tight, lute, pack, caulk; condense, compact, densify.

dichtend, selbst- self-sealing, tightening or packing.

Dichte-reguliergitter density grid, (charge) density regulator or control g. -schrift variable-density sound track. -skala density scale. -steuerung, **Ladungs-** charge-density modulation.

dichtgepackt close-packed (cryst.).

Dichtung, Labyrinth-, Turbinen- turbine labyrinth seal, t. gland.

Vakuum- vacuum plumbing, sealing or packing.

Dichtungs-ring gasket ring. -stoff luting, calking, packing, plumb-ing material (vacuum work).

Dicken-messer thickness gage, calipers, gage c. -schwingungen thickness vibrations (cryst.). -taster, Faden- calipers with jaws to measure thread diameter capacitively.

Dickte thickness.

dielektrische Verschiebung dielectric displacement.

Dielektrizitätskonstante specific inductive capacity, dielectric constant, permittivity.

Dienstvorschriften service or working rules or regulations.

Dietrich skeleton key, picklock.

Differenzfrequenz difference frequency (re:beat, heterodyning).

Differenzialrelais differential or discriminating relay.

differenzierbar differentiable.

Differenzton difference tone, differential t.

diffundieren diffuse.

Diffusionswärme diffusion heat (gas).

Diktiermaschine dictograph.

D I N (Deutsche Industrie Normalien) German industrial standards.

Dinaston Dinas clay.

Ding object. -punkt object point.

dingseitig on the object side.

Diodengleichrichter, Zweifach- duodiode rectifier.

Diopter alidade, diopter.

Dioptrik dioptrics (now covering refraction branch of optics).

Dipole dipoles, doublets.

Dipolzeile dipole array.

direktanzeigender Peiler direct-reading direction-finder.

direkt(es) Abspielen direct play-back. -(er) Dampf live steam. -(er) Gegenbeweis rebutting testimony or evidence. -(e) Kopplung direct coupling (by resistance, inductance or capacity).

Direktionskraft directing force, directive f., versonial f.

Direktor, Atelier- studio manager.

Direktverstärker straight-ahead amplifier.

Diskant treble. -posaune soprano trombone.

Diskontinuität, Elektronenfluss- shot effect.

Dispersion, Drehungs- rotatory dispersion.

dissoziierbar dissociable.

Distanz, Kern- inter-nuclear distance.

Distanzhalter spacer, separator, spacing means. -isolator spacing insulator, stand-off i. -relais distance relay. -stück spacer, separator piece.

DK (dielektrische Konstante) dielectric constant.

Dochtkohle cored carbon.

Döckchen stud.

docken wind (yarn, etc.).

Dockenfeder poppet spring.

Dolle nick.

Dompfaffenorgel bird organ.

Donnereffekt peculiar effect in sound recording when white and ultra-violet light is used; (non-linear) photographic distortion in variable-area recording known as "donner" or thunder effect.

Doppelaufnahme duplex shot.

doppelbeschichteter Film double-coated film stock, sandwich f.

Doppel-blitzzielfernrohr double

- direct sighting telescope.
-brechung double refraction, birefringence. -diode duodiode, double diode.
doppeleindeutig one to one.
Doppel-fernglas field glass, binoculars. -fernrohr binocular telescope. -gängeraufnahme dual-role work. -gestaltung dimorphism.
-gitterröhre bigrid valve, twin-grid tube, four-electrode tube (tetrode, pliodynatron, etc.).
-gleichrichter full-wave rectifier.
doppelhörig binaural.
Doppel-impulsverfahren double-impulse method. -kegelantenne cage antenna, double-cone antenna.
-klang echoed sound, hearing sound twice (by electric and by air transmission). -knoten binode. -konusanntenne cage antenna, double-cone antenna.
-kreisdiagramm figure-8 diagram, tangent circle pattern. -linse double lens, doublet. -lötungen (Dewar-Gefäß) double seals (Dewar vessel).
doppeln duplicate, copy.
Doppeln, Film- film duplication.
Doppel-pedalharfe double-action harp. -platten twin plates or crystals, composite crystal, biquartz. -plattenkristall bimorph crystal, divided-plate crystal, biquartz. -quarzkeil double quartz wedge. -ring-Oberflächenspannungsmesser twin-ring type surface tensiometer.
-röhre twin-tube, two-system t., dual amplification t., reflex tube. -röhrenschaltung tandem tube (push-pull) circuit organization.
doppelsägeförmige Spannung double sawtooth potential.
Doppel-schichtfilm sandwich film, double-coated f. -schichtlinse double-layer lens. -schnürspur, Gleichtaktsprossen- variable-density double-squeeze sound track.
doppelseitige Bildabtaströhre two-sided mosaic pickup tube (with separate image anode). -Mosaikröhre image multiplier iconoscope.
doppelsinnig ambiguous, equivocal, uncertain, double meaning, "double entendre".
Doppelsperkklinke (cf Klinke) double dog, d. pawls, d. detent.
doppelspuriger Tonstreifen double-edged variable-width sound track or record.
Doppelsteuerröhre power pentode in which cathode grid is connected with control g. rather than with cathode.
Doppel-T-Anker shuttle armature, h-type a.
doppelt-berührend bitangent.
-brechend birefringent, birefractive. -hochrund convexo-convex. -hohl concavo-concave.
Doppel-umkehrprisma inversion prism (reverses or échanges in both axes of image). -V-Antenne double-V-antenna, doublet.
-weggleichrichter full-wave rectifier. -wegschaltung double or full-wave rectifier circuit organization. -wendelsystem biplane filament system. -zackenschrift mit Abdeckung bilateral track recording with double-vane shutter; double-edged variable-width track, duplex v.-area t.
-zackenschrift, Viel- multiple double-edged variable-width track.
-zackenspur, Abdeck- duplex variable-area track. -zünder time and percussion fuse, combination f. -zungenpfeife double-tongued flute. -zweipolröhre duodiode.
-zweipol-Dreipolröhre duodiode-triode tube. -zweipol-Vierpolröhre duodiode-tetrode tube.
Dopplerbreite Doppler broadening (causing D. width).
Dorn mandrel, spine, pin, tongue.

Dorn, Lehr- inner cylinder or plug gage.

Dose, Abspiel- electric phonograph soundbox. Abtast- electric pickup or soundbox. Wiedergabe- sound pickup head.

Dosen-barometer aneroid barometer.

-fernhörer watchcase telephone receiver.

dosiert in measured quantities, quantitatively regulated, dosed (pharmacology, etc.).

Dosierung, Dosis dosage (re:rays, etc.).

Dosimeter, Roentgen- X-ray dosimeter.

Doublen duplicating.

Dptr. diopter, dioptry.

Drachen, Karton- box kite.

Draht, durchgehender through-wire.

-schwingender filament swing (magnetron, etc.). -spannungs-führender live wire, charged w., "hot" w. -stromführender current-carrying wire, live w.

Draht-, Durchgangs- through-wire.

Fasson- profile wire, shaped or fashioned w. Gitterwickel- grid coil wire. Haar- Wollaston wire, capillary w. Klingel- bell wire, annunciator w. Litzen- stranded wire, Litz wire.

Draht-gaze wire gauze, w. mesh, w. cloth. -gebilde, Luft- aerial or radiating array. -gewebe wire gauze, w. mesh, w. cloth.

-kreuzung wire crossing, transposition of (line) wires, crossover. -netz, Erd- ground mat.

-schirm wire screen. -schleife, Funkbeschickungs- QE (quadrantal error) correcting, clearing or compensating loop. -walzwerk wire rod mill. -wellentelegraphie wired radio, w. wave telegraphy.

Draill twist, spiral thread, torsional force, moment of momentum (phys.), spin (of electrons), rifling (gun).

drallfrei non-kinking, non-twisting;

unrifled.

Draillwinkel angle of twist (rifling).

Dreh-achse axis of rotation, center of r., pivot, fulcrum, hinge.

-anker pivoted armature (re:loud-speaker, etc.). -ausgleich torque compensation.

drehbar gelagerter Hebel pivoted lever; fulcrumed l. (when with two arms).

Dreh-buch shooting script, screen play. -dose crank box.

drehen, plan- face planing. Über- super-speed operation (m.p.). unter- low-speed operation.

Dreh-federwage torsion balance.

-fehler, Nord- northerly turning error. -feld rotating field, rotary f. -feldschwingungen rotating field oscillations.

-funkfeuer rotating radio beacon or radio range, omnidirectional b. -impuls, Spin- spin angular momentum, spin moment, moment of momentum of electron. -knopf rotary (tuning) knob. -licht- signal revolving beacon. -ling crank.

Drehmoment torque, moment of rotation, twisting or torsional moment, angular momentum (re: atomics). Anzugs- starting torque. -ausgleich torque compensation.

Dreh-platte turntable (re:phonograph). -polarisation rotatory polarization, optical rotation.

-punkt fulcrum, pivot, center of rotation, c. of motion. -resonanz torsional oscillation resonance.

-scharnier swivel hinge. -scheibe dial (re:automatic tuning, etc.); turntable (part of m.p. studio equipment). -schwingversuch oscillation or alternating torsion test. -späne turnings, borings, drillings. -spiegelung rotatory reflection, combined rotation and reflection (cryst.). -spule, mit einem Lager versehene unipivotal

- moving coil. -stabfeder torsion bar spring. -tisch rotating stage, rotator (opt.).
- Drehung rotation, revolution, turn, angular motion, gyration, twist, torsion. -, magneto-optische magneto-optical rotation, magnetic r., Faraday effect. -, optische optical rotation, rotatory polarization. -, optischen, Umkehrung oder Wechsel der mutarotation.
- Drehung, Bild- image rotation. Links- levogyration, left-handed polarization, counter-clockwise rotation. Phasen- phase rotation, p. shift. Rechts- dextro-rotation, right-handed polarization, clockwise rotation.
- Drehungsdispersion rotatory dispersion.
- drehungsfrei irrotational, rotation-free.
- Drehungs-kristall "twister" crystal. -schwingung torsional vibration. -vermögen rotatory power. -vermögens, Umkehrung oder Wechsel des mutarotation. -winkel angle of rotation; a. of deflection.
- Dreh-wage torsion balance. -wähler, Heb- vertical and rotary selector. -zapfen pivot, trunnion, journal. (of an axle).
- Dreibein tripod.
- dreichöriges Piano trichord piano, three-stringed p.
- Dreidimensionalität tridimensionality, three-dimensionality; stereoscopic property (opt.).
- dreieckig triangular, three-cornered.
- Dreieckrechner triangulator (for trigonometric calculations).
- Dreiecks-keil triangular wedge. -lehre trigonometry. -rechnung, Wind- air-drift triangulation.
- Dreiecksternschalter delta-star switch.
- Dreier-alphabet three-unit code.
- stöße triple collisions, three-fold c.
- Dreifachbindung triple bond(ing). dreifach(e) Oberharmonische triple harmonic. -(er) Streifenfilter tricolor banded filter.
- dreifachrechtwinklig trirectangular.
- Dreifach-röhre three-unit or three-purpose tube (three independent valves in one bulb). -stecker three-pin plug, triplug.
- Dreifarben-leuchtdichten tricolor RD (reflection density) values.
- trennung three-color separation.
- verfahren tricolor method.
- dreifarbig trichromatic, three-colored.
- Dreifingerregel right-hand rule, thumb rule, Fleming's r.
- dreifächig three-faced, trihedral.
- Dreifussring tripod ring.
- dreigliedrig trinomial (math.). -(e) Farbleichung three-color equation, three-stimulus e.
- Drei-kreisempfänger three-circuit receiver. -punktsschaltung Hartley circuit scheme (terminals including center tap of coil connected with three electrodes of tube), potentiometer circuit scheme. -schenkeldrossel three-legged reactor or choke coil.
- drei-schenkelig three-legged, three-limbed. -seitig three-sided, tri-lateral, triangular. -stellig three-place.
- Dreistoffsysteem ternary system.
- dreiteilig three-part, tripartite. -(er) Stecker three-point plug, three-way p.
- Drei-teilung trisection, tri-equipartition. -wegehahn three-way tap or cock. -wegeschalter three-way switch. -wegverbindung three-way connection. -wicklungs-transformator hybrid transformer.
- dreizählig trigonal (cryst.); three-fold, triple, ternary.
- Drillachse rotator (quantum theory).
- drillen drill, turn, twist.

Drillung torsion couple, twisting c.

Drillungs-kristall "twister" crystal. -modulus torsion modulus, shear m., rigidity m. -schwingungen torsional vibrations.

dritter Ordnung, Kurve cubic curve. **Drittwicklung** tertiary winding (of a transformer).

Drossel choke coil, choke, inductor, reactance coil, impedance c. kicking c., tickler c. (regeneration).

Drossel, eisenfreie air-core coil, air-c. choke. **Abflachungs-smoothing coil**, s. choke. **Dreischenkel**- three-legged reactor coil or choke coil. **Eisen**- iron-cored choke coil. **Entzerrungs-anti-resonant coil**. **Kipp**- cut-off choke (regulating battery charging). **Klang**- tone-control choke. **Netz**- hum-bucking coil, hum eliminator c. **Steuer**- magnetic modulator, modulator choke, Heising modulator. **Tast**-, **Telephonie**- magnetic modulator coil. **Tonbeseitigungs**- hum eliminator choke, h. bucking coil.

Drossel-absperrklappe throttle clack valve. -kette low-pass filter. -satz, **Niederfrequenz-low-pass filter**. -spule, **Funk-air-gap reactor**. -wirkung attenuation (filter, etc.), damping, choking or throttling action.

Druck pressure, head; compression; impression, print(ing).

Druck, Gegen- counter-pressure, back-pressure, reaction. **Hoch**- high pressure; relief print.

Licht- photo-mechanical printing, photographic p.; radiometer vane effect. **Lichtfarben**- photo-chemical color printing. **Rück**-reaction pressure. **Schall**- sound or acoustic pressure.

Schweiss- welding upset. **Strahlungs**- radiation pressure. **Tief**-

low pressure; intaglio printing process. **Um-** reprint. **Vor**- first impression, proof.

druckabhängig pressure-responsive, pressure dependent, being a function of p.

Druck-amplitude pressure amplitude. -eigenspannung residual compressive stress. -empfang typescript reception, printing r. -empfänger (cf **Bewegungsempfänger**) pressure (-responsive) microphone. -entlastung pressure relief.

Drucker, Fern- teleprinter, teletype, stock ticker.

Druck-erhöher intensifier, pressure step-up means. -feder compression spring. -fenster pressure plate or gate (m.p.). -filter pressure filter. -gasschalter gas blast switch, (cross) airblast s., auto-pneumatic circuit breaker.

-gebiet compressed or pressure region or area. -und Gefrierpunkt-messer manocryometer. -gleichgewicht, osmotisches isosmotic equilibrium. -kammerlautsprecher pressure-chamber loudspeaker, pneumatic l. (without diaphragm).

-knopfempfänger push-button or press-button receiver set, receiver with automatic tuning means. -kolben pressure flask, p. piston, piston ram plunger; digestion flask. -körper indentor (rubber). -kufe pressure pad (m.p.). -lack, Gummi- gum printing varnish. -luftantrieb pneumatic drive. -luftschalter (cross) airblast switch, auto-pneumatic circuit breaker.

Druckmesser pressure gage, piezometer, liquid manometer, fluid m. -osmotischer osmometer. **Dampf**-steam gage, manometer, tensimeter. -& **Gefrierpunkt-messer** manocryometer.

Druck-minderer pressure reducing or relief valve. -platte platen (of a printing press). -probe, Kugel-

ball pressure test, Brinell ball impression or indentation t.
-rahmen film trap (projection work). -raster printer's screen.
-regler pressure regulator, barostat, piezostat. -rolle presser or pad roll (film feed). -schiene pressure shoes (film proj.).
-steg pressure or harmonic bar (piano). -verbreiterung pressure broadening (re:gas spectrum).
-verschiebung pressure shift (re: spectral lines). -wage piston manometer. -windkessel compressed airtank, blast pressure tank. -Zug-Verstärker push-pull amplifier. -zünder pressure igniter.

D-Spannung Dee voltage (cyclotron).
Duanten duants (cyclotron), dees.
dubbeln, dubben duplicate.
Dublette doublet.
Dubletten-Aufspaltung doublet separation (spectrum).
duff dead, dull.

Dulling dulling (suppression of AF by dubbing or scoring, m.p.).
dumpf all bottom, tubby, boomy; dull
dunkel, Modulierung auf modulation to dark condition.

Dunkel-adaptation, -anpassung dark adaptation, scotopia. -entladung dark discharge, dark current.
-feldbeleuchtung dark ground illumination. -kammer dark room, camera obscura. -methode observation in darkness. -pause dark period, cut-off or obscuring period (m.p.). -raum,

Aston'scher Aston dark space, primary d.s. -raum, Faraday'scher Faraday dark space. -, Kathoden-Crookes dark space, cathode d.s.
-stöße background counts (in Geiger-Müller tube). -strahlung obscure radiation, heat r. (from a light source), invisible (actinic)r. beyond the violet.
-strom dark current (of photo-electric cell flowing in absence

of illumination). -wertsteuerung adjustment to value of darkness.
-widerstand dark resistance.
-zeit dark interval or period.
dunkles Stimmungsbild low-key picture.
dünn thin, tenuous, slender, dilute, feeble, rare, weak.
dünnewandig thin-walled.
Dunst, Fernen- distant fog.
Dunst-abzug hood (for fumes).
-abzugsröhr vent pipe. -kreis atmosphere. -messer atmometer.
-rohr ventilating pipe.
Dup-emulsion dupe emulsion.
-negativ duplicating negative.
-positivfilm duplicating positive stock, master p.
Dur (Tonart) major (musical pitch or mode).
durchbelichten fully expose or irradiate.
Durchbiegung deflection, flexure, bending, coflexure, sag, dip (of line wire).
Durchblickvorrichtung dioptric device.
durchbohren perforate, bore, drill, punch, pierce, penetrate.
durchbohrt perforated, punctured, punched, bored, apertured.
durchbrochen apertured, perforated.
Durchbruch burst (discharge); fracture, break. -stoss burst pulse.
durchdringen pervade, permeate, penetrate.
durchdringend (inter) penetrating (e.g., two crystal lattices), penetrant.
Durchdringungs-frequenz penetration frequency, critical f. -vermögen penetrating power, penetrativeness.
Durcheinander confusion, mixup, bedlam.
durchfallen fall or drop through (a potential).
durchfallendes Licht transmitted light, transcient l.
Durch-flussmesser flow meter.
-flutung circulation (magnetic

potential); flow (of RF, etc.).
Durchführung wall entrance, bushing, duct, lead-in. **Innenraum-** indoor bushing.
Durchführungs-isolator, Wand- wall lead-in or bushing insulator.
-**stromwandler** bushing-type current transformer.
Durchgangs-draht through-wire.
-**frequenz** penetration frequency.
-**richtung** forward or low-resistance direction (rectifier).
-**widerstand** volume resistance (exclusive of surface r.), insulation r.
durchgeben filter, strain.
durchgehend(er) Draht through-wire.
-**(es)** Licht transmitted light, transcient l.
Durchgriff grid controllance, g.
penetration factor, grid transparency, transgrid action, gain reciprocal $l:\mu$
Durchgrifflinse (cf **Lochblendenlinse**) aperture lens (through which field or anode may act or draw electrons).
Durchhang sag, slack. -**verfahren** "toe" method of recording (under-exposure of film, Tobis method using toe region of Hurter & Driffield curve).
durchkopieren print through.
Durchlass clearance, lumen.
-**breite** band-width, pass band.
durchlassen filter, strain, transmit (light, etc.), let through or pass.
Durchlass-frequenz pass wave.
-**grad (von Wasser)** transmission factor (of water), radiation through water.
durchlässig, halb- semi-permeable, semi-transparent.
Durchlässigkeit transmittancy, transmissivity, transmitting property or power (for rays, electrons, etc.), transparency, perviousness, penetrability, permeability (magnetic).

Durchlässigkeit für ultrarote Strahlen diathermancy, property of being diathermanous.
Durchlässigkeit, Filter- transmittance (ratio of filtered to unfiltered current). **Kopie-** transmission of picture. **Licht-** light transmittance, transmittancy (spec., of unit thickness). **Luft-** air penetrability, a. perviousness. **Ultrarot-** infrared transmittance or transmittancy, dia-thermancy.
Durchlass-kurve selectivity curve (of a direction-finding receiver).
-**richtung** forward direction, low-resistance d. (of a rectifier).
-**widerstand** forward resistance (of rectifier).
Durchlauf running through or passage (of a film). **Bildzeilen-** line traversal.
durchlaufen pass through, traverse, cover, sweep (a line).
Durchlaufkopiermaschine continuous film printer.
durchleuchtend transparent, dia-phalous.
Durchleuchtung trans-illumination, transmission of light; radioscopy.
-**mit Roentgenstr.** (diagnostic) radioscopy, radiography.
Durchleuchtingsapparat fluoroscope, cryptoscope.
durchlöchert punctured, perforated, pierced, punched, apertured, having holes or pits. -**(er)** Bügel beehive shelf (gas drying).
Durchmesserwicklung full-pitch winding.
Durchmesserwicklung des Senders operating transmitter at high modulation percentage.
durchmustern survey, review, catalog or count (stars).
durchnässen wet (thoroughly), soak, steep.
Durch-perlungselektrode bubbling-type electrode. -**projektion** back projection, diaprojection.

-projektionswand translucent screen.
durchröhren stir or agitate (thoroughly, to the bottom).
Durchsatz throughput (furnace work).
durchscheinend translucent, partially transparent, diaphanous, shining through.
Durchschlag breakdown, rupture, puncture (of insulation); punch, drift; filter, strainer; carbon copy. **Wärme-** breakdown due to thermal instability.
Durchschlagen (von Nachbarsender) interference by neighboring station in volume, neighboring stations "come through" or "break through" or swamp signals (by image frequency effect).
Durchschlagen der Gleichstromkomponente (über Synchronisierzeichen zum Schirm) d.c. component reaches screen by way of synchronizing pulses.
Durchschlags-festigkeit, Stoss-impulse-voltage breakdown strength. -**geschwindigkeit** propagation speed (of fluid in pipes); rate of insulation breakdown.
Durchschlagsspannung breakdown, puncture, rupture, disruptive or flashover potential.
Durchschmelzung burnout, melting, fusion, blowout.
durchschneiden traverse, cut across, cross, intersect.
Durchschnittsverminderung reduction of area (of a test piece pulled apart, resulting in a "waist").
durchschwingen swing through; operating condition in which wave is not interrupted or cut off.
durchseihen strain, filter, percolate.
durchsetzen thread (a film); permeate, traverse, pervade; mix, intersperse, thread (turns by magnetic flux).
durchsichtig transparent, dia-

phanous, translucent (when only partially transparent), clear, lucid, pellucid, limpid.
Durchsichts-betrachtung rear viewing (of pictures). -**bild** (cf Durchprojektion) diapositive, lantern slide, glass transparency (picture thrown from rear on frosted glass pane, etc.); translux picture. -**dichte** transparent density (m.p.). -**schirm** (Speicherprojektionsröhre) transparent screen (of a storage-type television tube). -**sucher** direct view finder, eye level finder).
durchstarten eines Flugzeuges "open up" and repeat landing procedure (in ZZ landing method).
durchstechen pierce, stab, cut through.
Durchnsteuern operating inside straight portion of characteristic close to point where overload begins; grid excitation sufficient to swing plate current from zero to saturation point (re: amplifier). Load a tube to full capacity (re: transmitter).
Durchstossverfahren descent (or piercing) through clouds, penetration method (in airplane landing).
Durchstrahlung transmission of light or of radiations, penetration by rays, irradiation.
Durchstrahlungs-methode transmission method. -**übermikroskop** transmission-type electron or ultra-microscope. -**verfahren** transmission method (using thin foil, in ultra-microscopy work).
durchstreichen flow, pass, circulate or travel through; cross out, cancel.
durchstreichende Linie trajectory.
Durchziehglas slide.
Düse nozzle, tip (welding), tuyere, tuyer.
Düse, Blas- blasting or discharge nozzle, gun. **Fang-** mixing nozzle.

(steam jet). Schweiss- welding tip. Venturi- throat or constricted piece of Venturi meter, nozzle-like reducer.

Düsenkopf nozzle tip.

D-Wert quadrantal error due to airplane fuselage, etc.

Dynamik contrast or sound volume ratio between lowest and highest intensities of notes or passages (in music, etc.); practical volume compression and expansion; speech or signal energy volume range. Also: Ratio between undistorted maximum signal strength and noise, noise-signal ratio.

Dynamik-einebnung compression.

-einregelung adjustment of contrast (by compandor action).

-entzerrer dynamic expander. -linie volume-range or contrast characteristic. -presser compressor (in volume-range control). -regler volume- or dynamic-range control means, compandor (comprising compressor and expander means), contrast regulator. -steigerung (cf. Wuchtsteigerung) dynamic-range expansion. -verzerrer dynamic compressor.

dynamischer Lautsprecher, permanent dynamic loudspeaker with permanent magnet.

Dynamometer, Brems- brake dynamometer, Prony brake.

Dynatronsummer dynatron (AF) oscillator.

E

Ebenbild image, likeness, similarity.
Ebene optical flat (opt.); plane, plain.

Ebene, in einer - mit coplanar with, flush with.

ebene Welle plane wave.

Ebene, Bezugs- datum level, d. plane, reference l., fiducial l.
Blenden- diaphragm plane. **Brenn-, hintere** back focal plane. **Brenn-, vordere** front focal plane. **Ein-falls-** plane of incidence. **Einstell-** focal plane. **Einstellungs-** focusing plane. **Flucht-** vanishing plane. **Halb-** semi-plane, half-p., H-p. **Haupt-** principal plane, p. surface. **Hyper-** hyperplane. **Kristall-** crystal plane, c. face. **Netz-** lattice plane, plane-family of a crystal.

Ebene, Polarisations- plane of polarization. **Drehung der-** polarization error.

Ebene, Reflexions- plane of reflection. **Schmiegungs-** osculating plane. **Spalt-** cleavage plane, c. face. **Symmetrie-** plane of symmetry, crystallographic p.
Teilungs- plane of division.

Ebenenabstand, Haupt- principal plane distance.

Ebenheit planarity, flatness, smoothness, evenness.

Ebenmass symmetry.

Ebnung, Bildfeld- flattening of image field.

Ebnungslinse, Feld- field flattener.
Echelettegitter echelette grating (opt.).

Echo, stufenförmiges echelon-formation of multiple echoes.

Echo, Hörer- listener echo. **Mehr-fach-** multiple echo, reverbera-

tion, flutter e. **Schein-** pseudo echo. **Vielfach-** multiple echo, flutter e. **Wellen-** radio (signal or wave) echo, wave reflection (involving one or more hops to ionosphere and back).

Echo-lot sonic altimeter, sound-ranging a., echo depth sounder, fathometer. **-lotung** echo sounding, echo or reflection altitude or distance measurement and ranging; radar or radio locator, sonar work (predicated upon echo principle). **-paare** paired echoes. **-stromdämpfung** echo current attenuation; active return loss. **-unterdrückung** echo suppression, e. killing, damping of reverberations (by sound absorbing material). **-weite** echo area, effective scattering cross-section of radar target. **-werk** swell organ. **-wirkung** echo effect.

echt, dampf- fast to steam. **koch-** fast to boiling. **licht-** fast to light, non-fading.

echtes, absolutes Gehör genuine absolute pitch.

echte Längenmessung direct measurement of length.

Eck, Seiten- lateral summit **Würfel-** corner of a cube, cubic summit.

Ecke corner, angle, edge (of a plane angle), summit (of a crystal), quoin.

Ecke, Mittel- lateral summit.

Eckfrequenz corner frequency, sharp cut-off frequency (filter).

eckig angular, cornered, angled.

edel noble, non-base, rare, precious, rich, vital, inert (gas).
Edel-erde rare earth. **-gas** rare or noble gas, inert gas (in atmos-

phère). -gas-Glühkathodengleichrichter tungar (argon-tungsten) rectifier. -metall noble metal, precious m., rare m. -stahl refined or superior alloy steel.

Effekt, kreismagnetischer gyro-magnetic anomaly.

Effekt, Bord- board effect, ship field error (in df work), quadrant error (due to structural parts, metal, etc.). **Funkel-** low-frequency variation of local emission density. **Richt-** rectification effect; directional. e.

Effektbeleuchtung effect lighting, spot or fancy l.

Effektivwert effective value, rms (root-mean-square) value, virtual v.

Effekt-kohle salted carbon, carbon for flame arc. -lampe studio light (ordinary hand or table lamp, m.p.). -szenen scenics, light effects, etc.

egalisieren equalize, level, regulate (piano).

Ei, Antennen- fish (of trailing antenna).

Eichamt gage or calibration office, standards bureau.

Eichelröhre acorn tube.

eichen gage, measure, standardize, calibrate, test, stamp, adjust (weights), log.

Eich-katzenanker squirrel-cage armature. -kreis, Arbeits- working reference circuit. -mass gage, standardized measure. -reizkurven (typical) visibility curves.

eidestattliche Erklärung affirmation in lieu of oath, statutory declaration.

eidliche Versicherung affidavit, sworn statement, testimony or declaration.

eigen inherent, self, "eigen", own, individual, characteristic, proper, specific, special; exact, pre-

cise, delicate.

Eigen-abstossung der Elektronenwolke repelling action of electron charge, negative space c. -dichte, Energie- proper energy density.

-drehimpuls eigen or characteristic angular momentum. -energie "eigen" energy, characteristic e.

-funktion eigen function, characteristic f. -geräusch inherent film noise. -geschwindigkeit indicated air speed (of an airplane).

-gewicht specific gravity, own or dead weight, proper w. -heit singularity, particularity, peculiarity. -kapazität self-capacitance. -licht des Auges eye's own light, self-l. or intrinsic l. of retina (associated with photopsy).

-peilung board aircraft direction-finding, taking bearings with homing device on board, on two or more stations. **eigenschwingungsfrei** aperiodic, deadbeat.

Eigen-spannung residual stress, inherent or internal tension or strain, -spannung, Druck- residual compressive stress. -störung internal trouble. -strahler-Übermikroskop self-emission electron microscope, s. -illuminating e.m. (based on electrons arising on object surface).

eigentümlich peculiar, characteristic, inherent, specific.

Eigen-tumsrecht ownership, proprietary or property right, proprietorship. -verständigung inter-phone communication (airplane), inter-vehicular c.

-wärme specific, body or animal heat. -wert "eigen" value, "eigenwert", characteristic, representative, typical or inherent value, characteristic number.

-zeit proper time. -zustand "eigen" state.

Eikonal, Winkel- angle eiconal (opt.).

- einachsig uni-axial.
 einäugiges Sehen monocular vision,
 non-stereoscopic vision.
 einäsichern incinerate, calcine,
 burn to ash.
 ein-atomar, -atomig monatomic.
 Einausschalter off-on switch.
 Einbandübertragung single-side-
 band transmission (with vestigial
 s.-b.).
 Einbau inner player (piano).
 einbetten imbed, place in matrix.
 Einbettungsmaterial matrix or em-
 bedding material.
 Einbeulungsprüfung bulging test.
 Einbiegung curvature, inflection,
 flexure.
 einblasen blow in or into, insuf-
 flate, inject.
 Einbläser punctiform pits produced
 by atmospheric pressure in glass.
 Einblenden der Mikrophone fade-in
 and mixing of microphones.
 Einblick-linse eyepiece lens.
 -rohr eyepiece tube.
 Einbrennzeit heating-up period.
 Einbruch (Kurven, etc.) break,
 breaking in.
 Einbruchsmelder burglar alarm.
 Einbuchtung bay, bight, indentation,
 niche.
 eindampfen thicken by evaporation,
 boil down, inspissate.
 eindeutig unique, plain, clear, un-
 equivocal, single-valued.
 -,doppelt- one to one.
 eindeutige Peilseite absolute di-
 rection. -Richtungsanzeige uni-
 directional direction-finding
 (with sense finding or sensing).
 Eindeutigkeitsprinzip (Pauli) ex-
 clusion or equivalence principle.
 eindicken inspissate, thicken, con-
 centrate, boil down, condense.
 eindrehen recess, tap (a screw-
 thread), indent.
 Eindringungsfähigkeit penetrative-
 ness.
 Eindruck, Mitten- binaural balance
 (in sound locating).
- Eindrucksgleichheit equality of
 sensation or impression.
 Eindruckverfahren ball test, Brinell
 hardness t. method.
 einebnen level, smooth, flatten
 (curve or wave).
 Einebnung, Dynamik- compression.
 Einergang-Kurbel und -welle single-
 picture crank and shaft (m.p.).
 Einfachantenne plain antenna.
 einfach-brechend singly refracting,
 unirefringent. -frei univariant,
 monovariant, having one degree of
 freedom. -wirkend single-acting.
 Einfachzacken-schrift mit Abdeckung
 unilateral variable-area track
 with single-vane shutter. -spur
 unilateral variable-area track.
 einfädeln thread (up) film.
 einfädig unifilar.
 Einfall, schiefer oder streifender
 grazing, oblique or glancing in-
 cidence. Glanz- grazing inci-
 dence (at a glancing angle).
 Einfallen incidence, snap-in motion;
 collapsing, implosion (reversed
 explosion).
 einfallendes Licht incident light.
 Einfallgeschwindigkeit bombardment
 velocity.
 Einfalls-ebene plane of incidence.
 -winkel angle of incidence.
 -winkel, Haupt- angle of princi-
 pal incidence.
 einfaltige Gruppe one-dimensional
 group.
 Einfang, Neutronen- neutron capture.
 einfangen capture, captivate, trap
 (electrons).
 einfärbiges Licht monochrome, mono-
 chromatic light, light of one
 color.
 Einfärbung dying, tinting, staining,
 inking, imbibition.
 einfassen border, hem, surround
 something, enclose, case, bind,
 trap, trim, set.
 Einfassleisten binding strips.
 Einflug-richtung direction of ap-
 proach (in airplane landing).

- schneise approach track. -sektor approach sector. -sender boundary marker beacon.
- Einflugzeichen** boundary marker signal, come-in s. **Haupt-** main marker, inner marker or main entrance signal nearest airport boundary (in airplane landing). **Vor-** outer marker (beacon) signal, fore m. beacon.
- Einflussbereich** sphere of influence, radius of action.
- einförmig** uniform, monotonous.
- Einfräzung** milled slot or recess.
- einfrieren** freeze up, congeal.
- einfügen** insert, interpose, intercalate.
- einführen** thread (up) film, introduce, insert.
- Einführungs-isolator** lead-in or feed-through insulator, bushing.
- isolator mit Vergusskammer pot-head insulator. -verlust insertion loss.
- Eingabe** amendment, petition (in Patent Office practice).
- eingängig** single-thread (mech.).
- Eingangs-bedämpfung** input resistance, i. damping. -klemme input terminal. -leitwert input admittance. -pupille entrance pupil. -schlitz entrance slit (spectr.). -wirkleitwert input conductance, i. active admittance.
- eingebaute Antenne** built-in antenna.
- eingefahrene Antenne** retracted or drawn-in antenna, reeled-in a.
- eingefroren** latent, dormant.
- eingehen** (in eine Gleichung) enter into, occur, or appear in, an equation.
- eingekittete Linse** cemented lens.
- eingeschwungener Zustand** steady-state (of current, oscillation, etc.).
- eingestrahltes Licht** incident light, exciting l.
- eingestrichene Oktave** one-stroked octave.
- Eingießung** pouring-in, infusion,
- transfusion.
- Eingreifen** (der Greifer) in-and-out movement (of claws), engagement of c.
- Eingrenzung von Fehlern** tracking down seat or source of interference or trouble, localize trouble.
- Eingriff** engagement, mesh, gearing.
- Einhaltsbefehl** injunction, interdict.
- Einhängeblende** inset diaphragm.
- einhängen des Hörers** hang up or replace telephone receiver, clear the line.
- Einheit** (constructional or structural) unit, integral part; unity.
- Einheit, Ladungs-, positive elek.** unit positive charge. Massen-unit of mass. Mehrheit von-en array of units, plurality or multiplicity of u. Oberflächen-unit of area. Radiumemanationscurie unit of radon. Raumwinkelsteradian, spheradian. X-, (Roentgenstrahl-) wave-length unit of X-rays, etc., Siegbahn unit, Xu, X unit.
- Einheiten und Formeln, Ausschuss für (A E F)** Committee on Units and Formulae, Standards Committee.
- Einheits-frequenz** standard frequency.
- funktion von Heaviside unit function of Heaviside. -gitter unit lattice. -ladung unit charge.
- masse unit mass. -punkt unit point, principal point. -spin unit spin. -zelle unit cell, elementary c., unit crystal, lattice unit.
- einhörig** monaural.
- ein hüllen** envelope, enwrap, imbed, shroud, sheath.
- Einhüllende** envelope, contour, outline.
- Einkanal-tastung** single-channel pulsing (telev. synchronization).
- Einkerbung** notching, indentation, denting.
- eine kellen** (in) dent, nick, groove, notch.
- einkernig** mononuclear, uninuclear,

single-cored.	Einpulsverfahren single-pulse or monopulse method.
Einklang syntony, consonance, unison, concord, accord, agreement.	Einpunktschreiber single-point recorder.
einklinken lock, engage, ratchet.	Einquellenempfänger solodyne receiver.
Einknopfkontrolle uniselector, uni-control.	Einrasten locking by a detent, snap shutting.
einkopieren over-print, double print.	Einrede plea, defense. Beschwerde-rejoinder (in an appeal).
Einkreisempfänger single-circuit receiver, ultraaudion (ultraudion) receiver.	Einregelung der Dynamik adjustment of volume range or contrast (by compandor action).
Einkristallfaden single-crystal filament, mono-crystal f.	Einregelungszeit building up or waxing period (say, of a control potential).
einlagern intercalate, embed, incorporate, store.	einreichen file, petition, apply for.
Einlagerung embedding, occlusion, inclusion, insertion, matrixing.	Einrichtung arrangement, device, disposition, equipment, contrivance, outfit, organization, means.
Einlagerungs-rate rate of incorporation (cryst.). -verbindung, komplexe complex intercalation compound.	Einriss rent, fissure, tear, flaw.
einlaufen shrink, contract; flow in; run in (as a bearing, etc.).	einrücken engage, throw in gear or mesh.
einläufig unicursal; single-barreled, s.-tracked, s.-channeled.	Einrückhebel trip or engagement lever, starting lever.
Einlauf-punkt auf die Rolle point where film is fed onto drum.	Einsattelung crevass or dip (of a resonance or other curve).
-seite feed or threading end (m.p.).	Einsatz (acoustic) intonation, onset (of sound, discharge or other action), start, incipiency, initiation, insertion; charge (of a furnace); stake, application, use, what is put to work.
einlegen, Berufung gegen eine Entscheidung bei höherer Instanz lodge or take an appeal from a decision to a higher court.	Einsatz der Schwingungen, harter hard start of oscillations.
einlegen (Film) thread up the film.	-,weicher gentle or smooth start of oscillations.
einleiten lead in, initiate, originate, induce, introduce.	Einsatz, Bildkipp- incipience of frame flyback or beam return (telev.). Leuchtfaden- streamer onset. Zeilenkipp- incipient (line) flyback.
einmalig single, solitary, unique.	Einsatz-blende interchangeable diaphragm. -dichte number of stations (satisfactorily) operable inside a given wave-band. -härtung case hardening, surface cementation. -punkt, Gitterstromgrid-current point, point of incipient grid-current flow. -spannung (cf Zündspannung) spark or
- (er) Vorgang non-recurrent, unique or singular action or phenomenon, single event.	
Einordnungsstellung position of grating resulting in a one-order spectrum:	
Einpegelung leveling.	
einpeilen (Funksender mit Richtempfänger) taking bearings from, or tune in, a radio transmitter, with directional receiver.	
einprägen impress, imprint, emboss (sound track on film).	
inpressen press-fit, press in.	

flashover potential, breakdown potential (in grid-glow tubes), starting potential.
Einsaugmittel absorbent, imbibent, adsorbent.
einsaugend absorbent, absorptive, imbibent.
einschichten imbed, (inter) stratify, interleave, arrange in layers.
Einschlaglupe folding magnifier.
einschliessen enclose, confine, include, seal in, lock, embed, matrix, occlude.
Einschlusströhre sealed tube.
einschmelzen seal-in (a wire or lead in a tube).
einschneiden engrave (sound track on film).
Einschnitt cut-off (spectrum); incision, cut, notch, dent.
Einschnürung squeezing, compression (re:film); bind-up, constriction, recess; waist, reduction in area (metal testing).
Einschnürungs-blende crossover aperture. -punkt crossover (in electron-optics).
Einschwing- und Ausschwing Verzerrung transient (non-linear) distortion, build-up and decay d. (in ac., facsimile, etc., associated with hangover, tailing, underthrow and overthrow).
Einschwingvorgang build-up transient oscillation, onset or initiation of impulse.
einseitig offen unilaterally open (-ended).
Einseitenbandübertragung single-side-band transmission (with vestigial s.-b.).
Einsenkung crevass, dip, depression.
einsetzen case-harden (metal).
Einsetzen der Zündung initiation or incipience of striking or firing.
einsickern infiltrate, soak in, ooze in.
Einspannrand, gewellter corrugated suspension means (of loudspeaker cone).

Einsprache acoustic inlet (of a microphone).
einspringen spring in, shrink (of fibers), re-enter (of an angle).
einspringend re-entrant.
Einspruch plea, objection, protest, demurrer, opposition. -unterstützen argue in support of an opposition.
einspuriger Tonstreifen single-edged variable-width sound track or record.
Einsteckseicher plug-in inlet strainer.
einstellen set, adjust, position, focus. -, neutral adjust or set to neutral.
Einstell-fassung focusing mount (of lens). -fehler faulty focusing or spot control, decrease of spot with intensity increase, large diffuse speck on screen in gas-focused picture reproducing tube.
-knopf focusing knob (of camera).
-lampe, Bild- framing lamp.
-lupe focusing magnifier. -marke reference mark, gage m., index dot (on dial), measuring m., wander m. (of telescope). -mikroskop focusing microscope.
-schraube set screw, adjusting s., leveling s. -tafel focusing board, test chart. -tubus micrometer adjustment (electron microscope), adjusting tube.
Einstellung, kritische critical adjustment, delicate a., setting or focusing. **Bildbühnen-** framing, racking (with framing device). **Bild-** centering control, height c., horizontal c., framing (in telev., with rack and pinion for focusing). **Fein-** vernier (dial) adjustment, tuning or setting. **Fern-** long-range focus. **Nah-** short-range focus. **Nullpunkt-** zero adjustment. **Phasen-** phasing, phase adjustment; shift or regulation. **Scharf-** automatic tuning; sharp focusing. **Still-** silent

tuning, q.a.v.c. tuning. **Unendliche**-infinity adjustment (of range-finder).
Einstellungs-ebene focusing plane. -fläche surface of reference. -klage complaint or action for discontinuance, suspension or stay (of infringement, etc.), action for issuance of an injunction, i. suit.

Einstellweite focal range, focusing r.

Einstich puncture, perforation.

einstimmig monophonic, one-voiced, unanimous.

Einstrahl-funkstelle beam station.

-sender beam transmitter, unidirectional t.

Einstreuung stray effect.

einstufige grade (by quality).

einstweilige Verfügung temporary, provisional or interim injunction, provisional decree.

einsumpfen digest with water, soak wet.

eintasten key on, key in.

eintauchen (cf Tauch) dip, plunge, immerse, steep; telescope (a coil).

Eintauch-refraktometer immersion refractometer, dipping r. -zeit immersion time.

Einteilchenmodell single-particle model.

einteilen divide, subdivide, distribute, separate, grade, sort, classify, graduate (in terms of degrees or other units), index.

einteilig uni-partite.

Einteilung, Nonius- vernier scale.

Eintrag charge, input.

Eintragende feed or charge end.

Eintragschnecke feed worm.

Eintragung entry, registration.

Eintragungs-bescheinigung certificate of registry. -zwang compulsory registration.

Eintritts-blende input diaphragm or capacity disk (re:klystron, resonance cavity). -feld area of applicator at skin surface

(X-ray work). -geschwindigkeit approach or inlet velocity. -phase entrance phase (re:filter).

Ein-und Ausrückhebel starting and stopping lever.

ein-und-einachsig orthorhombic (cryst.).

einverstanden sein agree to, acquiesce in.

Einwand demurrer, objection (for instance, of Patent Office Examiner).

einwandfrei satisfactory, unobjectionable, acceptable, tolerable.

Einweggleichrichter half-wave rectifier.

einwegig single-channel, simplex, one-way.

einweichen steep, soak, macerate, digest.

Einwendung plea, defense, objection, demurrer.

einwertige Salze 1 :1 salts.

Einzackenschrift single-edged variable-width sound track or record.

Einzahn-stift striking roller (m.p.). -scheibe drive wheel (m.p.).

einzel single, individual; various, unitary, separate.

Einzel-abschnitt-Filter single-section filter. -bild einer Bildreihe individual picture or unit frame in a series or sequence.

-darstellung single representation; separate treatise, monograph. -heiten details, particulars, minutiae. -klang (sounding of an) individual note. -linse unit lens (of focusing field).

-lupe magnifier unit. -peilung taking bearings from one object.

-streuung single scattering (of electrons). -vorgang single or separate process, happening, action, event or reaction.

einziehbar retractile, retractable, withdrawable.

einziehen wind or reel in (an antenna), retract (airplane undercarriage); turn down, decrease (say, diameter of a shaft).

Einziehungsmittel absorbent.

Einzigkeitstheorem uniqueness

theorem.

Einzugsgebiet cross-sectional area of undistorted portion of field (direction-finding frame).

eirund, **halb-** semi-oval.

eis-artig ice-like, icy, glacial.

-blau glacier blue.

Eisen, **kadmierter** cadmiumed iron.

Band- hoop, strip or band iron.

Eisen-begleiter elements accompanying iron, i. companions or associates, congeners (if of similar sort). **-bügel** iron staple, yoke. **-drossel** iron-cored choke-coil. **-drossel**, Besprechung mit modulation by voice action with magnetic modulator.

eisenfreie Spule air-cored (choke) coil.

Eisen-goniometer iron-cored goniometer. **-kern**, geblätterter laminated iron core. **-metalle**, Nicht-nor-ferrous metals. **-metallurgie** siderurgy. **-panzer** iron shield, i. screen, i. cladding. **-pulver-kern** Ferrocort core, compressed iron dust c. **-pulververfahren** magnaflux inspection method.

-rahmen iron-cored frame (d.f.).

-schluss, path closed, or passing, through iron (for magnetic flux), magnetic shunt, keeper (of permanent magnet). **-späne** iron turnings, borings, filings or chips. **-verlust** iron loss, core l. **-wasserstoffwiderstand** iron-hydrogen resistance. **-weg** iron path, magnetic or ferro-m. circuit.

Eiskalorimeter ice calorimeter.

elastisch gestreut elastically scattered.

elastische Nachwirkung plastic flow persistence, after-flow, elastic after-effect.

Elastizität elasticity, compliance (mechanical filter, ac.).

Elastizitäts-messer elasmometer (for Young's modulus), torsometer.

-modulus modulus of elasticity

(of extension, torsion, compression or volume).

Elektrete electrets.

elektrisch, **gleichnamig** similarly electrified or charged. **glüh-thermionic**. **ungleichnamig** oppositely electrified or charged.

elektrisch symmetrisch homopolar.

elektrischer Ausfall electric shock.

Elektrizität, **Druck-** piezo-electricity.

Glas- vitreous electricity, positive e. **Harz-** resinous electricity, negative e. **Reibungs-** frictional electricity, tribo-e.

Elektrizitätslehre, **Bewegungs-** electrokinematics, electrokinetics. **Ruhe-** electrostatics.

Elektrode, **Abnahme-** output electrode.

Beschleunigungs- accelerator electrode, gun e. (c.-r. tube).

Bildwurf- target electrode.

Bremsfeld- reflecting electrode, retarding-field e. (in electron-oscillation, Barkhausen-Kurz or positive-grid tube).

Durchperlungs- bubbling-type electrode.

Entnahme- output electrode, catcher e. (klystron).

Gegen- counter electrode, opposite e., co-operating e.; signal plate, metallic screen (forming foundation of mosaic, in telev. tube).

Nachbeschleunigungs- second or additional gun or accelerator electrode, after-accelerator, post-accelerator.

Quecksilbertropf- dropping mercury electrode. **Ring-, abbildende** image focusing ring.

Sammel- output electrode, collector e., gathering e., catcher (in klystron).

Seiten- end or wing electrode (in magnetron).

Spitzen- needle or point electrode.

Steuer- control(ing) electrode, shield, Wehnelt cylinder or grid (in cathode-ray tube).

Such- exploring, probe, search or collector electrode (vacuum tube).

Zitter- vibrating electrode.

Zünd- ignitor (of ignitron).

Elektroden-abstand electrode spacing, inter-electrode distance or gap. -**fahrsäule** electrode mast or support. -**kapazität** (inter-) electrode capacitance.

elektrodenlos electrodeless, devoid of, or without, electrodes.

Elektrodenschluss electrode short-circuit.

Elektrometer, **Faden-** filament electrometer. **Goldblatt-** gold-leaf electroscope. **Kipp-** Wilson electrometer (casing tilttable giving gold leaf different positions).

Elektronen, **angelagerte** trapped electrons. -, **innere** inner electrons (on K.L.M...shells).

-**kernferne** outer (level) electrons, conduction, valence, peripheral, orbital, or planetary electrons. -**kernnahe** electrons adjacent nucleus, inner (fixed) electrons. -**klebende** captured electrons, electrons sticking to electro-negative gases, surfaces, etc. -**kreisende** orbital electrons. -**positive** positrons, positive electrons. -**schwere** heavy electrons, barytrons, dynatrons, mesotrons, penetrans, x particles, etc.

Elektronen, **Bahn-** orbital electrons. **Feld-** field electrons (from cold or auto-electronic emission caused by an electric field).

Gitter- lattice electrons.

Hüllen- shell electrons. **Kreisel-** spin electrons. **Leitungs-** conduction electrons (from outer levels). **Rückstoss-** recoil electrons, Compton e. **Superleitungs-** super-conduction electrons.

Unterschale- sub-shell electrons. **Zerfall-** decay electrons, e. resulting from disintegration (say, mesotrons).

Elektronen-abgabe, **glühelektrische** thermionic emission, Edison or Richardson effect. -**abgabefläche** electron emission or emitting

area. -**abtaststrahl** electron scanning spot or brush (iconoscope), e. pencil, beam or lever.

-**auffang** electron capture.

-**austrittsarbeit** work function of electrons. -**bahn** electron path, orbit or trajectory, flight of electrons. -**belegung** density of electrons (in beam). -**beugung** electron diffraction. -**bildröhre** electron image tube. -**bremsung** reflection (in Barkhouse electron-oscillation tube), deflection (in magnetron); retardation or deceleration of electrons. -**draill** electron spin. -**einfang** electron capture or trapping. -**emission**, **Auto-**auto-electronic, cold or field emission of electrons. -**energie** electron energy, electron affinity.

-**entladung**, **Glüh-** thermionic discharge. -**fleck** electron spot, scanning s. -**fluss-** Diskontinuität shot effect. -**gas**, entartetes degenerate electron gas. -**gruppierung** phase focusing (in beam tubes). -**hülle** electron shell, electron cloud. -**konzentration** electron focusing. -**laufzeit** transit time of electrons, orbit time of e. -**lawine** avalanche of electrons. -**lehre** electronics. -**linse** electron lens (electromagnetic or electrostatic).

-**mikroskop** electron microscope, immersion objective. -**mikroskop-Selbstleuchtverfahren** self-luminous, self-emission or s.- illuminating method (using electrons arising on object surface).

-**niveau** electron level. -**optik** electron optics. -**ort** electron position, e. locus. -**pendelung** oscillating of electrons. -**physik** electronics. -**plasma** residual electrons, plasma (region without resultant charge). -**quelle** electron (emission) source, e. emitter. -**raster-Mikroskop** raster microscope, electron-scan m.

-relais electron relay, thermionic
r. -rumpf core, kernel, stable
 electron group. **-schalen,** **beinaher**
geschlossene nearly closed elec-
 tron shells. **-schleuder** electron
 gun. **-schwingungen** electron
 oscillations. **-spritze** electron
 gun. **-sprungspektrum** electron
 transition (or jump) spectrum.
-stauung electron cloud or ac-
 cumulation (in a virtual cathode).

Elektronenstrahl, gaskonzentrierter
 gas-focused electron beam.

-geschwindigkeits-gesteuerter
 velocity-modulated electron beam.
-weisser heterogeneous beam.

Elektronen-strahlabtaster electron
 scanning pencil, beam, spot.
 brush or lever. **-strahlengang**
 electron ray path. **strahlröhre**
 (cf *Kathodenstr.*) cathode-ray
 tube; beam tube; thermionic t.
 (obs); c.-r. tuning indicator t.

-strommodulation electron quanti-
 ty modulation. **-tanz** oscillatory
 movements of electrons (due to
 magnetic or electric forces).

-turbine cyclotron and inverted
 (or Hollmann) forms thereof.

-technik electronic art or technol-
 ogy, electronics. **-übergangswahr-
 scheinlichkeit** transition proba-
 bility (of electron passing from
 one level to another level).

-überholungsgebiet catchup or over-
 take region (in which electrons
 arrange themselves in groups for
 phase focusing in beam tubes).

-überkreuzungsstelle crossover of
 electrons (where principal rays
 from first lens cross axis, equiv-
 alent to exit pupil of eye).

-übermikroskop electronic super
 microscope, e. ultra microscope.

-unterhülle sub-shell (of elec-
 trons). **-welle** electron wave,
 phase w., de Broglie w. **-wolke**
 cloud of electrons. **--Eigenab-
 stossung** der repelling action of
 electron charge, negative space
 charge. **-wucht** collision force,

bombardment f. (of electrons).

-zustand, entarteter degenerate
 electron state.

Elektroniker electronician, elec-
 tronics engineer.
elektro-optischer Verschluss electro-
 optic shutter.

Elektrophoresezelle electrophoresis
 cell.

elektrostatisch geschirmt electro-
 statically shielded, e. screened.

-(er) Lautsprecher electrostatic
 loudspeaker, condenser l., capaci-
 tor l.

Element, **Lager-** inert cell. **-Raster-
 picture unit,** p. element, ele-
 mentary area. **Schalt-** circuit
 element, c. means. **Strecken-**
 linear element (math.).

Elementarladung elementary charge,
 electronic c. **-wellen** Huygens
 wavelets. **-zelle** unit cell, ele-
 mentary c., lattice unit.

Elementenmessung stoichiometry.

Emanation, abgeklungene emanation
 with diminished or decaying radio-
 activity. **Aktinium-** actinon.
Radium- radon. **Thorium-** thoron.

Emanationseinheit, **Radium-** curie
 unit of radon or radium emanation
 $(10^{-10}$ curie-liter = eman.).

Emission, glühelektrische thermionic
 emission. **Autoelektronen-** auto-
 electronic, cold or field emission
 of electrons.

Emissions-strom, **Feld-** field emission
 of electrons, cold e. **-vermögen**
 emissivity, emission power.

EMK (elektromotorische Kraft) emf
 (electromotive force).

EMK von rechteckiger Kurvenform
 square-shaped or rectangular emf,
 square-topped emf.

Empfang, **Block-** block reception, com-
 munal or party r. **Druck-** tele-
 script reception, typed r., tele-
 printing r. **Einquell-** solodyne
 reception. **Geradeaus-** single-
 circuit reception, non-heterodyne
 r., straightahead r. **Hör-** audible
 reception, auditory r., aural r.,

reception by ear, hearing or earphones. **Musa-** multiple-unit steerable antenna reception. **Primär-** single-circuit reception. **Richt-** directional reception. **Rückkopplungs-, mit Hilfsfrequenz** super-regenerative reception. **Schreib-** visual reception, recorder r. **Such-, direkter** single-circuit or straight-ahead (non-heterodyne) reception. **Superheterodyne-, mit selbsterregter Trägerwelle** homodyne reception, zero-beat r. **Tertiär-** three-circuit reception. **Ton-** AF modulated or tone-modulated c.w. reception. **Transponierungs-, Überlagerungs-** heterodyne reception.

Empfänger receiver; collector, pickup (microphone). **Empfänger, verdrahteter** fully wired receiver set.

Empfänger, Allstrom- universal receiver set, a-c/d-c r.s.

Bewegungs- velocity microphone, v. pickup; pickup or detector of motion. **Bild-** (cf *Bildempfangsstelle*) picture receiver, television or video r., picture reproducing device, p. viewing tube, image reconstructor.

Bildton- audio-video receiver combination. **Breitband-** broad-band or wide-band receiver.

Dreikreis- three-circuit receiver. **Druck-** pressure (responsive) microphone. **Druckknopf-** push-button or press-button tuned receiver. **Einkreis-** ultra-audion, ultraudion or single-circuit reception. **Einquell-** solodyne receiver. **Fernseh-** television receiver apparatus, video-signal receiver, kinescope (Zworykin), oscillight (Farnsworth). **Gleichstrom-** d.c. electric (radio) set. **Heimfernseh-** home television receiver. **Kontroll-** monitoring receiver. **Peil-** direction-finding receiver. **Peilfunk-**

radio compass, direction-finder (avigation). **Pendel-** super-regenerative receiver, Armstrong r. **Primär-** single-circuit receiver. **Richt-, Einpeilen auf Funk-sender** tuning directional receiver to radio stations (to take bearings). **Schall-** sound collection device, acoustic receiver, sound pickup or microphone. **Schall-schnelle-** velocity microphone. **Strahlungs-** radiation responsive or sensitive record or receiving sheet or surface (on which radiations impinge to measure color temperature, etc., such as photographic plate, selenium cell, bolometer). **Superregenerativ-(Armstrong)** super-regenerative receiver. **-und Sender kombiniert** transceiver radio set; micro-telephone. **Unterwasserschall-** subaqueous or submarine microphone, pickup device or sound detector, hydrophone. **Wechselstrom-** a.c. electric receiver set. **Ziel-flug-** homing receiver apparatus. **Zweikreis-** two-circuit receiver set. **Zwischenfrequenz-, mit Kristallsteuerung** crystal-monitored or c. stabilized supersonic or superheterodyne receiver, stenode radiostat.

Empfänger-blechgestell metal chassis -fläche radiation-sensitive surface; record sheet. **-reichweite** (distance) range of receiver, distance-getting ability of radio set. **-Senderkombination** microtelephone; transceiver radio set.

Empfangsfeldstärke incoming signal level.

Empfänglichkeit susceptibility, receptivity, responsiveness.

Empfangs-antenne, vom Sender ent-koppelte balanced receiver aerial (uncoupled from transmitter).

-bild recorded copy (in facsimile).

-gebiet service area (in broadcasting). **-spannung, gerichtete** directional incoming or signal

potential. -verfahren, Mehrfach-diversity receiving method.

empfinden sense, perceive, feel, apprehend, experience, have consciousness... **empfindlich** responsive, sensitive or reactive to (say, temperature), be a function of, be dependent on.

empfindlich, blau- blue sensitive. **flecken-** susceptible to staining or spotting. **richtungs-** with directional response.

empfindlich machen, licht- photosensitize.

Empfindlichkeit sensitivity, sensitiveness, sensibility, responsiveness; efficiency, yield, output.

Empfindlichkeit, Ablenkungs- deflection sensitivity (reciprocal of deflection factor). **Augen-** intensity discrimination, contrast sensitivity (embodied in Weber-Fechner law). **Hand-** hand or body capacitance or capacity effect. **Hör-** auditory sensitivity, hearing capability. **Kerb-** stress concentration index. **Korrosions-** corrodibility, susceptibility to corrosion. **Licht-** photo-sensitivity. **Richtungs-** directional response.

Empfindlichkeits-kurve response characteristic. -messung sensitometric measurement (phot.). -verteilung sensitivity distribution, spectral response (of eye). -ziffer sensitivity factor.

Empfindlichmachung sensitization, activation, sensitization.

Empfindung sensation, feeling, perception, sentience.

Empfindung, akustische acoustic perception. **Farb-** color sensation, c. perception, chromatic s.

Lautstärken- aural sensitivity.

Ton- acoustical perception, sound sensation.

empfindungs-gemäße, -gerechte

Farbstufe, subjective chromatic scale value. -gerechte Abstufung

subjective or natural grading or spacing (in chromaticity or chromatic scale, etc.).

Empfindungs-grenze des Ohres loudness contour of ear, auditory sensation area (between limits of maximum tolerable and minimum perceptible intensities). -lautstärke response of ear to signal strength; sensible loudness of sound.

-schwelle, Schall- threshold of audibility or acoustic perception. -zunahme sensation increment.

Emulsions-seite face (of film) bearing emulsion. -steilheit steepness of gradation.

End-alarm, Akt- reel-end signal. -ausschlag full excursion, limiting deflection. -geschwindigkeit terminal velocity. -gewicht fish of a trailing antenna. -impedanz terminating or end impedance, load i. -kapazität top capacity, terminating or end c. -kondensator terminating condenser or capacitor.

endloser Filmstreifen endless film strip.

End-mass, Parallel- standard gage block, end-to-end s. bar. -punkt terminal, terminating point, terminus. -röhre power tube, final t. -röhre, Doppelsteuer-power pentode in which cathode grid is connected with control g. rather than with cathode. -streifen trailer (of a film). -urteil final judgment. -verschluss cable box, terminating box.

-verstärkerstufe final amplifier stage, power amplifier s. -wert final, resultant or ultimate value.

energetische Bevorzugung energy preference.

Energie, Ablösungs- excitation energy, work function (of an electron). **Anregungs-** excitation energy, stimulation energy (say, a potential). **Bewegungs-** kinetic

energy, motional e. Bindungs-binding energy, bonding e. Eigen-eigen energy, characteristic e. Elektronen-electron energy or affinity. Selbst-self-energy (of electrons).

Energie-berg energy hill, e. barrier. -eigendichte proper energy density. -erhaltung energy conservation, preservation of e. -impulstensor energy momentum tensor. -leitung (energy) feeder lead, feeder downlead, transmission line.

energielos (ohne Energieverbrauch) non-dissipative, wattless.

Energie-messer ergometer. -niveau energy level, quantum state. energiereich full of energy, energy-rich, energetic.

Energie-rückgewinnung durch Bremsen energy recuperation by (regenerative) braking. -schwelle threshold of energy. -stufe energy level, energy term, quantum state. -übertragung energy transfer. -umwandler transducer, sink. -verbrauch consumption, dissipation, loss or expenditure of energy. -verbrauch, ohne non-dissipative, wattless. -zerstreitung scatter of energy.

enge Anschmiegeung intimate or snug adhesion, adherence, fit, engagement or contact, "hugging."

engjähriges Holz close-grain wood.

entaktivieren render inactive, deactivate, de-energize, de-sensitize.

entarteter Elektronenzustand degenerate electron state.

entartetes Elektronengas degenerate electron gas.

Entartung degeneracy, degeneration.

Entbindung, Wärme- disengagement of heat, evolution of h., release of h.

Entbrummer hum eliminator, hum-bucker.

Entbündeln de-bunching (in klystron),

unbunching; defocusing.

Entdämpfung gain, regeneration, de-attenuation. -Frequenzkurve gain-frequency curve.

enteignen expropriate, dispossess.

enteisen de-ice.

entfallen lose (a chance), drop out, fall.

Entfärbung decoloration, bleaching.

Entfärbungsmittel decolorant, bleaching agent.

Entfernung, Kern- inter-nuclear distance. Sprung- skip distance, skip zone.

Entfernungs-messer, Basis- base range finder. -messer, Halbbild-split-field coincidence range finder. -schleier distance fog. -skala distance scale.

entfesseltes, bewegliches Mikrophon following microphone.

Entfritter decoherer, tapper.

entgasen extract gas from, outgas, cleanup, degas, getter.

Entgasung, Trocken- dry distillation.

entgegen-arbeiten counteract, buck, work against. -drehen, dem Wind head into the wind, crab. -gesetzte Pole opposite poles, unlike p.

Entgegenhaltung anticipation, anticipatory disclosure or reference (from prior or earlier art).

entgegen-wirken oppose, counteract. -wirken, der Resonanz anti-resonant.

entglasen devitrify.

entgraten debur.

enthärten soften, anneal.

entionisieren de-ionize, unionize.

Entisolierer wire skinner, insulation stripping tool.

Entknurrungswiderstand anti-growl resistance, resistor designed to suppress growling noise due to RF or tickler coil, in regenerative path.

Entkohlung decarburization, decarbonization.

entkoppelte Antenne (vom Sender) balanced antenna.

Entkopplung decoupling, balancing, tuning out.

entkräften exhaust, debilitate, weaken, vitiate; invalidate.

entladen discharge; unload (phot.).

Entladeschaltung circuit means

causing fast rise of sawtooth potential.

Entladung, **aperiodische** aperiodic, deadbeat, impulse or non-oscillatory discharge. **-kontrahierte** contracted discharge. **-selbstständige** self-sustained, spontaneous or unassisted discharge.

-stille corona, silent discharge, efflove (in skin therapy).

-strahlartige needle-point, corona or streamer discharge, leader-stroke d. **-überspannte** overvolted discharge. **-unselbstständige** assisted or non-self-sustained discharge.

Entladung, Büschel- brush discharge, corona (ranges between glow and spark discharge). **Dunkel-** dark discharge, dark current. **Fackel-** torch-form of discharge. **Fadenstrahl-** (cf Fadenstrahl) thread-ray discharge. **GlühElektronenthermionische** discharge. **Hochstrombogen-, nichtkondensierte** heavy-current uncondensed discharge.

Kipp- condenser discharge (in time-base). **Neben-** lateral, stray or secondary discharge.

Schwing- oscillatory or oscillating discharge. **Spitzen-** point discharge, needle (-gap) d.

Spritz- initial discharge caused by rapid surge of ions; needle-gap discharge. **Vor-** pre-discharge.

Entladungs-aufbauzeit, **Funken-** spark-discharge formation time.

-kanal, **Vor-** pre-discharge track.

-leuchtstreifen luminous streamers.

Entladungsröhre, **Gas-** gas discharge tube or valve. **Kipp-** time-base

discharge tube; kipp relay.

Quecksilberhochdruck- high-pressure mercury discharge tube.

Entladungs-stoss burst, pulse, corona. **-verzug** discharge delay.

entlang streifen brush, skirt or wipe over or along, graze.

entlasteter magnetischer Lautsprecher balanced-armature magnetic loudspeaker.

Entlastung relieving something of weight, traction, stress, etc., say, by counterpoise and the like, unburdening, removal of load.

Spannungs- stress relief; anti-fatigue or anti-vibration means (for lines). **Zug-** traction relief.

entlüften evacuate, exhaust air, de-aerate.

entmagnetisieren de-Gauss, demagnetize, de-energize.

entmischen demulsify, liquefy out, ummix, separate, sort (ions in mass spectrometer).

Entmodulierung demodulation, detection, rectification.

Entnahme, Leistungs- energy or power output, delivery, absorption or pickup, tapping, taking or draining of power or energy.

Probe- sample taking, sampling, taking or selecting at random.

Entnahmeelektrode output electrode, catcher (in beam tube).

entnehmen absorb, pick up, catch or abstract (energy from an electron beam); derive or infer from.

Entorientierung desorientation.

Entquellen (Gele, etc.) shrinkage, cyneresis.

entregeln de-energize.

entriegeln unblock, unlatch, trigger, release, trip, unlock (a tube previously cut off, by causing it to break down and discharge).

entrinden strip off bark, bark, decorticate.

Entschädigung indemnity, indemnification, compensation, consideration, damage payment. **-festsetzen** assess or fix damage or indemnity.

- zuerkennen award damages.
Entscheidung decision, sentence, verdict, judgment. **Berufung einlegen gegen eine-** take or lodge an appeal from a decision. **Entscheidungskern** crux of a decision. **entschlickern** dross.
- Entschlüsselung** de-coding, ungarbling, deciphering, breaking a (secret) code, decryptographing. **Entspannen einer Feder** relaxing, relieving or untensioning of a spring. **Entspannung** relaxation, strain, stress or tension relief, untensioning or slackening, untensed state. **entsperren** see öffnen. **Entsprachung** equivalent, denotation, analogy. **Entstehung** origin, genesis, nascence. **Entstehungs-ort** origin, source or seat of generation or production. -potential appearance potential, ionization p. -zustand nascent state, status nascendi. **Entstörung** interference elimination. **entströmen** flow, stream, escape or issue from. **Entträubungsrahmen** frame designed to make zero or minimum point sharp (free from night effects, etc.), zero cleaning or sharpening frame. **Entwarnung** all-clear signal. **Entweichungsventil** escape, drain or outlet valve, vent valve. **entwerfen** design, project, plan, trace, sketch, outline, focus or form (an image). **entwickelbar** developable. **entwickeln** (cf erzeugen) develop, evolve, disengage, generate, give off (gases). **entwickelnd, licht-** emitting or producing light, photogenic. **Entwicklung, Rahmen-** rack or tray development. Reihen-, Serien-expansion in a series, power series or seriation (math.). **Umkehr-** reversal processing or development.
- Entwickelungs-arbeit** development (al) work. -faktor Watkins factor, development f., time of appearance. -rahmen developing rack. -steilheit slope (of an H & D curve). -vorrichtungen, Film- film processing equipment. **Entwicklerbottich** developing tank. **entzerren** correct or eliminate distortion, equalize, compensate. **Entzerrer** corrective network, attenuation compensator, attenuator (sound recording and reproduction); sound clarifier. -zum Anheben und Senken compensator to accentuate and deaccentuate frequencies or bands, accentuator and deaccentuator, emphasizing and deemphasizing means. **Entzerrer, Dämpfungs-** equalizing or compensation network. **Dynamik-dynamic expander.** Längs- series-type attenuation compensator or equalizer. Quer- shunt-type attenuation compensator or equalizer. **Entzerrung (Dynamik)** expansion (by an expandor). **Ausgleich-** complementary recording (of film). **Phasen-** correction of phase, delay equalizer; echo weighting term. **Entzerrungs-anordnung** distortion corrector device or compensator, anti-distortion device. -bereich frequency range of equalization. -drossel anti-resonant coil. -filter filter-type equalizer, network e. -gerät rectifying camera (aerial phot.). -grenze frequency limit of equalization. -kette mit Brücken-H-Schaltung H-type network attenuator (balanced). -kette mit Brücken-T-Schaltung T-type network attenuator (unbalanced). -kreis (zum Hervorheben einiger Frequenzbereiche) balancing network (to accentuate or underscore certain bands). **entziehen** abstract, extract, take

away, withdraw, deprive, rid.	empirical, usual.
Entziehung, Wasser- dehydration, removal or expulsion of water, drying.	Erfahrungstatsachen empirical, experimental or practical facts or data.
entziffern decipher, decryptograph.	erfassbar, zahlenmässig numerically evaluable.
entzünden ignite, kindle, inflame.	Erfindergeist inventive genius, creative conception, inventor's spirit.
Entzündung, Selbst- spontaneous combustion, self-ignition.	Erfindungs-gedanke basic or underlying idea of an invention, idea on which an invention is predicated. -gegenstand object of invention, disclosure. -geltungsbereich scope of invention or patent, command of a p. -patent patent for invention, letters p. -schritt object of an invention.
Episkop reflecting projector, episcope.	erfüllen fulfill, perform, satisfy, comply with, measure up to.
erbreiten broaden.	Ergänzung complement, supplement, completion, addendum (addenda, pl.).
erbringen produce, adduce.	Ergänzungs-farbe complementary color.
Erd-alkalimetall alkaline-earth metal. -antenne ground or earth antenna, underground or buried antenna. -anziehung gravitation. -anziehungskraft gravitational force. -bahn earth's orbit, terrestrial o. -bebennemesser seismometer, seismograph (when recording). -beschleunigung acceleration due to gravity. -drahtnetz ground mat. -draht-schleifenmessung loop test.	-stoff vitamin. -winkel complementary angle.
Erde, Edel- rare earth.	erhaben raised in relief, elevated, embossed; high, grand, salient, outstanding.
Erderwiderstand grounder resistance.	erhaben, hohl- concavo-convex. rund- convex.
Erd-kabel leader cable, buried cable. -kapazität, Teil- direct earth capacitance. -klemme ground clamp, g. terminal. -kruste, Ausgleichfläche der isostatic surface (of earth).	Erhaltung der Energie, Gesetz der law of conservation of energy. -der Masse conservation of the mass.
erdmagnetisches Feld geomagnetic field.	Erhaltungs-gesetz law of conservation. -satz, Impuls- theorem of conservation of momentum.
Erd-magnetismus terrestrial magnetism. -schelle ground clamp. -schleife earth or ground circuit.	erheben (Anspruch, Klage, etc.) make (a claim), bring or file (a suit or an action). -, in die nte Potenz raise to the nth power.
Erdschluss earth connection, (arching) ground. Flammenbogen- arcing ground. -fehler ground fault. -löschlorrichtung ground-fault neutralizer.	Erhebung elevation, projection, prominence, salience, peak, point, pip (on c.-r. screen tracing).
Erdung, Lichtbogen-, Erdungslichtbogen arcing ground.	Erhebungswinkel angle of elevation.
Ereignis occurrence, happening, action, event, phenomenon. -, einmaliges non-recurrent, unique or singular event or action.	erhitzen heat, warm, fire, incandesce, ignite, anneal.
erfahrungsgemäss according to, or in the light of, experience,	Erhöhung elevation, prominence, projection, peak, jutting, lobe (as

of a cam), pip (as on a c.-r. screen tracing).	impact or collision excitation.
Erhöhungszeichen sharp (mus.).	Summer- buzzer excitation.
Erholung recovery, recuperation (from fatigue, stress, etc.).	Erregungslampe exciter lamp, exciting l. (operating photo-electric cell).
Erichsen-prüfer Erichsen cupping machine. -prüfung Erichsen cupping test.	errichten, eine Senkrechte erect a perpendicular.
Erklärung, eidestattliche affirmation in lieu of oath. Nichtigkeits-declaration of nullity.	Errichtungsprotokoll minutes of proceedings.
erlauben allow, permit, authorize.	Ersatz-anspruch indemnity claim, claim for compensation. -antenne artificial antenna, mute a., phantom a. -bild equivalent circuit diagram. -elektron equivalent or replacing electron.
erlaubt(es) Energieniveau permitted level, p. quantum state, p. energy zone. -(er) Übergang permitted transition (according to selection principle).	-fähigkeit capability or susceptibility of being replaced, equivalence. -kapazität equivalent capacity. -schema equivalent circuit schema.
Erlöschen eines Patentes expiry or expiration of a patent, annulment of a patent.	Erscheinung phenomenon, action, event, manifestation, appearance. Nicht- non-appearance, non-attendance, absence, default, contempt.
ermächtigen empower, authorize.	Erscheinungsform form of manifestation, phase, state, physical appearance.
Ermangelung, in...von in default of, in the absence of, failing.	erschüttern shake, jar, percuss, chatter, vibrate.
Ermittelung investigation, ascertainment, discovery.	erschütterungsfrei resilient, shock-absorbent, non-vibratile.
Ermüdung fatigue, sluggishness, inertia, tiredness.	erschweren make (more) onerous or difficult, impede, aggravate.
Ermüdungsgrenze fatigue limit.	erstarren solidify, freeze, congeal, harden, set.
Erniedrigungszeichen mol (mus.).	Erstarrungspunkt freezing, coagulation or solidification point.
Erneuerungsschein certificate of renewal.	Erstattungspflicht liability to make restitution.
erörterbar discussable, arguable, disputable.	Erst-strom primary current. -wicklung primary winding.
erproben test, try out, prove (ordinance).	ersuchen um Gehör file application or petition to be heard.
errechnen calculate, compute, figure (out), reckon.	Erteiler, Lizenz- licenser, grantor, issuer of a license.
erregen excite, energize, impulse (by shock), stimulate, activate.	Erteilung eines Patentes grant or allowance of letters patent.
Erreger-lampe (cf Tonlampe) exciter or exciting lamp (m.p.). -spule, Feld- field (exciting) coil (of electrodynamic loudspeaker).	Erteilungsakten file wrapper (of a patent application).
Erregung excitation, energization, impulsing. Fremd- separate excitation. Selbst- self-oscillation, s.-sustained o., spontaneous (unassisted) o., spilling over (of a regenerative receiver, with fringe howl and whistling). Stoss- shock,	

Erwärmungs-kraft heating power, calorific p. -verlust Joule loss, Joulean heat, thermal or heat l.

Erwartungswert expected or anticipated value.

erweichen soften, plasticize.

erweitern widen, expand, enlarge, dilate, spread.

erweiterte Pupille dilated pupil.

Erwerber acquirer, purchaser, transferee.

Erwerbungskosten acquisition cost, purchase cost or price.

Erwiderung answer, rejoinder, reply, replication (of plaintiff to defendant's answer).

Erz, selbstgehendes self-fluxing ore.

erzeugen (cf entwickeln) generate, produce, create, set up, cause, result in.

erzeugend generant. elektronen-electronogenic (electron-emission under influence of light, from moles). farben- color producing, chromogenic. fluoreszenz- fluorogenic, with activator properties. kälte- cryogenic, frigorific. leuchtenergie- fluorogenic, phosphorogenic, photogenic, having phosphor properties. licht- emitting or producing light, photogenic. phosphoreszenz- phosphorogenic, causing persistence of fluorescence. schwingungs-vibromotive, oscillation-generative.

Erzeugnis, Neben- by-product.

erzwungen(e) Schwingungen forced or constrained vibrations or oscillations. (opposite of free o.).

-**(er)** Übergang forced or non-spontaneous transition.

Esse stack, chimney.

Estrichgips Keene's cement, flooring plaster.

Etagen-kessel battery boiler. -ofen storey furnace. -rost step grate. -ventil multi-seat valve.

Etagere rack, stand, shelf, support.

Etalonapparat reference standard, calibrated instrument.

eventuell optionally, contingently, if desired or necessary; eventually, ultimately.

Evolventenverzahnung involute tooth gear.

E.W. (Elektrizitätswerk)- Nachrichtenübermittlung power line signaling or intelligence transmission.

Exolierung anodic treatment, anodizing.

Expansionsschalter hydroblast or expansion circuit breaker or switch.

explosiver Laut explosive sound.

Exponentialtrichter exponential horn, logarithmic h. (either of uniform or of multiple-flare type, for loudspeaker). -, aufgewundener twisted, coiled or curled exponential horn. -, gefalteter folded exponential horn.

Expositionszeit exposure time, exposure scale.

Extinktionskoeffizient total-reflection coefficient, extinction c.

extra matt rough matt.

extremkurze Wellen (cf Wellengrenzung) ultra-short waves.

Exzenter cam, disk with lobes.

Exzenterbewegung, Herz- cam movement (of Living).

F

Fabrik-marke trade-mark. -zeichen anmelden register a trade-mark.

facettierte Linse bevel-edged lens.

Facettspiegel, Scheinwerfer- segmented or faceted searchlight reflector.

Fach-arbeiter skilled worker, specialist. -ausbildung technical education, schooling or training. -ausdruck technical term or expression.

Fächer-antenne fan antenna, harp a. or aerial. -aufblendung fan fade-in. -blende fan fading shutter.

fächerndes Prisma, stark highly dispersive prism.

Fach-genosse professional colleague, p. collaborator. -literatur technical literature or press.

-mann professional man, expert, specialist, man skilled or trained in an art. -ordnung classification. -photograph professional photographer. -presse technical press or literature.

-sprache technical language, professional terminology. -welt technical world.

Fackel-entladung torch form of discharge. -erscheinung flicker effect (of a cathode). -kohle carbon coal.

Faden, biegamer ductilized filament; flexible thread or fiber. -thorhaltiger thoriated filament.

Faden, Einkristall- single-crystal filament, mono-c.f. **Glas-** glass fiber or thread; thread-like defect of glass. **Kenn-** colored tracer thread (for color coding).

Leucht- streamer; glow column (in a tube). **Quarz-** quartz thread, q. filament. **Quecksilber-** mer-

cury column, m. thread. **Strom-streamer** (in discharge); current path, streamline, c. tube.

Faden-dicketaster calipers with jaws to measure thread gage capacitively. -einsatz, **Leucht-streamer** onset. -elektrometer filament electrometer. -galvanometer string galvanometer.

-glas spun glass, filigree g.

-kabel (**HF-Leitung**) co-axial or concentric cable with silk-thread-supported central conductor. -kreuz reticule, cross or hair lines, reticle, graticule, cross-spider hairs. -kreuzlupe reticle magnifier, r. glass, r. lens.

-länge, Glimm- length of neon glow column (in tuning, etc., indicators). -strahl

fuzzy hose-like pencil of non-uniform cross-section in gas-focussed c. -r. tube, consisting of positive ions and secondary electrons, thread beam. -strahlen pencil rays (electrons). -strahlentladung thread ray discharge. -strom filament current, cathode c.

-umschnürung serving of thread (on cables) -zähler thread counter, linen tester.

fädig, ein- unifilar.

Fading-automatik automatic volume control means (a.v.c.). -mischhexode a.v.c. mixer hexode.

Fagott bassoon. -wasserabguss bassoon syphon.

Fahne, Rauch- smoke steamer.

Fahnenbildung signal inertia-drag.

Fahr-arm hinged tracing lever (of planimeter). -aufnahme running, follow or traveling shot. -bahn track, taxiway (airfield),

runway; travel beam.	power factor (e.g., of a cable, condenser, etc.), ratio of watts to volt-amps.; phase angle difference ($\tan \delta$). Verstärkungsamplification factor, voltage f.
fahrbares Mischpult dolly or car-type mixer, teawagon console mixer.	Widerstand-Reaktanz- Q factor, magnification f.
fahren run, move, ride, travel.	fakultativ optional, non-obligatory, non-compulsory, permissive.
Fahr-gestell, einziehbares, rückziehbares retractable or re-tractile undercarriage. -säule, Elektroden- electrode mast or support. -stift tracing or tracking point (of planimeter).	fällbar precipitable.
-strahl radius vector. -stuhl, Spulen-, (in Bandbreiteregler) band-width regulator comprising auxiliary coupling coil parallel to oscillation coil.	Fall-bär ram, tup, rammer. -Beschleunigung gravitational acceleration.
Fahrtwindgenerator wind-driven generator.	Falle, Ionen- ion trap (in gun of c. -r. tube to attract negative ions). Quecksilber- mercury trap (in vacuum pump).
Fahr-widerstand (Flugzeug) drag.	fällen, ein Lot let fall a perpendicular. -, ein Urteil render a judgment, decision, sentence, verdict or award, issue a decree.
-zeug (power) craft (marine, land or air), power-propelled vehicle.	fallen lassen abandon (a patent, an application).
Faktor factor, coefficient, sub-multiple (of a number).	fallende Charakteristik drooping characteristic, falling c.
Faktor, Anregungs- excitation factor. Anreicherungs- concentration factor. Atomform- atom form factor, atomic structure factor, structure amplitude f., f-value; scattering factor (of X-rays or electrons by gases). Aufspaltungs- splitting factor. Callier-Callier factor. Entwickelungs- Watkins factor (time of appearance)	Fall-klappenrelais drop indicator relay. -körper, Zähigkeitsmesser mit ball-drop type of viscosimeter.
Filter- filter factor, screen f.	Fallmittel precipitant.
Form- shape factor, theoretical stress concentration f. Füll-space factor, activity f. or coefficient. Klirr- non-linear harmonic distortion factor, klirr, blur or rattling f. Kugel- coefficient of sphere (photometry)	Fall-raum cathode drop or fall space. -scheibe, -schieberverschluss drop shutter. -system-Plattenwechsel drop system of record changing. -werk vertical drop or blow-impact testing machine. -winkel angle of inclination.
Leistungs- power factor. Polbedeckungs- pole arc, pole pitch percentage. Q-Q factor, magnification f. Spur- tracking error, t. distortion (phonograph).	falsch (e) Ausrichtung misalignment (of image or track). -(es) Licht light fog, leakage l., stray l. (in film printing). -phasig misphased, dephased, out of phase. -(e) Strahlung stray radiation, s. rays.
Streu- scattering factor, S value (of x-rays). Trenn- separating factor. Übertragungs- transfer factor, image t. constant. Verlust-	Falsch-abstimmung mistuning, off-resonance condition. -anpassung des Widerstandes mismatching of impedance, mismatched i.
	Falschanpassungsfaktor mismatching factor, reflection f., transition f.

Fälschung distortion, vitiation, falsification, adulteration, fraud, forgery, counterfeiting.

Falte pleat, fold, crease, wrinkle, lap.

Falten-filter plaited, folded or fluted filter. -horn folded, coiled, curled or twisted horn (of a loudspeaker). -lautsprecher folded-horn loudspeaker. -schlauch pleated or corrugated hose or tube, accordion tube.

faltig having folds, pleats or creases, wrinkled, puckered,

Faltung (Spektrallinien) faltung (of spectral lines).

Faltversuch folding, doubling or bend-over test.

Falz fold, groove, flute, notch.

Falz-beständigkeit folding endurance (of film). -fähigkeit foldableness. -festigkeit folding strength. -membran non-rigid non-circular (breathing) cone with curved radiating surface. -widerstand folding resistance.

-ziegel interlocking tile.

Familie, Gleichungs- equations grouped in a family.

Fang-anode (cf Auffanganode) collecting or gathering anode. -blech baffle sheet (in a magnetron).

-düse mixing nozzle (steam jet).

fangen catch, capture, captivate, collect, trap, secure.

Fänger, Bild- pickup camera.

Schleifen- feed and take-up sprocket mechanism (film projection).

Fang-gitter suppressor grid, cathode g. (in power pentode), interceptor g. -mittel getter(ing substance) -platte target or impactor plate -röhre, Farnsworth'sche F. dissector tube -spiegel collecting mirror.

Faraday's(cher) Dunkelraum Faraday dark space. -(ches) Gefäß

Faraday ice pail, F. cylinder.

-(cher) Käfig Faraday screen, shield or collector.

Farb-angleichung color matching, c. comparison. -atlas color scale, c. chart (e.g., of Munsell).

-ausgleich color balancing (of c. film). -auszug color record, chromatic selection. -auszug, negativer separation negative. -deckfähigkeit concealing, covering or hiding power (of paint); opacity.

Farbe color, dye, paint, pigment, stain, hue, tone, shade, tint. -bezogene, related color. -bunte hue color, chromatic c. -,unbezogene unrelated color. -,unbunte hueless color, achromatic c., color devoid of hue. Ergänzungs- complementary color.

Grund- primary color; ground or priming c. **Interferenz-** interference color. Kern- nuclear stain.

Klang- timbre, tone color, quality. **Leucht-** luminous paint. **Stamm-** primary color. **Ton-** timbre. **Umdruck-** re-printing ink.

Färbekraft dyeing power, tinctorial p.

Farbemesser, Blut- plethysmograph (tests blood flow), electro- arteriograph.

Farbempfindung color sensation, c. perception.

Farben-abweichung chromatic aberration. -ausgleich color balancing (in color film). -auszugfilter selective filter, s. screen.

farbenblind color blind.

Farbendruck, Licht- photo-chemical color printing.

farbenempfindliches Zäpfchen color-distinguishing cone (of eye).

Farben-empfindlichkeit des Auges, -empfindlichkeitsverteilung color sensitivity or spectral response of the eye. -empfindung color sensation, chromatic s.

farbenerzeugend color producing, chromogenic.

Farben-fehler chromatic defect, color d., chromatic aberration.

-fehl sichtigkeit color-vision deficiency. -filmaufnahme color photograph. korrektion achromatization. -lehre science of color, chromatics. -mass colorimeter, colorimeter. -messer chromatometer, colorimeter; c. knife. -messung chromatometry, chromatometrics, colorimetry. -rad rainbow wheel. -reste residual chromatic aberration, uncorrected color.

farbenrichtig orthochromatic (phot.).

Farben-saum color fringe. -schicht-film dye-coated film. -sehen color perception, color vision. -skala chromaticity scale, color scale, color chart. -spektrum color spectrum, chromatic s. -stufe color gradation, shade, tint. -messer tintometer. -ton tint, hue, color tone. -tüchtigkeit color vision. -unterscheidung color discrimination. -veränderung change of color, discoloration. -vergleich color matching, c. comparing. -wahrnehmung color vision, c. perception. -wiedergabe color reproduction. -zerstreuung chromatism, dispersion, chromatic aberration (opt.).

Farberegler, Klang- tone control, tonalizer.

Färbetabletten varitone tablets.

Farbfehler chromatic aberration.

farbfehlerfrei achromatic.

Farb-film, Natur- natural-color film. -glas colored glass, stained g., c. filter. -gleichung, dreigliedrige three-color equation, tristimulus e.

farbig, flammen- flame or rainbow color. -, mehr- polychromatic, pleochroic (cryst.), multi-colored. -miss- discolored, in-harmonious in color. -, regenboogen- rainbow colored, iridescent. -, voll- full or saturated in color.

Farb-kennzeichnung color coding (for identification and wire tracing). -komponente color or image component (in color reproduction). -kopie color print.

farb-korrigiert color-corrected, achromatized. -los colorless, hueless, achromatic.

Farb-lösung staining solution (microscopy). -massystem (IBK) chromaticity scale system, color chart, CIE diagram. -messung colorimetry. -muster color sample -rad inking wheel, i. roller. -raster color embossing. -raster-aufnahme color screen photography. **farbrichtig** orthochromatic, iso-chromatic.

Farb-rolle inking roller, i. wheel.

-schaum fringing (in film).

-schreiber inker, printer.

-schwellenwert liminal value or threshold of intensity of a color. -stufe color gradation, tint, shade. -stufe, empfindungs-gemäße subjective chromaticity scale value. -temperatur color temperature. -toleranz color tolerance. -ton (warm, kalt) color hue, tone or tint (warm, cold).

farbtön-gleiches, reines Gelb psychologically unique yellow. -richtig orthochromatic.

Farb-treue color fidelity (of color film). -umschlag discoloration, change of color.

Färbung (Schall) timbre, tone or sound color, quality.

Farbunterscheidungsvermögen color discrimination faculty.

Farb-verfahren, Linsenraster- lens-ticular color printing method. -wiedergabe color reproduction. -zentren F. centers.

Farnsworth'sche Bildfangröhre F. image dissector tube.

-scher Vervielfacher F. multiplier tube.

faserförmig fibrous, filiform.

Faserung, Linsen- fibrillation of lens.
 Fassondraht sectional, shaped, fashioned or profile wire.
 Fassung socket, holder, mount (ing) fitting. -für Kristalle crystal (oscillator or resonator) mount or holder. -für Objektiv mount or barrel of lens or objective.
 Fassung, Einstell- focusing lens mount. Kristall- holder or mount of a crystal. Linsen-, Objektiv- objective or lens barrel or mount. Röhren- tube socket, valve socket. Röhren- federn- de cushion socket, anti-microphonic valve holder. Schneckengang- helical lens mount.
 Faustregel rule of thumb, rough and ready r.
 Fazettenspiegel, Scheinwerfer- segmented or faceted search-light reflector.
 Feder spring; pen, feather; (mech., corresponds to capacitance in electricity).
 Feder anspannen tension, tighten or bend a spring. -entspannen relax, relieve or untension a spring.
 Feder, Auslösungs- escapement spring, trip or release s.
 Blatt- leaf spring, flat or plate s., reed, blade. Dacken- poppet spring. Drehstab- torsion bar spring. Druck- compression spring. Gegen- counter (acting) spring, retractile s.
 Haupt- main spring, master s.
 Kegel- volute spring. Nebenschluss- shunting spring, off-normal s. Nut und - slot and feather (union), slot and key, groove and tongue joint. Pendel- (des Zerhackers) vibrator blade, v. reed or spring (of chopper). Rückführ, Rückzugs- retractile spring, restoring s. Schlag- impact spring.

Schleif- wiper, slide spring, contact spring. Schnecken-coil (ed) spring. Schrauben-helical spring, coil s. Schreib- stylus, style, recorder pen, inker, scribe.
 Feder, Schwing- (des Zerhackers) vibrator spring, reed s. (of chopper). Sperr- click spring. Stromstoss- impulse spring (of dial). Zentrierungs- spider (of loudspeaker coil). Zug- tension spring, traction s., retractile s.
 Feder-barometer aneroid barometer.
 -keil feather key. -klinke spring catch. -kraft elasticity. -kraftantrieb spring motor, clockwork (motor) drive. -manometer, Glas-spoon-type glass manometer.
 -motor spring motor.
 federnd springy, elastic, resilient, yielding, cushioned, flexible, supple.
 federnd (er) Kontakt spring contact, flexible c.c. spring. -(e)
 Leitrolle spring-loaded idler.
 -(e) Röhrenfassung,-(er) Röhrenhalter cushioned tube holder or socket, anti-microphonic valve holder.
 Feder-raster spring catch, s. dentent. -ring lock washer.
 -satz spring bank, s. assembly.
 -spannung spring tension. -uhr, Präzisions- chronometer.
 Federung, Federungswiderstand compliance, mechanical capacitance (reciprocal of stiffness).
 Feder-wage spring balance, s. scale.
 -weg spring deflection, s. excursion or elongation. -werk spring mechanism. -zange spring pliers.
 Fehl-abgleichung faulty alignment, misalignment. -anpassung mismatching; defective focus.
 -anpassungsfaktor mismatching factor, reflection f., transition f. -anweisung incorrect indication or reading, misreading.

-bauerscheinung mosaic structure (of metal crystals).

Fehler (cf **Verzerrung**) error, defect, fault, flaw, failure, distortion, aberration (in lenses), trouble (in circuits).

Fehler, chromatischer chromatic aberration. **-stroboskopischer** stroboscopic aberration.

Abbildungs- defect of image, aberration. **Abgleich-** unbalance, balancing error, alignment error.

Beobachtungs- error of observation, experimental e. **Bild-** picture distortion, image d. **Einstell-** faulty focusing, faulty spot control, decrease of spot with intensity increase, large diffuse speck on screen, in gas-focused picture reproducing tube (telev.)

Farb-, Farben- chromatic aberration, c. or color defect. **Form-** informality, formal defect. **Geometrie-**

geometric distortion. **Geschwindigkeits-** distortion due to synchronous speed differences.

Glass- glass defects or flaws: striae, cords (when large), bubbles (seeds when small, air-bells when of irregular shape), stones, crystallization bodies.

Gleichgewichts- imbalance, unbalance. **Gleichlauf-** jitters (distortion caused by non-synchronism in facsimile).

Instrumenten- variations of bearing due to instruments (df).

Kugelgestalts- spot-size distortion. **Leitungs-** line failure or fault. **Linsen-** lens defects, l. aberrations. **Norddreh-** northerly turning error. **Öffnungs-**

apertural defect, a. effect or error. **Orts-** geometric location error. **Peil-** direction-finding error (e.g., due to night effects), distortion of bearing.

Phasen- error of phase, phase distortion. **Richtungs-** deviation

(of pencil); directional distortion (of bearing). **Teilungs-** faulty pitch (of an image), underlap (of lines).

Tonnen- barrel distortion, positive distortion. **Trapez-** trapezoidal, keystone or trapezium distortion (due to dissymmetry to earth of deflection plates). **Verschiebel-** lack of synchronism, out-of-frame defect.

Versuchs- experimental error. **Zerdehnungs-** (eines Bildes) radial distortion of a picture or image (pincushion effect).

Zerdrehungs- (eines Bildes) rotational or tangential distortion, twist (barrel effect).

Zonen-, Zwischen- zonal aberration, zonal error.

Fehler-beseitigung curing or elimination of errors or of defects, "trouble shooting."

-dämpfung balance attenuation, return loss. **-dreieck** triangle of error. **-eingrenzung** tracking down seat or source of interference or trouble, localizing t.

fehlerfrei free from flaws, faults or defects, faultless, unmarred, sound; aplanatic (free from spherical aberration), aberrationless (of a lens). **-farb-** achromatic. **-polarisations-** free from polarization error (df).

Fehler-funktion,-gleichung

(Gaussian) error equation. **-grenze** limit of error.

fehlerhaft faulty, defective, impaired, having flaws.

Fehlerscheibchen circle of confusion; apertural effect. **-schutzeinrichtung** fault clearing device.

-sucher aniseikon (electronic crack detector), electromagnetic flaw d. (using flash magnetization), magnaflux inspection means, device used for flaw detection by x-ray or materiology methods.

-tiefenbestimmung stereoscopic radiography for locating defects; depth determination of flaws.
-verteilungskurve error distribution curve.

Fehl-griff blunder, mistake, error of judgment; wrong manipulation.

-ordnungserscheinung, thermische formation of holes (cryst.).

fehsichtiges Auge defectively sighted eye, ametropic eye.

Fehl-sichtigkeit, Farben- color vision deficiency. -weisung,
Funk- (cf **Funk-** Beschickung und **Funktrübung**) direction-finding or directional error, quadrantal error (QE), compass deviation, distortion of bearing. -winkel phase displacement angle, shift angle. -zündung failure to fire or ignite (rectifier, ignitron); misfiring.

Feilhalten (von Waren) delivery on sale (of goods), exposing or exhibiting for sale.

Feilhieb notch.

Feilicht, Feilsel filings, filing dust.

Fein-abstimmung sharp or fine tuning. -bewegung, Zahnrad- slow-motion gear. -blechstrasse sheet rolling mill. -einstellung vernier (dial) adjustment or tuning.

feinfühlig delicately sensitive.

Feingefüge fine structure, micro-structure.

feingepulvert finely powdered, pulverized, comminuted or atomized.

Feinheit (des Bildes) detail or (degree of) definition of picture or image. **Raster-** raster detail, resolution or definition of scanning pattern.

Fein-heitskoeffizient fineness coefficient (of Fabry), coefficient de finesse. -höhenmesser (aneroid) barometer measuring atmospheric pressure at airdrome not reduced to sea level, sensitive altimeter.
-korn fine sight; fine grain (phot.).

fein-mahlen grind fine, triturate.
-maschig fine-meshed.

Fein-messlehre micrometer caliper or gage. -messschraube micrometer gage screw. -rasterung high-definition scan (of picture). -regulierung sharp tuning (of radio).

feinschuppige magnetische Struktur fine-scaled magnetic structure.

Fein-sicherung glow-tube type, etc., of lightning arrester. -stell-schraube micrometer screw, vernier.
-struktur fine structure, micro-structure (cryst.).

feinverteilt finely divided.

Fein-verschiebung fine displacement.

-wage precision balance, micro-balance. -zerkleinern fine grinding or crushing, comminution, finely dividing.

feinzerteilt finely divided.

Feinzug finishing block, f. die.

Feld field, compartment, bay, section, panel, pane, frame (film pictures).

Feld, erdmagnetisches geomagnetic field. -,krümmungsfreies flattened field (by field flattening lens). -,totes dead zone (of ribbon microphone), plane of ribbon. -,wölbungsfreies flattened field.

Feld, Auskoppel- output field, coupling f., absorbing f., delivery f. (of a Hollmann electron turbine or inverted cyclotron), catcher f. (of klystron). **Bild-** printing plane (film printer); frame, picture or image field, picture area. **Brems-** reflecting field, retarding f. (of Barkhausen electron-oscillation tube). **Eintritts-** area of applicator (at skin surface, in X-ray work). **Gleich-** constant or steady (magnetic) field. **Gravitations-** gravitational field. **Kennlinien-** family of characteristics or curves. **Lampen-** bank or panel of lamps, battens (stage lighting). **Längs-** longitudinal

field, paraxial f., f. parallel to axis. **Lösch-** magnetic obliterating field (in magnetic sound recording, telephone and magnetophone). **Mittel-** central field (of vision). **Prüf-** test field; proving ground (ordinance). **Quer-** transverse or cross (magnetic) field. **Rückmelde-** revertive signal panel. **Saug-** suction or positive field, field which draws away. **Schärfen-** focal field. **Spiegel-** revertive signal panel, check-back position indicator p. (giving readings of remote instruments). **Stossprüfung-** potential impact or impulse testing field. **Stör-** stray field, interference f. **Tasten-** keyboard. **Teilchen-** particle field. **Vergleichs-** matching field (in photometry). **Versuchs-** proving ground, field for making tests or experiments. **Wellen-** wave field.

Feld-ausschnitt, Bild- image area (on scanning disk). **-beleuchtung,** Hell- bright ground illumination (micr.). **-bild** field pattern, configuration or map (made in electrolytic tank). **-blende** field stop. **-durchgriff** action of field through aperture lens (el. opt.). **-ebenungslinse** field flattener (opt.). **-elektronen** field electrons (resulting from emission caused by intense electric f.). **-elektronenemission** auto-electronic, cold or field emission (and current caused thereby). **-erregerspule** field (exciting) coil (in electrodynamic loudspeaker).

feldfrei field-free.

Feld-funkentelegraphie military service radio telegraphy, non-civilian wireless. **-generator,** Brems- negative transconductance generator or oscillator (using retarding field circuit), positive grid o. **-krümmung, Bild-** curvature of image field.

-krümmungskorrektur field flattening. **-krümmungsverzerrung** distortion due to curvature or lack of flatness, curvilinear distortion. **-linse** field lens (anterior or front lens in telescope and in microscope). **-messung** plotting field map or configuration of electrostatic field (in electrolytic tank); land surveying or measurement. **-profil** field pattern. **-röhre, Zwei-** drift tube working with two fields. **-spule** field coil, magnetizing c. **-stärkenprofil** field pattern. **-stecher** field-glass magnifier. **-strom** field current (emission of electrons due to an electric field). **-tiefe,** Schärfen- depth of focus, d. of definition, d. of field. **-trichtertheorie** field funnel theory. **-verlauf** field map, f. pattern, f. configuration. **-welle** field wave. **-wölbung, Bild-** curvature of image field, lack of flatness of image field. **-zerleger, bild-** picture scanner, dissector (of Farnsworth), p. exploring means.

Fell, Trommel- drumhead; tympanic membrane, tympanum, eardrum.

Felsöl petroleum.

Fenster projection aperture (film projection); window (in envelope of a cell, iconoscope, etc.); bezel (in casing or panel of radio apparatus).

Fenster, Andruck- pressure plate or gate (m.p.). **Belichtungs-** aperture (in aperture plate), photo-cell window. **Beobachtungs-** bezel, observation window, peephole. **Bild-** picture gate, aperture or trap; range-finder (m.p.). **Bild-, mit zwei Ausschnitten** film gate with two frames. **Druck-** pressure plate or gate (film). **Film-** film gate (of projector), film trap. **Kopier-** printing plane, p. station. **Pendel-** internal pressure plate. **Projektions-** projection aperture. **Rollen-** roller film gate. **Ton-**

sound gate.

Fensterbilder window transparencies.
 -blende apertural stop or dia-phragm. -druck gate pressure, gate friction. -führung aperture guide. -kopiermaschine step printer, intermittent p. -linse aperture lens.

fensterlose Roentgenröhre windowless X-ray machine or tube.

Fern-anzeiger telemeter (e.g., metamer of GE Co., using impulse carriers). -aufnahme telephoto-graphy, long shot. -besprechgerät remote-control unit. -bild television picture, televised p., telephoto. -bildgrossaufnahme (Ferns.) projection video picture (of large size). -blitzanzeiger keraunophone. -drucker tele-printer, teletyper, stock ticker.

Ferne, Sonnen- aphelion.

Fern-einstellung long-range focus.

-glas, Doppel- field glass, binocular g.

Fernendunst distant fog.

Fern-hörer, **Dosen-watchcase** telephone receiver. Kopf- headphone, headset, "can". -kino telecine, telecast, intermediate-film system (of television). -linse telephoto lens. -meldeleitung communication or signal circuit or line. -meldewesen, Flugzeug- aircraft communication service, avigation signal service. -messer telemeter. -messgerät telemeter (e.g., metamer of GE Co. using impulse carriers); range-finder. -messum-mengeber telemetric integrator. -objektiv telephoto lens. -punkt far point (opt.).

Fernrohr, **Ablese-** reading telescopic tube. **Doppel-** telescope of binocular type. **Doppelblickziel-** double direct- sighting telescope. **Rundblick-** panorama sight. Ziel-telescope sight, bombsight, rifle sight, etc.

Fern-rohrbrille telescopic spectacles. -rohrbüchse telescope tube, barrel.

-rohrlinse telescopic magnifier.

-schreiber telegraph, teletype, teletypewriter, telegraph printer; t. operator.

Fernseh-abtaster televisior, scanner (at sending end). -abtastung (von Kinofilm) telecine scan of (motion-picture) film. -aufnahmewagen television or electron (pickup) camera truck, video bus, televis-ing car.

Fernseh-bild, **plastisches** stereoscopic or three-dimensional (appearance of) video picture. -empfänger television receiver, picture re-producing device, teleview apparatus (e.g., Zworykin's, Farnsworth's oscillight, etc.). -emp-fänger, Heim- home television receiver.

fernsehen televise, teleview.

Fernsehen, **direktes** direct pickup (and viewing). Gegen- two-way television. Mehrkanal- multi-channel television.

Fernseher (cf Kathodenstrahlröhre) television transmitter, video or telev. camera, televisior (e.g., emitron, iconoscope, Farnsworth dissector, etc.).

Fernseh-raster (cf Raster) television raster, scanning surface, unmodulated screen pattern. -röhrenprüfer monoscope, monotron, phasmajector. -sender television transmitter (comprises strictly both video and aural signal transmitters). -signal video signal, picture s., telev. s. -sprecher, -telephon television telephone, video telephone. -wandlerorgane photo-cells and light-relays changing light into current and back (in telev. work), transducer means.

Fernsprech-formfaktor telephone influence factor. -messtechnik telephonometry. -störfaktor telephone interference factor.

Fern-steuerung distance, telemetric or remote-control action (by

Selsyn type motor). -thermometer water temperature gage. -übertragung, Wettermessinstrument mit funkentelegraphischer radio telemetorographic (or telemetric) instruments, r. sonde. -wirkung distance action, remote-control a., telemetric a. -zeichnung perspective drawing.

Fertig-erzeugnis finished article, manufactured goods. -form finishing mold (glass bottle making).

Fertigung, Fliess- conveyor belt or assembly-line production, large-scale manufacture.

fest (cf beständig) solid, firm, unvarying, compact, strong, fast, fixed, stationary, tight, rigid, secure, proof, stable. -(e)

Kopplung close coupling, strong c. festbacken cake together (by heat or pressure), clinker.

Festdetektor contact or crystal detector (with non-adjustable cat whisker).

fest-fressen seize, jam, freeze. -halten, photographisch record photographically (on record sheet).

Festigkeit strength, solidity, sturdiness, ruggedness, firmness, resistance.

Festigkeit, Dauer- fatigue strength. Falz- folding strength. Feuer- fire-proofness, refractoriness.

Gestalt- form stability, non-deformability. Kerbdauer- notch fatigue strength. Knitter- crumpling strength. Riss- crack strength, c. resistance. Spannungs- puncture potential, dielectric strength. Stossdurchschlags- impact breakdown strength.

Streck- resistance to stretching or elongation. Trennungs- separating strength, static crack strength. Zerbrechungs- breaking strength, resistance to breaking strain. Zerdrückungs- crush strength, resistance to compression or crushing strain.

estkondensator fixed or non-

variable condenser or capacitor. **fest-machen** consolidate, solidify, make concrete or firm; fasten, secure, attach. -setzen fix, settle, stipulate, determine, establish.

Festsetzung, Entschädigungs- assessing or fixing damage or indemnity. **Festsitz** tight fit, snug f.

feststellbar determinable, ascertainable; lockable (in position), fixable, securable.

feststellen ascertain, determine, establish, state; lock (in position).

Feststellungs-klage declaratory action. -urteil declaratory judgment.

festweich semi-solid.

Fett, Vakuum- vacuum grease.

Fett-fleckphotometer Bunsen photometer, grease-spot p. -schliff greased (ground-in) joint. -ton Fuller's earth.

Feuchtemesser hygrometer, psychrometer.

Feuchtigkeit moisture, moistness, wetness, dampness, humidity.

Feuchtigkeitsmesser hygrometer, psychrometer. -, registrierender hygrograph.

feuchtigkeitssicher damp-proof, moisture-proof.

Feuer beacon, (radio) beam station, radio range.

Feuer, Ansteuerungs- line of approach beacon, directional b. Drehfunk- rotating radio beacon, omni-directional b. Funk-, mehrstrahliges multi-beacon, triple-modulation b. Navigations-navigation or maritime beacon, b. or beam station for aerial navigation or avigation.

feuerbeständig resistant to fire or heat, fire-proof, refractory.

Feuerbeständigkeit fire-proofness, refractoriness.

feuerflüssig liquid at high temperature, molten, fused.

Feuer-führung firing (schedule).

-punkt focus (opt.); hearth (in mining). -schutztrommel safety magazine (of film projector). -stein flint. -ton fireclay. -versilberung hot-dip silverplating. -verzinkung hot galvanization, pot g. -verzinnung hot-dip tinning.

Figur, stehende stationary pattern or figure.

Figur, Ätz- etch pattern, e. figure. Beugungs- diffraction pattern, d. picture. Fließ- strain pattern.

Klang- sound pattern, acoustic p. or figure. Ring- Fresnel or Huygens zone, F. zone plate.

Schlag- percussion figure. Staubdust figure, powder pattern (of Lichtenberg, Bitter, Debye-Scherrer, Hull, etc.). Streck-flow lines, l. of stress, surface bands.

Film, doppelbeschichteter sandwich film, double-coated f. -, ge-gossener coated film. -, glasklarer pellucid film stock (of maximum transmittance). -, mehrfachbeschichteter double-coated film, sandwich f. -, plastischer stereoscopic film, plastic f. -, unverbrennbarer slow-burning film, safety f. -, verregneter rainy film.

Film, Atmen des...s in-and-out-of-focus effects. Auflaufen des...s take-up (by spool) of film. Einlegen des...s threading of film.

Film, Blank- film base. Doppel-schicht- double-coated film, sandwich f. Duppositiv- duplicating positive film, master positive. Farbenschicht- dye-coated film. Flach- non-stereoscopic film, non-plastic f., plain f. Gravar- film with directly engraved track. Hör- (Tonfilmrund-funk) video and audio film, sound telecine or telecasting film.

Kino-, Fernsehabtastung von tele-

cine scanning of motion-picture film, scanning of film for television. Klein- substandard film, narrow f. Kultur-, Lehr- educational film, cultural f., instruction or school film. Linsenraster-lenticular film, lenticulated f. Milieu- "milieu" film. Naturfarbnatural-color film. Präge- film with directly embossed track. Raster- lenticulated screen film. Reportage- newsreel, news film, topical f. Roh- blank film, raw stock. Rundfunkton- sound telecine, telecast (broadcasting of video and audio signals). Schmal-substandard film, narrow f. Spezial-, hoher Steinheit high-contrast emulsion film. *Stumm-silent film. Trickton- sound cartoon. Umkehr- film resulting from developing by reversal. Vorführungs- display film.

Zeichentrick- animated cartoon.

Film-abheber plow (to peel film from teeth. -absatz packing, wear and tear. -abtastung film scanning. -abwickler magazine drum, feeding reel. -architektur setting and composition. -archiv film archives. -atmen in-and-out-of-focus effects. -auflaufspule, -aufwickelspule take-up spool or reel. -bahn film track, f. channel. -bandführung aperture guide. -baukunst setting and composition. -belichtungsstelle film gate. -bewegung, bildweise intermittent film feed or movement. -bewegung, stete continuous film feed or movement. -bildschicht film emulsion, f. coat. -blitz statics (m.p. film). -doppeln film duplicating. -einfädelung, -einführung threading of film. -einschnürung squeezing or compression of film (for making squeeze track). -entwicklungsvorrichtung film processing equipment. -fenster film gate, film trap. -fern-sehabtastung telecine scan (of

m.p. film). -fernsehssystem intermediate film television system.
 -fortschaltung film feed, f. motion, f. travel. -führung film feed, film guiding, f. gate. -geber film transmitter, film pickup, f. scanner, tele-cinematographic device. -justierung registration of film. -kameralaufwerk camera film feed mechanism. -kanal film track, film channel. -kern reel, spool. -kittlehre film splicing gage. -messer, -meterzähler footage counter. -methode, Zwischen-intermediate-film (pickup) method of television transmission.
 -optic, Ton- sound lens, s. optic (m.p.). -projektionsfenster aperture, gate. -registerhaltigkeit registration or stability of film. -regler, film traction regulator (stabilizer). -rolle film take-up spool or reel. -rundfunk, Ton- sound telecine, video and audio broadcast. -schaltung, bildweise intermittent film motion, discontinuous f. feed. -schaltung, stete continuous film feed or movement. -schleife film loop. -schneiden editing. -schwanz trailer run-out (pièce of blank film at end). -sensitometer sensitometer, timer. -spannung film tension, f. traction. -spulenhalter film roll holder. -steilheit, hohe high contrast of film. -streifen, endless film strip. -träger film base, f. support. -transport, absatzweiser intermittent film feed. -transport, steter continuous film feed. -transportrolle film (feed) sprocket. -tür film gate. -uhr footage counter.
 -verarbeitung film processing.
 -verblitzung dendriform exposure of film (due to static charges).
 -vertrieb release of film, distribution of f. . -vorführung film projection; f. exposure (in gate).
 -vorlauf lead or precession of

sound recording over pictures = 19 frames = 361 millimeters. -vor- ratsspule film magazine roll, magazine. -wagen, Ton- sound truck, location t., sound van. -wirkung merit or quality of picture. -wölbung film buckling.

-zähler footage counter. -zug, Unstetigkeit im flutter in film pull. -zusatzgerät, Ton- sound-head, sound film attachment.

Filter, tonrichtiger true color filter, pure c.f., orthochromatic f.

Filter, Aufteilungs- crossover network (sound production). Band-, von grosser Lochweite broad-band filter. Bewertungs- weighting network. Blau- blue filter, viewing f. Durchlass- band-pass filter, b.-transmission f. Einzelabschnitt-single-section filter. Entzerrungs-filter-type equalizer, network e. Farbenauszug- selective filter, s. screen. Frequenzbereich- band-pass filter. Gitter- lattice filter (used in electric signaling). Glocken- bell jar filter. Kanal-channel filter. Kontrast- filter for selective contrasts, contrast screen filter. Kreuzglied- lattice section filter. Licht- light filter, color f. Mikro- filter for micrographic work. Nadelgeräusch- needle scratch filter. Streifen-, dreifacher tricolor banded filter. Tiefpass- low-pass filter. Trenn- dividing filter, separating f. Verlaufsky filter (of gradual action). Wellenstrom- ripple filter.

Filterabschluss dch. 1/2 Längsglied mid-series filter termination.

-dch. 1/2 Querglied mid-shunt filter termination.

Filter-durchlässigkeit, Glas- filter or glass transmittance or transmittancy. -faktor filter factor, screen f. -federungswiderstand compliance (of mechanical filter). -glied filter section, f. mesh, f.

unit. -lochlage position of transmission range. -massenwiderstand inertance (of mechanical filter). -steilheit sharpness (of cut-off) of selecting network, slope.

Filz-kufe felt pad. -unterlagscheibe felt washer.

Finger, Kontakt- contact finger, wiper.

Finger-anschlag finger stop (of dial switch). -bildner digitarium (for piano practicing).

-hut(ionisierungs)kammer ionizing chamber. -regel, Dreiright-hand rule, thumb rule, Fleming's r. -scheibe dial switch, finger disk or wheel.

Fisch-bauchantenne fish-belly antenna (mast antenna in which maximum cross-section and minimum characteristic impedance lie in the middle). -schwanzbrenner bat's wing burner, fishtail b.

Fis-Klappe F sharp key.

Fixier-flüssigkeit fixing liquid, f. liquor. -mittel fixative, fixing agent. -natron sodium hyposulfite, sodium thiosulfate, "hypo". -salz fixing salt.

fixierter Kathodenfleck des Quecksilberlichtbogens anchored spot of mercury arc.

flach flat, without contrast, with low gamma (picture); flat, flat-topped (curve, e.g., in broad tuning).

flach werden level off, flatten out, slope, become less steep, be smoothed.

Flachdruck lithoprinting.

Fläche surface, face, facet, plane, area, zone, plain, level, sheet, flatness.

Fläche, cartesische Cartesian surface. -deformierte deformed or figured surface. -konstanten Potentials equipotential surface, isopotential s.

Fläche, Abstrahl- radiation surface, radiant s., reflecting s., pro-

jector s. (loudsp.). Abstumpfungs-truncated face (cr.). Ausgleich-, der Erdkruste isostatic surface (of earth). Äquipotential- isopotential or equi-p. surface or plane. Bild- image area, picture field; image plane (opt.). Brenn-caustic surface (geometry). Emp-fänger- radiation sensitive sur-

face; record sheet. Gleit- glide plane, slip p. (cryst.), sliding surface, slide. Grenz- interface, boundary layer, surface of contact. Grund- basal surface, base, area. Ketten- catenoid. Knoten-nodal surface, n. plane (opt.). Kristall- crystal face, c. plane. Leit- deflection vane (in ldspk. horn, to reduce directional property), labyrinth, baffle. Licht-verteilungs- isophote, isolux diagram, luminosity or isophotic surface or curve. Neben- secondary face. Niveau- level, surface, equipotential s., isopotential s.

Potential-, konstante equipotential or isopotential surface. Prismen- prismatic surface, p. face. Rückstrahlbrenn- catacaustic (surface). Schärfen- surface of sharp or distinct vision. Schiebungs- slip plane (cryst.). Spalt- cleavage plane, c. face (cryst.). Stirn- end face, face, front surface. Strahl(ungs)- emitting surface, emitter area (electrons), radiator surface, radiant surface. Translations- translation plane, slip p.

Trennungs- cleavage plane, parting p., surface of separation.

Wellen-, Fresnel'sche Fresnel

zone (of half-period elements).

Flächen-aberration-, -abweichung zonal aberration (opt.). -antenne sheet antenna. -anziehung surface attraction, adhesion, adsorption. flächenartige Strombahn (cf flächenhaft) current sheet, laminar

- or areal path of current.
- Flächen-ausmessung** planimetering.
 -element (cf Bildpunkt) elementary area, unit a. -erhaltungs-gesetz principle of conservation of area.
- flächenförmig** areal, laminar, of sheet-like nature or form.
- Flächenglimmlampe** glow-lamp or neon l. with plate-shaped cathode, plate neon l.
- flächenhaft** areal, laminar, involving two-dimensionality, of sheet or plane form. -(e) Berührung surface or areal contact (as in osculation). -(e) Spule laminar or strip-like coil, non-filamentary c.
- Flächen-helle**, -helligkeit luminous brightness of a surface, intrinsic brilliance. -inhalt surface area. -integral area integral (of a surface). -kathode plate-shaped cathode, large-surface c. (as distinguished from crater-shaped, punctiform or filamentary c.). -lampe, -leuchte bank or pillar of lamps or luminous sources, battens. -messer planimeter, integrigraph (for curves). -potential, Grenz- interface potential.
- flächenreich** polyhedral, with many faces or sides.
- Flächen-satz** theorem of conservation of areas. -stück area element, unit a., elementary a.
- flächentreue** Projektion equal-area projection (in mapping).
- Flächenwinkel** plane angle. -winkel, Grenz- interfacial angle (dihedral between two crystal faces). -zeichnung, Spalt- cleavage plane marking, crystal m.
- flächenzentriert** face-centered (cryst.).
- flacher Frequenzgang** flat frequency characteristic (free from peaks and dips).
- Flach-film** plain film, non-plastic f., non-stereoscopic f. -gewinde square (screw) thread. -heit (eines Bildes) flat or non-contrasty quality or condition of a picture or image.
- flächig ...faced, areal, laminar.
- flächig, drei- trihedral, three-faced. viel- polyhedral, many-faced. vier- tetrahedral, four-faced. zwei- dihedral, two-faced.
- Flächner**, Halb- hemihedron. Voll- holohedron.
- Flach-spule** flat coil, pancake c. -streicher flat squeegee, strickler.
- Flackereffekt** flicker effect.
- flackern** flicker, flare, flash.
- Flackerrelais** flashing relay.
- Flageolettöne** harmonics.
- Flammbläser** blasting magnet, blowing m.
- Flamme**, leuchtende luminous flame. -, nichtleuchtende roaring flame. Lock- pilot flame. Lötrohr- blowpipe flame.
- flammenbeständig** flame-proof, f. -resistant
- Flammenbogen** flame arc, electric a. -erdenschluss arcing ground.
- flammenfarbig** flame-like, flame-colored.
- Flammen-mikrophon** flame microphone, f. transmitter. -spektrum flame spectrum.
- flammicht** watered (of fabrics), veined or grained (of wood).
- Flammpunkt** flashpoint, ignition p., kindling p.
- Flanken-spiel** backlash (of screw thread). -steilheit (cf Filter-steilheit) width of transition interval (between transmission and attenuation bands); steepness of sides or slopes of a curve, or of upstroke and downstroke of an impulse. -streuung side leakage, s. stray, end s.
- Flansch**, Kühl- radiator vane, cooling vane.

Flasche, Kugel- balloon flask,
 spherical flask.
Flaschenzugbügelhaken block shackle.
Flattereffekt flutter effect (called
 wowow when changes per second are
 less than 6, flutter 6-80, gargle
 80-200, and whiskers when over
 200 ps.)
flattern flutter, flicker, wave.
Flatter-russ lampblack. -widerhall
 multiple reflection (between two
 parallel surfaces), flutter echo.
flau flat, without contrast (c.
 often diminished by white tint
 permeating whole picture); limy
 or blooming condition, fuzzy (of
 picture); flattened or flat
 (characteristic or response).
flau werden flatten-out.
flechten plait, twist, braid, in-
 terweave.
Fleck, Kathoden-, fixierter anchored
 cathode spot (of an Hg arc).
Laue-Laue spot. Licht- spot (in
 scanning); hot spot (of film).
Reflexions- flare ghost, f. spot.
flecken spot, stain, speckle, mot-
 tle, patch.
fleckenempfindlich susceptible to
 staining or spotting.
Fleckentheorie patch theory (of
 metals).
Fleck-schärfe (sharpness of) spot
 focus. -Verformung, -verzerrung
 spot distortion.
flicken repair, patch, mend.
Flickerpeilung Robinson flicker di-
 rection-finding method, make and
 break, loop reversing or switch-
 ing method.
fliegen, gegen den Wind fly up wind.
 -mit dem Wind fly with tail wind.
fliegende Kathode floating cathode.
Flieger-aufnahme aerial picture,
 airplane p. or photo. -horizont
 artificial horizon. -visier
 anti-aircraft sight.
Fliehkraft centrifugal force, fly-
 wheel f. -regler centrifugal
 governor.

Fließ-behinderung inhibition of
 plastic deformation. -bereich
 plastic range. -eigenschaften
 rheological properties.
Fließen, plastisches viscous flow,
 streamline f., laminar f., steady
 f. -, Wissenschaft der Verformung
 unter rheology.
Fließ-feder fountain pen. -Ferti-
 gung production on conveyor belt
 or assembly line. -figur strain
 figure. -grenze flow limit, yield
 point. -körper fluid or liquid
 body or substance, non-solid.
 -verzug yield or flow distortion
 or deformation. -vorgang flow
 process.
Flimmer, Zwischenlinien-, Zeilen-
 inter-line flicker, shimmer, weave
 (telev.).
flimmerfrei flickerless. -(e)
 Verschlussblende non-flicker shut-
 ter. -(e) Wiedergabe flickerfree
 reproduction.
Flimmerfrequenz fusion frequency,
 no-flicker f., critical flicker f.
flimmen flicker, glisten, glitter,
 sparkle, scintillate.
Flimmer-peilung loop reversing or
 switch method, Robinson flicker
 d. f. method. -photometer flicker
 photometer.
flittern glisten, glitter, sparkle,
 scintillate.
flocken flake, form flakes or flocks,
 flocculate.
Flödel purfling (mus. instrument).
Flöte flute, flageolet. -mit
 Stimmzug flute with tuning slide.
Flöte, Harmonie- organ accordion.
Liebes- flute d'amore. Papageno-
 pandean pipe. **Piccolo**-, Pickel-
 piccolo flute. Stimm- tuning or
 pitch pipe. Stock- stick flute.
Terz- third flute. **Trommel-** fife.
Fluchtebene vanishing plane.
fluchtgerecht truly aligned or flush
 (with).
Fluchtlinientafeln alignment charts.
flüchtig volatile, fugitive, fleeting,

transient, cursory, superficial, evanescent.

Flüchtigkeit volatility, fugacity, evanescence, fleetingness.

Fluchtpunkt vanishing point.

fluchtrecht flush, aligned, in true alignment.

Flug, Gehörziel- aural indication or reading of homing device, aural method. **Schleifen-** ("U") turn, loop. **Sichtziel-** visual homing flight.

Flug-bahn path of flight, trajectory. **-bahnbild** trajectory diagram.

Flügel wing, vane, flap, lobe, blade.

Flügel, Abdeck- masking or shutter blade or wing. **Beruhigungs-** intermediate blade, anti-flicker blade, balancing blade. **Radio-meter-** radiometer vane. **Zwischen-** intermediate blade, anti-flicker b., balancing b.

Flügel-horn bugle, vocal horn.

-messer vane-type fluid meter.

-mutter winged nut, butterfly n., thumb n.

flügeln wing.

Flügel-rad screw wheel, worm w., s. propeller. **-schraube** wing or thumb screw or nut.

Flug-fernmeldewesen avigation or aerial navigation signal service.

-funkdienst aeronautical radio service. **-geschwindigkeit** rate of flying speed, traveling velocity (electrons, etc.).

Flughafen airport, airdrome, landing field, flying f. **Verkehrss-** commercial airport, civil a.

-befeuерung airport beacon service. **-grenze** airport boundary, a. border line.

Flug-leiter, Boden- ground control operator. **-leiter, Peil-** ground direction-finding operator. **-ort** (flying) position (of craft).

-probleme avigation, aeronatical or flying problems. **-sicherung** avigation or aerial navigation safety, air communication safety.

-strecke airway, avigation route. **-wesen** aviation, aerial navigation, avigation, aeronautics.

Flugzeug, anlaufendes approaching airplane. **-,schwanzloses** tailless airplane. **Murflügel-** tailless airplane.

Flugzeug-abhörapparat airplane sound locator or detector. **-aufnahme** aerial photograph, airplane p.

-aufsatzpunkt ground contact point, landing point. **-befehlsübertragung** inter-aircraft voice or command communication. **-führer** pilot; navigator, avigator. **-führung** avigation or piloting of an airplane. **-gleichgewicht** balance or trim of an airplane. **-längsachse** fore-aft line of airplane, major axis.

-leitung aircraft guiding or guidance, avigation, piloting. **-navigation** aircraft guidance, piloting of aircraft, avigation. **-propeller, Versetz-** variable-pitch (feathered) airscrew or propeller. **-schieben** crabbing of an airplane. **-stützpunkt** airplane base, base airport. **-versetzung** drift, lateral displacement or shift (in course) of an airplane, deviation from course, yaw.

Flugziel flying course, airplane heading or head (towards destination), home.

Fluoreszenzauslöschung fluorescence quenching, evanescence, f. extinction (e.g., by poison).

fluoreszenzerzeugend fluorogenic.

Fluoreszenz-messer fluorometer; phosphoroscope (measures decay).

-strich fluorescent screen tracing or line. **-unterdrückung** quenching of fluorescence, suppression or killing of f.

fluoreszieren fluoresce, scintillate (when excited by α rays), luminesce.

Fluoritlinsensystem semi-apochromatic lens system.

Fluss flow, flux, circulation, stream,

current, drift (of electrons).		-rung deduction, inference, conclusion, induction, corollary.
Fluss, Streu- leakage flux, stray flux. Windungs- turn flux, flux turns, magnetic linkage.		-schalterkamm sequence switch cam
flüssig liquid, fluid, non-solid, aquiform. -machen liquefy.		Folie, Träger- supporting foil.
-werdend liquefied.		Foliendurchmesser record (disk) diameter.
flüssig, feuer- liquid at high temperature, molten, fused.		Forcierkrankheit strain disease (metals).
streng- viscous, semi-fluid, difficultly fusible.		Förderband, Sandförderer band or belt conveyor, c. belt.
Flüssigkeits-dämpfung liquid or fluid damping or dash-pot action.		Fördermechanismus, Platten- plate feed mechanism (of electron microscope).
-dichtemesser hydrometer, liquid density meter, areometer. -linse (oil or water) immersion objective. -prisma liquid prism.		fördern convey, transport, feed, haul; boost, promote, favor, further, advance, help, hasten.
Fluss -mittel fluxing material, flux. -richtung low-resistance or forward direction (of a dry or oxide rectifier, e.g.) -spat fluorspar, fluorite. -verkettung flux linkage.		Form, Fertig- finishing mold (glass bottle making). Mutter- master mold (cer.), parental form.
Flutlicht floodlight.		Press- pressure mold. Vorgathering mold (glass manuf.).
Fokus tiefe depth of focus, d. of field.		Zwischen- passage type.
Folge sequence, series, succession, consecution, future, consequence, result, conclusion, sequel, compliance.		Formänderung deformation, distortion, strain, warp.
Folge, Bild- series or sequence of optical or pictorial actions.		Formänderungsfähigkeit (plastic) deformability, rheologic or flow property.
Klang- sequence or series of acoustic actions. Linsen- lens combination, system of lenses.		Formant harmonic determining timbre or tone color, formant. Haupt- resonance formant. Unter- basic formant. Unter- sub-formant.
Reihen- sequence*, consecution, succession, series, order. Ton-series or sequence of acoustic or sound actions.		Format, Bild- picture or frame size or format.
Folge-kern, Nach- product nucleus. -kontakt make-before-break contact. -produkt metabolons, products of successive disintegration of radio-active parent material. -punkt consequent points or poles (magn.) -reaktion consequent reaction, secondary r.		formbar plastic, capable of being plastically shaped or fashioned, plastically deformable or formable, moldable, fistic.
-rohr piloted thyratron (fires second in a trigger circuit).		Formbeständigkeit stability of shape, non-deformability.
		Formelbild structural formula.
		Formeln, Ausschuss für Einheiten und (AEF) Committee on Units and Standards, Standards Committee.
		Raum- spatial formulae.
		formengleich conformal.
		Form-faktor aspect ratio (picture).
		-faktor. Fernsprech- telephone influence factor. -fehler formal defect, informality.

-festigkeit stability of shape, non-deformability. -gebung fashioning, shaping, molding, imparting shape by outside action (e.g., pressure). -gebung, spanabhebende (und spanlose) shaping or fashioning by machining with (and without) removal of material by cutting tools (in the form of chips, etc.)

form-gerecht, -getreu true to form or shape, undistorted, having fidelity, faithful (e.g., in amplitude or phase of signals).

Formierung forming (of a valve or cell); activation, sensitization.

Formling molded article or blank.

formlos amorphous, formless, non-crystalline.

Form-mangel abhelfen oder heilen remedy or cure formality defect.

-maschine, Rüttel- jolt molding machine, jar ramming m.

formschlüssig form-closed or -locking.

Form-stich shaping pass (in rolling).

-stück, Ton-, mehrzügiges multiple tile or clay conduit.

Formulierung, Strich- chemical formula using dashes or lines to represent bonds.

Formziffer shape factor; theoretical stress concentration factor.

Forschungs-anstalt research institution. -gebiet research field or domain. -geist inquisitiveness, inquiring or searching spirit.

Fortdiffundierung diffusing away.

Fortepedal forte pedal, loud p.

fortführen carry away, convey; continue, prosecute (a case).

fortheben, sich cancel out or eliminate (a factor).

fortlaufend sequential, continuous, uninterrupted, non-intermittent.

-(e) Reihe unbroken, uninterrupted or continuous sequence or series.

Fortpflanzungs-geschwindigkeit velocity of propagation.

-konstante propagation constant, transfer c. -mass (hyperbolical) line angle.

Fort-rückung translation, advance, feed, shift, removal, moving away.

-schaltrels stepping or impulsing switch or relay. -schaltung, Film- film feed, travel or movement. -schaltwerk stepping mechanism.

fortschreitende Welle progressive wave, advancing w.

Fortschreitungs-bewegung translational movement, stepping, propagational m. -geschwindigkeit speed of progression, s. of travel. **Fortschritt** advance, progress, improvement, advancement (in an industrial art, etc.)

Foto... see Photo...

Fourier'sche Integralzerlegung Fourier integral seriation.

Fourierreihe, doppelte double Fourier series.

Frage-bogen questionnaire, list of queries. -recht right to cross-examine. -stellung interrogatory.

Fransen fuzz, fringe. Beugungs-diffraction fringes.

fräsen cut, mill, face.

frei, drehungs- irrotational, rotation-free. farbfehler- achromatic. funken- non-sparking, non-arcng, arcless. kohle- carbon-free, free from carbonaceous admixture. polarisationsfehler- free from polarization error (in df, etc.).

...frei -less, -free, non-, an-, free from, devoid of.

frei(e) Elektronen (Leitungs-elektronen) free electrons, conduction e. -(er) Platz hole (nuclear theory). -(e) Schwingung free oscillation. -(e) Weglänge, mittlere mean free (length of) path.

Frei-antenne outdoor antenna.

-fallbogenlampe gravity-feed arc-lamp. -gabe unblocking, release, disengagement, opening, clearing, liberation.

Freiheitsgrad degree of freedom.
-zahl variance (of a system).

Freilauf-bremse free-wheeling
brake, coaster b. -kupplung
free-wheel clutch, slip
coupling.

Frei-lichtaufnahme outdoor or ex-
terior shooting or shot.
-luftdurchführung open-air wall-
duct, leadin out-door bushing
(insulator). -luftisolator out-
door insulator. -schwinger free
radiator (loudspeaker).

freitragend self-supporting, s.
-supported.

Fremdbestandteil foreign, ex-
traneous or external matter,
material or substance.

fremderregt (er) Magnet electro-
magnet, non-permanent m.
-(er) Schwingröhre, -(er) Sender
master-excited oscillator or
transmitter.

Fremd-erregung separate excitation.
-gas foreign gas.

fremdgesteuerte Steuerstufe
crystal-stabilized master stage.
-unselbständige Kippmethode dis-
tant-operated non-self-running
time-base method.

Fremd-körper foreign or extraneous
body or substance. -licht-
Lichtmodulator light relay of
Kerr cell or Karolus c. type
(to re-convert currents into
brightness variations with con-
stant, independent ray source).
-peilung ground direction-finding
(bearing or directional data
supplied to airplane from ground
stations). -schichtverfahren
self-luminous or s.-emissive
method (using electrons on sur-
face of object, in electron
microscope). -töne alien fre-
quencies or tones (in sound
reproduction).

Frequenz, mittlere medium frequency,
mid frequency.

-technische commercial frequency,
industrial f.

Frequenz, Abschneide- cut-off
frequency, critical f. Abtast-
scan frequency (= lines x frame
frequency per second).

Beruhigungs- no-flicker frequency,
fusion or critical f. (m.p.).
Bild- picture frequency, frame
f., video f., visual f. Differenz-
difference frequency. Durchdrin-
gungs- penetration frequency,
critical f. Durchgangs- pass wave,
p. frequency. Ecken- corner
frequency, sharp cut-off fre-
quency (of a filter, etc.).

Einheits- standard frequency.

Grenz- cut-off frequency, limit-
ing f. Gruppen- group frequency
(number of wave trains per sec-
ond), spark f. Hilfs-, Rückkop-
plung mit super-regeneration.

Kreis- pulsatance, angular vel-
ocity, cyclic frequency, fre-
quency in radians (ω). Leitkreis-
transit-time frequency (magnet-
ron). Mittel- medium-wave fre-
quency, mid freq. Mutter- master
frequency. Null- frequency at
which phase shift is zero.

Pendel- electron oscillation
frequency; quench or bias f.
furnished from auxiliary os-
cillator circuit (in super-
regeneration). Raster-, Raster-
wechsel- field frequency (in
interlaced scanning). Resonanz-
resonance frequency, natural f.

Schwankungs- frequency flutter.
Schwellen- threshold or critical
frequency, photo-electric
threshold. Seiten- side fre-
quency (one of sum or differ-
ence frequencies). Spiegel-
image frequency. Sprech- voice
frequency, speech f. Steuer-
pilot or synchronizing frequency.

Summen- summation frequency, sum f.
Teil- component frequency. Trenn-

cut-off frequency. Überhör- supersonic, ultrasonic or ultra- audio frequency. Umlauf- rotational frequency (electrons). Unterhör- subaudio or infrasonic frequency. Unterresonanz- submultiple resonance frequency, subsynchronous f. Verschmelzungs- critical flicker frequency, fusion f., no-flicker f. Wach- watch frequency, distress f., f. of international automatic alarm signal. Wellenzug- group frequency, wave-train f., spark f. Welligkeits- ripple frequency. Wiederholungs- repetition frequency, f. of recurrence. Winkel- angular frequency, radian f., pulsatance. Zeichen- signal frequency. Zeilen (wechsel)- line frequency, strip f., horizontal scan f. Zwischen- intermediate-beat or transfer frequency (in superheterodyning).

Frequenz-abbau frequency division, f. submultiplication. -abgrenzung s. **Wellenabgrenzung.-abhängigkeit** frequency dependence, having a f. effect, condition of being affected by, or a function of, frequency. -abstand interference guard band, tolerance frequency. -abweichung frequency deviation, drift or swing, lilt (slow fluctuation). -amplitude amplitude proportional to frequency. -bereichfilter band-pass filter.

-bereichüberstreichung durch Kondensator frequency range or band swept, scanned or covered by a condenser or capacitor. -Entdämpfungskurve frequency-gain curve.

Frequenzgang frequency characteristic or response curve, influence of frequency, f. effect. -, flacher flat frequency characteristic (without peaks or dips). -der Amplitude, starker marked dependence of amplitude upon frequency. -normung standardization of frequency response curve.

Frequenzgemisch frequency spectrum. **frequenzgerader Kondensator** straight

line frequency condenser. **Frequenzgerät, Silben-** syllable vodas (Bell Co.). **frequenzgesteuerte Senderöhre** frequency-stabilized transmitter tube. **Frequenz-hub** frequency fluctuation, swing or variation (between two limits); f. deviation (above and below the assigned center or resting f., in f. modulation), amount by which instantaneous carrier f. differs from r.f. -kennlinie frequency-response characteristic. -kurve, Entdämpfungs gain-frequency curve. **frequenzmäßig, hoch-** for high frequency, so far as high frequency is concerned, relative to hf. **Frequenz-messer** frequency meter, wave m., odometer, sonometer. -messer, Zungen vibrating reed frequency meter. -modulation frequency modulation. -reihe series of frequencies. -schnitt cross-over of frequencies (in sound film production); point where wave-bands handled by loud-speakers intersect. -schwankung lilt (slow fluctuations of frequency), drift of f., f. flutter, f. departure, swinging (momentary variation of received f.). -schwankungsschwächer discriminator (converts drift into direct potential difference). -selektion frequency selection. -sieblobchbreite transmitted band, band-width of a filter, spacing between cut-off points. -skala frequency spectrum, f. scale. -sperre, Spiegel- image frequency stopper. -steuerung (von Senderohrschwingungen) frequency stabilization (of transmitter tube oscillations).

Frequenz-teiler (cf Frequenzweiche) frequency divider, f. submultiplier. -Übersetzung frequency transformation.

frequenzunabhängig free from frequency

effect, independent of f., f.-
independent.

Frequenz-unterdrückung, Spiegel-
image frequency stopper, image
frequency rejection. -unter-
scheidung frequency discrimination.
-verdreifacher frequency
tripler. -verschiebung frequency
distortion, tone d.-verwerfung
slow frequency drift (in trans-
mitter or receiver apparatus oc-
curring after tuning). -verzer-
rung attenuation-frequency dis-
tortion, amplitude-f.d., at-
tenuation d.f. distortion.
-wandlung heterodyne or super-
het. action; frequency change, f.
transformation. -weiche divid-
ing filter or network, separator
(sync and video signals, in telev.)
comprising limiter tube and net-
work. -wiedergabe frequency
response characteristic.

Fresnel's Mitführungs koeffizient
Fresnel coefficient of drag.

fressen seize, bind, freeze,
attack, corrode:

freundlich, licht- photophilic,
photophilous, favoring high-
lights over shadows.

Freyagerät German version of radar
or radio locator.

Frisch-arbeit fining process
(metals). -aufnahme new record-
ing, re-recording or new pickup
of film (sound track film).
-wirkung oxidizing or purifying
reaction.

Frist grace, limitation, respite,
term, (fixed) time allowance or
extension. moratorium.

fristgerecht in time, within time
limit.

Frist-gesuch dilatory plea.
-gewährung grant of respite.
-verlängerung time extension,
respite, grace.

fritten frit, sinter, concrete.

Frittporzellan soft porcelain,
frit p.

Front, Wellen-, geneigte tilted .
wave front or wave head.

frontale Halbkugellinse hemispheric
front lens.

Frontwelle onde de choc, impact
wave, bow wave (which precedes a
projectile).

Frosch cam, dog, adjustable stop,
arm; frog (of violin bow).

-perspektive worm's eye view.
frostbeständig resistant to frost,
freeze-proof.

Frostpunkt freeze point.

Frühzündung premature ignition,
pre-ignition.

F S P see Funkseitenpeilung

Fuge joint, junction, slit, groove,
crack.

Fuge, Dehnungs- expansion joint.
Schweiss- welding seam or line,
weld, shut. Stoss- joint, junc-
tion.

fühlbare Abstimmung tuning con-
denser sensibly detained or
braked on passing carrier,
"lazy tuning".

Führer-kondensator pickup con-
denser, scanning c. -lehre
thickness gage.

Fühlhebel tactile, feeler, con-
tactor or probing lever, scan-
ner, pickup means; indicator of
micrometric caliper.

fühlig, fein- delicately sensitive.

Fühladel selecting needle or pin,
pecker. Kugelspitzen- scanning
or pickup needle with spherical
point (sound record).

Führeratsche micrometer friction
thimble.

führen lead, conduct, guide,
pilot, steer, channel, carry
(current), support, hold.

Führerstand (Flugzeug) pilot's
cockpit, p. compartment (air-
plane).

Führung, seitliche lateral guidance
(of airplane).

Führung, Fenster- aperture guide,
gate.

Film- film feed, f. guiding, f. gate. **Nach-** (des Rahmens) re-setting or re-adjustment (of frame). **Nieder-** downlead. **Rück-** return path, return circuit, r. wire, r. lead. **Schmelz-** smelting practice, conduct of heat, smelting schedule. **Seiten-(von Film)** lateral guidance, side guiding (of film). **Wellen-** wave guide (either conducting or dielectric). **Führungs-band** control strip (of a printer). -kanal film track, f. channel. -loch (guide) perforation (for engagement of sprocket). -rille track or groove (of phonograph record). **rolle** sprocket wheel (of film feed). -schlitten slide (carriage).

Fülle, Klang- sound volume.

Füll-faktor space factor, activity coefficient. -flüssigkeit immersion liquid (microscope). -körper filling body, packing material. -kurve single-loop oscillogram. -mittel filler, filling, stuffing or loading material or compound. -perspektive plenary perspective -strich filling mark, gage m. or line.

fünf-dimensional in terms of five-dimensional world. -eckig pentagonal.

Fünferalphabet five-unit code.

Fünfflach pentahedron.

fünfgliedriger Mischer five channel mixer.

Fünf-polröhre pentode (either power pentode or screen-grid p.)

-strömealphabet five-unit code.

-stufenschwächer five-step weakener (phot.)

Funk, Bild- radio picture, wired picture, facsimile transmission.

Funkazimuth, rechtweissender oder geographischer true bearing. -missweisender oder magnetischer magnetic bearing.

Funkbake radio beacon, radio range (sometimes marker beacon).

Funkbake, Kurs- radio range or beacon. **Landungs-** landing beacon. **Richtungs-** (zum Anfliegen) runway localizing beacon, terminal marker beacon (used in approach procedure).

Funk-beamter radio station official, board radio operator. -beschicker, automatischer oder mechanischer automatic (radio) quadrantal error compensator, cam compensator. -beschickung (cf Funkprüfung) goniometric error or direction-finding deviation and its correction, clearing or compensation; shift of minimum or zero point; (local) calibration of radio compass.

Funkbeschickungs-aufnahme calibration of direction-finder. -drahtschleife QE (quadrantal error) compensating or clearing loop.

-kurve error curve. -kurvenscheibe compensator cam, zero-clearing c.

Funk-bestock radio fix. -bild photo-radio, radio picture, wired p., radiophotogram. -drosselspule air-gap reactance coil.

Funkeleffekt sparkling, scintillation, glitter; low-frequency effect of local emission density (of electrons).

funkeln sparkle, scintillate, glitter.

Funken, Gleit- slide spark, creepage s. **Öffnungs-** break spark, sparking at break. **Schliessungs-** make spark. **Unterbrechungs-** break spark, wipe s., circuit-opening s.

Funkenentladungs-Aufbauzeit formation time of spark discharge. **funkenfrei** sparkless, non-sparking, non-arching.

Funken-geber spark coil, Ruhmkorff c. -kanal spark track. -linien spark lines. -löscher spark quench, blowout or extinguisher, s. killer. -mikrometer micrometric spark-gap or spark-discharger, spintharometer: -sender, Ton-

singing or musical (quenched) spark transmitter.

Funkenstrecke, Kugel- sphere (spark) gap, ball gap, Lösen- quenched spark gap. Nadel- needle (spark) gap. Reihen- multiple spark gap. Schutz- spill gap. Ton- quenched gap. Überspannungs- surge arrester, s. gap, s. absorber.

Funksystem, Takt- timed spark system (wireless transmission).

Funkentöster static eliminator.

Funken-überschlag spark breakdown, flashover, sparkover. -verzöge- rung spark lag. -zählter spark counter.

Funk-fehlweisung radio df error, directionale., quadrantal e. (QE), compass deviation, distortion of bearing. -feuer radio beacon, radio range; marker beacon.

Funkfeuer, mehrstrahliges multi (-ray) beacon, multiple- or triple-modulation beacon. Dreh- rotating radio beacon or range. Haupt- main route or airway radio beacon. Kreis- rotary beacon, omnidirectional beacon, circular navigational beacon (sending non-directional signals in all directions). Landungs- landing beacon (for instrument or blind landing). Richt- directional beacon station or transmitter s. Strecken- (air) route beacon.

Funk-feuerkennung call signal or distinctive signal of a beacon station. -freund radio amateur, r, fan, ham, -geber radio transmitter; spark coil (obs.). -horch- dienst radio intercept service. -mutung radio prospecting, r. metal locating. -ortung radio position finding, obtaining r. fix.

Funkpeil-scheibe bearing plate of radio df. -schwund radio fadeout or fading. -sektor approach sector. -station, -stelle radio

direction-finder station or post (on ground or on craft). -sta- tionmittellinie center line of approach sector.

Funk-platte spark plate (condenser of automobile radio). -querver- bindung intercommunication chan- nel. -rufzeichen radio call, code signal, "signature" (of a sta- tion). -schatten radio shadow, dead spot, pocket. -schneise radio beacon course, equisignal track, corridor of approach. -schwund fading, fadeout (of radio signals).

Funkseitenpeilung, beschickte od. verbesserte true or corrected radio bearing. -, unverbesserte oder abgelesene uncorrected or read radio bearing.

Funksender, Einpeilen eines Richt- empfängers auf einen tuning in a transmitter station with direc- tional receiver, to take bearings. Leit- radio range, r. beam sta- tion, r. beacon.

Funkspektrum see Wellenabgrenzung Funkspruch, geschlüsselter radio code message, coded r.m. -spruchweg radio channel.

Funkstelle, Boden- aeronautical ground radio station, g. direc- tion-finder s. Einstrahl- beam station. Gross- high-power radio station, long-distance or long-range s. Land- ground radio station; shore or coast s. Leit- net control station. Luft- air- craft radio signal station.

Funktechnik radio engineering, r. art; r. communication or signal- ing art. -techniker radio technician, r. engineer. funktelegraphische Verbindung radio telegraphic connection, r. signal communication (channel).

Funktelephon radiophone.

Funktion, konjugierte conjugate function. Ausgangs- trial func- tion. Bessel- erster Art

Bessel function of the first kind.
Eigen- eigen function, characteristic f. Einheits- unit function (of Heaviside). Hyperbel- hyperbolic function. Kraft- power function. Kugel- spherical function. Orts- position function. Winkel- trigonometric function, angular f., function of angles.
Funk-trübung uncleared zero, blurring or lack of precision of minimum or zero (in radio d.f. or bearing). -verkehrsbezirk radio controlled aerial navigation (or aviation) district or zone.
-wechselsprechen alternate two-way radiophone communication.
-wesen radio technology, r. signaling art.
Furche furrow, channel, wrinkle, ruling or line (of diffraction

grating); groove or track (with undulations, of phonograph or gramophone disk).
Fuss pinch, press, squash, stem or foot (of a lamp, tube or valve). -umgestülpter re-entrant squash or press. Strahlerzeuger- gun press (of c.-r. tube).
Fusskreis root line, dedendum l. fusslose Röhre loctal tube.
Fussplatte base plate (camera).
Fusspunkt foot (math.), nadir (point opposite the zenith, in astronomy). -, Gegen- anti-pode.
Fusspunkt-kurve pedal (or podal) locus curve. -linie podal line.
-widerstand terminal impedance or base-loading (of antenna).
Futter, Mantel shell lining.
Fütterungsstoff lining material.

G

Gabe, **Impuls-**, **Stromstoss-** pulsing, impulsion, emission or transmission of impulses. **Impuls-**, rückwärtige revertive pulsing. **gabelartig** forked, furcated, bifurcate.

Gabel-klammer forked clamp. **-umschalter** hook switch. **-zinken**, **Stimm-** tuning fork prong or tine.

Galgen, **Mikrophon-** microphone boom. **Galle**, **Glas-** glass gall, sandiver. **Galtonpfelze** Galton pipe.

galvanisch galvanic, conductive. **galvanische Kopplung** resistance coupling.

Galvanometer, **kompensierte rheograph** (of Abraham) in which inertia and damping are compensated. **Bändchen-** twisted strip or band galvanometer. **Faden-** string galvanometer, vibrating g. **Saiten-** Einthoven g. **Stoss-** ballistic galvanometer.

Galvanostegie galvanoplastics, electroplating, electrodeposition.

Gamma, **Kopie-** negative gamma.

Gang motion, working state, gear; course, passage, pass, travel, stroke; trend, drift; heat run; thread or spire of screw; action (of camera); function, dependence, variation, response (characteristic).

Gang, toter lost motion, backlash, play. **-zügiger** intimate or positive threading of gear (without play or backlash).

Gang, Chargen- heat run. **Dämpfungs-** frequency response of attenuation, attenuation-frequency characteristic. **Frequenz-** frequency characteristic, frequency-response curve, effect of frequency. **Fre-**

quenz-, starker, der Amplitude, marked dependence of amplitude on frequency. **Gefälls-** gradient variation. **Gleich-** unison, synchronism. **Hin-** forward motion or working stroke, travel, pass or journey, scansion (telev.). **Hin- und Her-** reciprocating motion, rocking movement. **Orts-** local variation. **Rück-** return stroke, retrace or flyback (of pencil); decline. **Selbst-** automatic feed, operation or action. **Strahlen-** path of rays, ray tracing, geometric configuration of rays. **Tages-, örtlicher** local diurnal variation. **Temperatur-** temperature dependence. **Vorwärts-** direct action (of camera)

gangbar salable, marketable; practicable.

Ganghöhe, **Windungs-** pitch of turns. **gängig**-thread(ed), pitched. **gängig**, **links-** left-handed, counter-clockwise. **rechts-** clockwise, right-handed. **scharf-** (screw cut) with triangular thread.

Gangunterschied path or phase difference (of waves, rays, etc.)

ganz whole, entire, total, complete. **-(es)** Vielfaches integral multiple. **-(e)** Zahl integer, whole or integral number.

Ganzheit totality, whole, aggregation. **-metallwand** all-metal (projection) screen. **-polkegel** polehole cone, body cone. **-ton** whole tone.

Ganzzahlige Ladung integral spin, charge.

Ganzzahligkeit integralness, property of being an integer.

Gar-brand finishing burn (ceramics).
-brenne fired to maturity (ceramics).
Gare refined state, finished s.
Garnierung bushing, lining.
Garnitur fittings, trimmings, mounting.
Gasabgang gas issue, withdrawal or off-take, g. delivery.
gasartig gasiform, gaseous.
Gasaufnahme occlusion or absorption of gas (in metals). **-aufzehrung** gettering, absorption of gases.
-ausbruch gas eruption, (violent) liberation of g., escape of g.
-austreibung gas cleanup or expulsion, outgassing, degassing, gettering.
gasbehäftete Oberfläche gas contaminated surface, s. with adsorbed g. (skin).
Gas-bindung gettering. **-blasenbildung** cavitation, occlusion of gases (in metals, etc.). **-dichtemesser** dasymeter. **-entladungsrohr** gas discharge tube or valve. **-entwicklung** evolution, disengagement or giving off of gas.
gas-förmig gasiform, gaseous.
-gefüllte Röhre gas-content tube, gaseous t., gassy t.
Gas-konzentrierung gas focusing, ionic f. (in c.-r. tube). **-schalter**, **Druck-** (cross) airblast switch.
-schmelzsenschweißung gas torch autogenous welding. **-strecke** gaseous path or gap (in a tube). **-verschluss** gas seal, bell and hopper, cup and cone arrangement (furnace). **-wage** gas specific gravity balance. **-zelle** gas-filled photo-emission cell.
gattieren classify, sort.
Gattung kind, genus.
gaufrieren goffer, emboss.
Gaze, Draht- wire gauze, mesh or cloth.
gebend s. erzeugend
Geber, Bild- pickup camera. **Film-** film transmitter, pickup or scanner, telecinematographic or film scanning device. **Funk-** radio transmitter; spark coil (obs.) **Funken-** spark coil, Ruhmkorff c. **Impuls-** impulsive

device, impulse transmitter; tonal generator, tonic transmitter.
Kontakt- contact maker, time-tapper or marker. **Kristalltakt-** crystal monitor, c. stabilizer.
Takt- impulsing means, impulser; time beater, t. tapper, metronome.
Gebiet, Druck- pressure or compression area or region.
Einzugs- cross-sectional area of undistorted portion of field (re: df frame).
Empfangs- service area (broadcasting). **Interferenz-** mush area (chain broadcasting).
Orts- local area. **Reiss-** discontinuity or breakoff region (in oscillations). **Stör-** mush area (in chain broadcasting), disturbed area or zone.
Gebilde structure, system, organization, form, image.
Gebilde, Gewebe-, winzige ultramicrons (of eye tissue).
Leiter- conductor structure, c. system, array. **Leucht-** luminous pattern (lines, bands, or continuous spectra). **Luftleiter-** aerial extension, a. structure, a. network. **Raum-** space diagram; solid 3-dimensional structure. **Sieb-** selective system, filter means, network.
Gebläse, Knallgas- oxyhydrogen blowpipe.
geblättert laminated.
Gebrauch custom, usage, practice, use.
gebrauchsfertig ready for use, readied.
Gebrauchs-kopie usable or working copy (for display). **-last** working load, service l. **-muster** (German) petty patent, utility-model patent. **-vorschrift** directions for use.
Gebühr fee, royalty, tax, dues,

duty, payment. **Bekanntmachungs-** lay-out fee. **Zeugen-** witness fee. **Zuschlags-** extra fee, supplementary fee or dues, extra tax.

gebündene Ladung bound charge.

- **Wärme** latent heat.

gedacht imaginary, fictitious, conceived, assumed.

gedackte Pfeife stopped pipe.

gedämpft(e) **Anzeige** deadbeat, aperiodic or non-ballistic reading or indication. - (er) Raum, mittel- moderately live room.

Gedanke, Erfindungs- basic idea underlying an invention.

gedeckte Lichter covered lights.

- **Pfeifefestopped** pipe.

gedrängt, gedrungen compact, compendious, of restricted dimensions.

Gefahr danger, peril, risk, hazard, chance, jeopardy, menace.

Gefäll, Grenz- limiting slope, l. gradient. **Potential-** potential gradient, p. barrier, threshold of p.

Gefällsgang gradient variation.

gefalteter Exponentialtrichter folded exponential horn (of a loudspeaker).

Gefäß container, vessel, tank, jar, pot, box. -, **Faraday'sches** Faraday ice pail, F. cylinder.

Gefäß-barometer cistern barometer. - **heberbarometer** combination cistern and siphon barometer.

gefassete Linse mounted lens.

Gefässwirkungsgrad bulb efficiency (rectifier).

Geflecht plaited or woven work, network, reticulation.

gefrierbar coagulable, freezable, congealable.

Gefrierpunkt-lehre cryoscopics.

- **messer** cryometer. - **messer und Druckmesser** manocryometer.

Gefüge structure, texture, bed, stratum. **Fein-** fine structure,

micro-s. **Grob-** macro-structure. **Klein-** fine structure, micro-s. **Streifen-** laminated structure, banded s.

Gefühl, Raum- space feeling, spatial feeling (in vision).

gegebenenfalls if necessary, under certain circumstances, in an emergency, optionally.

gegen den Wind fliegen fly up wind.

gegenarbeiten buck, oppose, counteract, work in opposition.

Gegen-beleuchtung back (ground) illumination. - **beweis, direkter** rebutting testimony or evidence.

- **bild** counterpart, antitype, replica. - **druck** counter-pressure, back-p. reaction. - **druck, Strahlungs-** radiation reaction.

gegeneinander schalten connect in opposition, c. differentially.

Gegenelektrode counter-electrode, opposite e., cooperating e.; signal plate or metallic screen (forming foundation of mosaic in telev. tube).

gegenelektrromotorische Kraft

counter electromotive force (c emf), back emf.

Gegen-feder counter(-acting) spring, retractile s. - **feldmethode** retarding potential method. - **fernsehen** two-way television. - **fusspunkt** antipode. - **gewicht** counterpoise, counterweight, counterbalance. - **gewichtantenne** screened aerial. - **keil** counter-wedge.

- **klage** cross-claim, counter-claim, - **kontakt(p)** co-operating contact or terminal, opposite contact.

- **kopplung** negative or stabilized feedback, reverse f., anti-regeneration, degeneration. - **kraft** reaction, counter(-acting) or opposing force. - **kufe** counter pad.

- **kurs** course, head or flight away from port, outward c., opposite c.

- **lager** abutment, any relatively immovable point or surface

sustaining pressure.
gegenläufig oppositely directed or oriented, of contrary sense.
Gegenläufigkeit opposition, o. of phases, etc. **-modulation** push-pull modulation, m. in opposition. **-mutter** lock, clamp, check, jam or binding nut.
-partei adversary, adverse party, "the other side" **-phasigkeit** phase opposition, anti-phase condition. **-polung** opposition of polarity, opposite p., reversal of p. **-probe** contrasting sample, c. test, check test. **-satz, im...** zu contradistinct from, in contradistinction to. **-schaltung** differential connection, connection in opposition. **-sehen,** **Vorbeisehen beim** not to look straight at each other (in two-way video telephony). **-seher** 2-way video or television apparatus.
gegen-seitig mutual, reciprocal, one another (when more than two) each other (when two), contralateral (on the opposite side).
--mischarbar consolute. **-sinnig** in or of opposite or contrary sense, direction or orientation (e.g., of rotation); irrational, devoid of sense, non-sensical, illogical. **„sinnig in Reihe** series opposing.
Gegensonne parhelion, mock sun.
Gegenstand object, (sometimes:) image of cathode formed at crossover by first lens, in c.r. tubes, and acting as object for second lens; subject-matter.
Gegenstand, körperlicher solid or three-dimensional object.
Abbildungs- imaging object.
Erfindungs- object of invention, disclosure. **Übertragungs-** object to be televised or transmitted by video signals, teleview o., televised o.

Gegenstands-glas object glass
-weite distance from electron source (aperture or crossover) to lens, object d.
Gegen-stoff antisubstance, antibody, antidote. **-strahl** reflected ray, reflection. **-strom** counter-current, inverse c., reverse c. **-strom-relais** reverse-current relay. **-stück** counterpart, match.
Gegentakt-arbeiten push-pull operation, work in phase opposition. **-audion** push-pull grid detector. **-bremsfeldaudion** electron-oscillation detector or rectifier (negative anode associated with leak resistance and condenser) in push-pull circuit scheme. **-kippegerät** push-pull time-base. **-mikrophon** push-pull microphone. **-noiseless** split-wave noiseless recording. **-schrift** push-pull track.
Gegen-teil opposite, contrary, antithesis, converse, contrast. **-versuch** control or check test or experiment. **-werk** equivalent, counter, value. **-wind** contrary wind, head w.
gegenwirkend counteracting, reacting, antagonistic.
Gegen-wirkung, akustische acoustic reactance. **-zelle** counter electromotive force (battery) cell.
gegliederte Bildteile, verschieden picture portions of different gradation, composition or organization.
Gegner adversary, objector, opposer, opponent, "the other side."
gegossener Film coated film.
gegründet auf based upon, predicated on, grow out of, result from, conditioned by.
Geh-Steh-Apparat start-stop type of telegraph printer.
Gehalt, Kern- nuclear concentration, content of nuclei.

Gehäuse case, box, shell, housing, cabinet, chamber (camera).

Hörer- receiver case, r. shell.

Trieb- gear casing, g. box, g. housing.

Geheim-kamera detective camera, concealed c. -telephonie garbled, scrambled or secret telephony (based upon speech band inversion, use of scrambler circuits, speech inverters, etc.)

geheizte Röhre, indirekt heater type or indirectly heated tube.

Gehör...auditory, acoustic, audio, aural, hearing.

Gehör, echtes, absolutes genuine absolute pitch. um-ersuchen file application or petition to be heard, petition for a hearing.

Gehör-empfindungsskala auditory or aural sensation scale.

- maskierung auditory making.
- schädigung hearing impairment.
- scharfe acuity of hearing.
- scharfemessung audiometry.
- zielflug aural homing.

Gehrung mitre, bevel.

Geige violin. Stroh- violin in which bridge vibrates a dia-phragm attached to a horn.

Geigen-harz rosin, colophony. -lack violin varnish.

Geist, Erfinder- inventive genius, inventor's spirit. -Forschungs-researching or inquiring spirit, inquisitiveness.

Geister, Gitter- spectral (grate) ghosts.

Geisterbild ghost image.

Gekräzt- Metall- waste metal.

gelagert; drehbar- rotationally supported, journaled, fulcrumed, pivoted.

Gelände, Aufnahme- location.

Gelände-arbeit field work (geology, etc.) -winkelmesser angle of site instrument, clinometer.

gelatinebeschichteter Blankfilm gelatine-coated film base

Gelb-giesser brass founder. -glut yellow heat.

Gelbildung gel formation.

Geldstrafe, eine - ausklagen sue for a penalty.

Gelenk joint, link, articulation, hinge. Kardan- universal joint, cardan j., hall and socket j.

Knie- knee joint, knuckle j., elbow j. Kreuz- universal joint, Hooke's j. Kugel-, Universal- ball and socket joint, universal j., cardan j.

gelenkig flexible, pliable, supple; articulate, jointed, linked.

Gelenk-kette link chain. -kondensator swing-out condenser. -kupp lung Hooke's joint. -viereck linked or articulated quadrilateral or quadrangle.

gellend shrill, yelling, tingling.

gelten be valid or in force, be alive, apply to, hold good for.

geltend machen, einen Anspruch advance or make a claim.

Geltungsbereich einer Erfindung scope or command of an invention.

Gemagerät German type of radar.

gemasert speckled, streaked, veined, grained.

gemeinsam common and joint, shared.

gemeinschaftlich mutual.

gemeinschaftlich und einzeln jointly and severally.

gemeinschaftlich betrieben ganged (of condensers), geared or locked together, operated jointly or in interlocked relationship.

Gemeinschafts-antenne party antenna, block a., communal a., centralized or shared a. -sender chain broadcast station.

Gemisch, Klang- sound spectrum.

Gemischkomponenten spectral components (sound, etc.)

gemischtpaariges Kabel composite cable.

gemischte Stimme mutation stops (organ)

genau exact, correct, precise, close, faithful (of reproduction).

Genauigkeit, fünfstellige five-figure accuracy.

Genehmigung approval, approbation, permission, allowance, assent, consent, sanction, concession.

General-nenner common denominator.

-**unkosten** overhead or general expense. -**vollmacht** general power of attorney.

Generator, Ablenkungs-deflection generator, sawtooth g., time-base generator. **Bremsfeld-** negative transconductance oscillator or generator, positive-grid or retarding-field o.

Fahrtwind- fan-driven generator, wind-driven g. (airplane). **Impuls-** impulse generator, surge g., "lightning" g. **Lochscheiben-** light chopper. **Prüf-** signal generator, all-wave oscillator, test o. **Quadratwellen-** square or rectangular wave generator.

Resotank- micro-wave generator (electron-oscillation tube confined in a cavity, e.g., c. resonator magnetron). **Sägezahn** sawtooth generator, ratchet g. **Steuer-** drive oscillator, master o. **Ton-** musical generator, tonal g. **Wanderwellen-** surge generator, impulse g., "lightning" g.

Geometriefehler geometric distortion.

Geometrisierung der Wellenmechanik geometric derivation of wave equation.

geordnet, regellos with random orientation.

geordneter Zustand ordered state or arrangement (of a structure), perfect configuration (of units in crystal lattice).

gepackt, dicht close-packed.

gepanzerte, wenig streuende Spule iron-core deflecting yoke (with minimized spot and pattern distortion).

gepeilter Sender tuned-in beacon or transmitter (to take bearings).

gepufferte Lösung buffered solution.

Gerade straight-line characteristic or "curve," (Schottky) line.

gerad(e) Beleuchtung direct illumination(micr.) -(er)

Kondensator, frequenz- straight-line frequency condenser or capacitor. -(er) **Kondensator,** kapazitäts- straight-line capacity condenser. -(er) **Kondensator,** wellen- straight-line wave condenser. -(e) **Oberharmonische** even harmonic.

gerad-linig (recti)linear, in direct proportion. -sichtiges **Prisma** direct-vision prism.

-wertig of even valence.

gerasterte Schicht, -(r) Schirm mosaic screen, photosensitized m.

Gerät implements, gear, apparatus, outfit, equipment, instrumentation, tools. **Lichtton-** sound film head or attachment.

Geräteglas apparatus glass (stock).

Geräusch s.a. Akustik, Klang, Schall.

Geräusch (Radio, Film, etc.) und akustische Eigenarten:

Noise (in radio, film, etc.) and acoustic peculiarities;

Apparatgeräusch system noise (in recording).

Bildgeräusch frame noise.

Bildstrichgeräusch frame line noise (form of motor boating).

blecherner Klang tinny sound.

Bratpfannengeräusch frying noise, zoop.

Brodeln boiling.

Brummton, Netz- mains hum, hum.
dumpf all-bottom, boomy, dull,
tubby.

Eigengeräusch inherent film
noise.

gellend shrill, tingling,
yelling.

Geschwindigkeitsschwankungs-

Geräusch -flutter, wowows
(when intensity pulsation or
variation is up to 6 cycles
a second); flutter (6-30);
gargle (30-200), and whiskers
(over 200).

gleichmässiges Geräusch smooth
noise, uniform n.

gleitender Ton glissando, sliding
note.

Grundgeräusch (back) ground
noise.

hallend reverberant (multiple
echoes).

Heiserkeit pops (at splices),
raucousness, hoarseness.

helle Klangfarbe strident or
shrill timbre.

heulen howl.

Heulton warble tone, hf warble
note, "multi-tones."

hoher Ton tweeter, treble, high-
pitched or high-frequency
note or sound.

hohler Ton boomy sound, dull s.
(higher pitches cut off).

Kellerton tunnel or boom effect.

Klappern chatter, rattle.

Klebestellengeräusch blooping,
splice bumps, dull sound due
to blooping patches.

klimpernder Klang harsh or
strident sound (with strong
harmonics or high partials),
shrill, tinkling, chinkling s.

Klingen sounding, ringing (of a
tube), microphone noise.

klirren clink, clatter.

knacken click, crack, crackle,
crepitate.

knallen detonate, explode, report,

crack, pop, pistol shot noise.

knarren bloop, jar, crack, rattle
creak, squeak.

knattern crack.

knirschen grind, crunch.

knistern sizzle, grate, crackle,
rustle.

knurren growl, snarl, rumble.

kochen boil.

Kohlekörnergeräusch carbon noise
(microphone).

Kornrauschen film grain noise.

krachen crack, crash, crackle,
rustle.

krächzender Ton all-top sound or
voice.

kratzen scratch, scrape, rasp,
bumps (film splices).

kreischend strident, all-top (of
voice).

lautgetreu of acoustic fidelity,
orthophonic.

Lautsprechergeräusch rattle of
loudspeaker.

lebendig live, realistic.

Mikrophon-geräusch microphonic
noise, valve n. -schmoren
mike stew.

moiréartiges Geräusch moiré
pattern of noise.

nachhallend reverberant, echoing,
resonant.

Nadelgeräusch needle scratch n.
chatter, record noise.

Nebengeräusch extraneous noise.

Netz(ton)brummen mains hum.

offen hollow (of sound).

Perforationsgeräusch sprocket
hole modulation or noise.

pfeifen whistle, ring, squeal,
howl, sing.

Plattengeräusch record noise,
surface n., needle scratch.
-schlag disk wobble.

plötzliches Geräusch impulse
excitation noise.

prallen rattle.

prellen(am Kontakt) chirp, thump,
clink, chatter (caused at

contacts and keys).
quieken squeal, squeak.
raspeln rasp.
rasseln rattle, clatter.
Rauhigkeit hissing, raucousness, hoarseness.
Raumgeräusch set noise.
Rauschen (von Röhren) tube or valve noise (thermal agitation of electrons), hissing, rustle.
Rauschen, Schrammen- scratch noise. **Widerstands-** circuit noise (due to Brownian movement).
reiner Ton pure note or tone.
sausen rush, whiz, whistle, hum.
schallen sound, resound, ring.
Schallplattengeräusch record noise, surface n.
schallhart acoustically rigid or hard, non-absorbent.
schallweich sound absorbent.
scharf shrill, piercing, strident.
scharren scrape, scratch.
Schlag disk wobble (phonograph).
Schlägen(Kontakt) key click, thump, or chatter.
Schmutzgeräusch dirt noise.
Schmoren frying, mike stew.
schnarren, burr, buzz, jar.
Schrammenrauschen scratch noise.
Schrotgeräusch shot noise (due to Schottky effect).
schirren whiz, whir, buzz, hum.
Selbsttönen singing or squealing (of a tube).
Staubrauschen dust noise.
Strichgeräusch frame-line noise (sort of motor boating).
summen hum, buzz.
surren motor boating.
tiefe Töne low AF or bass notes; bassy condition (in sound reproduction, low AF over-emphasized).
trillern warble, trill, quaver.
Überschreien overmodulate.
unreiner Ton impure tone, ragged tone or note.

Wärmerauschen thermal noise (due to thermal motion of electrons).
Widerstandsräusch circuit noise (due to Brownian movement).
Wobbeln warble, wobble,
Zischen fuzzy noise (of film), hiss, sizz, sizzle, fizz, high harmonic alien tones, in film reproduction.
Zwitschern birdies, canaries.
Geräusch, Bild- frame noise.
Eigen- inherent film noise.
Lautsprecher- rattle of loud-speaker. **Mikrophon-** microphone or valve noise. **Neben-** extraneous noise. **Perforations-** sprocket noise (m.p.). **Raum-** set noise.
Wärme- thermal noise (sort of Brownian movement of electrons in input circuit).
Geräuschabstand signal-noise ratio.
geräuscharm of low noise, noiseless, silent, silenced.
Geräuschbekämpfung noise abatement, suppression or attenuation.
-beseitigung (an Tonklebestellen) blooping elimination.
-beseitigung, automatische silent tuning, noise suppression, noise gate. **-filter, Nadel-** needle scratch filter. **-kasten** (Erzeugung besonderer Geräusche) equivalent acoustics (for generation and imitation of noises and sound effects). **-losigkeit** noiselessness, silence, quietness, calm(ness), absence of noise. **-messer** noise meter, sound-level meter (e.g., measuring in terms of decibels), noise measuring set, acustimeter. **-messer** (in elektrischen Kreisen) psophometer. **-muster** noise pattern. **-spiegel** noise level. **-unterdrückungsstromkreis** noise reduction, squelching, suppression or silencing circuit. **-verdeckung** overriding of noise.
gerecht, flucht- truly aligned or

flush (with). form- true to form or shape.

gerechte Farbstufe, empfindungs- subjective chromatic scale value.

Gerechtigkeit justice, equity, equitableness.

gereckte Probe stretched specimen.

gereift grooved, milled, knurled, fluted.

Gericht, Bezirks- district court.

gerichtet, einseitig- unidirectional(ized).

gerichtet(e) Empfangsspannung directional signal or incoming potential. -(er) Lautsprecher directional loudspeaker. -(es)

Licht parallel light (rays).

gerichtlich belangen bring legal or judiciary action or proceedings against.

Gerichts-barkeit erster Instanz - original jurisdiction. -befehl writ or warrant. -beisitzer

assessor, associate judge.

-bezirk court circuit, court district. -hof, zuständiger court of competent jurisdiction. -stand competency of a court, jurisdiction, venue. -verhandlung hearing, trial.

gerieft, geriffelt grooved, milled, knurled, fluted.

geringhaltig low standard, worthless, of low content.

Gerippe, Kristall- crystal skeleton, skeletal c., crystallite.

gerissene Kurve dotted-line curve, broken-line c. or graph.

Gerüst structure, skeleton, frame, rack, scaffold. Trocken- drying frame or rack.

Gerüstkran gantry crane.

gesamt total, entire, aggregate, complete, whole.

Gesamt-ansicht total view, general v., assembly v. -heit totality, entirety, assembly, generality, whole. -spin total spin.

-verhalten general behavior.

-wirkungsgrad overall efficiency, total e., commercial e.

Geschädigter aggrieved, injured party. gescheckt cross-hatched.

Geschehnis action, event, occurrence, happening, phenomenon.

geschichtet, zwischen- inter-stratified.

geschichtete Kathode coated (oxide) cathode, photo- c. with light-sensitive layer.

Geschicklichkeit skill, cleverness, art, dexterity, expertness.

geschlagene Saite percussed string, p. chord.

geschlitzter Stöpsel split plug.

geschlossen, in sich closed upon itself, self-contained.

geschlüsselter Funkspruch coded radio message.

geschmeidig pliable, flexible, supple, soft, ductile, malleable.

Geschoss-bugwelle nose wave of a projectile. -geschwindigkeit projectile velocity.

Geschütz-aufsetz optical instruments for artillery. -zielender gunlayer

Geschwindigkeit (in Mechanik) velocity (being, in mechanics, the analog of current in electricity).

Geschwindigkeit, ungeordnete velocity of agitation. Abtast-pickup velocity, p. rate (phonograph).

Anfluss- velocity of approach, afflux v. (of fluid).

Apparat zur Bestimmung der- velocity selector. Austritts-exit, efflux, muzzle or emergence velocity.

Boden- ground speed (of airplane). Durchschlags- propagation speed (of fluids in pipes); rate of insulation breakdown.

Eigen- air speed (of airplane). Einfall- bombardment velocity. Eintritts- approach or inlet velocity. Flug- rate of flying speed, traveling velocity (electrons, etc.).

Fortpflanzungs- speed of propagation or transmission. Fortschreitungs- speed of progression or travel, forward speed. Grund- ground speed.

Gruppen-envelope velocity, group v. **Kriech-** rate of creep (of metal). **Masseteilchen-** particle velocity. **Mündungs-** muzzle velocity. **Phasen-** phase speed, p. velocity, wave v. **Rückkipp-** flyback speed, time-base unlock s. **Teilchen-** particle velocity (ac.) **Umfangs-** circumferential speed, peripheral s. **Wanderungs-** rate of migration, crawl or creep, m. velocity. **Geschwindigkeits-abtastung** variable-speed scan. -amplitude volume current (ac.). -fehler distortion due to synchronous speed differences. -feld velocity gradient, v. field pattern.

geschwindigkeitsgesteuerter Elektronenstrahl velocity-modulated electron beam or pencil (klystron, etc.).

Geschwindigkeits-gitter accelerator grid. -messer speedometer, tachometer, tachygraph, (when recording). -messer, Wind-anemometer. -potential velocity potential. -raum momentum space, velocity s. -schwankungen wowows (when intensity pulsation is up to 6 cycles per second); flutter (when 6-30 cps.); gargle (30-200) and whiskers (over 200). -steuerung velocity modulation. -verteilung velocity distribution, d. in energy. -wechsel-getriebe change-speed gear.

geschnzte Wicklung short-pitched winding, chord w.

Gesenk die, block forging d., swage. -schmiede drop forge.

Gesetz, Inkrafttreten eines -(es) commencement of an act or law.

Gesetz, Ähnlichkeits- similarity principle. **Brechungs-, Snelliuss'sches** Snell's law of refraction. **Erhaltungs-** law of conservation. **Flächenerhaltungs-**

principle of conservation of areas. **Impulserhaltungs-** principle of conservation of momentum. -Lambert'sches emission law, Lambert 1. **Teilungs-** law of partition. **Zufalls-** law of probability, l. of chances.

Gesetz-blatt, Reichs- imperial law journal, i. gazette. -buch code, statute book.

Gesetzesauslegung law interpretation.

gesetzlich lawful, legal, licit, legitimate, statutory.

gesetzliches Hindernis statutory bar.

gesetzmässig according to law or statutes, conformable to (natural) law, in a regular or legal way.

Gesetzmässigkeit lawfulness, legality, legitimacy, procedure according to statutes.

gesicherte Mutter lock nut, jam n.

Gesichts-eindruck visual impression.

-feld field of view, f. of vision.

-feldblende field stop. -sinn vision, faculty of seeing. -strahl visual ray. -wert face value, facial brightness (of a screen performer). -winkel visual angle, optic a., facial a.; camera or viewing angle.

Gespensterstrom ghost current.

Gesperr, Anker- anchor escapement.

Malteserkreuz- cross wheel, (cam and) star w. of Maltese cross, Geneva stop or intermittent movement.

Gespinst spun fabric, yarn goods.

Gesprächspausen intervals of no speech.

gespritzt squirted, extruded; sprayed, atomized. -(er)

Glühfaden squirted filament.

-(es) **Metall** die-cast metal.

gestaffelt staggered, echeloned, graded.

Gestalt, Kugel- spherical shape, bulbous or ball form.

Gestaltfestigkeit form stability,

- non-deformability.
- gestaltlos** amorphous, non-crystalline, formless.
- Gestalts-fehler**, Kugel- spot size distortion. -veränderung change of form, change of shape, deformation.
- Gestaltung** formation, configuration, form, shaping, fashioning, organization, state. Doppel-dimorphism. Neu- re-organization, re-arrangement, modification, re-formation.
- Gestell** frame, stand, rack, bay, shelf, mount. Verstärker-amplifier rack, repeater bay.
- Wässerungs-** washing rack (phot.).
- gesteuerte Oszillator**, leitungs-line-controlled oscillator.
- gestochene Schärfe** microscopic sharpness (phot.).
- gestreckt** straight, stretched, linear.
- gestreut**, elastisch und unelastisch elastically and unelastically scattered. kern- deflected by nucleus.
- Gesuch** application, petition.
- steller applicant, petitioner.
- geteilter Ring** split ring, segmented
- getreu, amplituden-** of equal amplitude, with a. fidelity.
- form-** true to form, undistorted, orthoscopic (opt.)
- klang-** orthophonic, of high fidelity.
- getreue Wiedergabe** faithful reproduction, fidelity in r., good definition of image (with fine detail formed by a lens, telev. or facsimile receiver or a c.r. oscilloscope).
- Getriebe**, Ausgleich- differential gear. Kegelräder- bevel gearing, mitre-wheel g. Planeten- planetary gearing, epicyclic gear train. Reduktions- reduction gear, stepdown gear.
- Schraubenzahn- helical gear, spiral g., worm. Umlauf- planetary gear, sun and planet g.
- Winkelverzahnungs-** double helical gear.
- Getriebelohre** kinematics.
- Getter-abschiessen** set off or cause vaporization of getter. -pille getter tab, g. patch, g. pill. -spiegel getter patch, getter film.
- gewährbar** allowable, grantable.
- gewähren** (ein Patent) allow a patent, grant a p., issue a p.
- Gewebe** tissue, texture, textile, fabric, web, cloth, gauze, netting. Draht- wire gauze, w. cloth, w. mesh. Hart- indurated fabric, impregnated f.
- Gewebegebilde**, winzige ultramicrons (of eye tissue).
- gewellter Einspannrand** corrugated suspension means (of cone.)
- gewerblich** industrial, concerning trade or profession.
- Gewicht**, Atom- atomic weight.
- Gegen- counterpoise, counter-weight, counterbalance. Mol- molar or gram-molecule weight.
- gewichtsanalytisch** gravimetric.
- Gewichtsprozent** percent by weight.
- verhältnis proportion by weight.
- Gewinde** thread, winding, coil.
- schniden tapping, thread cutting.
- Gewinde**, Aussen- male screw thread, outside s.t. Flach- square thread. Innen-, Mutter- female or internal screw thread.
- Rechts- right-hand screw thread.
- Gewinde-lehre** thread gage.
- steigung pitch of a screw thread.
- stift headless screw, grub s.
- taster thread caliper.
- gewölbt** arched; arcuate, domed, convex. - (e) Lamellen, kugelförmig dished laminae.
- gezackte Linie** jagged line, serrated l., notched l., dentated l., dented l.
- gezupfte Saite** plucked string or chord.
- Gier**, Elektronen- electron affinity.

Gierungsmesser yaw meter.
giessen coat (a film).

Giesser, Gelb- brass founder.
Giesserei, Kunden- jobbing foundry.

Giessform casting mold.

Giltigkeit validity, lawfulness,
legality, life (of a patent).

Gipfel, Wellen- peak, crest or
hump of a wave.

Gipfel-höhe ceiling. -spannung
peak voltage, crest v.

Gips plaster of Paris, gypsum,
calcium sulfate.

Gisklappe G sharp key.

Gitter, automatisch vorgespanntes
automatic- or self-biased grid.
-freies floating grid, free g.
-weitmaschiges open-meshed grid,
wide-meshed g.

Gitter, Anodenschutz- screen grid, ·
plate shield. Beschleunigungs-
accelerator grid (of c.r. tube);
screen g. (of tetrode). Beugungs-
diffraction grid. Brems-
suppressor grid, cathode g. (in
pentode tube). Dichte (regulier)-
(charge) density grid, density
control g. Echelette- echelette
grating (opt.). Einheits- unit
lattice. Fang- suppressor grid,
cathode g. (in power pentode),
interceptor g. Geschwindigkeits-
accelerator grid. Grund- funda-
mental lattice. Haupt- parent
lattice. Hohl- concave grating.
Kathodenstrahlröhren- grid or
shield, Wehnelt cylinder, of a
cathode-ray tube. Konkav- con-
cave grating. Kreisbogen-
arcuate grid. Kreuz- cross grat-
ing. Kristall- crystal grating,
surface lattice. Maisch- stirrer,
rake (brewing). Plan- plane grat-
ing. Raum- space-charge grid;
space lattice, "raumgitter".
Reflexions- diffraction grating
with parallel reflecting surfaces.
Saug- space-charge grid. Schicht-
stratified lattice. Schirm, Schutz-
screen grid; shield g. (in thyra-
tron). Stau- suppressor grid, baf-

fle g. Steg- grid in which all
wires are parallel to axis and
surround cathode cage-fashion.
Strich- ruled grating. Strom-
atomic lattice. Stufen- echelon
grating. Zug- positive grid,
space-charge g.

Gitterableitung grid leak (re-
sistance). -absorption, Grund-
fundamental lattice absorption.
-antenne parasol-type antenna.

-aufstellung, Rowland'sche

Rowland mounting of concave grat-
ing. -aufweiterung expansion or
increase in lattice spacing.
-aussteuerung grid (voltage)
swing, grid sweep. -beeinflus-
sung, -besprechung grid control,
grid modulation. -block grid
condenser; staircase-like struc-
ture of echelon grating. -block-
ierung negative biasing of grid,
g. cut off. -durchgriff grid
transparency, g. controllance,
g. penetration factor. -eben-
abstand inter-lattice-plane dis-
tance. -einheit lattice unit,
unit cell, elementary cell.

-einsatzpunkt grid current point,
point of incipient grid current
flow. -elektronen lattice elec-
trons. -filter lattice filter.

-furchen rulings or ruling
grooves (of diffraction grating).

-geister spectral grate ghosts.

-gleichrichtung grid-current
rectification or detection (in
audion valve). -haltedraft grid

stay wire, g. supporting w.

-holm grid stay or supporting mem-
ber. -interferometer grating in-
terferometer. -ion, Zwischen-
interstitial ion. -kathodenstrecke
grid-cathode path. -konstante
grating constant, g. space;
lattice c. -loch, lattice vacancy,
l. hole. -masche grid mesh. -mast
lattice pole, girder p. -mikrophon
grille-type microphone. -mitten-
abstand distance between centers
of successive rulings (in diffrac-
tion grating); grating constant.

-modulation grid modulation, g.
control (Brit.) -nebenschluss
grid leak (resistance). -platz
lattice place, l. point. -punkte
lattice points. -rohr, Doppel-
bigrid valve, twin-grid tube,
four-electrode t. (pliodynatron,
tetrode, etc.). saum grid skirt
(in telev. tube). -schwingung
(Kristall) lattice vibration
(cryst.) -spektrograph, Vakuum-
vacuum grating spectrograph.
-steg grid stay; solid portions
forming g. meshes; grid strip
used in lieu of wire. -steuerung
grid (voltage) sweep, g. swing,
g. excursion, g. excitation; g.
control (in ignitron, thyratron,
etc.); g. modulation. -störungen
lattice distortions, l. disloca-
tions (cryst.). -strebe grid
stay, g. supporting means. -strich
grating line, ruling or ruling
groove of a grating.

Gitterstrom-aufnahme drawing or
taking of current by grid.

-aussteuerung grid current swing
or sweep. -einsatzpunkt grid
current point, point of in-
cipient grid current flow or
where g. begins to draw current.
-gleichrichtung grid current de-
tection, cumulative grid detec-
tion. -punkt grid current point,
point of incipient current flow
at g.

Gitter-verschiebung lattice distortion,
l. dislocation. -verviel-
fältiger mesh multiplier. -vor-
spannung, automatische automatic
or self-biasing of grid. -wickel-
drähte grid coil wires.

Glanz, Halbmattal- submetallic
lustre.

Glanz-einfall grazing incidence.

-garn glace or glazed cotton,
lustrous or mercerized yarn.
-messer gloss meter, glossimeter.
-winkel glancing angle.

Glas s.a. Linse, Objektiv

Glas, berichtigendes correcting lens.
-,spannungsloses stainless glass,
strain-free g. -,ungefasstes
rimless lens.

Glas, Aufsteck- slip-on lens segment.
Brillen- spectacle glass.

Durchzieh- slide (micr.) Farb-
colored glass, color filter,
stained g. Hart- pyrex glass.
Lese-, viereckiges oblong reading
glass. Milch- frosted glass,
opal g., light-differing g.

Muschel- globular lens. Objekt-
slide, mount (micr.). Rauch-
smoked glass, tinted gl. Sammel-
converging lens; preparation tube,
specimen t. Solin- crown glass.

Spiegel- plate glass. Trüb-
opal glass, frosted g., light-
diffusing g. Überfang- flashed
opal glass.

glas-ähnlich, -artig glasslike,
glassy, vitreous.

Glas-bildner vitrifier. -blase
glass bubble, seed (when small),
air bell (when of irregular shape).

-faden glass thread, thread-like
defect of glass. -federmanometer
spoon-type glass manometer.

-fehler (cf Schlieren) glass de-
fects or flaws; glass striae or
chords (when heavy), bubbles (seed
when small); airbell (when of ir-
regular shape), stones; crystal-
lization bodies, cloudiness, strain.
-flächenspiegelung glare or reflec-
tion of glass surfaces, specular r.
-galle glass gall, sandiver.

glasig glassy, vitreous.

glas klarer Film pellucid film stock
(having maximum transmittance).

Glas-kolben glass bulb.-plattenstaf-

-feln (Michelson) echelon spectro-
scope. -satz glass batch, composi-
tion or charge. -schaum glass gall,
sandiver. -scheitel lens vertex.
-schlieren schlieren, striae or
chords (when large), reams (when
broken by rolling into fine bands).
-schliffverbindung ground-glass joint.

- schmutz glass gall. -schneider, Roll- wheel-type glass cutter.
- schweiss glass gall. -spannung strain or internal tension of glass. -stöpsel glass stopper.
- träbung glass cloudiness.
- glastechnisch glass technological. Glas-überfangschicht glass lining.
- vergütung refining or treating of optical glass (e.g., by producing low-reflectance coating, dimming, etc., as by Bausch and Lomb magnesium-fluoride anti-reflection film on glass).
- Glasur, halbmatte half-matt glaze. glätten smooth (ripples, fluctuations or pulsations of currents); make level, even or uniform, stabilize.
- Glattheitsprüfer smoothness meter or tester, glossimeter (measures ratio of reflection to total light), surface analyzer.
- Glättung smoothing (ripples of current, potential, etc.).
- Spannungs- voltage stabilization, v. smoothing.
- Glättungs-kondensator smoothing condenser or capacitor. -röhre glow-tube stabilizer.
- Glauben, in gutem- in good faith, bona fide.
- Glaubwürdigkeit credibility, trustworthiness, credit.
- gleichachsig co-axial, equi-axial.
- Gleichbeanspruchung static loading, constant l.
- gleich bedeutend equivalent, tantamount, synonymous.
- belastete Phasen balanced phases.
- Gleichen, Kurs- loxodromes, rhumb lines. Missweisungs- isogenic lines, isogonals.
- gleichentfernt equidistant, equally spaced (apart).
- Gleichfeld constant or steady field
- gleichförmig uniform, steady, smooth, even, homogeneous.
- Gleichgang unison, synchronism.
- gleich-gerichtet equidirectional, unidirectional, equi-axial, of like orientation. -gestaltet isomorphic, isomorphous
- Gleichgewicht balance, equilibrium, poise, trim (of airplane), stability. -, radioactive equilibrium (being either transient or secular).
- Brücken-bridge balance. Druck-, osmotisches isosmotic equilibrium.
- Gleichgewichts-fehler unbalance, imbalance, lack of balance or equilibrium. -lehre statics.
- potential equilibrium potential (of mosaic). -verhältnis equilibrium ratio. -zustand state of equilibrium or balance, stable or stabilized state.
- Gleichheit state of balance or equality, likeness, sameness, uniformity, constancy. Druck-, osmotische isosmotic equilibrium.
- Phasen- in-phase state, coincidence of phases. Spiegel- mirror symmetry,
- Gleichheits-photometer, Lummer Brodhun L.-B. contrast photometer, total-reflection p.
- zeichen equality sign.
- Gleich-klang unison, consonance, resonance. -lauf, lokal geregelter local synchronizing (e.g., by a tuning fork).
- gleichlaufende Kondensatoren gang(ed) condensers, synchronized capacitors.
- Gleichlauf-fehler, Auflaufen der compounding or integration of errors or differences in synchronism. -impuls synchronizing impulse, corrective i. -signal, -zeichen synchronizing pulse, sync signal; tripping s.
- Gleichluftstrom direct flow of air, d.c. air f.
- gleich-machen equalize, balance, stabilize, make even or uniform, steady. -mäßig uniform, steady, constant, smooth. -namig like,

similar (of poles). -phasig co-phasal, in phase, (equi-) phased. -richten rectify, detect, demodulate.

Gleichrichter, linearer linear rectifier, detector or demodulator. -quadratischer square-law rectifier or detector.

Gleichrichter, Doppel(weg)- full-wave rectifier. Einweg-, Halbweg- half-wave rectifier. Hochvakuum- kenotron, electron-type rectifier. Kontakt-contact rectifier, crystal r., natural r. Pendel- vibrating rectifier, tuned-reed r. Schwing- kontakt- vibrating-reed rectifier. Sperr- barrier-film rectifier, blocking-layer r., metal r. electronic r., cuprox r. Trocken- dry rectifier, metal r., copper r., cuprous-oxide r., selenium-oxide r. Verstärker- amplifying detector. Vollweg- full-wave rectifier. Zweifachdioden- duodiode rectifier.

Gleichrichter-pille oxide or metal rectifier of reduced size (e.g., Westector). -rückzündung backfiring, arcing-back (of Hg rectifier), backlash (imperfect rectification). -voltmesser rectifying voltmeter. -zelle rectifier cell, barrier-layer c.

Gleichrichtung beider Halbwellen full-wave rectification. -einer Halbwelle half-wave rectification -, unvollständige backlash

Gleichrichtung, Anoden- plate-current rectification or detection. Gitter- grid-current rectification or detection.

Gleichrichtung, Volumen- volume rectification.

gleich-schenklig isosceles.

-sinnig in Reihe series aiding.

Gleichstrom, Luft- current of breath (in sound recording).

Gleichstromempfänger d.c. electric radio set.

gleichstrom-vormagnetisierte Spule d.c. controlled saturable or

three-legged reactor or coil.

-Überlagert superposed on d.c., superposed with d.c.

Gleichakt-aufnahme in-phase recording (on film). -sprossen-Doppel- schnürspur variable-density double squeeze track. -sprossenspur single variable-density track.

-sprossenschnürspur variable-density squeeze track. -verstärker in-phase amplifier.

Gleichteilung equipartition.

gleich-temperierte isothermal, uniformly heated. -tönend unisonant, consonant.

Gleichung, eine - nach n auflösen solve an equation with respect to n.

Gleichung, quadratische quadratic equation. Ausgangs- starting equation, initial e. Bedingungs- equation of condition. Bestimmungs- defining equation. Farb-, dreigliedrige three-color equation, 3-stimulus e. Kontinuitäts- equation of continuity. Summen- summation equation. Wiederhall- Eyring formula. Zustands- equation of state.

Gleichungs-ansatz laying down a formula. -determinante für Leitung determinant for line equations. -familie equations grouped in families.

Gleichverteilungssatz law or principle of (energy) equipartition (of Maxwell-Boltzmann).

gleich-vielfach equimultiple.

-warm isothermal, uniformly heated.

Gleich-wellenbetrieb chain or network broadcast (from a key station, on one wave), operation of stations on one w. -wertigkeit equivalence.

gleich-winklig isogonal, equi-angular, equi-angled. -zeitig simultaneous, synchronous, isochronous, contemporaneous, contemporary, co-incidental.

Gleisweg rail track.

Gleit-bahn chute (of film), slide, slideway, shoot. -drahtbrücke slide wire bridge. -element glide element.

Gleiten, bildsames plastic deformation.

gleitender Ton sliding note, glissando.

Gleit-fläche glide plane, slip p. (cryst.); sliding surface, slide.

-flug, Seiten- side slip (airplane landing). -funken slide spark, creepage s. -Kontakt sliding contact (with self-cleaning or self-wiping action).

-lager plain bearing, slide b.

-lineal slide rule, s. bar.

-linien slide or slip bands or lines. -modulus modulus of elasticity (in shear), torsion m., rigidity m. -richtung slip direction (cryst.). -schuh pressure pad, p. guide. -sitz, Schlicht- plain sliding fit.

Gleitung slip (cryst.). Zwillings-twin slipping.

Gleitungskoeffizient slip coefficient.

Gleitweg glide path, landing curve, l. beam. -, äquipotentieller isopotential glide path.

Gleit-wegbake glide path beacon.

-winkel glide angle.

Glied member, term (math.); limb, joint, link; section or mesh (filter), element.

Glied, L,T,H, und π (oder II)-L,T,H, and pi type section or mesh (of a filter, attenuator or network). Ableitungs- shunt element. Brücken-lattice section. Dämpfungs- attenuation network or mesh. Kettenleiter-network mesh. Kreuz- lattice section (of filter or network). Längs- line arm, series element. Mittel- intermediate member (of a series). Quer- cross arm, shunt element. Regel- regulating attenuator. Schwächungs- attenuator. Sperr- suppressor. Spin-

spin term. Übergangs- transition type, transition member.

Verbindungs- connecting link.

Wechselwirkungs- inter-action term. Zwischen- intermediate member, connecting m., link, intermediate.

gliedern arrange, organize, classify, divide methodically (say, contents of a book, etc.); articulate, joint. verschieden gegliederte Bildteile picture portions of different nature, make-up or organization.

Gliederung organization, arrangement; jointing, articulation.

gliedrig, vier- four-membered, tetragonal, quadrinomial (math.)

- (e) Farbgleichung, vier- four-color equation.

Glimm-entladung glow-discharge (spontaneous or unassisted, in glow-tube), brush d. (when occurring at sharp points), corona.

-fadenlänge length of (neon) glow column (in tuning indicator).

Glimmlampe gaseous-conduction tube, glow-tube (e.g., neon tube), flashing lamp (in sound recording).

Flächen- neon tube with flat plate-shaped cathode, plate neon tube or lamp. **Polsuch-** polarity-finder glow-tube.

Glimmlampen-gerät, Universal- universal neon-tube tester. -kipp-schaltung neon lamp time base circuit scheme. -schallaufnahme glow-lamp sound recording (Aeolight).

Glimmlicht-anzeiger flashograph-type indicator, Tune-A-Light tuning indicator. -gebiet, Vor-sustaining voltage range, pre-photoglow region (arises at a voltage slightly below striking voltage).

Glimmröhre, Abstimm- tuning indicator glow-tube (e.g. flashograph).

Amplituden- glow-tube amplitude indicator, resonance or tuning indicator (e.g., flashograph).

Resonanz- resonance indicator glow-tube (flashograph).
Glimm-säule light column, glow c. (of tuning indicator). -spannung glow pointor potential, breakdown p. (indicates incipient glow-discharge in grid-glow tube); anode p. (at which glow-discharge begins, in photocell), stopping p. (lies slightly below glow p., in photo-glow or grid-glow t., and is the value to which p. must be dropped to stop glow-d. once it has started). -(strecken)spannungsteiler glow-tube potentiometer. -summer glow-tube type buzzer oscillator (produces relaxation waves), neon time base.
-verlust corona loss. -zelle photo-emissive gas-filled cell (operating at a potential slightly below critical discharge potential), photo-glow tube.

Glocke globe, bell, jar, glass; receiver (of air pump).

Glocken-filter bell-jar filter.
-klöppel bell hammer, bell striker.
-magnet bell-shaped magnet. -spiel carillon (set of bells), orchestra bells. -trichter bell funnel.

glühen heat, incandesce, anneal, glow, fire, ignite.

glühelektrisch thermionic.

Glüh-elektronenabgabe thermionic emission, Edison or Richardson effect. -elektronenerladung thermionic discharge. -faden, -biegsamer ductilized filament. -faden, gespritzter squirted filament. -fadendpyrometer disappearing-filament pyrometer, optical p., monochromatic p.
-kathodengleichrichter mit Edelgas tungar (argon-tungsten) type rectifier. -körper incandescent body or mantle, Welsbach mantle. -rückstand residue on ignition. -span mill iron, hammer scale.

Glutmess器 pyrometer.
gnomonische Karte gnomonic chart (straight-course chart).

Gold-bergkeil Goldberg wedge, neutral(grey) w. -blatt gold leaf, g. foil. -blattelektrometer gold-leaf electroscope or electrometer. -glimmer yellow mica. **goldhaltig** auriferous. **Goldquarz** auriferous quartz. **Goniometer, Eisen-** iron-cored goniometer. **Reflexions-** reflecting goniometer. **Grabstichel** graver, burin. **Grad, vom ersten** linear. **Grad, Aussteuerungs-** modulation percentage, percentage modulation; carrier amplitude (in tele-transmission). **Blähungs-** expanding property, swelling p., imbibition power. **Durchlass-** (von Wasser) transmission factor (of water), radiation through water. **Winkel-** degree of angle, radian (unit of circular measure of angle).

Gradation contrast.

Gradationskurve, Steilheit der gamma value or slope of response line.

Grad-bogen graduated arc, bow, protractor. -netz graticule, reticule, reticle; map grid.

Gramm, Atom- gramatom.

Grammophon, Licht- sound-track film player (without pictorial actions).

Granalien shot, granulated metal.

Graphitbelag Aquadag coating.

Grätzschaltung Grätz (full-wave) rectifier circuit organization (four electrolytic r. per phase in a bridge scheme).

Grau-keil neutral (grey) wedge, Goldberg w. -keilstufe intermediate shading value (of wedge).

-schleier grey fog (phot.).
-strahlung grey radiation. -stufe intermediate tonal or shading value (between white and black, of picture).

Gravarfilm engraved sound film, embossed groove recording.

Gravitationsfeld gravitational field. **Greifer** claw (of in-an-out movement or feeder mechanism); pull-down

(of projection printer). Bild-threading mechanism, in-and-out claw. Justier- pilot claw (m.p.). Greifer-maschine step-type printer. -mechanismus pull-down claw mechanism. -spitze dowel pin (film feed). -stift film feeder pin, pilot p., registration p. Greifloch finger hole. Grenz-bedingung limiting condition, critical c., boundary c. -durchmesser limiting diameter (of dielectric line). Grenze limit, boundary, bound, end, limitation, confines, demarcation. Grenze, Empfindungs-, des Ohres loudness contour of ear, auditory sensation area. Entzerrungs- frequency limit of equalization. Ermüdungs-fatigue limit. Loch- transmission range of band-pass between cut-off points. Schärfenfeld-camera lines. Schmerz- threshold of feeling. Grenz-fall limiting case, critical case. -fläche interface, boundary layer, surface of contact. -flächenpotential interface potential. -flächenspannung interfacial tension. -flächenwinkel interfacial angle (dihedral between two crystal faces). -frequenz cut-off frequency, limiting f. -gefälle limiting slope, l. gradient. -lastwechselzahl limiting number of load alternations. -linie boundary line, demarcation l. separation l., limiting l., junction l. -schicht interface, boundary layer. -strahl border line ray, infra-Roentgen r., grenz r. -wellenlänge threshold wave length. -wert limiting value, critical v., saturation v. -winkel critical angle, limiting a. (of refractometer).

Gries, Stör- low noise in picture background due to thermal effect,

Brownian movement, mechanical properties of tubes and low-frequency fluctuations of local emission density, i.e., shot effect, etc.

Griff, Durch- grid transparency, penetration factor, transgrid action, gain reciprocal l: μ . Kordel- milled 'rib, knurled k. Rück- inverse grü transparency. Griffrett finger board (of string instrument).

Griffel style, stylus, (slate) pencil. -stopfen stopper with thumb piece.

grobfädig coarse-threaded, c. filamentous.

Grob-gefüge macro-structure, coarse or gross s. -höhenmesser (cf. Fein-) barometer measuring actual atmospheric pressure reduced to sealevel.

grobkristallinisch coarsely crystalline.

Grob-sicherung arrester of spark-gap type. -struktur reduced (or reduction of) resolution.

-strukturanalyse gross, coarse or macro-structure analysis.

Grossaufnahme (big) close-up (m.p.). Fernbild- large viewing screen projection (for public entertainment).

Grösse quantity, magnitude, entity, size, dimension, format (of pictures, etc.). -, abgeleitete subsidiary quantity, derived q. -konjugierte, komplexe conjugate, complex quantity. Wirkungsaction quantity, a. magnitude.

Grössenlehre mathematics; geometry. größenmässig dimensional(ly), as regards size or quantity.

Größenordnung order of magnitude.

Gross-flächenlautsprecher power loudspeaker, (public) address l., announce, call or paging l. system.

-funkstelle high-power radio station, long-distance signal station. -kreis (peilung) great-circle (used in bearing calculation).

- kreisrichtung great-circle direction or course. -lautsprecher power loudspeaker, (public) address loudspeaker (system).
 -projektion large picture projection (with magnascope).
 -schallübertragungsanlage (public) address loudspeaker system, announce, call or paging l. system.
 -struktur coarse structure, gross s., macro s.
- Grösstwert maximum (value), maximal or crest v.
- Grossumfangkopie "hi-range" or wide-range print.
- Grübchen-bildung, Gruben- pitting, formation of pits.
- Grund, Ätz- resist, protective coating. Ausschliessungs- reason for exclusion.
- Grund-bande fundamental band.
- farbe primary, ground or priming color. -fläche basal surface, base; area. -flüssigkeit suspending liquid. -form primary, basic or fundamental type or form. -geräusch (back) ground noise. -stromkreis (back) ground noise reduction circuit, squelching, suppression or silencing circuit. -geschwindigkeit ground speed. -gitterabsorption fundamental lattice absorption.
- gleichungen, Maxwell'sche Maxwell electromagnetic equations. -harmonische fundamental frequency. -helligkeit background, mean or average shading component, d.c. component.
- körner fundamental substance, parent s. -kurs true course, head-on c. -linie, Anflug- center line of approach sector.
- masse ground mass. -material matrix, elementary material, base m., ground m. -nachbildung basic network. -niveau background level (or average illumination, telev.). -platte mounting plate, bed p., base, chassis. -punkt cardinal point (of a lens).
- richtungswinkel base angle (gunnery). -riss ground plan, floor p. -sätzliches fundamentals, rudiments, basic or elementary facts. -scheitelbrechwert primary vertex refraction. -schicht primary or fundamental layer. -schleier inherent fog, ground f. (of emulsion resulting in background noise).
 -schwingung fundamental or first harmonic oscillation or vibration. -stimmen foundation stops (organ). -teilchen smallest particle, fundamental p., atom.
- ton pitch, keynote, fundamental or primary tine or frequency; back-ground (noise). -zug leading or salient feature or characteristic, basic trait. -zustand ground state (of an atom).
 -zustand, Zurückfallen in return or re-transition to lowermost energy level.
- Grünauszug green record.
- grünempfindlich green sensitive.
- Gruppe, angeregte exciton (in dielectric breakdown).
- Gruppen-erscheinungen group phenomena (cryst.). -frequenz group frequency, number of wave-trains per second, (wave) train frequency, sparking frequency.
- geschwindigkeit envelope velocity, group v.; group retardation.
- schaltung series-parallel connection. -wähler group selector (aut. telephony).
- Gruppierung, Elektronen- phase-focusing (in beam tubes), bunching.
- Guckloch peephole, bezel (in radio set panel).
- Gitarre guitar.
- Gültigkeit eines Patentes anfechten challenge validity of a patent, plead or argue invalidity of a p.
- Gummi, Hart- ebonite, hard rubber, vulcanite.

Gummi-andrückrollen rubber-tired presser or pad rollers. -chrom-verfahren bichromated gum process. -dichtung rubber gasket, r. packing. -drucklack gum printing varnish. -harz gum resin. -propf rubber stopper. -puffer rubber grommet. -stopfen rubber stopper. -überzug(auf Rollenlaufbahn) rubber-tread(of pad roller).

günstigst optimal, most favorable, most propitious.

Gurtband belt strap, b. band.

Gürtel belt, girdle, band, zone.
Klima- climatic belt.

Guss, Hart- chilled casting.

Spritz- (pressure) diecasting,
feeder casting, die molded casting.

Guss-aluminium cast aluminum.

-blase flaw or defect in a casting.

-haut casting scale, c. skin.

-masse pourable compound, dope.

Gutachten expert opinion, judgment, decision, verdict.

Güte quality, merit, grade, "goodness"; legibility or definition (in telegraphy, television, etc.)
Bild- (figure of) merit or quality of pict. Übertragungs-transmission performance (rating).

Güte-wert, -zahl figure of merit, quality (Q) factor (of coil, etc.)

gutschliessend tight-fitting, tightly sealed.

G. W. (Gruppenwähler) group selector (in automatic telephony).

H

- H Brückenschaltung, Entzerrungskette mit balanced H-type attenuator network.
- H Strahlen H rays (consisting of H particles, positive hydrogen p. or protons).
- H & D Kurve Hurter & Driffield curve (phot.).
- haarartig hair-like, capillary.
- Haardraht capillary wire, Wollaston w.
- haar-faserig filamentous. -förmig capillary, hair-shaped.
- Haar-riss craze, micro flaw, (hair-line) crack, capillary fissure. -rohr, Heber- capillary syphon, c. tube syringe. -rohranziehung capillary attraction.
- haarscharf very (or microscopically) sharp, precise or correct.
- Haarzellen hair cells, capillary c.
- Haabannröhre type of split-anode magnetron; dynatron oscillator (though the latter strictly is predicated on secondary emission).
- hachieren hatch.
- Hacker chopper.
- Hafenbefeuерung, Flug- airport beacon service.
- haftbar liable, responsible, answerable.
- haften adhere, stick, cling.
- Haft-spannung adhesive stress. -vermögen adhesive power, adhesion.
- Hahn (stop)-cock, tap, faucet, cut-off (vacuum pump).
- Hahn, Kreuz- four-way cock. Licht-electromagnetic mirror vibrator (with oil damping, for variable-area recording). Schraubquetsch-screw pinchcock. Tropf- dripping cock. Vakuum- vacuum tap. Viel-wege- multi-way stop cock. Vier-wege- four-way cock. Wechsel-
- change cock.
- Hahn-fett tap grease, joint g., vacuum g. -kegel, -küken plug of a cock. -stopfen cock stopper.
- Häkchen little hook, clasp.
- Haken hook, catch, fastening. Band- bridle wire, tie hook.
- Sperr- pawl, catch, latch, trip, dog, click, detent, ratchet.
- Wider- barb.
- Hakenharfe hook harp.
- Halb-achse semi axis. -achsenverhältnis ellipticity coefficient. -art sub-species. -bildenfernungsmesser split-field coincidence range finder. -blende half stop, scale. -dunkel twi-light, semi-darkness.
- halbdurchlässig semi-permeable, semi-transparent.
- Halbebene semi-plane, half-p., H-plane.
- halbeirund semi-oval.
- Halb-erzeugnis, -fabrikat semi-finished product, intermediate p. -flächner hemihedron.
- halbgeschränkter Riemen quarter-turned belt.
- Halbheit imperfection, half-measure, half-way step, "half-cooked" condition.
- halbieren halve, bisect, dissect, cut in half, part.
- Halbierende, Winkel- bisector (of angle).
- Halbierungslinie bisector, bisectrix (line).
- halbklassische Bildkraftberechnung semi-classical image-force calculation.
- Halb-kokung semi-coking, partial carbonization. -kreis semi-circle, hemicycle. -kugel hemisphere. -kugellinse semi-circular lens,

hemispherical l. -längsglied,
Abschluss eines Filters durch
mid-series termination of a
filter. -leiter semi-conductor,
poor c.
halbmatt half matt.
Halb-mattglasur half-matt or semi-
matt glazing. -metallglanz sub-
metallic lustre. -öffnungswinkel
semi-apertural angle. -periode
semi-period, half-period, half-
cycle. -prisma hemi-prism (cryst.).
-querglied, Abschluss eines
Filters durch mid-shunt termina-
tion of a filter. -raster,
Ineinanderpassen der interlocking
or meshing of fractional scans
(in interlaced scanning). -raum
half-space.
halbrund half-round, semi-circular,
hemi-spherical.
Halbschatten half-tone, half-shade,
partial shadow, penumbra.
-apparat half-shade apparatus,
half-shadow analyzer. -grenze
penumbra boundary. -kompensation
penumbral compensation.
Halbtönen semi-tone, semi-note; sharp
(mus.) -bild half-tone picture,
mezzo tinto (in black and white,
with grey intermediate shading
values).
Halbtotale close-medium shot,
medium shot.
halb-tragbar semi-portable. -ver-
senkt semi-sunk, semi-recessed.
-versilberter Spiegel beam
splitter (densitometer).
Halb-vokale liquid consonants,
semi-vowels (liquidae).
-wieggleichrichter half-wave rec-
tifier.
halbwegs fairly, substantially,
half-way.
Halbweltschicht half-value layer.
-wellenpotential half-wave po-
tential.
Halbwert-breite half-width, w. at
half maximum intensity (opt.,
spectral line and band). -dicke

half-value thickness or layer.
-druck half-value pressure.
-punkt half-maximum point. -zeit
half-value life, half-l. period.
Halbwinkel half angle.
halbzahliger Spin half-integral spin,
half-odd s.
Halb-zähligkeit half integer. -zeit
period of half life or change,
semi-period, time-to-half value,
half-life period. -zelle half
cell.
Halleffekt, Raum- liveness.
hallend reverberant, with multiple
echoes.
Hallformanten resonance formants.
Halligkeit liveness (realistic
acoustic condition).
Hallraum acoustically live room,
reverberating chamber or enclo-
sure. -zahl chamber coefficient
(ac.).
Halo-bildung halation (television,
etc.). -chemie chemistry of salts,
halochemistry.
Hals, Schwanen- goose neck. Stöpsel-
neck, ring, collar or sleeve of a
plug. Trichter- throat of a loud-
speaker horn, neck.
Hals-bandkurve collar curve. -lager
journal bearing.
haltbar durable, strong, stable,
fast, permanent (of colors).
Haltbarkeit, Dauer- fatiguedur-
ance.
haltbarmachen stabilize, preserve.
Haltedraht, Gitter- grid stay wire,
g. supporting w.
halten hold, support, keep, retain,
stop, restrain.
Haltepunkt break.
Halter holder, support, handle,
keeper. Distanz- spacing means,
spacer, separator. Röhren-,
federnder cushioned tube holder
or socket, anti-microphonic
valve holder. Wicklungs- winding
form, coil f., skeleton f., form-
er.
Halterelais guard relay, holder r.

Halterung, Kristall- crystal holder, c. mounting.

Halterungssystem holder, mounting or supporting system.

Halte-spule (eines Relais) restraining coil, holding-on c. (of a relay). -strom retaining current, holding c. -vorrichtung chassis (of loudspeaker). -zeit critical range, c. interval, thermal retardation.

haltois unstable, unsteady unsupported, unattached, untenable.

Hammer, Pendel- Charpy's impact testing machine.

hämmbar malleable. .

Hammerkopf (für Bass, Mittellage und Diskant) piano hammer (for bass, tenor and treble).

Hand, an - von by reference to, by the aid of. auf der - liegen (it is) obvious, evident or patent, goes without saying.

Handbuch handbook, manual, compendium.

handelsgängig commercial, marketable

Handelsmarke trade-mark.

Hand-empfindlichkeit hand (or body) capacity effect. -feilenkloben hand vise. -griff handle, grasp, grip, knob, button. -kamera, Berufs- professional hand camera.

-kapazität body capacity effect, hand c.e. -koffer carrying case, suitcase.

Handlung plot, story, treatment, theme, scenario, shooting script (m.p.).

hängen bleiben "take hold" (in silent tuning).

hantieren work, handle, manipulate, manage, operate.

Harfe, Doppelpedal- double-action harp. Haken- hook harp. Klavier-keyed harp, piano h.

Harfenantenne harp antenna, fan a.

Harmonieflöte organ accordion.

hart (es) Bild crisp or harsh picture, high-contrast p., contrasty p., hard p. -(e) Kom-

ponente der Höhenstrahlung penetrating or hard component of cosmic rays. -(e) Röhre hard tube, h. valve, high-vacuum t. -(e) Teilchen primaries.

härtbar hardenable, temperable, indurable, capable of being hardened or cemented.

Härte, Auslenk- deflection hardness (force required to deflect phonograph needle point 100 μ). Schallsound or acoustic stiffness, rigidity, ratio pressure amplitude: velocity amplitude as function of frequency.

Härte-bad, Fixier- fixing and hardening bath. -bildner salt causing hardness (in water). -messer, Strahlen- penetrometer (for X-rays), qualimeter.

härten harden, temper, indurate.

Härteprüfer hardness tester (Brinell, Rockwell sclerometer and scleroscope).

hartgeschlossenes Rohr rigidly terminated tube (ac.).

Hart-gewebe indurated or impregnated fabric. -glas pyrex. -gummi hard rubber, ebonite, vulcanite. -guss chilled casting. -lagerhärtung induction hardening.

Härtling (hard) dross.

Hartlötzung hard soldering, brazing.

Härtung, Ausscheidungs- precipitation hardening. Brennstrahl- flame hardening. Einsatz- case hardening. Oberflächen- case hardening, surface cementing.

Härtungs-biegeprobe bending test in tempered state. -kohle hardening carbon, cementing c.

Hartwerden (einer Roentgenröhre) hardening of an X-ray tube (due to clean-up effect and gain of vacuum).

Harz, Dammar- Dammar resin or gum.

harzhaltig resinous, resinic, resiniferous.

Haspel reel, spool, windlass.

Haufen cluster, aggregation,

accumulation, piles, agglomeration, clump. **Molekül**- molecular clusters.

Häufigkeit frequency, incidence, abundance.

Häufigkeitsverhältnis abundance ratio.

Haufwerk, Kristall- aggregation of crystallites.

Haupt-achse prime axis, major a., vertical axis (of a rhombic crystal). -azimuth principal azimuth. -ebene principal plane, p. surface. -ebenenabstand distance between principal planes or points. -einfallwinkel angle of principal incidence. -einflugzeichen inner marker signal, main entrance s. (nearest airport boundary, in airplane landing), main marker. -formanten main formants, basic f. -funkfeuer main route or airway radio beacon.

-gitter parent lattice. -linie principal line (spectr.). -nenner common denominator. -patent parent patent, main or original patent. -peilstelle main control direction-finder station (of an air communication safety district comprising several ground df stations). -punktbrechwert principal point refraction. -punkte principal points, unit p. -quantenzahl principal quantum number. -regler main governor or regulator (of a turbine). -rohr main oscillation generator (in independent drive system). -rolle leading star. -rollendarsteller principal, star, star performer.

hauptsächlich main, chief, principal. **Haupt-sammellinse** second lens (in electron gun, c.-r. tube). -satz fundamental principle, f. law, f. theorem, axiom (math.). -schnitt, erster (!.) primary plane, tangential p., meridional p. (opt.). -schnitt, zweiter (!!) secondary plane, sagittal p. (opt.).

-sender main oscillator, m. transmitter. -signal inner marker signal, main entrance s., main marker (in airplane landing). -streckenfeuer main or trunk route or airway beacon. -taste master key. -uhr master clock. -valenzkette primary valence chain. -verhandlung main oral hearings, m. proceedings. -zahl cardinal number. -zipfel major lobe (of space pattern). -zug main object (of an invention), outstanding or principal characteristic feature or trait.

Haustelephon domestic telephone, private home telephone, house 'phone, telephone extension, intercommunication t.

Haut skin, hide, film, membrane.

Guss- casting scale, c. skin.

Licht- cathode glow. **Oxyd-** skin or film of oxide.

Haut-abstand (focal) skin distance.

-widerstand dermal or skin resistance. -wirkung skin effect.

Heaviside'sche Einheitsfunktion H. unit function.

Hebdrehwähler vertical and rotary selector.

Hebedaumen cam, tappet, finger, disk with lobes.

Hebel, **drehbar gelagerter** pivoted lever, fulcrumed l. (when with two arms). -, **hin- und hergehender** rocking lever, oscillating l.

Hebel, Aufzieh- lever ratchet.

Auslöse- trip lever, detent lever. **Einrück-** starting lever, tripping lever, engaging l. **Einrück- und Ausrück-** starting and stopping lever. **Fühl-** tactile lever, feeler, scanning l., pickup l., probing l., indicator (of micrometric caliper). **Schwung-** balance beam, rocker, rocking lever. **Sperr-** pawl, latch, arresting lever, lock l.

Hebel-arm, Strahl- pencil leverage, deflectibility of p. -detektor

- lever-adjusted cat whisker crystal detector. -schalter, Zweipol- double-lever switch. -wage beam scale, lever s. -wirkung leverage, lever action, purchase.
Hebepunkt fulcrum.
- Heber**, **Kontrast-** (dynamic-range) compandor (comprising compressor and expander, to improve signal-noise ratio).
- Heber-barometer** syphon-barometer. -haarrohr capillary syphon. -pumpe syphon pump. -rohr syphon tube, syphon. -schreiber syphon recorder.
- Hebeschritt**, **Wähler-** vertical step of selector (automatic telephony).
- Heck stern.**
- Heft** handle, hilt; number or issue of a magazine, stitched booklet.
- Heilgerät** therapeutic apparatus (e.g. using short waves, rays, etc.).
- Heimfernsehempfänger** home television receiver.
- Heimlauf** backstroke, return s. or motion; retrace or flyback (of pencil or beam, in telev. tube, often gated by blanking pulse).
- Heiserkeit** raucousness, hoarseness.
- heissbrüchig** hot-short.
- Heissdampf** superheated steam.
- heissgrädig** difficultly fusible.
- Heiss-Kühlung** cooling by evaporation. -leiter hot conductor (with negative temperature coefficient), third class conductor.
- Heiz-kathoden-Roentgenröhre** hot-cathode X-ray tube, Coolidge tube.
- körper heater (e.g., for indirectly heated cathode), heating element; radiator. -kraft heating power, calorific p. -lötstelle hot junction (of a thermocouple). -mantel heating jacket. -unruhe fluctuation in heating current, ripples. -wendel heater spiral, heater coil.
- hell** bright, brilliant, light, pale, clear, transparent, limpid; strid- ent, shrill (ac.).
- Hellanpassung** bright adaptation, light a., photopia.
- Hell-Dunkel-Intervall** light-dark range. -linien light-dark-lines.
- helle Klangfarbe** strident timbre, shrill t. -Stelle (im Film) clear portion (in film).
- Helle**, **Flächen-** brightness of a surface, intrinsic brilliance.
- Hellfeldbeleuchtung** bright ground illumination (micr.).
- Helligkeit** (als physikalische Grösse) photometric brightness, luminance, radiance (in candles per unit area). -(als psychologische Grösse) visual sensation. -eines Objektivs speed of a lens or objective.
- Helligkeit, mittlere** average background illumination (telev.).
- Helligkeit, Flächen-** surface brightness, intrinsic brilliance.
- Grund-** background, mean or average shading component, d.c. component.
- Objektiv-** speed of a lens or objective. Raum- volume brightness.
- Ton-** pitch (sound sensation).
- Helligkeits-angleichung** brightness matching. -schwebung brightness flutter. -signal, Bild- video signal, picture shading s.
- steuerung brilliance modulation, brightness control, intensity m.
- stufe intermediate brightness stage, i. grey value (between black and white), shading or tonal v. -umfang brightness range, contrast, key (of a picture). -verteilung brightness distribution (of highlights and of shadows). -wechsel je Sekunde frame frequency per second, number of illuminations of a picture point p.s. -werte brightness values. density v., shading v.
- Hell-rotglut** bright red heat.
- schreiber Hell-type recorder.
- sektoren shutter openings.
- steuerung modulation to light condition.

Hemieder hemihedron, hemihedral form, h. crystal.

hemmen stop, check, brake, impede, obstruct, retard, inhibit, clog, lock.

Hemm-rad brake wheel, escapement w. -schuh brake shoe.

Hemmung escapement, retarding action, brake a., stopping a., check, hindrance, restraint, inhibition (in reactions).

Hemmungs-grund disability (law). -körper restraining substance, decelerator.

Henkel handle, lug, ear.

Herabsetzung stepping down (of potential, gearing, etc.), decrease (speed, by step-down gear); sub-multiplication.

heranlotzen guide to (airplanes, etc.).

herausarbeiten work out of (say, a solid piece, by cutting, punching, etc.), blank out.

Heraus-führung lead-in (wire or conductor), lead-out wire. -gabe restitution, return, delivery, surrender, issuance, edition (of a publication).

heraus-hören apperceive (say, a certain note in a spectrum).

-pipettieren pipet out, remove with pipette. -spritzen spurt or spout out, gusher, gush. -treten protrude, emerge, step out of.

herrschende Verhältnisse prevailing circumstances.

herrühren originate, proceed or come from.

herstellen make, produce, manufacture, close (a circuit, a connection).

Hertz-Einheiten cycles per second, cps. -'sche Welle Hertzian wave, H. radiation, electric wave.

herunter-gehen let down (of an airplane). -klappen let down in hinges, hinge down, drop (as a table leaf). -regeln, -steuern

regulate (a quantity) in a downward direction, regulate down.

hervor-bringen produce, create, set up, develop. -heben make conspicuous or prominent, underscore, highlight; accentuate, emphasize, underscore (certain frequencies or bands). -ragen project, stand out, be salient.

Hervorrufungszeit developing time.

Herz-bahn cardioid-shaped path (of electrons). -charakteristik cardioid characteristic or space pattern. -exzenterbewegung cam movement of Livin. -spannungs-kurve electro-cardiogram.

heulen howl.

Heul-signal siren. -ton sound with large number of modes of vibration, warble frequency tone, high-frequency warble tone ("multitones").

Hexodenkappe top cap of hexode tube.

H-Glied H-type section, filter mesh or network m.

heulton Aeolian note.

Hilfs- auxiliary, subsidiary, subordinate, ancillary, accessory, standby.

Hilfsfrequenz pilot frequency auxiliary f.; local f. oscillation (in superheterodyne).

-rückkopplung super-regeneration (working with quench voltage).

Hilfs-funke pilot spark. -landeplatz emergency or auxiliary landing place or field. -mittel auxiliaries, accessories, supplemental or expedient means, makeshift, adjuvants. -netz auxiliary (control) grid. -peilstelle auxiliary, associate or affiliated ground direction-finding station (subject to main control station).

-phasenkreis starting-winding circuit (of split-phase induction motor). -sender auxiliary transmitter, local oscillator (in heterodyne scheme). -stoff adjuvant (substance), auxiliary or

accessory material or agent.	Hinter-grundeffekt background effect.
-träger auxiliary carrier, sub-carrier. -voramt sub-control station.	-grundprojektion back (ground) projection.
Himmelfernrohr astronomic telescope, astrographic t.	hinterlegen deposit, file, record, register.
Himmels-gegend point of compass, quarter of the heavens.	Hinterlinse back lens.
-mechanismus astronomical dynamics, celestial mechanism or mechanics.	hinterschnitten undercut.
Hinaufpendeln (gradual) rise in resonance (amplifier).	Hinter-setzer false front. -wandzelle photo-voltaic barrier-layer cell with posterior metallic layer.
Hindernis bar, barrier, difficulty, obstacle; estoppel (law).	hinüberreissen carry over (in a distillation).
,gesetzliches statutory bar, legal impediment estoppel. Luft-fahrt- avigational (air navigation) obstacle.	Hin- und Herbewegung shuttle, rocking, oscillating or reciprocating motion.
Hinderungsgrund sein be a bar to (law).	Hinuntertasten carrier caused to drop to low value (zero) by synchronizing signal.
hineinziehen draw in, drag in, incorporate, involve.	Hirschleder buckskin.
Hinführung und Rückführung lead and return (path or circuit wires); scansion and fly-back (telev.).	Hitzdraht-anemometer, -sonde hot-wire anemometer. -strommesser thermal ammeter, hot-wire a.
Hin-gang, -lauf forward move, f.	hitze-beständig stable or resistant to heat, heat-proof, thermostable, refractory. -empfindlich sensitive to heat, susceptible to thermal action.
working stroke, travel, pass or journey; scansion, scanning motion, (active-line) sweep (telev.).	hitzen, über- superheat, overheat.
Hinlauf-Rücklauf-Verhältnis sweep-flyback ratio.	Hitzmesser pyrometer.
Hinleiter outgoing lead, o. wire, o. conductor.	Hoch-antenne open outdoor antenna (installed at, or reaching, a point high above ground). -ätzung relief etching, r. engraving (metal bears outline of pattern in resist). -aufnahme vertical or upright picture or shot.
hinten in the rear, behind, posteriorly.	-belastbarkeit high-load or heavy-load or current-carrying capacity.
Hinter-ansicht rear elevation, r. view. -beleuchtung Rembrandt illumination, half-back i.	hochblau bright blue, azure.
hinterdrehen back-off, relieve eccentrically.	Hochdruck high pressure; relief print. -kondensator pressure-type capacitor (in nitrogen tank).
hintere Brennweite back focal length.	-rohr, Quecksilber- high-pressure mercury discharge tube.
hintereinander sequentially, consecutively, serially, one after the other.	Hoch-frequenzbereich treble range, treble band (mus.). -frequenzheilgerät short-wave therapeutic apparatus. -frequenzkamera high-
Hintereinanderschaltung series connection, seriation, cascading, concatenation or tandem connection (of motors).	

speed camera.

hochfrequenzmässig for high frequency, so far as high frequency is concerned, relative to high frequency.

Hochfrequenztelephonie, leitungsgereichtete carrier-current or wire-guided radio telephony.

hochgekohlt high-carbon, with high carbon content (of metal).

Hoch-glanz high polish, h. lustre, brilliance. -heim'sche Verspiegelung special mirror plating or "silvering" (of I.G. Farben). -intensitätskohle high-intensity carbon (arc).

hochkantig on edge, edgewise.

Hoch-lautsprecher tweeter loud-speaker, treble l. -leistungs-lautsprecher high-power loud-speaker, (public) address l., announcer, call or paging l.

hoch-lichtstarkes Objektiv high-speed or ultra-speed objective or lens. -rund convex. -schmelzend high-melting, difficultly melt-able.

Hoch-schule, technische techologic-al institute, polytechnical uni-versity, technical college.

-spannungskondensator high-potential (fixed) condenser or capacitor.

hochspannungssicher safe against high-potential breakdown, having high puncture strength, proof against high p. and shock.

Höchst-besetzungszahl maximum num-ber of electrons in shell.

-leistung maximum power, peak p., crest p.; extreme record per-formance.

Hochstrombogen heavy-current arc, large-c. arc. -entladung, nicht kondensierte heavy-current un-condensed discharge.

Höchstwertanzeiger crest indicator, peak i.

Hoch-tastung working impulse trans-mitted on voltage substantially

above normal; transmitter for im-pulse-keying operated at voltage far above normal. -tonkonus, -tonlautsprecher tweeter or treble (cone) loudspeaker.

Hochvakuum-gleichrichter kenotron, electron-type rectifier. -röhre high vacuum tube, hard t.

hochzeiliges Bild high-definition (telev.) picture.

hochziehen pull out (of a dive, airplane).

Höcker hump (of resonance curve); bump, protruberance; pip (of c.-r. screen tracing).

Hof, Licht- halo, halation.

hoffreie Platte, licht- non-halation plate.

Höhe, Breiten- meridian altitude. Objektiv- height of objective or lens. Sprung- pedestal height or level; amplitude of return or flyback (of beam or pencil, in telev.). Windungs- pitch of turns.

Höhen high (audio) frequencies, h. pitches. Absenkung in den- de-accentuation or attenuation of higher (audio) frequencies, using treble de-emphasizer means.

Höhen-einstellung height control (telev.). -lader supercharger (with high blower ratio). -lage height, altitude, position in vertical sense. -messer altitude meter, altimeter (for instance, echo or reflection type sound ranging altimeter), statoscope, terrain clearance indicator (of W.E. Co.). -messer, Fein- (aneroid) barometer measuring atmospheric pressure at airdrome not reduced to sealevel, sensi-tive altimeter. -messer, Grob- barometer measuring actual at-mospheric pressure reduced to sea-level. -schritt vertical step (in automatic telephone equipment). -strahlen cosmic rays. -strahlen-schauer, -strahlenstösse bursts

- or showers of cosmic rays, c. ray track (traced by odoscope).
-strahlung, harte Komponente der penetratting or hard component of cosmic rays.
- höhensymmetrisch** symmetric about vertical axis.
- Höhen-verstellung** adjustment in elevation. -wert altitude value (in vision). -winkel angle of elevation, azimuthal a., angular height, vertical visual a.
- Höhepunkt** culminating point, summit, top, crest, maximum, critical point.
- hoher Ton** tweeter, treble, high-pitched or h.-frequency note or sound.
- höhere Instanz** higher court, superior c., c. of appeals.
- holh** all bottom, boomy, dull (of sound or voice); hollow, concave (of mirror).
- hohl(er)** Ton boomy sound, dull s. (high AF frequencies cut off).—(e) Wiedergabe reproduction with high acoustic frequencies cut off or de-accentuated.
- Höhle, Augen-** socket of eye, orbit, orbital cavity. **Ohr-** ear cavity.
- hohlerhaben** concavo-convex.—**Hohl-gitter** concave grating. -heit cavity, emptiness.
- höhlig** honeycombed, having cavities or pits.
- Hohl-kathode** concave cathode, hollow c. -kehlenhalbmesser fillet radius. -metallrohr, Wellenausbreitung in wave propagation in wave guide or metal pipe (dielectric or conducting). -prisma hollow prism.
- Hohlraum** reverberation chamber (ac.); (blackbody) cavity. Resonanz-resonance cavity, r. chamber, rhumbatron. -bildung cavitation (in supersonic waves). -kabel, Papier- airspace paper-core cable, dry-space c., dry-core c. -resonator cavity resonator, chamber r., rhumbatron. -strahlung black-body radiation, cavity r.
- Hohl-rohrleitung** hollow pipe line, h. wave-guide (either dielectric or conducting); concentric line, co-axial l., pipe l. -schicht airspace. -schraube female screw. -sog cavitation. -spiegel concave (mirror) reflector.
- Höhlungsresonanz** cavity resonance (of rhumbatron and klystron).
- Holm, Flugzeug-** spar of an airplane wing. Gitter- grid stay, g. supporting member. Tragflächen-wing spar.
- Holoeder** holohedral form of crystal.
- Holoedrie** holohedrism.
- Holz**, engjähriges close-grain wood. Knet- plastic wood. Kohl-charcoal (of wood).
- Holzfaser** wood fiber, ligneous fiber, woodpulp. -stoff lignin, cellulose, ligno-cellulose.
- Holz-mehl** wood meal, w. powder, w. flour. -pech wood pitch. -pfife wood pipe (of organ). -schliff mechanical woodpulp. -schnitt wood stock, w. block, engraving, w. cut. -stoff woodpulp, cellulose. -wolle excelsior, wood-wool.
- holzzerstörend** lignicidal.
- homochrom** of uniform color, homo-chromatic, homochromous.
- Honigwabenspule** honeycomb coil.
- hörbar** audible, aurally perceptible, auditory, capable of being heard or acoustically perceived or sensed. -machen render audible, audibilize.
- Hörbarkeits-lautstärkeregler** audibility network. -schwelle threshold of audibility or of auditory or acoustic perception (represented by audiogram).
- Horch-dienst, Funk-** radio intercept service. -gerät radio or sound locator, listening or detecting device (e.g., to spot airplanes

- by sound, based on echo principle), range- and distance-determining device, intercept receiver, asdic (submarine detector). -*ortung* radio intercept service, sound location, s. ranging.
- Hör-empfang** auditory reception, aural r., r. by ear, hearing or earphones. -*empfindlichkeit* hearing ability, auditory sensitivity.
- Hören**, *einohriges* monaural listening or reception. -, *zweiohriges* binaural or plastic hearing or audition, two-channel listening.
- Richtungs-** aural determination of direction (of airplanes), airplane spotting. **Rück-** side tone.
- Hörer**, *Schau-* aural and visual audience, video-audio a., persons receiving audible and visual impressions simultaneously. *Sprech-microtelephone*, telephone handset, transceiver, walkie-talkie set.
- Hörer-echo** listener echo. -*gehäuse* receiver case, r. shell.
- Hörfilm** (*Tonfilm zur Rundfunk-übertragung*) sound film broadcast, s. telecine or telecasting.
- Hörfrequenz** audio, audible, tonal or acoustic frequency, A.F.
- Über-** supersonic, super-audible or ultra-audio frequency. **Unter-** sub-audio frequency.
- hörig, doppel-** binaural. **ein-** monaural.
- Horizont, künstlicher Flieger-** artificial horizon.
- Horizontal-ablenkung** horizontal or line scan, sweep or deflection.
- wechsel* horizontal or line synchronizing pulse or cycle.
- Hör-kopf** sound (pickup) head.
- muschel* earpiece, earcup.
- Horn**, *Exponentiell-, aufgewundenes* twisted or curled exponential or logarithmic horn (of loudspeaker).
- Exponentiell-, gefaltetes** folded exponential loudspeaker horn.
- Horn, Ruf-** signal horn. **Signal-**
- bugle. **Wald-** French horn, concert h.
- hornig** horny, horn-like, corneous, callous.
- Hör-peilung** auditory direction-finding. -*samkeit* acoustic properties, acoustics. -*schärfe* acuity of hearing. -*schwelle* audibility threshold. -*sprechschalter* talk-listen switch (in inter-communication systems).
- Hosenrohr** syphon pipe, Y-pipe.
- Hub** stroke, throw, travel, excursion; percentage modulation. **Frequenz-** frequency swing or deviation (above and below the assigned resting frequency, in f.-modulation), amount by which instantaneous carrier f. differs from resting f.
- Rück-** return stroke, back s.
- Hubmagnet** vertical stepping magnet (automatic telephony).
- Hügel**, **Potential-** potential barrier.
- Hülle** cover (ing), case, casing, wrapper, envelope, sheath, cloak, shell, hull (ship), contour, shroud.
- Atom-** atom shell. **Dampf-** steam jacket; vaporous envelope or sheath.
- Elektronen-** electron shell, e. shroud. **Leucht-** luminous sheath or envelope, aureole, photosphere (of sun), l. shroud. **Schutz-** protective cover, p. coat, p. sheath.
- Hüllen-elektronen** shell electrons. -*kurve* envelope. -*rohr* encasing tube or pipe, jacket.
- Hülse** bush, sleeve, socket, case, collar, barrel.
- Hülsenschliff** female part of ground joint.
- Hupe** reed horn.
- Hüpfer, Hüpferschalter** contactor (in multiple-unit control system).
- Hütchenkondensator** ceramic hood-shaped fixed condenser or capacitor.
- Hüttenarbeit** smelting, founding or foundry work.
- Huygens'sche Elementarwellen** Huygens wavelets.
- H W Z** (*Halbwertzeit*) half-value life,

half-life period.	Hyperfunktion hyperbolic function.
hydrophob non-hygroscopic, non-absorbent, water- or moisture repellent.	Hysteresemesser hysteresis meter. -, schreibender hysteresigraph.
Hyperebene hyperplane.	HZ (Hertz) cycle per second, Hertz
hyperfeine Struktur hyperfine structure.	unit (of frequency).

IBK-System CIE (Commission Internationale d'Eclairage) chromaticity scale.
Iconometer iconometer, wire-frame view-finder.
Ignitron-Stromtor-Kombination mutator.
Im allgemeinen as a general rule, generally speaking, by and large.
Im Grunde genommen basically or fundamentally speaking, as a matter of principle.
Im Übrigen as to the rest.
Immersionslinse immersion lens, i. objective (with oil or water, of microscope); double aperture lens.
Impedanz s. a. Scheinwiderstand.
Impedanz, Abschluss- terminating, end or load impedance or impedor. **Bewegungs-** motional impedance. **Blindkomponente der** reactive impedance component. **End-** terminating impedance, end i., load i. **Streu-** leakage impedance. **Stromkreis mit-** impedor.
Wirkkomponente der - active, dissipative, effective or resistance component of impedance.
Impedanzglied, Reihen- series impedance element or impedor.
Impfen inoculate, vaccinate, inject.
Imprägniermittel impregnating agent, pregnant.
Impuls momentum (in dynamics); impulse, pulse (telev.), surge (when of unidirectional polarity).
Impuls, Austast- blanking pulse (to gate retrace of pencil, in telev. tube). **Bahn-** orbital moment.
Bildsynchrosynchronisier- frame synchronizing impulse, low sync. i.

Dreh-(Spin) angular momentum (spin). **Gleichlauf-** synchronizing impulse; correcting i. **Kipp-** tripping impulse. **Öffnungs-** break impulse.
Impuls, Takt- synchronizing impulse, sync signal. **Zellensynchronisier-** line synchronizing impulse, high sync. i. **Zellenfolge-** line sequence impulse, line set impulse, partial scan impulse (in interlaced scanning).
Impuls-abtrenner, Synchronisier- synchronizing separator, amplitude s., clipper. **-erhaltungssatz** theorem of conservation of momentum. **-gabe** impulsing, pulsing, i. transmission or emission. **-geber** impulse generator, surge g., impulsing device, i. transmitter; tonal generator, tonic transmitter. **-generator** (cf -geber) impulse generator, surge g., lightning g. **-messer** peak or crest (voltage) meter.
Impulsmodulierte Wellen pulse-modulated waves (as in radar).
Impuls-ölschalter oil-blast circuit breaker. **-peilverfahren** impulse direction-finding method. **-platte** signal plate (iconoscope).
-prüfung flash or impulse test (of insulation). **-quantenzahl** spin quantum number. **-summe** sum of momenta. **-tensor, Energie-** energy momentum tensor. **-transporttheorie** momentum transportation theory (of turbulent flow). **-verfahren, Doppel-** double impulse method.
Inaktivierung inactivation, deactivation; racemization (opt.). **-optische** racemization (of a quartz crystal).

Inanspruchnahme claim, right of taking advantage of.

Inbetriebsetzen setting in motion, rendering operative, starting, initiating.

Indeterministische Auffassung indeterministic conception or interpretation.

Indexstrich index mark, i. line, gage m.

indirekt geheizte Röhre heater type tube, indirectly heated tube.

- (er) Dampf latent steam.

Induktion, Wechsel- mutual induction.

induktionsfrei(es) Kabel screened (conductor) cable. - (er) Widerstand non-inductive resistance, effective r., ohmic r.

Induktionsspule, variable, variometer.

Induktive Kopplung inductive coupling, transformer c.

Induktivität, punktförmige lumped inductance, concentrated i. (or electrical inertia). -, verteilt distributed inductance, continuous loading. **Streu-** stray inductance, leakage i.

Industriegeräte commercial apparatus, industrial a. (as distinguished from precision and laboratory equipment).

ineinandergreifen interlock, interengage, intermesh (as partial scans).

inertmachen de-activate, devitalize, de-energize.

Influenz electrostatic induction.

Inhalt content (s), area, volume, substance, capacity. **Bild-** picture area, p. content or subject matter, "information". **Flächen-** (surface) area.

Inhaltsangabe table of contents, index.

Inhibierung stay of proceedings, estoppel.

Inhomogenität non-homogeneousness, lack of homogeneity, heterogene-

ousness.

Inklinationswinkel magnetic inclination, m. dip.

Inkrafttreten commencement (of an act or law), coming into force.

Innen-antenne indoor antenna or aerial. -aufnahme indoor shot, studio s.; oscillogram directly recorded on photographic emulsion inside vacuous space. -gewinde internal thread, female t.

-grenzlehre plug gage. -photographieoszilloskop internal photography oscilloscope. -raum-durchführung indoor bush(ing). -taster inside calipers.

innere Quantenzahl inner quantum number. -Reibung solid viscosity, internal friction.

innermolekulare Kette inter-molecular chain.

innwohnend inherent, intrinsic, innate.

Insel island.

Inselartige Ablagerung, Inselbildung "island" formation.

Insgesamt altogether, substantially, on the whole.

Instand-haltung servicing, maintenance work. -setzung repairing, reconditioning, restoration, rehabilitation.

Instanz, Gericht erster court below, lower court. **Gericht höchster-** supreme court. **Gericht zweiter oder höherer** - court above, higher c., c. of appeal. **Gerichtsbarkeit erster** - original jurisdiction.

Instrument, Blech- brass instrument (mus.). **Dreheisen-** moving-iron instrument (of plunger, vane or repulsion type). **Mess-, gedämpftes** deadbeat measuring instrument, aperiodic m.i. **Mess-, ungedämpftes** ballistic measuring instrument. **Schreib-** graphic or recording instrument.

Instrumentausrüstung instrumentation.

Instrumentenfehler variations of bearing due to instruments (df), measuring instrument error.

Integral, Austausch- exchange integral. Raum- space integral.

Integralrechnung integral calculus.

Integrierbar integrable.

Integrieren über integrate over.

Intensitäts-ausfall fading.

-messgerät level recorder.

-steuerung intensity, brightness or brillance modulation (of c.-r. tube), -verfahren variable-density method (of sound recording).

Interferenz-bild interference figure.

-farbe interference color. -gebiet mush area (in chain broadcasting).

Interferenzialrefraktor interferometer.

Interferenz-streifen interference fringes (opt.) -ton beat tone, interference note.

Interferometer, Gitter- grating interferometer.

Interkombinationen inter-system combinations.

Intermediär intermediary, intermediate.

Intermittenzschwingung relaxation oscillation, sawtooth o., ratchet o., timebase o.

Intervall-faktor interval factor.

-regel interval rule (of Landré).

intervenieren intervene, interpose, interfere.

intonation voicing.

intonieren tune (a piano), intone.

in Tritt kommen fall in step, synchronize, phase-focusing (in beam tubes).

Inverter inverter (thyatron).

Invertzeitrelais inverse-time relay.

Ionen, Locker- defective ions, "Locker" i. Sprüh- spray ions. Zwischengitter- interstitial ions. Zwitter- dual, hybrid or amphoteric ions.

ionen-beweglichkeit ionic mobility. -falle ion trap (in electron gun of c.-r. tube). -komponente, Wasserstoff- pH value, hydrogen ion concentration. -rückkopplung ion feedback. -rumpf ion core. -rundlauf circulation of ions. -spaltung ionic cleavage, ionization. -stärkemesser ionometer. -steuerrohr thyatron. -windvoltmesser ionic wind voltmeter. -wolke ionic atmosphere.

Ionisationswärme heat of ionization, h. of dissociation.

Ionisierungs-kammer, Fingerhut- thimble ionization chamber.

-spannung ionization potential, ionizing p., p. sufficient to detach electron from its atomic bond. -spielaufbau Townsend structure or build-up. -stufe stage of ionization.

Iris-auf- und-Abblendung irisising in and out. -blende iris diaphragm.

irisieren irisate, iridize, iridesce.

irreführen confuse, mislead, misdirect.

Irrung correction.

Isoklinen isoclinics (lines of equal darkness, in photoelasticity).

Isolations-messer insulation tester, megger. -prüfung, Stoss- impact, impulse or flash test. -widerstand insulation resistance, insulation (reciprocal of leakance).

Isolator, unvollkommener imperfect dielectric, leaky insulation.

Abspann- terminal insulator, strain i. Abstand-, Distanzstand-off insulator, spacing i.

Durchführungs-, Einführungs- feed-through insulator, lead-in i., wall duct, bushing.

Freiluft- outdoor insulator.

Kreuzungs- transposition insulator.

Pilz- mushroom, petticoat or umbrella insulator (long leakage path).

Stütz- pin insulator, rod i.
Wanddurchlass- wall lead-in or
bushing insulator.

Isolier-masse insulating compound,
i. paste, moldable or fictile i.

substance, "dope." -masse,
gepresste molded insulation.
-röhre buffer tube, isolating
valve.

Isotopieverschiebung isotope ef-
fect, i. shift.

J

Jacarandaholz rosewood.

Jahresgebühr annual fee or tax.

Jahreszeitliche Änderungen
seasonal variations.

Jalousiebretter louvres.

Japan-lack Japan lacquer, J.
varnish.. -wachs Japan wax.

jeweils under given or prevailing
conditions; at the time, in each
case.

Jodieren iodizing (of a negative).

jungfräuliche Kurve virgin curve.

Justier-greifer pilot claw (m.p.)
-stift pilot pin, registration p.
(film printing.)

Justierung, Film- registration of
film.

Jutebeilauf jute filler (cable mak-
ing.)

K

K Absorptionskante, K. wert

K edge, K absorption limit.

K Wert octantal component of quadrantal error (QE) due to fuselage.

K and L Schale-Abschirmungskoeffizient K and L shell absorption coefficient (screening function.)

Kabel, gemischtpaariges composite cable. - , induktionsfreies screened (conductor) cable.

- , konzentrisches co-axial line, concentric l. or cable, pipe l.

- , mehradriges multi-wire cable.

Erd-leader cable, pilot cable, buried c. (for airplane landing.)

Faden- co-axial or concentric cable with silk-thread-supported conductor. Leit- leader cable, pilot cable (for airplane landing.)

Papierhohlräum- airspace paper-core cable, dry-core c.

Photozellen- low-capacity shielded cable between photo-cell and amplifier, video c., concentric or co-axial c.

Kabel-schuh cable eye, c. socket, connector lug, sweated thimble.

-verlegung cable laying, burrying of a c. -wachs cable wax.

Kabine, Kino-, Vorführungs- projection room, p. box; p. booth (in back projection.)

kadmiertes Eisen cadmium iron.

Käfig, Auffänger- collector electrode (in Farnsworth dissector.).

Faraday'scher Faraday shield, F. screen, F. wire cylinder.

Rollen- roller cage.

Käfig-antenne cage antenna. -spule canned coil, shield c., cage c.

-transformer shielded transformer.

Kaliber bore, pass, caliber, diameter; groove. -dorn, Toleranz- tolerance plug gage.

kalkartig calcareous, limy.

Kalk-schleier chalk fog. -spat calcite.

Kalorimeter, Eis- ice calorimeter.

Kondensations- steam calorimeter.

Kalotte cup-shaped, cap-shaped or hemispherical part, calotte.

Kalottenmembran hemispheric or cap-shaped (metallic loudspeaker) diaphragm.

kalt(er) Farbton cold color hue.

kalt(e) Kathode cold cathode (as in photo-tube and BH type gaseous rectifier).

Kaltaushärten cold tempering.

kalt-bläsig refractory (of metal.) -brüchig cold short-brITTLE.

Kälteeinheit frigorie.

kältezeugend frigorific, cryogenic.

Kälte-punkt solidifying point (of oil). -regler cryostat.

Kalt-lack cold varnish. -schlag cold heading die. -sprödigkeit cold brittleness. -stauchmatrize cold upsetting die. -verformung cold working, c. shaping.

Kamera, Atelier- studio camera.

Berufshand- professional hand camera. Geheim- detective camera, concealed c. Hochfrequenz- high-speed camera. Laufboden- base-board extensible camera. Loch-

pin hole camera. Mikrospektral- microspectroscopic camera. Nebel- cloud chamber. Rundblick- panoramic camera. Spreiz(en)- strut camera, extension c. Ton-

sound recording camera. Trick- trick camera. Wilson- fog, cloud

or expansion chamber (of Wilson).
Kamera-auszug camera extension.

-balgen camera bellows. -fahrgestell camera truck, dolly.

-laufwerk feed mechanism. -mann, Atelier- studio cameraman. -mann, Ton- recordist.

Kamm, Folgeschalter- sequence switch, cam.

Kämmen der Turbinendichtungen rubbing of labyrinth seals.

Kammer chamber, room, space, camera, compartment. Aufzeichnungs-recording chamber (of electron microscope). Fingerhut(ionisierungs)- thimble ionizing chamber. Klein- small (air) chamber for ionizing work. Leistungs-energy chamber (of klystron).

Luft- air pressure space (of a loudspeaker.) Nachhall- reverberation room, r. space or enclosure. Wilson- Wilson fog, expansion or cloud chamber.

Kammer-gericht Supreme Court (of Prussia.) -lautsprecher, Druck-pressure chamber loudspeaker, pneumatic l. (without diaphragm.) -ton "A" of tuning fork.

Kamm-lager (concealed) collar thrust bearing. -rad cog wheel. -zwecke tack.

Kampfstoffe (chemical) warfare substances.

Kanadabalsam Canada balsam.

Kanal, Film-, Führungs- film track, f. channel (in film camera.)

Funken- spark track. Sendetransmission channel, signaling c. Teil- sub-channel. Übertragungstransmission channel. Vorentladungs pre-discharge track.

Kanalfilter channel filter.

kanalig, mehr- multi-channel.

Kanal-strahl canal ray, positive r., diacathode r., anode r. -tastung, Ein- single-channel pulsing (telev. synchronization.)

Kanonenbronze gun metal, g. bronze.

Kanonier, Richt- gunlayer.

Kante, ablaufende trailing edge. Leit- leading edge, l. tip (of airplane wing). Schmal- narrow edge, n. side.

Kanten-schärfe resolution on border (of a picture.) -schema Deslandres diagram (of spectral band systems.)

-system zero-line system, edge s.

kantenweise edgewise, on edge.

kantenwirkung edge effect, fringe e.

Kapazität s. a. Kondensator

Kapazität, akustische acoustic capacitance, a. compliance (reciprocal of a. stiffness.) -,mechanische compliance. -,punktförmige concentrated capacitance, lumped c. -,verteilte distributed capacitance, self-c.

Kapazität, Beruhigungs--smoothing capacity. Dach- top (loading) capacity. Eigen- self-capacitance.

Elektroden- (inter-) electrode capacitance. Ersatz- equivalent capacity. Kipp- time-base condenser. Röhren- (inter-)electrode capacitance. Sättigungs-saturation capacity. Schalt-

circuit capacitance. Selbst-self-capacitance, distributed capacity (of a circuit, etc., due to proximity effects.) Streu-stray capacitance, distributed c., spurious capacity. Teilerd-direct earth capacitance.

Verdunkelungs- shading condenser. Verlust- imperfect capacity, leaky c.

Kapazitätsarm of low capacity or capacitance.

Kapazitätsbrücke capacitance bridge, farad b., Wien b.

Kapazitätsgerader Kondensator straight-line capacity condenser.

Kapazitäts-messer faradmeter.

-probe capacity test. -reaktanz capacitive reactance, negative r.

Kapazitiver Blindwiderstand capacitive reactance, negative reactance, condensance.

Kapotte, Abblende- dimming cap.

Kappe cap, hood, top, dome, crown, can. **Aufsteck-** slip-on cap.

Hexoden- top cap of hexode tube. **Lichtschutz-** light-hood (phot.) **Ohren-** ear muff.

Kapsel capsule, case, box (printing), cap, chill, mold (foundry), sagger (cer.). **Mikrophon-** microphone button (housing), capsule. **Sprech-** condenser microphone.

Kapsel-blitz flashlight capsule. **-guss** casting in chills; chilled work. **-ton** sagger clay, capsule c.

karburiert, öl- oil carburetted.

Kardan-gelenk, -kupplung universal joint.

Kardinalpunkte cardinal points (opt.)

Kadioide, Wechsel- switched cardioid (space pattern).

Kardioidenbildung cardioid formation (of space pattern or directional diagram.)

kariert cross-hatched.

Karneol carnelian.

Karolus-Kerr Mehrfachplattenzelle Karolus multi-plate Kerr cell.

Karte, gnomonische gnomonic chart (straight-course chart.)

Merkator- Mercator chart.

Strecken- route (airway) map.

Kartei card index, c. catalog.

Kartenaufnahme, photographische photographic mapping.

Karten-kurs map course. **-netz** graticule. **-projektion,** Merkator- Mercator or cylindrical projection (orthomorphic p.) **-winkelmeß** map protractor.

kartesische Fläche Cartesian surface.

Karton, Bristol- bristol board.

Kartotheke card index, c. catalog.

kaschieren place on a support, base or other surface; coat with paper.

Kaskaden-schaltung cascade connection, cascading; concatenation or tandem connection (of motors.)

-verstärker cascade amplifier, repeating a.

Kassette spool box, darkslide (phot.); cassette (X-ray work), sagger, coffer, casket. **-,leise** silenced magazine. **Anlege-** clamp-on darkslide. **Tageslicht-** daylight loading magazine (m.p.). **Kassetten-rahmen** darkslide carrier. **-schieber** shutter of darkslide.

Kastagnetten castanets.

Kastanienholz chestnut wood.

Kasten, Geräusch- equivalent acoustics (for special sound effects and noise imitations.) **Potential-** potential well, p. hole. **-drachen** box kite.

Katheten perpendicular and base adjoining hypotenuse (in a right-angled triangle.)

Kathode cathode, filament, emitter (of electrons.) **-,direkt geheizte** direct-heated cathode. **-,geschichtete** (oxide-) coated cathode; photo-c. with light-sensitive layer. **-,indirekt geheizte** indirectly heated cathode (in heater-type tube), unipotential c., iso-p. c. **-,kalte** cold cathode (as in photo-tube and in BH type gaseous rectifier). **-köörperliche** physical cathode, material c.

Kathode, Anti- target, anti-cathode (of X ray tube). **Flächen-** plate-shaped cathode (of neon tube as distinguished from point or crater.) **Hohl-** concave cathode, hollow c. **Oxyd-** oxide-coated filament, dull emitter. **Paste-** oxide-coated (pasted) cathode. **Photo-, zusammenhängende** mirror type or continuous photo-cathode, photo-electric c. **Punkt-** point-source cathode, crater c. **Quecksilber-** mercury-pool cathode. **Raster** (photo)- mosaic, rastered photo-cathode screen. **Rein-** bright emitter (often thoriated c.) **Schicht-** cathode bearing a layer

or coat (of oxide, photo-sensitive substance, etc.). **Siedekühlung**- vapor-cooled cathode.

Kathoden-anheizzeit cathode heating time (till stable temperature is reached), thermal time constant.

-**ansatzpunkt** spot (of arc) formed on cathode. -**dunkelraum**,

Crookes cathode dark space,

Crookes' dark s., Hittorf's dark s.

-**fackelerscheinung** cathode flicker effect.

-**fallableiter** valve arrester. -**fleck des**

Hg-Lichtbogens, **fixierter** anchored cathode spot of mercury arc.

-**licht(haut)** cathode glow.

-**linie** cathode line. -**neuaktivierung** cathode re-activation, c.

rejuvenation. -**siedekühlung**

vapor cooling for cathode.

-**spratzen** flicker or spitting of cathode. -**sprung** cathode jump of potential.

Kathodenstrahl-abtaster electron-beam scanner. -**bündel** cathode-ray beam or pencil; gun. -**intensitätskontrolle** cathode-ray beam intensity modulation (by shield, grid or Wehnelt cylinder).

-**röhre** thermionic tubes (obs.); beam tube; c.-r. tube, oscilloscope, iconoscope, emittron, and other tubes operating with beam and screen; Lenard t. -**röhre**, gasgefüllte gas-filled c.-r. tube, soft t. working with a c.-r. (for ionic or gas focusing).

Kathoden-verstärker cathode follower. -**zerstäubung** cathode disintegration, c. spatter, sputter or sputter.

Kathodo-lumineszenzlampe cathode-glow tube. -**phon** cathodophone, diaphragmless microphone, glow-discharge m.

Kation cation (positive ion moving toward cathode; negative ion called anion).

Katzenauge bull's eye (small thick lens). **kaubar** masticable.

Kauf nehmen, in accept something (at the expense of), be tolerable or tolerated.

käuflich commercial (grade), merchantable, purchasable.

Kaustik caustic (opt.).

Kaution stellen give bail, bond or security.

Kavitation cavitation.

Kegel, Anflug- sector of approach.

Ganzpol- polehole cone, body cone.

Licht- cone of light, luminous c.

Rastpol- herpolhode, space cone.

Reibungs- pole of friction. **Seh-** angle of vision, cone of v. (camera work.) **Strahlen-** cone of rays. -**Stumpf-** truncated cone, frustum.

Kegel-antenne, Doppel- double-cone antenna, cage a. -**druckprobe** cone (indentation) test. -**feder** volute spring. -**lehre** taper gage.

-**mantel** cone-shaped shell. -**projektion** conical projection (of a map).

-**rad** bevel wheel, cone w., mitre w.

-**radgetriebe** bevel gearing, mitre-wheel g. -**schnitt** conic section.

-**stumpf** truncated cone, frusto c., frustum. -**ventil** conical valve, ball v.

Kehle throat, larynx, channel, flute.

kehlen groove, slot, flute, channel, key.

Kehl-kopfmikrophon laryngophone, throat microphone. -**nahtschweisung** fillet weld.

Kehr-doppelwendel reversed double loop. -**wendel** return spiral, reversed s., helix, coil or loop.

-**wert** reciprocal value, inverse v.

-**wert, Zähigkeits-** fluidity (reciprocal of viscosity).

Keil wedge, key, cotter, jib, liner, shim. **Dreiecks-** triangular wedge.

Goldberg- Goldberg wedge, neutral (grey) w. **Streifen-** photometric wedge.

Stufen- step tablet, stepped (photometric) absorption wedge (X-ray, etc., work).

Keil-flach spheroid. -nute keyway.
-schwärzungsmesser circular wedge densitometer.

Keim nucleus or seed (cryst.), germ.
Kristall- crystal nucleus, seed c.
Reif- digestion nucleus.

Keim-kristall crystal nucleus,
nucleus crystal. -ling nucleus
(cryst.), germ, embryo. -wirkung nuclear action, action of nuclei
(cryst.) -zenter grain center.

Keller-armatur boiler fittings.
-ton tunnel effect, boom e.

Kenndämpfung iterative attenuation constant.

Kenndämpfungswiderstand iterative impedance; characteristic i.
(for uniform line).

Kennedy-Heaviside Schicht Kennedy-Heaviside layer.

Kenn-faden (colored) tracer-thread
(for c.coding). -grösse characteristic quantity, c. magnitude.
-grösse, Übertragungs- transfer characteristic. -leitwert in-
dicial admittance.

Kennlinie, Arbeits- operating or working characteristic or curve, performance c. **Dynamik-** volume (range) characteristic. **Frequenz-** frequency-response characteristic. **Richt-** directional diagram or space pattern (df); rectification characteristic. **Schwing-** oscillating characteristic, resonance c.,c. of an oscillatory system.

Touren-Belastungs- speed-load characteristic. **Übernahme-** transfer characteristic.

Kennlinien-feld family of characteristics or curves. -kippung characteristic straightening.
-knick, oberer upper bend or knee of characteristic. -kick, unterer lower bend or knee of characteristic.

Kennsignal tuning note (characteristic audio signal for tuning),c. sign or signal (of Morse code or other identification), signature of a station, theme.

kenntlich machen characterize, identify, make conspicuous, identifiable or distinguishable.

Kennung, Funkfeuer- call or distinctive signal (of a beacon station.)

Kennungssignal distinctive, identifying or code signal, signature.

Kenn-widerstand characteristic impedance, image i., indicial i.

-winkelmaß iterative phase constant. -zahl characteristic factor, office code. -zeichen character. or distinguishing mark or feature, sign, identification, symptom; object (of invention or patent).

kennzeichnen characterize, distinguish, code.

Kenn-zeichnung, Farb- color coding.
-ziffer characteristic.

Kerb, scharfe sharp notch, nick or groove; slot, slit. **Rund-** round notch, Charpy notch (with root radius.)

Kerb-dauerfestigkeit notch fatigue strength. -empfindlichkeit stress concentration index. -nute keyway. -schlagzähigkeit notch impact tenacity.

Kerbverzahnt splined (externally or internally.)

Kerb-wirkungszahl fatigue stress concentration factor. -zähigkeit notch tenacity.

Kern nucleus, core, grain, kernel, pip, stone, pith, heart, crux (of a matter.) -, geblätterter laminated core. **Eisenpulver-, gepresster** compressed iron-dust core, Ferrocarr c. **Film-** reel, spool.

Kristall (isations)- center or nucleus of cristallization.

Lamellen- laminated core. **Luft-** air core. **Masse-** compressed iron-powder or dust core, molded c., Ferrocarr c. **Nachfolge-** product nucleus. **Spulen-** bob or core of a spool (m.p.) **Staub-** duct or mold-ed core, Ferrocarr c. **Verunreini-gungs-** impurity nucleus.

Wasserstoff- H particle, hydrogen particle or nucleus, proton, deuteron (when of heavy hydrogen or deuterium.) Zwischen- compound core, "intermediate".

Kern-abstand inter-nuclear distance.
 -anregung nuclear excitation.
 -bildung germination, nucleation.
 -distanz internuclear distance.
 -durchdringung (Potentialschwelle) nuclear penetration function.
 -farbe nuclear stain.

kernferne Elektronen planetary, peripheral, orbital or outer (-level) electrons (farthest from nucleus), valence e., conduction e.

Kerngehalt nuclear concentration, content of nuclei.

kerngestreut deflected by nucleus.

Kernguss cored work (foundry).

kernig, ein- uninuclear, mononuclear.

mehr-, viel- multinuclear, poly-nuclear, having a plurality of nuclei or cores, polycyclic.

Kern- körper(chen) nucleolus.

-ladungszahl charge on nucleus, nuclear charge number, atomic number. -magneton (K.M.) nuclear magneton. -moment, magnetisches nuclear (magnetic) moment.

kernnahe Elektronen inner(fixed) electrons, e. adjacent nucleus.

Kern-physik nuclear physics.

-potentialschwelle, Durchdringung der nuclear penetration function.
 -schatten umbra. -schliff male part of ground-in joint. -spin nuclear spin. -spule, Masse- dust-core coil, compressed-iron-core coil.
 -teilung nuclear division.
 -theorie nuclear theory.
 -umänderungsprozess nuclear disintegration process. -umwandlung nuclear transmutation. -verlust core loss, iron l. -wechselwirkung nuclear inter-action. -zerplatzen nuclear fission or disintegration.

Kerr Mehrplattenzelle, Karolus- Karolus multi-plate Kerr cell.

Kerze, römische Roman candle, magnesium torch, smoke pot.

Kerzenstärkencharakteristik candle-power characteristic.

Kessel boiler, vessel, tank, pot. Druckwind- compressed-air tank, blast pressure tank. Etagen-battery boiler.

Kesselsteinbildung boiler scale formation, incrustation.

Kette filter, network; channel, chain, train, series, bondage.

-, elektroakustische channel (in sound recording or reproducing), electro-acoustic transducer.

-, innermolekulare intra-molecular chain. Abstimm- tuning arrangement comprising a plurality of oscillation or tuning circuits. Drossel- low-pass filter.

Entzerrer- corrective network, equalizing n. Gelenk- link chain.

Neben- side chain, subordinate c. Sieb- ladder-type filter, band-pass f. or network. Sperr- low-pass filter. Sternglied- T network. Transport- conveyor chain.

Verstärker- amplifier cascade. Verzögerer- delay network.

Widerstands- voltage divider, potentiometer.

Ketten-brüchmethode method of infinite continued fractions.

-durchhang slack or sag of a chain. -fläche catenoid. -flaschenzug chain tackle block. -glied network or filter mesh or section.

Kettenleiter iterative network, recurrent structure. -erster Art II (π) network. -, mehrgliedriger multi-mesh network. -, mit 1/2

Längsglied endender mid-series terminated network. -, mit 1/2

Querglied endender mid-shunt terminated network. -, vielgliedriger multi-mesh network, multi-section n. -, zweigliedriger two-section network.

Ketten-leitermasche mesh, section of a network. -linie catenary.
-molekül chain molecule. -rad sprocket wheel. -rollenscheibe chain sheave. -schaltung relay chain circuit. -widerstand iterative impedance.

K-H Schicht Kennedy-Heaviside layer. Klefernholz pinewood.

Kieselzinkerz willemite.

Kimm (sea) horizon. -tiefe dip of horizon.

Kino motion-picture theater, film playhouse, movie.

Kino, Fern- telecine, telecast, intermediate-film television system. **Koffer-** portable projector. **Spielzeug-** home movie.

Kino-film-Fernsehabtastung telecine scan of film, pickup of pictures from moving-picture f. -kabine projection booth. -positiv moving picture positive. -skala station name projection scale.

Kipp... time-base, relaxation, "kipp," trip, triggering.

Kipp-drossel cut-off choke (regulates battery charging). -einsatz, Bild-incipient frame flyback. -einsatz, Zeilen- incipient line fly-back. -elektrometer Wilson electrometer (gold leaf given different positions by tilting case).

Kippen retrace, reversal or return of pencil (in scanning); trip over, trigger; tip, dump, tilt.

Kippentladung condenser discharge (in time-base).

Kippentladungsröhre time-base discharge tube.

Kipper, Bild- frame time-base. Zeilen- line time-base.

Kipp-erscheinung jump phenomenon, swing p. (in arts other than television). -frequenz relaxation frequency, time-base f. -gerät time-base, deflector means, relaxation oscillator, trigger device. -gerät, Gegentakt- push-pull time-base. -hebelschalter toggle switch (with projecting lever).

-impuls tripping impulse, -kapazität time-base condenser. -kreis time-base circuit, trigger c., relaxation c. -moment maximum torque (mech.) -oszillator, Sperr- blocking oscillator. -periode time-base period. -schaltung, Glimmlampen-neon-lamp time-base circuit scheme. -schwinger time-base oscillator.

Kippschwingmethode, fremdgesteuerte, unselbständige distant-operated (non-self-running) time-base method. -selbständige, mitgenommene self-running controlled time-base method.

Kippschwingung relaxation, sawtooth or ratchet oscillation, time-base o., kipp o. -selbständige - self-running time-base. Bild-frame or picture time-base oscillation or impulse. Zeilen- line time-base impulse or oscillation.

Kipp-schwingungsdauer relaxation period. -sender, Sperr- blocking oscillator. -spannungsrücklauf flyback of sweep potential, return of time-base p. to zero. -spiegel oscillating mirror, vibrating m.

Kippung, Kennlinien- characteristic straightening.

Kippvorgang time-base action, ratchet a.

Kirsche, Schmelz- igniting pellet.

Kirschrotglut cherry-red heat, cherry redness.

Kissen, Luft- air cushion, dashpot. **kissenförmige Verzeichnung** pincushion distortion, pillow d. (telev.).

Kittlehre, Film- film splicing gage. **klagbar werden** bring action or suit (against).

Klage, Einstellungs- action for discontinuance (of an infringement, etc.) **Feststellungs-** declaratory action. **Nichtigkeits-** action or suit for cancellation, annulment or invalidation. **Patent-** patent suit, patent action, p. litigation. **Patentverletzungs-** action or suit for infringement of patent rights.

Schadenersatz- action for damages.
Unterschiebung- suit for passing off goods as though of another person.

Klage-abweisung dismissal of claim, non-suit. -**Beantwortung** reply, response, answer, defense (plea). -**Grund** cause of action.

Klagen bring action, sue, file a suit.

Klagepatent patent in issue, in suit, at bar.

Kläger plaintiff, complainant.

Berufungs- appellor. **Wider-** cross or counter-claim plaintiff.

Klageschrift plaint, bill of charges, statement of claim, bill of particulars, plaintiff's declaration.

Klammer clamp, clasp, clip; bracket (round or square, used in mathematical formulae, etc.). (Round brackets are strictly known as parentheses in typography).

Gabel- forked clamp. **Verbindungs-** brace, clip connector.

Klang s.a. Ton, Akustilk, Geräusch und Schall.

Klang, blechnernt tinny sound. -**zusammengesetzter** complex (musical) sound. **Doppel-** echoed sound (hearing sound twice, i.e., by electric transmission and by transmission through air).

Einzel- (sounding of an) individual note or tone. **Gleich-** unison, consonance, resonance.

Klang-bild sound pattern, acoustic p. -**blende** tone-shading means, tone switch, t. control, tonalizer.

-**drossel** tone-control choke (coil).

-**einsatz** acoustic intonation, onset of a sound. -**farbe** timbre,

tone color, quality. --, **helle** strident timbre, shrill sound.

-**fär bemittel** tone-shading means, tone or timbre control m., tonalizer.

-**farberegler** tone control, tonalizer.

-**figur** sound pattern, acoustic figure. - **fülle** sound volume. -**gemisch**

sound spectrum.

klanggetreu of high fidelity, orthophonic (of reproduction of sound).

Klang-intensitätsbereich dynamic range of sound. -**reiniger** acoustic clarifier (on ldpsk. baffle).

Klappe (clack) valve, flap, trap, lid, damper, stop, key (of wind instrument), pallet (of harmonium).

klappen strike, clapper; clap, flap, fold, move in various directions, often about pivots or hinges, to open or close, as the lid of a chest or the cover of a box. **auf-, hoch-** fold, raise or lift to open or erect, on hinges, as the cover of a talking machine. **weg-** swing or fold out of the way. **zu-** drop, move, swing or let down (for shutting) on hinges.

Klappen-horn key horn. -**mechanismus** key work, k. action.

Klappern chatter, rattle.

Klappensignal see Klatsche.

Klapp-kamera folding camera, collapsible c. -**kassette** hinged dark-slide. -**sucher**, **umlegbarer** reversible folding finder. -**variometer** hinged-coil variometer.

klar clear, distinct, pellucid, lucid; intelligible, articulate.

-**bestimmt** uniquely determined, definitely or clearly defined.

Klär-bad clearing bath. -**bassin**, -**bottich** settling or clearing tank, tub, vat or reservoir.

Klarinette clarinet, clarionet.

klarmachen standby, make ready, alert.

Klärmittel, **Klärungsmittel** clarifying or clearing agent, clarifier, fining substance.

Klartonverfahren noiseless film method.

Klatsche beat or clappers (to mark sound and picture tracks for synchronization).

Klatschenbild beat picture.

Klaue claw, paw, pawl, catch, clutch, grasp.

Klauen-kupplung claw clutch, c. coupling.

Klaviatur keyboard, bank of keys.
Klavierharfe keyed harp, piano harp.
Klebäther collodion.
Klebband friction tape, adhesive or sticky t.
Klebemittel adhesive, agglutinant, cement.
Kleben sticking (of a keeper), freezing, adhering, clinging; cementing, gumming, glueing. -der
Elektronen capturing or sticking of electrons (to electro-negative gases, surfaces, etc.) Film-blooping, patching or splicing (of film).
Klebe-presse bloopoer, splicer (for making blooping patches in film).
-stelle, **Ton-** bloop, blooping patch or splice (on sound film).
-stellengeräusch splice bump, dull sound due to blooping patch, wowows, blooping. -tisch splicing table, s. bench.
klebrig sticky, adhesive, pasty, viscid, glutinous.
Klein-bildphotographie microphotography, photomicrography. -film narrow film, sub-standard f.
-gefüge, **micro-structure**, fine structure. -kammer small (air) chamber, thimble (for ionizing work). -lampe miniature lamp.
-lader trickle charger. -lebewesen micro-organism. -lichtbildkunst photomicrography, microphotographic art.
kleinlückig of fine porosity, close-grained.
Kleinröhre miniature tube (of acorn, midget, etc. type).
kleinsten Quadrate, **Methode der** method of least squares.
Kleinmaschine miniature machine.
Kleinumfangkopien "lo-range" prints.
Klemme terminal, binding post, connector, clamp.
Klemmeffekt pinch effect (in needle reproduction of sound).
Klemme, **Eingangs input terminal**. Erd-ground clamp. **Verbindungs-** connector means, binding post, terminal.

Klemmenwiderstand terminal impedance, t. resistance.
Klemmschraube clamp, lock or thumb screw; binding post, terminal.
Klick, Tast- key thump, k. click.
Klima-gürtel climatic belt. -technik air conditioning.
Klimatisierung air conditioning.
klimpernd harsh or strident (of a tone or sound containing strong harmonics and high partials), grating, shrill, tingling.
Klingeldraht bell wire, annunciator w.
Klingen sounding, ring (of a tube).
Klingfähigkeit ringing noise, microphonic n. (of a tube).
Klinke, **Batterie-** battery jack.
Doppelsperr- double dogs, pawls or detents. **Rast-** detent, latch, pawl. **Sperr-** pawl, catch, latch, click, detent, ratchet.
Klinken-scheibe notched disk, ratchet disk. -stecker jack, plug switch.
Klinkwerk trip gear, release g.
Klirrdämpfung correction of non-linear harmonic distortion.
Klirren scratch (of a loudspeaker), clink, clatter.
Klirrfaktor non-linear harmonic distortion factor, klirr f., blur or rattle f.
klopfen beat, knock, tap.
Klopffeind anti-knock agent (engine).
Klöppel, **Glocken-** bell hammer, b. striker. -stange clapper rod, c. stick.
klumpig clotted, clotty, lumpy.
Klystron klystron (ultra-high-frequency oscillator with two rhumbatrons acting as buncher and catcher).
K.M. (Kernmagneton) nuclear magneton.
knacken crack, crackle, click, crepitate.
Knagge cam, catch, peg, stop, lug, bracket.
Knall detonation, explosion, report, crack, pop, pistol shot noise.
Knall-gas, **Wasserstoff-** detonating

gas mixture (of H and O), oxyhydrogen gas. -gasgebläse oxyhydrogen blowpipe. -pyrometer explosion pyrometer. -satz detonating composition.
 -schutzgerät pistol shot silencer, crack s., noise killer (radio).
 -welle shock wave (ac.)
 knapp close, tight, narrow; scanty, meager, brief, concise.
 Knarre ratchet.
 knarren crackle, rattle, crack (of loudspeaker), creak, squeak.
 Knebel-bolzen toggle bolt.
 -griffschraube tommy screw.
 kneifen nip, squeeze, pinch.
 kneten knead, pug (cer.).
 Knet-holz plastic wood. -legierung plastic alloy, wrought a., malleable a.
 Knick break (in curves); crack, flaw, kink; bend or knee (e.g., upper and lower, of tube characteristic).
 knicken crack, break, buckle, collapse.
 Knick-festigkeit flexibility (of a film), breaking strength, buckling strength (of metal). -punkt, -stelle kink or knee, break (of a curve). -Widerstandsfähigkeit folding endurance (of film), breaking or buckling strength.
 Knie knee, bend (of a curve); elbow, knuckle.
 knieförmig knee-shaped, geniculate.
 Kniegelenk knee joint, elbow j.
 Kniff (cf. Trick) artifice, trick, device; crease, pinch.
 knistern crackle, crepitate, rustle (silk).
 Knitterfestigkeit crumpling strength.
 Knöllchen nodule, little knob or node.
 Knolle lump, knob, node, nodule, knot.
 knollig knobby, knotty, bulbous.
 Knopf button, knob. Druck- push button, press button. Einstell- focusing knob (camera). Trieb- milled head, pinion h. (micr.).

Knopf-empfänger, Druck- pushbutton-tuned receiver, receiver with automatic tuning. -karte instruction chart. -röhre shoobutton tube, acorn t.
 Knoten node, nodule, knot, knob; plot. -abstand internodal distance. -ebene, -fläche nodal plane, n. surface (opt.). -linie neutral line, common l., nodal l.
 -punkt, -stelle nodal point (opt.); junction p. -strahl beam or pencil of non-uniform section, in gas-focused c.-r. tubes, due to poisons and secondary electrons.
 -verbindung transfer joint, temporary bridge.
 Knüppelisolator club-type insulator, pin i.
 knurrnen growl, snarl, rumble.
 Kochbecher beaker.
 Koch-beständig resistant, stable or fast to boiling (dyes, etc.). -echt fast to boiling (dyes).
 kochend(er) Akkumulator agitated or gassing accumulator (just disconnected from charger). - (es) Geräusch boiling noise.
 Kochpunktmeßer ebullioscope.
 Koeffizient s.a. Faktor und Beiwert.
 Koeffizient, Ausnutzungs- utilization coefficient. Extinktions- total-absorption coefficient, extinction c. Gleitungs- slip coefficient. Mittführungs- Fresnel coefficient of drag. Schwächungs- absorption coefficient. Vereinigungs- combination coefficient.
 Koerzitivkraft coercive force, coercivity (sometimes: retentivity). -messer coercimeter.
 Koffer, Speisungs- current feed box. -apparat box equipment, trunk unit (for sound and picture pickup). -kino portable projector equipment.
 Kohärenzlänge der Wellenzüge coherence length of wave-trains.
 Kohäsionsfestigkeit cohesion strength.

Kohle coal, charcoal, carbon, carbonaceous material. -**salz-**getränkte mineralized carbon, impregnated c. Docht- cored carbon. Effekt- salted carbon, c. for flame-arc. Härtungs-hardening carbon, cementing c. Hochintensitäts- high-intensity carbon (for arcs). Rein- solid carbon.

kohlefrei carbon-free, non-carbonaceous.

Kohlen-korn carbon granule, c. grain. -**körngeräusch** carbon noise (of microphone). -**mikrophon**, atmendes breathing of microphone (slow changes of resistance and response of carbon m.)

kohlen char, carbonize, carburize.

Kohlennachschub carbon feed.

Kohlepuppe (Trockenelement) carbon rod (of dry cell).

Kohlholz charcoal.

kohlschwarz coalblack, jet-black.

Kokosfaser coco fiber, coir (fiber from husk of coconut).

Kolben piston, plunger, ram, bulb, iron or bit (for soldering).

Mess- graduated flask, measuring f., gage f. Röhren- bulb or vessel of a tube (radio). Schliff-ground-in glass stopper. -membran piston diaphragm. -stange piston rod.

Kollektiv des Okulars field lens of eyepiece.

Kollektor commutator, revolving contact-maker, distributor, rotary switch.

Kollimationslinie collimating mark (opt.).

Kollisionsverfahren interference action or procedure (law).

Koma-abbildung,-bild comatic image. -reste höherer Ordnung independent coma of higher order.

Kombinations-aufnahme combination exposure, composite shot, mask method of shooting. -blende Goerz effect shutter. -register combination stop (organ). -stimme mutation stop (organ). -töne

combination (difference or summation) tones.

Komikbilder film cartoons, funnies. **Kommando-gerät** data computer, ballistic director (gunnery).

-stelle order point, order place, o. station (bridge); impulsing or control-action transmitter (remote control). -übertragung zwischen Flugzeugen inter-aircraft command or voice communication or signaling.

kommutieren reverse (polarity, connections, etc.)

kompakt compact, solid; non-apertured.

Komparator, **selbstrechnender** computing recording comparator.

Komparserieraum extras room.

Kompass, **Kreisel-** gyro-compass.

Ortungs-, Peil- navigation compass. Tochter- auxiliary compass, repeater c. Trocken- dry compass.

Kompass-büchse compass bowl, c. kettle. -kurs compass course, steered c. - rose compass card, c. scale. -strich point of compass.

Kompendium Goerz effect set (to obtain different effects, fading, etc. in motion picture work).

Komplementwinkel complementary angle.

komplexe konjugierte Grösse conjugate complex quantity.

Komponente, **ausserordentliche** extraordinary component (of rays).

-**ordentliche** ordinary component (of rays). Blind- wattless, idle, quadrature, reactive or reactance component (of impedance). Wirk-active, wattful, energy or in-phase component.

Komprimieren der Laufzeit transit-time compression.

Kondensanz capacitive reactance, condensance.

Kondensationskalorimeter steam calorimeter.

Kondensator s. a. Kapazität

Kondensator, **frequenzgerader**

straight-line frequency condenser or capacitor. (Note: Capacitor nowadays is preferable).

-**gleichlaufender** ganged condense.

synchronized condenser. -, kapazitätsgerader straight-line capacity condenser. -, quadratischer square-law condenser. -, unvollkommener leaky condenser. -, wellengerader straight-line wave (length) condenser. Abgleich-aligning condenser, trimming c. Blätter- foil capacitor, tubular c., Mansbridge (paper) c. Block-blocking condenser, stopping c., insulating c., fixed c. End-terminating condenser. Fest-capacitor, fixed or invariable condenser. Fühler- pickup or scanning condenser (used in sound reproduction). Gelenk- swing-out condenser, book c. Glättungs-smoothing condenser. Hochdruck-pressure-type capacitor (in nitrogen high-p. tank). Hütchen-ceramic hood-shaped capacitor. Mehrfach-, Mehrgang- multiple condenser, ganged c., synchronized c., tandem c. Mittellinien-logarithmic condenser (relation between capacity and angle obeys l. law). Nachstimmungs- aligning condenser, trimming c.; vernier c. Quer- shunt condenser, by-pass c., bridging c. Quetsch- compression type condenser. Schluss- terminating condenser, short-circuiting c. Sperr- stopping condenser, insulating c., blocking c. Trocken-dry electrolytic condenser. Überbrückungs- bridging condenser, by-pass c. Verkürzungs- shortening condenser, padding c. Vervielfältigungs- condenser-type d.c. multiplier. Wickelblock-tubular condenser, paper capacitor, mica c. (made of metallized or foil-coated insulation strip). Zeitkreis- time-base condenser. Kondensator-abschlusswände end shields (forming "tub" of ganged condenser). -belagverlust surface leakage loss of a condenser. -klemme condenser type bush or terminal. -leitung high-pass filter. -mikrophon condenser microphone.

phone, electrostatic m. -rückstand residual charge of condenser. -sirene condenser siren (produces pulsating current). -wanne tub-like container with end plates or shields of dielectric or sheet-metal to accommodate a condenser; ganged c., multiple c. kondensierte, nicht-, Hochstromentladung uncondensed heavy-current discharge. Kondensorspule condenser coil (of electron microscope). Konduktanz, Röhren- transconductance (of a tube). Kondukte wind trunk (of an organ). konforme Abbildung conformable representation. Königsholz king's wood. Konizität conicity, conicalness, coning, taper. konjugierte Funktionen conjugate functions. -komplexe Grösse conjugate complex quantity. -Schnittpunkte conjugate intercept. Konkavgitter concave grating. konphas in-phase, in p. coincidence, co-phasal. Konsistenzmesser viscosimeter. konsolidieren consolidate, set, concrete, solidify. Konsonanten, stimmhafte sonant, voiced or vocal consonants. -, stimmlose non-vocal, surd or breathed consonants. -deutlichkeit consonant articulation. konstant constant, invariable, non-varying, fixed, stable, steady, stabilized. Konstante constant, parameter. Ansprech- sensitivity or response (of microphone). Dämpfungs- attenuation constant (real part of transfer or propagation c.) Dielektrizitäts- dielectric constant, specific inductive capacity, permittivity. Fortpflanzungs- propagation constant, transfer c. Gitter- grating constant, g. space; lattice c. Kraft- force constant. Richt- rectification constant. Verlust- attenuation constant. Verschiebungs- displacement constant

specific inductive capacity (in vacuo). **Wellendämpfungs-** wave attenuation constant. **Zerfalls-** disintegration constant, transformation c., radio-active constant, decay coefficient.

Konstanthal tung stabilization. **konstruktiv** constructional, practical, concrete, constructive.

Kontakt, ausgefressener pitted contact, worn c. **-, federnder** spring contact, flexible c., c. spring.

Kontakt, Abreiss- arcing contact (of a switch). **Arbeits-** marking contact, make or operating contact (closure occurring upon energization of relay). **Folge-** make-before-break contact, dummy c.

Gleit- sliding contact (self-wiping and s.-cleaning). Leerlauf-spare or vacant terminal or contact. **Ruhe-** spacing contact, rest c., non-operating c. (closure occurs upon de-energization of relay); contact of rear part of key lever. **Schiebe-** adjustable slide, slide contact, cursor. **Schlepp-** make-before-break contact, trailing c. **Wackel-** variable contact, loose or defective c. **Wechsel-** make-and-break contact. **Wisch-** self-cleaning or -wiping contact.

Kontakt-abdruck contact print (phot.) **-arm wiper**. **-bürste** contact brush, wiper. **-finger** contact finger, wiper. **-geber** contact maker, time tapper, time marker. **-gleichrichter** contact detector, crystal d. or rectifier, natural d. **-hebel** contact lever. **-kleben** sticking of contacts. **-mittel** catalyst, contact agent, c. substance. **-prellen** contact chatter, c. click, c. thump, c. chirp. **-satz** bank of contacts. **-schieber** adjusting slider, slide contact, cursor. **-schiene** contact bar. **-schmören** scorching, freezing or melting together of contacts. **-substanz** contact substance,

catalyzer, catalyst. **-wirkung** catalysis, contact effect. **-zunge** spring contact, reed, blade, ditton. **-zusammenschmoren** scorching, freezing or melting together of contacts.

Kontingentierung quota system.

Kontinuitätsgleichung equation of continuity.

Kontinuum continuous spectrum.

Kontra-Alt contralto. **-Bass** **-contra-bass** (brass wind instr.) **-Fagott** contra bassoon.

kontrahierte Entladung contracted discharge.

Kontraktionskoeffizient Poisson's ratio (lateral contraction: longitudinal extension), rho ratio.

kontraktlich contractual, by contract or agreement.

Kontrast contrast, gamma (γ)

-empfindlichkeit, **-empfindung** contrast sensibility or sensitivity, intensity discrimination.

-filter filter for selective contrasts, contrast screen, c. filter.

-hebung compandor action, dynamic-range action means (comprising compressor and expander) to improve signal-noise ratio. **-photometer mit Würfel** cube-type contrast photometer, contrast p. with cubical cavity.

kontrastreiches Bild contrast picture, high-gamma p.

Kontraststeigerung Callier effect, print contrast.

Kontrollbild monitoring picture (telev.).

Kontrolle control, check-up, supervision, monitoring, regulation, governing.

Kontrolle, Aussteuerungs-, mit Neonröhre neon tube volume indicator.

Einknopf- uni-selector, uni-control operation. **Modulationsgrad-** modulation meter.

Kontroll-empfänger monitoring receiver. **-lehre** master gage. **-sender** monitor transmitter, check-up t.; service test oscillator.

Konturenversteilierung improvement in resolution and black-white contrast, insuring higher definition (telev.); expansion.
Konus, weitgeöffneter wide-open cone or pencil. **Hochton-tweeter** or treble cone loud-speaker. **Riffel-** corrugated cone. **Tiefen-** low-frequency cone loudspeaker, woofer. -antenne, **Doppel-** cage antenna. -membran diffusion cone, conical diaphragm; woofer.

Konventionalstrafe (monetary) penalty, contractual fine.

Konvergenz, Winkel- half convergency error.

Konvergenzwinkel convergence angle. -unterschied binocular parallax difference.

Konzentration, Anfangs- pre-focus. **Elektronenoptik-** focussing by electron lens. **Gas-** gas focusing (in c.r. tube), ionic f. **Nachre-focusing**. **Selbst-** gas focusing, self-focusing. **Vor-** (cf **Vorsammellinse**) preliminary focusing, pre-focus, first focus action (in c.r. tube).

Konzentrieren focusing, concentration, fasciculation.

konzentrisches Kabel co-axial cable or line, concentric c., pipe l.

Konzert-flügel concert grand piano. -piano upright grand piano.

Koordinaten-bild pattern of co-ordination. -papier cross-section paper, ruled p., co-ordinate p. -system, Polar-polar co-ordinates. -system, **rechtwinkliges** rectangular co-ordinate system.

Koordinationszahl co-ordination number.

Kopf, verlorener deadhead, crop end, wastehead. **Banden-** band head, b. edge (spectr.) **Düsen-** nozzle tip. **Einspann-** fixing head, clamping h. **Hör-** sound (pickup) head. **Lawinen-** head of surge. **Magnetisierungs-** magnetic recording head (for sound,

on wire or tape). **Revolver-** lens turret (camera). **Ring-** annular recording head. **Schicht-** striation head. **Schreib-** recorder head. **Teil-** index head. **Verschluss-** cable terminal.

Kopf-fernhörer headphones, headset, "can". -höranschluss telephone jacks. -hörerbügel harness, head band, strap. -welle onde de choc, head or front wave, bow w., impact w., shell w., ballistic w.

Kopie, Ansichts- release print.

Arbeits- studio copy, s. print.

Farb- color print. **Gebrauchs-** working copy, usable copy (for display).

Grossumfang high-range ("hi-range") or wide-range copy or print. **Kleinumfang** "lo-range" print. **Lavender**-lavender print. **Mehrzahl-** multiple print. **Montage-** first answer print. **Muster-** master copy, m. print. **Photo-** photostatic copy, photostat, photographic c., photo-print. **Schnitt-** edited print.

Theater- release print. **Ton-** sound film used for reproduction.

Verleih- release print, distributing p. **Zwischen-** lavender print, l. copy.

Kopieranstalt printing shop.

Kopieren, Durchlauf- continuous film printing. **Verkleinerungs-** reduction printing.

Kopier-fenster printing plane, p. station. -gamma negative gamma (γ).

Kopiermaschine printer. -, automatica automatic printer. -, optische projection printer, p. printing machine. **Durchlauf-** continuous film printer. **Fenster-** intermittent step printer. **Schlitz-** slit printer, contact printer.

Kopier-schwärzung printing density. -stelle printing drum. -werk

printing studio, p. shop or plant.

Koppel, Oktav- octave coupler (organ).

Koppelnavigation navigation by dead

reckoning. -ort fix, dead-reckoning position (avigation).

Kopplung, direkte direct coupling (by a resistance, capacitance or inductance common to both circuits), impedance coupling, conductive c., -, feste close coupling, tight c., strong c., galvanische resistance coupling, galvanic c., -, induktive inductive coupling, transformer c., kapazitive capacitive coupling, electric c., electrostatic c., -, lose loose coupling, slack c., weak c., -, veränderliche vario-coupler, -, wilde stray, spurious or undesired coupling.

Kopplung, Gegen-negative or stabilized feedback, reverse f., anti-regenerative coupling, degeneration. Mit- positive regeneration, p. feedback; spurious or undesired coupling or feedback. Rück- regeneration, reactive coupling, feedback c., reaction. Sperrkreis- parallel resonance coupling. Spinimpuls- spin orbit coupling. Streu- stray coupling, capricious c., spurious c.

Kopplungs-block invariable or fixed coupling capacitor. -faktor coupling factor, c. coefficient. -röhre coupling tube. -spule, veränderliche vario-coupler. -verlauf coupling coefficient, c. factor. -widerstand transfer impedance, coupling resistance.

Korb, Lautsprecher- loudspeaker chassis frame. Schutz- arcing ring, guard r. (of insulator).

Korb-bodenspule spiderweb coil, basket c. -flasche carboy, demijohn. -wicklung basket winding, low-capacitance w.

Kordel-griff milled knob, knurled k. -mutter milled nut, knurled n.

kordieren mill or knurl (an edge).

Korn front sight, muzzle s.; grain, bead, granule.

Korn, Raster- silver globule (of iconoscope mosaic), silver plug (in barrier-grid m.) Schleier- fog grain (of film). Sucher-backsight (of view-finder).

Korn-anhäufungen grain aggregations. -bildung granulation, crystallization.

Körner center point, punch mark, gage p. -rauschen carbon granule noise (microphone).

Kornet cornet.

Korngrenzen grain boundaries (cryst.)

Körnigkeit graininess, granularity, granulation.

Körnigkeitsmesser granulometer.

Korn-rauschen film-grain noise.

-zerfall grain disintegration.

Körper, optisch inaktiver racemate, racemicized material (quartz), racemic substance.

Körper, Fließ- fluid or liquid body, non-solid (substance).

Fremd- foreign, external or extraneous matter or substance, undesired admixture, impurity, contamination. Füll- filling body, packing b. Glüh- incandescent body, incandescing b., incandescent mantle (Welsbach).

Körper(chen), Kern- nucleolus.

Körper, Lager- bearing box, housing or body. Rotations- body or solid of rotation or revolution.

Schicht- stratified structure, s. body. Stamm- parent substance, p. body.

Körperbeschaffenheit constitution.

Körperchen corpuscle, particle.

Körperlich solid, three-dimensional, bodily, corporeal, physical, material (e.g., of a cathode), molar.

Körperlose Spule structure in which whole mass of vibrating system is contained in oil.

Körper-schaft body corporate, corporation. -schall sound conducted through solids. -strahlung, Schwarz- black-body radiation,

cavity r. -teilchen particle, corpuscle.

Körpuskeln, Licht- photons.

Korrektionsglied correction factor, corrective term.

Korrektur-abzug proof sheet.

-scheibe compensating cam (df).

Korrespondenzprinzip (Bohr's) correspondence principle.

korrigiert, farb- color corrected, achromatized.

Korrosionsbildner corrosive, corrodent, corroding agent, rusting agent. -dauerfestigkeit corrosion fatigue strength.

-empfindlichkeit corrodibility, susceptibility to corrosion.

-verhinderung corrosion inhibition.

kosmische Ultrastrahlen cosmic rays.

kostenpflichtig abweisen dismiss (a suit or legal action) with costs.

krachen crack, crash, crackle, rustle.

Krachtöter (automatic) silent tuning; noise suppressor, noise gate (in film work, etc.)

krächzender Ton all-top sound or voice.

Kraft force, power, energy (force in mechanics = voltage or emf in electricity). -, auflösende resolving power. -, atombindende atomic combining power, valence. -, lebendige-kinetic force, vis viva, momentum.

kraft meines Amtes by virtue of (power vested in) my office.

Kraft, rücktreibende repelling force, deflecting f. (acting on electron pencil). -, schwingungs- erzeugende vibromotive force. -, zwischenmolekulare intermolecular force.

Kraft, Abstossungs- repulsion, repulsive force, repellency.

Abstrebe- centrifugal force.

Anstrebe- centripetal force.

Antriebs- driving power, propell-

ling force or p., propulsion.

Anziehungs- attraction, attractive force or power, adhesive f.

Bewegungs- motive or motor force or power, motional f., kinetic f.

Bild- image potential, i. force.

Brech- refractive power, refractivity.

Direktions- directive force, directing f., versorial f.

Erwärmungs- heating power, calorific p.

Färbe- tinctorial power, dyeing p.

Feder- elasticity.

Flieh- centrifugal force. **Gegen-** reaction, counter-acting force, opposing f., reactive f., antagonistic f.

Massen- inertance (of mechanical filter).

Prall- resiliency, elasticity; ricocheting force.

Rand- force acting at an edge, marginal force.

Richt- directive force, directing f., versorial f.

Rückstell- resiliency, restoring force, retractile f., elastic f., restitution force or pressure.

Schieb- thrust, thrusting power, shear.

Schnell- elasticity.

Schwimm- buoyancy; floating capability.

Schwing- centrifugal force; vibratory power, vibrating p.

Spann- tension, extensibility, expandibility, elasticity.

Spring- springiness, power of recoil.

Stoss- percussive power, motive p.

Teil- partial force, componental f.

Thermo- thermoelectromotive force or power.

Seebeck effect.

Umfangs- circumferential force, tangential f., peripheral f.

Verbindungs- combining power, bonding strength, affinity.

Wurf- projectile force.

Zieh- drawing power, tractive power, traction, attraction, pulling, dragging or hauling power or force.

Zug- traction, tractive force, tension, attraction.

Kraft-audion power grid-current detector.

-äußerung manifestation or effect of force.

-berechnung,

Bild-, halbklassische semi-classical

- image force calculation.
-fahrzeug motor vehicle, power
craft. -funktion power function.
-konstante force constant. -linie
 line of force, tube of force.
-linienschräglage slope of force
 lines. -loserklärung declaration
 of invalidity or cancellation.
-mass unit of force. -messer
 dynamometer. -messer, Koerzitiv-
 coercimeter.
kraftschlüssig (cf zwangsläufig)
 tensionally or positively con-
 nected (by positively acting
 means), force-locking.
Kraft-schwingröhre power oscillator.
-stossmesser ballistic pendulum.
-stufe power stage, final s. (of
 an amplifier). -wechsel energy
 exchange.
Krählrechen rake, rabble.
Kran, Gerüst- gantry crane.
Kranz, Rad- wheel rim, tire.
Spiegel- row, array, rim or set of
 mirrors, mirror drum (telev.
 scanning). Zahn- gear rim, tooth
 rim.
Kranz-abtaster, Linsen- lens drum
 scanner. -brenner ring burner,
 crown b.
krarupieren krarupize, load (a line)
 continuously.
kratzen scrape, scratch, rasp, grate.
Kratzer, sichtbare visible scratches.
kräuseln curl, crisp, crimp, mill
 (coins).
Kräuselung rippling (of a d.c.).
Kreis (s.a. Stromkreis). circuit,
 circle, orbit, circular path.
Kreis, nichtschwingungsfähiger ap-
 eriodic or non-oscillatory circuit.
-, widerstandloser resistanceless
 circuit. -, umschreibender circum-
 scribing circle. Achtel- octant.
Arbeitseich- working reference cir-
 cuit. Bei- epicycle. Brems-
 negative anode circuit. Dunst-
 atmosphere. Fuss- root line,
 dedendum l. Halb- hemicycle, semi-
 circle. Kipp- trigger circuit,
- time-base c., relaxation c.
Krümmungs- curvature circle (lens).
Kurs- direction or bearing circle.
Licht- circle of light-halo. Luft-
 atmosphere. Mittags- meridian.
Nutz- active circuit, useful c.,
 signal c. Parallelresonanz-
 parallel resonance circuit, re-
 jector c. Roll(bahn)- cycloidal
 path (of electrons). Saug- ac-
 ceptor circuit, impedance or ab-
 sorption wave trap. Schwungrad-
 parallel resonance circuit, fly-
 wheel c. Sechstel- sextant.
Selektiv- selective circuit, selec-
 tor c. Serienresonanz- series
 resonance circuit, acceptor c.
Sieb- selective circuit, filter c.
Spannungs- potential circuit (of
 ammeter). Sperr- rejector circuit,
 wave trap. Stoss- impulse circuit,
 impulsion c. Teil- pitch circle, p.
 line, divided c., graduated c.,
 dial, g. circular plate. Übertrager-
 intermediate circuit, transformer c.
Um- periphery, circumference; sur-
 roundings, environs, ambency.
Ureich- master reference system.
Viertel- quadrant. Zerrungs- an-
 nulating network, suppressing n.
Zerstreuungs- circle of confusion,
 blur circle.
Kreis-bahn circular path, orbit.
-bahnbewegung motion in a circle or
 orbit, orbital movement, circular
 m. -bewegung circular motion, gyro-
 tation. -bewegung, Rollbahn- cy-
 cloidal path motion. -blende iris
 diaphragm. -bogen arc of a circle;
 circular arch. -bogengitter arcuate
 grid.
kreischende Stimme all-top voice (or
 sound).
Kreisdiagramm circle diagram, circular
 loci. Doppel- tangent circle pat-
 tern, figure-8 diagram or (space)
 pattern (df).
Kreisel top, gyro gyroscope, gyro-
 stat.
Kreiselektro spinning electron.

Kreisel-kompass gyro-compass.

-moleköl top molecule, spinning
m. -neigungsmesser bank-and-turn
indicator. -pumpe centrifugal
pump, turbine p. -verdichter ro-
tary compressor, centrifugal c.
kreisend circulating, rotary, gyra-
tory, eddying, vortical (i.e., of
vortex motion).

Kreis-frequenz pulsatance (ω), an-
gular velocity, cyclic frequency,
f. in radians. -funkefeuer rotat-
ing or omnidirectional beacon,
circular navigational beacon
(sending non-directional signals
in all directions). -funktion
trigonometrical function, angular
f. -grad degree of a circle or
arc, d. of angular measure, ra-
dian. -keilschwärzungsmesser
circular wedge densitometer.
-lauf cycle, circulation (of flu-
id), circular course, circuit.
-lochscheibe film scanning disk
with apertures circularly rather
than spirally arranged.

kreismagnetischer Effekt gyromag-
netic anomaly.

Kreis-messung cyclometry. -para-
meter circular parameter. -prozess
cyclic process, cycle. -scheibe
mit veränderlichen Sektoröffnun-
gen sector disk (shutter) with
variable apertures. -spannung
"circle" voltage. -spule tuning
coil. -ströme circular currents,
c. flowing in a circular path.
-welle circular electric wave.

Kreuz sharp (mus.).

Kreuz, Abstimmungs- tuning indicator
(magic eye, etc.). Achsen- coor-
dinate system. Faden- reticle,
reticle, graticule, cross line,
hair l., cross spider hairs.

Leucht- reticle image (reflector
sight). **Malteser-** cam and star
wheel of Maltese cross, Geneva
intermittent movement, cross-
wheel. **Strich-** cross lines, c.
ruling, reticle.

kreuzen cross, intersect, traverse,
transpose.

kreuzförmig cross-shaped, cruciform.

Kreuz-gelenk universal joint, Hooke's
j. -gelenkkupplung cross joint.
-gesperre, Malteser- Geneva stop.
-gitter cross grating, surface
lattice. -glied lattice section
(of network or filter). -hahn
four-way cock. -libelle cross
level, -modulation cross modula-
tion. -peilung fix, bearing taken
from two or more ground direction-
finders, cross bearing. -rahmen-
antenne crossed coil antenna.

kreuzsaitig cross strung, overstrung.

Kreuz-schaltung s.H- & T-Brücken-
schaltung. -schlitzen compound
slides. -teilungsmast cantilever
type of tower (with double-tapered
mast).

Kreuzungs-isolator transposition in-
sulator. -punkt, Über- crossover
(of electrons in c.-r. tube).

Kreuzverhör cross examination, cross
questioning.

krüppeln swarming (of film).

kriechen crawl, sneak, creep (of ma-
terials); leak (of current).

Kriech-galvanometer quantometer, flux-
meter. -geschwindigkeit rate of
creep (in metal). -strom creep cur-
rent, sneak c., surface leakage c.

Kristall, einachsiges uniaxial crys-
tal. -, langstrahliges needle-like
elongated crystal. -, linksdrehen-
des levogyrate crystal. -, optisch
inaktives Quarz- racemic quartz
crystal, racemized c., racemate.
-, zweiachsiges biaxial crystal.

Kristall, After- pseudomorph. Bie-
gungs- "bender" crystal. Doppel-
platten- biquartz crystal, bimorph
c., bimorph cell. Drehungs, Dril-
lings- "twister" crystal. Ein-
monocrystal, single c. Holoeder-
holohedral form of crystal. Keim-
crystal nucleus, nucleus c. Mehr-
polycrystal. Misch- mix crystal,
mixed c., crystalline solid solution.

Quarz-, fertiges piezoid, finished blank. Quarz-, optisch inaktives racemic quartz crystal, racemized c., racemate. Schwing- crystal oscillator. Seignettesalz- Rochelle (salt) crystal.

Spaltungs- cleavage crystal.

Sphäro- spherical crystal, sphaero c. Tannenbaum- dendrite.

Zweielement- bimorph crystal (either of bender or twister type). Zwilling- (cf Doppelplatten-) twin crystal.

Kristall-achse crystal axis, crystallographic a. (x = electric a.; y = mechanical a.; z = optical axis). -achsenmesser conoscope (determines optical axis). -achsenrichtung crystallographic axis orientation. -anschuss crop of crystals, crystallographic growth, crystallization, shoot into crystals.

Kristallartig crystal-like, crystalline.

Kristall-ausscheidung separation of crystals. -bau crystal structure, crystalline form. -baufehler crystal (structural) defects.

-beschauer inspectoscope.

-biegungsschwingung crystal flexural vibration. -bildung crystal formation, crystallization, granulation (of sugar).

-dickenschwingung thickness vibration of a crystal. -drehungsschwingung, -drillungsschwingung torsional vibration. -ebene crystal plane, c. face. -ecke crystal angle. -faden, Ein-single-crystal filament, mono-crystal f. -fassung (piezo-electric) crystal holder or mount. -fläche crystal face, c. plane. -gerippe crystal skeleton, skeletal c., crystallite. -gitter crystal grating (used for diffraction); crystal lattice.

-gitterschwingung crystal lattice vibration. -halterung crystal holder, c. mount.

-haufwerk crystallite aggregation. -inaktivierung, optische racemization.

Kristallisations-kerne centers of crystallization, nuclei of c. -wachstum crystal growth, germination.

Kristall-kanten crystal edges.

-keim crystal nucleus, seed c. -kern nucleus of crystallization, center of c. -kernbildung crystallization, nucleation, germination (a germ being required in induced crystallization).

-körperchen, rundes globulite, spherulite. -längsschwingung longitudinal vibration of a crystal.

-lautsprecher piezo-electric loud-speaker. -lehre crystallography.

-linse crystalline lens. -mikrophon piezo-electric microphone, crystal m. -querschwingungen transverse vibrations (including flexural v.), contour vibrations or oscillations. -schnitt crystal cut (x cut or Curie cut, also known as the zero angle cut, face-perpendicular cut and normal cut; y cut, 30-degree cut or face-parallel cut; T cut = 35 degrees to z axis). -schwingung crystal vibration. -splitter crystal grain or chip. -steuerung crystal stabilizing, crystal control. -taktgeber (beim Sender) crystal monitor, c. control means, c. stabilizer.

-winkelmessung crystal goniometry.

kritisch critical, delicate.

Kröpfung crank.

Krücke rake, rabble, crowbar.

Krümmer, Rohr- pipe bend, elbow or knee. -radius radius of curvature, r. of gyration.

Krümmung, Bildfeld- curvature of image field.

Krümmungsfreies Feld flattened field (by flattening lens).

Krümmungskorrektur field flattening.

Krummwenden warping, buckling, crooking, bending.

Kübel vat, tub, pail.

Kubieren raise to third power,
involution process (math.)

Kubikwurzelziehen extraction of
cube root, process of evolution.

kubisch-raumzentrierte Metalle
body-centered cubic metals, cubic
body-centered m. (cryst.)

Kubizierung calculate volume of;
raising to third power, involu-
tion process (math.)

Kufe pressure pad, p. guide (m.p.)
Filz-felt pad. Gegen- counter
pad.

Kugel ball, sphere, globe, bullet,
shot, bulb, bead.

Kugel, After- spheroid. Halb-
hemisphere. Ulbricht'sche
Ulbricht sphere.

kugelähnlich spheroidal, ball-like.

Kugel-blasen, Stahl- steel shot
blast. -blitz flashbag; globular
lightning, ball l.

Kügelchen small bulb, globule,
spherule, globulite, pellet,
small ball or shot.

Kugel-densitometer, integrie-
rendes integrating spherical
densitometer. -druckprobe
ball pressure test, indentation
or Brinell ball impression t.
-einsprache spherical mouthpiece.
-faktor coefficient of sphere
(photometry). -flasche balloon
flask, spherical f.

kugelförmig spherical, globular,
ball-shaped, orbicular. nicht-
aspherical, non-s. -gewölbte
Lamellen dished laminae.

Kugel-funkenstrecke ball-gap,
sphere gap, spark-gap with ball
electrodes. -funktion spherical
function. -gelenk ball-and-
socket joint, universal j.
-gestalt spherical form, ball
shape, bulbous s. -gestalts-
fehler spot size distortion.
-körperchen globulite, spherulite
(cryst.) -kupplung ball-and-
socket joint, universal j.
-linse spherical lens. -mikrometer
spherical micrometer. -mikroskop

ball stage microscope. -photometer
sphere or globe photometer (of
Ulbricht). -rücksprung ball rebound,
ricocheting. -schale partial sphere,
cup-shaped, or cap-shaped or hemi-
spherical part, spherical shell,
calotte. -schliff ground-in ball-
and socket joint. -spiegel spheri-
cal mirror, s. reflector.
-spitzenfühlnadel scanning or pick-
up needle with spherical point
(sound engraved film).

kugelsymmetrisch spherically symmetric,
sphero-s.

Kugel-tisch ball stage (micr.).
-ventil ball valve. -welle
spherical wave.

Kühler cooler, refrigerator, con-
denser; radiator (automobile).

Rückfluss- reflux condenser,
return-flow c. -mantel cooling
jacket, condensing j.

Kühl-mantel cooling jacket, condens-
ing j. -rippe cooling or radiating ,
fin, vane or flange. -schlange
cooling coil, spiral condenser
pipe or tube.

Kühlung, Heiss- cooling by evapora-
tion.

Kühlvorrichtung cooling, refrige-
ration or chilling device.

Kükem plug of a cock.

Kübchen ball, piece, lump, parison
(of glass).

Kulissenaufblendung side-curtain
fade-in.

Kulturfilm cultural film, education-
al f.

Kümmerform degenerate form.

Kundengiesserei jobbing foundry.

Kündigung (giving of) notice, de-
nunciation (of a treaty), termina-
tion.

Kundschaft clientele, customers,
clients, following, goodwill.

Kunst-ausdruck technical term, art
term. -griff artifice, trick.
-holz artificial wood, imitation w.
-leder leatherette, art leather,
artificial l., l. imitation.
-leitung artificial line, cable or

circuit, balancing or equalizing network.

künstlich artificial, synthetic.

- (e) Antenne artificial antenna, mute a., dummy a., phantom a.
- (e) Radioaktivität induced or artificial radio-activity.

- (er) Zug forced draft.

Kunstprodukt, -stoff synthetic product, artificial p., synthetic, plastic. -trick, Schleif- optical grinding artifice.

Küpe vat, boiler, copper.

Kupfermantelrelais copper-jacketed relay.

Kuppe cusp, crest, peak, meniscus (of a liquid colum).

kuppeln couple, clutch, interlock, gang (e.g., condensers), join, unite.

Kupplung, Freilauf- free-wheel clutch, slip coupling. Gelenk-Hooke's joint, universal j.

Kardan- universal joint.

Klauen- claw coupling, c. clutch.

Kreuzgelenk- cross joint. Kugel-ball-and-socket joint, universal j. Leerlauf- slip coupling, free-wheeling clutch. Rutsch-,

Schlupf- slip clutch, s. coupling.

Kurbel und Welle, Einergang- single-picture crank and shaft (m.p.)

Kurbel, Tret- foot pedal, treadle.

Kurbel-antenne reel antenna, trailing-wire a. -aufnahme hand-drive shot or shooting. -kröpfung crank (of a shaft). -schelbe crank disk, cam. -schelfe crank guide. -zentrum crank center.

Kurbler crank turner.

Kurs, ablaufender course or direction away from airport, outward course. -, missweisender magnetic heading, m. course, uncorrected bearing. -, rechtvoraus head-on course (fore-aft axis of craft directed to objective). -, rechtwenders true (north) course. -mit Vorhaltewinkel course heading directly into wind, crabbing.

Kurs, Grund- true course, head-on course. Karten- map course.

Kompass- compass course, steered c. Soll- prescribed course, charted c. Steuer- steered course, compass c. Vorhaltewinkel- course heading directly into the wind, crabbing.

Wind- course headed directly to objective, corrected c. heading in wind (same as map c. in absence of wind). Wind-, rechtweisender true heading. Ziel-, ablaufender course away from transmitter or beacon. Ziel-, anlaufender target course towards beacon. Ziel-, missweisender magnetic course to steer. Zwischen- compound course.

Kurs-absetzen laying off or plotting position lines or bearings, shaping course for. -abweichung (temporary) deviation from course, yaw. -fehler course error. -funkbake radio range, r. beacon. -gleiche loxodrome, rhumb line. -kreisel directional gyro. -linie, achterliche astern course, direct line away from transmitter. -linie, vorliche ahead course (towards beacon), "go-to" indication. -peilung course bearing (taking bearing by directional signals, to keep craft on course). -richtung head, course bearing. -schelbe bearing plate.

-stativ class microscope.

-steuerung, automatische automatic or mechanical piloting. -weiser radio range, r. beacon. -weisung, rechtwiesende true course to steer, radio guidance or pilotage (from ground). -welsung, misswelsende magnetic course to steer by radio guidance or pilotage (from ground). -winkel azimuth of target (in gunnery); magnetic a.

Kurve(s.a. Kennlinie, Charakteristik) curve, graph, diagram, characteristic. -drütt Ordnung cubic curve. -, flache flat curve, flat-topped curve (e. g., in broad tuning), flat characteristic. -, flau flattened curve (not rising steeply), flat characteristic. -gerissene dotted-line or broken-line

curve or graph. -, jungfräuliche virgin curve. -, zweispitzige double-peaked curve, double-hump c. Abkling- decay curve. Auslauf- coasting curve, deceleration c. Begrenzungs-enveloppe, contour line. Blatt-folium. Durchlass- selectivity curve (of df receiver, etc.) Eichreiz- (typical) visibility curve. Empfindlichkeits- response curve, r. characteristic. Füll- single-loop oscillogram. Funkbeschickungs- error curve. H & D - Hurter & Driffield curve. Halsband- collar curve. Hüll-envelope. Längungs- elongation curve, stretch c. Leit- directrix, pitch or contour of cam compensator(df). Ohren- auditory sensation curve. Peil- directional diagram, space pattern. Resonanz-, mit zwei Höckern double-hump resonance characteristic or curve. Schlangen-serpentine. Schwärzungs- characteristic film or H & D (Hurter & Driffield) curve. Sinus- sine curve, curve of sines. Übertragungs- transmission (frequency) characteristic. Umrandungs-envelope. Verfestigungs- plastic stress-strain curve. Wachstum-growth curve. Wende- turn in landing (by ZZ method), U turn. Zapfen- spectral response of eye cones. Zerfall- decay curve. Kurven-einebnung flattening of a curve. -form, rechteckige rectangular curve shape (say, of an emf). -lichtmethode variable-area recording method (of sound).

-schaar family, group or system of curves or graphs. -scheibe, Funkbeschickungs- compensator or zero cleaning cam. -schreiber oscillograph, oscilloscope (when no graphic record is made), curve tracer. -schwanzstück toe region of film characteristic. -zeichnen mapping a curve, plotting a graph (say, with stylus). -zug, abklin-gender decay train. kurz-brennweitiges Objektiv short-focus lens or objective. -brüchig short-brittle. Kurzflammlampe hard light. kurz-gefasst brief, concise, abbreviated, compendious, of reduced length or style. -halsig short-necked. -lebiges Produkt short-life, short-lived, periodic or transient product. Kurzschluss short-circuit, "short," bridge, by-pass, short-circuit path. -, akustischer acoustic feedback or short-circuit. -, vollständiger dead short-circuit. kurzsichtig near-sighted, short-s., myopic. Kurzschluss-brücke, -bügel short-circuiting bridge. -läufer squirrel-cage rotor (of induction motor). Kurz-wellenwandler short-wave converter. -zeichen symbol. Küvette trough, vessel; bulb. Absorptions- absorption cell. K Wert octantal component of quadrantal error (or QE) due to fuselage.

L

- L Glied L-type section, filter s., mesh of network.
- L Regler L-section attenuator.
- Labialpfeife flue pipe (of organ).
- labil unstable, non-stable, labile.
- Ladium lip (mus.).
- Labyrinthdichtung labyrinth seal, l. gland (of turbine).
- Lack, Tauch- dipping varnish.
- Lackmuspapier litmus paper.
- La Cour'sches Rad phonic wheel.
- Lade, Wind- wind chest, sound box (of organ). -pumpe charging pump, compression p.
- Lader, Klein- trickle charger.
- Ladeschaltung circuit means causing slow rise of sawtooth voltage.
- Ladestrom charging current (of dielectric).
- Ladung, freie free charge. -, ganz-zahlige integral spin, i. charge. -, gebundene bound charge, induced c. -, punktförmige lumped loading. -, ungebundene free charge.
- Einheits- unit charge.
- Ladungs-ausgleich charge equalization. -austauschoperator charge exchange operator. -bild charge pattern, c. image (of iconoscope). -dichte charge density. -dichtesteuerung charge density modulation. -einheiten, positive elektrische unit positive charges. -sinn nature of a charge, sign. -speicher-Bild-abtaster, einseitiger single-sided mosaic-type of storage iconoscope. -speicherung charge storage, c. accumulation. -träger charge carrier. -trägertrennung sorting or separation of ions and electrons (in a mass spectrometer). -vermögen, elektrisches electrostatic capacity. -zahl, Kern- nuclear charge number. -zusammenballungen bunching of charges, b. of electrons.
- Lage layer, stratum, bed, coat, coating; state, situation, position, location, site; bearing (df).
- Lägel barrel, keg.
- lagenrichtig positionally or geometrically correct.
- Lagensicherung locking in position.
- Lager bed, layer, stratum; bearing, bush. Mit einem einzigen - versehene Drehspule unipivot moving coil. -mit Weissmetallfutter babbitted bearing.
- Lager, Gegen- abutment. Gleit- slide bearing, plain b. Hals- journal bearing. Kamm- (concealed) collar thrust bearing. Spur- thrust bearing. Spurzapfen- end thrust bearing. Steh- pillow block bearing, pedestal b. Stein- jeweled bearing. Weissmetallfutter- babbitted bearing.
- Lager-bock pedestal of a bearing. -büchse, -buchse bearing bush, bushing of a b. -element inert cell. -härtung, Hart- induction hardening. -körper bearing box, b. house. -prozess ageing, storage process.
- Lagerung, Schneiden- knife edge supporting or suspension. Spitzen-pivot jewel, jewel bearing, point suspension or support. Stift-pin suspension, p. supporting.
- Lagerzapfen journal pin.
- Lambertgesetz cosine emission law, Lambert I.
- Lamelle, Pumpen- vane (in Gaede vacuum pump).
- Lammellen, kugelförmig gewölbte

- dished laminae.
- Lamellen-kern** laminated core.
-magnet compound magnet, laminated
m. -spiegel strip-like mirror
(in screw scanner).
- laminieren** laminate; draw (in spinning).
- Lammfell** lambskin.
- Lampe**, **punktförmige** lamp with point-shaped or crater light source (e.g., tungsten arclamp, Pointolite). **Aufnahme**- studio light.
- Bienenkorb-** beehive neon lamp.
- Bildeinstell-** framing lamp.
- Blink-** flash lamp. **Blitz-** flash (light) lamp. **Bogen-, sprechende** speaking arc, Simon or Duddell.
- Effekt-** studio light. **Einstell-** framing lamp. **Erreger-** exciter lamp, recorder or reproducer l.
- Flächen-** bank of lamps, pillar of l. (studio, etc.), battens (stage).
- Flächenglimm-** flat-plate neon tube. **Glimm-** glow tube (e.g., neon tube or lamp), gaseous-conduction t., flashing lamp (for sound recording). **Kathodolumineszenz-** cathode glow-tube. **Klein-** miniature lamp. **Kurzflammen-** hard light. **Langflammen-** soft light. **Leuchtstoff-** fluorescent, luminescent or luminous lamp or light, tube using phosphor substance. **Mehrfadens-** multiple-filament lamp. **Melde-** pilot lamp, telltale l., alarm l., indicator l. **Mikronernst-** Nernst microscope lamp, **Polsuchglimm-** polarity finder glow-tube. **Punkt-** point-type neon tube (e.g., tungsten arc lamp, Pointolite). **Pust-** blow lamp. **Quecksilberdampf-, mit Steuerelektrode** mercury-vapor tube of thyratron or ignitron type with control grid. **Reduktor-** adapter-transformer lamp. **Reserve-** spare lamp. **Säulen-** pillar (lamp), battens. **Schlitz-** slit lamp (micr.). **Signal-** signal lamp, telltale l.
- Sofitten-** (overhead) scoop lamp,
- scaffold** 1. **Spiegelbogen-** reflected (or reflector) arc-lamp. **Ton-** exciter lamp (operating photo-cell). **Wolframmöggen-** pointolite.
- Lampen-aggregat** bank of lamps, pillar of l. -arbeit blast-lamp work (glass making). -arm lamp bracket. -feld bank of lamps, panel of l. -fuss lamp squash, l. press. -gehäuse lamp chamber, l. housing. -stempel lamp squash, l. press. -überlastung overrunning of a lamp (operated under overvolted condition).
- Landé Intervallregel** Landé interval rule.
- Landeachse** correct bearing or line for approach (and landing, of an airplane). **Blind-** blind or instrument landing line or path.
- Lande-bahn** landing runway. -dienst, **Blind-** beacon service (to assist in blind or instrument landing of airplanes). -funkeuer landing radio beacon. -platz landing field, l. strip, airport, airfield. -platz, **Hilfs-** emergency or auxiliary landing field or airport, landing strip.
- Landesgericht** national court.
- Landfunkstelle** ground radio station, shore or coast s.
- Landgericht** district court or county c., general court of justice.
- Landung, Nebel-** blind landing, instrument l.
- Landungsfunk-bake, -feuer** landing beacon (for instrument landing).
- langbrennweitige Linsen** long-focus lens or objective.
- Länge, Ost oder West** east or west longitude.
- langeiförmig** of extended oval shape.
- Längen-ausdehnung** linear expansion.
- bruch longitudinal fracture.
- durchschnitt longitudinal section.
- mass linear measure. -messung, echte und unechte direct and indirect measurement of length.
- längentreu** isometric.

- Langflammenlampe** soft light.
- Tang-gestreckt** extended, elongated, oblong. -gliedrig long-linked, long-membered. -halsig long-necked. -lebig long-lived. -lebiges Produkt long-life product.
- Länglichrund** elliptical, oval, lenticular.
- Langloch** oblong hole, slot. -hebel slotted lever.
- Längsachse** major axis, longitudinal a., fore-aft line (ships, airplane, etc.).
- langsam abfallendes Relais** slow-release relay. -ansprechendes Relais slow-response relay, slow-operating r. -lösend slowly releasing or disengaging; s. dissolving.
- Langsambindner** slow-setting cement.
- Längsarm** line-arm, series a. (of a network).
- Langschliff** long-fibered (mechanical) pulp.
- Längs-durchschnitt** longitudinal section. -entzerrer series-type attenuation equalizer or compensator. -feld longitudinal field, f. parallel to axis, paraxial f. -glied(einer Kette) series element, s. mesh (of network). -glied, in 1/2 - endendes Filter mid-series terminated filter.
- pellung taking bearings from d.f. station situated more or less in direction of travel or course.
- schärfe definition in line direction.
- Längsschliffs** fore and aft.
- Längsschwingung** longitudinal vibration.
- langstrahliges Kristall** elongated, needle-like crystal.
- Langstreckendienst** long-range or long-distance avigation or navigation service.
- Längsstreifen** longitudinal stripes, l. striae, l. streaks.
- Längs- und Querverschiebung** axial and cross adjustment (electron microscope).
- Längs-widerstand (Filter)** line resistance, series r. (of a filter). -zweig line arm, series arm.
- Längung** extension, elongation.
- Längungskurve** elongation curve, stretching c.
- lang-wellig** long-wave, of long wavelength. -wierig protracted, wearisome, tedious, time-consuming.
- Lappen** flap, tab, lobe, flange, lug; rag. -schraube thumb screw.
- lappig** lobed, lobate; flabby, flaccid.
- Lärm-abwehr**, -bekämpfung combating of noise, noise abatement.
- Lasche** bond, cover plate, fish plate, splice strip (rail track).
- Last, Gebrauchs-** working load, service l.
- Lastwechsel** cyclic stress, s. application cycle. -zahl alternating stress number, n. of load alternations.
- Lasurstein** lapis lazuli.
- Laternen-bilderkasten** lantern slide box. -bildermasken lantern masks. -einfaßselsten lantern slide binding strips.
- lau** tepid, lukewarm, mild, balmy.
- Laueflecke oder -punkte** Laue spots.
- Lauf** course, path, run, race, current; barrel (gun). **Heim-** return or back stroke or motion, flyback (of pencil or cathode spot). **Hin-** forward move, f. working stroke, travel, pass or journey, active-line scansion (of spot or pencil, in telev.). **Kreis-** cycle, circulation (of a fluid), circular course, circuit. **Leer-** no-load operation, idling. **Rück-** return or retrace, flyback (of pencil or cathode spot).
- Lauf-bahn einer Rolle mit Gummiüberzug** rubber tread of pad roller.
- bild moving picture, animated p., one of a sequence or series of pictures or pictorial actions.
- bodenkamera base-board extensible

camera. -einschaltung throwing in (of a gear), starting to run (of a mechanism, etc.).

laufend(en) Band, am—fabrizieren conveyor-belt manufacture, assembly line or large-scale m.

-(es) Maass linear measure.

-(e) Nummer serial number, consecutive n. -veränderlich running variable.

Läufer rotor; cursor contact, sliding c.

Läufer, Kurzschluss- squirrel-cage rotor (of induction motor).

Läufermühle edge mill.

Lauffläche tread, bearing surface, journal. -gewicht sliding weight. -glasur flow glaze.

läufig, links- moving to left, m. counter-clockwise.

Laufrichtungskoeffizient directional effect (in film processing).

-ring race, raceway, ball-race (of a bearing). -schaufel runner blade, bucket (of turbine).

-umschaltung reversal of motion.

-werk feed mechanism, movement, working gear. -werk, Ton- sound-film feed mechanism. -winkel transit angle. -zahl variable number, running variable. -zapfen journal, neck (of rolling mill).

-zeit transmission time, transit t., propagation t. -zeit, Elektronen- electron transit time, orbit time of electrons. -zeit-einfluss (electron) transit time effect. -zeitensteuerung velocity modulation.

Laufzeit-geräte (cf. Lautzeitröhre) devices predicated on transit time wherein electrons are bunched in proper phase to result in space-charge concentrations and formation of groups. -glieder means involving transit time effects or phase delay. -komprimierung transit time compression. -korrektur echo or delay weighting term (telephony), delay equalizing.

-röhre drift tube, beam t., t. involving transit time or phase effects. -schwingungen electron oscillations. -störungen delay distortions. -verzerrungen transit-time distortion, phase d.

Laugenflüssigkeit liquor.

launisch capricious, erratic, fickle. lauschen listen in.

Leuschkopf pickup microphone, p. transmitter detectophone (connected to head-phones).

Laut (articulated) sound. -, explosiv explosive sound. Selbst- vowel. Zisch- sibilant, fricative.

Lautete lute.

Lauter pure, clear, genuine, unalloyed, sheer.

läutern purge, refine, purify, clear, clean, cleanse, clarify, rectify, wash.

lautgetreu of high fidelity, orthophonic.

Lautheit loudness.

lautlos silent, quiet, noiseless.

Lautschriftband sound recording steel tape.

Lautsprecher, elektrostatischer capacitor or condenser loudspeaker.

-, fremderregter dynamischer electrodynamic or moving-coil loudspeaker. -, gerichteter directional loudspeaker. -, induktordynamischer moving-iron loudspeaker.

-, permanent-dynamischer permanent-magnet(pm) or moving-coil dynamic loudspeaker. -, trichterloser direct-radiator loudspeaker (without horn).

Lautsprecher, Abhör- monitoring loudspeaker. Druckkammer- pneumatic loudspeaker (without diaphragm), pressure-chamber l. Exponential-trichter- exponential or logarithmic loudspeaker (with uniform or multiple flare in horn). Faltenfolded, curled, coiled or twisted horn loudspeaker. Freischwinger-direct-radiator loudspeaker, free-r. l. Gross- power loudspeaker.

Grossflächen-, Hochleistungs- power loudspeaker, (public) address l., announce l., paging l., call l. **Hoch(ton)-** tweeter loudspeaker, treble l. **Konusmembran-** cone loudspeaker. **Kristall-** piezo-electric loudspeaker. **Luft-** kammer- air-chamber loudspeaker (c. coupling diaphragm and horn). **Pilz-** omni-directional (360°) exponential horn loudspeaker (mostly mounted on pole). **Pressluft-** pneumatic loudspeaker, compressed-air l. (without diaphragm). **Riffel-** Riffel loudspeaker (with corrugations and substantially horizontal radiation). **Riffel-falten-** folded and corrugated horn loudspeaker. **Tieftonkonus-** low-frequency cone loudspeaker, woofer. **Vierpol-** balanced-armature loudspeaker (with permanent magnet). **Lautsprecher-abstrahlfläche** projector surface, radiating s. (of a loudspeaker). **-anlage,** Betriebs-works address or public a. loudspeaker system (in factories, etc.). **-antrieb** motor element. **-haltevorrichtung** chassis of a loudspeaker. **-horn, aufgewundenes** twisted loudspeaker horn, coiled h. **-horn, gefaltetes** folded loudspeaker horn.

Lautsprecher-korb chassis frame of loudspeaker. **-leitfläche** deflecting vane, labyrinth. **-leitwand** deflecting vane; baffle (to prevent acoustic feedback). **-luftkammer** air space, a. chamber. **-spinne** spider of loudspeaker (inside or outside voice coil, to keep coil centered). **-tonführung** labyrinth of loudspeaker.

Lautsprechertrichter, aufgewundener twisted loudspeaker horn, coiled h. **-gefalteter** folded loudspeaker horn. **-hals** throat of loudspeaker horn. **-mundöffnung** mouth opening of horn, largest flare. **-mundstück** throat (narrow

inlet) of horn.

Lautsprecher-vorhof air chamber of loudspeaker (between horn and cone).

-wagen sound truck, loudspeaker t.

Lautstärke, Empfindungs- response of ear to signal stimulus, sensible loudness of sound. **Stör-** noise level.

Lautstärkemesser, Neonröhre- neon tube volume indicator.

Lautstärken-bereich der Stimme human voice intensity or dynamic range. **-empfindung** aural sensitivity. **-stufe** loudness unit, sensation unit.

Lautstärke-regler, logarithmischer volume control with resistance varying according to a logarithmic law. **-schwankungen** fadings. **-umfang** volume range, dynamic r.

Lavenderkopie lavender copy, l. print.

Lawine, Elektronen- electron avalanche.

Lawinenkopf head of a surge.

lebender Kalk quicklime.

lebendige Kraft kinetic force, vis viva, momentum.

Lebendigkeit liveness, realistic properties (in architectural acoustics).

Lebensdauer life period, (working or useful) life, life time (say, of a quantum).

Lebewesen, Klein- micro-organism.

lebhaft lively, brisk, active, vivacious; bright, vivid, gay (of colors).

lebig, lang- long-lived.

Lecherleitung Lecher-wire line.

Leckstrom leakage current, leakance c.

Lederharz (India) rubber. **-stulpen** leather cuffs.

leer empty, blank, void, vacant, hollow.

Leere vacuum, emptiness, vacancy.

Leergewicht tare, weight allowance for container, weight empty.

Leerlauf no-load (operation), idling.

-**impedanz** open-circuit impedance, no-load i. -**kontakt** spare or vacant terminal or contact, dumb or dummy c. -**kupplung** slip coupling, free-wheeling clutch.
-nocke delayed pulse trip cam.
-widerstand open-circuit impedance.
Leer-scheibe idler (wheel). -**stelle** hole, vacancy (in lattice).
-stellenmechanismus vacancy mechanism (metals). -**versuch** blank experiment, no-load test.
Legierung, **sparstoffarme** alloy low in critical or scarce metals.
Automaten- machining alloy stock, alloy readily workable in automatic machine tools. **Knet-** plastic alloy, malleable a., wrought a.
Lehm-guss loan casting. -**stein** unburnt brick, adobe.
Lehrdorn inner cylinder or plug gage.
Lehre, **Augen-** ophthalmology. **Bewegungs-** mechanics (re:machines); kinetics (re:motion of bodies and forces acting thereon); kinematics (re:motion in the abstract); dynamics (force action on bodies).
Bewegungselektrizitäts- electro-kinematics, electrokinetics.
Dreiecks- trigonometry. **Elektronen-** electronics. **Farben-** science of color, chromatics.
Filmkitt- film splicing gage.
Fühler- thickness gage. **Getriebe-** kinematics. **Gefrierpunkts-** cryoscopics. **Gewinde-** thread gage.
Gleichgewichts- statics. **Größen-** mathematics, geometry. **Innengrenz-** plug gage. **Kegel-** taper gage.
Kontroll- master gage. **Kristall-** crystallography. **Licht-** optics, photology (or physiological o.).
Loch- internal caliper, plug gage.
Natur- natural science, n. philosophy. **Normal-** normal gage, master g. **Phasen-** solution theory, doctrine of phases. **Rachen-** gap gage.
Ruheelektrizitäts- electrostatics.
Schraub- micrometric gage, micrometer. **Schub-** sliding gage, s.

caliper. **Seh-** optics. **Uhrschraub-** dial micrometer. **Wärmekraft-** thermodynamics. **Wasserkraft-** hydrodynamics. **Wurf-** ballistics. **Zahlen-** arithmetic, numerology. **lehrenhaltig** true to gage.
Lehr-film educational film, instruction f., school f. -**satz** abstract theorem, adoctrine. -**schau** educational exhibition.
leicht-flüchtig readily volatile.
-**flüssig** easily fusible, e. melt-able, e. liquefiable; mobile.
-**löslich** easily soluble.
Leichtmetall light metal (of low sp gr.).
leicht-schmelzbar easily fusible, e. melt-able. -**siedend** low-boiling, of low ebullition (point).
Leim glue, size.
leimartig gluey, gelatinous, glutinous.
Leine line, chord, cord.
leise Kassette silenced magazine.
Leiseabstimmung silent tuning.
Leiste ledge, border, ridge, mold-ing, strip. **Einfass-** binding strip.
Leistung power, work, performance, energy. **Abschalt-** rupturing capacity, circuit-breaking c., circuit-opening c. (of a switch).
Blind- reactive power, r. volt-ampere, var. **Schall-** response (of an acoustic system). **Schein-** apparent power. **Spitzen-** record (achievement, performance or accom-plishment). **Verlust-** (power) dissipation, power loss. **Ver-zerrungs-** distortion power (in d. volt-amps.). **Watt-** wattage, power in terms of watts. **Wirk-** (cf **Blind-**) active power, actual p., true p. (in watts).
Leistungs-aufwand power input, p. expenditure, energy dissipation.
-**bedarf** power absorption; p. dissipation, p. requirements.
-**bedarfspegel** power reference level.
-**entnahme** energy output, power o.,

delivery, absorption or pickup of energy or power; taking, tapping or draining of power or energy.

-fähigkeit performance, efficiency, serviceability, power, ability; resolving power (of a microscope). -faktor power factor.

-faktorzeiger power factor indicator or meter. -kammer energy chamber (of a klystron).

leistungslos non-dissipative, wattless.

Leistungs-messer power meter, ergometer. -reserve margin of power, standby p. -umsatz energy exchange, transduction. -verstärker power amplifier.

Leitbahn transit path. -bewegung transit path motion. -welle (Magnetron) transit-time or electron path oscillation (of magnetron).

leiten conduct, guide, lead, govern, steer, pilot, route (a message).

Leiter, **Aufnahme-** first cameraman, chief c. **Aussen-** "outer", outside conductor or wire. **Halb-** semi conductor, poor c. **Heiss-** third-class conductor, hot c. (with negative resistance). **Hin-** outgoing lead, o. wire, o. conductor. **Ketten-** iterative network, recurrent structure. **Null-** neutral wire. **Rück-** return wire, r. lead, r. conductor. **Ton-** musical scale (natural, diatonic or just scale, and tempered s.). **Voll-** compact or unstranded conductor.

Leiter-gebilde conductor structure, c. system. -gebilde, **Luft-** aerial extension, a. structure, a. network, array of antennae. -stück element of conductor, conductor element. -system conductor system, c. structure.

Leitfähigkeit, dielektrische leakage, dielectric conductance.

-, elektrische conductance.

-, magnetische magnetic conduc-

tance, permeability, permeance.

-spezifische conductivity. **Super-** supra conductance, super c. **Temperatur-** temperature diffusivity, thermal conductivity. **Über-** supra conductivity, super c.

Leit-fähigkeitsgefäß conductivity cell. -fläche deflecting vane (mounted in horn to reduce directional properties of a loudspeaker), labyrinth, baffle. -funk-sender radio range, r. beacon.

-funkstelle net control station.

-kabel leader cable, pilot c. (d.f.). -kante leading edge, l. tip (of airplane wing). -kreis-frequenz transit-time frequency (of a magnetron). -kurve directrix; pitch or contour (of a cam compensator). -linie beacon course, beam, equi-signal line, e.-s. course or zone; directrix.

-richtung course on beam or equi-signal line. -rolle guide roller, idler, pad roller (without sprockets).

-rolle, federnde spring-loaded idler. -satz rule, guiding principle, basic p. -stelle ground direction-finder station (sending directional or position data to craft).

-strahl guide-ray, localizer beam, radio beacon course, landing beam; radius vector (math.). -strahl, Strecken-long-distance or route navigation (or avigation) beam.

-strahl-sender beacon, radio range or beam station, aerophare. -strahl-winkel angle of beam. -strom conduction current; pilot c. (in wired radio).

-system, Licht-condenser relay system (in film printing).

Leitung conduction, conductance, transmission; electric circuit, wire, (supply) line, cable, lead conduit, guide, piping, mains.

-, angepasste matched line.

-, konzentrische co-axial line or cable, concentric c., pipe 1.

-kurzgeschlossene short-circuited line. -, offene (am Ende) open-ended line. -, verkabelte cable line, stranded-wire l.. -, zusammengesetzte compound circuit.

Leitung, Antennenring- multiple receiver connection to an antenna.

Ausgleichs- balancing network, b. line. **Energie-** energy feeder lead, e. leader, downlead, transmission line. **Fern-** long-distance line, toll circuit. **Hohlrohr-** conductive (hollow or pipe) line, wave-guide. **Kondensator-** high-pass filter. **Kunst-** artificial line, a. cable, a. circuit, balancing or equalizing network.

Lecher- Lecher-wire circuit or line. **Quer-** shunt line, cross l.; leakage conductance, leakance.

Regler- pilot wire. **Rohr-** pipe line, co-axial cable, concentric l. **Rückwärts-** high-resistance direction (of rectifier). **Simultan-** earthed phantom, composite circuit. **Speise-** (aerial) feeder lead, down-lead, energy feeder cable or wire. **Umweg-** by-pass lead. **Vorrats-** spare circuit, standby c. **Weg-** directions for tracing or tracking trouble or for "trouble shooting". **Wellen-** ultra high-frequency feeder line; wave guide (either dielectric or conducting).

Leitungs-dämpfung line loss, l. attenuation. -elektronen conduction electrons (from outer levels of atoms). -fehler line failure, line fault.

leitungs-gerichtete Hochfrequenz-telephonie wired or carrier current RF telephony, t. along wires by RF. -gesteuerter Oszillator line-controlled oscillator.

Leitungs-induktivität lead inductance, line i. -messer conductor meter. -nachbildung balancing network, artificial b. line. -rundfunk wire broadcast, AF re-diffusion. -schema diagram of

connections, circuit d., hook-up. -schleife loop, metallic circuit. -strom-Modulation conduction-current modulation. -stück stretch of line, portion of l., line element. -taubheit (im äusseren Ohr) conduction loss or impairment of hearing, conduction deafness (in outer ear). -Übertragung wired radio, w. wireless, carrier telephony or telegraphy, wire broadcast. -verstärker telephone (circuit) repeater, communication line r. -wasser tap water, city mains w. -wechselstrom conduction a-c.

Leitvermögen, richtungsabhängiges asymmetric conductance. -, spezifisches specific conductance, conductivity.

Leitwand baffle, deflecting vane (of loudspeaker).

Leitwert admittance, conductance, susceptance (being, respectively, the reciprocals of impedance, resistance and reactance, the latter either inductive or capacitive). -, spezifischer conductivity.

Blind- susceptance. **Eingangs-** input admittance. **Eingangswirk-** input active admittance, input conductance. **Kenn-** indicial admittance. **Rückwirkungs-** reactive admittance, susceptance (either inductive or capacitive). **Schein-** admittance. **Übergangs-** transconductance, transfer characteristic. **Wirk-** conductance.

Leit-zahl, Wärme- thermal conductivity. -zone equi-signal or glide zone or path.

Lenardröhre c.-r. tube of Lenard (used in radiology and early experiments on phosphors).

Lese-band (ore) picking belt conveyor. -glas, viereckiges oblong reading glass.

Lettern-gut, -metall type metal. lettig clayey, clayish.

Leuchtdauer illuminated period, light p.; period or duration of

glow, luminescence or luminosity; phosphorescence p.

Leuchtdichte brightness (in terms of stilb, sb, or apostilb, asb, or other units), intrinsic brilliance (of a luminous surface).

Bildwand- screen brightness, s. luminous density. **Dreifarben-** tricolor RD (reflection density) value. **Schwarz-** brightness of black.

Leuchte lamp equipment (m.p.).

Flächen- bank or pillar of lamps, battens. **Matrium-** sodium lamp.

Leuchtelektronen emitting electrons, optical e.

leuchten emit light, shine, glow, luminesce.

Leuchten, **Nach-** afterglow, phosphorescence, persistence of light or of vision (of an image, on retina).

leuchtende Flamme luminous flame.

Leuchtenergie erzeugend photogenic, fluorogenic, phosphrogenic (as by manganese, in zinc sulfide).

Leuchter, **Selbst-** self-luminous substance, fluorescent s., phosphor.

Leuchtfaden luminous or glow column; streamer. -einsatz streamer onset.

Leucht-farbe luminous paint.

-fleckdurchmesser spot diameter.

-gebilde luminous pattern (lines, bands, or continuous spectra).

-hülle luminous sheath, l. envelope; photosphere (of sun).

Leuchtkraft illuminating power, luminosity. -gemessene luminance, photometric brightness.

-bestimmung photometry. -verminderer, **Nach-** poison, killer (of phosphorescence). -verstärker phosphrogen.

Leuchtkreuz reticle image (reflector sight). -masse, -material phosphor, luminescent or phosphorescent substance or material. -mittel illuminant.

-punkt (luminous) spot. -rakete

flare. -resonator glow-tube resonance indicator. -röhre luminous discharge tube; fluorescent t. -schirm fluorescent screen, luminescent s., phosphor s.; target.

-schirmsubstanz phosphor, fluorescent substance (for c.-r. tube screens). -spur tracer trajectory.

-strahlquelle, einfarbige monochromatic illuminator, monochromator. -stofflampe fluorescent lamp, luminous or luminescent l. or tube, t. containing phosphor.

-streifen (bei Entladung) luminous streamer (in discharge). -verfahren, Selbst- self-luminous or s. -emissive method (using electrons on object surface). -Zeiger dial light resonance indicator.

-zifferblatt luminous dial.

L Glied L-type section, filter mesh or network m.

Libelle level, spirits or water l. Kreuz- cross level.

licht(e) light, pale, bright, luminous, clear, inside (of diameter).

-(e)weite inside diameter, i. width, lumen, clear aperture (of lens), useful or effective d.

Licht, auffallendes incident light.

-ausfallendes emergent light, transmitted l. -direktes specular light. -durchfallendes transcient light, transmitted l. -einfallendes incident light. -einfarbiges monochromatic light, homogeneous l. -eingestrahltes incident light, exciting l. -falsches light fog, leakage l., stray light (film printing). -gerichtetes parallel light rays. -spektral zerlegtes spectroscopically dispersed or separated light.

-unzerlegtes undispersed light.

Licht, **Blitz-** flashlight, flash bulb, magnesium light, lime l. Flut-floodlight. **Gegen-** backlight, counter light (m.p.). **Kathoden-** cathode glow. **Neben-** light-shot (film). **Nord-** aurora borealis. **Ober-** overhead scoop light, scaffold

l., skylight. Ruhe- unmodulated light, no-modulation l., average or steady illumination, no-sound lighting (in sound recording). See- marine phosphorescence. Sofitten- overhead scoop, scaffold light. Spitzen- highlights (of a picture). Streu- stray light. Sucher- searchlight. Südaurora australis. Ton- exciter lamp (operating a cell). Wechsel- brightness variations (striking photo-cell), light intensity v. Licht-abstufung gradation of light. -anzeiger, Glimm- flashograph, Tune-A-Light tuning device. -ausbreitung auf Film distribution of exposure on film. Lichtbild photo-image, photograph. -,unvergängliches imperishable picture or photograph. -entzerrung rectification of aerial photographs. -kunst, Klein- microphotography, photomicrography. Licht-blende light stop, diaphragm, apertured partition; light shield (in sensitometer). -blitz pulse of light, flash of l., scintillation. -bogen, Erdungs- arcing ground. lichtbogenbeständig arc-proof, a. resistant. Lichtbogen-erdung arcing ground. -löschkammer arc quench chamber. lichtbrechend optically refracting, light r., refractive or refringent. Licht-brechungsvermögen (optical) refractive power, refractivity. -bündelvignettierung vignetting of cone of light. -chaos chaotic light (of eye or retina), photopsia. lichtchemisch photo-chemical, actinic. Lichtdämpfer silk, light softener (m.p. studio). lichtdicht (sealed) light-tight or l.-proof. Lichtdruck photo-mechanical printing; photographic p.; radiometer-vane effect. Lichtdurchlässig light transmissive

or transmitting, diaphanous, previous or permeable to light rays, transparent, translucent. Lichtdurchlässigkeit light transmittance, (specific) light transmittancy. licht-echt fast to light, non-fading. -elektrisch (cf photo-) photo-electric; electronogenic. -elektrische, -empfindliche Zelle photo (-electric) cell, light microphone. -empfindlich machen photo-sensitize. Lichtempfindlich-keit photosensitivity; actinism. -keitskurve des Auges response curve of eye. lichtentwickelnd emitting light, producing l., photogenic, with luminophor properties. Licher highlights (in pictures), lights, transparent spots or areas (in photography, printing, etc.). -,gedeckte covered lights. lichterzeugend emitting light, producing light, photogenic, with luminophor powers. Licht-farbendruck photo-chemical color printing. -filter light filter, color f. -fleck hot spot (on film); spot (of light). -fleck-verzerrung spot distortion. Lichtfreundlich favoring high lights over shadows, photophilic, photophilous. Lichtfreundlichkeit light transmittancy, l. transmissivity. Lichtgebend giving or emissive of light, luminous, photogenic, with luminophor properties. Licht-gewinn light increment, l. gain. -grammophon sound-track film player (without pictorial accompaniment). -hahn electromagnetic mirror vibrator (often) with oil damping (for film recording by variable-area method). -haut cathode glow. -hof halation, halo. -hof, Reflexions- halation by reflection. Lichthoffreie Platte non-halation plate, plate free from halo. Lichthof-schutzmittel anti-halo

means, anti-halation substance.

-störung halo disturbance.

Licht-kegel cone of light, luminous cone. -**körpuskeln** photons. -**kreis** circle of light, halo. -**lampe**, **Ton**- exciter lamp. -**lehre** optics, photology (or physiological o.). -**leitsystem** condenser relay system (film printing). -**loch** pupil (of eye), opening for light. -**messung** photometry, optometry (re:eye).

-**mikroskop** optical microscope, light m., light-optical m.

Lichtmodulator light relay, any device adapted to reconvert current into light or brightness variations, e.g., television receiver lamps, Kerr cells, modulated neon lamps, c.-r. tubes, etc. -**,selbstleuchtender** light relay of the glow-tube, neon arc lamp, sodium lamp, etc., type.

Fremdlicht- light relay of the Kerr cell, Karolus c., etc. types adapted to reconvert currents into brightness variations by the use of a constant independent ray source.

Licht-mühle radiometer. -**netzantenne** light-socket antenna, l.-circuit a. -**optik** light optics, physical o., geometrical o. of light rays. -**pause** photographic tracing, blue print. -**phonograph** sound-track film player (without pictorial accompaniment). -**quant** light quantum, photon. -**quelle** source of light, illuminant. -**quelle,-punkt-förmige** punctiform light source, pointolite, tungsten-arc lamp.

-**quellenbild** light source image.

-**rakete** flare. -**reflexionsvermögen** light reflectance, l. reflexivity. -**regler** light relay, l. modulator (Kerr cell, etc.); light control means. -**reiz** luminous stimulus.

Lichtrelais light relay (Kerr cell, Karolus cell, modulator, recorder lamp, etc.); device converting current into light variations. -**,elektrooptisches** electro-optical

cell, Faraday c., light-relay depending on F. effect. **Überschall**- supersonic light-relay.

Licht-säule light column (of glow tube). -**schacht** light tunnel (of sensitometer). -**scheue** photophobia. -**schleuse**, **Vierband**- four-band or f.-ribbon light valve. **lichtschluckend** light absorbing, optically absorptive, optically absorbing.

Licht-schranke light barrier.

-**schutzkappe** light hood (phot.).

Lichtschwaches Bild low-luminosity picture, p. of low brightness.

Licht-schwächung light absorption, l. loss, l. diffusion, l. dimming, l. intensity drop, cutting down or reduction of l. -**sinnprüfer** visual photometer. -**sirene** light chopper, c. wheel. -**spalt** light slit, l. aperture, l. opening. -**spielhaus** moving picture theater, film playhouse, movie. -**spritze** (Ewest'sche) recorder lamp with constricted neon arc (system Ewest). -**spur** light track, l. pattern, l. tracing.

Lichtstärke luminous intensity, light i.; power, speed, F number (of a lens). -**,gemessene** luminance, photometric brightness. **Objektiv-speed** or power (of a lens, etc.), F number.

Lichtstärkemesser photometer.

lichtstarkes **Objektiv** high-speed or high-power objective, fast o. **Objektiv, hoch- ultra-rapid** lens, ultra-high-speed l.

Licht-stärkeverteilung light intensity distribution (on photo-cathode). -**staub** luminous dust (of dark visual field). -**steuerung** light modulation; l. scanning. -**steuerungseinrichtung** light valve, light relay. -**steuerzelle**, Debye-Sears supersonic light valve, D.-S. l. modulator.

Lichtstrahl, **wandernder** flying spot (for spotlight scanning). -(es), **maximaler Ausschlag des** clash

point of light valve (in sound recording). -abtaster spotlight scanner, scanning brush, s. pencil.
Licht-streuung light scatter, diffusion. -strom luminous flux, light f. (in lumen units); lighting or lamp current. -stromdichte luminous flux density (in lumens). -strommesser lumen meter (of Blondel, etc.), photometer, lumeter. -stufe der Kopiermaschine printer step. -summe total light emitted, l. sum.

Lichtton photographic sound recording. -ansatz photographic sound-film head. -aufnahme photographic sound film recording. -gerät sound-film head or attachment. -punkte elementary shading values, e. density v. -spalt recording slit. -streifen veränderlicher Breite squeeze track. -zusatz sound-film head or attachment.

Lichtumfang range of light oscillations.

lichtundurchlässig light-tight, opaque to l., impervious to l., non-diaphanous.

Licht-ventil light valve, l. relay (e.g., selenophone, Kerr cell, neon lamp, etc.). -verteiler beam splitter (m.p.). -verteilungsfläche luminosity curve, isophotic c., isophote, isolux diagram. -wagen light-truck. -wechsel variation of exposure. -weg, Satz vom ausgezeichneten law of extreme path. -werbung light advertising, propaganda using illumination or light effects. -wissenschaft optics, photology (or physiological o.). -zähler counter tube. -zelle photo- (electric) cell. -zerhacker light (beam) chopper, episotister. -zerlegung dispersion of light, decomposition of light (into primary colors).

lichtzerstreuend light diffusive, dispersive or scattering.

Liderung packing.

Liebesflöte flute d'amore.

Ligand attached atom or group. Lindenholz lime. Lindern alleviate, soften, relieve, mitigate. Lineal straight edge, rule. Linearantenna plain or straight (one-wire) antenna or aerial. **linear(er)** Gleichrichter oder Detektor linear rectifier or detector. -(e) Vergrösserung magnification in diameter. **Linearisierung** linearizing action, correction of non-linear distortions (in an amplifier), say, by reverse feedback. **Linearskala** slide-rule dial. **Linie, abgewickelte** evolute. -,ausgehackte jagged line, serrated l., notched l., dented l. -,ausgezogene solid line (in graphs, etc.). -,durchstreichende trajectory. -,falsche grating ghost. -,gezackte jagged line, serrated l., notched l., dented l. -,in eine -bringen align, rectilinearize, straighten out in a line. -,in gerader -mit in alignment, or flush, with. -,strichpunktierte dash-dot line. -,verbotene forbidden line. -,zusammengesetzte multiplet (in complex spectrum). **Linie, Anflug-** center of approach sector. **Anschlag-** striking line (piano). **Aussen-** contour line, boundary l. **Begleit-** satellite line. **Bild-** focal line, image l. **Blick-** line of sight, l. of vision. **Brenn-** focal line, image l. **Gleitslide** or slip band or line. Grenz- boundary line, demarcation l. **Grund-** center line of approach sector. **Halbierungs-** bisector (line), bisectrix. **Haupt-** primary line. **Kenn-** characteristic curve or graph, indicial diagram. **Knoten-** neutral line, common l., nodal l. **Kollimations-** collimating mark. **Kraft-** tube of force, line of f. **Mantel-** directrix, line along a shell or cylinder. **Mittags-** meridian. **Mittel-**

line, center l., axis, equator.
Neben- secondary line, branch l.; satellite (spectr.). **Nordlicht-** green auroral line. **Rad-** cycloid (stroboscopic aberration), epicycloid. **Richt-** guide line, guiding l. **Richtkenn-** rectification characteristic; directional diagram, space pattern. **Schau-** graph, curve. **Scheide-** boundary line, separation l. **Schmelz-** fusion curve. **Schrauben-** helix, helical line. **Seh-** line of sight, l. of vision, l. of collimation. **Sinus-** sinuous line, sinusoidal l., sinusoid. **Spektral-** spectrum line, spectral l. **Stand-** position line. **Strom-** stream line, flow l., force l. **Translations-** slip band. **Trennungs-** dividing line, boundary l., partition l., line of separation (of a solid moving through liquid). **Umgrenzungs-** contour, line of demarcation or separation, boundary line, peripheral l., circumferential l., circumscription l. **Verschiebungs-** line of displacement. **Visier-** line of sight. **Wellen-** wavy line, undulatory l., sinuous l. **Winkel-** diagonal. **Wurf-** line of projection, curve of p., trajectory. **Zeuge-** generating line, generatrix. **Zug-** tractrix.

Linien-bilder, aufgelöste resolved line patterns. **-breite** breadth or width of line; spot diameter. **-gleicher Spannung** isoclines (indicating stress lines in glass and other materials). **-komplex** multiplet. **-raster** ruled plate, line screen or grating; raster. **Linienreich** rich in lines, with abundance of l. **Linien-skala** variable-density sound track. **-spektrum** line spectrum. **-steuerung** velocity modulation. **-summe** line integral. **-umkehr** line reversal. **-verbreiterung** broadening or spread of line or strip (telev.). **-zug** line, trace (of

a graph).

linig, krumm- curvilinear.

linksdrehend levo-gyratory, levo-rotatory, counter-clockwise rotating.

Links-drehung levorotation, left-handed polarization. **-häufigkeit** left-handedness. **-kurve** left-hand (or port) curve or loop (in airplane landing, etc.).

links-laufende wellen sinistro-propagating traveling waves or surges. **-läufig** moving to the left, counterclockwise.

Links-quarz left-handed quartz, levogyrate crystal. **-schraube** left-handed screw.

Linse (s.a. **Objektiv, Lupe, Glas**) lens, objective glass; bob (of a pendulum).

Linse, eingekittete cemented lens.

-, facettierte bevel-edge lens.

-, fehlerfreie perfect, aberration-less lens. **-, gefasste** mounted lens.

-, gekittete cemented lens.

-, krümmungsreduzierende field-flattening lens. **-, kurzbrennweitige** short-focus lens. **-, langbrenn-**

-weitige long-focus lens. **-, licht-**

starke high-power lens, h.-speed l. **-, magnetische**, mit Eisenpanzer ironclad magnetic lens, iron-core deflector unit (of c.-r. tube).

-, scharfzeichnende achromatic lens.

-, ungefasste rimless lens.

-, ungekittete uncemented lens, broken-contact l. **- veränderlicher**

Brennweite und v. Bildgrösse zooming lens for variable focus and variable magnification, vario-

objective, **-, verkittete** cemented lens. **-, weichzeichnende** soft-focus lens. **-, weitwinklige** wide-angle lens. **-, zusammengesprengte**

uncemented lens (lens units closely fitted together, as in Cornu device), broken-contact l.

Linse, Augen- eye lens. **Beleuchtungs-** condensor lens, illuminating l., bull's eye l. **Beschleunigungs-**, mit 2 Lochelektroden double-aperture (electron optic)

accelerator lens. Brenn- burning glass, convex lens. Butzenscheiben- bull's eye lens. Doppel- double lens, doublet. Doppelschicht- double-layer lens. Durchgriff- (cf. Lochblenden-) aperture lens (through which field or anode may act or draw electrons). Einblick- eyepiece lens. Einzel- unit lens. Elektronen- electron lens (either electromagnetic or electrostatic). Feld- anterior lens (in telescope and microscope), field l. Feldebnungs- field flattener. Fenster- aperture lens. Fern- telephoto lens. Flüssigkeits- (oil or water) immersion lens. Halbkugel- semi-circular lens. Haupt- second lens (in electron gun). Hinter- back lens. Immersions- (oil or water) immersion lens; double aperture lens (electron-opt.). Kugel- spherical lens. Lochblenden- (cf. Durchgriffs-) simple aperture lens (electronic). Lochscheiben- aperture lens (in scanning disk). Muschel- globular lens. Punktal- toric lens. Sammel- condensor lens, convergent l., positive l. Schau- viewing lens. Scheitel- zenithal lens, vertical l. Stufen- echelon lens. Trocken- dry lens, d. objective. Verzögerungs- cutoff lens, stopping l. (el.opt.). Vorder- front lens, field l. Vorsammel- cathode lens, first focusing l. (like Wehnelt cylinder, aperture disk, etc., in c.-r. tubes). Vorsatz- auxiliary lens, supplementary l., l. attached in front, magnascope (to enlarge projector image). Zerr- anamorphic lens, anamorphosing l., distorting l. Zerstreuungs- dispersive lens, divergent l., negative l. Zusatz- supplementary lens. Zwiebel- biconvex lens. Zylinder- cylindrical lens.

Linsen-abweichung aberration of a lens. -achse optical axis of a lens. Linsenähnlich lenticular, lenticulated, lens-shaped. Linsendeckglas anterior surface of a lens. -einschiebebettel slidable lens panel. -faserung, Augen- fibrillation of lens (of eye). -fassung lens barrel, 1. mount. -fassung, Vignettierung effect or trimming of light by lens mount. -fehler lens defects, 1. aberrations. -folge lens combination, system of lenses. -grundpunkt cardinal point (of a lens). -kranzabtaster lens drum scanner. -prüfer lensometer. -rasterfarbverfahren lenticular or lenticulated lens color printing method. -rasterfilm lenticular film, lenticulated f. -satz lens combination, system or assembly of lenses. -scheibe lens disk (scanner). -scheinwerfer spotlight. -scheitel vertex of lens, apex of l. -system, Fluorit- semi-apochromatic lens system, fluorite l.s. -trommel lens drum (scanner). -trübung clouding of a lens, opacity of a l. -vergütung s. Glasvergütung. -weite, lichte clear aperture of a lens (useful or effective diameter). -zusammenstellung lens combination, lens assembly. Lippenpfeife flue pipe, flute p. Lissajousfiguren Lissajous figures, L. curves. -apparat kaleidophone (of Wheatstone). Literatur, Fach- technical literature, t. press. Litze strand, stranded wire, braid, lace, cord, string. Litzen-draht stranded wire, litzwire. -spule litzwire coil. Lizenz, Zwangs- compulsory license. Lizenz-erteiler licenser, grantor, issuer of a license. -gebühr royalty, license fee. -nehmer licensee, grantees, concessioner. In natural, Naperian or hyperbolic

- logarithm = \log_e or \log_{10} .
- Loch** eye, pore, pocket, opening, aperture, perforation, puncture; hole (of nucleus). - *auf treiben* enlarge, expand, broach or ream a hole. -, *ausgetuchtes* bushed hole.
- Loch**, **Blenden-** anode aperture (cathode-ray tube). **Führungs-** guide perforation (for sprocket engagement). **Gitter-** vacancy or hole in lattice. **Greif-** finger hole (in dial switch). **Licht-** opening for light admission, pupil (eye). **Schau-** peep hole; inspection hole, bezel.
- Loch-blende** apertured partition, anode aperture, diaphragm or shield (of c.-r. tube), stopping aperture. - *blendenlinse* (cf.).
- Durchgrifflinse** apertured disk lens; simple (electron-optic) aperture lens. - *breite* (eines Frequenzsiebes) transmitted band, transmission range, bandwidth, band pass (of a filter), spacing between cutoff points. - *breite*, **Bandfilter von grosser** broad-band filter. - *elektroden*, **Beschleunigungslinse aus zwei** double-aperture accelerator lens (in c.-r. tube).
- löcherig** punctured, perforated, apertured, porous, pitted.
- Löchertheorie** hole theory (re: nucleus).
- lochfrassähnliche Zerstörung** pitting, destruction in form of pits, honeycombing.
- Loch-grenze** transmission range of band pass (range between cutoff points), channel width or limit, cut-off frequency. - *kamera* pinhole camera. - *lage* (eines Filters) position of transmission range or of band pass (of filter). - *lehre* internal caliper gage, plug g. - *niete* hollow rivet, tubular r. - *probe* drift test.
- Lochscheibe**, **konzentrierende** focusing aperture lens or apertured disk (mounted anteriorly of cathode, in c.-r. tubes). **Kreis-** film scanner (with holes arranged circularly rather than spirally).
- Mehrzahl-** multi-spiral scanning disk. **Spiral-** Nipkow disk, spiral d. (for scanning). - **Vierfach-** quadruple spiral scanning disk.
- Lochscheiben-anode** apertured disk anode, ring a. - *generator* light chopper. - *linse* aperture disk lens.
- Loch-spirale** scanning (hole) spiral; spiral row of apertures (e.g., in Nipkow disk). - *trommel* scanning drum (of Jenkins).
- Lochung** perforation, punched holes (in film), punching.
- Lochweite** band-width, band-pass, band between cutoff points; inside diameter. **Bandfilter grosser** broad band filter. **Wellenberg-** peak separation, inter-peak distance, inter-crest d.
- Locker-ionen** defective ions, "Locke" ions. - *stellen* loose spots, l. places (cryst.).
- Lockflamme** pilot flame.
- Löffelbohrer** spoon bit.
- Logarithmen**, **dekadische** common logarithms.
- ogarithmus der Belichtung** log exposure.
- lösbar** detachable; soluble, dissolvable, dissolvable.
- losblättern** detach in leaves or scales, exfoliate, defoliate.
- löschen** (cf. auslöschen) turn off (repeater); extinguish, quench, slake (lime), obliterate, clear, cancel, blot, erase, wash out (a magnetic record).
- Löscher**, **Funken-** spark quench, blow-out or extinguisher, s. killer.
- Röhren-** tube quench.
- Lösch-feld**, **magnetisches** obliterating field, erasing f. (of magneto-phone, etc.). - *funkenstrecke* quenched spark gap. - *kalk* quicklime, slaked l. - *kammer*, **Lichtbogen-** arc quench chamber. - *kohle*

quenched charcoal. -magnet obliterating magnet (in magnetic sound recording equipment), wash-out m. -spannung stopping potential (at which glow discharge is stopped; s.p. is lower than glow p., in photo-cells and g.-tubes), extinction p., critical p. (at which tube goes out), cut-off p. (of thyratron). -taste cancel key, clearing k., release k. -wirkung quench effect. -zündspannungsdifferenz extinction-striking potential difference.

Lösen solve, dissolve; loosen, untie, detach, disengage, disconnect.

Löser solving agent, solubilizer.

Löslichkeits-druck solubility pressure. -produkt solubility product.

löslich machen solubilize.

los-löten unsolder. -trennen separate, sever, tear apart, detach.

Lösung solution; discharge (of a gun); separation, detachment, opening (of a connection), severance. -, un gepufferte unbuffered solution. Abschwächungs- reducer solution. Zehntel (normal)- tenth normal solution, decinormal s.

Lösungs-druck solution pressure.

-magnet releasing magnet, trip m.

Lot fällen let fall a perpendicular.

Lot, Behm- fathometer, echo depth sounder; sonic altimeter. Mess-schlag- brass solder. Mittel- median perpendicular.

Löt-kolben soldering bit. -rohr blowpipe. -rohrflamme blowpipe flame.

lotzen, heran- guide to, pilot (a craft by radio signals).

Lötstelle soldered joint, shut; junction of a thermo-couple.

Heiz- hot junction of a thermo-couple.

Lötstreifen tag strip, terminal s.,

connection s.

Lotung sounding (determination of depth or altitude), probing (for depth).

Lötung soldering, brazing (by hard solder); agglutination; adhesion. Doppel- double seals (in Dewar vessel, etc.).

Lotung, Echo- echo sounding, reflection s. (cf depth and altitude measurement).

Lötung, Hart- hard soldering, brazing. Selbst- autogenous soldering.

Loxodrome oblique line, loxodromic line or course, great-circle bearing.

L-Regler L-section attenuator.

Lücke gap, void, space; deficiency.

auf - stehen positioned so as to fill gaps (e.g., in a parallel row), staggering. -, positiv geladene positive hole (cryst.).

Lücke, Bildsynchrosynchronisierungs- synchronizing gap (between traversal of frame and beginning of next), underlap or interstice period in which sync signal is introduced. Mischungs- miscibility gap.

Lückenbildung unsaturated linkage.

-satz vacancy principle. -synchrosynchronisierungsverfahren gap, underlap, interstice or interval synchronizing method (sync. signal introduced between end of line traversal and beginning of next line).

lückig porous, honeycombed, pitted.

Luft-abschluss exclusion of air, absence of a., hermetic seal, airtight s. -alarm air raid alarm.

-aufnahme air absorption, a. occlusion; aerial photograph, airplane picture. -auftrieb air buoyancy. -bild aerial image, i. formed in space by optical system.

-bilddaufnahme aerial photograph, airplane picture. -bildkarte aerial mosaic; photographic map.

luftdicht air-tight, hermetical.

Luftdraht (cf Antenne) aerial (wire), antenna. -gebilde aerial structure, radiating system, array of antennae.

-verkürzungskondensator shortening condenser. -verlängerungs-spule antenna load coil, aerial loading inductance.

Luft-druck air pressure, atmospheric p., pneumatic pressure. -durch-lässigkeit air permeability, a. perviousness, -einschluss air cavity, a. bubble, a. occlusion. **luftelektrische Störungen** atmospherics, statics.

Lüften ventilate, air, aerate; raise or lift (clear of something).

luftentzündlich inflammable in contact with air, pyrophoric.

Lüfter ventilator, fan.

Luftfahrt, Verkehrs- commercial aviation, c. avigation. -hindernis air navigation obstacle, avigational o. -navigation avigation, aerial navigation.

Luft-funkstelle aircraft radio signal station. -gebilde aerial structure, radiating system.

-gleichstrom current of breath (in sound recording). -gütemesser audiometer. -hahn air cock.

-kammer air pressure space (loudspeaker). -kammerlautsprecher air-chamber loudspeaker (c. coupling diaphragm with horn). -kern air core. -kissen air cushion, dash-pot. -kreis atmosphere.

Luftleerer Raum vacuum, vacuous space, exhausted s.

Luft-leerspannungssicherung vacuum arrester. -leitergebilde aerial extension, a. structure. -mast ("Schnorchel") breathing mast, underwater air intake (supplying air, for Diesel engines, to submerged submarines). -meer atmosphere. -plattenspektroskop Fabry-Férot interferometer, étalon (when not variable). -rahmen air-cored frame (d.f.). -reibungsverlust windage loss. -sauger aspirator. -säure carbonic acid. -schall sound conducted or transmitted through air. -schleier air fogging (chemical action of air).

-schraube, Versetz- variable-pitch (feathered) propeller or airscrew.

-schraubensteigungsmesser propeller pitch indicator. -schutzeleiter air warden. -spule air-core coil, loop or frame (d.f.). -strahl air jet.

-strom, Gleich- direct flow of air, d.c. air-flow. -strompendelung air jet pendulation. -strömungsmesser anemometer. -verdichter air condenser, a. compressor. -verdünnung air rarefaction, vacuum.

-verkehrskontrolle airways traffic control, avigation regulation.

-welle sky wave, space w., indirect w. -wichte specific gravity of air.

-widerstand aerodynamic drag (on airplane). -winkel angle of the wind. -zutritt access of air, admission of a.

Lumièrreplatte autochrome plate.

Lumineszenzlampe, Kathoden- cathode-glow tube.

Luminophore phosphors, luminophors, luminescent substances.

Lummer-Brodhun'sches Photometer oder Würfel L.-B. contrast (or total-reflection) photometer, cube p. (with cubical cavity).

Lunkerung shrinkage, contraction, piping, blowhole formation, cavitation (in metals).

Lupe, stark vergrößernde high-power magnifier. Ablese- reading lens. Einstell- focusing magnifier (lens). Einzel- magnifier unit, individual m. Fadenkreuz- reticle magnifying lens. Feldstecher- field glass magnifier. Fernseh- telescopic magnifier. Präparier- dissecting magnifier. Stativ- stand magnifier.

Lupen-aufnahme, Kamera für Zeit- camera for slow-motion picture projection. -ständer lens stand. -verfahren, Zeit- high-speed shooting, low-speed projection method.

Luwinkel drift angle, a. of lead.

l.W. (lichte weite) inside diameter, i. width, lumen.

Lyra lyre.

M

Maasss. Mass

Mach'sche Streifen Mach bands.

Mächtigkeit size, thickness, magnitude, power, strength.

Madenschraube headless screw.

Magazinbalg reservoir bellows.

mägern make lean or poor, shorten, reduce plasticity (of ceramics).

Magnesia-glimmer magnesia mica (biotite).

Magnesiumlicht magnesium light.

Magnet, fremderregter non-permanent magnet, electro- m. Abnahmepickup magnet. Aufnahme- recording magnet (for steel-band or wire recording of sound), pickup magnet. Auslöscherobliterating magnet, wash-out m. (to wipe away sound track or recording on wire or tape, for re-use). Eindrück-trigger magnet, trip m., starting m. Glocken- bell-shaped magnet. Hub- vertical magnet, stepping m., lifting magnet. Lamellen- laminated magnet, compound m. Löscherobliterating magnet, wash-out m. (sound recorded on wire or tape). Lösungs- release magnet, trip m. Topf- ironclad magnet, pot-shaped m. Wähler- bank of (stationary) contacts, selector magnet (aut. telephony).

Magnetfeld, Quer- transverse magnetic field.

Magnetförderröhre magnetron (or pentron) working with a constant magnetic field (strictly, a m. operates with a variable m.f.)

magnetisch(e) Belegung magnetic induction, m. charge, seat of m. induction or m. field. -(er)Effekt, kreis- gyromagnetic anomaly.

-(e)Leitfähigkeit permeance, magnetic conductance, permeability.

-(er)Schirm magnetic shield, m. screen, can (of a coil).

-(e)Spannung magnetic potential (line integral of m. intensity).

-(er)Tonaufzeichner magnetic sound recorder, magnetophone, Poulsen telephone, Blattnerphone (modern form of F.t.).

Magnetisierungskopf magnetic sound recording head (on wire or tape). magneto-optische Drehung magneto-optic rotation, magnetic r., Faraday effect (rotation of plane of polarization).

Magneton, Kern- (K.M.) nuclear magneton.

Magnetorotationsspektrum magnetic rotation spectrum.

Magnetron, Zweischlitz- two-split magnetron, two-segment m.

Magnetron-cycloidhöhe cycloidal height of a magnetron. -leitbahnwelle transit-time or electron path oscillation. -leitkreisfrequenz transit-time frequency of a magnetron. -schwingungen magnetron oscillations (3 kinds: electronic, negative- resistance and rotating field o.)

Magnet-schale magnetic shell.

-schenkel magnet limb, m. leg.

-spansschaube magnetic chuck.

-spule solenoid, field coil.

-summer magnetic interrupter, buzzer type of audio-frequency oscillator. -tonverfahren magnetic sound recording method, telephone s.r.m.

Mahl-feinheit fineness of grind, f. of grain, f. of comminution.

-gut material to be ground or milled.

Malschgitter stirrer, rake.

Makroachse macro-axis (of crystal).

Mal mark, spot, sign, token; stigma.

- mal times (x).
- Malerfiris** painter's varnish.
- Malteserkreuz** Maltese cross, cross wheel, (cam and) star wheel in Geneva intermittent movement.
- gesperre Geneva stop.
- Mängel** (in einer Anmeldung) defects (in a patent application).
- mangels** in default of, in the absence of, because of lack of.
- manipulieren** manipulate, handle.
- Manko** shortage, deficiency, deficit.
- Mannigfaltigkeit** manifoldness, multiplicity, variety, diversity.
- Mann-loch** manhole. -schaft men, force, crew, gang.
- Manometer**, **Glasfeder-** spoon-type glass manometer. **McLeod**- McLeod (vacuum) gage.
- Manschette** flap, collar, cuff.
- Mantel** casing, jacket, case, shell, sheath, surface (math.), nappe, sheet, envelope, cover. **Heiz-** heating jacket. **Kegel-** cone-shaped shell. **Wasser-** water jacket.
- Mantel-fläche** generated surface, shell s. -futter shell lining.
- gefäß, **Vakuum-** thermos or Dewar vessel exhaust jacket. -linie directrix. -rohr tubular shell, -transformator ironclad transformer, shell t. -welle wave on outer surface of coaxial cable, "shell" wave.
- Mantisse** mantissa (fractional part of a logarithm).
- Manual** keyboard, manual.
- Manuskript** scenario script (m.p.).
- Marien-bad** water bath. -glas selenite, mica.
- Mark** marrow, pith, pulp, core.
- Marke, Einstell-** reference work, bench m., gage m., measuring m., wander m. (of telescope, to establish "stereoscopic contact"). **Fabrik-** trade-mark.
- Zeit-** time scale, t. marking.
- Ziel-** sight reticle or graticule.
- Markenplatte** index plate (of telescopic sight).
- Markieren** mark, define, outline.
- Markierung(Szenenwechsel)** nothing on film edge. **Unterscheidungs-** distinctive marking, telltale m.
- Markierungs-sender** marker beacon, marker. -vorrichtung marker, puncher, notcher (m.p.).
- Masche, Gitter-** grid mesh. **Kettenleiter-** mesh or section of a network.
- maschig** meshed, netted, reticulated. **grob-, weit-** wide-meshed, coarse m. (e.g., of a grid).
- Maschinensender** alternator transmitter.
- Maser** speckle, spot, mark. -holz burwood.
- maserig** speckled, streaked, grained, veined.
- Maske** mask, mat (in film recording). **Laternenbilder-** lantern mask.
- Vignettier-** vignetting mask.
- maskieren** mask, blank, blanket, conceal, camouflage, cover, dissimulate, eclipse.
- Maskierung, Gehör-** auditory masking (loss of sensitivity of ear).
- Mass** measure, scale, dimension, proportion, degree, extent. **auf -drehen** turn true (to template or gage). **auf genaues - bringen** finish or true up (to template or gage). -, laufendes linear measure.
- Mass, Aussen-** over-all dimension, outside d. **Belichtungs-** exposure level (of Decoutes). **Dämpfungs-** unit of attenuation, image attenuation constant. **Eben-** symmetry. **Eich-** standardized gage, s. measure, calibration unit. **End-** standardized gage block, end-to-end standard bar. **Farben-** colorimeter. **Kraft-** unit of force. **Längen-** linear measure. **Parallelelend-** standardized gage block, end-to-end standard bar. **Phasen-** phase constant, wave-length

c. Richt- standard, gage.
 Strich- line standard. Vierpolwinkel- image phase constant.
 Winkel- phase constant, wavelength c. (denotes phase shift between input and output potential, and is the imaginary component of image transfer constant); set square. Zeit- time scale, t. marking.

Mass-abweichung (cf. Toleranz)
 off-size condition, dimensional discrepancy or difference.
-analyse volumetric analysis.
Masse mass (in mechanics; analogous to inductance in electricity and inertance in acoustics).

Masse, aktive active paste.
Einheits- unit mass. Grund-ground mass. **Isolier-**, gepresste molded insulation. **Leuchtphosphor**, luminescent or fluorescent substance. **Ruhe-** (der Teilchen) rest mass (of particles).

Massekern dust core, molded c.
-spule dust-core coil, compressed iron core c. Ferrocarr c.
Massen-absorptionskoeffizient mass absorption coefficient. -anziehung gravitation. -dichte mass density.
-einheit unit of mass. -gesteine unstratified rocks. -güter bulk goods; large-scale manufactured goods. -kopie release print; quantity production of prints.
-kräfte mass, inertia (in mechanics, mechanical filters, etc.); analogous to inertance in acoustics and inductance in electricity).
-moment moment of inertia, rotational i. -platte pasted plate (of battery). -plet electric mass. -punkt quantum, point-mass (in quantum theory), rotator; center of mass, c. of inertia, centroid. -schwankungskoeffizient mass absorption coefficient.

-spektrograph mass spectrograph, m. spectrometer. -spektrum mass spectrum. -strahler mass radiator. -widerstand inertance (ac.). -zahlen

mass numbers. -zentrum center of mass, c. of inertia, centroid.
Masseteilchen-Geschwindigkeit particle velocity.
Mass-faktor dimensional constant, d. factor. -gabe, nach in accordance with, in proportion w.
massgebend determinative, determinant, decisive, authoritative, competent, conclusive.
Massgefäß measuring vessel, graduated v. masshaltig true to size, measure or dimension (inside tolerance range, found by limiting gage).
-mäßig suffix signifying "in the manner of"; "so far as...is concerned"; according to, in terms of. For instance, hochfrequenzmäßig: so far as RF is concerned, or, for RF.
massig massive, massy, molar.
mässig, gesetz- in accordance with law or statute, conformable to (natural) law, in a regular or legal way. -,größen- dimensionally, quantitatively, numerically; pertaining to, or in relation to, quanta. -,hochfrequenz- for RF, so far as RF is concerned, relative to RF. -,quanten- pertaining or in relation to quanta. -,zahlen- numerically.
mässigen moderate, temper, mitigate.
massiv solid, strong; molar.
Mass-kunde metrology. -nahme mode of action, (precautionary) step, expedient, technique. -nahme, Schutz- preventive, protective, safety, or precautionary step, measure or means, safeguard.
-regel cf. -nahme. -röhre measuring tube, graduated t., burette.
Masstab scale, size, measure, yardstick, proportion, gage, standard.
Parallelend- end-to-end measuring bar, standard gage block. **Vergleichs-**standard of comparison or reference, comparative "yardstick".
Zeit- time scale.
Mass-stabtransformator gage (group) transformer. -stock gage,

yardstick, linear measure. -system, Farb- (CIE) chromaticity scale system, CIE diagram. -zahl measure or numerical criterion.

Mast, Glitter- lattice pole, girder p. Kreuzteilungs- cantilever type of tower, double tapered mast.

Luft- ("Schnorchel") breathing mast, underwater air intake (supplying Diesel engine air when submarine is submerged).

Mast-armatur pole hardware, fittings. -befeuering mast beacon.

Material, entgegenstehendes anticipatory references (found in prior art and literature). -, zertrümmerbares fissionable or disintegrable substance. -prüfer, elektronischer aniseikon. -prüfung testing of materials. -wanderung flow of material, creep of m.

Materie-welle matter wave, de Broglie (elementary particle, electron, proton) wave, electron w., phase w. -zertrümmerbarkeit disintegrability or fissionability of matter.

Matrize metal master, master negative, mother (in phonograph record manufacture), matrix die. **Kaltstauch-** cold upsetting die. **Press-** negative stamper. **Stanz-** cutting die-plate, punching die.

matt dead, faint, feeble, weak, dull, matt (photographic paper).

mattgeschliffen ground, frosted, de-lustered, matted.

Mattglas ground glass, frosted g.

mattieren tarnish, deaden, dull, deluster, matt, frost, impart a matt surface or look to, grind (glass).

Mattierungsmessung film polish measurement, glossimetric m.

Mattlack matt varnish.

Mattolein matoleine (retouching varnish).

mattrot dull red.

Mattscheibe ground or frosted glass (pane or plate). Visier-focusing screen.

Maul-trommel Jew's harp. -weite

interpolar distance, air-gap (of horseshoe magnet).

m.a.W. in other words, that is to say.

Maxima, Neben- secondary or lateral radiations, s. lobes or ears (in space pattern).

maximale Aussteuerung des Lichtstrahles clash point of light valve (in sound recording).

Maximalpeilung maximum signal (strength) method (df).

Maximumwertzeiger peak indicator, crest i.

Maxwell'sche Grundgleichungen Maxwell electromagnetic equations.

Maxwellverteilung Maxwell (statistical) distribution.

mC milli-curie.

McLeod Manometer McLeod vacuum gage.

mechanischer Filter, Federungswiderstand compliance of a mechanical filter. -Filter, **Massenwiderstand** inertance of a mechanical filter.

Medien media, mediums.

Meerfarbe sea green.

mehlartig like meal or flour, farinaceous.

Mehlgips earthy gypsum.

mehradriges Kabel multi-wire cable.

Mehraufwand extra or additional expenditure or means (in equipment, etc.) **Röhren-** tube complement, extra outlay for tubes,

Mehr-deutigkeit ambiguity, equivocation. -drehung multirotation.

mehrfaich manifold, multiple, repeated.

Mehrfachbelichtung superimposing, multiple exposure.

mehrfachbeschichteter Film sandwich film.

Mehrfach-bild multiple image (in telev.) -echo multiple echo (reverberation), flutter e. -empfangsverfahren diversity reception method (to minimize fading). -kondensator multiple condenser, gang c., tandem c., synchronized c., gang capacitor. -kopien multiple prints.

-nachrichtensystem multiplex signal system. -platten Karolus-Kerrzelle Karolus type of multiple-plate Kerr cell. -röhre multi-valve, dual v., multi-purpose tube, multi-unit t. -rückkopplung multiple regeneration. -spiralloch-scheibe multi-spiral scanning disk. -strahler bank or pillar of lamps, battens. -telegraph multiplex telegraph. -telephonie multiple telephony. -verstärker multi-stage amplifier. -zackenschrift multilateral sound track. -zeichen multiple signal, echo s.

mehr-fädige Lampe multiple-filament lamp. -farbig polychromatic, pleochroic, multi-colored.

Mehr-gangkondensator ganged condenser or capacitor, synchronized c., multiple c., gang capacitor. -gitterröhre multi-grid tube (tetrode, pentode, etc.)

mehrgliedrig multi-mesh, m. - section (e.g., of a network).

Mehrheit plurality, multiplicity, majority. -von Einheiten array of units, (plurality or multiplicity of u.

Mehrkanalfernsehen multi-channel television.

mehrkanalig multi-channel.

Mehrkanaprisma polyhedral prism.

mehr-kernig with more than one

nucleus or core, polynuclear.

-köpfige Besatzung multimann crew. -köpfiges Stations-

personal multi-manned station.

Mehr-kristall polycrystal.

-lagenspule multi-layer coil, banked c., pile c., honeycomb c. with banked winding.

-platten Karolus-Kerrzelle

Karolus multiple-plate Kerr cell.

-punktorschreiber multi-point recorder.

mehr-stimmig polyphonic (of an organ). -strahliges Funkfeuer

multi(-ray) beacon, multiple- or triple - modulation b.

-teilig multipartite. -wegig having multi-channel or m. -path properties. -wegige Übertragung multi-path transmission.

Mehr-welligkeit multi-wave property. -zahl plurality, multiplicity; majority.

mehrzügliches Tonformstück multi-ply tile or clay conduit.

Meilerkohle charcoal.

Meissel chisel, plectrum, stylus or style (for sound recording), engraver tool.

Meister, Bild- director of photography, picture chief, p. director. **Ton-** monitoring operator (working at mixer desk), recordist, sound engineer, director of s.

Meister-negativ metal master (in making phonograph records), master negative. -positiv mother record, master positive.

Melde-feld, Rück- revertive signal panel. -lampe alarm lamp, pilot l., telltale l.

Melder (s.a. Anzeiger) indicator

Melder, Abstimmungs- tuning indicator. **Einbruchs-** burglar alarm. Rück- revertive signal means, position-repeating m., check-back p. indicator (in telemetric arrangements).

Stations- station indicator, tuning i. **Wellenbereich-** wave-band indicator.

Membrane, als Ganzes schwingende piston diaphragm, diaphragm moving like a p. or en bloc. -, atmende flexible, non-reflecting diaphragm. **Falz-** non-rigid non-circular breathing cone (with curved radiating surfaces).

Kalotten- hemispherical diaphragm, cap-shaped d. **Kolben-** piston diaphragm. **Konus-** conical diaphragm, cone d., diffusion cone. **Nawi-** cone

diaphragm with curve profile, curvilinear c., para-curve.
Riffel- pleated diaphragm (of loudspeaker), d. with pleated corrugations. **Schirm-** screened diaphragm (of microphone).
Sektor- (non-rigid) sector diaphragm, sectorial cone.
Membraneinspannung suspension of diaphragm.
membranloses Mikrophon diaphragm-less microphone, cathodophone.
Membranschwingamplitude excursion amplitude of diaphragm.
Mengeeinheit unit of quantity.
Mengen-bestimmung quantitative determination, q. analysis.
-verhältnis quantitative relationship, proportion (of ingredients), q. composition.
Meniskuskante meniscus edge.
menschliche Stimme, Lautstärke-verhältnis human voice intensity range.
Mensur measure (string instruments), scale (organ); measuring vessel; measuring, mensuration.
Merkatorkarte Mercator chart.
Merkatorkartenprojektion Mercator projection, cylindrical p., orthomorphic p.
merkbar perceptible, noticeable, appreciable.
Merk-mal characteristic feature, c. object (of an invention), c. mark, sign, indicator, index, criterion.
-punkt index point, fiducial p., reference p., point de repère (in Baudot apparatus), bench mark.
Mesonen-bahnende mesotron track end.
-zerfall meson decay.
Mesotrontheorie meson theory, t. of mesotrons (also known as heavy electrons, barytrons, dynatrons, penetrons, x particles, etc.)
Messbereich measuring range, measurement r., indication or reading r.
Messer (s.a. Anzeiger, Melder, Messgerät, Messung, Meter, Probe, Prüfung, Zähler) measurer, meter,

measuring instrument or device; knife, cutter, blade. **Abklingzeit-fluorometer**. **Abschleif-** grinding blade, g. knife. **Abtrift-** drift meter. **Augen-** ophthalmometer, optometer. **Augenabstand-** inter-pupillary distance gage. **Augenbrechungs-** skiascope, retinoscope. **Ausdehnungs-** dilatometer, extensometer. **Basisentfernungsbase** range finder. **Beben-seismometer**, seismograph. **Beleuchtungs(stärke)-** illumination meter, i. photometer, illuminometer. **Belichtungs-exposure meter** (in sound recording, etc.), brightness m., turbidity m. **Beschleunigungs-accelerometer**. **Blutfarbe-plethysmograph** (tests blood flow), electroarteriograph. **Brand-pyrometer**. **Brechungs-** refractometer. **Brennweiten-** focometer. **Dampfdichte-** dasymeter. **Dampf-(druck)-** steam gage, manometer, tensimeter. **Dampfdruck-, osmotischer osmometer**. **Dämpfung-loss** or transmission (efficiency) measuring device, decremeter (measures logarithmic decrement or damping of circuits). **Deckkraft-cryptometer** (measures concealing power of paint). **Dehnbarkeits-, Dehnungs-** ductilimeter, dilatometer, extensometer. **Dichte-, photographischer (photo-) densitometer**. **Dicken-** thickness gage, calipers. **Dosis-** dosimeter, dosage m., intensimeter. **Druck-piezometer**, liquid manometer, fluid m., pressure gage. **Druck-, osmotischer osmometer**. **Druck- und Gefrierpunkt-** manocryometer. **Dunst-** atmometer. **Durchlässigkeitstransmissometer** (for semi-transparent media). **Elastizitäts-elasmometer** (measuring Young's modulus), torsometer. **Energie-ergometer**. **Entfernungs-** range finder, distance meter. **Erdbeben-seismometer**, seismograph (when

recording). Fallkörperzähigkeitsball-drop viscosimeter. Farbenchromatometer, colorimeter. Farbenstufen- tintometer. Feinhöhen- (aneroid) barometer measuring atmospheric pressure at airdrome (not reduced to sea level), sensitive altimeter. Fern- telemeter. Fern-, mit Summenangeber telemetric integrator. Feuchte- hygrometer, psychrometer. Feuchtigkeits, registrierender hygrograph. Film-film footage meter or counter. Flächen(aus)- planimeter; integrator (for curves). Flügelvane-type fluid-flow meter. Fluoreszenz- fluorometer. Flussfluxmeter (for magnetic measurements). Flüssigkeitsdichte- liquid density meter, areometer, hydrometer (measuring sp.g.) Frequenz-(cf Wellenmesser) frequency meter, onometer, sonometer. Gasdichte- dasymeter. Gefrierpunkt- cryometer. Gehörschärfe- audiometer. Geländewinkel-angle-of-site instrument, clinometer. Geräusch- sound level meter, noise m., n. measuring set, psophometer (for telephone noises), acustimeter. Geschwindigkeits- speedometer, tachometer. Gierungs- yawmeter. Glanz- gloss meter Glätte- glossimeter; surface analyzer. Gleichrichtervolt- rectifying voltmeter. Glutpyrometer. Grobhöhen- (aneroid) barometer or altimeter measuring actual atmospheric pressure reduced to sea level. Halbbildfernungs- split-field coincidence range-finder. Herzschlag- cardiac tachometer. Hitz- pyrometer. Hitzdraht- hot-wire anemometer (and other measuring instruments using a hot w.) Höhen- altimeter, altitude meter (of echo or reflection type), sound ranging altimeter, statoscope. Hörschärfe- audiometer. Hysterese- hysteresigraph. Impuls-

peakmeter, crest m. (for potentials). Ionenstärke- ionometer. Ionenwindvolt- ionic wind voltmeter. Isolations- insulation tester, megger. Kapazitäts- faradmeter. Kartenwinkelmap protractor. Kochpunkt- ebullioscope. Koerzitivkraft- coercimeter. Konsistenzviscosimeter. Körnigkeitsgranulometer. Kraft- dynamometer, force meter. Kraftstoss- ballistic pendulum. Kreiselneigungs- bank-and-turn indicator (aviation). Kreiskeilschwärzungs- circular wedge densitometer. Kristallachsenconoscopy (determines optical axis of crystals). Lautstärke- volume indicator. Leistungs- power meter, ergometer. Leitungskonductometer. Leuchtkraftphotometer. Lichtstärke- photometer, lumen meter, lumeter. Lichtstrom- lumen meter (of Blondel), photometer, lumeter; wattmeter for lighting circuits. Luftdruck- barometer, manometer. Luftdruck-, registrierender barograph. Luftfeuchtigkeits- hygrometer, psychrometer. Luftgüte- eudiometer. Luftstromanemometer. Mattierungs- film polish meter, glossimeter. Neigungs- (winkel)- clinometer. Neonröhrenlautstärke- neon tube volume indicator. Oberflächenspannungssurface tensiometer. Öffnungs- winkel- apertometer. Pegeltransmission measuring set. Permeabilitäts- permeameter. Politur- glossimeter. Pulsschlagcardiotachometer. Pupillenweitekorometron. Quotienten- quotient meter, ratio m. Röhrenspannungs-, Röhrenvolt- vacuum tube voltmeter. Roentgendosis- X-ray dosimeter. Roentgenstrahlenhärté- penetrometer, qualimeter. Roentgenstrahlen- Roentgen meter, ionoquantimeter (Duane's), ionometer. Rückstrahlungs- reflectometer. Sauerstoff-

eudiometer. Saug- vacuometer. Schalenwindstärke- cup-type anemometer. Schallstärke- phonometer, sound level meter. Scheitelbrechwert- apex refractometer. Schlüpfungs- slip meter. Schnittbildentfernungs- split-field range-finder. Schwärzungsdensitometer. Schwere- barometer, radiometer (measures gradient of earth's gravity field). Schwere-, registrierender barograph. Schwingaudionwellen- autodyne wave or frequency meter. Sicht (barkeits)- visibility meter (of Lukiesh-Taylor, etc.) Sonnenstrahlungswärme- solarimeter, pyroheliometer, actinometer (for solar flux density measurements). Spiegelneigungs- Abney level (to measure vertical angles). Steigleistungs- rate of climb meter ("variometer" measuring both rise and descent). Steilheitsderivator, tangent meter (for curves). Strahlen- radiometer (for heat rays), actinometer (for actinic r.) Strahlenbrechungsrefractometer. Strahlenhärtepenetrometer (for x-rays). Strom-, registrierender recording ammeter. Summerwellen- buzzer wave meter. Temperatur- bolometer (of high precision). Temperatur-, thermoelektrischer thermel. Tiefen- fathometer (e.g., supersonic and sonic types), depth finder. Ton-tonvariator, pitchpipe; frequency record. Tonschwankungs- flutter meter. Trägerfrequenzfern-telemeter, metameter (of GE Co., using carrier waves). Tropfenstactometer, stalagmometer. Trübungs- turbidimeter, opacimeter, nephelometer. Übersteuerungs-overload indicator. Umfangsgeschwindigkeits- tachometer (e.g., stroboscopic using strobotron). Vakuum- vacuum gage,

ionization g., vacuometer. Verbrauchs- supply meter. Wanderwellen- klydonograph, surge indicator. Wärme- calorimeter, thermometer. Wärme-, thermoelektrischer thermel. Wassersiede- hydrometer. Wellen- (s.a. Frequenzmesser) wave meter, frequency meter, Fleming's cymometer, ondometer. Widerstands- ohmmeter, megger. Windgeschwindigkeits- anemometer, wind meter. Winkel- protractor, goniometer, angle gage (for eye), angleometer (for measuring external angles), theodolite (for surveying). Wirkverbrauchs- active power meter. Zähigkeit- viscosimeter, viscometer. Zeit- chronometer, time piece, clock, watch. Zeit-, registrierender chronoscope, chronograph. Zungenfrequenzreed frequency meter. Messer-schalter knife (blade) switch. -zeiger knife-edge pointer. Mess-filmleinrichtung time recorder on film. -form parison (bottle making). -gefäß measuring vessel, graduated v., measure. Messgerät, Fern- telemeter, metamer (of GE Co., using carrier impulses). Intensitäts- level recorder. Mikrozeit- microchronograph. Wetter-, mit funken- telegraphischer Fernübertragung radio telemeteorographic instrument. Zeit- chronographoscope. Messing-blasinstrument brass wind instrument. -schlaglot brass solder. -späne brass shavings, b. turnings. Messinstrument, gedämpftes aperiodic or deadbeat measuring instrument. -, ungedämpftes ballistic measuring instrument. Wetter-, mit funkentelegraphischer Fernübertragung radio-telemeteorographic instrument, r. sonde. Mess-kolben graduated flask,

measuring f., gage f. -kunde metrology. -lehre, Fein-micrometer caliper, m. gage. -methodik measuring methodology. -okular micrometric eyepiece. -pegel measuring level, expected l. -schallplatte frequency record, phonograph r. bearing sliding or constant notes, parlophone record (producing warble note). -technik, Fernsprech-telephonometry. -trommel graduated drum. -umformer measuring transducer.

Messung, quantitative quantitative measurement, q. analysis. -, stationäre deadbeat measurement. Abnahme- acceptance test, works test. Elementen- stoichiometric measurement, stoichiometry. Entdämpfungs-Frequenz- gain-frequency measurement or test. Farb- colorimetry, chromatometrics, chromatometry. Feldland surveying, l. measuring; mapping or plotting of field configuration or field pattern (in an electrolytic tank). Gehörschärfe- audiometry. Kreis-cyclometry. Kristall- crystal-lometry. Kristallwinkel- crystal goniometry. Längen-, echte direct measurement of length. -, unechte indirect measurement of length. Leuchtkraft-, Licht- photometry, optometry (re: eye). Mattierungs- film polishing measurement, glossimetric m. Strecken- end-to-end measurement, straight-away m.

Mess-wandler measuring transformer, instrument t. -zahl numerical value, measured v., measuring v. -zweige measuring arms.

Metall, gespritztes die-cast metal. Edel- noble metal, precious m., rare m. Erdalkali- alkaline-earth metal. Misch- mix metal, alloy m., "Misch" m. Spiegel- specular metal.

Metall-azid metallic azide.

-beschreibung metallography. -blatt (thin) sheet of metal, m. foil, lamina, lamination. -gekrätzt waste metal. -glas enamel. -kassette metal darkslide. -kunde metallography. -pickelbildung (corrosion) pitting. -probe assay, test for metal; metal testing. -schliff polished section, micro-section; metal filings. -späne metal shavings, turnings, borings or chips. -spritzmethode metal spray method (with Schoop gun). -tuch wire cloth. -versetzung alloying, alloy. -vorrat metal reservoir, pool of Hg (in a mercury-vapor arc rectifier, etc.)

Metastellung meta position. Meter, Spektralphoto- spectrophotometer. Vakuum- vacuometer, vacuum gage.

Meter-zahl, ausgefahrenе reeled-out yardage, paid-out y. (airplane antenna). -zähler (film) film footage counter.

Methodik methodics, methodology. Mess- measuring methodology.

Mikro-densogramm microdensitometer record. -filter filter for micrographic work.

Mikrometer, Funken- micrometric spark-discharge gap. Kugel-spherical micrometer. Objekt-stage micrometer. Okularnetz-micrometer with reticle eyepiece. Über- ultra-micrometer.

Mikrometerschraube micrometric screw, micrometer.

Mikro-nernstlampe Nernst lamp of a microscope. -nutsche micro-funnel, m. suction filter.

Mikrophon, bewegliches, entfesseltes following microphone. -, lichtempfindliches light-sensitized cell, l. microphone. -, membranloses diaphragmless microphone, cathodophone, glow-discharge m. -, nichtrichtungsempfindliches astatic microphone. Atmen des - s breathing (slow changes in resistance and response) of a

carbon microphone. Band-, Bändchen- ribbon microphone, band m., velocity m. Besprechungs- sound pickup microphone. Bewegungs- velocity microphone, pressure- gradient m. Brust- breast-plate microphone or transmitter. Doppelkohle- push-pull carbon microphone. Einblendungs- fade-in and mixing microphone. Flammen- flame microphone, f. transmitter. Gegenkontakt- push-pull microphone. Gitter- grille-type microphone. Kehlkopf- laryngophone, throat microphone. Kohle-carbon microphone. Kon- densator- condenser microphone, electrostatic m. Kristall- piezo-electric microphone, crystal m. Lausch- pickup microphone, p. transmitter, detectophone. Post- solid-back transmitter, carbon- back microphone. Raum- non-directional (polydirectional) microphone. Richt- directional microphone (unidirectional, bidirectional, etc.), non-astatic m. Schall- acoustic microphone. Schüttel- granule microphone. Stab- carbon- stick microphone. Tauchspulen- moving-coil microphone.

Mikrophon-ansprechkonstante sensitivity constant of microphone. -antenne microphone boom, m. outrigger. -atmen breathing of microphone (due to slow changes in resistance and response, in carbon m.) -einblendung fade-in and mixing of microphones. -einsprache acoustic inlet of microphone. -galgen microphone boom. -geräusch microphonic noise (carbon noise), valve noise. -schmoren mike stew (noise). -verstärker microphone amplifier, m. pre-a.

mikrophotographisch photomicrographic.

Mikro-photozellen globules of mosaic screen (in iconoscope).

-raffer camera for stop-motion or time-lapse motion micrography. Mikroskop, bildaufrichtendes image-erecting microscope. Durchstrahlungsüber- transmission-type ultra- microscope. Einstell- focusing microscope. Elektronen- electron microscope. Elektronenraster- electron scan microscope, raster m. Hornhaut- corneal microscope. Kugel- ball-stage microscope. Licht- optical microscope, light m., light-optical m. Raster- electron-scan microscope, raster or screen-scan m. Schatten- shadow microscope. Über- electron ultra-microscope, e. super- microscope.

Mikroskop-aufbau, -aufhängung microscope mounting. -bügel saddle of microscope, bracket of m.

Mikroskopie microscopic optics.

Mikroskopiker microscopist.

Mikroskop-revolver revolving nose- piece. -schleuse airlock (cham- ber) of electron microscope.

-spektralkamera microspectroscopic camera. -träger microscope stage.

-verschiebung, Längs- und Quer- axial and cross adjustment (in electron microscope).

Mikro-telephon microtelephone trans- mittor, transceiver, combination handset. -wage micro-balance.

-wellen micro or hyperfrequency waves (1 to 100 cm). -zeitmessgerät microchronograph.

Milchglas opal glass, frosted g., light-diffusing g.

mild mild, soft, gentle.

Milderungsgründe extenuating circum- stances, mitigating c.

Milieufilm "milieu" film.

Milopam German trade-name for poly- vinyl chloride.

Minderer, Druck- pressure reducer, relief valve.

Mindest-voltgeschwindigkeit appear- ance (or minimum) potential.

-wertanzeiger minimum (voltage) indicator.

Minimalrelais no-load relay.
 Minimum-auflösungsvermögen
 minimum separabile (of eye).
 -bereinigung zero clearing (df).
 -peilung minimum (or zero) signal direction-finding method.
 -schärfen zero cleaning, z. sharpening (df). -verfahren method based on minimum deviation (opt.) -wertzeiger minimum (voltage) indicator.
 Minutenzeiger minutes hand (of timepiece).
 mischbar miscible, mixable.
 -, gegenseitig consolute (miscible in all proportions).
Misch-barkeit, Nicht- non-miscibility, immiscibility. -brett mixing panel, monitoring p., supervising p.
 mischen mix, mingle, blend, adulterate, alloy, combine, unite.
Mischer mixer, fader, blender, (ac., etc.), mixing booth, "aquarium" (m.p. studio slang) -, fünfgliedriger five-channel mixer. Ton-tone fader, t. mixer.
Mischerschaltung keying or mixer tube scheme (for adding sync and video signals).
Misch-gerät mixer bus. -hexode, Fading- a.v.c. mixer hexode.
 -kristall crystalline solid solution, mixed crystal.
 -metall mixed metal, alloy, "Misch-metall." -molekül mixed molecule (loosely associated molecular union).
 -peilung taking bearings on board, without directional receiver, from directive beacon.
 -pult mixing desk, monitoring d., supervising d. -pult, fahrbares dolly or cart-type mixer, teawagon console m.
 -regler mixing control. -röhre mixer tube. -röhre, selbst-schwingende self-heterodyning mixer tube, autodyne.

-signal signal spectrum (containing video and sync impulses, telev.)
 -stufe mixer stage, m.-first detector s. -tafel mixing panel, monitoring p., supervising p.
 -tisch mixing desk, monitoring d.
Mischungs-lücke miscibility gap.
 -rechnung alligation (math.)
Mischwalzwerk set of mixing rollers.
miss-farbig discolored, inharmonious in colors. -jüngerer Teil rejected take (m.p.)
Miss-ton distorted sound, off-pitch note. -verhältnis disproportion, asymmetry, disparity.
missweisend(er) Kurs uncorrected bearing, magnetic heading, m. course.
 -Nord uncorrected or magnetic north.
Missweisung, Orts- local declination.
Missweisungsgleichen isogonic lines, isogons.
Miszelle micelle.
Mit-arbeiter fellow worker, collaborator, co-worker, contributor, assistant. -bewegung relative motion (of atomic nucleus), co-movement, associate motion.
 -führungskoeffizient (Fresnel) coefficient of drag.
mitgenommene, selbständige Kipp- methode self-running controlled time-base method (telev.)
Mithör-einrichtung side-tone circuit. -schalter, -schlüssel listening key.
Mitkoppeln determining of course or fix, by dead reckoning (navigation).
Mitkopplung positive regeneration, p. feed-back; spurious or undesired f.
mitlaufende Spannung follower potential.
Mitlauter consonant.
Mitnahme synchronization, pull-in-step, locking-in; locking of circuit. -bereich range of forced oscillations, "entrainment" range, coherence r., pull-in-step r.

Mitnehmen (bei Entladung) drift (in discharge).

Mitnehmer part carrying, dragging or driving along another part: driver, carrier, gripper, catch, dog, nose, clutch, engaging piece, etc., entrainment means.

mit-reissen entrain, carry, drag or pull along. -schwingen co-vibrate, oscillate in resonance, sympathy or unison, be in sympathetic vibration. -schwingend-(er) Leiter equi-frequent conductor, resonant or co-vibrant c. -schwingend(e) Saite sympathetic string or chord.

Mitschwingung co-vibration, sympathetic v.

Mittags-kreis,-linie meridian.

Mitte center (point), middle, mid-point (of tapping).

Mittel middle, medium, expedient, means, remedy, agency; mean (math), average.

Mittel, Füll- filler, filling, stuffing, loading material or compound. Schalt- circuit element, c. means.

Mittel-anzapfung center tap, mid (point) t. -bildhelligkeit average illumination, background i., mean brightness value of picture. -blende middle diaphragm. -ecke lateral summit (cryst.) -feld central field (of vision). -frequenz(cf. Wellenabgrenzung) medium frequency m. wave.

mittelgedämpfter Raum moderately live room.

Mittel-glied intermediate member (of a series). -lage tenor (of voice). -lichter half tones, average shading values. -linie der Funkpeilstation center line of approach sector. -linien-kondensator logarithmic capacitor (in which relation capacity: angle obeys 1. law). -lot median perpendicular.

mitteln average, ascertain mean value.

Mittelpunkt center, c. point, mid-point (of tapping). Krümmungs-center of curvature. -tastschaltung center-tap key modulator scheme.

Mittel-schenkel center leg, c. limb. -senkrechte median perpendicular. -wert, quadratischer virtual or root-mean-square (rms) value.

Mitten-abstand distance between successive rulings (in diffraction grating, indicated by grating constant). -eindruck binaural balance (in sound locating).

mittenerichtig centered, co-centric.

Mittenschärfe central definition, sharpness of center.

mittensymmetrisch centro-symmetrical.

mittig co-axial, concentric. -, aussen-eccentric, off-center.

Mittigkeit centrality, centricity.

mittler mean, average, medium, central, mid...-(e) freie Weglänge mean free length of path. -(e) Helligkeit average (background) illumination (telev.)

Mittungsstift centering pin.

mitziehen (s.a. Ziehvorgang und ziehen) draw, drag or pull along, pull in step, tug; warp.

Mn(Motorgeräusch im Norden) noise of motor north signal.

Modell, Atom- (R-B) atom model or conception. Einteilchen- single particle model. Mutter- master pattern.

Modellerton modeling clay.

Modellschreiner wood pattern maker.

modeln modulate by pulse-time modulation (t-m), amplitude m. (a-m), frequency m. (f-m) or phase m. (p-m); model, mold.

Modul, piezo-elektrisches piezo-electric modulus.

Modulation, additive upward modulation. -, subtraktive downward modulation.

Modulation auf Dunkel modulation to dark condition, negative m. -auf Hell modulation to light condition, positive m. -der Stimme

- inflection of voice.
- Modulation, Absorptions-** absorption modulation, Heising m.
- Dichte-** (charge) density modulation. **Elektronenstrom-** electron quantity modulation, m. of bunched e. stream. **Frequenz-** frequency modulation Gegen- opposite modulation. **Ge-** schwindigkeits- velocity modulation. **Gitter-** grid modulation, g. control (Brit.). **Intensitäts-** intensity, brightness or brilliance modulation. **Kreuz-** cross modulation. **Leitungsstrom-** conduction current modulation. **Nullphasen-** null phase modulation. **Parallelröhren-** Heising modulation, choke m., plate m., constant-current m. **Phasen-** phase modulation. **Puls-** pulse modulation (used in radar). **Quer-** cross modulation. **Reihenröhren-** constant-potential modulation. **Spannungs-** velocity modulation. **Zelt-** velocity (variable-speed) modulation; variable-speed scan.
- Modulationsfrequenz** modulation frequency, signal f.
- modulationsgesteuerter Sender** transmitter in which amplitude varies with AF amplitude, AF modulated transmitter.
- Modulations-grad** percentage modulation, m. percentage, degree of m., depth of m. **-gradkontrolle** modulation meter. **-röhre** mixer tube, modulator t. **-tiefe** cf. M.-Grad.
- Modulator, besprochener** voice-impressed or voice-actuated modulator.
- Modulator, Licht,-** light relay, any device adapted to reconvert current into light or brightness variations, e.g., television receiver lamps, Kerr cells, modulated neon lamps, c.-r. tubes etc. **Licht-,selbstleuchtender** light relay of the glow-tube, neon arc lamp, sodium lamp, etc.
- type. **Licht-, (Fremdlicht)** light relay of the Kerr cell, Karolus c., etc., types adapted to reconvert currents into brightness variations by the use of a constant independent ray source.
- Modulierbarkeit** modulability, modulation capability.
- Modulus, Drillings-, Schiebungs-** torsion modulus, shear m., rigidity m.
- modulieren s. modeln.**
- Mohr, Platinum-** platinum black. **Quecksilber-** black mercuric sulfide.
- moiréartiges Geräusch** moire pattern of noise.
- Moiréeffekt** moiré or watered-silk pattern (in photography).
- moirieren** water; cloud (fabrics).
- Molekül, unstarres** non-rigid molecule. **Ketteh-** chain molecule. **Kreisel-** top molecule, spinning m.
- Misch-** mixed molecule (in a loosely associated or l. bound molecular union).
- Molekülaggregate** molecular clusters.
- Molekular-gewicht** (Mol.-Gew.) molar weight, gram-molecular w. -strahlen molecular rays, m. beam.
- Molekül-haufen** molecular clusters. -sieg micro-filter. -spektrum molecular spectrum.
- Molenverhältnis** molar ratio, mole r.
- Molisierung** re-combination (of ions in gas).
- molletieren** mill, knurl (coins, etc.)
- Mol-norm** molal. -verhältnis molar ratio, mole r. -volumen molar volume. -wärme molar heat.
- Moment, Brems-** brake torque, retarding t. (in a meter). **Dreh-** torque, moment of rotation. **Kern-** nuclear (magnetic) moment.
- Massen-** moment of inertia, rotational i. **Reibungs-** friction torque.
- Moment-bild** instantaneous photograph, snapshot. -prozess

m-process, evanescence p. (in decay of phosphorescence).
-transport momentum transfer.
monaurales Hören monaural reception, m. listening.
Mündchen lune, meniscus.
mondförmig crescent-shaped, lunate, meniscal.
monoatomar monatomic.
Mono-chord monochord, sonometer (with one string) **-chromasie** monochromatism, monochromasia, (condition of electrons being of like wave-length and like speed).
monochromatisierend, selbst- auto-monochromatic (e.g., when an instrument becomes its own monochromator).
monomolekularer Film monolayer, monomolecular layer (adsorbed film).
Monopackverfahren mono-pack method.
Montage setting-up, mounting, erection, installation or assembly (work), fitting.
Montagekopie first answer print.
Morsepunkte, breite lengthened dots.
-spitze clipped dots.
Mosaik-block mosaic block (cr.).
-platte target, mosaic plate (telev.). **-röhre, doppelseitige** image multiplier iconoscope.
-schirm mosaic (of iconoscope).
-schirm, Überfahren durch Strahl sweep out mosaic with beam.
Motor-geräusch im Norden(Mn) noise of motor North signal. **-unter-** brecher motor-drive make-and-break.
 μ F microfarad (mfd, mf).
 $\mu\mu$ F picofarad, micromicrof.
Muffe muff, sleeve, bush, socket joint, clamp, coupling box.
Röhren- pipe socket.
Muffenverbindung socket joint.
Mühle, Licht- radiometer (of Crookes).
Mulde, Potential- potential well, p. hole.
Multipletten multiplets.
Mund mouth, opening, muzzle, vent, orifice.

Mundharmonika mouth harmonica, m. organ.
mündliche Verhandlung oral hearing.
Mund-öffnung, Trichter- mouth opening of horn, largest flare.
-stück, Trichter- throat of horn.
-stücköffnung chink between mouth-piece and reed (of clarinet).
Mündung mouth, aperture, orifice.
Mündungs-geschwindigkeit muzzle velocity. **-wucht** kinetic energy at the muzzle.
mürbe mellow, tender, soft, brittle, friable, short (of metal).
Musa-Empfang multiple-unit steerable antenna reception, musa r.
Muschel, Augen- eye cup. **Hör-, Ohren-** ear cap, earpiece. **Okular-** eyepiece cup.
Muschelglas globular lens.
muschelig shelly, conchoidal.
Musikwerk musical automaton, mechanical music instrument, "jute box"
Muster, Geräusch- noise pattern.
Stör- spurious or false pattern (in iconoscope picture).
muster-gültig serving as a model, standard or ideal, classic.
-haft standard, typical, exemplary,
Musterkopie master copy, m. print.
Mutter mother disk, master matrix (in phonograph record making).
Mutter, gesicherte lock nut, jam n.
Daumen- thumb nut. **Flügel-** winged nut, butterfly n. **Gegen-** lock, clamp, check, jam or binding nut. **Kordel-** milled nut, knurled n. **Schrift-** type mold, matrix. **Überwurf-** castle nut.
Mutter-form master mold (cer.); parent (al) form. **-frequenz** master frequency. **-gewinde** female screw thread. **-modell** master pattern. **-schlüssel** (nut) wrench, spanner. **-schraube** bolt and nut. **-sender** key station, master s. (in chain broadcasting). **-substanz** parent substance. **-uhr** master clock. **-verschluss** nut lock.
Mutung, Funk- radio prospecting, r. metal locating.

N

- Nabe** nave, hub, boss.
Nabelpunkt umbilic.
nachahmen imitate, copy, mimic; counterfeit, adulterate.
Nach-anmeldung supplementary application.
nacharbeiten finish, dress, re-mill, re-trim, re-true (up or off).
Nach-aufnahme re-take. -baratome, nächstnähere next nearest neighbor atoms. -belichtung post-exposure.
-beschleunigung after-acceleration, post-a., acceleration by second gun. anode. -beschleunigungselektrode second or additional gun anode or accelerator electrode, after-accelerator.
-bild after-image; copy, imitation, replica.
nachbilden copy, reproduce, imitate; balance, simulate. -, neu re-balance.
Nachbildung, **Grund-** basic network.
Leitungs- balancing network, artificial b. line **Neu-** rebalancing.
Nachbildungswirkung persistence of vision (in form of after-image).
nacheilen lag, trail (behind).
Nacheilwinkel angle of lag.
nacheinander one after another, successively, sequentially, consecutively, seriatim. -färben dye again, counterstain.
Nach-fliessen after-flow (of metals), persistence of plastic f., elastic after-effect. -folgekern product nucleus. -forschung research, search, investigation.
-frist time extension, respite.
-Führung des Rahmens re-setting or re-adjustment of frame or coil (d.f.)
nach-geben give way, yield, concede.
-geschaltete Stufe higher stage, end s., power s. -giebig yield-ing, flexible, pliable.
Nach-giebigkeit compliance, yieldingness. -glühen after-glow, phosphorescence. -glühcharakteristik persistence characteristic. -hall echo, reverberation; resonance.
-halldauer, Übertriebene excessive reverberation period.
nachhallen dying down of sound (in an acoustically live room).
Nachhall-kammer, -raum reverberation room, enclosure or space. -zeit reverberation period.
nachhaltig lasting, enduring, persevering.
Nach-konzentration re-focusing, action of second lens. -ladeerscheinungen phenomena associated with absorption current and residual charge (of condenser).
nachlassen temper, anneal (glass, metals, etc.); slacken, relax, abate.
Nachlauf-einstellung automatic re-setting of direction-finder to zero. -peiler direction-finder in which readjustment to zero is effected automatically. -profil wake profile. -stufe (cathode) follower stage.
Nachleuchten after-glow, phosphorescence, persistence of light or of vision (on retina). Verminderer des Nachleuchtens killer, poison.
nachmessen check dimensions, check-up of measurements, test figures, etc.
Nach-prüfung re-examination, re-check, verification, review.
-reifung maturing (of film).
Nachricht communication, intelligence, information, signals; news.
-Übermittelung signalling, intelligence transmission.
nachrichten re-align, re-straighten,

- readjust, re-set.
- Nachrichten-system, Mehrfach-** multiplex signal system. -technik communication or signal art or technics, signal work.
- Nach-schlagewerk** reference work. -schlüssel master key, pass key. -schrift picture re-creation; postscript. -schub, Kohlen-carbon feed (arc lamp).
- nachstellbar** regulable, re-adjustable, resettable.
- Nachstellung, Bild-** framing of picture, racking of p. (m.p.), centering control (telev.)
- Bild-, falsche** misframing, out-of-frame condition. Blenden-phasing of shutter (film work).
- Nachstimmung, Rahmen-** re-setting or re-check of frame or coil tuning (in automatic radio compass).
- Nachstimmungskondensator** aligning condenser, trimming capacitor; vernier c.
- Nächstnähere Nachbaratome** next nearest neighbor atoms.
- nachsuchen** apply (for a patent), file (a petition).
- Nachsynchronisieren** post-scoring (a silent film), dubbing, scoring (first picture, then sound), re-recording.
- Nachsynchronisierung (von Trick-film mit synchronisch springendem Ball)** bouncing ball synchronization.
- nachtblindes Auge** night-blind eye, nyctalopic e.
- Nacht-blindheit** hemeralopia, nyctalopia. -effekt night effect, polarization error, directional or quadrantal errors (in general).
- nachteffektfrei** night-effect-free, free from n.e. or polarization errors.
- Nach-teil** disadvantage, injury, prejudice, loss, detriment, shortcoming, demerit, inconvenience, difficulty. -trans-
- port take-up sprocket action.
- Nachtstreckenbefeuерung route beacon** for night flying service.
- Nach-verstärker** amplifier in stage above input stage, (mostly) power amplifier. -vertonung dubbing, re-recording of sound track.
- nachweisen** detect, discover, prove, demonstrate, identify; point out, refer to
- Nachwickel-rolle** take-up reel or spindle, hold-back sprocket. -trommel take-up sprocket.
- Nachwickler (lower)** take-up sprocket.
- Nachwirkung after-effect, secondary e., accompanying e.; hysteresis, persistence, decay (period).**
- elektrische electric after-effect (persistence of strain). -magnetische magnetic fatigue, m. after-effect, residual loss (of metals). -plastische plastic flow persistence, after-flow, elastic after-effect.
- Nachwirkungs-strom** absorption current, c. of residual charge (of a condenser). -verlust residual loss.
- Nachwirkzeit** decay period.
- Nadel, Abfühl-** selecting needle or pin, pecker. **Abspiel-** needle, stylus (riding in groove).
- ndlöffig** needle-shaped, acicular.
- Nadel-funkenstrecke** needle-point spark-gap, needle g. -geräusch-filter needle scratch filter (phon.) -reibung needle friction (causing stylus drag). -schalter vibrating reed rectifier.
- Nadelton** stylus or needle-recorded and reproduced sound. -ansatz sound on disk attachment or head. -verfahren sound on disk method. -verstärker phonograph amplifier. -zusatz sound on disk attachment.
- Nähe** nearness, vicinity, neighborhood, proximity, propinquity, closeness, adjacency, contiguity.
- Sonnen-** perihelion.
- Naheinstellung** short-range focus.

naheliegen be or lie near, border (on), be adjacent or contiguous; be patent, obvious, evident or self-suggesting.

Näherung approach, approximation, proximation.

Näherungsformel approximate formula, a, equation.

nahestehend intimately related or connected, affiliated.

Nah-feld vicinity or short-range field (of antenna). -stellung close-range direction-finding. -punkt near point.

Nährboden nutritive substratum, nutrient medium.

Nahschwund radio fadeout or fading 60-100 miles around transmitter site. -antenne low-angle or short-range fading antenna.

Nah-signalmittel short-distance or s. range signal means. -störungen nearby interference (from sources close to receiver).

nahtlos seamless, jointless.

Nahtschweißung seam welding.

Nahverkehrsbezirk local control zone, approach c.z.

namhaft famous, well known, renowned, reputable, considerable, appreciable.

Napf bowl, basin, pan, cup.

Narbe scar, seam, grain (of leather and paper), pit, defect, flaw, pock. Rost- rust pit. Schnell- cutting scar.

Narbung pocking.

Nase catch, lug, nose, beak, cam, tappet; projection, spout, nozzle. Klink- detent, latch.

Nasenkell jib, key.

Nassverfahren wet process.

Matrümleuchte sodium lamp.

naturähnlich realistic, true or similar to nature.

Natur-erscheinung natural phenomenon, n. process, n. action.

-farbfilm natural color film.

-forscher investigator of nature or in field of natural sciences, n. philosopher, naturalist.

naturharder Stahl self-hardening steel.

Naturlehre natural science, n. philosophy.

natürliche Zahl natural number.

Natürlichkeit der Wiedergabe faithfulness, fidelity or realism of reproduction.

Naturtreue fidelity, faithfulness, realistic properties.

Navigation, Flugzeug- avigation, aircraft navigation, aircraft pilot-ing. Koppel- navigation by dead reckoning. Richtungs-, Selen- directional navigation. Strecken- long-distance (air) navigation or avigation. Vertikal- vertical guidance, v. avigation.

Navigationsfeuer navigational or maritime radio beacon.

Nawimembrane cone diaphragm of curved profile, curvilinear cone, para-curve.

Nebel nebula (spectroscopy), mist, fog, veil (phot.). Stör- chief interference zone, maximum noise z. -apparat atomizer. -kamera cloud chamber. -landung blind landing, instrument l. -spur-methode Wilson cloud track or chamber method (streak of drop-lets produced by a particle).

Neben-achse lateral axis (of rhombic crystal); secondary a. -apparat accessory equipment, auxiliary apparatus. -bestandteil secondary ingredient. -betrieb by-operation, secondary process, side-line. -beweis secondary proof, additional evidence. -bild ghost image. -bindung secondary union, s. bond, linkage of the second order.

nebeneinander in parallel (electrical connection). -stellen juxtapose, place side by side or alongside.

Heben-entladung lateral discharge stray d., secondary d. -erzeugnis by-product. -fläche secondary face. -geräusch extraneous noise (m.p.); ambient n. (in sound locating). -Interventient co-intervener,

-kette side chain, subordinate c.
 -klage incidental action. -kläger co-plaintiff. -kopplungsschwingung spurious oscillation. -licht (auf Platte) light-shot (on film).
 -linie secondary line, branch line, satellite (spectr.) -maximum secondary radiation, lateral r., s. lobe or ear (in directional characteristic or space pattern).
 -patent sub-patent, collateral or subordinate patent. -peilstelle associate direction-finder ground station. -reaktion side reaction, secondary r. -rohr side or branch tube or pipe.

Nebenschluss, Ayrton'scher universal shunt, Ayrton s: Gitter-grid leak. -feder shunting spring, off-normal s. -kondensator by-pass condenser. -resonanz parallel resonance.

Neben-setzung juxtaposition.

-sprechdämpfung cross-talk transmission equivalent, cross-talk attenuation. -stelle, Peil- associated direction-finder.
 -uhr secondary clock. -umstände collateral circumstances, c. factors. -weg by-path. -winkel adjacent angle, adjoining a.
 -zipfel minor lobe, m. ear (of space pattern).

Negativ, Meister-, Original- master negative, metal master (of phonograph record). **Rahmen-** rack negative.

Negativ-ebene negative plane, n. aperture (of film printer).
 -farbauszüge separation negatives. -gamma negative gamma (γ). -lack transparent negative varnish. -schwärzung negative density. -umfang intensity range or latitude of a negative.
 -widerstandsröhre dynatron type of tube with negative resistance (e.g., kallirotron).

Nehmer, Lizenz- licensee, grantee.

Neigekopf tilting head (tripod).

Neigung inclination, tendency, slope, pitch, dip, trend. **Schwingungs-** tendency to oscillate or "spill-over"

Strahl- inclination of ray.
Neigungs-differenz difference of vergence. -ebene inclined plane.
 -messer clinometer (to measure angles of slope), Abney level (to measure vertical angles). -messer (zum Messen von Neigungen im Meeresboden) clinometer for measuring sea bottom slopes.
 -messer, Kreisel- bank-and-turn indicator. -winkel inclination (angle), a. of slope, a. of dip.
 -winkelmesser clinometer.

Nenner, General-, Haupt- common denominator.

Nenn-reichweite rated range, nominal r. -wert nominal, rated, assessed, normal, expected or face value.

Neonflächenlimmlampe plate neon lamp (telev.)

Neonröhren-aussteuerungskontrolle, -lautstärkemesser neon tube volume indicator.

Nernstlampe, Mikro- Nernst microscope lamp.

Nerven-reiz nervous stimulus.

-taubheit perception or nerve impairment of hearing, n. of perception deafness.

Netz (of Gitter) net, netting, gauze, network, reticule, graticule, reticulation, reticulum, grate, lattice, grid.

Netz, Anodenschutz- screen grid, plate shield. **Anpassungs-** matching network. **Erdraht-** ground mat. **Grad-** graticle, reticle, map grid. **Hilfs-** auxiliary (control) grid. **Karten-** graticle, map grid. **Raumlade-** space-charge grid.

Schutz- shield or screen grid; protective network. **Spannungs-** space-charge grid. **Strecken-** air routes. **Verstärker-** amplifier channel.

Netz-anode plate fed from power unit or light socket. -anschluss-gerät (strictly:) power pack, power unit; power converter set, electric s., mains-operated radio s.

-antenne, **Licht-** light socket or lighting circuit antenna, lamp-socket a.

netzartig (s.a. **Netz**) netlike, reticular, reticulate, grate-, grid- or grating-like,
Netzbedeckung coverage factor.
-bildung reticulation, netting.
-brummen mains hum, motor boating (of a-c), a-c pickup. **-drossel** hum eliminator coil, hum-bucking c.
-ebene lattice plane, plane family of a crystal. **-ebenabstand** grating constant (spectr.); inter-lattice plane distance, distance between successive planes indicative of lattice constant (cr.)
netzen wet, moisten, steep, soak.
netzförmig net-shaped, reticular, reticulate.
Netzgerät electric set, mains-operated set, power-pack or power-unit s., power-unit electric radio s.
Netzhaut retina. **-bild** retinal image. **-träigkeit** retinal persistence. **-zentersehen** foveal vision.
Netzmikrometer, Okular- micrometer with reticle eyepiece. **-stecker** power supply plug, light-socket p.
-struktur cellular network, lattice, reticular structure, reticulation. **-ton** mains hum, line h.
-transformator power transformer, mains t. **-unruhe** mains or supply-line ripple or fluctuation.
-verstärker, -vervielfacher mesh multiplier, m. amplifier (with secondary emission, serial or cascading of electron-permeable fine-mesh targets).
-werk network, reticulum. **-werk, Trenn-** dividing network.
Neuaktivierung der Kathode reactivation or rejuvenation of a cathode. **-gestaltung** re-organization, re-arrangement, modification. **-heit** novelty, originality.
neuheitsschädlich anticipatory, rendering novelty negative.

nachbilden re-balance.
neunwertig nonavalent.
Neusilber argentan, German silver
neutral einstellen adjust to neutral, set to n.
neutraler Schirm neutral screen.
Neutralisations-kondensator balancing or neutralizing condenser. **-schaltung** neutrodyne circuit organization.
Neutroneneinfang neutron capture.
nichtabgestimmt untuned, aperiodic.
Nicht-anerkennung non-acknowledgment. **-beobachtung** non-observance.
nicht-berechtigt disqualified, not entitled. **-bevorzugte Orientierung** random orientation, non-preferential o., non-privileged o. or direction. **-dissoziiert** undissociated, non-d.
Nicht-eisenmetalle non-ferrous metals, non-iron m. **-erfüllung** non-performance, non-fulfillment, default. **-erscheinen** non-appearance, non-attendance, absence, default, contempt.
nichtgerichtetes Mikrophon astatic microphone, non-directional m.
nichtig null, void, invalid, annulled.
Nichtigkeits-abteilung annulment department. **-beschwerde** plea of nullity. **-erklärung** declaration of nullity, annulment or cancellation.
-klage action or suit for cancellation, annulment or invalidation.
nicht-ionisiert unionized, non-ionized. **-kommutative Algebra** non-commutative (vector)algebra.
-kondensierte Hochstromentladung uncondensed heavy-current discharge. **-kristallisch** amorphous, non-crystalline.
Nichteiter non-conductor.
nicht-leuchtende Flamme roaring flame. **-lineare Verzerrung** non-linear distortion. -

- linearity lack of linearity, non-l. -metall nonmetal.
- nichtmischbar** immiscible, nonmiscible; unsoluble, insoluble, insolvable.
- Nichtmischbarkeit** non-miscibility, immiscibility.
- nicht-reproduzierbar** non-reproducible, non-controllable. -resonierend aperiodic, non-resonant.
- rostend rust-proof, stainless, rust-free. -sphärisch non-spherical, aspherical. -ständig non-permanent, temporary, transient, transitory. -symmetrisch asymmetric, unilateral. -umwandelbar convertible. -vergasbar non-gasifiable, non-volatile. -wässerig non-aqueous, anhydrous.
- Nicht-zahlung** default of payment, non-payment. -zerfallbarkeit non-disintegrability, non-fissionability.
- nichtzerstörende Prüfung** non-destructive test.
- nieder-drücken** press down, force d., depress or touch (a key or button). -fallen fall down, drop, precipitate, settle.
- Niederfrequenz-drosselsatz** low-pass filter. -röhre AF tube, low frequency t., "apple" (m.p. studio slang).
- Nieder-führung** downlead. -gang descent, decline, downward stroke or travel, lowering movement or stroke.
- niederlegen** lay down, put d., deposit.
- Niederschlag** precipitate, precipitation, (radio-active) deposit, sediment, settlement. -arbeit precipitation process, iron-reduction work. -gefäß precipitating vessel. -mittel precipitant.
- Niederschlags-apparat** precipitator (Cottrell). -potential deposition potential.
- nierenförmig** reniform, kidney-shaped (for instance, condenser plate).
- Niete, Loch-** hollow rivet, tubular r. .
Niet-schaft rivet shank, r. stem.
 -teilung rivet spacing, r. pitch.
 -verbindung riveted joint.
- Nipkowscheibe** Nipkow scanning disk.
- Nitrierstahl** nitriding steel, nitrally s.
- Nitrierung** nitrification, nitrogen, nitridation (steel).
- Nitrobenzol** nitrobenzene.
- Niveau** level.
- Niveau, Energie-** energy level, quantum state, term. **Grund-** background level (or average) illumination (telev.). **Stör-** noise level.
- Niveau-fläche** level surface; equipotential or isop. surface. -röhre level tube, leveling t. -stufe term, energy level (of electrons).
- nivellieren** equalize, smooth, bring down to an average level, grade, even.
- Nivellierer, Spannungsspitzen-** voltage peak limiter.
- Nocken** cam, lifter, tappet, disk or wheel with lobes. -zweistufiger double-lift cam. **Leerlauf-** delayed pulse trip cam. **Schalt-** trip cam, trigger c. **Steuer-** sequence switch cam.
- Noiseless, Gegentakt-** split-wave noiseless film recording. -blende biasing or noise-reducing stop or shutter vane or gate. -stromkreis back-ground noise reducing circuit, noise gating c.
- Nomogramm** straight-line or alignment chart, self-computing c., monogram.
- Nonius-einteilung, -skala** vernier scale.
- Nonne** mold matrix.
- Nord, missweisend** uncorrected north, magnetic n. -, rechtweisend corrected north.
- Norddrehfehler** northerly turning error.
- nördliche, Breite** northern latitude.
- Nordlicht** aurora borealis. -linie green auroral line.

Norm standard, norm, model.	null m., balance m. -phasenmodulation zero phase or null phase modulation.
Norm, Vor- preliminary standard, tentative s.	Nullpunkt zero point, neutral p., origin (of a diagram). -abweichung zero error. -anomalie origin distortion. -einstellung zero adjustment. -empfindlichkeit zero-level sensitivity. -fehler origin distortion, ion cross effect. -schärfung zero point clearing, cleaning or sharpening (in df).
Normal-bildkade standard picture frame. -essig standard vinegar, proof v. -flüssigkeit normal or standard solution or liquid.	Nullstelle zero place; abscissa which gives zero value to Bessel function.
normalglühen normalize.	Nullung eines Störers connecting casing of interfering device with neutral (in d.c. mains).
normalisieren standardize, normalize (brief heating slightly above A, point).	nullwertig aivalent, non-valent.
Normal-lehre normal gage, master g. -potential normal potential.	Nullzweiglinien zero branch lines.
-schliff standard (interchangeable) ground joint. -schrift standard track (sound recording).	numerische Objektivöffnung numerical aperture of objective.
normalsichtig normal sighted, emmetropic.	Nummer; laufende serial number, consecutive n.
Normalweingeist proof spirit.	Nummernscheibe dial (switch), number plate, d. plate. Ablaufen der - return of the dial. Aufziehen der - winding up the dial.
Normenaufstellung formulation or laying down of standard rules or norms, standardization or normalization.	Nummernwahl impulse action or stepping, selection.
Normierung standardization, normalization, gaging.	Nurflügelflugzeug tailless airplane.
Normung des Frequenzganges standardization of frequency response or characteristic.	Nussbaum walnut.
Not-amt temporary exchange, emergency e. -anlage provisional or emergency plant or equipment.	Nute slot, notch, groove, recess, key-way, oilway. -und Feder slot and feather (union), slot and key, groove and tongue joint.
-behelf makeshift, expedient, last resort, temporary or emergency means, improvisation.	Nute, Schmier- oil groove or slot, worm.
Note, Triller- trill note, warble n.	nuten slot, groove, notch, flute, keyseat.
Not-fall case of emergency, case of need. -mittel expedient, makeshift or emergency means. -ruf, -signal, -zeichen S O S call, (radio-telegraphic) distress call or signal, mayday (radio telephone distress call).	Nuttenwellen slot ripples, tooth r.
Novokonstant Cu-Mn alloy with Al Fe.	Nutsche, Mikro- micro suction filter, m. funnel.
Nuance shade, tint.	nutzbarer Linsendurchmesser useful or effective (clear) aperture of a lens.
Null zero, nought, cipher, null.	Nutz-dämpfung damping resulting in useful radiation or signal power, effective transmission equivalent.
-frequenz frequency at which phase shift is zero. -leiter neutral wire. -linie zero line, missing l., band center (spectr.). -linienverlagerung zero setting, electrical biasing (in film recording). -methode zero method,	-feldstärke signal strength or

field intensity, "useful" field intensity. -kreis useful circuit, active c. -lautstärke signal level, sound s. volume. -leistung useful power, signal p., useful work or effect; efficiency. -nlesser usufructuary, beneficiary. -signal intelligence signal, any s. with information.

-spannung useful potential, signal p. -strom useful current, signal c. -stromkreis signal circuit, utilization circuit. -widerstand (cf Wirkwiderstand) useful or signal resistance. -wirkung efficiency.

N.Z. (Neutral. Zahl) neutralizing number.

Ober-banden overtone absorption bands.
-begriff introductory part of German patent claims setting forth prior art, broad class and nature of invention and disclosure.

-beleuchtter chief light electrician; scaffold or top light controller (studio).

Oberfläche, gasbehäftete gas-contaminated surface, s. with adsorbed gas. -, spiegelnde specular surface. -, vertonte sound-impressed surface, surface or area bearing sound track.

Oberflächen-ableitung surface leakage.

-abtaster surface analyzer.

-beladung (mit Hg) activation, sensitization or charging of a surface (with Hg). -effekt surface effect (of photo-cathode). -einheit unit of area.

Oberflächengerichtet surface normal.

Oberflächen-härtung case-hardening (metals), surface cementing.

-integral integral taken over a surface. -normale surface normal.

-phase surface phase. -schicht surface layer; s. barrier.

-spannung surface tension.

-spannungsmesser od.

-spannungsprüfer, nach

Abreissmethode surface tensiometer of adhesion-balance type.

-taster surface analyzer (to measure irregularities). -widerstand surface resistance (of insulation); skin-effect resistance (in a-c flow). -wirkung surface action; skin effect; surface work (cryst.)

oberflächlich superficial.

Oberharmonische harmonic, higher h.

-dreifache third harmonic, triple h. -, gerade even harmonic. -, ungerade odd harmonic.

Ober-leiter, künstlerischer art su-

pervisor. -licht overhead scoop, scaffold light, skylight. -strich permanent maximum current or carrier, peak carrier amplitude, maximum or black-level picture signal (telev.) -taste sharp (mus.).

-ton overtone (often a harmonic), upper partial (NOTE: harmonics and overtones are partials of a frequency above fundamental, a partial being a pure-note component of a sound or complex note).

Objekt, Übertragungs- object to be televised or scanned. Untersuchungs-test specimen, t. sample, t. piece. -glas slide, mount (micr.)

Objektiv (cf Linse, Lupe, Glas) objective, object glass, lens (receiving first light from object).

-, höchstlichtstarkes ultra-rapid or ultra-high-speed objective or lens. -, kurzbrennweites short-focus lens. -, lichtstarkes high-speed objective. -, zusammen-gesprengtes broken-contact (uncemented) lens or objective.

Aufzeichnungs- recording objective. Fern- telephoto lens. Immersions-immersion objective (electron microscope).

Objektiv-brett lens or objective panel or board. -deckel lens cap. -fassung objective or lens mount or barrel. -gewindes, Ansatzfläche des screw shoulder or s. collar of objective mount.

-halter lens holder. -höhe height of lens or objective.

-öffnung, numerische numerical aperture of objective.

-öffnungswinkel angular aperture of objective. -ring lens adapter.

-satz set of lenses, lens combination. -spule objective coil.

-wechsler revolving nosepiece (micr.)

Objekt-kammer object chamber.
 -mikrometer stage micrometer.
 -schleuse object airlock -sucher
 object finder (opt.) -tisch
 micrometer stage, object stage or
 stand, manipulator. -träger
 object slide, mount, stage or
 stand, o. support, o. carrier
 (plate), specimen holder (e.g.,
 a celluloid film or skin).
 -trägerplättchen object support
 lamina or slide (film or skin).
 -umfang range of brightness (of
 subject).

Ofen, Etagen- storey furnace. -sohle
 furnace bottom, bed, sole or
 floor.

ofentrocken kiln- or oven-dried, d.
 in kiln or oven.

offen hollow (of sound).
 -(er) Schwingen open oscillator.
 -(e) Sprache open language, un-
 coded l. einseitig- unilater-
 ally open (-ended).

offenbarer Unsinn manifest absurdity.

Offenbarung disclosure.

offenkundige oder öffentliche
 Vorbenutzung public use, prior use.

öffentlichen Hand, Betrieb der
 public utility.

öffnen, eine Röhre open, unlock,
 render conductive, allow dis-
 charge, cause breakdown of a
 tube, trigger a t. (say, a
 blocking oscillator). -, einen
 Stromkreis break or open a cir-
 cuit or a line.

Öffnung aperture, orifice, opening,
 mouth, vent, leak, crack, slit,
 port; F number (opt.).

-numerische, des Objektivs
 numerical aperture of objective.

Blenden- aperture of diaphragm or
 stop. **Mundstück-** chink between
 mouthpiece and reed (of clarinet).

Schall- louvre (of bell tower).

Spalt- chink (of clarinet).

Verschluss- shutter aperture, s.
 opening.

Jffnungs-bild aperture image.

-fehler apertural defect, error
 or effect. -verhältnis aperture

ratio, relative a.; field of view
 (picture projection). -weite
 flare, width of opening, (of horn,
 trumpet, etc.) -winkel, Halb-
 semi-apertural angle. -winkel-
 messer apertometer.

Ohm'scher Widerstand ohm resistance,
 steady-current r.

Ohr ear, lug, eye, catch, loop.
 -, vertäubtes deafened ear.

Öhr ear, handle, eye, catch, eyelet.

Ohrenempfindungsgrenze loudness con-
 tour of ear, auditory sensation
 area.

Ohren-kappe ear muff. -kurve
 auditory sensation curve. -muschel
 ear, cap, e. piece.

Ohrhöhle ear cavity.

Ökonomiekoeffizient efficiency of
 economy.

Ökonomisch economic(al).

Oktaeder octahedron.

oktaedrisch octahedral.

Oktave, eingestrichene one-stroked
 octave.

Oktavkoppel octave coupler (organ).

Okular, verzerrungsfreies ortho-
 scopic eyepiece, distortion-free e.
 Augenlinsen- eyelens of eyepiece.

Mess- micrometric eyepiece.
 Sucher- focusing lens.

Okular-aufsteckglas eyepiece cor-
 recting lens. -blende eyepiece
 diameter, e. stop. -kollektiv
 field lens of eyepiece. -muschel
 eyepiece cup. -netzmikrometer
 micrometer with reticle eyepiece.

ölbildend oil forming, olefiant.

-es Gas olefiant gas
 (ethylene).

Oldämpfung oil damping (in vibrators);
 o. dashpot. -fänger oil catch, o.
 collector.

ölhaltig containing oil, oleiferous.

Ölharz oleoresin.

ölig oily, oleaginous.

ölkarburiert oil-carburetted.

Öl-nute oil groove, oil run, oilway.
 -pumpe oil pump; type of high-
 vacuum pump, e.g., "Hyvac".

-schalter, impuls- oil-blast
 circuit-breaker. -schiefer oil shale.

-schwungmasse rotary stabilizer (in film feed). -tröpfchenmethode oil drop method.

Opalglass opal glass, frosted g., light-diffusing g. -schelbe, Vollpot opal diffuser disk (phot.)

Operatorenrechnung operational calculus.

Optik optics (science), optic (optical means such as lenses, etc., placed in path of rays in physical apparatus, etc.)

Optik, Elektronen- electron optics, e. lenses (and their control of beams). **Licht-** light optics, physical o., geometric o. of light rays. **Spalt-** microscopic aperture, imaging optic means, slit "optic". **Ton (film)-** soundhead lens, s. optic (m.p.)

Optik-auswechselung optical system or assembly comprising interchangeable intermediate lens barrels. -tubus optical barrel.

optisch, spannungs- photo-elastic.

-**(e)** Bank optical bench. -**(e)** Drehung optical rotatory power, o. rotation, rotatory polarization. -**(e)** Inaktivierung eines Quarzkristalles racemization.

ordentliche Komponente ordinary component (of rays, etc.)

ordnen order, arrange (methodically or systematically), regulate, settle, collect terms (math.)

Ordnung order, arrangement, organized disposition, class; power (math.)

-Kurve dritter cubic curve.
-,nter of nth order.

ordnungsgemäss orderly, methodical.

Ordnungs-grad degree of order.

-stellung, Ein, -stellung, Zwei- position of grating resulting in a one-order or a two-order spectrum.

ordnungswidrig irregular, disorderly, contrary to order, discipline or rule.

Ordnungszahl ordinal number; n. of a series, atomic n.

Orgel, Dampfaffen-, Vogel- bird organ. -zungenspfeife reed organ pipe.

orientiert, nicht bevorzugt randomly oriented, non-preferential ly o.

Orientierung orientation, direction; trend, inclination. -, bevorzugte non-random orientation, privileged orientation.

orientierungsabhängig orientation-sensitive, o.- responsive, be a function of, or dependent upon, orientation, direction or angle.

Ort place, locus, region, locality, site, position.

Original-negativ master negative.

-positiv master positive.

Ort, geometrischer vector point, geometrical locus.

Ort und Stelle, an in situ, on the site, on the spot.

Ort, Elektronen- position or locus of an electron. **Flug-** position of flying craft, fix. **Koppel-** fix, dead-reckoning position.

Orthochromatisierung orthochromatic processing.

Orthodrome straight (or rhombic) line portion of a great circle.

-ortig -place.

ortig, drei- three-place.

örtlicher Tagesgang local diurnal variation.

Orts-bestimmung position-finding.

-diagramm locus diagram, circle d.

-fehler geometric location error.

-funktion position function.

-gang local variation. -gebiet local area. -missweisung local declination.

ortsveränderlich non-stationary, movable, (trans)portable.

Ortung position-finding, orientation, taking of bearings, navigation, avigation. -, akustische sound location, acoustic orientation. **Funk-** radio position-finding, obtaining r. fix.

Ortungskompass navigation compass.

Öse lug, eye, ear, hook, loop, eyelet. **Löt-** soldering tag, tab.

Ösen-blatt tong, lip, flange.

-bolzen eyebolt.

Oszillationsquantumszahl vibrational quantum number.

Oszillator, leitungsgesteuerter line-controlled oscillator.

Sperrkipp- blocking oscillator, squeegging o.

Oszillograph, Innenphotographie- internal photography oscilloscope. Saiten- string oscilloscope. Schleifen- loop, string or vibrator oscilloscope.

Oszillographenschleife oscilloscope loop, o. vibrator.

Oxydations-flamme oxidizing flame. -mittel oxidizing agent.

-stufe stage of oxidation, degree of o.

Oxyd-beschlag coating of oxide. -faden oxide-coated cathode, oxide filament.

oxydhaltig oxidic, containing oxide.

Oxydhaut skin of oxide, film of o. oxydierbar oxidizable.

Oxydkathodenröhre tube with oxide-coated filament, dull emitter t. oxygenieren oxygenate, oxygenize.

Ozokerit ozocerite.

Ozonsauerstoff ozonized oxygen, activated oxygen in the form of ozone.

P

- P Zweig P branch (spectr.)
- Paarbildung pairing, formation of pairs, drawing together of lines (due to hum, in interlaced scanning).
- Paare, Echo- paired echoes.
- Paarerzeugung pairing.
- paarig erscheinen(von Linien, im Bild) pairing of lines (telev.)
- Paarigkeit pairing, formation of pairs (caused by hum, in interlaced scanning).
- Pack pack, packet, bale, bundle.
- Packung packing, serving, wrapping.
- Störschutz- interference eliminator kit.
- Packungserscheinung packing phenomenon.
- Paket, Federn- bank, assembly or set of springs.
- Panel panel.
- Panoramabild panoramic picture or view, panning shot.
- Panzer shield, ironcladding, armor (of a cable).
- Panzerholz metal-plated plywood.
- Panzerung shielding, screening, iron-cladding.
- Papageno-flöte, -pfeife Pandean pipe.
- Papier, abziehbares transfer paper.
-, selbstonendes self-toning paper.
- Papier, Koordinaten- ruled paper, coordinate paper, cross-section p.
- Papier-bahn web of paper. -band
tape of paper, web of p.
-hohlräumkabel air-space paper-core cable, dry-core c. -pergament parchment paper. -strang web of paper. -streifen paper strip; paper web. -umhüllung wrapping of paper. -vorschub paper feed.
- Pappbogen sheet of pasteboard or cardboard. -deckel pasteboard, paperboard, carton.
- Pappe pasteboard, paperboard, card-board, carton, millboard.
- Pappelholz poplar.
- Pappenguss pressure-cast carton or cardboard (using paper pulp), papier mâché, millboard.
- Pappmasse papier-mâché.
- parabolisch, rotations- full parabolic.
- Parabolspiegel parabolic reflector.
- parachsial paraxial.
- Paraffinbad paraffin bath.
- Parallax, Sucher- seeker or finder parallax.
- parallel, achs- axis-parallel, paraxial.
- Parallel-endmass standard gage block, end-to-end s. bar.
-impedanz leak impedance.
- Parallelogramm, schiefwinkliges rhomboid, oblique parallelogram.
- Parallel-resonanzkreis parallel-resonance circuit, rejector c. -röhrenmodulation Heising choke or plate modulation, constant-current m.
- parallelschalten (connect in) parallel, shunt (across).
- Parallel-schaltung parallel connection, p. circuit organization, multiple connection, paralleling. -verschiebung translatory motion, t.shift. -versuch parallel experiment, check-up e., duplicate determination. -weg bypass, shunt, shunt path.
- Para-lysator anti-catalyst. -stellung para position.
- Pardune back stay, guy wire, g. cable.
- Partei, Gegen- opponent, adversary, adverse party, "the other side" (in a suit).
- Partialdruck partial pressure.
- Paschen-Back Verwandlung Paschen-Back (magneto-optic) effect.
- passend fit, suitable, convenient, appropriate.
- Pass-fläche seat, surface where two

parts fit together or engage (snugly). -sitz press-fit, snug f., seat, lodgment.

Passierrohr indicating plug, inside gage.

Passivierung passivation.

Passung fit.

Pastekathode pasted (oxide-coated) cathode.

Pastille pastil, button, bead, lozenge.

Patent, angemeldetes filed p., pending p., p. applied for.

-, schwebendes pending patent.

Abänderungs- re-issue patent.

Apparat- patent covering and disclosing apparatus or machine, a.p.

Beweise, die Gültigkeit eines... es Abbruch tun evidence impeaching, or prejudicial to, validity of a patent.

Haupt- parent patent, main or original patent.

Klage- patent in issue, in suit or at bar.

Stamm- parent patent.

Stoff-patent covering a substance or material, product p.

Verbesserungs-patent of improvement.

Verfahrens-process patent, method p.

Zusatz-patent of addition (to parent p.)

Patent-anmassung usurpation of patent rights.

-anspruch claim of a patent.

-beschreibung patent specification.

-dauer life of a patent, continuance of a p., term of a p.

-erlösung expiry or expiration of a patent; annulment of a p.

-erteilung allowance, grant or issue of letters patent.

-gebühr patent fee, p. tax.

-gesetz patent law, p. code, p. statutes.

-gültigkeit anfechten challenge validity of a patent.

patentiert im In- und Ausland covered by domestic and foreign patents.

Patent-inhaber patentee, grantee, holder of letters patent.

-klage patent suit, p. action.

-kommissar stellvertretender deputy or acting patent commissioner.

-streit patent action, p. litigation.

-unteranspruch sub-claim of a

patent.

-verlängerung renewal of a patent.

-vorwegnahme anticipation, anticipatory reference.

patentverletzendes Merkmal patent-infringing fact or feature.

Patentverletzungsklage action or suit for infringement of patent rights.

Patrize upper tup die, punch.

Patrone cartridge (for specimen in electron microscope); pattern, stencil, mandrel.

Patronenreihe string of cartridges.

Pauke kettle drum.

Paukenstimmschlüssel kettle drum wrench.

pauschen swell, refine (met.)

Pause copy, tracing; space, interval, intermission, pause.

Dunkel- obscuring period, cut-off p., dark p.

Gespräch- interval of no speech.

Licht- photo(graphic) tracing, blueprint.

Telegraphierspace (in keying or telegraphing work).

pausen trace, calk.

Pedal, Forte- loud pedal.

Piano- soft pedal.

Tonhaltungs- tone sustaining pedal.

Pegel level, gain (in db units); water gage.

-mittlerer mean power level (as indicated in volume indicator).

Dialog- dialogue level.

Leitungsbedarf- power reference level.

Rausch- noise level (due to Schottky effect and thermal noise).

Schwarz- black level.

Stör-, Untergehen der Bildspannung im swamping of picture or video signal in noise level.

Pegel-ausgleich equalizing level, l. equalizer.

-messer transmission measuring set.

-schreiber level recorder.

-strom pilot current, p. carrier (in suppressed carrier system).

Piegelung level or volume (gain) regulation.

Peil Q Gruppen Q code groups.

Peiler, direkt anzeigen direct-reading direction-finder.

-selbstanzeigen automatic

direction-finder, direct-reading d.f.

Peiler, Bodenstation- ground station direction-finder. Nachlauf-direction-finder with automatic zero setting. Sicht- visual direction-finder, direct-reading d.f.

Peil-abschnitt, geeichter calibrated sector. -antennensystem directional antenna system. -antrieb frame drive, loop d. (handle, wheel and spindle). -aufsatz bearing plate (of d.f.). -empfänger direction-finding receiver. -fehler direction-finding error, bearing e. (due to night effects, etc.), distortion of bearing. -feld bearing field, -flugleiter ground direction-finding control operator. -funkempfänger radio compass, direction-finder. -hauptstelle main control direction-finder station (of an air communication safety district). -haus direction-finder station building. -kompass navigator's compass. -kurs, recht voraus head-on course (fore-aft axis or lubber line of craft directed toward objective). -kurve space pattern, directional diagram. -leitstelle main control direction-finder station (of an air communication safety district). -nebenstelle associated d.f. ground station, sub-control station. -punktmarke, schwarze black dot, b. mark (on scale). -rahmen coil antenna, loop a., frame a. -richtung direct course or line to transmitter or beacon. -ring direction-finder loop or frame. -scheibe, Funk- bearing plate (of radio direction-finder). -seite, eindeutige absolute direction. -seitenschalter direction-finding sense switch, sense-finding s. -spannung directional signal potential (picked up by directional antenna in df, as distinguished from auxiliary antenna potential). -stelle, Boden- ground

df station, aeronautical g.s.-, Neben- associate ground station df. -strahl, raumgeradliniger orthodrome.

-strahlwegablenkung distortion of bearing, deviation due to diurnal or seasonal factors, weather, terrain, local conditions, etc.; lateral deviation. -tabelle bearing chart.

peiltreue Bodenwelle ground wave resulting in undistorted bearing. **Peilung** taking bearings, direction-finding. -, falsche false bearing, erroneous b. -, optische pilotage. -, wahre true bearing.

Peilung, Deck- alignment bearing.

Eigen- board (aircraft) direction-finding, taking bearings with homing device on board. Einzel-bearing taken from one object.

Falsch- erroneous bearing, false b. Flimmer- (cf Wechselkadioide) loop reversing switch method (d.f.).

Fremd- ground direction-finding (directional data or radio bearing supplied on request to airplane from ground station).

Grosskreis- great circle bearing.

Hör- auditory direction-finding.

Kreuz- cross bearing (taken from two or more ground df stations).

Längs- taking bearings from df stations roughly in direction of travel or course. Maximal- maximum-signal strength (df) method. Minimum- minimum or zero signal strength (df) method.

Misch- taking bearings on board (without directional receiver) from directive beam. Nah- close-range direction-finding. Standlinien- position-line bearing, great circle bearing. Standort- obtaining a fix, position or location finding (by two or more direction-finders), position-line bearing, great-circle b. Ziel-, missweisende Richtung Flugzeug-Boden magnetic reciprocal course (from airplane to ground station). Ziel-, rechtweisende true course to steer.

Ziel-, rechtweisende Richtung vom Flugzeug zur Bodenpeilstelle true reciprocal course (from airplane to ground station).

Peilungsbeiwert error compensation value.

Peil-verfahren, Impuls- impulse direction-finding method.

-verlagerung bearing shift, b. error, b. displacement. -vorsatz d.f. means added to normal receiver equipment. -zeichen call sign, code signal (say, of a ground station). -zeiger pointer of df apparatus.

Pendel, Schwere- gravity pendulum.

Pendel-bewegung shutter movement (m.p.) -feder (im Zerhacker)

vibrator blade, reed or spring (of chopper). -fenster internal pressure plate. -frequenz quench or bias frequency furnished from auxiliary oscillator circuit (in super-regeneration); electron-oscillation frequency.

-frequenzschaltung (Armstrong) super-regeneration circuit organization. -gewicht pendulum weight, bob. -gleichrichter vibratory rectifier, tuned-reed r. -hammer (Charpy's) impact testing machine. -kugellager self-aligning ball bearing.

Pendeln oscillate (of electrons), vibrate, swing (of phases), pendulate, undulate, pulsate, rock, hunt (around an average value).

Pendeln, Hinauf- (gradual) rise in resonance.

Pendel-rückkopplung super-regeneration. -rückkopplungsspannung positive quench or biasing voltage (impressed on grid in super-regeneration circuits).

-schlagwerk (Charpy) Charpy impact testing machine. -umformer vibrating rectifier.

Pendelung, Elektronen- oscillating of electrons. Last- load fluctuation, hunting of load. Luftstrom-

air-jet pendulation.

Pendel-vervielfacher reciprocating and accelerating secondary-electron multiplier. -wechselrichter vibratory inverter, inverted rectifier of vibrator type.

Peracidität superacidity, hyper-acidity.

Perforationsgeräusch sprocket hole modulation or noise (m.p.)

Periode cycle, period. Halb-half cycle, h. period, semi-oscillation, alternation.

Schwebungs- beat cycle.

Viertel- quarter-period.

Zugwechsel- field frequency in interlaced scanning (= 2 x frame f., telev.)

Periodenzzeit time of vibration, t. of oscillation.

Perlen form bubbles, drops or beads; sparkle, glisten like pearls.

Perlenwand directive or beaded screen.

Perl-glimmer margarite. -mutterblech crystallized tinplate, moiré métallique. -mutterpapier nacreous paper. -rohr bead tube (filled with glass beads to break up a fluid). -schnur maryante (cryst.); string of beads or pearls, line of droplets.

permanentlydynamischer Lautsprecher dynamic or moving-coil loudspeaker using permanent magnet (to produce constant field), p-m dynamic 1.

Permanentsatz permanence principle, sum rule.

Permeabilitätsmesser permeameter.

Perpendikel pendulum, perpendicular-ende oder -Gewicht bob.

Personenabtaster mit wanderndem Licht spotlight scanner for persons.

Perspektive, Frosch- worm's eye view.

FÜLL- plenary perspective.

Vogel- bird's eye view.

Pesenantrieb belt drive.

Petent petitioner, applicant, suppliant.

Petrokokks petroleum coke, oil c.

Pfahl stake, pile, stick, pole, post.

Pfeife, gedackte, gedeckte stopped pipe. Doppelzungen- double-tongued flute. Galton- Galton pipe. Labial-, Lippen- flue pipe, flute pipe. Orgel- reed organ pipe. Quer- fife. Rohr- reed pipe. Signal- siren, whistle. Stimm- tuning pipe, pitch p.

Vogel- bird whistle. Zink- zinc pipe. Zinn- tin pipe. Zungen- reed pipe, r. flute. Zwitscher- bird warbler.

pfeifen whistle, sing, squeal, howl, self-oscillating (of a tube)

Pfeipunkt-abstand,-sicherheit singing, whistling or stability margin (of radio tube).

Pfeil arrow, dart; strain.

Pfeiler pillar, post, column, upright, standard.

Pfeil-höhe sag or dip (of a line wire), height (of an arch, meniscus, etc.), camber (of airplane wing). -rad double helical or herring-bone gear wheel.

Pferdefleischholz Surinam wood.

Pflanzenwachs vegetable wax.

Pflichtenblatt (contractual) specification.

Pflichtwert specification value, contract v.

Pflock peg, pin, plug, stake.

Pfosten pillar, post, upright, column, standard.

Pfropfen cork, stopple, stopper; graft.

pH Wert pH value (hydrogen-ion concentration).

Phase phase; stage, epoch, era.

Phase, ausser de-phased, out-of-phase (condition). gleichbelastete - (n) balanced phases. -, in in-phase, co-phasal, in step. -, verschobene displaced phase, shifted p., de-phased or out-of-phase condition.

Phase, Eintritts- entrance phase (of network or filter). Oberflächen- surface phase. Verdunkelungs- dark interval (m.p.)

Phasen-abgleichvorrichtung phase balance, p. changer, p. shifter. -ablösung phase switch (in polyphase operation of ignitron). -aussortierung phase focusing. -drehung phase rotation, p. shift. -einstellung phasing, phase adjustment, p. shift, p. regulation. -entzerrung phase correction, delay equalizer; delay or echo weighting term.

phasenfalsch misphased.

Phasen-fehler error of phase, p. distortion. -fokus phase focusing. -geschwindigkeit phase speed, p. velocity, wave v.

-gleichgewicht phase (rule) equilibrium. -gleichheit phase coincidence, in-phase state, co-phasal s. -hub phase variation or fluctuation.

-kurve phase curve. -laufzeit time of phase transmission.

-lehre solution theory, doctrine of phases. -mass phase constant, wavelength c.

phasenmässig in proper phase relation; looked at from phase viewpoint.

Phasenmodulation phase modulation. -nacheilung phase lagging. -raum phase space, extension-in-phase.

-regel phase rule. -regelung phasing, phase adjustment, p. shift. -reinheit freedom from phase shift or angular differences. -resonanz phase resonance, velocity r.

phasenrichtig in proper phase relation.

Phasen-rückdreher phase lagger, p. shifter. -schwund phase fading. -spaltung phase splitting.

-sprung phase angle shift.

phasenstarr in locked phase relation, p. -locked.

Phasen-teiler phase splitter.

-transformator phase shifting transformer. -übergang phase transition. -umkehrer phase inverter, p. reverter.

-verdrehung phase shifting, p. rotation.

phasenverkehr act in reverse polarity, act in opposite phases or in p. opposition.

Phasenverschiebung phase shift, p. displacement, p. advancing (if forward), dephased condition. -von 90 Grad quadrature relation of phases. -von 180 Grad phase opposition.

phasenverschoben dephased, out-of-phase, in p. quadrature (when 90 degrees), in p. opposition (when 180 degrees).

Phasen-verzerrung phase distortion. -verzögerung phase lag, p. delay. -voreilung phase lead, p. advance. -vorschieber phase advancer. -welle phase wave, de Broglie w., electron w. -winkel impedance angle, phase.a., impedance factor, Q factor; quality factor.

phasig,falsch- misphased, dephased. gleich- co-phasal, equi-phased, in phase. richtig- true-phased, in correct phase (relationship).

Phonograph, Licht- sound track film player (without pictorial accompaniment).

Phonographen-drehplatte turntable. -platte phonograph disk, p. record. -plattenteller turn-table.

Phoresezelle, Elektro- electro-phoresis cell.

Phosphore phosphors, luminescent or fluorescent (screen or lamp) materials.

phosphoreszenzerzeugend phosphogenic.

Phosphorigene phosphorogens, activating additions (promotive of phosphorescence).

photoelektrisch(e) Ausbeute,-(es) Emissionsvermögen photo-electric emissivity, p.-e. yield. -(e) Schwellenfrequenz photo-electric threshold frequency, critical f. -(e) Wirkung photo-electric effect, Hertz e. -(e) Zelle photo-electric cell, electric

eye (either photo-conductive, p. -voltaic or p. -emissive, though the last-named should strictly be called a photo-tube, a light-sensitive tube or a photo-electric t.)

Photogramm photograph, photographic record.

Photographie, Kleinbild- microphotography, photomicrography.

photographisch festhalten record photographically (on a record sheet).

photographisch(e) Dichtemessung

(photo)densitometry, photographic density measurement. -(en)Schicht, Bremsvermögen der stopping power of photographic emulsion.

-(em) Zeichendruck, Telegraph mit photo-printing telegraph.

Photokathode photo-cathode, photo-electric c. -, zusammenhängende plain mirror or continuous (non-mosaic) photo-cathode (of Farnsworth dissector and superelectron). -, Lichtstärkeverteilung auf light intensity distribution on photo-cathode.

Photokopie photostatic copy, photographic c., photoprint, photostat.

Photometer, Bunsen-,Fettfleck- Bunsen photometer, grease-spot p., with translucent central spot in screen. Flimmer- flicker photometer. Gleichheits- contrast photometer, total-reflection p. Kontrast-, mit Würfel contrast photometer of cube-type with cubical cavity. Kugel- sphere photometer. Ulbricht integrating sphere.

Lummer-Brodhun- contrast photometer, Lummer-Brodhun p. (based on equality of illumination). Spektral- spectrophotometer. Topf- photometric integrator. Ulbricht- sphere or globe photometer of Ulbricht. Würfel- cube photometer, integrating p. with cubical cavity.

Photometer-aufsatzt photometer head. -schirm photometer screen.

Photo-metrierung photometric

- evaluation or recording. -physik photo-physics. -strom photo-cell current. -volteffekt photo-voltaic effect (as in a cuprous-oxide cell).
- Photozelle** photo-electric cell (photo-conductive, photo-voltaic or photo-emissive), electric eye.
- Mikro-** globule of mosaic screen.
- Photozellen-kabel** low-capacity shielded cable between photo-electric cell and amplifier of the video cable, co-axial or concentric cable type. -verstärker electron multiplier phototube; photo-cell amplifier. -vorlicht priming or bias illumination.
- physikalisch-chemisch** physical-chemical, physico-c.
- π Glied (11-Glied). pi (π) type section, filter mesh or network m.
- Piccoloflöte** piccolo flute.
- Pickelbildung** (corrosion) pitting (of metal).
- piezo-elektrischer Modul** piezo-electric modulus.
- Piezokristall** piezo-electric crystal. -quarzzelle supersonic light valve (predicated on Brillouin and Debye-Sears effect).
- Pikkelflöte** piccolo flute.
- Pilgerschrittverfahren** Mannesmann, Perrins or reciprocating rolling process.
- Pille, Getter-** getter tab, g. pill, g. patch. **Gleichrichter-** oxide or metal rectifier of reduced size (say, 1 sq. cm), Westector r.
- Pilz-isolator** mushroom, petticoat or umbrella insulator. -lautsprecher omnidirectional (360 degree) exponential horn loudspeaker or sound radiator (mostly mounted on a pole top).
- Pinne** pin, peg, tack; peen (of a hammer).
- Pinseldetektor** cat whisker detector.
- Pinzette** pincette, tweezers, forceps, nippers, pincers.
- Pistole, Spritz-** spray gun, s. pistol.
- Pitotröhre** Pitot tube (to determine fluid or liquid velocity of flow).
- Plan, Bedrahtungs-** wiring diagram.
- biegeversuch plane bending test.
- Planck's Wirkungsquantum** Planck's constant (quantum of action).
- Plandrehen** face planing.
- Planetantriebe** planetary gear, epicyclic g. (train).
- Plangitter** plane grating (for light dispersion).
- planieren** plane, planish, smooth, level, even.
- plan-konkav** plano-concave. -konvex plano-convex. -liegen in Fokusebene flattened in focal plane. -mässig systematic, methodical, according to plan.
- parallele Platte plane-parallel plate. -schleifen surface-grind. -symmetrisch planisymmetric.
- Plasma, Rest-** residual electrons, plasma (region without resultant charge).
- Plastik** plastic, stereoscopic or relief effect (pictures). **Bild-** plastic or relief effect; form of telev. picture distortion (consisting of multiple contours of diminishing intensity giving pseudo or erroneous three-dimensional appearance).
- plastisch(e) Bildwirkung** illusion of depth (of a picture or telev. image). -(er) Film stereoscopic film. -(es) Fliessen viscous flow. -(e) Verformung plastic deformation, p. working.
- Platine** plate, sheet bar, p. slab; p. bar.
- Platin-mohr** platinum black. -papier platinotype paper.
- Plationröhre** amplifier tube with filament disposed between control grid and plate (with low internal resistance, one model with photo-electric g.)
- Plättchen** lamella, small plate, platelet, scale.
- Platte** plate, sheet, slab, lamina, lamination, leaf (of a table),

flagstone. -, lichthoffreie
non-halation plate, p. free
from halo.

Platten, Ablenk- deflection plates, deflector p. Auffang- target, collector or impactor plates, dynodes (in multiplier). Doppel- twin plates, twin crystal, composite c., biquartz. Strichkreuz- cross wire plates, reticles, graticules (telescope and other optical instruments).

Plattenfördermechanismus plate-feed mechanism (in electron microscope).

plattenförmig laminar, laminated, plate-like, p. shaped, lamellar, lamelliform.

Platten-geräusch (phonograph)
record noise, surface n. -halter plate holder. -kristall, Doppel- divided plate crystal, biquartz. -lampe flat-plate (neon) lamp; tube with center plate instead of grid. -schlag disk wobble (of phonograph record). -schnitt plate contour, plate section (of condenser, etc.). -spieler disk-type phonograph or gramophone. -staffeln, Glas- (Michelson) echelon diffraction grating spectroscope. -teller turntable (of phonograph). -wechsler record changer.

Plattieren plating.

Plattine plate, mill bar, slab.

Platz, freier hole (in nuclear theory). Gitter- lattice place, l. point. Lande- landing field. airport.

Plätzchen little cake, lozenge, troche, tablet.

platzen burst, crack, break open, explode, implode (inward collapse or burst, as of a vacuum tube).

Platzwechsel transposition, crossing; exchange of places (of electrons, etc.)

plötzlich sudden, abrupt, precipitous.- (es) Schwingen spilling

over (of an amplifier tube, attended with fringe howl).

Pochwerk steam stamp.

Pockholz lignum vitae, pockwood.

Pohl'sche Wippe Pohl commutator (double-pole double-throw switch).

Polarisation, Dreh- rotatory polarization, optical rotation.

Polarisations-apparat polarizing apparatus, polariscope. -ebene plane of polarization. -ebene Drehung der polarization error. effekt polarization error.

polarisationsfehlerfrei free from polarization error (d.f.)

Polarisationskapazität polarization capacitance.

polarisationsoptisch photo-elastic. **Polarisations-prisma** polarizer.

-winkel polarizing angle, Brewster a.

polarisiert, elliptisch elliptically polarized. -geradlinig plane-polarized. Kreisbahn-, zirkular - circularly polarized.

Polarlicht aurora (borealis or australis).

Pol-bedeckung pole arc, circumferential length of pole face, p. pitch percentage. **bildung** pole formation, polarization. -bogen pole arc, p. pitch percentage. -eck summit (cryst.) -effekt pole effect.

Pole, ausgeprägte salient poles.

-, entgegengesetzte opposite poles, unlike p. -, gleichnamige like poles, similar p.

-, ungleichnamige opposite poles, unlike p. **Gegenkontakt-** co-operative contacts, opposite contacts.

polen, um- reverse polarity.

polieren polish, burnish, shine.

Polierschleifmaschine grinding and polishing machine.

Politur polish, gloss, shine, shining, lustre. -messer glossimeter, glossmeter.

Polklemme pole terminal. -papier
pole paper, p.-finding p.

Polster, Luft- air cushion, a.
pocket; dashpot.

Pol-suchglühlampe polarity-finder
glow-tube, p. indicator. -teilung
pole pitch.

Polumg, Gegen- opposite polarity,
opposition of p., reversal of p.

Pol-wechsel reversal of polarity,
change of p. -zwischenraum pole
clearance, inter-polar space or
gap.

Porenraum pore space, cell s., cell
cavity.

Porzellanerde porcelain clay, China
c., kaolin. -masse porcelain
body. -schiffchen porcelain boat.
-tiegel porcelain crucible. -ton
porcelain clay, kaolin.

Posaune trombone. -, durchschlagende
trombone with free reed (organ).

Alt- alto trombone. **Diskant-** so-
prano trombone. **Zug-** slide trombone.

posaunenartig verschiebar shiftable
trombone-fashion or like a telescope,
telescoping.

Posaunenauszug telescoping means, ex-
tension m. (for tuning Lecher-wire
system).

Positiv, Bromsilber- positive in sil-
ver bromide. **Meister-** mother
record, master positive. **Original-**
master positive.

positive elektrische Ladungseinheit
unit positive charge.

Positron positron, positive electron,
antielectron.

Postmikrophon solid-back transmitter,
carbon-back microphone or telephone
instrument.

Potential, Abstossungs- repulsion po-
tential. **Entstehungs-** appearance
potential, ionization p.

Geschwindigkeits- velocity poten-
tial. **Gleichgewichts-** equilibrium
potential (of mosaic). **Grenzflächen-**
interface potential. **Rückstoss-**
recoil potential. **Strömungs-**
flow potential, streaming p.

Potential-berg potential barrier.

-fläche, konstante equipotential
surface, isopotential s. -gefalle,
weltzeitlicher Anteil universal
diurnal (variation) component of
potential gradient. -hügel
potential barrier. -kasten,
-mulde potential hole, p. well.
-schwelle potential barrier.

Potenz, in die nte - erheben
raise to the nth power.

Potenz-gefäß potential gradient.
-schwelle(Kerndurchdringung) nuclear
penetration factor.

Potenzieren raise to higher power
(by process of involution, math.)

Potenzreihe exponential series,
power s. (math.)

Präge-bär ram (of a press). -film
(cf Gravarfilm) engraved sound
film (track cut in film).

prägen stamp, coin, imprint, im-
press, emboss.

prägepolieren roll polish, r.
finish.

Prägepresse screw press.

Prägung, Rand- marginal embossing
of film.

Präklusivfrist preclusion period.

Prall-elektrode electron mirror,
dynode, reflecting electrode,
impactor anode (of multiplier
phototube or photo-electric elec-
tron-multiplier phototube), target
electrode, rebound or reflecting
impactor (of Weiss mesh multi-
plier).

prallen(cf prellen) rebound, bound,
bounce, be reflected.

Prall-kraft elasticity, resiliency.
-winkel angle of reflection, a. of
ricocheting.

Präparier-arbeit dissecting work
(micr.). -lupe dissecting lens.

prasseln crackle, rustle, rattle.
Pratze claw.

Praxis, in die - überführen
reduce to practice or to a prac-
tical form, work a patent or the
invention disclosed therein.

Präzisionswage precision balance, p..
scales.

prellen (cf *prallen*) toss, make to rebound, thump or click (key), chatter, reflect.

prellfrei free from thumping or click (in key operation).

Prellkraft resiliency.

Press-bernstein ambroid. -bodenröhre loctal base tube. -druck ram pressure (in pressfits).

Presse,Fach- technical press, t. literature, professional men's press. **Klebe-** bloop, splicer (for film). **Präge-** screw press. **Zieh-** (cf *Tiefzieh-*) drop (forge) press (for drawing and shaping articles from sheet material).

pressen press, compress, stamp, mold (under pressure).

Presser compressor (in volume-range control).

Press-form pressure mold.

-gasschalter (cross) airblast switch. -körper,-ling pressed object or article, blank after pressure application or molding. -luftlautsprecher compressed-air loudspeaker, pneumatic l. (without diaphragm). -luftschalter (cross) airblast switch (similar to gas b. s.) -masse fictile substance, moldable material, plastic m., synthetic, (thermo-) plastic. -matrize, negative negative stamper (phonograph record).

-platten pressings (phonograph record disks). -prozess pressure-shaping, molding or fashioning method. -sitz press-fit, force or driving f. -spahn glazed cardboard, presspan insulation material, pressboard. -stempel press ram. -stock stamper, die (built up from mother record, in phonograph record manufacture). -stoff plastic, moldable or fictile material,

Primär-abstimmung pre-selector means. -empfang single-circuit reception.

Prinzip gerlingsten Zwanges principle of least strain or resistance.

Prinzip,Ausschlüssungs- exclusion principle (formerly Pauli's

equivalence p.) Auswahl- selection principle. Korrespondenz- Bohr's correspondence principle.

Prinzipal open diapason (organ stop).

Prinzipschaltung basic circuit diagram (showing underlying principle).

Prioritäts-beanspruchung priority claim. -belag priority proof. -jahr convention year.

Prisma prism, wedge (when weak).

-,aneinandergesprengtes broken-contact p., two quartz prisms closely fitted together without cementing. -,doppelumkehrendes inversion prism, inverting p. (reverses in both axial directions of image). -,geradlichtiges direct-vision prism. -,stark fächerndes highly dispersive prism.

Prisma,Ablenkungs- deviating prism. **Aufrichtungs-** erecting prism.

Mehrkant- polyhedral prism.

Polarisations- polarizer. **Stufen-echelon** prism. **Umkehr-** (cf *Bildumkehrung*) inverting prism, reverting p. **Vergleichs-** comparison prism. **Wollaston**-Wollaston prism, double-image p., **Zwillings-** biprism, double-image p.

prisma-ähnlich prism-like, prismatic. -förmig prism-shaped, prismatic.

Prismen-fläche prismatic surface, p. face. -sucher prismatic finder, p. seeker.

Privataufführung pre-view.

Probe (cf *Prüfer*, *Prüfung*, *Messer*, *Messgerät*, *Messung*) sample, specimen, test piece; trial, test. **gereckte** stretched specimen.

-,vergüte quenched or tempered specimen or test piece. **Beschuss-** bombardment test, shooting t.

Kapazitäts- capacity test.

Kegeldruck- Brinell ball impression or indentation test, ball pressure t. **Loch-** drift test.

Metall- assay, test for metal; m. testing. **Risshärté-** abrasion

- test, scratch t. **Schlag-** impact test, blow t., percussion t.
Tiefzlehr- cupping test, cuppability t. (piece or specimen). **Ton-** sound test; tonsil t. (in recording voice of a singer).
Zerreiss- tensile test, breaking t., rending test (specimen).
Probe-abdruck proof, proof print, p. sheet. -aufnahme test picture, trial shot. -entnahme sample taking, sampling (at random). -machen testing, assaying. -nehmen sampling.
Probenglas specimen glass, s. tube.
Probe-objekt specimen. -saal rehearsal hall. -stück specimen, sample, test piece. -ziehen sampling.
Problergefäß testing vessel, assaying v.
Profil,Feld(stärken)- field pattern (often mapped in an electrolytic tank). -Tragflügel- aerofoil section.
Profil-begrenzung contour line, boundary of a section or profile.
-prüfer (electronic) profilometer.
-stempel profile stamp (surface pressing).
Projektion, flächentreue equal-area projection (mapping) **Dia-** oder **Diapositiv-** lantern slide projection. Durch- back projection.
Gross- large-picture projection work (with magnascope, etc.)
Hintergrund- background projection.
Kegel- conical projection (of a map). **Merkatorkarten-** Mercator projection, cylindrical p., orthomorphic p.
Projektions-anlage,Rück- back projection equipment; re-p. apparatus.
-aussteuerungsanzelger projected volume indicator. -bildschreibröhre projection-type television receiver.
-fenster projection aperture, p. gate. -spule projection coil.
-tubus projection tube (micr.).
Propeller, Verstell- feathered (variable-pitch) propeller or airscrew.
proportional, umgekehrt od. verkehrt inversely proportional.
Proportionallitätskonstante constant of proportionality.
Prozent,Gewichts- percent by weight. Raum- percent by volume.
Prozentgehalt percent content, percentage.
prozentuale Aussteuerung percentage modulation, m. percentage.
Prozess manufacturing process or method; action, lawsuit, cause, suit, trial, legal case, court c. (law). **Anfechtungs-** contested action.
Prozess-kosten law costs, c. of proceedings, c. of a legal action.
-ladung writ of summons.
prüfen,nach- re-examine, re-check, re-test.
Prüfer,Erichsen- Erichsen cupping machine. **Glattheits-** smoothness meter, glossimeter. **Härte-** hardness tester (Brinell, Rockwell sclerometer and scleroscope). **Lichtsinn-** visual photometer. **Linsen-** lensometer. **Material-, elektronischer aniseikon.**
Oberflächenspannungs-(nach Abreiss-methode) adhesion-balance type of surface tensiometer. **Profil-** (electronic) profilometer.
Rauhheits- smoothness meter (determines degree of polish), glossimeter, profilometer. **Ritzhärte-** sclerometer, scratch hardness tester. **Röhren-** tube checker, t. tester. **Stromschluss-** continuity tester. **Tonhöhe-** tonvariator.
Universal- multiple-purpose tester, multimeter. **Windungsschluss-** (inter-)turn short-circuit tester.
Prüfbank (lens) test bench (opt.).
prüfen test, assay, probe, try, prove, examine, inspect, verify, scrutinize.
Prüf-feld test field, proving ground.
-feld, **Stoss-** potential impact, flash or impulse testing field.
-generator signal generator, test oscillator, all-wave o.

-gerät trouble shooting device, tester, set analyzer (radio).
 -ling test piece, t. specimen, t. model, t. sample. -pult test desk.
 -röhre für Fernseher phasmajector, monoscope, monotron. -schnarre test buzzer. -sender service test oscillator. -sonde, Klauen- claw-type test probe or prod, search electrode. -spitze penetrator (of hardness tester); indenter.
 -stabeinschnürung waist (forming in bar under tensile test).
 -stand test bed. -streifen buzz track (on a film). -verfahren prosecution (of a patent application), period during which Patent Office Examiner reviews novelty and merits of a disclosure; test method.

Prüfung (s.a. Probe, Prüfer, Messer, Messgerät, Messung). examination, testing, perusal, consideration, inspection, investigation, reviewing, surveying, verification, check, search, probe. -, nicht- zerstörende, zerstörungsfreie non-destructive test. Abnahme- acceptance test. Dauerstand- festigkeit- -(long-time) creep test. Eisenpulver- Magnaflux inspection (using iron dust).

Impuls- s. Prüfung, Stoss- .

Material- testing of materials. Rauheits- testing with smoothness meter or glossimeter. Regen- rain test, wet t. (of an insulator). Stoss- impact, flash or impulse test (of insulation). Treib- cupping test. Verschleiss- abrasion test, t. to ascertain wear and tear. Zerreis-, Zieh- tensile test, breaking t., rending t.

Pseudo-dämpfung loss of selectivity by parallel internal resistance.

-schwund pseudo-fading (due to swing or swaying of antenna).

Puffer grommet, cushion, pad, buffer, shock absorber. -betrieb floating battery operation. -lösung buffer

solution. -stufe buffer stage, separator s.

Pulsation pulsation, beat, throb.

Pulser pulsator (fatigue tester)

Puls-verfahren, Ein- monopulse

method. -verstärker,

Bildsynchronisierungs- frame synchronizing (or low sync) im- pulse amplifier.

Pult, Misch- mixing, monitoring or supervising desk. Prüf- test desk. -befeuерung firing on stepped grate bars. -ofen black-flame hearth.

pulverartig pulverulent, pulverous, powdered, dust-like.

Pulverdiagramm powder pattern. Pulverig powdery, pulverulent, pulverous, dust-like.

Pulverkern, gepresster Eisen- compressed iron-dust core.

Pulvern powder, pulverize.

Pumpe, Kreisel- centrifugal pump, turbine p. Lade- charging pump, compression p.

Pumpenlamelle vane (of Gaede vacuum pump).

Pumpstengel pumping lead (short piece of tube connecting vessel to be evacuated and vacuum pump), exhaust tube, e. vent.

Punkt, ausgezeichneter cardinal point (opt.) Berührungs- point of contact, tangency or osculation, touching p. Brenn- focal point (opt.) Einschnürungs- crossover (in electron-optics).

Flucht-vanishing point. Haupt- principal point, unit point (opt.) Kardinal- cardinal point (opt.) Kehr- cusp. Knoten-

nodal point (opt.) Morse- breiter, spitzer, lengthened dot, clipped dot. Nabel- umbilic.

Wende- cusp.

Punktallinse toric lens.

punktförmig punctiform; crater- shaped. -(e) Induktivität

lumped inductance, concentrated i.

-(e) quelle point (shaped) source or emitter (of light, electrons,

etc.), focus lamp.
Punkt(glimm)lampe point or crater
 neon lamp, tungsten arc lamp,
 Pointolite, focus l.
punktieren, strich- dot-dash.
Punkt-kathode point source cathode,
 crater c. -lagen point positions.
 -licht point (crater-shaped)
 light source. -losigkeit astigmatism.
 -marke spot reading (on dial
 of direction-finder). -raster
 point (dot or granule) raster,
 screen, plate or grating.
 -schreiber, Ein- single-point re-
 corder. -schweissung spot welding.
 -singularität point singularity.
 -strich semicolon.
punktsymmetrisch having point or
 radial symmetry.
punktuelle Abbildung point-focal vi-
 sion or imagery.
Punkt-verlagerung, Bild- spot shift

(causing "plastic", telev.)
 -versteller, Bild- picture scanner.
punktweise Auswertung point-by-point
 evaluation.
Pupille, erweiterte dilated pupil.
 Ausgangs-, Austritts- exit pupil.
 Eingangs-, Eintritts- entrance pupil.
Pupillen-grösse pupillary size, p.
 diameter. -soiel response of pupil
 -weltemesser körrometron.
Pupinspule loading coil, Pupin c. (for
 reactance balance).
Puppe, Kohle- carbon rod.
Purpur, Seh- visual purple, rhodopsin.
Pustlampe blow-lamp.
Putzen clean, cleanse, scour, polish,
 trim.
Pyramiden-stumpf truncated pyramid,
 frustum. -würfel tetrahedron.
Pyrometer, Glühfaden- optical pyrome-
 ter, disappearing-filament p.,
 monochromatic p.

Q

Q Faktor Q factor, magnification f.
Q Gruppen Q code groups.
Quadrat, Methode der kleinsten
 method of least squares.
quadratisch square, quadratic,
 tetragonal (cryst.), quadrangular.
 -(e) Abtastung square-law scan.
 -(er) Gleichrichter square-law
 rectifier or detector. -(e)
 Gleichung quadratic equation.
 -(er) Kondensator square-law con-
 denser or capacitor. -(er)
 Mittelwert root-mean-square
 (rms) value, virtual v.
Quadrat-wellengenerator generator
 of square or rectangular waves.
 -wurzel ziehen extract square
 root.
quadrieren square; raise to 2nd
 power.
Quadrupolmoment quadrupole moment.
Quant, Licht- photon, light quantum.
quanteln quantize.
Quantelung, Raum-, Richt- directional
 quantization, space q.
Quanten-ausbeute quantum yield, q.
 efficiency. -bedingungen
 quantum conditions.
quantenhaft pertaining to quanta or
 the quantum theory.
Quanten-hypothese quantum hypothesis.
 -sprung quantum transition (abrupt
 transfer of a quantum system from
 one of its stationary states into
 another), quantum jump or leap.
 -theorie quantum theory.
Quantenzahl, innere inner quantum
 number. Oszillations- vibrational
 quantum number. Rotations- rota-
 tional quantum number.
Quantisierung quantizing.
quantitative Messung quantitative
 measurement, q. analysis.
Quantum, Planck's Wirkungs- Planck's
 constant, quantity of action.
Quantum-ausbeute quantum yield, q.
 efficiency. -berichtigung quantum

correction. -gewichtete quantum
 weights, statistical w. -mechanik
 quantum mechanics. -übergang
 quantum transition, q. jump, q.
 leap. -zustand quantum state,
 energy level.
Quarz, optisch inaktiver racemic
 quartz, racemate. Links-
 levogyrate quartz crystal, left-
 handed q.c. Rechts- dextrogyrate
 quartz crystal, right-handed q.c.
Steuer- (frequency) stabilizing
 quartz.
quarzhähnlich quartzose, quartzous.
 -artig quartzic, quartzous, quartzy.
Quarzfaden quartz thread, q. fila-
 ment.
quarzgesteuerte Steuerstufe crystal-
 stabilized master or drive (oscilla-
 tor) stage.
quarzig quartzy, quartzose.
Quarz-inaktivierung, optische racemiza-
 tion. -keil, Doppel- double quartz
 wedge. -kristall, fertiges piezoid,
 finished blank (including elec-
 trodes). -kristall, optisch
 inaktives racemate. -mehl quartz
 powder. -resonator piezo-electric
 resonator, quartz r. -sender
 (piezo-electric) crystal or quartz-
 stabilized transmitter. -zelle,
 Piezo- supersonic light valve
 (predicated on Brillouin and Sears-
 Debye effect).
quasi-elastisch quasi-elastic.
 -unendlich quasi-infinite.
Quecksilberdampflampe mit Heizkathode
 phanotron, tungar and similar types
 of tube (with argon filling). -mit
 Steuergitter mercury-vapor tube
 of the thyratron, ignitron, etc.,
 type.
Quecksilber-faden mercury thread, m.
 column. -falle mercury trap
 (vacuum pump operation). -halogen
 mercury halide.
quecksilberhaltig mercurial, with Hg.

Quecksilber-hochdruck-Entladungsrohr
 high-pressure mercury discharge tube or vessel. -kathode mercury (pool) cathode. -legierung mercury alloy, amalgam. -lichtbogen-Kathodenfleck, fixierter anchored cathode spot of mercury arc. -masse mercury pool, m. sump (in bottom of a tube). -mohr black mercuric sulfide. -schalter mercury switch. -strahlunterbrecher mercury-jet. interrupter, m. break. -tropfelektrode dropping mercury electrode. -vorrat mercury pool (in discharge tube).

Quelle, einfarbige Leuchtstrahl-
 monochromatic illuminator source, monochromator. -, punktförmige point (-shaped) source or emitter. **Elektronen-electron source, e.** emitter. **Licht-** source of light, illuminant. **Strom-** source of current (supply).

Quellenbild, Licht- light source image.

Quellung swelling, welling, soaking, imbibition.

quer cross, across, transverse, transversal, traverse, diagonal, lateral, oblique, askance, athwart.

querab athwart. -Backbord abeam, on the port beam. -Steuerbord abreast, on the starboard beam. -Peilung taking bearings from athwart or abeam stations.

Quer-arm cross arm, shunt a. (of network). -aufnahme horizontal picture. -effekt transversal effect (of crystal).

Quer-entzerrer shunt-type attenuation equalizer or compensator.

-feld transverse or cross (magnetic) field. -glied, In 1/2 -endender Kettenleiter mid-shunt terminated network.

-kondensator bridging capacitor, by-pass c., shunt c. -kontraktionskoeffizient Poisson's coefficient, rho ratio (lateral contraction: longitudinal extension).

-leitung leakage conductance, leakage; shunt line, cross l.

-leitungsbrücke transconductance bridge. -magnetfeld transverse magnetic field. -modulation cross modulation. -pfife fife. -profil cross-section. -riss transverse crack, cross c., fracture of mineral); cross-section. -schärfe definition in picture direction.

Querschnitt cross-section, transverse s., cross-cut; cross-sectional area. **Streu-** scattering cross-section. **Wicklungs-** cross-sectional area of winding.

Querschnitts-verminderung cross-section reduction (of area), draft, draught. -zusammenziehung contraction or reduction of area, formation of a waist (in test piece under tension or tensile stress).

Quer-schrift lateral-wave or Berliner type track (used in gramophone and modern phonograph records). -schwingung transverse vibration, shear v. (sometimes called flexural v.), contour vibration or oscillation (cryst.) -spulenbelastung leak load.

-steuerröhre cross-control beam tube, drift t., tube operated on beam deflection. -verbindung, Funk-intercommunication channel.

-verschiebung und Längsv. cross adjustment and axial adjustment (of electron microscope).

-widerstand shunt resistance, cross r. (of network) -zusammenziehung lateral contraction.

-zweige cross arms, shunt a. (of network).

Quetsche, Rollen- squeegee.

quetschen pinch, squeeze, crush, mash, squash.

Quetschfuss squash, press or foot (of a tube).

quetschfussfreie Röhre loctal base tube.

Quetsch-hahn pinchcock. -kondensator

compression-type condenser.

Q Faktor Q factor, magnification
f.

Q Gruppen Q code groups.

quicken amalgamate.

quieken squeak, squeal.

Quinte violin E string.

quirlen twirl, stir with a whirling
motion, turn.

Quotientenmesser quotient meter,
ratio meter.

R

- Rachenlehre gap gage.
- Rad, Daumen- sprocket wheel.
- Farb- inking wheel, i. roller.
- Flügel- worm wheel, screw, s. propeller. Hemm- escapement wheel, brake w. Kamm- cog wheel.
- Kegel- bevel wheel, mitre w., cone w. La Cour'sches phonic wheel.
- Pfeil- double helical or herringbone gear wheel. Rayleigh-, Schallreaktions- Rayleigh disk (placed in a sound field).
- Schnecken- worm wheel, worm.
- Schrittschalt- step-by-step wheel, stepping w. Schwungfly wheel, balance w. Sperrratchet wheel, cog w. Spiegel-mirror wheel, Weiller scanning w. or drum, drum scanner with peripheral mirrors. Steig- escapement wheel, ratchet w. Stern-star wheel. Stift- sprocket wheel. Stirn- spur wheel.
- Stufen- step wheel, cone pulley.
- Ton- tone wheel. Umlauf- planetary wheel. Vorschub- feed wheel.
- Zeilenspiegel- line scanning mirror wheel (of Scophony Co.)
- Rad-bewegung rotary motion, wheel m., rotation. -buchse bushing.
- Rädchen, Reiter- jockey wheel, j. roller.
- Raddrehung rotation; torsion.
- Rädern shredded wheat effect (m.p.)
- radförmig rotate, spider-shaped, wheel-s., radial (of a structure). radialsymmetrisch radially symmetric, in radial symmetry.
- Radier-firnis etching varnish. -grund etching ground.
- radioaktiv(e) Emanation radioactive emanation (known as radon, thoron and actinon). -(es) Folgeprodukt metabolon. -(es) Gleichgewicht radio-active equilibrium (being either transient or secular). -(er) Niederschlag radioactive deposit, film of r. matter, -(e) Produkte metabolons, successive disintegration products of radioactive materials.
- Radioaktivität, künstliche induced or artificial radioactivity.
- Radio-amateur radio fan, r. amateur, "ham". -meterflügel radiometer vane. -sonde(für Wetterforschung) radiometeorograph, radio sonde.
- Radium-behälter radiode (glass or metal tube or capsule). -emanationseinheit curie unit quantity of radon.
- Radius, Abrundungs- contour radius.
- Krümmungs- radius of curvature.
- vektor radius vector.
- radizieren extract the root, evolve.
- Rad-kranz wheel rim, tire. -linie cycloid (in stroboscopic aberration), epicycloid. -phänomen wheel illusion. -reifen tire, rim.
- satz axle plus two (shrunk-on) wheels. -stand wheel base. -taster wheel-operated means (causing signals, bell ringing, etc.)
- Radtkeverfahren sound reproduction method of A.A. Radtke (invented 1917, USP issued 1938); cell impulse amplified, while maintaining and restoring grid potential by high impedance between cell cathode and negative end of source of potential.
- Raff-aufnahme, Zeit- time-lapse-motion photography (low-speed shooting, high-speed projection.) -bild time-lapse picture, fast-motion p.
- Raffer, Mikro- camera for stop-motion or time-lapse motion micrography. Zeit- time-lapse or stop-motion camera.
- Raffineranlage refinery, refining plant.
- Rahmen stator, frame; loop

or coil (aerial), frame antenna.
Rahmen, Druck- film trap (in projection). Eisen- iron-cored frame (d.f.) Entwickelungs- frame to make zero or minimum signal point sharper (free from night effects, etc.), zero clearing or sharpening frame. Entwickelungs- developing rack. Kopler- printing frame. Luft- air-cored frame (d.f.) Peil-coil antenna, loop a., frame a. **Rahmen**-antenna coil antenna, loop a., frame a. -antenne, Kreuz- crossed coil antenna. -entwicklung rack development, tray d. -nachstimmung re-setting or re-check of frame or coil tuning (in automatic radio compass). -negative rack negatives. -sucher wire-frame view-finder, iconometer.

Rakete, Leucht-Licht- flare. Ramankomponente modified frequency of incident light, or Raman spectrum, in a scattering substance.

rammen ram, beat down, tamp, pound. Rampenbeleuchtung footlights. rampig shear-scarred (of glass), burred.

Rand edge, border, rim, margin, brim, hem, flange, boundary, periphery, brink. Bördel- flanged edge, beaded edge. Schirm-border, edge or margin of screen. Rand-anmerkungen marginal notes, m. annotations, marginalia. -aussparung(für Tonstreifen) setting aside margin (of film strip) for sound track. -bedingungen boundary conditions, marginal, fringe, or edge c. -bemerkungen marginal notes, m. annotations, marginalia. -effekt edge effect, Eberhard e. (of film), fringe or marginal e. rändeln edge, border, rim, mill, knurl, bead.

Rand-kante lateral edge. -kraft force (acting) at edge, marginal force. -prägung (des Films)

marginal embossing of film (Pathé). -strahl marginal ray, peripheral r. -winkel angle of contact (between wall and liquid), wetting a. -zone, verstickte nitrided edge or marginal zone.

-Rasierstein styptic stick. raspeln rasp. rasseln rattle, rustle, clatter. **Rast(e)** (bei Fern- und Schaltersteuerung) notch, detention point, detent, arrester means (in telemetric, switch, etc., operation). Feder- spring catch, s. detent. rasten, ein- lock in position (as by a detent).

Rasten-arretierung arrester means, locking m., detent. -schalter step switch, multiple-point s. -spreizen bracing members (of piano) -teilscheibe notched index wheel.

Raster scanning field, s. pattern or "raster," unmodulated light-spot scan or scanned area (of a television picture); mosaic (in photocathode tube and in iconoscope); grating or screen (of dot, ruled or line type, used in printing).

Raster, Druck- printer's screen or meshwork. Farb- color embossing. Fernseh- (cf Raster) television scan surface, scan area or "raster." Halb-, ineinandergreifen der interlocking or meshing of fractional scans (in interlaced scanning). Linien- ruled plate, line screen or grating. Punkt- point, dot or granule type of grating, plate or screen.

Raster, Zwischenzeilen-, geradzahliger even-line interlaced scan. - -, ungeradzahliger odd-line interlaced scan.

Raster-aufnahme, Farb- color screen photograph. -blende scan hole, scan aperture, raster screen aperture. -element picture unit, p. element or elementary area. -farbverfahren, Linsen- lenticulated or lenticular screen color printing method. -feinheit

resolution, raster detail or definition (of scanning pattern). -film, Linsen- lenticular or lenticulated screen film. -frequenz field frequency. -kathode photocathode, mosaic screen. -körner silver globules (of iconoscope mosaic), silver plugs (in barrier-grid m.). -mikroskop screen scan microscope, raster scan m., electron scan m. -platte scan pattern, s. field, s. area, photo-sensitized mosaic plate (of iconoscope); screen (dotted, granule, line or ruled). -punkt elementary scan area, e. picture point or area. -schirm mosaic screen.

Rasterung definition or resolution of a picture (say 300 lines); embossing or lenticulation (of a film surface). Fein- high-definition scan (of a picture).

Raster-wechselsequenz field frequency (in interlaced scanning). -zahl number of picture points, p. units or elementary areas (determining definition or resolution of picture).

Rast-klinke detent, latch, pawl. -nase detent, latch. -polkegel herpolhode, space cone. -stern (im Wellenschalter) notched star (of wave-band switch).

Rastral music ruling pen.

Ratsche rattle. Fühl- micrometer friction thimble.

Rauch-fahne smoke streamer. -glas tinted glass, smoke g. -klappe vent, stack (of projection booth). rauchschwach smokeless (of powder). rauh rough, raw, roughened, granulated, knurled, burry.

Rauen granulating, graining, roughing or roughening (superficially).

Rauhheit(Lautsprecher) raucoressness, hoarseness (of loudsp.).

Rauhheitsprüfer smoothness meter (determines degree of polish, or lack of polish, on surfaces), glossimeter, profilometer.

Raum space, room; chamber, cavity, enclosure, volume; scope.

-, luftleerer vacuum, vacuous space, exhaust s. -überakustischer exceedingly live room or space (with excessive reverberation period). Abhör-mixer room, monitoring booth, box. Anfangs- Arbeits- generator space, working or drift s. (in drift or beam tube). Aufnahme- studio, teletorium, telestudio (of audio and video broadcast station, etc.). Aufschluss- part of electrically prospected volume of soil or earth subject to current or displacement lines. Besprechungs-studio. Bild- image space. Ding-object space. Fall- cathode fall space (in which c. drop occurs). Geschwindigkeits- velocity space. Halb- half space. Hall- acoustically live room; reverberation chamber. Nachhall- reverberation room, r. space. Phasen- phase space, extension-in-space. Poren-pore space, cell s., cell cavity. Sammel- receiver, receptacle, collector space. Schlag- spark-gap chamber or space. Zuschauer- auditorium. Zwischen- intervening space, intermediate s., interstice, interspace, interstitial s., interval.

Raum-akustik stereo-acoustics, architectural a., space or room a.

-beständigkeit volume stability.

-bild stereoscopic picture, plastic p.; space diagram (d.f.).

-bildung, Hohl- cavitation (in supersonic wave work, etc.).

-bildvorführung stereoscopic picture projection. -chemie stereo-chemistry. -formel spatial formula. -gebilde space diagram; solid three-dimensional structure.

-gefühl space or spatial feeling (in vision). -geometrie solid geometry.

raumgeradlinig orthodromic.

-(e) Peilstrahlen orthodromes.

Raum-geräusch set noise (caused by insufficient sound insulation, in m.p. work), set noise (in radio receiver) comprising Johnson n.,

shot n., hum, etc. -gewicht weight by volume. -gitter space lattice, "raumgitter"- -gruppe space group, point g. -halleffekt liveness (ac.) -helligkeit volume brightness. -inhalt volume content, capacity. -integral space integral. -ladennetz space-charge grid. -ladungswelle space-charge wave. -ladungswolke concentration of space charges, accumulation of s.c.

räumlich spatial, concerning space, space-geometrical, three-dimensional. -(e)Behinderung steric hindrance (chem.) -(e) Rotationsgruppe space rotation group. -(e) Verteilung spatial distribution, geometric d. -(er) Winkel solid angle (in steradian units)

Raum-mikrophon non-directional microphone, polydirectional m. -punkt space point. -quantelung space quantization, directional q.

-resonator, Hohl- cavity resonator, chamber r., rhumbatron (as part of klystron). -sektor solid sector. -sinn space perception. -strahl, Welt- cosmic ray. -strahlenstoss burst or shower of cosmic rays. -strahlung cosmic ray radiation. -teil part by volume, volume.

-toneffekt stereophonic sound effect, binaural e. -verhältnis volume relation, proportion by v. -verteilung spatial distribution, geometric d. -welle sky wave, space w., indirect w.; spherical w. -winkel solid angle (in steradian units). -winkeleinheit steradian, spheradian, unit solid angle. -wirkung (cf Bildplastik) stereoscopic effect (of a picture); spatial e., auditory perspective, stereophonic e. (ac.)

raumzentriert body-centered, space-c. (cryst.)

rauschen rush, gurgle, murmur, rustle (in a tube), whistle, roar. Rauschen (back) ground noise (in sound reproduction, radio, film, etc.).

. Röhren- tube noise, thermal agitation of tube, hiss. Schrammen-scratch noise. Staub- dust noise (m.p.).

Rausch-pegel noise level (Schottky effect, thermal noise). -spannung noise potential.

Raute rhombus, diamond.

Rauten-antenne rhombic antenna. -flach rhombohedron.

rautenförmig diamond-shaped, rhombic. R.E. (Richtempfang) directional reception. Reagenzglas test tube.

Reagenzien reagents, reactive means. Reaktions-gleichung equation (of a reaction). -masse reaction mass, mass resulting from a reaction.

Rebromierung re-bromination.

Rechen-bild nomogram. -fehler error or mistake of calculation or computation. -knecht ready reckoner. -schieber slide rule. -tafel computation table.

rechnen calculate, compute, figure, reckon, count, estimate.

Rechner, Dreieck- triangulator (for trig. calculus). Verzugs-acoustic corrector (sound location).

rechnerisch arithmetic, mathematical, by calculation or computation, calculative.

Rechnung, Mischungs-alligation (math.) Störungs-perturbation calculation.

Rechnungs-beamter auditor, accountant. -legung making or submitting an accounting.

recht achteraus right astern. -voraus right ahead.

Recht, Eigentums- ownership right, proprietary r., property right, proprietorship.

recht, flucht- flush, aligned, in true alignment. -winkel- right-angled, rectangular, orthogonal.

rechteckige Kurvenform der EMF square emf curve, flat-topped emf c. -Welle square wave.

rechten Winkel, im at right angles, orthogonally, normally, transversely.

Rechtfertigung justification, defense, vindication, exculpation. -mässigkeit lawfulness, legality, rightfulness, legitimacy.

Rechtsanspruch legal claim, title. -beugung miscarriage of justice. -drall right-handed lay or twist (of a cable).

rechtsdrehend dextrogyrate, dextro-rotatory, of right-handed or clockwise rotation.

Rechts-drehung dextrorotation, right-handed polarization. -einwand demur, plea, objection. -fall (legal) cause or case, suit, litigation. -gewinde right-handed (screw-) thread. -grund legal ground, l. reason, argument. -händigkeit right-handedness.

rechtsichtig normal-sighted, emmetropic (of eye).

rechts-kräftig machen make legal or non-appealable, legalize, validate, ratify. -laufende Welle dextro-propagating wave.

Rechts-kurve right-hand curve, starboard c. -mittel aufheben avoid or remove a remedy of law. -nachfolger legal successor, assign, assignee. -punkt point in or of law. -quarz dextrogyrate quartz, right-handed q. or piezo-electric crystal. -schraube right-handed screw. -spruch judgment, decision, sentence, verdict. -streit(es), Gegenstand des matter in a controversy, case at bar, in issue or in suit. -system right-handed system. -zuständigkeit jurisdiction, competence.

recht voraus Peilkurs head-on course (with fore-aft axis of vessel or craft directed toward objective).

rechtwinkeler Kurs true (north) course. -Windkurs true heading.

rechtwinklig right-angled, rectangular, orthogonal. -, dreifach triangular.

rechtzeitig timely, opportune, punctual.

recken stretch, extend, elongate, pull, rack; subject to traction,

strain (metal testing); shingle, tilt (metal).

redigieren edit (film).

Reduktions-getriebe reduction gear, step-down g. -transformator step-down transformer.

Reduktorlampe adapter-transformer lamp.

Referierdienst abstracting service, reporting s., press clipping s.

reflektierende Brennfläche catacaustic.

Reflexion, rückweisende retro-directive reflection. -, zerstreute diffuse reflection. Spiegel- specular reflection, mirror-like r.

Wellen- wave reflection, w. echo (with one or more hops). Zickzack-staggered reflection.

Reflexions-brennfläche catacaustic.

-ebene plane of reflection.

-flecke flare ghosts, flares (phot.) -goniometer reflecting goniometer. -höhe level of reflection (of waves in ionosphere).

-lichthof halation by reflection. -vermögen reflecting power, reflectivity, reflectance. -winkel angle of reflection. -zahl number of reflections (of waves from ionosphere involving single or multiple hop).

Refraktometer, Eintauch- immersion refractometer, dipping r.

-grenzwinkel critical or limiting angle of a refractometer. **Regel**, Dreifinger- right-hand rule, thumb r., Fleming's r. Faust-rule of thumb, rough and ready r. Phasen- phase rule.

Regel-glied regulating attenuator.

-grad degree of dynamic-range or contrast regulation; maximum range of gain variation. **regellos** geordnet with random orientation.

Regellosigkeitsproblem random problem, haphazard p.

Regelmässigkeit regularity.

regeln regulate, adjust, arrange, set, order, control, govern, regularize.

Regelschwankungen hunting (in making

- adjustments or in regulation).
- Regelspannung** automatic volume control (avc) potential; dynamic-range or contrast regulation or control p., generally; control p. **Schwund**-automatic volume control (avc) potential.
- Regelung**, **Nach-** re-adjustment, re-setting. **Rückwärts-** indirect control, retroactive action, backward regulation.
- Regelverstärker** variable-gain amplifier, avc amplifier; noise or silencing a.; amplifier in which regulator or control potential operates.
- Regen** rain (in film).
- regenbogenfarbig** rainbow colored, iridescent
- Regenbogenhaut** iris.
- Regenerat** reclaimed product (rubber).
- Regenversuch** rain test, wet test (on insulators).
- Regiepult** mixing table, m. desk.
- Regisseur** director.
- Register stop** (organ). -haltigkeit des Films registration stability of film. -übertragung transfer of registry. -zug draw stop (of organ).
- registrieren** record (graphically), register, file.
- registrierend, selbst-** self-recording, automatically r. -(er) **Spannungs-teiler** potentiograph. -(er)
- Strommesser** recording ammeter.
- Registrierung, Dauer-** long-period recording, time record.
- Regler** regulator, governor, controller. **Druck-** barostat. **Dynamik-volume-** or dynamic-range control means, compandor, contrast regulator. **Film-** film traction regulator, pull r., stabilizer. **Fliehkraft-centrifugal** governor. **Haupt-** main regulator or governor (of a turbine). **Hörbarkeits-** audibility network; volume control means (avc). **Kälte-** cryostat. **Klangfarbe-** tone control, tonalizer. **L-** L-section attenuator. **Lautstärke-** audibility network; volume control means (avc).
- Licht-** light relay, light modulator (Kerr cell, etc.); light control means. **Misch-** mixing control. **Saal-** theater fader. **Steck-** plug-in and socket (volume) control means. **T-** T section attenuator, double-L s.a. **Temperatur-** temperature control, thermostat, thermo-regulator, thermostat (electronic). **Tonbandbreite-** tone band-width control.
- Regler-dose** control aneroid (for engine). **-leitung** pilot wire. **-pult** control desk, monitoring d. (in sound recording). **-stellung** fader setting (in film recording).
- Regulierband, Zeit-** timing tape.
- regulieren, über-** overshoot, overrun, excessively regulate.
- Regulierschraube** adjusting screw, set s.
- Regulierung, Bandbreite-** band-width regulation, b. switching.
- Reibahle** reamer.
- Reibe** grater, rasp.
- reiben** rub, grind, triturate, rasp, grate, abrade.
- Reiboxydation** rubbing corrosion, frictional oxidation,
- Reibung, innere** internal friction, solid viscosity. **Schlüpfungs-** sliding friction, slip.
- Reibungs-arbeit** frictional work; magnetic hysteresis. **-kegel** cone of friction. **-moment** friction torque. **-widerstand**, **Schall-** acoustic resistance.
- reich, flächen-** with many faces or sides, polyhedral. **linien-** rich in lines, with abundance of l.
- Reichsgesetzblatt** Imperial (German) Law Journal or Gazette.
- Reichweite (eines Empfängers)** (distance) range (of a receiver apparatus), distance-getting ability of a r.a. **Nenn-** rated range, nominal r.
- Reichweitenteilung** range distribution.
- reif** ripe, mature,
- Reif(en)** ring, hoop, tire, collar.

- Reifkeim digestion nucleus.
 Reifung ripening, digestion of emulsion (of film). Mach- maturing (of film).
Reifungskörper ripening (accelerator) substance, sensitizer.
Reihe series, row, succession, sequence, train, rank, file, bank (of contacts, keys, etc.)
Reihe, an die - kommen take (one's) turn. der - nach sequentially, in sequence or succession.
 gegenseitig in - series-opposing.
 gleichzeitig in - series-aiding.
 unendliche - infinite series.
Reihe, Bild- sequence or series of pictures, frames or pictorial actions. Fourier-, doppelte double Fourier series. Impuls- series, succession or train of impulses. Potenz- exponential series, power s. (math.) Tasten- row or bank of keys.
Reihen-anordnung seriation or series connection (of resistances and condensers, etc.) -bilder sequence of pictorial actions or pictures, motion pictures. -entwicklung expansion in a (power) series, power seriation. -fertigung mass production, assembly-line p. -folge sequence, consecution, succession, series, order. -folge energetischer Bevorzugung sequence or order of energy preference.
 -funkenstrecke multiple spark gap.
 -glied series element (of a network). -impedanzglied series impedance element, s. impedor.
 -röhrenmodulation constant-voltage modulation. -verlustwiderstand equivalent series resistance (of a condenser).
rein(es)farbengleiches ("einheitliches") Gelb psychologically unique yellow. -(e) Skala true scale.
 -(e) Sprache clear voice.
 -(e) sinusförmige Bewegung plain harmonic or sinuous motion. -(er) Ton pure note or tone, simple t.
Reinartzschaltung Reinartz circuit scheme (comprising both capacity and inductance or tickler-coil feedback); also; a special short-wave receiver circuit scheme.
reinigen purify, refine, clean, cleanse, wash, purge, scavenge, separate, rid.
Reiniger, Klang- acoustic clarifier (on ldspk. baffle). Strom- harmonic eliminator, filter, stopper or excluder, smoothing means.
Reinigungskreis smoothing circuit, filter c., low-pass f. (following a rectifier in a power unit, to remove ripples).
Rein-kathode bright emitter. -kohle solid carbon.
Reinton (cf Heulton) note with one mode of vibration, single-frequency tone. -blende biasing stop, noise-reducing s., shutter, vane or gate. -schaltung noiseless recording circuit organization. -verfahren noiseless recording (on film).
Reißblei graphite.
reissen tear, pull, drag; pluck (a string or chord).
Reiss-festigkeit resistance to tearing or breaking, tenacity, tensile strength. -gebeit discontinuity, cut-off or break-off region (of oscillations). -kohle crayon, charcoal crayon. -länge breaking length (cable and paper testing). -verschluss slide fastener, zipper.
Reiter slide contact, slider, cursor.
Gewichts- rider. -räddchen jockey roller, j. wheel.
Reiz stimulus, excitation, stimulation. Licht- luminous stimulus, light s. Nerven- nervous stimulus. Seh- optical or visual stimulus or excitation. -schwelle threshold of sensation or stimulus, liminal value of stimulation.
Relais, elektro-optisches electro-optical cell, Faraday c., light relay depending on F. effect. -mit mittlerer Ankerruhestellung

neutral relay, r. with differentially moving armature.
Bremzylinder- dashpot relay.
Differenzial- differential relay, discriminating r. **Distanz**- distance relay. **Elektronen**- electron relay, thermionic r., **Flacker**- flashing relay. **Fortschalt**- stepping or impulsing switch or relay. **Gegenstrom**- reverse-current relay. **Halteholding** relay, restraining r., guard r. **Kupfermantel**- copper-jacketed relay. **Licht**- light relay (converting current into light variations) (e.g., Kerr cell, Karolus c., modulated neon lamp, etc.). **Licht-, elektro-optisches** electro-optic cell, Faraday c., light relay depending on F. effect. **Minimal**- no-load relay, under-current r. **Rückstrom**- reverse-current relay. **Schneldeanker**- knife-edge relay, **Schnell**- high-speed relay. **Spannungs**- under-voltage relay, low-v.r., no-v.r. **Steuer**- pilot relay. **Stufen**- relay with sequence action. **Tast**- keying relay, r. key. **Tauchkern**- plunger relay. **Verriegel**- locking relay. **Verzögerungs**- slow-acting relay, time-lag r.
Relais-aberregung de-energization of a relay. **-anker** relay armature. **-vorwähler** relay pre-selector.
Relaxations-schwingungen relaxation, sawtooth or ratchet oscillations. **-zeit der Ionenwolke** relaxation time of ionic atmosphere.
Relief (cf Raumwirkung und Plastik) plasticity (of pictures), plastic effect, three-dimensional appearance of telev. pictures. **-schreiber** embosser. **-träger** relief support (of embossed film).
Reportage news reporting or gathering work. **-film** newsreel, news-film, topical f.
reproduzierbar, nicht- non-reproduc-

ble, non-controllable, non-repeatable.
Requisitenraum property room.
Reserve, Leistungs- margin of power, standby p. **-lampe** spare lamp.
Reservierungsmittel resist, reserve (in calico printing, metal etching, etc.)
Resonanz entgegenwirkend anti-resonant.
Resonanz, in resonant, resonating or in resonance with, in unison with, in tune with, syntonized.
In - bringen resonate, cause to be in resonce with. **-untersynchrone** subsynchronous resonance, submultiple r.
Resonanz, Dreh- torsional oscillation resonance. **Höhluungs-** cavity resonance (of rhumbatron).
Nebenschluss- parallel resonance.
Schüttel- vibration resonance.
Resonanz-anzeiger resonance indicator (e.g., vibrating reed instrument), tuning i. **-beschleuniger** magnetic resonance accelerator (e.g., cyclotron comprising two dees or half hollow cylinders and spiral beam, and other forms of beam tubes using ions, positrons and electrons), induction electron accelerator, also called rheotron and i. accelerator.
-boden sounding board; belly (of violin). **-fluoreszenz** resonance radiation (fluorescence).
-frequenz natural frequency, resonance f. **-frequenz, Unter-** submultiple (resonance) frequency, subsynchronous f. **-hohlraum** resonance cavity or chamber (rhumbatron). **-körper** sound or sounding board (or other resonant structure). **-kreis, Spannungs-** series resonant circuit. **-kreis, Strom-** parallel resonant circuit, tank c.
Resonanzkurve, schiefe unsymmetrische skew resonance characteristic.
-, zweihöckrige, zweispitzige,
zweiwellige double-hump or double-

- peak resonance curve.
- Resonanzkurven-einsattelung, -senke** crevass of resonance curve, dip.
- Resonanz-röhre** resonance or tuning indicator (mostly glow tube), flashograph. -scharfe selectivity, sharpness of resonance or tuning- -schwingung resonant vibration, sympathetic v., co-vibration. -spannung resonance potential, radiation p., p. resulting in transition of electron from ground state to next orbit and emission of resonance line spectrum.
- spitze resonance peak. -spitze, abgeflachte flat-topped resonance crest. -sprung transition of electron resulting in emission of radiation, -strahlung resonance radiation (of vapor lamp).
- Resonator, Hohlraum-** cavity resonator, chamber r., enclosure r. Quarz-piezo-electric resonator, tuning or resonance indicator.
- Resotank** micro-wave generator (electron-oscillation tube or magnetron t. confined in hollow space or sphere), cavity resonator magnetron.
- Rest-abweichung** residual aberration (of lens). -dämpfung net transmission equivalent, net attenuation, -flüssigkeit residual liquid.
- härte residual hardness (of water).
- keim residual nucleus. -plasma residual electrons, plasma (region practically without resultant charge). -strahl residual ray, r. radiation, "reststrahl".
- Retortenhelm** retort head, r. helm.
- Reusenantenne** cage antenna.
- Reversionpendel** reversible pendulum, Kater p.
- Revolver** revolving nosepiece (in microscope). Spulen-coil switching assembly (for wave-band change). -kopf lens turret (of camera).
- Rezension** review, criticism.
- Reziprok, Widerstands-** inverse resistance, resistance reciprocal (= conductance).
- Rhodan thiocyanogen, sulfocyanogen.
- Rhombendodekaeder** rhombic dodecahedron.
- Rhomboeder** rhombohedron.
- Rhombus** rhomb(us), lozenge.
- Rhythmus**, im in tune, synchronism, rhythm or unison with; at the rate of.
- Richt-antenne** directional antenna, unilateral a. -bogen clinometer.
- charakteristik directional characteristic, space pattern. -dorn mandrel. -effekt rectification effect; directional action.
- empfang directional reception.
- empfänger, Einpeilen auf Punksender tune directional receiver to radio station (to take bearings).
- richten** direct, turn, arrange, adjust, set, straighten (out), dress, align, lay (a gun), train or aim (at). -auf train on, aim at. sich - nach be guided by.
- richtende Eigenschaft** directional property (of a loud-speaker, screen, antenna, etc.)
- Richter, Strom-** rectifier of thyratron, ignitron or other mercury-arc type.
- Wechsel-** inverter, inverse rectifier, d-c to a-c transverter.
- Richt-fähigkeit** directivity, directional property. -faktor rectification factor. -funkfeuer directive beacon station, d. transmitter s., radio range s., beam s. -gerät bombsight, sight.
- richtig** right, correct, just, true, ortho. -, farben- orthochromatic (phot.)
- Richtigkeit** correctness, accuracy, faithfulness, fidelity (of reproduction).
- richtigphasig** true-phased, in correct phase relationship.
- Richt-kanonier** gunlayer. -kennlinie rectification characteristic; directional diagram, space pattern.
- konstante rectification constant.
- kraft directive force, directing f.; versorial f. -lautsprecher directional loudspeaker. -linie guide line, guiding l., directive.

-mass standard gage. -mikrophon directional microphone (uni-d., bi-d., ultra-d., etc.) -moment torsional rigidity (couple required to twist spring a certain angle). -platte orientation plate (micr.) -scheit rule, straight edge. -sendeanlage beam station, radio beacon s., radio range s. -spannung output voltage furnished by rectifier, d-c. potential of r. -strahler directional antenna; d. loudspeaker or projector of sound. -strom output current (d.c.) of a detector; rectified (d.c.) component of plate current.

Richtung, ausgepeilte bearing.

Anflug- direction of approach, homing direction (of airplanes).

Aus - falsche misalignment (of track or image). Gleit- slip direction (cryst.) Kristallachsen-crystallographic axis orientation. Vorzugs- privileged direction.

Richtungs-anzeige, eindeutige uni-directional direction-finding (with sense-finding). -anzeiger direction-finder, d. indicator; course indicating radio beacon. -bestimmung direction finding.

Richtungscharakteristik directive or directional characteristic or diagram, space pattern. -Doppel-Kreis- figure 8 characteristic, tangent-circle pattern.

Richtungseffekt head and tail effect (in developing machine); directional action.

richtungsempfindlich with directional response, dependent upon direction or orientation, non-astatic.

Richtungs- und Entfernungsbestimmung ranging (say, by echo method).

Richtungs-fehler deviation (of pencil or beam), directional distortion (telev.) -funkbake(zum

Anfliegen) runway localizing beacon (terminal marker, used in approach procedure). -grter director, directive antenna. -hren aural determination of direction

(of airplanes), airplane spotting or locating. -kurve directrix.

-navigation directional navigation. -quantelung directional quantization. -sender beacon station, beam s., radio range s. -sinnbestimmung sense-finding, sensing(determines sense of direction or absolute d.)

richtungsunempfindlich non-directional, astatic.

Richtungs-vermögen directivity.

-verzerrung direction distortion (in sound reproduction).

-zerstreuung scatter of direction (beam).

Richt-vermögen directivity. -verstärker amplifying detector, plate-current d. -verstärker, Schirmgitter- screen-grid tube with plate-current rectification. -weiser radio beacon, r. range, beam station. -widerstand unidirectional resistance (to flow), valve effect, rectifier e. -wirkung directional effect, directivity. -zylinder directional cylinder.

Rieve groove, furrow, channel, flute, slot, milled knurl. Zieh-drawing groove, d. scratch.

riefeln mill, groove, knurl.

Riegel (sliding) bolt, lock, fastening.

Riemen strap, belt, band, thong.

-, halbgeschränkter quarter-turn belt. Umhänge- shoulder strap.

Riemen-fett belt dressing. -scheibe belt pulley.

Rieseln rippling, gushing, trickling; swarming (of film); friable, non-caking condition (of materials).

Rieselurm scrubber, wash tower, spray t. or column,

Riffel-faltenlautsprecher loudspeaker with folded and corrugated horn. -lautsprecher Riffel loudspeaker (with diaphragm corrugations and substantially horizontal radiation.) -membrane pleated

diaphragm, d. with circular corrugations.

riffeln furrow, channel, groove, ripple (flax).

Rille furrow, groove, track (of phonograph disk).

Rille, Führungs-, Schall-groove or track with undulations (of phonograph record or disk).

Rindenschicht cortical layer.

Ring, geteilter split ring, segment-ed r. Absaug- (cf. Saugspannung) annular or ring-shaped collector electrode. Aufschraub- lens flange. Befestigungs- ring fastener, fastening r. Debye-Scherrer- D.-S. ring or circle, powder pattern, Hull r. Dichtungs-gasket ring, gland. Lauf- race, raceway, ball-race (in bearing). Peil- direction-finder loop or frame. Schleif- slip ring, collector r. Teil- index ring. Verschluss- locking collar (of magnifier).

Ring-bildung ring formation.

- bolzen eyebolt. -elektroden, abbildende focusing rings.
- entladung ring discharge.
- figur zone plate (of Fresnel), Huygens z.

ringförmig ring-shaped, annular, cyclic, toroidal, toric.

Ring-kopf annular recording head.

- leitung, Antennen- multiple-receiver connection to antenna.
- lochscheibe film scan disk (with apertures arranged circularly).
- übertrager repeating coil.

ringungesättigt cyclically unsaturated, containing an unsaturated ring.

Ringwulst tore, torus, toroid, "doughnut".

Rinne channel, groove, gutter, trough.

rinnen run, flow, trickle, leak.

Rippe rib, fin, vane, ripple, flute, corrugation, undulation, section (of a radiator). Kühl- cooling fin, c. flange, radiator fin.

Rippentrichter ribbed funnel.

Riss fissure, crack, flaw, rent, tear, gap, opening, elevation (say, front or side).

Riss, Haar- micro-flaw, hairline crack, craze, capillary hair fissure. Schatten- silhouette. Seiten- lateral elevation, side e. Spalt- cleavage crack, c. fissure.

Riss-bildung cracking, fissuration. -festigkeit crack strength, c. resistance. -härteprobe abrasion test, scratch t.

Rissigkeit, Schweiss- chinking or fissuration due to welding.

Ritze rift, slit, fissure, crack, chink, cleft, scratch. Stimm-glottis, glottic catch or cleft.

Ritzhärte scratch hardness, sclerometric h. -prüfer sclerometer, scratch hardness tester.

Ritzspalt scratched slit (for instance, in silver coat, in sound recorders).

Roentgen... s. Röntgen...

roh raw, coarse, rough, unrefined, unwrought, unworked, unfinished, in blank form; broad (radio tuning).

Roh-block (raw) ingot. -bramme slab, ingot. -film blank film, raw stock. -formel empirical formula. -gang abnormally fast drive or run, irregular working (metallurgy). -ling blank, un-worked, unfinished or unfashioned piece or part.

Rohmannshaut Rohmann's skin.

Rohr (s.a. Röhre) tube, valve (radio); pipe, duct, conduit. -, hartge-schlossenes rigidly terminated tube. Abzugs- vent stack (of an arc-lamp). Befehls- pilot or master thyratron (firing first in a trigger circuit). Beobachtungs- observation tube (of electron microscope). Dunst- ventilating pipe. Folge- piloted thyratron (fires second in a trigger circuit).

Hebe- syphon (tube). **Hosen-** syphon or Y-pipe. **Hüll-**encasing tube, jacket pipe. **Neben-** side or branch tube or pipe. **Perl-** bead tube (filled with glass b. to break up a fluid). **Skalen-** scale tube (of spectroscope). **Stern-** astronomical telescope. **Übersetzungs-**(in Schwundregelung) converter tube (in a/c circuits, between regulator and regulated tubes). **Zähl-** counter tube (Geiger - Müller).

Rohr-bildung tubing or piping action. **-blatt** reed (of clarinet).

Röhrchen tubelet, capillary tube.

Schreib- pen, syphon (of a recorder).

Röhre (cf Rohr) tube, valve, pipe, duct, conduit. **-, abgeschmolzene** sealed off tube. **-, fremderregte**, **fremdgesteuerte** master-excited tube (with independent drive circuit). **-, füsslose** loctal tube. **-, gas gefüllte** gas-content tube, gaseous t.; gassy t. **-, harte** hard tube, highly evacuated t. **-, indirekt geheizte** heater-type tube, indirectly heated t. **- negativen Widerstandes** dynatron oscillator. **-, quetschfussfreie** loctal base tube. **-, selbsterregte** self-excited or self-oscillatory tube (in a direct drive circuit). **-, weiche** soft valve, ionic v., gas-filled tube, gassy t. **-, zerlegbare** demountable tube.

Röhre, Abstimm- tuning indicator glow-tube (e.g., flashograph), c.-r. indicator t. or magic eye. **Achtelektroden-** octode. **Amplituden(glimm)-** glow-tube amplitude indicator, resonance i., tuning i. of neon type. **Ballast-** absorber valve, a. tube (takes energy during spacing periods). **Beeinflus- sungs-modulator** tube. **Bildabtaster**, mit mechanischer Blende Farnsworth dissector or electron camera tube, Dieckmann & Hell magnetic scanner, Campbell-Swinton c.-r. scanning or

pickup tube. **Bildschreibe-** televisor tube, viewing t., picture-reproducing tube using cathode rays. **Bildspeicher-** signal- or charge-storage tube, normal iconoscope. **Bildspeicher- und Bildwandler-** supericonoscope. **Bremsfeld-**(cf Bremsfeldschaltung) retardation valve, Barkhausen-Kurz retarding-field or positive-grid t. **Doppelgitter-** bigrid tube, b. valve, double-grid t. **Doppelsteuerend-** power pentode wherein cathode grid is connected with control g. rather than with cathode. **Doppelzweipol-** duodiode. **Doppelzweipol-Dreipol-** duodiode-triode tube. **Doppelzweipol-Vierpol-** duodiode-tetrode tube. **Dreielektroden-** triode. **Dreifach-** three-unit tube, three-purpose t. **Eichel-** acorn tube. **Einschluss-** sealed tube. **Elektronen-** thermionic tube, electronic t., electron tube, e. valve. **End-** power tube, end t. **Entladungs-** discharge tube, vacuum t. **Exponential-** exponential tube, variable- μ t. **Fünfpol-** pentode tube (either of power type or of screen-grid type). **Gasentladungs-** gas discharge tube or valve. **Geräuschunterdrückungs-** squelch tube, noise-reduction t. **Glättungs-** glow-tube stabilizer. **Habann-** type of split-anode magnetron, dynatron oscillator (strictly, dynatron uses secondary electrons). **Haupt-** main oscillator (in independent drive system). **Ionensteuerungs-** thyratron. **Isolier-** buffer tube, isolating t. **Kathodenstrahl-** thermionic tube (obs.); beam t.; Lenard cathode-ray t.; Braun and other c.-r. tubes working with beam and screen such as oscilloscope, iconoscope, emitron, kinescope, Farnsworth dissector and oscillight, etc. **Kippentladungs-** time-base discharge tube. **Klein-** miniature tube. **Knopf-** shoebutton tube,

acorn t. Kopplungs- coupling tube (RF input t. associated with antenna). Kraftschwing- power oscillator. Lautzeit-drift tube, beam t., tube involving transit-time or phase effects. Lenard-Lenard c.-r. tube (used in radiology and experiments on phosphoresc.). Magnetfeld- magnetron type of tube working with constant magnetic field (strictly, a m. operates with variable magnetic field), permatron. Mass- measuring tube, gage t., graduated t., burette. Mehrfach- multi-valve, dual- or multi-purpose tube, multi-unit t. Mehrgitter- multi-grid tube (say, tetrode, pentode, etc.). Misch- mixer tube. Mischselbstschwingende self-heterodyning mixer tube. Modulations- mixer tube, modulator t. Mosaik-, doppelseitige image-multiplier iconoscope. Negativwiderstandskallirotron or dynatron types of negative-resistance tube. Niveau-level or leveling tube. Oxydkathoden- tube with oxide-coated filament, dull emitter t. Plation- amplifier tube with filament placed between control grid and plate; (one model has photo-electric g.) Pressboden-loctal base tube. Prüf-, für Fernseher phasmajector, monoscope, monotron. Quecksilberhochdruck- high-pressure mercury (-vapor) discharge tube. Quersteuer- cross-control beam tube, drift t., t. predicated for its operation on transverse action on beam. Resonanz- resonance indicator, tuning i. (mostly glow-tube), flashograph. Röntgen-, mit Heizkathode hot cathode X-ray tube, Coolidge t. Schirmgitter-, Schutzbretter-shield grid tube, shielded-plate t., screen-g. t. Schwing-, fremderregte master-excited oscillator tube (in an independent drive circuit). Schwing-, selbsterregte self-ex-

cited or self-oscillatory tube (connected in direct drive circuit). Sechspol- hexode. Siebenelektroden-heptode. Sondenbildfang- Farnsworth dissector tube. Speicher- (signal) storage or storing tube (telev.) Speicher- und Bildwander-super-iconoscope. Stab- arcotron. Steuer- master, drive or pilot oscillator, exciter tube. Trenn-isolating tube, buffer t. Trennstrom- spacing valve. Trift- drift tube, beam t. (e.g. Klystron). Übersetzungs- Umkehr- converter tube (used in avc schemes between regulator and regulated tubes). Vakuum- vacuum tube, discharge t. Vervielfältigungs- multiplier, multipactor. Wasserkühl- water-cooled tube. Wiedergabe-, Braun'sche Braun cathode-ray or electronic picture reproducing tube. Zeichenstrom- marking valve. Zweielektroden- diode. Zweifachzweipol- duodiode tube. Zweifeld- drift tube working with two fields (Heil types of tubes). Zwischenstrom- spacer valve.

Röhren-empfang mit gleichzeitiger HF und AF Verstärkung dual or reflex (valve) reception.

-fassung, federnde cushioned socket or anti-microphonic tube or valve-holder. -fuss pinch, press, squash, stem or foot of a tube or valve. -fuss, umgebördelter re-entrant squash or press. -kapazität interelectrode capacitance. -kappe top cap (to bring in control grid lead). -kolben bulb of a tube, vessel or container of a tube or valve. -konduktanz transconductance. -löscher tube quench. -lot pipe solder. -mehraufwand tube complement. -prüfer tube tester, t checker. -rauschen tube noise, thermal agitation of a tube, t. hiss, valve rustle. -sockel tube base. -spannungsmesser vacuum tube voltmeter. -sperrung cut-off of tube. -stativ

telescope tripod. -stempel press or squash of a valve or tube. -summer vacuum tube AF oscillator. -träger tube or pipe support. -übersteuerung tube overloading (causing blasting). -voltmesser vacuum tube voltmeter. -voltmesser, selbstgleichrichtender self-rectifying tube voltmeter. -wippe kipp relay, trigger circuit. -wulst tubular tore, "doughnut". -zerplatzen, nach innen implosion of a vacuum tube. -zwischenstecker tube adapter, valve a.

Rohr-holz cane. -krümmer pipe bend, p. elbow, p. knee. -leitung, Hohl- co-axial or concentric line, pipe l.; wave guide (dielectric or conducting). -pfeife reed pipe. -schlange coil (of pipe), worm, spiral tube. -schlüssel pipe wrench, -sitz cane seat. -streifen skelp or strip (for forming tubes). -stutzen short piece of pipe (serving as an opening, outlet, socket, or connection), nipple, short cylindrical piece, bush or sleeve. -verlegung pipe laying. -ver-stopfung pipe clogging, stop-up, choke. -welle dielectric wave.

Rohstück blank.

Rollbahn cycloidal path (of electrons); roller type conveyor; runway or taxiway (of airfield). -kreis cycloidal path (motion of electrons).

Rolle roll, roller, pulley, reel, spool, coil, sprocket; records, file-wrapper, file, docket.

Rolle, Abzieh- pull-down spool or sprocket. **Auflauf-** take-up reel.

Auftrags- application roller, inker, inking r. **Belichtungs-** printing drum (of film printing machine); sound recording d., scanning point, translation p. (in s. film reproduction).

Druck- impression roller; presser or pad r. (in film feed). **Farb-** inking roller, i. wheel. **Film-** reel, take-up r. or spool. **Filmtransport-** film feed sprocket. **Führungs-** sprocket (wheel). **Gummiandruck-** rubber-tired presser or pad roller. **Haupt-** (part played by) leading star. **Kordel-** milled or knurled roller. **Leit-** idler, guide roller. **Nachwickel-** take-up sprocket. **Schnur-** grooved roller, pulley. **Schwungmassen-** rotary stabilizer, roller with fly-wheel action, impedance wheel. **Seil-** pulley. **Spann-** tension roller (m.p.). **Sprossen-** sprocket drum or wheel. **Titel-** part played by leading star. **Transport-** sprocket wheel (film feed). **Umlenk-** flanged idling roller, deviating r. **Vorrats-** magazine, m. roll. **Vorwickel-** upper feed sprocket; pull-down s. (m.p.). **Zacken-** sprocket wheel.

rollen curl (of film).

Rollen-darsteller, Haupt- principal, star. -fenster roller film gate. -räfig roller cage.

-laufbahn mit Gummiüberzug rubber-tread of a pad roller.

-nummer docket number, register n. -quetsche squeegee.

-scheibe chain sheave. -zug block and tackle.

Roll-glasschneider wheel glass cutter, g. cutting w. -kassette film roll darkslide. -kreis cycloidal path (of electrons).

-schweller crescendo pedal (organ). -treppe escalator.

-walze roller squeeze.

römische Kerze Roman candle, magnesium torch, smoke pot.

Röntgen-aufnahme röntgenography, X-ray picture, skiagraph.

-beugungsaufnahme X-ray diffraction exposure or picture.

-bremsstrahl Röntgen rays caused by collision and checking. **-dosimeter** X-ray dosimeter. **-einheit** roentgen (international X-ray quantity unit); Xu, X unit, Siegbahn u. (wave-length). **-messer** roentgenmeter, iontoquantimeter. **-photographie** röntgenograph, X-ray photograph, skiagraph. **-röhre mit Heizkathode** hot-cathode X-ray tube, Coolidge t. **-röhre, fensterlose** windowless X-ray tube. **-röhre, Hartwerden** hardening of X-ray tube (due to clean-up and loss of vacuum). **-strahlenhärtemesser** penetrometer, qualimeter. **-strahlenmesser** röntgenmeter, iontoquantimeter, dose meter, dosimeter, intensimeter, **roentgenstrahlen-undurchlässig** radiopaque. **Rose, Kompass-** card of compass, scale of c. **Rosettenbahn** rosette-shaped path (of electrons). **Rost** rust; grate, gridiron. **Etagen-** step grate. **Rostanfressung** corrosion, honey combing, pitting, tubercular or channel-shaped corrosion. **rösten** calcine, roast, sinter. **Rost-festigkeit** corrosion resistance, non-corrodibility. **-grübchen, -narbe** pit. **rostsicher** non-corrodible, corrosion-resistant, rust-proof, non-rusting. **rot, hell-** bright red, of bright-red incandescence. **kirsch-** cherry red, of cherry-red incandescence. **Rotation, behinderte** hindered or inhibited rotation (of molecules). **Rotations-bewegung** rotational motion, rotary m. **-gruppe, räumliche** space rotation group. **-körper** body or solid of rotation or revolution. **rotationsparabolisch** full-parabolic.

Rotations-quantenzahl rotational quantum number. **-schwingungsband** rotation vibration band. **-schwingungsspektrum** rotation vibration spectrum. **rotationssymmetrischer Körper** body presenting rotation symmetry. **Rot-auszug** red record (color film). **-bruch** red-shortness (of metal). **-bruchversuch** hot breaking test. **-buchenholz** red beech. **Rötetonung** russet toning, brown-reddish t. **rotempfindlich** red sensitive. **Rotglühhitze** red heat (of incandescence). **rotierend(er)** Dämpfer rotating stabilizer (film feed). **-(e) Umlaufverschlussblende** rotary flicker shutter, r. light-cutoff. **Rotorfunkenstrecke** spark-gap rotor. **Rotterdammergerät** radar. **Rotverschiebung** shift of spectral lines toward red or longer waves. **Rouleauverschluss** roller blind shutter. **Ruck** jerk, jolt, sudden shift or motion, tug. **Rückbewegung** back stroke, return s., retrogression, flyback (of beam, telev.) **rückbilden** form again, re-form. **Rück-bildung** back (reversible) reaction, regression; re-formation. **-dehnung** damping capacity (of metals). **-dreher, Phasen-** phase lagger, p. shifter. **-druck** reaction pressure, back p. **Rückenwind** tail wind. **Rück-flussdämpfung** structural return loss. **-flusskühler** reflex condenser, return c., return-flow cooler. **-führfeder** retractile spring, restoring s. **-führschncke** return screw conveyor, return worm. **-führung**

return lead, r. path, r. circuit; flyback, retrace (telev.)
-gang return, retrogression, decline, backstroke; flyback (of pencil).

rückgekoppeltes Audion regenerative grid-current detector, ultraudion.

Rück-gewinnung recovery, recuperation (of current or energy); reclamation, regeneration. **-griff** (cf Durchgriff) inverse grid transparency.

-heizung extra or additional heating (of cathode, from other electrodes). **-hörbe-zugsdämpfung** side tone reference equivalent. **-hören** side tone. **-hub** back-stroke, return s. **-kehrpunkt** cusp.

-kippgeschwindigkeit flyback speed, time-base unlock s.

rückkoppeln regenerate, feed back (a tube), put in reactive coupling relation (either positive or negative).

Rückkopplung regeneration, reactive coupling, feedback c., reaction. **-mit Hilfsfrequenz** super-regeneration (using quench potential).

Rückkopplung, Ionen- ion feedback. **Mehrfach-** multiple regeneration.

Pendel- super-regeneration (with quench potential). **Reinartz-** feedback (of Reinartz) using both capacity and inductance. **Schall-** acoustic feedback, a. regeneration.

Rückkopplungsaudion regenerative grid-current detector, ultraudion.

rückkopplungsfrei non-regenerative, free from feedback action.

Rückkopplungs-kreis regenerative circuit, reactive c., feedback c. **-spannung** positive bias potential, p. quench potential (impressed upon grid, in super-regenerative circuit organiza-

tion). **-sperre** reaction suppressor, "vodas," feedback s. **-spule** tickler coil, feedback c. **-unterdrückung** decoupling, balancing out, tuning out, reduction or suppression of feedback.

Rücklauf return of pencil, flyback or retrace of cathode spot or beam. **-der Kippspannung** flyback of sweep potential, return of time-base to zero.

rücklaufend recurrent, retrograde, in return or opposite direction. **-(er)Blitz** return lightning stroke.

Rücklauf-verdunkelung flyback or return trace elimination, blackout of flyback, gating (by blanking pulse). **-zeit** retrace period, flyback p.

Rück-leiter return wire, r. lead, r. conductor. **-leitung, Erd-** ground return (circuit).

-meldefeld revertive signal panel. **-melder** revertive signal or position repeating means, check-back position indicator (in telemetric or remote-control work). **-nahmestreit** action for withdrawal.

Rückprall rebound, bump, reaction, repercussion, strike-back, back-stroke, recoil, return, back-fire. **-elektrode** (cf Prallelektrode) rebound electrode, target e., impactor e. (in Weiss mesh multiplier).

Rück-projektionsanlage reprojection equipment; back projection e. **-reaktion** back reaction. **-schlag** see Rückprall. **-schlag, Bogen-** arc-back.

-schlagventil check valve.

rückschreitende Welle regressive wave, reflected w.

Rück-seite back side, posterior face, rear surface, reverse.

-sicht, mit - auf with due regard for, because of, in the light of. **-spiegelung** specular

reflection, regular r. -spielen
 playback, dubbing. -sprung (cf Rückprall) rebound, ricochet.
rückspulen re-wind.
Rückstand, in - kommen fall behind, be in arrears. Gas- residual gas, remnant of g. (or vapor).
Kondensator- residual charge of condenser. **Trocken-** dry residue.
rückständig in arrears, backward, not progressive, retrogressive, reactionary.
Rückstellkraft restoring force, resiliency, retractility, elastic f., restitutive f. or pressure.
Rückstoss repulsion, rebound, backward push, recoil, back stroke, reaction, shock.
 -atome recoil atoms. -bahn recoil track. -elektron recoil electron, Compton e.
 -potential recoil potential.
Rück-strahl echo, reflected wave, reflection. -strahlbrennfläche catacaustic. -strahldiagramm back reflection photogram.
 -strahler reflector, re-radiator.
 -strahlung, spiegelnde specular reflection, regular r. -strahlungsfaktor reflectance, reflection factor. -strahlungsmesser reflectometer. -strahlverfahren (Ultramikr.) reflection method (ultra or electron microscope using a thin foil). -strom inverse current, backward c. (in rectifier). -stromrelais reverse-current relay.
rücktreibende Kraft repelling force, reflecting f. (acting on electron pencil).
Rückverwandlung reconversion.
rückwärtige Stromstossgabe rever- tive pulsing.
Rückwärts-leitung high-resistance direction. -regelung indirect control, retroactive control action, backward regulation.
Rückweg return path.

ruckweise by jerks, jars or jolts, intermittently, discontinuously, spasmodically.
rückweisende Reflexion retro- directive reflection.
rückwerfende Brennfläche catacaustic.
Rück-werfer rejector, reflector, throwback means. -wirkung,
Anoden- anode or plate feed- back or reaction. -wirkung,
Blind- reactance (either in the form of inductance or capacitance). -wirkung, **Schall-** acoustic impedance (comprising resistance and reactance, the latter being either in the form of inertance or compliance, corresponding to inductance and capacitance in electricity).
-wirkungsleitwert reactive admittance, susceptance (either capacitive or inductive).
-zugfeder retractile spring.
-zugtaste back-spacing key.
-zündung backlighting, arc-back, backfiring; backlash (imperfect rectification, in valves).
Ruf ring, ringing, call (signal).
Not- SOS or distress call, may-day (radio telephone d. call).
Rufer developer.
Ruf-horn signal horn. -zeichen, **Funkstellen-** station call, code sign, code signal, "signature".
Ruhe rest, repose, quiescence, silence, Q. state, unmodulated, unexcited or neutral condition, stationary equilibrium.
Ruhe....(in Zusammensetzungen) no-signal..., when in unexcited or unelectrified state, Q or quiescent condition (of a valve).
Ruhe-arbeitspunkt Q point, quiescent condition (of valve). -belich- tung unmodulated lighting, no-modulation l., average or steady illumination, no-sound l. (in variable-density sound

recording). -elektrizitätslehre electrostatics. -kontakt spacing contact, rest or inoperating c. (closure occurs upon de-energization of relay), contact of back part of key lever. -lage equilibrium position, balanced p. -lage, Strahl-spot zero. -licht unmodulated lighting, no-modulation l., average illumination, steady i., no-sound i. (in variable-density sound recording). -masse (der Teilchen) rest mass (of particles).

ruhendes Bild still picture, "still", unanimated p., ordinary photograph.

Ruhe-punkt point of rest, fulcrum; quiescent or Q p. (on tube characteristic).

-schwärzung unmodulated density, no-sound d., (in variable-density sound recording).

-spannung bias potential, steady p.; no-signal p., repose p., Q point p. -stellung, Anker-, Relais mit neutral relay. -stellung, Tonstreifen-zero modulation of track.

-streifen unmodulated track.

-strom no-signal current, quiescent c.; anode-feed current (d.c. component of anode c.) -strombetrieb closed-circuit operation. -trägerfrequenz center frequency, resting f. (in f - m). -transparenz unmodulated transmission (of film).

-wert (cf Ruhezustand) steady, static, stationary, no-signal, neutral or quiescent value, Q point (e.g., when a tube furnishes no oscillations or no potential difference exists between grid and filament).

-winkel angle of repose, a. of friction (rarely used).

-zustand state of rest, s. of quiescence, Q, neutral or repose condition.

Rührapparat stirring apparatus, agitating a., stirrer, agitator. röhren stir, agitate, puddle, pole, rabble.

Rühr-scheit paddle, rake, stirrer. -stab stirring rod, s. pole, paddle, rabble.

Rumpf body (of engine, etc.); trunk; hull (of a ship); fuselage (of airplane); core (of ions), kernel (stable inner electron group); negative unvaried portion of luminous glow (in g. tube). Ionen-ion core.

Rumpfelektron inner electron (forming part of core, kernel or rumpf e. group).

Rundblick-aufnahme panoramic view, p. photograph, panning shot, pan, pam (m.p. slang). -fernrohr panorama sight, panoramic telescope. -kamera panoramic camera.

runderhaben convex.

Rundfunk, Leitungs- AF wire broadcast, AF rediffusion.

Rundfunk-tonfilm sound telecast, s. telecine (of film), broadcast of television program with sound accompaniment (or of video and aural signals simultaneously). -welle (cf Wellenabgrenzung) broadcast wave, medium-frequency w., b. band (frequencies between 550 and 1600 kc in USA).

rundhohl concave.

Rund-kerb round notch, Charpy n. (with root radius). -laufen der Ionen circulation of ions.

-strahlantenne polydirectional antenna, omni-d.a.

runzelig wrinkled, puckered, shriveled; mottled, reticulated (of film gelatin).

Runzeln mottling, wrinkling.

Rüssel nose, snout, nozzle.

Rute, Wünschel- dousing or divining rod.

Rutengänger, Wünschel- douser.

Rutherford-Bohr Atommodell R.-B.
atom model or conception.
Rutil rutile, titanium dioxide.
Rutsche chute, shoot, slide.
rutschen glide, slide, slip,
chute.
Rutsch-erscheinung slip phenomenon

(cryst.), -kupplung slip clutch.
Rüttelformmaschine jolt molding
machine, jar ramming m.
rütteln shake, jolt (by jerky
motion).
Rütteltisch jarring, jolting or
bumping table.

S

S. A. (Selbstanschluss-System)

automatic telephone system.

Saal, Probe- rehearsal hall.

Saalregler theater fader.

Sache subject(-matter), cause, case, theme, topic, matter, affair, docket, in re.

sachgemäß appropriate, in an expert way.

Sach-kenntnis,-kunde expert knowledge, expertness, competence, knowledge in an art.

sachkundig experienced, expert, skilled, trained in an art or profession.

Sachlage state of affairs, factual situation.

sachlich objective, material, neutral, real, in a matter of fact way.

Sach-verhalt factual situation, facts of a case. -verständiger expert, authority, specialist (in technological art or science, etc.)

-verzeichnis subject index.

-wörterbuch encyclopedia.

Sack bag, sack, pocket, pouch, sac.

Wind wind cone, w. hose (airport).

säge-artig saw-like, serrated.

-förmige Spannung, doppel- double sawtooth potential.

Sägemehl saw dust.

Sägezahn-generator sawtooth generator (telev.) -kurve, Steilabfall der abrupt drop of sawtooth wave. -spannung sawtooth voltage, ratchet v. saigern liqueate.

Saite, ausgespannte stretched chord, s. string. -, geschlagene percussed chord or string. -, gezupfte plucked string. -, mitschwingende sympathetic string, co-vibrant s. Begleit- accompaniment string(zither).

Saiten-galvanometer string galvanometer, vibration g. -summer chord buzzer. -zug string tension.

salbig salvy, unctuous.

Salz, Fixier- fixing salt.

salzgetränkte Kohle mineralized carbon, impregnated c.

Salzkristall, Seignette- Rochelle salt crystal.

sämisches Leder Chamois leather.

Sammel-anode collector anode, gathering a., output a., ultimate a. -anschluss p.b.x. line, private branch exchange.

-anschlussteilnehmer subscriber with several lines. -elektrode output electrode, collector e., gathering e., catcher (klystron).

-gefäß receiver, reservoir, collecting vessel, receptacle. -glas converging lens; preparation tube, specimen t. -linse condensor lens, converging l., convergent l., positive l. -linse, Haupt- second lens (in electron gun). -linse, Vor- first focusing lens, cathode l. (like Wehnelt cylinder, apertured disk, etc., in cathode-ray tube).

sammeln concentrate, focus, collect, gather, accumulate, assemble, catch. **Sammel-raum** receiver, receptacle, collector space, catcher space (in Klystron). -rohr collector pipe, mains. -schiene busbar, omnibus bar. -spule focusing coil. -system collective or condenser system or element (projector). -zylinder focusing cylinder.

Sammlier accumulator, storage battery; collector. **Wind** air reservoir, compressed-air tank.

Samtdichtung velvet trap.

Sandform sand mold (foundry).

sandführend sand-bearing, sandy, areniferous, arenaceous.

Sandguss sand casting.

sandig sandy, areniferous, arenaceous.

sanft soft, gentle, mild, smooth.

Saphir sapphire. -spat cyanite.

satinieren satin, glaze, burnish.

Satiniermaschine, heisse hot burnishing press.
 Sattdampf saturated steam, saturated vapor.
 Satte bowl, dish.
 Sattel crevass, dip (of resonance curve).
 sättigen, über- supersaturate.
 Sättigungs-aktivität saturation activity. -apparat saturator.
 sättigungsfähig saturable, capable of saturation.
 Sättigungs-kapazität saturation capacity. -strom saturation current. -wert valence.
 Satz deposit, sediment, settling; set (of things); sentence, principle, law, rule, theorem, axiom. -vom ausgezeichneten Lichtweg law of extreme path.
 Satz, Federn- spring bank, s. assembly. Flächen- theorem of conservation of areas. Glas- glass batch, g. composition, g. charge. Gleichverteilungs- principle of equipartition of energy (Maxwell-Boltzmann). Haupt- fundamental principle, f. law, axiom (math.) Impulserhaltungstheorem of conservation of momentum. Knall- detonating composition. Kontakt- bank of contacts. Lehr- abstract theorem or doctrine. Leit- guide rule, guiding principle, basic p. Linsenlens combination, system of lenses. Lücken- vacancy principle. Objektiv- set of lenses, system of l., lens combination. Permanent- permanence principle, sum rule. Rad- axle and two wheels. Summensum rule, permanence principle. Verschiebung- displacement law. Verteilungs- principle of distribution, d. law. Vorder- antecedent, premise. Wechsel- exchange principle.
 sauber clean, neat.
 säuern acidify, sour.
 Sauerstoff-ion anion, negative ion.
 -messer eudiometer. -pol oxygen

pole, anode. -verbindung oxygen compound.
 Saugapparat suction apparatus, aspirator.
 saugen suck(up), absorb, imbibe, aspirate.
 Sauger suction apparatus, aspirator, exhauster. Wellen- wave trap, smoothing choke coil, series reactor.
 Saug-fähigkeit absorptive capacity, absorptivity, imbibition power.
 -feld positive field, suction f., f. which draws away. -festigkeit resistance to suction, s. strength.
 -filter suction filter. -flasche filter flask. -geschwindigkeit rate of evacuation (of vacuum pump). -gitter space-charge grid.
 -hahn suction cock. -heber syphon.
 -höhe suction head, s. height, absorptive height. -kreis acceptor circuit; impedance or absorption wave trap. -leitung suction pipe, s. piping. -luft vacuum.
 -messer vacuometer. -näpfchen suction cup. -spannung anode, driving or positive potential (of photo-cell), saturation p.
 -spule smoothing coil. -stutzen pump intake, p. nozzle. -transformator booster transformer, sucking t. -ventil suction valve.
 Säule column, pillar, prism (cryst.); pile (electr.). Glimm- light column, glow c. (of tuning indicator). Licht- light column.
 Quecksilber- mercury column.
 Volta'sche- voltaic pile.
 Säulenachse prismatic axis.
 säulenartig columnar, prismatic (cryst.)
 Säulen-lampe pillar (lamp), batten. -tischfensprecher desk (stand) telephone set.
 Saum seam, hem, edge, fringe.
 -, farbiger color fringe.
 säumen hem, edge, border.
 Säureballon acid carboy.
 säure-beständig stable to acid action, fast to acid. -bildend

acid forming. - *-haltig* containing acid, acidiferous.
Säureschwemmverfahren acid flotation method.
säurewiderstehend resistant to acid, fast to a.
Säurezahl acid number.
sausen rush, whiz, whistle, hum.
Schaar, Kurven- family, group or system of curves.
schaben scrape, shave, grate, rub, abrade.
Schablone pattern, template, stencil, mold, form, model, former.
Schablonenstreifen controlling strip (automatic film printing).
Schabsel scrapings, parings, shavings.
Schacht, Licht- light tunnel (of sensitometer).
Schadenersatz festsetzen assess damages or indemnity. *-klage* action for damages.
schädlich spurious, stray (of radiations), noxious, injurious, dangerous, harmful, detrimental.
-machen vitiate, contaminate.
Schadloshaltung indemnification, indemnity, compensation.
Schaft shaft, shank, stock, stem, handle, stalk. *Niet-* rivet shank, r. stem.
Schake link (of a chain).
Schäkel shackle.
Schale dish, basin, cup, bowl, scale, tray; husk, shell, rind, skin. *Abtropf-* drainer, drip, jar, dish. *Anoden-* anode segment (of magnetron). *Dampf-* evaporating dish, e. basin. *Elektronen-, beinahe geschlossene* nearly closed electron shell. *Kugel-* partial sphere, cup, spherical shell, cup-shaped or hemispherical part, calotte. *Unter-* sub-shell (of electrons). *Zweier-* duplet rings.
Schaleabschirmkoeffizient shell absorption coefficient (shielding function).
Schalen-bau der Elektronenhülle structure of electron shell.

-entwicklung tray development, dish d. *-guss* chill casting.
-gussform chill. *-kupplung* sleeve coupling. *-lack* shellac.
-windstärkemesser cup-type anemometer,
Schall(s.a. Akustik, Geräusche, Klang & Ton) sound, acoustic action, sound a., ring, peal, noise (=disturbing s.)
Schall, Körper- material conduction of sound (say, through solids).
Luft air conduction of sound.
Tritt impact sound (transmission).
Schall-abstrahlung sound radiation or projection. *-abwehr* noise abatement, n. suppression, sound attenuation, s. absorption.
-aufnahme, akustische direct mechanical recording (as distinguished from electrical r.).
-aufnehmen sound recording; s. pickup, s. collection, s. receiving (by a microphone).
-aufnehmen, Glimmröhren- glow-tube or g.-lamp sound recording (e.g., by Aeolight). *-aufzeichner* sound recorder. *-ausbreitung,* vertikale vertical spread or diffusion of sound. *-ausschlag* displacement of a particle (ac).
-bandaufnahme magnetic steel tape recording. *-becher* bell(wind instrument). *-bestrahlung, hohe* high radiation distribution efficiency. *-brett* baffle(board).
-bündel pencil of sound. *-dämmung* sound reduction, s. attenuation, s. deadening, s. absorption, silencing (of noise). *-dämmzahl* sound transmission characteristic.
schalldämpfend sound absorbing, s. attenuating, damping, deadening (for sound).
Schall-dämpfer silencer, sound absorbing means, muffler. *-dämpfungseinheit* unit of sound absorption (e.g., Sabin unit).
-dämpfungsfaktor sound absorptivity, s. absorption coefficient.
-dämpfungsmittel sound absorbing,

s. attenuating, s. damping, s. deadening means or material, sound absorbent or absorber, s. insulation. -deckel sounding top (of mus. instrument), sounding board, sound b., abat-voix. -druck, effektiver effective sound pressure, rms (root-mean-square) acoustic p. -durchlässigkeit sound transmission, s. transmittance. -einfall, streifender glancing incidence of sound wave. -empfang sound collection, s. reception (of a microphone). -empfänger sound pickup, sound collection device (e.g., microphone), s. receiver. -empfindungsschwelle threshold of audibility, t. of acoustic perception or percipience (represented by audiogram). -ereignis sound action, acoustic a. schallen sound, resound, ring. Schallfärbung timbre, tone color, tone quality. schallharte Trichterwand rigid or non-absorbing horn wall. Schall-härte acoustic stiffness, sound hardness (denoting ratio pressure amplitude to velocity amplitude as a function of frequency). -impedanz acoustic impedance. -ingenieur sound technician, acoustician. -leistung response (of an acoustic system). -mikrophon acoustic microphone. -öffnung louvre (of bell tower). -ortung sound location. -platte für Rundfunk 16" transcription record for broadcast studios. -platte, Bild- sound and picture on disk. -platte, Mess- frequency record, phonograph disk bearing sliding notes or constant notes; parlophone record (produces warble note). -plattengeräusch record noise, surface n. -plattensteg wall, land or barrier between record grooves. -quelle sound generator, sound source, source of acoustic energy. -reaktionsrad Rayleigh disk, etc. (placed in a

sound field). -reibungswiderstand acoustic resistance (dissipative component of acoustic impedance). -reiz, überschwelliger super-threshold (sound) intensity level. -rille groove or track (on a disk). -rückkopplung acoustic feedback, a. regeneration. -rückwirkung acoustic impedance (comprising resistance and reactance, the latter either in the form of inertance or of compliance, corresponding to electrical inductance and capacitance.). -sampler sound or microphone concentrator. -scheinwerfer sound reflector, acoustic radiator. -schirm baffle. -schlucker sound absorbent, s. deadening material. -schluckung sound absorptivity, acoustic a. -schnelle volume current (ac.). -schnelleempfänger velocity microphone. -schreiber sound recording stylus, s. recorder. -schutz sound proofing, s. insulation. -schwellenstärke threshold sound intensity (of audibility and of feeling). schallsicher sound-proof. Schall-stärkemesser phonometer, sound level meter. -strahlbü'l pencil of sound. -tilgung sound absorption, s. suppression, s. deadening, s. damping, s. attenuation. -tilgungsmittel gobo, nigger, baffle (in form of a wall, etc., in m.p. work). schalltot non-resonant, non-oscillable, acoustically inert or inactive. Schall-treibwerk loudspeaker operating mechanism, motor element. -übertragungsanlage (public) address system; electroacoustic transducer (rare). -umfang sound range, s. contrast. -umwandlungseinrichtung electro-acoustic transducer. -verstärkungsmittel sound re-inforcing system (in halls, auditoria, etc.) -verzugs, Ausschalten des acoustic correction (sound locator).

-wahrnehmung des menschlichen Ohres
human tone or sound perception,
auditory percipience. -wand (cf
Tonführung) baffle (partition or
board), loudspeaker screen (to
prevent acoustic feedbacks), sound
panel (for either s. absorption or
s. reflection). -weglänge sound
path length.

Schallweich sound absorbent.

Schallwelle, Über- supersonic wave,
ultrasonic w.

Schallwellen-aufzeichner phonodeik
(records on film). -ausgleich
neutralization of sound waves
(prevented by baffles). -wider-
stand acoustic impedance; complex
quantity comprising acoustic re-
sistance corresponding to internal
friction responsible for energy
dissipation, and acoustic reactance
either in the form of inertance
(=electric inductance) or of com-
pliance (=electric capacitance).

Schall-widerstand ratio pressure am-
plitude: velocity a. -wiedergabe,
Radtkeverfahren s. Radtke ver-
fahren. -wiedergabequalität
realistic or faithful sound re-
production (with "atmosphere" or
"room tone"). -wirkungswiderstand
acoustic resistance.

Schalt-band controlling strip (of
printing machine). -bild circuit
diagram, wiring d., hook-up. -buchse
jack. -element circuit element, c.
means.

schalten, gegeneinander connect in op-
position, c. differentially. -, in
Brücke bridge (across). -, vielfach
multiple. -, vorwärts step forward,
notch f.

Schalter, halbversenkter semi-sunk or
semi-recessed switch. -mit 5
Ausgängen switch with five points,
five-point s. -, sechsteiliger, mit
zwei Stellungen two-position six-
point switch. **Bogenlösch-** Deion
circuit breaker. **Dämmerungs-** twi-
light switch. **Dreieck-Stern-**
delta-star switch. **Dreiwege**-three-

way switch. **Druckgas-** cross gas-
blast switch. **Druckluft-** auto-
pneumatic circuit breaker, air
blast switch. **Expansions-** hydro-
blast or expansion circuit breaker
or switch. **Einaus-** off-on switch.
Hebel-, zweipoliger double-lever
switch. **Hörsprech-** talk-listen
switch (of intercommunication sys-
tem). **Impulsöl-** oil blast circuit
breaker. **Kipphebel-** toggle switch.
Messer- knife (blade) switch.
Mithör- listening key. **Nadel-**
vibrating reed rectifier.
Peilseiten- direction-finder sense-
switch, sensing or sense-finding
s. (operates df and sense-finding
loops). **Pressgas-** gas-blast
switch. **Pressluft-** airblast
switch. **Quecksilber-** mercury
switch. **Rasten-** step switch,
multi-point s. **Schnapp-** snap
switch, tumbler s. **Sprech-**
speaking key. **Stern-Dreieck** star-
delta switch. **S'teu'er-** sequence
switch, master s., control s.
Stöpsel- plug switch. **Stromstoss-**
impulsing switch, stepping s.
Stufen- multi-point switch, multi-
contact s., step s. **Thermo-**
thermal lag switch. **Trenn-** isolator,
isolating switch, disconnecting
link. **Überwachungs-** monitoring
key. **Verstimmungs-** wave-
change switch, w. changer (in a
transmitter). **Verzögerungs-**
time-lag switch. **Wahl-** selector
switch. **Wasser-** hydroblast switch.
Wechsel- double-throw switch.
Wellen(bereich)- wave-band switch.
Wende- reversing switch, r. key.
Zeitschnell- high-speed switch,
quick-break s.

Schalter-arbeit switch work. -kamm
sequence switch cam. -leistung
of Abschaltleistung.

Schalt-kapazität circuit capacitance
(radio). -leistung, Ab- rupturing
capacity, circuit-breaking c. (of
a power switch). -mittel circuit
element, c. means; switching

device. -nocken trip cam, trigger c. -periode shutter period, shift p., moving p., feed stroke (m.p.) -rad, Schritt- stepping wheel. -rolle sprocket wheel (film feed). -schema diagram of connections, circuit d., hookup. -spannung bias reducing potential, unblocking potential (silent tuning). -strom current on contact. -trommel intermittent (motion) sprocket (film feed).

Schaltung (s.a. Stromkreis und Kreis) connection, circuit arrangement, c. organization, c. scheme, hookup; switching.

Schaltung, bildweise intermittent film feed or movement. -, stete continuous film feed or movement.

Schaltung, Abwäge- comparator circuit organization. Bild- feed or movement of frame or picture (m.p.), frame ratcheting. Blink- blinking arrangement, ratchet, relaxation or sawtooth generator scheme with RC time-base and neon lamp. Bremsfeld- retarding-field circuit organization (with positive grid and negative plate), Barkhausen-Kurz circuit, oscillating-electron or electron-oscillation scheme with reflecting electrode. Brücken- H. and T. see Entzerrungskette. CW- capacity-resistance circuit scheme, c.-r. network.

Doppelröhren- tandem-tube circuit arrangement, push-pull c.a.

Doppelweg- full-wave rectifier circuit organization. Dreipunkt-Hartley (oscillator) circuit scheme, potentiometer circuit scheme.

Entlade- circuit causing fast drop of sawtooth voltage. Film- pull-down film movement, film feed.

Filmfort- film feed, f. travel, f. movement. Glimmlampenkipp- neon-lamp time-base circuit scheme.

Graetz- four electrolytic rectifier bridge-arrangement. Greifer- claw film feed. Gruppen- series-parallel connection. Hintereinander-series connection or arrangement,

seriation, cascading a., tandem a., concatenation (of motors).

Kaskaden- cascading connection, concatenation, tandem arrangement (of motors). Ketten- relay chain circuit. Lade- circuit means causing slow rise of sawtooth voltage. Mischer- keying and mixer tube scheme (for adding synchronizing and video signals).

Mittelpunkttast- center-tap key modulator arrangement. Neutralisations- neutrodyne circuit organization. Parallel- parallel connection, p. circuit organization, multiple connection, paralleling.

Pendel- (Armstrong) super-regeneration circuit. Reinartz- regeneration circuit (comprising capacity and tickler coil). Reinton- noiseless recording circuit organization.

Schläger- dog or plunger movement or mechanism. Schleifen- circuit looped back and forth. Spar- circuit organization designed to economize (plate) current (e.g., Nestel's).

Zeilen- vertical stepping-down movement, picture traversing. schaltungstechnischer Aufbau constructional details of circuit organization or wiring.

Schalt-vorgang switching operation, s. process. -wähler, Schritt- step-by-step selector.

schaltweise Bewegung intermittent movement or feed, discontinuous m.

Schalt-welle wiper shaft. -werk film feed, intermittent or shuttle mechanism (m.p.); control switch m. or gear, trip or stepping m.

-werk, Fort-, -werk, Schritt- step-by-step mechanism, stepping or switching m. -zeichen symbols of radio circuit elements, legend (list of symbols) letters or numerals.

Schamottestein firebrick.

scharf strident, shrill, piercing (of sound); peaked (of a curve).

-begrenzt highly selective (of resonance).

Schärfe resolving power, resolution, definition; sharpness (of selection, distinction, discrimination or tuning), degree or measure of distinctness (e.g., of optical actions), acuity.

Schärfe, gestochene microscopic sharpness. **Abstimm-** sharpness of tuning or of resonance, selectivity.

Bild- picture definition, p.

resolution. **Fleck-** spot focus, sharpness of f. **Gehör-** acuity of hearing. **Längs-** definition in line direction. **Mitten-** central definition, sharpness of center. **Quer-** definition in frame direction. **Resonanz-** selectivity, sharpness of resonance or of tuning. **Seh-** visual acuity, sharpness of vision, visual focus.

Tiefen- depth of focus, d. of field. **Trenn-** selectivity, filter discrimination.

Scharfeinstellung sharp focusing (opt.); automatic tuning indication.

Schärfen, Minimum- zero cleaning or clearing, z. sharpening (d.f.)

Schärfenfeld (in Bezug auf Öffnung, Entfernung und Brennweite) focal field (in respect of aperture, distance, and focal length).

Schärfenfeld-grenzen limits of sharpness or of definition; camera lines (delineating good focus area). **-tiefe** depth of field.

Schärfen-fläche surface of sharp or distinct vision. **-messung, Gehör-** audiometry. **-tiefe** depth of vision, definition in d., depth of focus. **-winkel** angular resolving power. **-zeichnung** sharpness of delineation.

Schärferegelung, Trenn- automatic bandwidth selection.

scharfgängig property of a screw cut with triangular thread.

Schärfung, Nullpunkt- zero or minimum point cleaning or clearing, sharpening of minimum (d.f.).

scharf-winklig acute-angled.

-zeichnende Linse achromatic lens.

Scharnier hinge, joint, articulation.

Dreh- swivel pivot.

scharren scrape, scratch.

schartig notchy, nicked, jagged, serrate.

Schatten shades, shadows (of picture); umbras. **Funk-** radio shadow, r. pocket, r. dead spot. **Halb-** penumbra, half-shade or shadow, partial shadow. **Kern-** umbra.

Schatten-anzeiger shadow tuning indicator, shadowgraph. **-apparat, Halb-** half-shade apparatus, half-shadow a. **-bild** silhouette.

-grenze, Halb- penumbra boundary.

-kompensation, Halb- penumbral compensation. **-mikroskop** shadow microscope. **-riss** silhouette.

-veränderung change in shade or shading values. **-verhältnis** (zwischen Drähten und freier Gitterfläche) cover ratio (say, 1/3), transparency. **-wurf** sound shadows. **-zeiger** shadowgraph (tuning indicator).

Schattierung shading, hatching, shade, tint.

Schattierungsverfahren variable-density recording method.

Schaubild diagram, graph; hookup; perspective view.

Schauer, Höhenstrahlen- bursts or shower of cosmic rays (traced by hodoscope).

Schauerstrahlen shower radiations.

Schaufel blade, bucket (of turbine), shovel, scoop, beater, vane. **Lauf-** runner blade, r. bucket (turbine.)

Schaufelabstand circular pitch (of turbine).

Schau-glas display glass; specimen g., sample g. **-hörerschaft** aural and visual audience, persons listening to and seeing simultaneously audio and video actions.

schaukeln oscillate, rock, reciprocate, move to and fro, swing.

Schau-linie graph, curve. **-linse** viewing lens. **-loch** peephole,

inspection h., bezel, observation port (for projectionist, to view the screen).

Schaum, chromatischer chromatic soft focus, c. bleeding. **Farb-** fringing (of film). **Glas-** glass gall, sandiver.

Schaum-abheber froth skimmer, drosser. -gold Dutch metal. -gummi sponge rubber. -löffel skimming spoon, skimmer. -ton Fuller's earth.

Schau-versuch lecture experiment, demonstration e. -zeichen indicator signal, visual s., optical s., telltale means.

scheckig dappled, spotted, mottled.

Scheibchen, **Beugungs-** diffraction disk. **Zerstreuungs-** circle of confusion, blur circle.

Scheibe disk, slice, pane, dial; pulley, wheel. -, **stroboskopische** stroboscope, stroboscopic pattern wheel. **Ablese-** dial (of direction-finder). **Abtast-** Nipkow scanning disk, exploring d. **Ausgleichschwung-** rotary stabilizer, roller with fly-wheel action. **Blenden-** auxiliary rotary shutter disk, stop d. with spiral slot cyclically co-operating with holes of quadruple scanning disk.

Daumen- cam (with lobe). **Dreh-** turntable (part of m.p. studio equipment). **Exzenter-** cam. **Fall-** drop shutter, d. annunciator.

Finger- dial switch, finger disk, f. wheel. **Funkbeschickungs-** compensator cam, zero-clearing c.

Kettenrollen- chain sheave.

Klinken- ratchet disk, notched d. **Kombinator-** combiner disk, c. wheel. **Korrektur-** compensating cam (of d.f.) **Kurbel-** crank disk. **Leer-** idler wheel. **Linsen-** lens disk (scanner). **Loch-** Nipkow scanner disk. **Matt-** ground glass, frosted g. (plate or pane).

Mehrachspiralloch- multi-spiral disk (for scanning). **Nipkow-** N. scanning disk. **Nummern-** dial

switch, number plate, dial p. **Peil-** bearing plate. **Riemen-** belt pulley. **Rollen-** chain sheave. **Sektoren-** spinning disk (in flicker test). **Sperr-** ratchet wheel. **Spiralloch-** Nipkow scanning disk, spiral d. **Stufen-** cone pulley, tapered p., stepped p. **Teil-** index disk, i. plate. **Übersetzer-** combiner disk, c. wheel. **Unterlag-** washer; supporting disk. **Vielkant-** polyhydral mirror (of scanner). **Wähler-** dial type selector switch. **Wechselblenden-** auxiliary rotary disk with spiral slot. **Zwischenlag-** washer.

Scheibenanode, **Loch-** apertured disk anode, ring a.

scheibenförmig disk-shaped, discoid.

Scheiben-isolator disk insulator, dish i. -linse, **Loch-** aperture disk lens. -strahl disk ray.

scheidbar separable, analyzable.

Scheide-anstalt refinery. -linie boundary line, separating l.

scheiden separate, isolate, analyze, decompose; pick, sort, sever, divide.

Scheide-verfahren refining method, separation m. -wand partition, separator (wall), diaphragm, septum; baffle (ldspk.). -wasser nitric acid, aqua regia.

Schein lustre, light, shine, glow.

scheinbares logarithm. **Dämpfungsdecrement** equivalent logarithmic decrement.

Schein-dämpfung apparent attenuation. -echo pseudo echo.

Scheinergrad Scheiner degree, d. of S. scale.

Schein-leistungszähler apparent power meter (in volt-ampere units).

-leitwert admittance. -verbrauchs-zähler apparent power meter, tri-vector.

-werfer, **Linsen-** spotlight. -werfer, **Facettenspiegel-** segmented or faceted searchlight reflector.

Scheinwiderstand apparent resistance, impedance, impedor (part having i.).

Blindkomponente d. - (es) reactive component of impedance (either inductive or capacitive). **Wirkkomponente d.** - (es) active, watt or dissipative component of impedance.
Scheit,Richt- rule, straight edge.
Rühr- paddle, rake, stirrer.
Scheitel vertex, summit, crown, top, apex. **Brücken-** bridge gap. **Glas-** lens vertex.
Scheitel-brechwert, Grund- primary vertex refraction. **-linie** vertical line, zenithal l. **-punkt** vertex, zenith, apex.
scheitelrecht vertical, perpendicular, plumb.
Scheitel-spannungs-Voltmesser peak voltmeter, crest v. **-tiefe** depth of vertex, vertical d. **-wert** peak value, crest v., maximal v., amplitude. **-winkel** vertex angle, opposite a., vertical a.
Schelle clip, clamp, shackle. **Erd-** ground clamp.
Schellenbaum bell tree, crescent.
Schellhammer riveting snap, s. hammer.
Schema schema, scheme, diagram, blank, form, model, pattern.
Schalt- diagram of connections, circuit d., hookup. **Term-** term diagram. **Wick-** actual or practical work diagram.
Schenkel leg, limb, foot, shank, side, side piece, branch. **Achs-** (axle) journal. **Aussen-** outer leg, o. limb. **Magnet-** limb or leg of a magnet. **Mittel-** center leg.
Schenkel-drossel,Drei- three-legged reactor or choke. **-rohr** bent tube, b. pipe, V-tube, elbow tube, e. pipe.
schenklig legged or limbed.
Scherenspreizer lazy tongs.
Scher-festigkeit shearing strength.
-schwingungen shear vibrations.
Scherung,Bild- shearing of image.
Kurven- correction (of induction curve, etc.)
Scherungs-modulus shear modulus, torsion m., rigidity m. **-winkel** angle

of shear.
Scheue,Licht- photophobia.
Schicht layer, stratum, bed, coat, film, skin, lamina. **-auf Schicht** emulsions placed together so as to face each other.
Schicht, atmosphärische atmospheric layer, sphere (troposphere, tropopause; stratosphere or isothermal region; ionosphere or Heaviside layer or Kennedy-Heaviside layer; Appleton l.).
-gerasterte mosaic (photosensitized) coat or screen. **Brems-vermögen der photographischen** — stopping power of photographic emulsion. **Feinkorn-** fine-grain emulsion. **Filmbild** film emulsion, f. coat. **Grenz-** interface, boundary layer. **Hohl-** air space. **K.-H.-** Kennedy-Heaviside layer. **Oberflächen-** surface layer, s. barrier. **Sperr-** barrier layer, stopping l., blocking l. (of cell).
schichten arrange in layers, stratify, pile (up), stack.
Schichtengitter, Schichtgitter stratified lattice, layer l.
Schicht-Kathode cathode bearing, layer or coat (of oxide, light-sensitive substance, etc.)
-körper stratified structure, s. body. **-länge** path length (of bands). **-seite** emulsion or sensitized side or face (of a film). **-textur** stratified texture, sheet intergrowth.
Schichtung stratification, arranging in layers, piling or stacking (up).
Schiebekontakt adjustable slide, slide contact, cursor.
schieben push, shift, thrust, shove; crab (of airplane).
Schieber slide, slider, slide bar; slide valve, damper (regulating draft).
Schieber,Belichtungs- exposure lid, e. shutter. **Kontakt-** adjustable slider, slide contact, cursor.

- Rechen- slide rule.
- Schieber-kassette roller blind darkslide. -körper slide valve or gate.
- Schiebe-rohr sliding means to tune an oscillator (by C or L variation).
- Schieber-rahmen lantern slide carrier. -verschluss, Fall- drop shutter. -widerstand slide rheostat.
- Schiebkraft thrusting power, thrust, shear.
- Schiebungs-fläche slip plane (cryst.) -modulus torsion modulus, shear m., rigidity m.
- Schieds-richter arbitrator, referee, umpire, arbiter. -spruch arbitration, arbitrament, award.
- schief oblique, sloped, slanty, askew, skew, crooked, warped, unsymmetric, skew-symmetric (of curves).
- schief-achsig oblique axial. -symmetrische negative Paare skew-symmetric "negative" pairs.
- Schiefe dissymmetric condition; skew.
- Schiefeinfall grazing incidence, oblique i.
- Schiefer slate, shale, schist. -bruch slaty, scaly or laminar fracture.
- schief-liegend inclined, sloping, obliquely positioned. -symmetrisch skew-symmetric (of curves). -winklig oblique-angled. -winkliges Parallelogram rhomboid, oblique (angled) parallelogram.
- Schielen (beim Goniometer) squinting (minimum signal points are displaced an angle other than 180 degrees).
- Schielwinkel angle of strabismus, a. of squint (eye).
- Schiene rail, strip, bar; rim; tire (of a wheel); splint, splice. Andruk- pressure pad or guide. Druck- pressure shoe (film feed). Kontakt- contact bar. Sammel- bus bar, collector
- b. Strom- third rail.
- Schienenstoss rail joint.
- schiessen shoot, dart, emit, dash, bombard, set off.
- Schiffchen, Porzellan- porcelain boat. Verbrennungs- combustion boat.
- Schild label, sign, plate, shell, shield.
- Schiller lustre, shine, iridescence, play of colors, opalescence.
- schillerfarbig iridescent with metallic color or lustre display.
- Schirm screen, shield (of dissector tube); shade, umbrella, visor (of a cap); can (of a screened or shielded coil, etc.).
- Schirm, kapazitiver electrostatic screen or shield. -magnetischer magnetic shield, m. screen, can (of a coil). -, neutraler neutral screen. -, ununterbrochener, zusammenhängender continuous photosensitized screen or photocathode (in Farnsworth dissector and supereletron).
- Schirm, Bild- projection screen.
- Blenden- gobo (of sound absorbing material). Durchsichts- (der Speicherröhre) transparent screen (of storage type television tube).
- Leucht- fluorescent screen, phosphor s., luminescent s., luminous s., target. Mosaik-, Überfahren d. sweeping out of mosaic (with beam). Raster- mosaic screen. Schall- baffle.
- Streifen- rod screen. Ton- sound screen. Verstärkungs- intensifying screen (X-ray work).
- Schirm-aussteuerung full utilization of screen (up to border, in cathode-ray tube, etc.). -breite screen width.
- schirmende Spule, selbst- astatic coil, self-shielded c.
- Schirm-gitter-Richtverstärker screen-grid tube with plate-current rectification. -gitterröhre screen-grid tube, shield-grid t., shielded-plate t.

-luminophore phosphors, fluorescent substances (for cathode-ray screens, etc.). **-membrane** screened diaphragm (of microphone). **-rand** margin of screen, s. border or edge. **-substanzen**, **Leucht-** phosphors, fluorescent substances (for cathode-ray screens, etc.) **-träger** carrier, foundation or support for screen phosphor material (in CR tube).

Schlacke slag, cinder, scoria, dross, clinker.

schlacken slag, form slag, scorify.

Schlacken-bildung slag or ash formation, scorification. **-wolle** rock wool, slag w., mineral w.

schlackig sluggy, drossy, clinkery, scoriaceous.

schlaff slack, loose, flabby, flaccid, soft, exhausted, tired.

schlaffes Trumm slack (or driven) side or end of a belt.

Schlag stroke, blow, percussion, impact, knock, shock, kick, beat, pounding; wobble (of phonograph disk); click, thump or chatter (of a key or contact); lay (of a cable). **Kalt-** cold heading die. **Platten-** disk wobble (of phonograph). **Tast-** key click or thump, chatter.

Schlag-beanspruchung shock, blow or impact load or stress. **-biegeprobe** shock, blow or impact bending test.

Schlägel mallet, maul, beater, pestle, hammer, drumstick.

Schlägerschaltung dog or plunger movement.

Schlag-feder impact spring. **-figur** percussion figure. **-fläche** impact surface, striking s. **-gold** leaf gold. **-instrument** percussion instrument (mus.). **-länge** lay, length of twist (of cable). **-lot** hard solder, copper-zinc brazing mixture. **-lot,** **Messing-** brass solder. **-probe** impact, blow or percussion test. **-probe,Dauer-** continuous impact or shock test (piece). **-raum**

spark-gap chamber or space. **-ton** strike note (of bell, followed by hum n.) **-weite** spark, flash-over or striking distance (of a gap.) **-werk** breaking machine, impact tester (of Charpy); signal device, striking mechanism. **-werk,Dauer-** continuous impact testing machine. **-zeug** percussion instrument (mus.)

Schlamm mud, sludge, pulp, slime, slush, sediment.

Schlämmbrei precipitated chalk, prepared c.; whiting.

Schlange,Kühl- cooling coil, spiral condenser pipe or tube. **Rohr-** spiral tube, coil.

Schlangen-holz snake wood, letter w. **-kühler** spiral condenser, coil c. **-kurve** serpentine.

Schlauch hose, tube, tubing, pipe (of flexible material).

Sprech- speaking tube.

schlechte Abstimmung mistuning, off-tuned position.

schleichen sneak, creep.

Schleier veil, haze, slight cloudiness, mist, fog, turbidity (in liquids); reflected, double or ghost image causing veiling (in images or pictures).

Schleier,dichroischer dichroic fog, silver f., red f.

-zweifarbig dichromatic fog.

Entfernungs- distance fog. **Grund-** inherent fog, ground f. (of emulsion, resulting in background noise). **Kalk-** chalk fog. **Luft-** air fogging (chemical action of atmosphere).

schleierig foggy, fogged, hazy, misty.

Schleier-korn fog grain (of film). **-schwärzung** fog density. **-wert** fog value.

Schleife loop, noose, knot; slide, chute. **Bahn-** orbital loop.

Erd- earth circuit, ground c.

Film- film loop. **Leitungs-** loop, metallic circuit.

Oszilloskophen- oscillograph

loop, o. vibrator.
schleifen grind, sharpen, polish, cut; slip, slide; loop (a line).
Schleifen,Kristall- lapping, precision grinding of quartz crystal plates. **Plan-** surface grinding.
Schleifen-bildner loop setter.
 -fänger feed and take-up sprocket mechanism. -flug ("U") turn, loop. -messung, **Erddraht-** loop test. -oszillograph loop, string or vibrator oscilloscope.
 -schaltung circuit looped back and forth.
Schleifer sliding wiper, copper wire interrupter (sliding over nickel disk to break up c.w. and render them audible).
Scheif-feder wiper, slide spring.
 -kunst, optische optical grinding artifice or art. -maschine grinding machine, grinder; abrasion or hardness tester. -mittel abrading, abrasive. -pulver grinding powder, polishing p. -rille groove, furrow. -spalt slit stop (opt.) -wirkung abrasive action, attrition.
Schleisse splint, splinter.
schlenkern swing, sling, fling.
Schlepp-antenne trailing (wire) antenna (of airplane). -kontakt trailing contact, make-before-break c., shorting c.
Schleuder centrifuge, centrifugal machine; sling. **Elektronen-** electron gun.
Schleuder-fuss gun press. -guss centrifugal casting.
Schleuse,Licht- light valve.
 Objekt- object airlock chamber, air-lock (of electron microscope).
Vakuum- airlock (of electron microscope).
schlicht smooth, even, plane.
schlichten smooth, plane, dress; adjust, arbitrate or settle (a dispute).
Schlichtgleitsitz plain sliding fit.
Schlieren streaks, schlieren, striae (of glass), cords (when heavy).
 -methode striae method. -zone

Schlucker, Schall- dead zone, skip z., shadow z., shadow.
schliessend,gut- tight-fitting, tightly or hermetically sealed.
Schliessung und Unterbrechung make and break (of a circuit).
Schliff grinding, sharpening, polish, cut (of a gem); ground section, g. specimen, g. slide, micro-section surface (as of metals, for etching); ground-in joint.
Schliff,Ätz- ground section (for etching metal). **Fett-** greased joint. **Kern-** male part of ground-in joint. **Kugel-** ground spherical ball-and-socket joint. **Normal-** standard (interchangeable) ground joint. **Metall-** polished section, micro-s.; metal filings.
Schliff-kolben,-stopfen ground(-in) stopper. -verbindung, **Glas-** ground glass joint.
Schlinge loop, noose, tie. **Bahn-** orbital loop (of electrons).
Schlingerstativ cardan-suspended tripod.
Schlitten slide, sliding carriage, slide rail, chariot (in Hughes apparatus). **Führungs-** slide carriage. **Kreuz-** compound slide.
Schlitz slit, slot, fissure, cleft, incision, split. **Aufzeichnungs-** recording slit, r. aperture (of contact or of optical type).
Ausgangs- exit slit (in spectrograph). **Ton-** reproducer aperture, r. slit.
Schlitz-blende slit stop. -brenner batswing burner. -effekt apertural effect, slit e.
 -kopiermaschine slit-type printer, contact p. (for film).
 -lampe slit lamp (of microscope).
 -magnetron, **Zwei-** two-split magnetron, two-segment m. -verschluss focal plane shutter, slit-type rotary disk shutter.
Schluckbewert absorptivity.
schluckend,licht- light absorbent, optically a. or absorptive.
Schlucker,Schall- sound absorbent

material, s. deadening m., s. insulation. **Wellen-** wave trap (of absorptive or impedance type). **Schluckerzahl**, **Schall-** sound absorption coefficient, acoustic or sound absorptivity (e.g., in sabin units). **Schluck-grad** sound absorptivity, s. coefficient. **-stoff** absorptive material, absorbent, imbibent. **Schluckung**, **Schall-** sound absorptivity, acoustic a., s. absorption. **Schlupf** slip, slippage. **schlupffreier Antrieb** (s.a.) zwangsläufig) non-slip drive, geared d. (free from backlash). **Schlupfkupplung** slip clutch, s. coupling. **Schlüpfrigkeit** lubricity, slipperiness, oiliness. **Schlüpfung** slip, slippage. **Schlüpfungs-messer** slip meter. **-reibung** sliding friction, slip. **Schluss** short-circuit. **-**, **magnetischer** magnetic shunt. Eisen-path closed or passing through iron (for magnetic flux), magnetic or iron path, magnetic shunt, keeper (of a permanent magnet). **Elektroden-** electrode short-circuit. **Erd-** earth connection; (arcing) ground. **Wasser-** water seal, trap. **Schlüsselblende** final diaphragm (opt.). **Schlüssel** key, switch (for make and break); code. **Mithör-** listening key. **Mutter-** nut wrench. **Nach-** master key, pass k. **Sprech-** speaking key. **Strom-** key switch, make and break. **Überwachungs-** monitoring key. **Verwürfelungs-** jumble code. **Schlüssel-bolzen** clutch key. **-gruppen** (Q) code groups. **Schlüsselung** coding, cryptography. **Schluss-fehler**, **Erd-** ground fault. **-gebühr** final fee. **-kondensator** terminating condenser or capacitor, short-circuiting c. **-löschvorrichtung**, **Erd-** ground fault neutralizer. **-prüfer**, **Strom-** con-

tinuity tester. **-prüfer**, **Windungs-** (inter-) turn short-circuit tester, continuity t. **Schmal-film** substandard film, narrow f. **-kante** narrow edge, n. side. **Schmelz** enamel, glaze; fusion, melting bath, melt. **schmelzbar** fusible, meltable, non-refractory. **-**, **schwer-** difficultly meltable. **Schmelze** melting, fusion; smelting, smeltery; fused mass, melt; melting heat, blow run; fluid solution (metallography); batch (of glass). **Schmelz-fluss** fused mass, melt. **-führung** smelting practice or schedule, conduct of heat, run. **-glasur** enamel. **-kirsche** igniting pellet. **-mittel** flux. **-schweißung**, **Gas-** gas torch autogenous welding. **Schmelzung** heat (run). **Durch-** burnout (causing open circuit), blowout (of fuse). **Über-** superfusion, enameling. **Schmelzungslinie** fusion curve. **Schmerz-grenze**, **-schwelle** threshold of feeling (of ear). **schmiedbar** malleable, forgeable, capable of being wrought. **Schmiede**, **Gesenk-** drop forge. **schiemegsam** flexible, pliant. **Schmiegeungsebene** osculating plane. **Schmier-loch** oil hole, oil run. **-nute** oil groove, oilway. **Schminke** make-up. **Schmoren** scorching, freezing or melting together (of contacts); mike stew, frying (in radio). **Schmutzgeräusch** dirt noise. **schmutzig** dirty, soiled, contaminated, unrefined, polluted, filthy, smutty. **Schnabel** bill, beak, nozzle, nose. **Schnapp-schalter** tumbler switch, quick-action s., snap s. **-schuss** snapshot. **-stativ** self-locking tripod. **Schnarre**, **Prüf-** test buzzer. **Schnarrwecker** buzzer (alarm). **Schnauze** snout, mouth, nose, nozzle,

spout. **Ausguss-** pouring lip, p. nozzle, p. mouth.

Schnecke worm, endless screw, volute, spire. **Eintrag-** feed worm. **Rück-führ-** return screw conveyor, r. worm.

Schneckenfeder coil spring, coiled s.

schnellenförmig spiral, helical, worm-shaped.

Schnecken-gangfassung helical lens mount. -gewinde helix. -rad worm wheel.

Schneidbrenner cutting torch.

Schneide knife edge, edge (of a blade). -haltigkeit ability to preserve keenness, cutting power or edge.

Schneiden,Film- editing of film.

Gewinde- thread cutting, tapping.

-ankerrelais knife-edge relay.

-aufhängung knife-edge suspension.

-lagerung knife-edge suspension or supporting.

Schneider,Rollglas- wheel-type glass cutter, g. cutting w.

Schneide-stichel cutter, cutting stylus, c. tool, engraver, cutting head (phon. record). -ton edge tone, flue stop (of f. pipe).

Schneid-narbe cutting scar, burry condition. -winkel cutting angle (known as dig-in or drag a., when other than 90 degrees) (in record making).

Schneise radio beacon course, equi-signal track, sector or corridor.

Anflug-, Einflug- approach track, a. sector, a. corridor.

Schnell-anlauf high-speed start, rapid starting, high acceleration.

-binder quick-setting cement.

Schnelle quickness, velocity, speed, fastness, celerity, swiftness.

Schall- volume current (ac.).

-empfänger, **Schall-** velocity microphone.

schnellflüssig easily fusible, readily melttable.

Schnell-kopie quick print, hurry p. -kraft elasticity. -methode rapid

or high-speed method, quick procedure. -photographie instantaneous photograph, snapshot.

-relais high-speed relay.

-schalter, **Zeit-** high-speed circuit breaker. -verfahren (film) high-speed film processing.

schnelltrocknend quick-drying, siccative.

Schnitt cut, cutting, incision, section, slice; cutting and editing (m.p.)

Schnitt,Frequenz- crossover frequency (in woofer-tweeter combination at which equal power is delivered to both ldspks.) **Haupt-, erster(l.)** primary plane, tangential p., meridional p. (opt.) **Haupt-, zweiter** (l.l.) secondary plane, sagittal p. (opt.) **Kegel-** conic section.

Kristall - see **Kristallschnitt**.

Strahlen- jet contraction, contractio venae.

Schnittbild-entfernungsmesser split-field range-finder. -versetzung, Ausschalten der halving adjustment (of coincidence range-finder).

Schnitt-brenner slit burner, batwing b. -fänger section lifter (micr.)

-fläche sectional plane, section; surface of a cut or section.

schnittig,wind- streamlined.

Schnitt-kopie editorially cut print, edited p. -punkt crossover (beam), point of intersection. -schaube grub or headless screw. -weite distance between back lens and image, intercept length, -weite, konjugierte conjugate intercept, c. distance. -zeichnung cross-sectional drawing, illustration, view, picture or figure (Fig.)

schnitzeln, schnitzen cut, carve, chip, whittle.

Schnitzer knife, whittle, paring tool.

Schnorchel (cf Luftmast) air intake, breathing mast, air funnel, a. mast (on modern undersea craft, for submerged Diesel operation).

Schnur string, cord, chord, line,

- twine, tape, band. -rolle grooved roller, pulley.
- Schnürspur** squeeze track, matted t. (sound film). -blende mask to make squeeze track.
- Schnürung, Ein-** squeezing (film), compression, bindup, constriction.
- Schoopieren** spraying with Schoop gun. **Schoop'sche Spritzmethode** Schoop spray (gun) method, aerograph m.
- schöpfen** draw (liquid, etc.), scoop, dip; create.
- Schornsteinwirkung** stack effect, chimney e.
- Schott** bulkhead, partition, separation.
- Schottky Effekt** Schottky effect, shot e., autoelectronic e.
- Schottky'sche Gerade** Schottky line.
- schräffieren** shade, hatch, line.
- schräg** oblique, sloping, slanting, inclined, beveled, chamfered, skew, askance, canted.
- Schräge** slope, slant, bevel, obliquity, diagonal, cant.
- Schräglage, Kraftlinien-** slope of flux lines.
- schrägstellbar** inclinable, tiltable.
- Schräg-stellen** tilting (of electrode in a magnetron). -strahlen skew rays.
- Schramme** optical scratch, shadow s. (film); slash, scar.
- Schrammenrauschen** scratch noise.
- Schanke, Licht-** light barrier. Potential- potential barrier.
- schränken** cross, put across; set (a saw).
- Schraubdeckel** screw cover, s. cap, s. lid.
- Schraube, Achter-** octet ring. **Einstell-** set screw, adjusting s., leveling s. **Feinstell-** micrometer screw, vernier. **Flügel-** thumb screw, wing nut. **Klemm-** clamp screw, binding post, terminal. **Knebelgriff-** tommy screw. **Lappen-** thumb screw. **Links-** left-handed screw. **Luft-, versetzbare** aircrow or propeller of variable pitch (feathered). **Maden-** headless screw, grub s. **Mutter-** bolt and nut.
- Rechts-** right-handed screw (thread). **Regulier-** adjusting screw, set s. **Schnitt-** headless screw, grub s. **Senk-** countersunk screw. **Spann-** turnbuckle screw, (magnetic) chuck (in machine tool). **Spiegel-** mirror screw (scanner). **Stell-** set screw, adjusting s. **Stift-** tap bolt.
- Schrauben-bohrer** screw tap, auger, twist drill. -feder coil spring, helical s. -kopf, versenkter countersunk screwhead. -lehre micrometric calipers. -linie helix, helical line. -nut helical groove, h. slot, worm. -quetschhahn screw pinchcock. -zahngetriebe helical gear, spiral g., worm.
- Schraub-lehre** micrometer, micrometric gage. -lehre, Uhr- dial micrometer. -sockel screw base (of lamp). -stöpsel screw plug.
- Schrecksekunde** time elapsing between shock on molecular system and reaction.
- Schreibempfang** visual reception, recorder r.
- schreiben** write, record (graphically), type, delineate, trace, reproduce (an image or picture).
- schreibende Stimmgabel** tuning-fork chronoscope.
- Schreiber, Bild-** picture reproducer, p. delineator, p. recreator, p. receiver, video-signal receiver, televisior, viewing tube. **Einpunkt-** single-point recorder. **Farbinker**, printer. **Fern-** teletype, teletypewriter, telegraph printer; t. operator. **Heber-** syphon recorder. **Hell-** Hell type recorder. **Kurven-** oscillograph, oscilloscope (when no graphic record is made), curve tracer. **Mehrpunkt-** multi-point recorder. **Pegel-** level recorder. **Relief-** embosser. **Schall-** sound recording stylus. **Tintenstrahl-** ink vapor jet recorder (in picture telegraphy).
- Schreib-feder** stylus, recording pen,

style. -fenler clerical error, typographic e. -fläche record sheet or surface. -instrument graphic instrument, recording i. -kopf recorder head. -röhren pen, syphon (of a recorder). -röhre, Bild-picture receiver tube, viewing t., electronic reproducing device. -stift cutter, stylus, cutting tool, engraving t. -thermometer thermograph, recording thermometer.

Schreien, Über- overmodulation.

Schreiner, Modell- wood pattern maker.

Schrift, Amplituden- variable-area or variable-width recording or track.

Beschwerde- plaint, appeal papers.

Dichte- variable-density recording or track. **Gegentakt-** push-pull track or record. **Nach-** picture re-creation; postscript. **Normal-** standard track. **Quer-, Seiten-** lateral track, Berliner t., horizontal cut (gramophone). **Sprossen-** variable-density record or track.

Tiefen- hill-and-dale (Edison) track or recording, vertical sound groove. **Tonfolge-** sound track or record (on film, disk, etc.)

Verteidigungs- defense, plea.

Vieldoppelzacken- multiple double-edged variable-width track.

Vielzacken- multilateral sound track. **Zacken-** variable-area track, v.-width t. **Zweizacken-** bilateral track.

Schrift-boden recording base.

-material literature references (e.g., of prior art), bibliography, documentation; file wrapper (of patent case), records. -metall type metal. -mutter type mold, matrix. -satz written pleadings, memorial, brief. -stück bill, brief, papers, document. -tum literature (sources), bibliography, documentation, source material, references (from magazines, patents, etc.) -tumverzeichnis bibliographic list.

Schritt, Erfindungs- object of invention, step of i. **Hebe-, Höhen-**

vertical step (in automatic telephony). **Wählerhebe-** vertical stepping of selector.

Schrittschaltwähler step-by-step selector.

schriftenkürzte Wicklung short-pitch winding.

Schrittweite interval (between spectral lines).

Schrödinger-de Broglie Materiewelle de Broglie elementary particle (electron, proton), electron wave, phase w.

schroten granulate, bruise, rough-grind, crush coarsely.

Schrott-effekt (small) shot effect, Schottky e., auto-electronic e.

-geräusch shot noise (due to Schottky effect).

schrumpfen shrink, contract, shrivel. **Schrumpf-mass** amount of shrinkage or contraction. -spannung contraction or shrinkage strain or tension.

Schrumpfungsausgleich shrinkage compensation.

Schub shove, push, thrust, throw, shear. -kurbel crank. -lehre sliding gage or calipers.

-spannung shear stress. -stange thrust rod, push(er) r. -vektor thrust vector. -weg finite distance.

Schuh, Gleit- pressure pad, p. guide. **Kabel-** cable eye, c. socket, connector lug, sweated thimble.

Schuhmacherwachs cobbler's wax.

Schuldigerklärung verdict of guilty, conviction.

Schuppe scale, flake.

schuppig, fein- fine-scaled.

Schurre chute.

Schüttel-herd bumping table.

-mikrophon granule microphone.

schütteln shake, agitate, churn, toss.

Schüttelresonanz vibration resonance.

Schüttwinkel angle of repose, (sometimes) angle of friction.

Schutz screen, shield, protection, guard, preserving or conserving

- means, safeguard.
- Schütz** relay, contactor.
- Schutz**, **Berührungs-** protection against electric shock hazard. **Schall-** sound proofing, s. insulation.
- Übersteuerungs-** overload limiter.
- Schutz-einrichtung**, **Fehl-** fault-clearing device. -funkenstrecke spill gap. -gerät, **Knall-** crack silencer, pistol shot s., noise killer.
- gitter shield (in shield-grid thyratron). -gitterröhre screen-grid tube, shield-g.t.; shielded plate t. -hülle protective cover, p. coat, p. sheath. -kappe, **Licht-** light hood. -korb arcing ring, guard r. (of insulator). -marke trade-mark. -masse resist (used in printing, etc.) -mittel, **Licht-hof-** anti-halation means or substance. -netz, **Anoden-** screen grid, plate shield. -rechte patent rights, trade-mark r., etc. (granted by or registered in Patent Office). -wulst, **Sprüh-** anti-corona collar or tore, guard-ring.
- schwach, rauch-** smokeless (of powder).
- schwach ausgesteuerter Tonstreifen** low-modulation track.
- schwächen** weaken, enfeeble, impair, attenuate, dilute, dim, absorb (light), mute (sound).
- Schwächer, Fünfstufen-** five-step weakener (phot.) **Stufen-** step-type weakener (spectr., phot.)
- schwachsichtig** weak-sighted, amblyopic.
- Schwächung, Licht-** light absorption, l. dimming, l. drop, l. loss, cutting down or reduction of l. intensity, l. diffusion.
- Schwächungs-glied** attenuator. -periode fading period. -widerstand gain controller, g. regulator, potentiometer.
- Schwanenhals** goose neck.
- schwanken** fluctuate, oscillate, vary, shake, rock, sway or swing (of an antenna).
- Schwankung, Frequenz-** frequency flutter, f. drift, lilt (when slow); swing or deviation of f. (above and below assigned resting or center f., in f-m). **Lautstärke-** fading, fade out, volume or intensity fluctuation. **Regel-** hunting (in making adjustments or in regulating). **Ton-** pulsation of reproduced sound intensity, flutter (known as wowows when up to 6 cycles per second, as flutter when 6-30, as gargles when 30-200, and as whiskers when over 200 cps.). **Volumen-** volume flutter.
- Schwankungs-frequenz** (cf **Ton-schwankung**) frequency of flutter.
- messung, **Ton-** flutter measuring instrument. -schwächer, **Frequenz-** discriminator (converts frequency drift into d.c. potential).
- theorem fluctuation theorem.
- Schwanz, Blind-** arrangement making resistance alternately zero and infinite, in dipole feeders; stub.
- Film-** trailer or run-out (piece of blank film attached to film end).
- Wellen-** wave tail (in facsimile).
- Schwanzbanden** tail bands (in afterglow).
- schwanzloses Flugzeug** tailless airplane.
- Schwanzstück, Kurven-** toe region of film characteristic (or of gamma curve of emulsion).
- Schwärme, Molekül-** swarms of molecules.
- schwarz(e)** **Temperatur** black-body temperatur, cavity t.
- Schwarz-druck** black printing, p. in b. -pegel black level. -sender unlicensed transmitter, illicit t., "underground" t. station.
- strahl black (-body) radiation, cavity r., Planckian r. -temperatur black-body temperature, cavity t.
- Schwärzung** blackening, density.
- Kopier-** printing density. **Ruhe-** unmodulated density, no-sound d. (in variable-density recording).
- Schleier-** fog density.
- Schwärzungs-abstufung** density graduation. -bereich density range (γ) (say, from .3 to 3.0). -dichte density (of film). -einheit unit

of (film) density. -hof halo.
 -kurve characteristic film curve, H & D (Hurter & Driffield) curve.
 -messer densitometer. -messer, Kreiskeil- circular wedge densitometer. -umfang density scale, range or latitude of d. variations. -verfahren variable-density method.
Schwarzweissbildsendung black and white facsimile picture or phototelegraphic transmission.
Schwarzwert black level value (telev.)
Schwebefähigkeit buoyancy, floating power, suspension p.
schwebende Stimme voix céleste.
Schwebestoff,-teilchen suspended particles, s. substance, s. matter.
Schwebung beat, interference action (opt., ac.) Helligkeits-flutter of brightness.
Schwebungs-amplitude surging amplitude, beat a. -empfang beat reception, heterodyne r. -frequenz, Null- zero beat frequency. -null zero beat. -periode beat cycle. -summer audio oscillator, beat-frequency o. -ton beat note.
schweifen curve, chamfer, tail.
Schweige-trichter cone of silence (marker). -zone skip distance, shadow region.
Schweiss,Glas- glass gall.
Schweiss-backe welding die. -blase arc crater. -druck welding upset.
 -düse welding tip. -eisen weld iron.
schweissen,stumpf- jump weld, butt-w. -, übereinander-, überlappt- lap-weld, scarf-w.
Schweiss-fuge welding seam, w. line, w. joint, shut. -hitze welding heat. -löcher pores (of wood). -naht shut, weld, weld seam. -raupe, breite spread bead.
 -rissigkeit "chinking" or fissuration due to welding. -stelle welded or welding area, shut.

-tropfen welding dribble, w. beads.
 -umformer welding converter.
 -umspanner welding transformer.
Schweißung,Kehlnaht- fillet welding.
 Naht- seam welding. Punkt- spot welding.
Schwelle,Empfindlichkeits-(Schall) threshold of audibility or acoustic perception. Potential-potential barrier, p. threshold.
Potenz- (Kerndurchdringung) nuclear penetration function.
Schmerz- threshold of feeling.
Sichtbarkeits- threshold of vision or visibility.
Schwellen-frequenz threshold frequency, critical f., photo-electric threshold. -reiz threshold or liminal (stimulation) value. -stärke, Schall- threshold sound intensity (of audibility or of feeling). -wert, Farb- liminal value or threshold of intensity of a color. -wert der Platte exposure factor of plate (phot.).
Schweller,Roll- crescendo pedal (of organ).
schwellig liminal, concerning threshold. unter- subliminal.
Schwell-kasten swell box. -pedal swell pedal (organ). -werk swell organ.
Schwelung low-temperature carbonization, slow burning, smoldering.
Dampf- destructive distillation with steam.
Schwemm-stein porous brick (from clay and gravel). -verfahren flotation method.
schwenken swing, turn around, pivot, fulcrum, swivel, rotate, revolve, slew, tilt (telev. camera).
Schwenkungswinkel angle of traverse (gunnery).
Schwerbetrieb heavy-duty operation or service.
schwerdurchlässig difficultly permeable, of low permeability or transmittance, highly opaque.
Schwere heaviness, weight, gravity. -feld gravitational field. -messer

barometer, gradiometer (measures gradient of earth gravity field).
-pendel gravity pendulum.

Schwererde heavy earth, baryta.

schwer(es)Elektron heavy electron, barytron, dynatron, mesotron, penetrone, x particle. -(er)

Wasserstoff deuterium (with mass of 2), tritium (with mass of 3).

schwerflüchtig difficultly volatile, d. volatilizable.

Schwermetallaktivator heavy-metal activator or phosphorogen (in phosphors).

Schwerpunkt mass center, c. of gravity. Leucht- luminous "center of gravity," photometric c., p. centroid.

Schwerpunktsystem center of gravity system, c. of mass system.

schwerschmelzbar difficultly fusible, refractory.

Schwimmen lateral flicker (in over-speedy panorama work).

Schwimmer float, pontoon, swimmer.

Schwimm-kraft buoyancy. -methode flotation method. -regel, Ampère's Ampere's right-hand rule. -spannung blurring potential, p. causing sway of picture; floating, spurious or stray p.

schwinden shrink, contract, fade.

Schwing-amplitude der Membran amplitude of diaphragm excursion. -anker oscillating armature. -audion oscillating detector, audiodyne, endodyne. -audionwellenmesser audiodyne wave-meter or frequency m.

Schwinge link.

schwingen vibrate, oscillate, swing, rock, pivot, reciprocate (to and fro), surge (back and forth).

Schwingen, plötzliches spilling over (of an amplifier), sudden undesired oscillating (attended with fringe howl), triggering of a tube.

schwingen,durch-(cf Ballaströhre) swing through (operating condition in which wave is not interrupted or cut off). mit-

co-vibrate, oscillate in resonance, sympathy or unison, experience sympathetic vibration.

schwingender Draht swinging of filament (in magnetron).

Schwingentladung oscillatory discharge, oscillating d.

Schwinger oscillator, vibrator.

-, offener open oscillator.

Frei- free radiator (loudspeaker).

Kipp- time-base oscillator.

Sperr- blocking oscillator.

schwingfähig oscillatory, vibratory, oscillable, vibrant, vibratile.

Schwing-feder vibrator(y) spring, reed (of a chopper). -kennlinie oscillating characteristic, c. of an oscillatory system, resonance characteristic. -kontaktgleichrichter vibrating-reed rectifier. -kristall crystal oscillator. -löcher dead spots (trouble in direct-coupled antenna). -relais trigger relay.

Schwingröhre, fremderregte master-excited oscillator valve (connected in an independent drive circuit).

-, selbsterregte self-excited or self-oscillatory valve (connected in direct drive circuit). Kraft-power oscillator.

Schwing-spiegel oscillatory mirror, vibrating m. -spiegelabtaster vibrating mirror scanner (of Mihaly's Telehor). -spule moving coil, signal-current c., voice c., speech c. (of loudsp.)

Schwingung vibration, oscillation, undulation, swing, wave, high-frequency a.c., "oscar" (m.p. studio slang). -durch Nebenkoplung stray or spurious oscillation. -, erzwungene forced oscillation, constrained o. -, freie free oscillation. -, gedämpfte damped oscillation, decadent o.

-, ungedämpfte undamped oscillation, persistent o., sustained o.

-, zusammengesetzte complex (harmonic) wave.

Schwingung,Biegungs- flexural

vibration, lateral v. Bild-video or picture impulse or signal. Dicken- thickness vibration (cryst.) Drehfeld- rotating-field oscillation. Drehungs-, Drillungs- torsional vibration. Gitter- lattice vibration (cryst.) Grund- fundamental wave, first-harmonic w. Intermittenz- relaxation, sawtooth or ratchet wave or oscillation, time-base o. Ionen-ionic oscillations, fringing effect, waving in the breeze (across image). Kipp- see Intermittenzschwingung, Längs- longitudinal vibration or oscillation. Laufzeit- electron oscillation (of magnetron). Magnetron- magnetron oscillation (of three kinds: electronic, negative-resistance and rotating-field oscillations). Mit- resonant vibration, sympathetic v., co-vibration (acting in unison). Nebenkopplungs- spurious oscillation. Quer- transverse vibration, shear v. Resonanz- resonant vibration, sympathetic v., co-vibration (acting in unison). Relaxations- sawtooth, relaxation or ratchet oscillation.

Scher- shear vibration. Übertragungs- signal oscillation, s. wave. Umfangs- circumferential oscillation or vibration. Unter- subharmonic oscillation, sub-frequency o. Unterbrechungs-, Unterdrückungs- quench oscillation (in super-regeneration). Wärme- heat vibration. Zwangs- forced oscillation, f. vibration.

Schwingungs-abreissen quenching, suppression or discontinuance of oscillations. -abschnitt "bit" of vibration (in sound recording investigation). -amplitude, Membran- excursion amplitude of diaphragm. -anfachung wave generation, wave excitation. -aufzeichner vibrograph (to record mechanical vibrations). -ausschlag(einer Saite) deflection, excursion or

swing (of a chord). -band, Rotations- rotation vibration band. -bauch loop or anti-node of an oscillation or vibration, internode. -bogen amplitude of oscillation. -dämpfung vibration or shock absorption, damping (out) of oscillations or vibrations. -dauer, Kipp- relaxation period. -einsatz, harter hard start of oscillations. -einsatz, weicher gentle or smooth start of oscillations.

schwingungserzeugende Kraft vibromotive force.

Schwingungserzeuger, selbstsperrender self-blocking oscillator. -, Vielfach- multivibrator.

Schwingungserzeugung, selbständige self-oscillation, spontaneous or undesired oscillating, spilling over (attended with fringe howl and whistling in amplifier).

schwingungsfähig oscillable, vibratile, oscillatory, vibratory.

Schwingungs-festigkeit vibration strength. -form mode of vibration, form of v.

schwingungsfrei, eigen- aperiodic, deadbeat.

Schwingungs-knoten oscillation or vibration node or nodal point.

-kreis oscillatory circuit, oscillation c., tuned c., tank c.

-neigung tendency towards, or on the verge of, oscillating or spilling over (with fringe howl and whistle). -schleife loop, antinode or internode of stationary wave or oscillation.

-spektrum vibrational spectrum.

-transformator(Tesla) Tesla coil, T. transformer, oscillation transformer. -versuch, preh- oscillation torsion test. -weite

amplitude of oscillation or vibration. -zahl, Umlauf- rotation frequency. -zeit time of vibration.

Schwund, Nah- fading or radio fade-out 60-100 miles around transmitter.

Phasen- phase fading. Pseudo- fading due to swinging or swaying of antenna.

Schwund-ausgleich volume control, fading compensation. -automatik automatic volume control means (avc). -regelspannung (automatic) volume control potential, avc p. -verminderungsantenne anti-fading antenna.

Schwung vibration, oscillation, swing. -bahn sound take-off drum (m.p.) -gewicht pendulum. -hebel balance beam, rocker, rocking lever. -kraft centrifugal force, vibratory power, vibrating p. -maschine centrifugal whirler. -masse, Öl-rotary stabilizer (in film feed). -massenrolle rotary stabilizer, roller with fly-wheel effect (film feed), impedance wheel. -moment moment of rotation, moment of inertia; fly-wheel action. -rad fly-wheel, balance w. -radkreis parallel resonance circuit, fly-wheel c. -scheibe, Ausgleich- rotary stabilizer, roller with fly-wheel action (film feed), impedance wheel.

S.E. (Siemens-Einheit) Siemens (resistance) unit.

S.E. Faktor secondary-emission factor.

sechs-eckig hexagonal. -fach sixfold, sextuple.

Sechs-flach, -flächner hexagon, hexahedron. -polröhre hexode.

sechsseitig six-sided, hexagonal.

Sechstelkreis sextant.

sechs-wertig hexavalent, sexivalent. -winklig six-angled, hexangular, hexagonal.

seegrün marine green.

Seelicht marine phosphorescence.

Segerkegel Seger cone (for temperature determination), fusion c.

Segment, Wöhler- bank of stationary contacts.

segmentförmig segmental.

Sehen, einäugiges monocular vision, non-stereoscopic v. (eye, opt.). -, zweiäugiges binocular vision, stereoscopic v. **Farben-** color perception, c. vision, **Netzhautzenter-** foveal vision.

Seher, Gegen- two-way television or video apparatus (as in video telephone).

Seh-feldblende field diaphragm, f. stop. -funktion visual function.

-kegel angle of vision, cone of v. or view. -lehre optics.

-linie line of sight, l. of vision, l. of collimation.

Sehne chord (geometry); fiber (metal), fillet.

Seh-nerv optic nerve. -nervenapparat organ of vision. -purpur visual purple, rhodopsin. -reiz optical stimulus, visual s. or excitation.

-schärfe visual acuity, sharpness of vision, resolving power (of eye). -schärfegrenzwinkel angular resolving power, critical angle of visual acuity. -schärfeneinteilung focusing scale. -schwäche, vorgetäuschte simulated amblyopia. -tiefe depth of focus, depth of field. -vermögen resolving power (of eye), visual faculty, power of sight, p. of vision. -weite distance of vision, visual range; distance between scale and mirror (times 2 in telescopic measurements). -winkel visual angle.

Seiden-faden silk fiber, s. thread -papier tissue paper.

Seifen-bildung formation of soap, saponification. -lamelle plane soap film or membrane. -leim soap glue, s. paste, size (paper). seichern liqueate.

Seignettesalzkristall Rochelle salt crystal.

Seiher strainer, filter. Einstekk-plug-in inlet strainer.

Seil rope, cable, chord, line.

Abspann- guy rope, span r.

Seilrolle pulley, sheave.

Seite, Emulsions- face bearing emulsion, coated side (of film).

Seiten-abrutschanzeiger side slip indicator. -abweichung lateral deviation. -ansatz side tube, lateral arm, l. appendage.

-ansicht lateral elevation, l. view, side e. -arm side tube,

lateral arm, l. appendage (of a vessel); side branch. -aufriss lateral elevation, side e.
 -bandübertragung, Ein- single-side-band transmission. --Zwei- double-side-band transmission.
 -bandunterdrückung side-band suppression. -bestimmung sense-finding or sensing (determination of absolute direction or sense of direction); determination of side towards which airplane is off course. -eck lateral summit. -elektroden end electrodes, wing e. (of a magnetron). -fehler lateral deviation. -fläche lateral face, flat side, facet. -frequenz side frequency (one of sum or difference frequencies).
 -führung (von Film) lateral guidance, side guiding (of film strip in gate). -gleitflug side-slip (of airplane). -kante lateral edge. -navigation, -ortung directional navigation, d. avigation. -riss lateral elevation, side e. -schalter, Peilungs- sense-finding switch, d.f. sense s. -schrift lateral track, horizontal t. or recording, Berliner track (of gramophone). -strahlungen secondary radiations, lateral r., stray or spurious lobes (of space pattern).
 -veränderungen turns and banks (avigation). -verhältnis, Bild-picture aspect ratio. -wind wind on the beam, side or cross w., w. blowing across course.
 -windabdrift, Kurs mit Vor- haltewinkel bei course heading into wind, crabbing (due to drift).
 ...seitig -sided, lateral,... angular.
 seitlich lateral. -(es) Abrutschen side-slip (of airplane).
 -(e) Führung lateral guidance.
 -(em) Minimum, Antenne mit directive antenna. -(e)sphärische Abweichung transverse spherical aberration.

Sektor, Anflug-, Einflug- sector of approach, a. sector, a. track, corridor of a. Raum- solid sector.
 Sektoren-membrane sectorial cone (loudspeaker). -scheibe spinning disk (in flicker test). Ver- schluss sector shutter.
 Sektormembran (non-rigid) sector diaphragm or cone.
Sekundär-emissionsfaktor (SE)
 secondary-emission factor.
 -emissionsvervielfacher electron multiplier tube, e.m. phototube (with plurality of secondary-emission reflecting electrodes, known as dynodes in the e.m. photot.) -struktur secondary structure gridwork (cryst).
 Sekunde, Sonnenzeit- solar second.
 Sekundemeterkerze meter-candle-second.
 Sekundenuhr time piece with seconds hand.
 selbstabgleichend self-balancing.
 selbständige Entladung spontaneous discharge, self-sustained d., unassisted d. -Funktion self-consistent function. -mitgenommene Kippschwingmethode self-running controlled time-base method.
 selbstangetrieben self-propelled.
 Selbstanschluss-System automatic telephone system.
 selbstanzeigender Peiler automatic or direct-reading direction-finder.
 Selbstauslösung automatic release, a. tripping action.
 selbstdichtend self-sealing, s. tightening, s. packing.
 Selbst-einstellung self-adjustment, s. setting. -energie self-energy (of electron). -entzündung spontaneous combustion, self-ignition.
 -erhitzung self-heating, spontaneous h.
 selbsterregender Sender self-oscillatory transmitter.
 selbsterregt(e) Schwingröhre self-excited oscillator tube.
 -(er) Trägerwelle, Superhetempfänger mit homodyne receiver apparatus.

Selbsterregung self-oscillation, self-sustained o.; spontaneous (undesired) o., spilling over (with attendant fringe howl) of regenerative receiver.

Selbst-farbe self-color, solid c. -gang automatic feed, a. operation, a. action.

selbstfarbig entirely of the same tint, self-colored.

selbst-gehendes Erz self-fluxing ore. -gleichrichtendes Röhrenvoltmeter. self-rectifying tube voltmeter.

Selbst-kapazität self-capacitance, distributed c. of a circuit (due to proximity effects). -konzentration self-focusing, gas. f. -laut vowel. -lautdeutlichkeit vowel articulation.

selbstleuchtender Lichtmodulator light modulator of the glow-tube, neon lamp, sodium l. type, light relay with inherent light.

Selbst-leuchter self-luminous substance, fluorescent s., phosphor. -leuchtverfahren self-luminous or s. -emissive method (using electrons arising on object, in electron microscope). -lötung autogenous soldering.

selbst-rechnender Komparator computing recording comparator. -registrierend self-recording, automatic r. -schirmende Spule self-shielded coil, astatic c. -schwingende Mischröhre self-heterodyning mixer tube, autodyne.

Selbstschwingungsvorrichtung thermionic trigger device.

selbst-sperrender Schwingungserzeuger self-blocking oscillator. -ständige Entladung spontaneous discharge, self-sustained d., unassisted d. -ständige Funktion self-consistent function.

-ständige mitgenommene Kipp-schwingmethode self-running controlled time-base method.

Selbststrahlungsverfahren (Elektronenmikroskop) self-emissive electron microscope or self-illuminating method (based

on electrons arising on surface of object).

Selbsttönen ringing or squealing (of a tube).

selbsttonendes Papier self-toning paper.

Selbst-überlagerung autodyne, self-heterodyne. -umkehrung self-reversal (of spectral lines).

-unterbrecher trembler, self-interrupter, buzzer. -zündere pyrophorus lighter, self-igniting l., automatic l.

Selektion, Amplituden- amplitude selection, a. filtering.

Selektivkreis selective circuit, selector c.

Selen-chlorid selenium chloride.

-cyanid selenocyanate. -halogen selenium halide.

selehaltig containing selenium, seleniferous.

Selen-kupfer copper selenide. -metall metallic selenide. -zelle selenium (photo-conductive type of) cell, photronic c.

Seltenheit rarity, scarcity, infrequency.

Sende-anlage, Richt- beam, beacon or radio range station. -bild outgoing subject copy. -kanal transmission channel, signaling c.

Sender, gepeilter tuned-in beacon (whence bearings are taken).

-modulationsgesteuerter transmitter with carrier being varied with AF amplitude; AF modulated transmitter.

-selbsterregender self-oscillatory transmitter. -, tönender musical-spark transmitter, singing-s.t.

Sender und Empfänger, kombinierter transceiver (radio); microtelephone, handset.

Sender, Ball- re-broadcast station, repeating s., station belonging to a network. Bild-video transmitter; facsimile t. Diapositiv-film transmitter. Einflug-boundary marker beacon. Einstrahl-beam transmitter, unidirectional t.

Fernseh- television transmitter (comprises strictly both the aural and video signal transmitting means).

Gemeinschafts- chain broadcast station, network s. **Haupt-** main oscillator (in independent drive system). **Hilfs-** auxiliary transmitter, local oscillator (in heterodyne apparatus). **Kontroll-** monitor transmitter, check-up t.; service test oscillator. **Leitfunk-, Leiststrahl-** radio beacon, beam station, r. range. **Markierungs-** marker beacon, marker. **Maschinen-** alternator transmitter. **Mutter-** key station, master s. (in chain broadcasting). **Prüf-** service test oscillator. **Quarz-** (piezoelectric) crystal or quartz stabilized transmitter. **Richtungs-** beam station, beacon s. **Schwarz-** unlicensed transmitter, illicit t., "underground" t. **Sperrkipp-** blocking oscillator. **Steuer-** master oscillator, drive o. (working on main transmitter in independent drive). **Stimmgabel-** tuning-fork oscillator, vibrating-reed transmitter. **Stör-** interfering station, jamming s.; shadowing signal, spurious irregular shading signal (telev.). **Telegraphie-, tonmodulierter** AF or tone-modulated telegraphic signal transmitter. **Telephonie-, sprachgeschalteter** voice-modulated telephony (signal) transmitter, v.-m. radiophone. **Tochter-** repeater or affiliated station (related to key station, in chain broadcasting and in b. networks). **Ton-** modulated c.w. transmitter; audio or aural transmitter (of sound part of a telev. program). **Tonfunken-** singing or musical (quenched) spark transmitter (telegraph), Zeichen- signal transmitter, s. station. **Zwischen-** re-transmitter, repeater station. **Sender-abstand** interference guard band, tolerance frequency. **-durchmodulierung, hohe** operation of transmitter station at a high modulation percentage. **sendereigner** Ton note or pitch

peculiar to a beacon station, code note; tuning n.

Senderöhre, frequenzgesteuerte frequency-stabilized transmitter tube.

Sendung transmission or emission (of radio waves or signals), program.

sengen singe, scorch, parch, flame.

Senke crevass, dip (of resonance curve), trough, valley, depression; negative source.

senken depress, lower, sag, slope, droop (of curve), de-accentuate (a band).

Senkkörper sinker, bob.

Senkrechte vertical, normal, perpendicular, plumb (line). **-fallen** let fall a perpendicular. **-errichten** erect a perpendicular. **Mittel-** median perpendicular.

senkrechte Beleuchtung scaffold lighting, overhead l., top l.

Senkspindel specific gravity spindle, hydrometer.

Senk-rechtstellung vertical position, perpendicular p., plumb line p. **-schraube** countersunk screw.

Senkungswinkel depression angle.

Senkung sag, droop, depression, dip.

Sensitometer sensitometer (for comparing and grading film), densitometer.

Separatabdruck reprint, separate impression, special i.

Sequenzillusion sequence illusion.

Serien-apparat series camera.

-entwicklung series expansion (math.)

serienmässige Herstellung quantity production, large-scale manufacture.

Serienresonanzkreis series-resonance circuit, acceptor c.

sicher, feuchtigkeits-damp-proof, moisture-p. **hochspannungs-** safe against high-voltage breakdown, possessing high puncture strength, proof against high-potential shock.

Sicherheit, Pfeifpunkt- singing margin, whistling m., stability m. (of radio tube). **Stand-** stability or steadiness (to shock or vibration).

Sicherheits-koeffizient safety factor.

- lampe safety lamp, s. light.
- sicherstellende Vorkehrungen preventive measures, precautions, preventative steps.
- Sicherung, Grob-** spark gap or similar arrester. **Lage-** locking in position. **Luftleerspannungs-** vacuum arrester.
- Sicht** visibility, sight.
- Sichtbarkeit, überschwellige** super-threshold visibility.
- Sichtbarkeits-messer** visibility meter (e.g., Lukiesh-Taylor).
- schwelle threshold of visibility, t. of vision.
- sichtbarmachen** render visible or visually perceptible, visualize, indicate visually or optically.
- Sicht-messer** visibility meter.
- peiller visual or direct-reading direction-finder.
 - weite direct-sight range or distance, line of sight, optical distance.
 - winkel angle of sight.
 - wirkung sifter effect, sorting, classification.
- zielflug visual homing flight, flight depending on visual indication or reading.
- Sicke** reinforcing seam, crease or pleat, r. fin (bent, pressed or otherwise fashioned in metal sheeting).
- Sieb** filter, network; sieve, screen, bolter, strainer. **Amplituden-** amplitude filter, a. discrimination selector.
- siebeneckig** heptagonal.
- Siebenelektrodenröhre** heptode.
- siebenwertig** heptavalent.
- Siegebilde** selective system, filter means, network.
- Siebkette** ladder-type filter, band-pass f. or transmission network.
- , mehrgliedrige multi-mesh filter, multi-section f.
 - von grosser Lochweite broad-band filter.
- Sieblochbreite**, **Frequenz-** transmission band, transmitted b., b.-width of filter, spacing between cut-off points.
- Siebschale** dish with perforated bottom.

- Siebsteilheit** sharpness of selective network.
- Siebung** screening, shielding; sifting, straining, filtering, sorting, bolting, classifying.
- Siebwiderstand** contact resistance (of barrier cell).
- Siede-erleichterer** boil adjuvant.
- kolben boiling flask.
 - kühlung, Kathode mit vapor-cooled cathode.
 - messer, Wasser- hydrometer.
- Sieke** reinforcing seam, pleat, crease or fin (bent, pressed or otherwise fashioned in metal sheet).
- Siemens-einheit (S.E.)** Siemens unit (of resistance).
- Signal, tönendes** tonal signal, musical spark s.
- Signal, Abschattierungsstör-** spurious signal, shading s. (in iconoscope operation, known also as "shading," "black spot," "tilt and bend," etc.)
- Bild-** video signal, picture s.
- Drehlicht-** revolving beacon.
- Entwarnungs-** all-clear signal.
- Fernseh-** video signal, television s.
- Freigabe-** clearance signal.
- Gleichlauf-** synchronizing signal, sync impulse; tripping s. **Haupt-** inner marker signal, main entrance s. (airport). **Kenn-** tuning note (characteristic audio signal or note for tuning). **Misch-** signal spectrum (comprising video and sync impulses). **Not-** distress signal, SOS s., mayday (radio telephone). **Nutz-** intelligence signal, s. conveying information. **Stör-** shadowing signal, shadow s., spurious s. (iconoscope operation); jamming signal, interference s. **Synchronisier-** synchronizing signal, sync impulse, tripping s.
- Vor-** caution signal, warning s., first or outer marker s. (airport).
- Warn-** alarm signal, caution s., alert, raid alarm.
- Signal-horn** bugle. **-lampe** signal lamp, telltale l. **-lampentafel** signal lamp or annunciator board or panel. **-mittel** signaling means, communication m. **-pfeife** siren, whistle. **-platte** signal plate (of

- iconoscope). -überdeckung
blanketing or swamping of signals.
-verlauf signal spectrum, s.
pattern. -wand wall of signals,
curtain of s.
- Silben-abschneidung** clipping,
obliteration or mutilation of
syllables (in signal art).
-frequenzgerät syllable vodas (of
Bell Co.) -umkehrung inversion
of syllables (in secret, garbled
or scrambled telephony). -ver-
ständlichkeit syllable articula-
tion, syllable intelligibility.
- Silber-belegung** silver coating, s.
plating, s. film, silvering.
-blech silver foil, (thin) sil-
ver plate. -glätte litharge.
-glimmer common mica, muscovite.
-halogen silver halide. -lot
silver solder. -papier silver
paper, silvered p.; tinfoil,
tinfoiled p.
- Sims** molding, shelf, cornice.
- Simultanleitung** earthed phantom.
- singende Bogenlampe** singing arc
lamp, Duddell arc.
- Singulette** singlets.
- sinken** sink, fall, decline, droop
(of a curve).
- Sinkstoff** deposited substance,
settled s., settling, sediment.
- Sinn, im bejahenden** in the affirmative (sense). **Ladungs-** nature
of charge, sign.
- sinnähnlich** substantially synonymous, in an analogous way or
sense.
- Sinn-bestimmung, Richtungs-** sense-
finding or sensing (determination
of sense of direction or
absolute direction). -bild
symbol, emblem.
- sinn-gemäße** Anwendung analogous,
rational, logical, corresponding
or equivalent application or use.
-getreu faithful (e.g., in trans-
lation).
- Sinnverständlichkeit** intelligibility.
- sinn-verwandt** synonymous. -voll
intelligent, clever, ingenious,
very suitable, logical. -widrig
absurd, senseless, contrary.
- to sense or reason, illogical.
Sinterkohle sintering coal, non-
caking c.
- sintern** sinter, form s., concrete,
frit, consolidate, vitrify (cer.)
- Sinter-quarz** siliceous sinter.
-schlacke clinker.
- Sinterung** sintering, fritting,
fusing, vitrification, baking,
caking, agglomeration, consoli-
dation.
- Sinus, hyperbolischer** hyperbolic
sine (sinh).
- sinusförmige Bewegung, rein-**
simple or plain harmonic motion,
sinusoidal m.
- Sinus-linie** sine curve. -schwingung
sinusoidal wave, sine w. -winkel
sine of angle.
- Sirene, Kondensator-** condenser
chopper or siren (produces pulsat-
ing current). **Licht-** light chop-
per, c. wheel. **Zahn-** tooth-wheel
synchronizer, tone-w.
- Sirutor** Westector, rectifier of the
copper or oxide type.
- Sitz** seat, fit, lodgment. **Press-**
press-fit, force fit, driving f.
- 'Schlichtgleit-' plain sliding fit.
- Treib- driving fit.
- Skala, reine** true scale (mus.).
Entfernungs- distance scale.
- Frequenz- frequency spectrum, f.
scale. Linear- slide-rule dial
(with straight scale).
- Skalen-intervall** scale division, s.
interval. -rohr scale tube (of a
spectroscope).
- Slip side slip (of airplane).
- smaragdgrün** Guignet's green.
- Smaragdspat** green feldspar, ama-
zonite.
- SMK (Sekunden/Meter/Kerze)** meter-
candle-second.
- Snellijs'ches Brechungsgesetz**
Snell's law of refraction.
- Socket** base or cap (of lamp or tube);
pedestal. **Röhren-** tube base,
valve b.
- socken** crystallize out, contract
(of metal).
- Soffittenlampe** overhead scoop,
scaffold light or lamp.

Sog, Hohl-	cavitation.	sorbierter Stoff	sorbed substance,
soggen	crystallize out, contract (of metal).	sortieren	sort, assort, size.
Sohle	sole, bottom, bed, floor, level, base.	Sortierung, Phasenaus-	phase focusing (in beam or drift tube such as Klystron).
solarisationsfreie Platte	anti- halation dry plate (phot.).	sossig	spotty, bleary (of a picture).
Sole	brine, salt water.	Sourdine	mute.
Solinglas	crown glass.	Spähne, Eisen-	iron turnings, borings, filings or chips.
Soll-kurs	charted course, pre- scribed c. -wert nominal, rated, prescribed, assigned, normal, face or theoretical value.	Spalt	crack, gap, split, rent, fis- sure, slit, interstice, aperture, lacuna.
Sonde	probe, search electrode, test prod, sound, sonde (radio).	Spalt, Aufzeichnungs-	recording slit, r. aperture. Stufen-
Abtast-	scanning aperture, hole of Farnsworth dissector tube.	step slit (phot.) Ton-	sound recording aper- ture or slit.
Hitzdraht-	hot wire anemometer.	Spalt-ausleuchtung	slit illumination.
Klauenprüf-	claw-type test prod or probe. Prüf-	-bild, optisches	optical slit image.
Wetterforschung	test prod, probe, search electrode. Radio-, für radio sounding, sonde or sondage devices (for weather recording).	-bildgerät	photographic soundhead.
Sondenbildfangröhre	Farnsworth type of pickup tube, F. dissector t. (with a scanning aperture).	-blende	slit, apertured stop.
Sonder-	special, separate, exclu- sive. -abdruck	-breite	width of slit (of spectro- scope, etc.), apertural width.
sondern	reprint, sepa- rate p.	-brüchigkeit	cleavage brittleness.
Sonne (Krieg)	separate, sever, segregate, sort (out).	-ebene	cleavage plane, c. face.
Sonne (Krieg)	sun, sun arc, Krieg lights. Gegen-	-effekt	aperture effect, apertural e.
Sonnen-ausbruch	parhelion, mock sun.	-fläche	cleavage face, c. plane.
-bahn	solar eruption.	-flächenzeichnung	cleavage plane or crystal marking.
-bestrahlung	ecliptic (apparent path of sun). -bestrahlung	spaltfreie Beleuchtung	apertureless or slitless illumination.
irradiation by solar rays, expo- sure to sunlight. -blende	sun shield, black screen. -ferne	Spalt-körper	cleavage substance, c. product. -öffnung
perihe- lion. -fleckperiode	aphelion. -fleckperiode	chink (in clarinet). -optik	microscopic aperture- imaging optical means or "optic".
period, s. cycle. -nähe	sunspot period, s. cycle. -nähe	-prozess	fission process. -rohr
perihe- lion. -schutz	perihe- lion. -schutz	collimator. -riss	cleavage crack, c. fissure. -streuung
solarimeter, actinometer (for solar flux density). -tätigkeit	sunshade. -strah- lungsmesser	slot leakage, s. stray. -ton	beam, jet t.
solar activity. -wärmemesser	solarimeter, pyro- heliosimeter, actinometer (for solar flux density). -zeitsekunde	Spaltung, Phasen-	beam splitting, split beam.
solarimeter, pyroheliosimeter. -zeitsekunde	solar second.	Spaltungs-kristall	cleavage crystal.
sorbierender Stoff	sorbent, sorp- tive.	-produkt	fission product, cleavage p.
		-untergrund	fission background.
		Span	chip, splinter; shaving, boring, turning (mostly used in plural form).
		spanabhebende	Bearbeitbarkeit free- cutting machinability. -Formgebung
			shaping or fashioning by machine tool, with incidental removal of chips.

Spange clasp, buckle, clip, stay-bolt.

spannbar tensile, extensible, ductile, capable of being tensed or tensioned.

spannen stretch, strain, set, wind, tense, tension, tighten, span, clutch, grip.

Spann-kraft tensional or elastic force, tension, load, extensibility, expandibility, elasticity. **-rolle** tension roller, spring-loaded idler (m.p.).

-schraube turnbuckle, turn screw; chuck (magnetic).

Spannung (cf Potential) potential, voltage, tension, pressure (in electricity); strained state or condition; strain (of molecules).

Spannung, abgeflachte flat-topped potential (wave). **anlaufen gegen eine-** buck against a potential.

an - liegender Draht negative wire. **elastische-** elastic strain.

magnetische- magnetic potential (line integral of field intensity).

mitlaufende- follower potential.

sägeförmige- sawtooth potential, ratchet p. **-verriegelnde-** cutoff biasing potential.

Spannung, Ablenk-, deflection potential, sweep p. **Abreiss-** stopping potential, cut-off p. **Anregungs-** exciting potential, stimulating p., pre-ionizing p., p. causing electron to be raised to a higher level out of its atomic bond.

Ausgleich- transient potential; compensating p. **Beschleunigungs-** gun potential, accelerator p.

Bild-, Untergehen der swamping of video or picture signal potential (in noise level). **Bildwellen-** video (signal) wave potential.

Bogenzünd- ignition potential, arc-striking p. **Brems-** negative anode potential (in electron-oscillation tube). **Brenn-** constant glow potential (is slightly lower than striking p.), normal running p. (of photo-glow tube, etc.)

Bruch- ultimate stress, breaking s. **Brumm-** hum potential, ripple p.

D- Dee voltage (of cyclotron).

Druckeigen- residual compressive stress. **Durchschlag-** breakdown, rupture, disruptive, puncture or flash-over potential (el. engg.).

Eigen- residual stress, inherent or internal tension or strain.

Einsatz-(cf Zündspg.) sparking-over or flash-over potential;

breakdown p. (in grid glow tube), starting p. **Empfangs-** signal potential, incoming p. **Feder-** spring tension, elasticity. **Film-**

film tension, f. pull. **Gipfel-** peak potential, crest p. **Glas-**

strain or internal tension of glass. **Gleich-, wellige** ripple potential, pulsating p. **Glimm-**

glow potential, breakdown p. (indicates incipient glow discharge in grid-glow tube); anode p. (at which glow discharge begins in photo-cell), stopping potential

(lies slightly below glow p. in photo-glow or grid-glow tube, and is the value to which p. must be dropped to stop glow discharge once it has started). **Grenzflächen-**

interfacial tension. **Haft-** adhesives stress. **Ionisierungs-** ionizing potential, ionization p., p. sufficient to detach electron from its atomic bond. **Kipp-, Rücklauf der**

flyback of sweep potential. **Kreis-** "circle" voltage. **Lösch-** stopping potential (at which glow discharge is stopped; s. p. is lower than glow p. in photo-cell and glow tube); extinction p., critical p. (at which t. goes out); cut-off p. (of thyratron). **Nutz-** useful potential, signal p. **Oberflächen-**

surface tension. **Peil-** directional signal potential (picked up by directional antenna; to be distinguished from auxiliary a.p.) **Regel-**

automatic volume-control (avc) potential; dynamic-range or contrast regulating p.; generally: control p. or regulator p. **Resonanz-** resonance potential, radiation p., p. resulting in transition of electron from

ground state to next orbit, with

incidental emission of resonance spectrum. **Richt-** output voltage of rectifier, d.c. v. of rectifier. **Ruhe-** bias or steady potential; no-signal p., repose or quiescent p., Q point p. **Sägezahn-** sawtooth potential, ratchet p. **Saug-** anode potential, driving p., positive (d.c.) p. (of photo-cell), saturation p. (if all electrons are drawn to anode). **Schalt-** variable bias potential (in silent tuning and automatic volume control). **Schrumpf-** contraction or shrinkage strain or tension. **Schub-** shear stress. **Schwimm-** floating, spurious or stray potential, blurring p., p. causing sway of picture, in telev. **Schwundregel-** automatic volume control (svc) potential. **Sperr-** cut-off potential, quench p., stopping p., biasing p. **Stoss-** impulse potential, shock p. **Streck-** yield stress. **Teil-** partial potential, componental p. **Tonwellen-** audio(signal) wave potential. **Trübungs-** potential causing quadrantal error (QE). **Über-** overvoltage, excess-voltage, overvolting. **Umlauf-** magnetomotive force (mmf) (being the line integral of magnetizing force). **Verkettungs-** interlinked voltage. **Versorgungs-** supply (source) potential, voltage s. **Verzögerungs-** delay voltage, delayed-action v. (in avc). **Vor-** biasing potential (impressed on a grid, magnet, etc.); pre-stress (of metals); inherent bias tension (of a spring) to restore, say, to normally tensed or tensioned condition; anode, drive or positive p. (of photo-cell); normal or initial tension (in materials). **Vor-, verriegelnde** cut-off biasing potential. **Vorglimm-** sustaining potential (in pre-glow range, slightly below critical discharge p.)

Wiederkehr- recovery voltage. **Zeichen-** signal potential. **Zünd-** firing potential, striking p. (of ignitron, thyratron, etc.); p. at which in glow-tube discharge changes from assisted to self-sustained form. **Zusatz-** booster potential, additional p. **spannungsführender Draht** live wire, charged w., hot w. **Spannungs-änderung** change of strain (in metal). **-aussteuerung**, Anodenplate voltage excursion. **-Dehnungsdiagramm** stress-strain diagram, stress-deformation d. **-differenz**, **Zündlösch-** striking-extinction potential difference. **-eisen** iron in voltage circuit (of a meter). **-entlastung** stress relief, anti-fatigue or anti-vibration means (in transmission lines). **-erhöher** voltage step-up means (e.g., transformer); booster. **-festigkeit** puncture strength, dielectric s. **spannungsfrei** Glühen strain relief anneal or thermal treatment. **-(es)** Glas strain-free glass. **Spannungs-glättung** smoothing device (filtering out ripples), potential stabilizer. **-knoten** voltage node, potential n. **-kreis** potential circuit (of a meter). **-kurve**, Herz- electro-cardiogram. **spannungslos** free from tension or strain, untensed; dead (absence of electrical potential). **Spannungs-messer**, Oberflächen- surface tensiometer. **-messer**, Röhrenvacuum tube voltmeter. **-modulation** velocity modulation. **-netz** space-charge grid. **spannungsoptisch** photo-elastic. **Spannungs-prüfer**, Oberflächen-, nach Abreissmethode adhesion-balance type of surface tensiometer. **-punkt** terminal, tap. **-reihe** contact potential series, electro-tromotive s., electro-chemical s. **-reihe**, Thermo- thermo-electric series. **-relais** undervoltage relay, low-v.r., no-v.r. **-resonanzkreis** series-resonance circuit, voltage

r.c. -rücklauf, Kipp- flyback of sweep potential, return of time-base p. to zero. -schutz, Berührungs- protection against electric shock hazard. -sicherheit breakdown strength, puncture proofness. -sicherung, Luftleer- vacuum arrester. -spitzenanzeiger crest-voltmeter, peak-voltage indicator. -spitzennivellierer voltage peak limiter. -sprung voltage step, v. leap, abrupt change of v., discontinuity. -spule voltage coil (in two-wattmeter method). -stoss impulse voltage, potential i. or pulse. -strom current flowing in potential circuit (of a meter). -teiler voltage or potential divider, potentiometer. -teiler, Glimm- glow-tube potentiometer, g.-t. voltage regulator. -tensor stress tensor. -verlust drop of potential. -wechsel stress alternation, s. variation, s. cycle. -zeiger voltmeter; voltage vector.

Spannvorrichtung jig, chuck, holding, gripping or clamping device.

Sparren rafter, spar (of airplane).

Sparschaltung (Nestel) circuit organization designed to economize plate current.

sparstoffarme Legierung alloy low in scarce or critical materials.

Spartransformator auto transformer.

Speckstein soapstone, steatite, talc.

Speichelkammer moisture chamber (of soldering iron).

Speicher accumulator, means to store up electrons (or energy in general). Stromstoss- impulse storer, digit storing register. Wärme- heat accumulator, regenerator.

Speicher-platte storage pickup.

-röhre signal or charge storing or storage tube (telev.) -röhre, Bild- signal or charge storage tube, normal iconoscope.

-wandlerröhre, Bild- super iconoscope. -wirkung signal storage, charge accumulation.

Speise-apparat feed apparatus. -hahn

feed cock. -leitung (aerial) feeder lead, downlead, energy- feeder cable or wire, transmission line. -rohr feed pipe, supply pipe or tube.

Speisung supply, s. source, feeding, excitation, energization.

spektral zerlegtes Licht spectroscopically dispersed or separated light.

spektralanalytisch spectroscopic, spectrometric.

Spektral-apparat spectroscopic apparatus, spectroscope. -bereich spectral range, s. region.

-darstellung representation by spectra. -linie spectral line, spectrum l. -linienfaltung "faltung" of spectral lines.

-photometer spectrophotometer.

-tafel spectral chart.

Spektrograph, Geschwindigkeits- velocity spectrograph, v. analyzer. Massen- mass spectrograph, m. spectrometer.

Vakuumgitter- vacuum grating spectrograph. Zweikristall- double-crystal spectrograph.

Spektroskop, Luftplatten- Fabry- Pérot interferometer, étalon (when not variable).

Spektrum, Elektronensprung- electron transition (or jump) spectrum.

Feinstruktur- fine structure spectrum, micro-s. s.

Flammen- flame spectrum.

Funk- see Wellenabgrenzung. Grosstruktur- macro-structure spectrum. Magnetrotations- magnetic rotation spectrum. Streifen- band spectrum.

Übersichts- general spectrum.

Wellen- (cf Wellenabgrenzung) spectrum of electromagnetic waves; radio wave s.

Sperr-bereich suppression band or range, attenuation b. exclusion b.

-blende blocking light stop, limiting s. -dämpfung stop band attenuation.

Sperre (cf Sperrer) wave trap, stopper, rejector; lock, seal, baffle. Band-

band rejection filter, elimination f., exclusion f. Rückkopplungs- reaction suppressor, feed-back s., "Vodas". Spiegel-frequenz- image-frequency stopper. Stör- noise gate.
 sperren shut, shut off, block, stop, bar, space (apart), guard (a position), stopper, exclude, preclude, lock, cut-off or choke (a tube).
 sperrend, selbst- self-locking, automatically l.
Sperrer (cf. Sperre) trap, suppressor, excluder; lock, block. Echo-echo killer, e. suppressor.
Sperr-feder click spring. -filter rejection filter, r. circuit, stopper c., suppressor f. -flüssigkeit sealing liquid.
 -gleichrichter barrier-film rectifier, blocking r., electronic r., metal r., cuprox r.
 -glied suppressor. -greifer pilot pin. -hahn stopcock.
 -haken pawl, latch, catch, trip, dog, click, detent, ratchet.
 -hebel pawl, latch, arresting lever, lock l. -holz plywood.
 -kegel pawl, detent, click.
 -kette low-pass filter.
 -kipposzillator, -kippsender blocking oscillator. -klinke pawl, latch, catch, trip, dog, click, detent, ratchet.
 -kondensator stopping condenser, insulating c., Blocking c. -kreis rejector circuit, parallel-resonance c.. wave trap c.
 -kreis, HF- low-pass filter or selective circuit. -kreis, NF- high-pass filter or selective circuit. -kreiskopplung parallel resonance coupling. -membrane stop diaphragm. -rad ratchet wheel, cog w. -relais locking relay, guard r. -richtung high-resistance direction, backward d. (of a rectifier). -scheibe ratchet wheel. -schicht barrier layer, blocking l., stopping l. -schichtzelle barrier-type cell, photo-voltaic c., photronic c.,

rectifier c. (operating with a blocking layer). -schwinger blocking oscillator. -spannung biasing potential (impressed upon grid), cut-off p., quench p. (in super-regeneration). -strom backward current, inverse c. (of rectifier). -topf wave trap.

Sperrung, Röhren- cut-off of a tube, quenching of discharge. Strahl-beam cut-off, b. eclipsing, b. gating (telev. tube, by blanking pulse).

Sperr-ventil stop valve, check v. -wirkung (cf. sperren) brake action, retarding a., delay a., lagging, valve a. -zeit, Teil- partial restoring time (in echo suppression). -zelle barrier-type cell (working with blocking layer).

Spezialfilm hoher Stellheit high-contrast emulsion film.

spezifisch(e) Ladung specific charge, charge-mass ratio. -(er) Widerstand resistivity.

spezifizieren specify, itemize, particularize.

sphärisch überkorrigiert spherically overcorrected. -unterkorrigiert spherically undercorrected.

spheroidal Zustand spheroidal state.

Sphärokristall spherical crystal, sphero-crystal.

Spiegel mirror, reflector, speculum, polished or reflecting surface, any deposited layer or coat (inside a tube, etc.), silvering; surface or level (of a liquid, etc.)

Spiegel, Augen- ophthalmoscope, skiascope. Fang- collecting mirror.

Geräusch- noise level. Getter-getter patch, g. film. Hohl- concave mirror, c. reflector. Kipp- oscillating mirror. Kugel-

spherical mirror, s. reflector.

Lamellen- strip-like mirror (in screw scanner). Parabol- parabolic reflector. Schwing- vibratory mirror, oscillating m.

Stör- noise level.

Spiegel-belag mirror coating, reflecting film, silvering (of a mirror).

-bild speculum image, mirror i.;

flare ghosts or spots (camera), double or reflected (ghost) image (in telev.).

spiegel-bildlich homologous, mirror-picture condition, specular. -*bildlich(es)* Verhältnis inverse relationship. -*blank* highly polished.

Spiegel-bogenlampe reflector arc-lamp. -*feld* revertive-signal panel, check-back position indicator (giving readings of remote instruments, in metering work). -*frequenz* image-frequency (in radio). -*frequenzspur* image-frequency stopper or rejector. -*glas* plate glass. -*gleichheit* mirror symmetry.

spiegelig specular, mirror-like.

Spiegel-kranz row, array, rim or set of mirrors (in scanner), drum scanner. -*kreuzlibelle* reflector-type cross-level (panoramic telescope). -*metall* speculum metal.

spiegeln reflect, shine, glitter, be reflected, glare (from glass surfaces).

spiegelnde Oberfläche specular surface. -*Reflektion* specular reflection, mirror-like r.

Spiegelneigungsmesser Abney level (of reflecting type, to measure vertical angles).

Spiegel-rad mirror drum (e.g. of Weiller). -*rad, Zellen-* line scanning mirror wheel (of Scophony). -*reflexion* specular reflection, regular r. -*schraube* mirror screw (scanner). -*symmetrie* mirror symmetry, specular s.

Spiegelung reflection, specular effect, picture mirroring; replica (of curves), homologous condition or relation. *Dreh-* combined rotation and reflection. *Rück-* specular reflection, regular r. *Viel-* multiple of image.

Spiegel-welle reflected wave. -*wirkung* cut-off, reflecting or mirror effect (of electron lens when electrons are unable to cross barrier).

Spiegler reflector.

Spiel play, playing; working, operation, action (of mechanical parts), cycle of action; backlash, shake, play or lost motion (of wheels, gears, etc.); deflection, throw or excursion (of meter or instrument needle); set (of things).

Spiel, Flanken- backlash (of screw-thread). *Glocken-* carillon (set of bells).

Spiel-art touch (mus. instrument); variety. -*aufbau, Ionisierungs-* Townsend structure or buildup.

Spieler, Platten- disk-type phonograph or gramophone. *Rück-* playback, dubbing device.

Spiel-haus, Licht- motion-picture theater or playhouse, movie.

-*leiter* director of play.

-*raum* play, latitude, margin, range, scope, freedom of action, elbow room, clearance, backlash.

-*raum, Belichtungs-* latitude of exposure. -*salten* fingerboard strings (zither). -*zeugkino* home movie.

Spießkant diamond.

Spin, Einheits- unit spin. *Kern-* nucleus spin.

Spinbahn-aufspaltung spin orbit splitting. -*kupplung* spin orbit coupling.

Spindel spindle, pivot, axle, arbor, shaft, axis of revolution.

spindelförmig spindle-shaped, fusiform.

Spindelführung screw control (of recording cutter).

Spindeln hydrometer test.

Spindeltrieb worm drive, w. gear.

Spin-drehimpuls spin angular momentum.

Spinelle spinel (cryst.)

Spin-glieder spin terms. -*impulskopplung* spin orbit coupling. -*momentdichte* spin momentum density. -*multipletten* spin multiplets.

Spinne, Lautsprecher- spider of loud-speaker (inside or outside, to keep voice or signal coil centered).

Spin-vektor spinor (two-dimensional vector). -*verdopplung* spin doubling. -*verteilung* spin distribution (math.).

Spiralantenne (flat) spiral aerial or antenna, extensible s. antenna, s. loop.

Spirale spiral, helix, coil, twisted structure.

Spirallochscheibe Nipkow scanning disk with helical array of apertures, spiral d. scanner.

Mehrzahl- multi-spiral scanning disk. **Vierfach-** quadruple scanning disk.

Spiral-steigung pitch or lead of a spire or spiral. **-täuschung** spiral illusion.

Spitze point, peak, crest, tip, top, apex, vertex, summit. **Prüf-** penetrator (of hardness tester).

Resonanz- resonance peak or crest.

Stecker- tip of telephone plug (fitted into tip jack or pup j.)

Spannungs-anzeiger, Spannungs- crest or peak voltage indicator, c. voltmeter. **-aufhängung** point suspension, pivot s. **-elektrode** needle electrode, point e. **-entladung** point discharge, needle (-gap)d.

spitzengelagert journaled on points. **Spitzen-glas** reticulated glass.

-lagerung jeweled bearing, pivot jewel, point suspension, p. support. **-leistung** record (achievement, performance, or accomplishment), peak output. **-nivellierer**, **Spannungs-** voltage peak limiter. **-zähler** needle counter. **-zirkel** compasses, dividers.

spitzer Morsepunkt clipped dot.

spitzig pointed, acute, sharp, tapering.

Spitzlichter bright lights, highlights (in a picture); tangential lighting.

spitzwinklig acute-angled.

Splint sap, sapwood; pin, peg, key, splint, cotter, split pin. **-holz** sapwood, sap.

Splitter, Kristall- crystal chip, c. grain.

Sprach-aufnahme speech, voice, vocal or dialog recording. **-beeinflus-** sung voice control, modulation by v. **-deutlichkeit** articulation,

intelligibility (of vowels and consonants, etc.)

Sprache speech, voice, articulate sound, language; code.

sprachgeschalteter Telephoniesender voice-modulated telephony (signal) transmitter, v.-m. radio-phone.

Sprachlaute speech sounds, articulate s.

sprachmoduliert speech-modulated, voice-m.

Sprachuntersuchung speech study, s. analysis. **-verständlichkeit**

articulation, intelligibility of speech or articulate sound (ascertained, e.g., by logatoms).

-verstärkungsanlage (public) address system. **-wiedergabe** voice reproduction; demodulation of speech.

Spratzen flicker, sputter or spitting (of a cathode).

Sprechaufnahme speech, voice, vocal or dialog recording.

sprechende Bogenlampe speaking arc, Simon arc, Duddell a.

Sprecher, synthetischer voder.

Fernseh- television telephone, video t.

Sprechfaktor, Fern- telephone influence factor. **-frequenz** voice frequency, speech f.

-hörer microtelephone, telephone handset, transceiver. **-kapsel** condenser microphone. **-kopf** soundbox, recording soundhead.

-kopf, Abnehmer- sound pickup, reproducing head. **-leistung** response of an electroacoustic system. **-schalter** speaking key.

-schlauch speaking tube. **-schlüssel** speaking key. **-strom** voice, speech, sound, telephone or signal current.

-stromkreis circuit carrying voice or AF signal currents (in loud-speaker). **-transformator** speech transformer, AF t. **-verkehr**,

Fernseh- video telephone traffic, television telephone communication.

Spreize spreader, spacer, strut, outrigger.

Spreizenkamera, Spreizkamera strut camera, extension c.
sprengen explode, blow up, blast, burst; sprinkle (with water).
sprenkeln sprinkle, speckle, mottle, spot.
Spriegel hoop.
springen burst, break, crack, fracture, spring, jump, leap.
Spring-federwage spring balance.
 -kraft springiness, elastic force, elasticity, power of recoil or rebound, resiliency.
 -punkt critical point (where a break or discontinuity occurs).
Sprite, Elektronen- electron gun. Licht-recorder lamp with constricted neon arc (e.g., Ewest "light gun," pointolite, etc.)
spritzen squirt, spurt, spout, sputter, spray, exude, inject (syringe).
Spritz-entladung initial discharge caused by rapid surge of ions; needle-gap d. -guss (pressure) die-cast. -pistole spray gun, s. pistol (of Schoop), aerograph.
sprode brittle, short. -machen embrittle.
Sprödigkeit, Kalt- cold brittleness.
Spross, Sprosse shoot, sprout, germ; rung (of a ladder).
Sprossen-rolle sprocket drum.
 -schnürspur, Gleichtakt- variable-density single squeeze track.
 -spur, Gleichtakt- single variable-density track. -trommel sprocket drum or wheel.
Sprossung germination.
sprühen spray, spit, scintillate, scatter, produce corona (on wires).
Sprüh-festigkeit spray proofness.
 -ionen spray ions. -schutzwulst anti-corona collar, guard ring.
 -verlust corona form of discharge, brush d. loss.
Sprung (cf Sprungentfernung) crack, chink, fissure, flaw, fault; jump, bounce, leap; break, discontinuity (of a curve), transition (in spectra and quanta); hop (of waves).
Absorptions- absorption discontinuity. Barkhausen- Barkhausen

effect (abrupt changes of magnetization). **Bild-** picture repetition frequency, p. cycle; break or shift of vision. **Phasen-** phase angle shift. **Quantum-** quantum transition, q. leap, q. jump. **Spannungs-** voltage step, v. leap, abrupt change or discontinuity of v. **Sprung-entfernung** skip zone, s. distance (between beginning and end of wavehop). -faktor, Zeilen- interlace factor or ratio.
sprunghaft irregular, non-sequential, sudden, by leaps and bounds.
Sprung-höhe pedestal level or height, amplitude of return or flyback (telev.). -methode, Zeilen- interlaced, interleaved or intermeshed scanning method (with odd or even line interlace). -punkt (cf. Springpunkt) transition point.
-spektrum, Elektronen- electron transition or jump spectrum.
-stelle point of sudden irregularity, unsteadiness, change, or discontinuity. -wahrscheinlichkeit transition probability, leap p.
sprungweise (cf ruckweise) by steps or stages, by leaps and bounds, intermittently, discontinuously, non-sequentially.
Sprung-winkel, Aus- angle of reflection. -zeit transit time, transition t. (of electrons).
Spule, angezapfte tapped coil.
 -, angezapfte, in der Mitte center-tapped coil, mid-tap c.
 -, flächenhafte laminar or areal coil, non-filamentary c.
 -, gepanzerte, wenig streuende iron-core deflection yoke unit (with low spot and pattern distortion). -, gleichstromvormagnetisierte d.c. controlled, saturable coil (of loudspeaker). -, kleine bobbin. -, körperlose structure with entire mass of vibratory system contained in oil.
 -, selbtschirmende self-shielded coil, astatic c.
Spule, Ablenk- deflection coil, deflector c.d. yoke. **Abwickel-** feed spool, f. reel. **Achter-**

figure-8 coil. Auflauf- take-up reel. Aufsteck- plug-in coil. Auslöse- trip coil. Beruhigungsfilter choke, smoothing coil. Betätigungs- working coil, tripping coil, differential c. Binokular- binocular coil (form of closed-field c.) Dämpfungs-damping coil, amortisseur c. Dreh- moving coil, rotating c., rotor c. Dreh-, mit einem Lager unipivotal moving coil. Eisenblätterkern- laminated iron-core coil. Eisenstaubkern- iron-dust-core coil, Ferrocort core c. Feld- field coil, magnetizing c. Feldererger- field exciting coil (in electro-dynamic loudspeaker). Filmvorrats- film magazine roll, magazine. Honigwaben- honeycomb coil. Induktanz-, eisengeschlos-sene closed-core coil. Induktions-, variable variometer. Käfig-canned coil, shielded c. Kondensor- condenser coil (electron microscope). Kopplungs-coupler coil. Kopplungs-, veränderliche vario-coupler. Korbboden-spider-web coil, basket-type c. Kreis- tuning coil. Litzen-litzwire coil. Luft- air-cored coil. Luftdrahtverlängerungs-aerial loading coil, lengthening c. Magnet- solenoid, field coil. Massekern- compressed iron-core coil, dust-c.c., Ferrocort c.c. Mehrlagen- multilayer coil, banked c., pile c., honey-comb c. with banked winding. Objektiv-objective coil. Projektions-projection coil. Pupin- loading coil, Pupin c. (for reactance balance). Quer- leak coil. Ring- toroidal coil. Rückkop-plungs- tickler coil, retroactive c. Sammel- focusing coil. Saug-smoothing coil. Schwing- moving, speech, voice or signal-current coil. Spannungs- voltage coil (in wattmeter). Steck- plug-in coil, detachable c.; demountable reel (film). Striktions- focusing coil. Strom- current coil (in

two-wattmeter method). Such- search coil, probe c., rotating c., exploring c. (of d.f.); flip c. (in mag-netic field tests). Tauch- moving coil (of loudspeaker), telescoping c. Teil- fractional coil, component or subdivision of a coil. Variome- ter-, drehbare rotor of variometer. Variometer-, feste stator of variome- ter. Verlängerungs- serial loading coil, lengthening c. Vorrats-magazine, m. roll (m.p.) Waben-honeycomb coil, lattice-wound c., duolateral c. Zeilen- line scan coil, l. sweep c. spulen wind, reel, coil up. Spulen-abzweig coil tap. -achse bob of spool, core of s. (m.p.) -anzapfung coil tap. -arm magazine or spool arm or support. -durchflutung magnetic potential of coil. -fahrstuhl band-width regulator with reciprocating auxiliary coupler coil parallel to oscillating c. -halter, Film-film roll holder. -kern bob of spool, core of s. (m.p.) -kette low-pass filter. -körper coil form, c. former, spool. -mark molded coil core. -revolver coil switch mechanism (for wave-band change). -topf can, canned coil. -träger magazine or spool arm or support. -windungsschluss-prüfer inter-turn short-circuit or continuity tester. Spund stopper, plug, bung; tongue (of dovetailed board). Spur track, trace, trail; gutter, channel. -, vorionisierte pre-ionized track. Brumm- buzz track. Ton-, eingeprägte track embossed on film strip. Ton-, eingeschnittene track engraved in film strip. spurenweise in traces. Spur-faktor tracking factor (phono-graph recording). -lager thrust bearing. -methode, Nebel- Wilson cloud track method (using a streak of droplets and an ionizing particle). -verzerrung tracking error, t. distortion (phonogr.) -zapfenlager (end) thrust bearing.

- zeit, Bild- Watkins factor, development f.
- Stab rod, bar, stick. -antenne rod antenna, whip a.
- Stäbchen rod (of nerve endings of eye), rodlet.
- Stabfeder, Dreh- torsion bar spring.
- stabilisieren stabilize, steady, make constant, uniform or normal, regularize.
- Stab-kopf rod eye. -mikrophon carbon stick microphone. -röhre arcotron.
- Stachel sting, thorn, spine, prickle, prong.
- Staffeln, Glasplatten- (Michelson) echelon spectroscope.
- Stahl, naturharter self-hardening steel. Edel- refined or superior alloy steel.
- stahlband-armiert, -bewehrt steel-tape armored, ribbon wrapped.
- Stahl-bandaufnahme magnetic steel tape recording. -drahtaufnahme sound on wire recording system.
- kiesstrahlen, -kugelblasen steel shot blasting. -stechen steel engraving.
- Stammbaum flow sheet (of working process). -farbe primary color.
- holz stem, heart or trunk wood.
- körper parent substance, p. body.
- patent parent patent.
- Stampfe stamp, stamper, pestle, punch, rammer, tamper.
- stampfen ram, tamp, pave, pound.
- Stampfwerk stamp mill.
- Stand, heutiger, der Technik present state of the art (or technology).
- Stand, Achs- wheel base. Führer-control cabin, pilot's cockpit, p. compartment (airpl.), tank commander's position. Prüf-test bed.
- Stand-anzeige dead beat indication or reading (of an instrument). -anzeiger bearing indicator means, d.f. dial.
- Standarte lens carrier, base board.
- Stand-bild still film picture, in-
- animate p. -entwicklung slow development, stand d.
- Ständer stand, standard, pillar, post, pole, pedestal, upright, column, housing (of rolls); stator, field system (of dynamo).
- Abtropf- drainer. Lupen- lens stand.
- Standfestigkeit stability, rigidity, steadiness, solidity, resistance to deformation, creeping strength (of materials). Dauer- long-time creep strength.
- Standfestigkeitsprüfung (long-time) creep test.
- standhaft steady, constant, firm, stable.
- Stand-linie base line, position line. -linienpeilung position-line bearing, great circle b. -linienverfahren base-line method of measurement.
- Standort station, stand; position (d.f.), fix. -bestimmung obtaining a fix, position or location finding (by two or more d.f. stations), fix, position-line bearing, great circle b. -daten positional information. -peilung see Standortbestimmung.
- Standsicherheit stability or steadiness (to shock and vibration).
- Stange stick, rod, bar, pole, post. Abspann- stay, terminal or strain pole or mast. Kreuzungs- transposition pole. Schub- thrust rod, push rod, pusher r. Zahn- rack rod.
- Stanniol tinfoil.
- stanzen punch, perforate, stamp or blank out (from a solid sheet).
- Stanz-matrize cutting dieplate, punching die. -presse stamping press, punch. -verfahren stamping method, punching m.
- Stapel staple, pile, heap, stack.
- stark belastet heavily loaded, highly l., carrying a heavy load.
- Stärkegrad intensity, degree of strength or of concentration.
- Starkstromstörung interference from power systems; power (supply) failure.

starr stiff, rigid, non-yielding,
Starrheit rigidity, stiffness.
Startbahn runway.
starten,durch- "open up" and repeat
landing procedure (in ZZ landing
method).
Startweite (der Elektronen) dis-
tance from origin (of electrons),
distance from object to lens, ob-
ject distance.
stationär(e)Messung deadbeat measure-
ment. -(er)Zustand steady, sta-
tionary or stable state.
Stations-melder station indicator,
tuning i. -wähler station selec-
tor.
Stativ stand, support, tripod.
Kurs- class microscope. Röhren-
telescopic tripod. Schlinger-
cardan-suspended tripod. Ver-
folgungs- running tripod, follow-
shooting t.
Stativlupe stand magnifier.
staubdicht dustproof, dust tight.
Staub-figuren powder pattern, dust
figures (of Lichtenberg, Bitter,
Debye, Scherrer, Hull, etc.).
-kern dust core, molded c.
-rauschen dust noise (of film).
-welle acoustic dust pattern
(showing nodes and antinodes).
-zähler dust counter.
Stauchdruck compression.
stauchen compress (by blow), knock,
beat, upset, clinch (a rivet).
Stauchmatrize,Kalt- cold upsetting
die.
staufen stow, dam up, choke, baffle.
Stau-gerät baffle type fluid flow
gage. -gitter suppressor grid,
baffle grid. -körper baffle,
barrier.
Stauung,Elektronen- electron ac-
cumulation or cloud (in virtual
cathode).
Stauwirkung baffle or accumulator
effect, damming e.; resistance.
stechen stick, prick, pierce, sting,
tap; engrave.
Stechkolben pipette.
Stecker,berührungssicherer shock-
proof plug. -,dreiteiliger three-

point plug, three-way p. -,unver-
wechselbarer non-interchangeable
plug.
Stecker,Blind- dummy plug. Dreifach-
three-pin plug, triplug. Klinken-
jack, plug switch. Netz- power
supply plug, light socket p.
Zwischen-socket adapter, a. plug.
Stecker-buchse,-hülse plug socket,
connector s.-säule multiple socket
and plug device, multi-way s. and
p.d. -spitze tip (of telephone
plug).
Steck-regler plug-in and socket
(volume) control. -spule
demountable magazine or reel (m.p.);
plug-in coil, detachable c. -um-
schalter plug-in switch.
Steg path, small bridge (of string
instrument), cross piece, strap,
bar; material or wire portions of
a grid (between meshes); any nar-
row strip of solid material be-
tween holes or recesses, as in
m.p. film between perforations, or
between tracks or grooves in phono-
graph disks, called barrier or land.
Druck- pressure bar, harmonic b.
Gitter- grid stay; solid portions of
g. mesh, g. strips used for wires.
Steg-abstand distance between grid
wires (or g. supports or stays).
-gitter grid in which all wires are
parallel to axis and surround
cathode cage-fashion. -zahl
number of grid wires, stays or
supports.
Stehbild still picture, non-animated
p. -verfahren lantern slide pro-
jection method.
Stehen des Bildes steadiness of
image. --,mangelhaftes jumping or
unsteadiness of image.
stehende Figur stationary pattern, s.
figure. -Welle standing wave,
stationary w.
Steh-kolben flat-bottomed flask.
-lager pillow block, pedestal
bearing.
steif stiff, rigid, firm, non-yield-
ing.
Steife prop, strut, brace; rigidity,
stiffness.

steigen rise, ascend, mount, increase.

Steigerer, Wucht- dynamic expander. **Steigerung** increase, increment, raise, boost. **Dynamik-** dynamic-range expansion. **Kontrast-** Callier effect, print contrast (phot.)

Steig-höhe elevation (in capillary tube), height of rise or of ascent, pitch (of a screw). **-leistungsmesser** rate of climb meter ("variometer" measuring both rise and descent). **-rad** ratchet wheel, escapement w.

Steigung, Gewinde- pitch (of screw thread). **Spiral-** pitch of a spire, lead of a s.

Steigungsmesser, Luftschauben- propeller pitch indicator.

Steigwinkel rise angle.

steil, zu too high a gamma (in film printing).

Steilabfall der Sägezahnkurve abrupt drop of sawtooth wave. **Steilheit** gradient, mutual conductance (mutual characteristic), slope (of tubes); contrast (film).

Steilheit, Emulsions- steepness of gradation. **Entwicklungs-** slope (of D and H curve). **Film-, hohe** high contrast (of film). **Filter-** sharpness of selective network. **Flanken-** width of transition interval between transmission and attenuation bands; steepness of sides or slopes of a curve or of upstroke and downstroke of an impulse. **Gradationskurven-** gamma value or slope of response line. **Sieb-** sharpness of selective network. **Transponierungs-** slope or mutual conductance (of a mixer tube). **Umwandlungs-** mutual conductance, slope (of mixer tube, etc.)

Steilheitsmesser derivator, tangent meter (for curves).

Steinbildung, Kessel- boiler scale formation, incrustation. **-gut** white ware (with white absorbent body and soft glaze). **-kohlen-** **schlacke** coal cinders. **-lager**

jeweled bearing. **-öl** petroleum. **-porzellan** hard porcelain.

Stelle spot, site, locale, location, place. **an - und Stelle** in situ. **Stelle, abgeschirmte** dead spot, radio shadow, r. pocket. **Dezimal-** decimal place. **Locker-** loose place, l. spot (cryst.). **Null-** zero place. **Peil-** control station (in group of d. f. stations). **stellen** place, put, set, regulate, adjust.

Stellenzahl position number, atomic n.; index (math.), number of digits.

Stellhahn regulating cock.

stellig, drei- three-place, t.-figure (value). **fünf-(e)** Genauigkeit five-figure accuracy. **sechs-** with six decimal places.

Stell-kraft, Rück- restoring, retractile, elastic or restitution force or pressure. **-schraube** set screw, adjusting s.

Stellung, Arbeits- working position, operative p.

stellvertretender Patentkommissar deputy or acting patent commissioner.

Stempel stamp, stamper, die, punch, pestle, piston, matrix. **Lampen-** press or squash of a lamp. **Press-** press ram.

Stempelrohr plunger tube, piston t. (used in acoustic impedance tests).

Stengel, Pump- pumping lead, pump tube (short piece of tubing connecting with vacuum pump), exhaust vent.

Stereogrammetrie stereophotogrammetry.

Stern-Dreieckschalter star-delta switch.

sternförmig star-shaped, stellate.

Stern-gliedkette T (-mesh) network. **-rad** star wheel. **-rohr** astronomical telescope. **-tag** sidereal day.

stet, stetig continuous, constant, stable, steady.

stetiger Bildwechsel continuous, steady, non-intermittent feed or motion (of picture strip).

steuerbar modulable, capable of being modulated or controlled; steerable (of antenna characteristic and polarization); manageable, manoeuvrable, controllable.

Steuerblende modulating electrode, modulation shield, m. grid (in cathode-ray tube).

Steuerbord achteraus starboard aft. -voraus starboard bow. -kurve starboard (right-hand) curve (airplane approach).

Steuer-daumen sequence switch cam. -drossel magnetic modulator, m. choke, Heising modulator. -frequenz pilot frequency, synchronizing f. -generator drive oscillator, master o. -gitter control grid; shield (of a c.-r. tube). -kurs steered course, compass c. -mann, Ton- operator controlling sound volume (in theaters).

steuern steer, regulate, control, modulate, guide, direct. herunter- regulate down, decrease carrier amplitude.

Steuer-nocken sequence switch cam. -quarz (frequency) stabilizing quartz crystal. -relais pilot relay. -röhre master oscillator tube, drive t., drive o. -röhre, Quer- cross-control tube, beam tube (depending for its operation on b. deflection). -schalter master switch, control s., sequence s. -sender master oscillator tube, drive t., d.o. (working upon main transmitter, in independent drive). -stelle sound gate (film); impulse receiving place or point (in remote-control, telemetering, etc.). -stelle, Ton- tone-control point, exciter p., sound gate. -strich dot or pointer to observe or read bearings. -stufe, fremdgesteuerte, quarzgesteuerte crystal-stabilized oscillator stage, master or driver stage stabilized by quartz crystal.

Steuerung auf Dunkel modulation to dark condition, negative m. -auf Hell modulation to light condition, positive m. Ausblend- obturator modulation, cut-off m. Dichtigkeits- charge-density modulation. Dunkelwert- adjustment to value of darkness. Fern- remote-control

action, telemetric c. (with selsyn motor and synchro system). Frequenz von Senderschwingungen frequency stabilization of transmitter oscillations. Geschwindigkeits- velocity modulation. Gitter- grid sweep, g. swing, g. excursion, g. excitation; g. control (in ignitron, etc.) Helligkeits-, Intensitäts- brilliancy modulation, intensity m., brightness m. or control. Kristall- crystal stabilization, quartz control. Ladungs(dichte)- charge density modulation. Leitungsstrom- conduction-current modulation. Licht- light scanning, l. modulation, l. control. Linien- velocity modulation. Zeilen- velocity modulation, variable-speed m.

Steuerungs-bereich drive range, swing of amplifier grid, operation inside straight part of characteristic. -einrichtung, Licht- light valve, light relay.

Steuer-verstärker amplifier between power and input stage (operating on pure voltage amplification). -welle control wave (in chain broadcasting), pilot w. -zylinder focusing grid, Wehnelt g. or cylinder (in cathode-ray tubes).

Stich prick, puncture, stab, sting, stitch; engraving; tap, tapping; pass (rolling mill). Form- shaping pass (rolling).

Stichel, Schneide- cutter. cutting stylus, c. tool, c. head, engraver (phonograph recording), scribe.

Stich-flamme fine pointed flame, dart of f. -leitung tie line, tap l. -loch tap-hole. -pfropf tap-hole plug. -probe sample taken by tapping, random sampling, assay of tapped metal. -wortverzeichnis (key-word) index.

Stickstoffhalogen nitrogen halide. Stiel handle, shaft, stem, stalk.

Stift pin, peg, tack, stud, pencil. Gewinde- headless screw, grub s.

Justier- pilot pin, registration p. Mittlungs- centering pin.

Schreib- stylus, style, cutting or engraving tool. Tast- tracer

point, feeler.
Stift-lagerung pin suspension, p. supporting. -rad sprocket wheel.
-schlüssel pin wrench. -schraube tap bolt.
Stilb stilb (unit of luminosity in Hefner candles per square cm).
stille Entladung corona, silent discharge, effluvium. -Zone skip zone, dead spot.
Still-abstimmung silent tuning, quiet t. -einstellung silent tuning, q.a.v.c. tuning. -leben still life.
still-schweigend tacit, implicit, implied; silent, quiet, calm.
-stehen stand still, stop, arrest, be stationary.
Stimme, gemischte mutation stop (organ). -, schwedende vox céleste. Grund- foundation stop (organ). -, Lautstärkenbereich der menschlichen human voice intensity range. -, Modulation der inflection of voice.
Stimmflöte tuning pipe, pitch pipe.
Stimmgabel, schreibende tuning fork chronoscope. -sender tuning-fork buzzer oscillator, vibrating-reed transmitter. -steuerung tuning fork control (in phonic wheel). -unterbrecher tuning-fork interrupter. -zinken prong or tine of a tuning fork.
stimm-hafte Konsonanten sonant, voiced or vocal consonants.
-lose Konsonanten surd, non-vocal or breathed consonants.
Stimm-pfeife tuning pipe, pitch p.
-platte reed board, r. plate (of accordion). -ritze glottis, glottic catch or cleft. -schlüssel tuning key, wrench (of kettle drum). -stock wrest plank (piano). -ton tuning pitch. -wirbel wrest pin.
Stimmung, hohe high pitch. -, Flöte mit flute with tuning slide.
Tremolo- tremolo.
Stimmungsbild key picture, sentiment p. -, dunkles low-key picture.
 -überhelles high-key picture.
Stirn, wellen- wave face, w. front, w. head.

Stirn-ansicht end view. -bügel headrest (of magnifier). -fläche end face; face, front. -holz cross-cut wood, end-grain w.
-rad spur wheel. -streuung overhang leakage flux. -verbindung face connector. -wand front wall, plate or panel; end w. -welle onde de choc, impact w., bow w.
-widerstand (front) end resistance, leading-end r. -zapfen trunion, end journal.
Stocheisen poker (bar or iron), fire p., stirrer, stoker, rake.
Stock stick, staff, stock.
stocken stop, slacken, hold up, arrest; mold, decay.
Stockflöte stick flute.
Stockung stoppage, stagnation, obstruction, standstill, jam, "bottle neck".
Stoff substance, matter, material, stuff, fabric, cloth. **Trockensiccative**, drying substance.
Stoff-aufwand expenditure or requirement of material. -bahn web of fabric or cloth (textile). -bedeckung, Wandbekleidung draping, gobo, tormentor (when in the form of a portable wall with sound-absorbent material, in m.p. studio). -mangel shortage of material, underfill (in rolling). -patent patent covering substance or material, product p., substance p. -teilchen particle of matter, corpuscle. -verbindung composition of matter.
Stöpfel, Stopfen stopper, plug, cork.
Stopfen, Griffel- stopper with thumb piece. **Schliff-** ground-in stopper (of glass).
Stopf-ton (der gedackten Trompete) stopped tone (of s. trumpet). -werg oakum.
Stopppbad short-stop treatment.
Stöpsel, geschlitzter split plug.
Blind- dummy plug. **Glas-** glass stopper.
Stöpsel-glas stoppered glass.
-hahn stopper cock, c. stopper.
-körper plug body.
stöpseln plug in, insert a p. falsch-misplug.

Stöpsel-rheostat resistance box (plug operated). -schalter plug switch.
Stör-amplitude noise level. -anfälligkeit susceptibility to trouble, "X", interference or noise, trouble incidence.
-befreiung elimination of interference, jamming, fading, strays, static or atmospherics. -befreiung, Einrichtung zur static eliminator, X stopper. -breite detuning "width" (detuning required to reduce resonance amplitude to 1 percent).
Storchschnabel pantograph.
stören interfere, jam, disturb, trouble, perturb, derange.
Störer, durch - verdeckte Zeichen swamped signals.
Störernullung connection of case of interfering device with neutral wire (in d.c. mains).
Stör-faktor, Fernsprech- telephone interference factor. -feld stray field, interference f.
-festigkeit immunity from noise, disturbance or distortion.
-gebiet mush area (in chain broadcasting), disturbed area.
-geräuschatmen fluctuation of noise, waxing and waning of n.
-gries low noise in picture background due to thermal effects, Brownian movement, mechanical properties of tube, and low-frequency fluctuations of local emission density, i.e., shot effect. -lautstärke noise level.
-muster spurious pattern, false p. (telev.) -nebel chief interference zone, maximum noise z. -niveau noise level.
-pegel, "Intergehen der Bildspannungen im swamping of picture signals in noise level. -schutz interference eliminator, trouble elimination, anti-parasitic means.
-schutzpackung noise suppression, shielding harness (for airplane engines), interference eliminator kit. -sender shadowing signal (telev.); interfering or jamming

station. -signal, Abschattierungs-spurious or shadowing signal (in iconoscope operation; known also as "shading," "black spot," "tilt and bend" etc.). -signal-Kompensation compensation of spurious signal in iconoscope operation by shading circuit.
-sperré noise gate. -spiegel noise level. -stelle center of disturbance (cryst.); point of disturbance or perturbation; discontinuity. -suchgerät interference locator, signal tracer (used stage by stage in receiver).
Störung disturbance, perturbation, noise, distortion, interference, statics, atmospherics, jamming (in signal transmission); disarrangement, derangement, trouble.
-atmosphärische atmospherics, static, stray, "X's", QRN.
-ausserirdische extra-terrestrial or interstellar noises or disturbances. -luftelektrische statics, atmospherics, "X".
Eigen- internal trouble. Gitter-lattice distortion, lattice dislocation. Laufzeit- delay distortion. Lichthof- halo disturbance. Nah- nearby interference, local i. (from sources close to receiver site). Starkstrom- interference from power systems; power failure.
Störungs-rechnung perturbation calculation. -suche trouble "shooting", interference location. -theorie perturbation theory. -welle parasitic or interfering wave, jamming w., garbling w. (in secret telephony). -wellenweg path of interference wave.
Stoss impact, shock, collision, pulse, count or burst (e.g., of cosmic rays), impulse; push, stroke, jolt, recoil, thrust; joint, junction (of rails). Durchbruch- burst pulse.
Höhenstrahl- cosmic ray burst or shower. Rück- back stroke, recoil. Schienen- rail joint.
Spannungs- potential impulse, p. pulse, impulse voltage. Treppen-

lap joint.

Stoss-dämpfung damping or attenuation of pulsations or vibrations, shock absorption. -dauer duration of collision or shock. -durchschlagfestigkeit impulse-voltage breakdown strength.

Stöße, Dreier- triple collision, three-fold c. Dunkel- background counts (in Geiger-Müller tube).

Stössel, Stösser pestle, stamper, rammer, tamper, stem (of valve), impulsing, pushing or impacting rod (in loudspeaker), driver rod.

stossen push, thrust, hit, knock, impact, ram, pound.

Stoss-erregung shock, impact or collision excitation.

-feder, Strom- impulse spring (in dial). -festigkeit shock, impact or impulse (breakdown) strength. -fuge joint, junction. -galvanometer ballistic galvanometer. -generator impulse or test wave generator.

-kraft percussive power, motive p. -kreis impulsing circuit.

-linie boundary line, joining l. -messer, Kraft- ballistic pendulum. -prüffeld (potential) impact or impulse testing field.

-sender impulse exciter, i. transmitter. -spannung impact potential, shock p. -stelle joint area or point, junction p. contact point. -ton beat note; throb. -verbreiterung impact broadening. -wage ballistic pendulum. -welle percussion impact or impulse wave; w. impacting upon a joint. -winkel butting angle, a. of joint. -zahl number of collisions, impacts, or bursts.

Strafe, bei - der Nichtigkeit on pain of nullity.

Strafgesetz penal code. -recht criminal law. -summe penalty, fine.

Strahl (cf Strahlung) ray, radiation, beam (in d.f., telev., etc.), pencil, jet (of fluid),

flash (of lightning); straight line, radius (geometry).

Strahl, achsenparalleler paraxial ray. -, ausfallender emergent ray.

-, ausserachsialer extra-axial ray, abaxial r. -, ausserordentlicher extra-ordinary ray. -, durchfallender transcient ray, transmitted r.

-, einfallender incident ray. -, ordentlicher ordinary ray.

-, schräger skew ray, oblique r. -, streifender glancing ray.

-, ultraroter infrared ray, ultrared r. -, ultravioletter ultraviolet ray, vita-r. (between 2900 and 3200 Å.)

Strahl, Ab- reflected ray. Anoden-anode ray, canal r., positive r. Brems- (Röntgen) X-rays due to collision or checking. Dunkel- obscure radiation, heat r. (from a light source), invisible (actinic) r. beyond the violet. Elektronen-, weisser heterogeneous beam of electrons. Faden- pencil ray (electrons); beam or pencil of non-uniform cross-section, in gas-focused c.-r. tube, due to positive ions and secondary electrons, thread beam. Fahr- radius vector (math.). Gegen- reflected ray, reflection. Gesichts- visual ray

Grenz- border-line ray, infra-Röntgen r. H- H-ray (consisting of positive hydrogen ions and protons). Kanal- canal ray. Knoten- cf Strahl, Faden-. Leit- guide ray, g. beam, radio beacon; radius vector (math.) Licht-, maximale Aussteuerung des - (es) clash point of light valve (in sound recording).

Luft- air jet. Molekular- molecular ray, m. beam. Peil-, raumgeradliniger orthodrome. Rand- marginal (zone) ray, peripheral r., extra-axial r. (opt.) Rest- residual ray, r. radiation, reststrahl.

Röntgenbrems- X-rays due to collision or checking. Schräg- skew ray.

Schwarz- black (body) radiation, cavity r., Planckian r. Streu-scattered radiation, s. signal, stray radiation, stray light.

Weltraum- cosmic ray. **Zentral-** central ray, axial r. (opt.)

Strahl-abblender means to mask, stop down, occult, eclipse, gate or diaphragm rays, beam douser, blanking or blanketing means, dimmer. **-ablenkung** ray deflection, pencil d., beam d. or deviation; ray refraction.

Strahlabtaster (mit unsichtbaren ultraroten Strahlen) noctovision scanner (using micro- or infrared rays). **Elektronen-** electron scanning pencil, beam, brush or lever. **Kathoden-** electron beam scanner. **Licht-** spot-light scanner, brush or pencil.

Strahl-abtastung scanning or sweep-ing with a light or electron pencil. **-apparat** jet apparatus, injector (of steam).

strahlartige Entladung needle-point corona or streamer discharge, leader-stroke d.

Strahl-ausfall emergence of beam. **-brechung** refraction or splitting of rays. **-bündel** beam, pencil, bundle, bunch or brush of rays. **-bündel,Kathoden-** cathode-ray beam or pencil, (loosely) gun.

strahlen emit rays, radiate, be radiant or radiating.

Strahlen-brechungsmesser refractometer. **-bündel**(s.a.**Strahlb.**) bundle of rays or radiations, cone of r. **-bündel, Schall-** pencil of sound. **-einfall,** **streifender** glancing incidence of rays. **-gang** path of rays, trajectory of r., ray tracing, geometric configuration of rays. **-härtemesser** penetrometer, qualimeter (for X-rays). **-kegel** cone of rays. **-messer** radiometer (heat rays), actinometer (actinic r.), solarimeter (sun r.). **-optik** geometric optics. **-reichweite** range of rays or corpuscular emission. **-schnitt** jet contraction, contractio venae. **-stoss,** **Höhen-, Raum-** burst or shower of cosmic rays, cosmic ray track (traced by hodoscope). **-teiler**

beam splitter.

Strahleentladung,Faden- thread ray discharge.

Strahlentstehungsort source or origin of electron pencil or gun.

Strahlenzieher protractor.

Strahler radiator (of radio waves, loudspeaker, etc.); heater (of a cathode). **Massen-** mass radiator.

Mehrfach- bank or pillar of lamps, battens. **Richt-** directive antenna, directional a.; directional loud-speaker or projector, radiator.

Rück- reflector, re-radiator.

Temperatur- incandescent light source, luminous radiator.

Strahl-erweiterung spread of beam (telev. tube). **-erzeugerfuss** gun press. **-erzeugungssystem** gun (comprising electron source, first and second lenses); ray radiator system. **-fläche** radiant area, radiator surface, radiation-emissive s. **-hebelarm** pencil leverage, deflectibility of electron beam.

strahlig, lang- elongated, needle-like (cryst.)

Strahl-intensitätskontrolle modulation of beam intensity (by grid, shield or Wehnelt cylinder, telev.)

-methode, Atom- atom or molecule ray method. **-neigung** inclination of ray. **-quelle, Leucht-, einfarbige** monochromatic illuminator, m. source, monochromator. **-röhre,** **Elektronen-(cf. Kathodenstrahlröhre)** beam tube; cathode-ray tuning indicator t. or magic eye. **-ruhelage** spot zero. **-schauer, Höhen-** cosmic ray shower or burst. **-schreiber,** **Tinten-** ink vapor jet recorder (facsimile telegraphy). **-sender,** **Leit-** beacon, radio range or beam station. **-spaltung** split-beam, b. splitting. **-sperrung** beam cut-off or eclipse, gating of the b. **-stösse, Höhen-** cosmic ray bursts.

Strahlung, aktinisch undurchlässige adiactinic radiation. **-, falsche** stray radiation. **Grau-** grey radiation. **Hohlraum-** cavity radia-tion, black-body r. **Raum-** cosmic

ray radiation. Resonanz- resonance radiation (of vapor lamp).

Rück-, spiegelnde specular reflection, regular r. Schwarzkörper- black-body radiation, cavity r. Seiten- secondary radiation, lateral r., spurious lobe (of space pattern), Temperatur- thermactinic radiation. Über- irradiation.

Ultra- cosmic rays. Vernichtungs- annihilation radiation.

Strahlungsbelastung radiation load.

-dämpfung radiation damping, r. resistance. -diagramm radiation diagram or characteristic, space pattern, radiation p. -druck radiation pressure. -empfänger radiation-sensitive or responsive pickup, r. receiver, record sheet or surface (on which radiations impinge for measuring color temperature, etc., consisting of photographic plate, selenium cell, bolometer, etc.) -fläche (electron) emitting surface, emitting area, radiator s. -formel, Planck'sche Planck's equation (of spectral energy distribution).

-gegendruck radiation reaction. -gleichgewicht radiation equilibrium. -messer actinometer (for actinic rays and solar flux density), radiometer (thermal rays), solarimeter (sunrays). -messer, Sonnen- pyrohelioimeter, pyrheliometer, solarimeter, actinometer (for solar flux density). -potential radiation potential, resonance p. (to excite atom or molecule).

-temperatur radiation temperature, effective t. -verfahren, Selbst- self-emissive or s.-illuminating method (used in electron microscope) based on electrons arising on object surface. -verluste corona losses, radiational l.

-widerstand effective resistance (loudsp., antenna, etc.), radiation r., characteristic impedance.

-werfer beacon or beam station.

Strahl-unterbrecher, Quecksilber- mercury (jet) interrupter.

-vergenz vergency of rays (either convergence or divergence).

-verlauf path of rays, course of r., trajectory of r., ray tracing. -wegablenkung, Peil- distortion of bearing, lateral deviation (due to diurnal or seasonal factors, terrain, local conditions, etc.)

Strang rope, chord, cord; web (of paper, cloth, etc.), strand; line (of drive shafts).

Strasse, Feinblech- sheet rolling mill.

Wirbel- vortex avenue.

Strebe, Gitter- grid stay, g. support. strebenlos unsupported, unstayed, unpropred.

streckbar extensible, extensile, ductile, malleable.

Strecke distance, space, stretch, extent; path (e.g., grid-filament).

Strecke(z.B.a-b) interval a-b, element of length a-b.

Strecke abschneiden lay off a distance.

Strecke, Gas- gaseous path or gap (in a tube). Gitter-Kathoden- grid-filament path or circuit.

strecken stretch, extend, spread, draw, elongate, pull.

Strecken-befeuerung, Nacht- route beacon for night flying service.

-dienst, Lang- long-range or long-distance avigation (navigation) service. -element linear element (math.) -feuer, Haupt- main or trunk route beacon, airway b.

-funkfeuer range beacon. -funkfeuer, Haupt- main route radio beacon.

-karte route airway map.

-leitstrahl long-distance or route avigation (navigation) beam.

-messung end-to-end measurement, straight-away m. -navigation long-distance avigation, route a. -netz air routes. -spektrum continuous spectrum. -teilchen linear element (math.)

Streckfestigkeit resistance to stretching, r. to elongation.

-figur flow lines, lines of stress, surface bands. -grenze yield

point, limit of elongation.
-spannung yield stress. **-stahl** rolled steel. **-werk** rolls, rolling mill.

streichen stroke, rub; paint, coat, varnish; erase, cancel; bow or stroke (a string).

Streich-instrument bowed or string instrument. **-schale** oilstone, whetstone.

Streifen strip, stripe, ribbon, tape, fringe (in light interference), band, streak, stria, vein.

streifen graze (as in a shock or collision), glance, skirt, brush against; stripe, streak, striate.

Streifen, Abdeck- squeeze unit, mask, mat(m.p.); barrier (between frames). **Absorptions-** absorption bands, a. spectrum. **Bitter'sche** Bitter (magnetic powder) pattern or bands.

Brumm- buzz track; hum (broad transverse bands appearing on c.-r. tube screen). **End-** trailer (blank end of a film).

Interferenz- interference fringe (opt.). **Kontroll-** monitor slip.

Längs- longitudinal stripes, striae or streaks. **Leucht-** (in Entladung) luminous streamers (in discharge). **Löt-** tag strip, terminal s., connection s.

Mach'sche Mach bands. **Rohr-** skelp, strip (for forming pipes). **Ruhe-** unmodulated track. **Ton-** sound track.

streifender Einfall grazing, oblique or glancing incidence (of rays or sound waves).

Streifen-filter, dreifacher tricolor banded filter. **-gefüge** laminated structure, banded s. **-keil** photometric wedge. **-lichtverfahren** variable-density recording method. **-schirm** rod screen. **-spektrum** band spectrum. **-verschmälerung**, **Ton-** squeezing of sound track, matting.

Streifungen striations, striae (metal coatings, etc.)

Streifungen, Translations- transla-

tion gliding striae.

Streit, Patent- patent litigation, p. action, p. suit. **Rücknahme-** action for withdrawal.

Streitanmerkungen annotations of litigation.

Streiter contestant to a suit, litigant, disputant.

Streit-fall,-frage,-punkt,-sache issue, question at issue, contested case, dispute, controversy, matter at bar, m. in issue, m. in suit.

strengflüssig viscous, semi-fluid, difficultly fusible; refractory, **streuen** scatter, strew; fluctuate, disperse, "spread" or scatter (of values).

Streu-faktor scattering factor (of x-rays), s value. **-feld** stray field, leakage f., extraneous f.

-impedanz leakage impedance.

-induktivität stray inductance.

-kapazität stray capacitance, spurious c. **-kopplung** stray coupling, capricious c., spurious c. **-licht** stray light. **-querschnitt** scattering cross-section. **-richtung** scattering direction. **-strahlen** scattered signals, s. radiations, stray radiations, stray light.

Streuung scattering effect, diffusion e., dispersion, stray leakage, spread (d.f.). **Flanken-** side leakage, s. stray. **Spalt-** slot leakage, s. stray. **Stirn-** overhang leakage flux.

Streu-winkel angle of scattering. **-zelle** scattering cell.

Strich stroke, streak, stria, line, dash, mark, grain. **Ab-** downstroke or trailing edge of a synchronizing impulse (telev.). **Auf-** upstroke or leading edge of a synchronizing impulse (telev.)

Dauer- long dash, permanent note (N-A interlock in d.f.). **Gitter-** grating line. **Kompass-** point of compass. **Ober-** maximum or peak carrier current, m. picture signal.

Steuer- dot or pointer to observe and read bearings. **Teil-** graduation line, division l., gage mark (of a scale).

Strichdiapositiv line transparency, l. diapositive.

Stricheinstellung, Bild- framing (by observing frame lines). **Bild-**, falsche misframing, out-of-frame condition.

stricheln shade, hatch, streak.

Strich-fokus line focus (of x-rays).

- formulierung chemical formula using dashes or lines (to represent bonds).
- geräusch frame-line noise (form of motor boating).
- gitter ruled grating, simple line g.
- kreuzplatte cross wire plate (of telescope), reticle, graticule.

strichiert broken (of a line), dash-lined.

Strich-mass line standard.

- methode stroke method, line m. (paper test).
- punkt semicolon.

strichpunktiert broken (dot-dash) (line).

Striktionsspule focussing coil.

stroboskopische Scheibe stroboscopic disk, s. pattern wheel.

Strohgeige Stroh violin (with diaphragm or contact microphone attachment).

Strom, abgehender outgoing current.

- , ankommender incoming current, input c.
- , eingeschwungener steady-state current.
- , phasenverschobener out-of-phase current, phase-displaced c., de-phased c., quadrature c. (when shift is 90°).
- , vagabundierender leakage current, stray c.
- , verzweigter branched current, branch c.
- , welliger ripple current, undulated c., pulsating c.

Strom, Ableitungs- leakage current, stray c.

Arbeits- watt current, working c.

Ausbreitungs- dispersion current.

Ausgleich- balancing current (of a bridge), compensating c.

Ausschwing- decay current, decaying c.

Bild- video current, picture c.

Blind- reactive current, re-actance c., wattless c.

Brücken-

ausgleich- bridge balancing current. **Dauer-** persistence current.

Dunkel- dark current (flowing in photocell, in absence of light).

Einschwing- building-up current.

Erst- primary current.

Gespenster- ghost current.

Halte- holding current, retaining c.

Kreis- circular current; c. flowing in a circuit.

Kriech- creep current, sneak c., surface-leakage c.

Lade- charging current (anomalous and normal, of condenser); charging c. (of battery).

Leck- leakage current, leakance c.

Leit- conduction current; pilot c. (in wired radio).

Leitungswchsel- conduction alternating current.

Licht- light flux, l. current (in lumens); lighting c.

Nachwirkungs- absorption current, residual-charge c. (of condenser).

Nutz- useful current, signal c.

Pegel- pilot current.

Photo- photo-cell current.

Quer- leak current.

Richt- output current (d.c.) of detector, rectified d.c. component of plate c.

Rück- reverse current, backward c. (in rectifier).

Ruhe- anode-feed current (d.c. component of plate or anode c.); no-signal c., quiescent c.

Sättigungs- saturation current.

Schalt- current on contact.

Spannungs- current flowing in potential circuit (of a meter).

Sperr- backward current, reverse c. (of rectifier).

Ton- voice signal current, sound c.

Träger-, plötzlich veränderter wobbled carrier.

Verdrängungs- capacitance current, displacement current, dielectric c.

Verlust- watt current, active c., energy c.

Verschiebungs- capacitance current, displacement c. dielectric c.

Vor-, dunkler dark pre-sparking current.

Vormagnetisierungs- biasing current (for magnetic polarization).

Wand- wall current (of amplifier).

Wechsel- alternating current (a.c.) (mostly single-phase current is meant specifically),

indirect c., any periodic c.
Wellen- pulsating current, ripple c.
Zeichen- marking current (telegr.).
Zwischen- spacing current (telegr.).

Strom-abnehmer tap, collector of current. -arbeit Joule heat.
-aufnahme, Blind- drawing or taking wattless, idle, or reactive current. -aufnahme, Giffer-drawing of current by grid.
-aussteuerung, Anoden- plate current excursion. -bahn, flächenartige laminar or areal path of current, sheet c. -belag current coverage, c. distribution (in terms of amps. per centimeter of periphery). -dämpfung, Echo-echo current attenuation, active c. loss. -dichte current density (in amps. per unit of cross-section); luminous flux (in lumens).

stromdurchflossen alive (of a wire), traversed by current.

Strom-einsatz, Gitter- point where grid draws current, incipient g. c. flow. -faden streamer (in discharge), current path; stream line. -flächenformel current sheet formula.

stromführend current-carrying, c.-conducting or conductive, live, charged, "hot".

Strom-gattung kind of current, system of c. -gebiet, Anlauf-range or region of incipient current flow (e.g., at grid). -gitter atomic lattice.

Stromkreis (s.a.Kreis), am Ende kurzgeschlossener short-circuited circuit or line, end-shorted c.

-am Ende offener open-ended circuit. -, unbelasteter unloaded circuit. -, verzweigter branched circuit, divided c. Abstimm-tuned circuit, tuning c., tank.

Bezugs- reference circuit.

Geräuschunterdrückungs- noise reduction circuit, squelching c., silencing c. **Grundgeräusch-** (back) ground noise reduction circuit. **Impedanz-** impedor,

circuit with impedance. **Nutz-** signal circuit, utilization, working or useful c., active c. **Reinigungs-** smoothing circuit, filter c., low-pass filter (following rectifier in power unit). **Sprech-** circuit carrying voice or signal current (in loudspeaker). **Stillabstimmungs-** silent tuning circuit, q.a.v.c. circuit.

Strom-leistung electric power (wattage). -linienaufzeichner device (often electrolytic tank) to map or plot potential, fields, lines, tubes of force, etc., on a model.

stromlos currentless, de-energized, dead.

Strommesser, registrierender recording ammeter. **Hitzdraht-** thermal ammeter, hot-wire a.

Strom-modulation, Elektronen- electron quantity modulation.

-reiniger harmonic eliminator, h. excluder (filter), smoothing means, stopper. -resonanzkreis parallel resonance circuit, tank c. -richter, gittergesteuerter rectifier of thyratron type, mercury r. or ignitron with control grid. -schiene third rail, busbar. -schlüssel key switch, make and break. -schlussprüfer continuity tester. -spule current coil (of a wattmeter).

Stromstoss current pulsation, pulse or impulse. **Anlass-** starting rush or impulse of current. -feder impulse spring (of dial switch) -gabe impulsing, pulsing. -gabe, rückwärtige retractive pulsing. -schalter impulsing switch, stepping relay. -Übertrager impulse repeater. -verhältnis impulse ratio.

Strom-tor thyratron. -tor-Ignitron Kombination mutator. -übernahme transfer of current, tapping of c.

Strömung current, stream, flow, flux, circulation, fluid movement; tendency, trend. -, wirbellose flow free from vortices, eddies or turbulence, irrotational flow.

Stromungs-potential flow potential, streaming p. -widerstand flow resistance (of a test piece); aerodynamic r., drag.

Strom-verdrängung skin effect, current displacement, Heaviside e. -verzweigung network of conductors, dividing or branching of currents. -wage ampere balance. -wandler, Durchführungs- bushing-type current transformer. -wechsler commutator, reverser. -weiche current divider (network or filter). -wender commutator, reverser. -wert current value, amperage. -zeiger ammeter; current vector. -zuführung current supply lead.

Strudel eddy, vortex, whirl (pool), maelstrom.

strudellos irrotational, non-eddying.

Struktur, feinschuppige magnetische fine-scaled magnetic structure.

-hyperfeine-, überfeine hyperfine structure. -, zellenartige honeycombed structure, pitted s., cellular s. Fein- fine structure, micro-s. (cryst.)

Sekundär- secondary structure gridwork (cryst.). Über- superlattice; superstructure.

Überfein- hyperfine structure.

Verzweigungs- lineage structure.

Struktur-analyse, Grob- gross or macro structure analysis.

-chemie structural chemistry.

strukturlos structureless, amorphous.

Stück, Flächen- area element, areal e., unit area. Leiter- conductor element, portion, part or (short) length of conductor.

Stückfärbung tissue staining, staining in toto (microscopy).

stückweise piecemeal, piece by piece.

Stufe step, stage, degree, grade, gradation; digit (automatic telephony), point (in multi-point switch). -, nachgeschaltete gesteuerte main oscillator stage (in independent drive system).

Stufe, Beschleunigungs- target (of

multiplier), acceleration stage. Einer- units digit. Farb-, Farben-color gradation, tint, shade.

Graukell- intermediate shading value. Helligkeits- (intermediate) brightness stage, i. grey value (between black and white), shading or tonal v. Lautstärken-loudness unit, sensation u.

Licht- printer step (copying machine). Misch- mixer stage, m. first detector s. Nachlauf- (cathode) follower stage. Niveau-term, energy level (of electron).

Oxydations- stage or degree of oxidation. Puffer- separator

stage, buffer s. Überlagerungs-mixer stage, first detector (in superheterodyne receiver).

Zehner- tens digit.

stufenartig graduated, step-like, graded, gradual, echeloned, stepped.

Stufenfolge succession or sequence of steps or stages, graduation.

stufenförmige Echos echelon formation of multiple echoes.

Stufen-gitter echelon grating.

-keil step tablet, stepped photometric absorption wedge (in x-ray, etc., work). -linse echelon lens, Fresnel l.

-messer, Farb- tintometer. -methode gradient method (of cooling, etc.).

-platte sensitometer tablet.

-prisma echelon prism. -rad step wheel, cone pulley. -relais relay with sequence action.

-schalter multi-point switch, m.-contact s. -scheibe cone pulley, taper p., stepped p. -schwächer step-type weakener (spectroscopy, photography). -spalt step slit (phot.).

stufenweise in stages or steps, step-wise, by degrees, successively, sequentially, gradually.

Stulpe cuff.

stülpen turn inside out, t. upside down, put over or upon in inverted position.

Stummfilm silent film.

Stumpf stump, butt-end. **Kegel-** truncated cone, frustum-cone,

frustum. Pyramiden- truncated pyramid frustum. Wellen- butt end of a shaft.
 stumpfe Verbindung butt joint.
 stumpfeckig blunt cornered.
 Stumpfkegel truncated cone, frustum.
 stumpschweissen butt-weld, jump-w.
 Stumpfungfläche, Ab- truncating face (cryst.)
 stumpfwinklig obtuse-angled.
 stürmisch stormy, turbulent, violent, vivid, agitated.
 Sturz plunge, fall, sudden drop or decline, chute.
 Stürzung, Bild- toppling of picture or image (pictures turned an angle in relation to one another).
 Stütze support, stay, prop, bearing.
 Trag- supporting stay or prop.
 stützen support, prop, stay, rest or bear on.
 Stutzen, Ausblick- objective lens socket (opt.) Rohr- short piece of pipe or tubing serving as an opening, socket, or connection; nipple, short cylinder, bush or sleeve. Saug- pump intake, p. nozzle.
 Stütz-isolator pin insulator, rod i.
 -pfeiler supporting pillar, s. column, bedding pile. -punkt point of support, bearing surface, fulcrum; airbase, base airport.
 Substanz, Mutter- parent substance.
 subtraktive Modulation downward modulation, positive m.
 Suche, Störungs- trouble "shooting", t. locating, interference location.
 Such-elektrode probe electrode, exploring e., collector e. (in vacuum t. work). -empfang straight-ahead reception, single-circuit r., direct r., non-heterodyne r.
 Sucher searcher, locator, detector, finder, probe, view-finder (opt.). Durchsichts- direct-view finder, eye-level f. Fehler- aniseikon (for detecting cracks electronically), electromagnetic crack detector (by flash magnetization), materialologic devices (with X-rays).

Objekt- object-finder (opt.)
 Prismen- prismatic seeker or finder. Rahmen- wire-frame view-finder, iconometer. Ziel(auf)-radar (radio detection and ranging apparatus), sonar (underwater sound navigation, detection and ranging).
 Sucher-bild seeker picture, monitoring p. -korn backsight of view-finder. -okular focusing lens. -parallax seeker parallax, finder p.
 Such-gerät, Stör- interference locator, signal tracer (traces progress of signal by stages). -licht search-light. -spule search coil, rotating c., exploring c. (of d.f.); flip c. (used in magnetic field tests). -tonanalysator heterodyne analyzer. -tonverfahren beat-note method (using heterodyning search frequency).
 südliche Breite south latitude.
 Südlicht aurora australis.
 Summand term of a sum (math.).
 Summer (Leitz) Summar objective.
 Summe, Licht- light sum, total l. emission. Linien- line integral.
 summum hum; buzz; sum up, add (up).
 Summen-frequenz summation frequency, sum f. -geber, Fernmess- telemetric integrator. -gleichung summation equation. -satz sum rule, permanence principle. -ton summation tone. -wirkung combined or compound action or effect.
 Summer buzzer, small AF oscillator. Dynatron- dynatron oscillator. Glimm- glow-tube type of buzzer oscillator. Magnet- magnetic interrupter or buzzer-type of AF oscillator. Röhren- vacuum tube AF oscillator. Schwebungs- audio-frequency (AF) oscillator, heterodyne buzzer o., beat.f.o. Stimmgabel-tuning-fork AF buzzer oscillator. Überlagerungs- heterodyne AF warbler oscillator.
 Summer-erregung buzzer excitation. -wellenmesser buzzer wave meter. Summlerungsgerät integrator. Summ-spur, -streifen buzz track (on film).

Sumpf swamp, marsh, bog; pit, sump, pool (of mercury in a vessel), pouring basin.

Super-leitfähigkeit supra-conductivity, super-c. -het(erodyne)- empfang mit selbsterregter Trägerwelle homodyne reception.

Supra-leitelektronen super-conduction electrons. -leiter super conductor.

Surrerscheinung motor-boating (in radio receivers).

Süßwasser fresh water.

Symmetrie symmetry, balanced condition. -ebene plane of symmetry, crystallographic plane.

symmetrieren, symmetrisieren balance, symmetricize, symmetrize, align, make symmetric, neutralize.

Symmetriezentrum inversion center.

symmetrisch, achsen- axially symmetric, in axial symmetry.

elektrisch- homopolar. höhen-symmetric about vertical axis (cryst.) kugel- spherically symmetric, spherically symmetrical. mitten- centro-symmetrical.

plan- planisymmetric. punkt- having point or radial symmetry.

radial- radially symmetric, in radial symmetry. rotations- in rotation or revolution symmetry. schief- skew-symmetric.

spiegel- mirror symmetric, with specular symmetry. zentral- centro-symmetric.

Synchronisator, Zahnrad-, magn. cogged or tooth-wheel synchronizer. Zeiger- dial scoring machine (m.p.)

Synchronisieratelier scoring stage.

Synchronisieren s. a. Gleichlauf.

Synchronisieren, lokal geregeltes

local synchronization (by tuning fork, etc., in telev.)

-selbständiges self-running synchronization (telev.)

-, unselbständiges distance- or signal-controlled synchronization (telev.) Nach- post-scoring (of silent film), dubbing, re-recording (first picture, then sound). Nach-(von Trickfilm, mit springendem Ball) bouncing-ball synchronization (m.p.). Vor- pre-scoring (first sound, then picture). Zwangs- locked synchronization.

Synchronisierimpuls, Bild- frame synchronizing impulse or signal, low sync i. Zellen- line synchronizing impulse or signal, high sync i.

-Abtrennung oder -Aussiebung synchronizing separation (separating control or sync impulses from video signals), amplitude separator, clipper.

Synchronisier-klappe clappers to mark sound and picture track for synchronization. -lücke, Zeilen-line synchronizing period. -zeitmarke marking of time, synchronizing m., time scale. -zwang locked synchronization, l. synchronization.

Synchronisierverfahren, Lücken- gap, underlap, interstice or interval synchronization method (sync signal introduced between end of line traversal and beginning of next line).

synthetischer Sprecher voder.

Systematik systematology.

Szenen, Atelier- regular stage scenery or sets. Effekt- scenics, light effects, etc.

T

- T Regler** T type section attenuator.
tabellarisch tabular, in tabulated form.
Tabelle, Belichtungs- exposure time table. Peil- bearing chart.
Umwandlungs- conversion table.
tabellisieren tabulate, tabularize,
Tabletten, Färbe- varitone tablets.
Tafel table, tablet, plate, slab, sheet (of metal), cake (of chocolate), pane (of glass); slate, blackboard, panel.
Tafel, Einstell- focusing board, test chart. Farben- color chart, c. scale. Fluchtlinien- alignment chart. Misch- mixing panel, monitoring p. Rechen- computation table. Signallampen- signal panel, annuiciator board or p. Spektral- spectrum chart.
Umrechnungs- conversion table, reduction t., conversion scale (say, meters to kilocycles).
Zahlen- numerical table, n. tabulation, table of figures.
Tag, Stern- sidereal day.
Taglindeit hemeralopia.
Tages-gang, örtlicher local diurnal variation. -lichtfaktor day-light factor (occasionally called window efficiency ratio, phot.), -lichtkassette daylight loading magazine (m.p.)
täglich daily, diurnal.
Takt time, cadence, measure (mus.), tempo, rate, rhythm, stroke (of engine).
Takt-funksystem timed-spark system. -geber impulsion means, impulser, time-valve, time tapper, t. beater, metronome.
-geber, Kristall- crystal monitor, c. stabilizer. -impuls synchronizing impulse, timing i.
taktmässige Ablenkung timed deflection, t. sweep.
Tal, Wellen- trough, valley or dip of a wave.
- Talg** tallow, (solid) fat, grease.
Talwegkurve thalweg.
Tambourinbecken tambourine jingles.
Tangens, hyperbolischer hyperbolic tangent, tanh (math.).
Tangente, Wende- tangent to reversing point.
Tannenbaumantenne christmas tree antenna.
Tannenbaumkristall dendrite (cryst.)
Tanz, Antreten zum formation of electron groups, bunching (in beam tube), phase focusing. Elektronen-oscillatory (erratic) movements of electrons (caused by electric or magnetic actions).
Tanzen, Bild- unsteadiness or jumping of picture.
Tarnung camouflage.
Tasche pocket, pouch, bursa, trap. Ausfrier- liquid-air trap (vacuum pump).
Tastarm wiper (arm).
Tastatur, Universal- universal keyboard.
Tast-blende, Ab- scanning aperture, s. hole (Farnsworth tube). -bolzen gage finger, tactile part. -drossel magnetic modulator.
Taste, Abstands- blank key, spacer k.
Lösch- cancel key, clearing k., release k. Ober- sharp (mus.), black key. Rückzug- back-spacing key. Unter- long key, white k.
Tasten keying, k. modulation; feeling, exploring, scanning, probing.
Tasten, Hinunter- carrier caused to drop to low value (zero) by synchronizing signal.
Tasten-feder, Brumm- spring for bass keys (accordion). -feld keyboard.
-reihe bank of keys, row of k.
Taster calipers, feeler, keying device (radio), tactile part or device; scanner, explorer (telev. picture).
Taster, Aussen- outside calipers.
Fadendicke- calipers with jaws measuring thread gage capacitively.
Gewinde- thread calipers. Innen-

inside calipers. Rad- wheel operated means causing signals, bell ringing, etc. Tiefe-depth gage.

Taster-skala feeler scale. -zirkel gaging calipers.

Tastgerät stabilizer; keyer and limiter leveling amplitude variations in incoming video signals (telev.) Vibrations-vibro-tactile device.

Tast-geräusch key chirp (occurring after key has been opened), key thump, k. click (caused on closing key). -klick key thump, k. click. -prellen see -geräusch. -relais keying relay, r. key. -schaltung, Mittelpunkt- center-tap key modulator circuit. -schlag key click, k. thump, chatter. -stift tracer point, feeler.

Tastung (cf Abtastung) control, keying, modulation by key action; impulsing, pulsing. Einkanal- single-channel pulsing (telev. synchronization). Hoch- working impulse transmitted on voltage substantially above normal. Spiral- spiral scanning.

Tatbestand factual findings.

Tätigkeit, Sonnen- solar activity.

Tatsachen, Erfahrungs- empirical experience, practical facts or data.

Tatze paw, claw, cam.

Taubheit, Leitungs-(des äusseren Ohres) conduction deafness or impairment of hearing (outer ear). Nerven- (d. inneren Ohres) nerve deafness, perception d., nervous perceptive impairment of hearing (inner ear).

Tauch-bahn (der Elektronen) dip-orbit (of electrons). -batterie plunge battery.

tauchen immerse, dip, plunge, steep. Taucher-aufnahme submarine shooting. -kolben plunger.

Tauch-kernrelais plunger relay. -lack dipping varnish. -spule moving coil, signal coil (of loudspeaker); telescoping c.

-spulenmikrophon moving-coil microphone. -zylinder plunger cylinder, plunger.

tauglich fit, proper, appropriate, useful, serviceable, usable, good, suited.

Taumelbewegung tumbler movement, t. action.

Taupunkt dew point, thaw p.

Täuschung, Augen- optical illusion. Spiral- spiral illusion.

Technik engineering art, technology, technics, technique. Funk-radio technology, r. engineering art. Nachrichten- signal art, communication art. Stand der-state of the art.

Techniker, Aufnahme- camera technician, c. man.

technisch commercial (grade, etc.), technical, technological, practical, industrial. glas- glass technological, vitrological.

technische Frequenz commercial frequency. -Wechselströme commercial alternating currents, industrial a.c. -Werkstoffe industrial, commercial or technical materials. teigig doughy, pasty, mellow, plastic, kneadable.

Teil...sub..., fractional, divisional, partial, componental.

Teil-abtastung fractional scan, partial s., coarse s. -bild compound image (of color record).

Teilchen particle, small part, corpuscle, element (math.). -harte primaries. Grund- smallest particles, fundamental p., atoms.

Schweben- suspended particles.

Stoff- particle of matter, corpuscle. Strecken- linear element (math.).

Teilchen-dichte particle density.

-feld particle field. -geschwindigkeit particle velocity.

Teildruck partial pressure.

Teiler divider (of potential, etc.), divisor (math.), submultiple.

Frequenz- frequency divider, de-multiplier or submultiplier of f.

Phasen- phase splitter.

Spannungs- voltage divider, potentiometer. Strahlen- beam

splitter (m.p.)

Teilerkapazität direct earth capacitance.

tellerfremd aliquant.

tellfremd prime to each other.

Tell-frequenz component frequency (say, of a spectrum). -kanal

sub-channel. -kopf index head.

-kraft component force, component f.

-kreis pitch circle, p. line, divided or graduated

circle, dial, graduated circular plate.

-maschine dividing engine, d. machine, ruling e.

-nehmer, Sammelanschluss- subscriber with several lines.

-raster fractional scan, f.

sweep (in interlaced scanning).

-ring index ring. -scheibe

index circle, i. plate.

-scheibe, Rasten- notched index wheel.

-spannung partial voltage, component v., submultiple v.

-sperrzeit partial restoring time (in echo suppression).

-spule fractional coil, component or subdivision of a c.

-strich graduation line, division l., d. mark (on a scale).

-ton partial, p. note (either a higher harmonic or a sub-h.)

-trommel divided drum, graduated d.

Teilung division, graduation, partition, pitch, scale, submultiplication.

Gleich- equipartition. Kern- nuclear division.

Niet- rivet spacing. Vier- quadripartition. Zeilen- line pitch (telev.) Zwei- bipartition, bisection.

Teilungs-ebene plane of division.

-fehler faulty pitch (telev.), line p. defect (e.g., underlap of lines).

-gesetz law of partition.

-koeffizient distribution coefficient.

Teilvierpol section of recurrent structure.

Teleaufnahme telephotographic work.

Telegraphie, Bild- picture tele-

graphy, radio or wire picture

transmission, phototelegraphy,

facsimile, wire-photo. Drahtwellen-wired wave telegraphy, wire radio t., "wired wireless". Unterlagerungs- sub-audio frequency telegraphy system, composite operation (telegraphic and telephonic signals passed over one wire, often attended by thump noise).

Telegraphier-pause space (in telegraphic work). -sender, tonmodulierter AF or tone-modulated telegraphic transmitter.

Telephon telephone (Poulsen, Blattnerphone, etc.)

Telephon, Fernseh- television telephone, video t. Funk- radiophone. Zungen- reed or Brown-type telephone receiver.

Telephonie, Geheim- scrambled, garbled or secret telephony (based upon band transposition or inversion, use of scrambling circuits, speech inverters, etc.) Mehrfach- multiple telephony.

Telephonie-drossel magnetic modulator. -sender, sprachgeschalteter voice-modulated telephony (signal) transmitter or radiophonic transmitter.

Teller, Auflage-, Platten- turntable (of phonograph).

Teller-fuss plate- or dish-shaped foot, press or base. -gerät, Zwei-double turntable type of player.

-isolator dish or disk insulator for antenna supporting.

Temperatur, charakteristische (Debye's) characteristic temperature.

-, schwarze black-body temperature, cavity t. Anlass- tempering temperature, annealing t. Farb-color temperature.

temperaturabhängig temperature responsive, t. dependent, be a function of temperature.

Temperatur-beständigkeit temperature stability, t. constancy, condition of being unaffected by temperature (changes). -feld temperature gradient, t. "field" pattern.

-gang variation of temperature, function or effect of t.

-leitfähigkeit temperature diffusivity, thermal conductivity.

Temperaturregler

-regler temperature control, thermostat, thermo regulator, (electronic) thermautostat.
-strahler incandescent light source, i. luminous radiator.
-strahlung thermactinic radiation.
Tempknopf speed regulator (in shape of a knob).
Tensor, Spannungs- stress tensor.
Tensoralgebra tensor algebra.
Terme, anharmonische anharmonic terms or constants.
Termin zur Verhandlung einer Sache anberaumen set a date for a hearing or a case, appoint a h.
Term-schema term diagram, t. scheme.
-verschiebung term shift.
Tertiärempfang three-circuit reception.
Terzflöte third flute.
Tetraeder tetrahedron.
Teufe depth.
Textur, Schicht- sheet intergrowth, stratified texture.
 $\operatorname{tg} \alpha \tan \alpha$.
T-Glied T-type section or filter mesh, T-type network m.
Thallium-sulfidzelle, -zelle thalofide (photo-conductive) cell.
Theaterkopie release print.
Thema theme, subject, subject-matter, topic.
thermische Fehlordnungsscheinung formation of holes (cryst.)
thermoelektrischer Effekt thermo-electric effect, Seebeck e.
-Wärmemesser thermel.
Thermo-element, Vakuum- vacuum thermocouple. -galvanometer Duddell's thermo-galvanometer.
-kraft thermo-electric force.
-kreuzbrücke thermo-couple or junction, thermal cross.
Thermometer, thermo-elektrisches thermel. Registrier-, Schreib- thermograph.
Thermoschalter thermal-lag switch.
Thorerde thoria (thorium oxide).
thorieren thoriate.
thorierten Kathode, Wiederbelebung der re-activation or rejuvenation of thoriated cathode, flashing.

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Tieftemperaturvergasung

thorisch toric.
Thoriumemanation thoron.
thoriumhaltiger Wolframfaden thoriated tungsten filament.
Tiefätzen intaglio etching (whole metal coated with resist, pattern cut out with scriber).
-decker low-wing airplane.
-druck intaglio printing process.
Tiefe depth of focus (of eye).
Eindring- depth of penetration.
Modulations - s. Modulationsgrad.
Schärfen- depth of vision, d. of focus, definition in d.
Schärfenfeld- depth of field.
Seh- depth of focus, d. of field.
Tiefen bass-notes, low-frequency n., low-pitch n.; dark picture portions.
Tiefen-bestimmung, Fehler- stereoscopic radiograph for locating defects, depth determination of flaws. -hervorhebung bassy condition (low AF overemphasized).
-kompensation reed armature arrangement to accentuate or emphasize low frequencies (in loudspeaker). -konus low-frequency cone loudspeaker, woofer. -messer fathometer, ocean sounding meter (e.g., supersonic), sonic depth finder. -schärfe depth of focus, d. of field. -schrift hill and dale track, Edison t. or sound groove, vertical recording (of phonograph disks). -taster depth gage. -unschärfe insufficient, or lack of depth of, focus. -unterscheidungsvermögen power of differentiating depths. -winkel angle of elevation below horizontal, a. of depression.
-wirkung plasticity of image, plastic or stereoscopic effect (of picture).
tiefer Ton low-pitch sound, bass s. or note.
Tiefpassfilter low-pass filter.
tief-rund concave. -schmelzend low-melting. -schwarz jet black.
Tieftemperaturvergasung low-

temperature distillation or carbonization, partial c.

Tieftonkonus low-frequency cone loudspeaker, woofer.

Tiefung cupping (or drawing in drop press to make concave or dished articles).

Tiefungswert cupping value, ductility v.

tiefziehen deep draw, cup, dish.

Tiefzieh-fähigkeit capability of being cupped or drawn into article with deep concavity in drop press, etc., cuppability. -probe cuppability test (specimen), Erichsen test. -verfahren technological method of drawing sheet articles in drop press, cupping method.

Tiegel, Porzellan- porcelain crucible, p. pot.

Tiegel-brennofen crucible oven.

- flusstahl crucible cast steel.
- form crucible mold.

Tierleim animal glue, a. size.

Tikker ticker, tikker; radio chopper, c.w. train interrupter.

tilgen eradicate, destroy, cancel, erase, blot out, delete, efface, obliterate.

Tilgung (und Ausleuchtung) extinction or quenching (of fluorescence), evanescence.

Tilgung, Schall- sound absorption, suppression, damping, deadening or attenuation, abatement of noise.

Ton, dumpfer all-bottom sound.

- , gehaltener sustained sound.
- gleitender glissando, sliding note.
- , hoher h.-frequency note or sound.
- , hohler boomy sound, dull s.
- , krächzender, kreischender all-top sound or voice.
- , reiner pure note, p. tone, simple t.
- , sendereigner note or pitch peculiar to a beacon station, code note.
- , tiefer low tone, low-pitch tone, bass note.
- , unreiner impure tone, ragged note or t.

Ton, Anblas- Aeolian tone.

Ausfluss- jet tone, slit t.

Dauer- permanent note, tone, sound or signal. **Differenz-**

difference tone. **Dinas-** Dinas clay. **Farb-** color tone, tint. **Feuer-** fireclay. **Fremd-** alien frequency or tone (in sound reproduction). **Ganz-** whole tone. **Halb-** semi-tone, sharp (mus.). **Heul-** sound with large number of modes of vibration. **Hieb-** Aeolian tone or note. **Interferenz-** beat note, interference n.

Kammer- "A" of tuning fork.

Kapsel- sagger clay, capsule c.

Keller- tunnel effect, boom e.

Kombinations- combination tone (either difference or summation t.).

Licht- photographic sound recording. **Magnet-** magnetic sound recording. **Mis-** distorted note, off-pitch sound. **Nadel-** stylus- or needle-recorded and reproduced sound. **Netzbrumm-** motor boating (of a.c.), a.c. pickup, mains hum.

Ober- overtone (often a harmonic), upper partial. **Rein-** note with one mode of vibration, single-frequency tone. **Schlag-** strike note (in a bell, followed by hum n.) **Schneide-** edge tone, flue stop tone (of flue or organ pipe).

Schwebungs- beat tone, interference t., b. note. **Spalt-** slit tone, jet t. **Stopf-(einer gedackten Trompete)** stopped tone.

Stoss- beat note, throb. **Summensumma-** summation tone. **Teil-** partial note, partial (being either a subharmonic or a higher harmonic or overtone). **Triller-** trill, quaver, warble. **Übergangs-** transient. **Wechsel-** warble note, w. sound (air alarm). **Zwischen-** medium or intermediate tone or shade (of color).

Ton-abnahmestelle sound aperture, s. gate. **-abnehmer** pickup (of phonograph), soundhead (m.p.). **-abnehmertrommel** sound take-off drum, scanning d. **-abstufung** grading of tones, graduation of tonal intensities. **-abtastspalte** sound scanning slit. **-abtaststelle** sound gate, s. pickup point, s. scanning slit. **-analysator, Such-**

heterodyne analyzer of sound.
-angeber, chromatischer chromatic pitch pipe. -**ansatz, Licht-** photographic sound film head.
-ansatz, Nadel- sound-on-disk attachment or head. -**arm** tone arm.
-art tonality, mode (major or minor), key. -**atelier** sound stage, studio, teletorium.
-aufnahme-Kofferapparat box equipment, trunk unit. -**aufnahme, Licht-** sound film recording. -**aufnehmer** sound recorder. -**aufzeichner,** magnetischer magnetic sound recorder, magnetophone, Poulsen telephone, Blattnerphone, etc.
-bandbreiteregler (tone) band width control. -**belichtungsstelle** sound gate, point where sound track is scanned, scanning light.
-beseitigungsdrossel hum-bucking coil, hum eliminator choke.
-bild tonal pattern, tone spectrum.
-bildwand transoral screen (m.p.).
-blende tone-control means, tonalizer; fader (continuously variable or otherwise). -**blende, Reini-** biasing or noise-reduction stop, gate, vane or shutter. -**darbietung** sound entertainment, acoustic e.
-effekt, Raum- stereophonic sound effect, binaural e. -**empfang** modulated reception, tonal r.
-empfänger, Bild- audio-video receiver combination. -**empfindung** acoustical perception, sound sensation, auditory percipience.
tönend(es) Signal tone s., tonal s., musical s. gleich- unisonant, consonant. selbst- ringing or squealing (of a tube, in radio apparatus).

Tonerde alumina, argillaceous earth.

tonerdehaltig containing alumina, aluminiferous.

Ton-erdesalz, aluminum salt.

-**farbe** timbre, tone quality.
-färbemittel tone shading means, tonalizer. -**fenster** sound gate, s. slit.

Tonfilm, Rundfunk- broadcast of video and aural signals, sound

telecine or s. telecast, television program with s. accompaniment. **Trick-** sound cartoon. -**optik** soundhead lens or optic (m.p.), sound "optic". -**rundfunk** audio and video film broadcast, sound telecine. -**wagen** sound truck, location t., s. van. -**zusatzgerät** sound film head or attachment. **Ton-fixierbad** toning or fixing bath. -**folgeschrift** sound track, s. record. -**formstück, mehrzügiges** multiple tile or clay conduit. -**frequenz** audio frequency, audible f., voice f., a-f. -**frequenzen,** höhere treble, high a-f or audio frequencies (handled by tweeter loudspeaker). -**frequenzen, niedere** bass frequencies, low a-f (handled by woofer loudspeaker). -**führung** labyrinth (of loudspeaker). -**funkensender** singing or musical (quenched) spark transmitter. -**funkentstrecke** quenched spark gap. **tongebend** sound generative, acoustic, sonant. **Ton-gehör, absolutes** absolute (genuine) pitch. -**generator** a-f generator, tonal or musical g. -**gerät, Licht-** sound film head or attachment. -**haltungspedal** tone sustaining pedal. -**helligkeit** pitch (of sound sensation). -**höhe** pitch. -**höhe-vergleicher** tonvariator, (sometimes) pitch pipe. -**kamera** sound recording camera. -**kameramann** recordist. -**klebestelle** blooping patch or splice (of sound film). -**kodaskop** sound kodascope. -**kontrolle, Kopfhörer-** monitoring with headset. -**kopf** sound film head or attachment. -**kopie** sound film used for reproduction. -**lampe** exciter lamp (mostly incandescent light-source) operating photo-cell. -**laufwerk** sound film feed mechanism. -**leiter** musical scale (natural, diatonic or just s., and tempered s.) -**lichtlampe** exciter lamp (mostly incandescent) operating photo-cell. -**masse** paste (cer.) -**meister** monitoring operator (working at control or

mixer desk), recordist, sound engineer, director of sound. -mess'er
tonvariator. -mis'cher tone fader, t. mixer.

tonmodulierter Telegraphiersender
tone- or AF-modulated telegraphic transmitter.

Tonmuffel clay retort.

Tonnenfehler barrel distortion, positive d.

Ton-optik soundhead lens, s. "optic" (m.p.) -papier tinted paper.

-probe sound test; tonsil t. (for recording voice of a singer).

-punkt, **Licht-** elementary shading value or density v. -rad tone-wheel.

tonrichtiger Filter orthochromatic, true-color or correct-tone filter (opt.)

Ton-röhre singing valve. -rolle recording roll (of sound film).

-schiefer clay slate or schist, argillaceous slate, argillite.

-schirm sound screen. -schlitz reproducer slit, r. aperture, sound g. -schwankung pulsation of reproduced sound intensity (known as wowows up to 6 cycles per second, as flutter between 6 and 30 cps, gargles 30-200 and whiskers over 200 cps), generally called flutter regardless of cps (sound film). -schwankungsmesser flutter reter, f. measuring instrument (sound film).

-sender modulated c.w. transmitter, tonic t.; audio, aural or sound t. (accompanying video program). -spalt sound slit, s. aperture. -spektrum sound spectrum. -spur, eingeprägte track embossed on film strip. -spur,

eingeschnittene track engraved in film strip. -spurbreite, Zackenwidth of variable-area sound track.

-steuermann operator controlling sound volume in a theater.

-steuerstelle control or exciter point (sound film).

Tonstreifen sound track, s. recording.

-doppelspuriger double-edged

variable-width sound track.
-, einspuriger single-edged variable-width sound track.
-, schwach ausgesteuerter low-modulation track.

Tonstreifen, Licht-, veränderlicher Breite squeeze track (bearing photographic sound actions).
-verschmälerung sound track squeezing, matting.

Ton-strom sound current, signal c., voice-signal c. -träger sound-track support. -transportrolle sound-film feed roller or sprocket wheel. -trickfilm sound animated cartoon. -trommel scanning drum, sound take-off d. -überblendung sound fading, s. fade. -überlagerung AF modulation. -umfang tonal range, bandwidth, compass. -umschaltungseinrichtung fading or shading device.

Tönung density value, shading v.

Beiz- mordant toning. **Wärme-** heat tone (thermochemistry), h. quantity, h. effect.

tönungsrichtiges Bild picture of proper shading and contrast.

Tönungswert tonal value, gradation (of image).

Tonveredler high-frequency cutoff, h.f. filter, h.f. de-accentuator, sound clarifier, tone control comprising blocking condenser shunted to loudspeaker, tonalizer.

Tonverfahren, Klar- noiseless film method. **Magnet-** magnetic sound recording, telephone r. method, Blattnerphone m., etc. **Nadel-** sound on disk method. **Rein-** noiseless film method.

Ton-volumen, mittlerer power level (read in volume indicator), average l. -wagen sound truck, location t. or unit, lorry set, s. van.

-wahrnehmung acoustical perception, sound or auditory sensation. -welle recording drum shaft. -wellenspannung audio wave potential (of sound accompaniment, in telev.) -wender tone converter. -wiedergabe sound

reproduction. -wiedergabeoptik soundhead lens or "optic".
-zeitdehnung acoustic slow motion (Silka method). -zelle sound cell (used in talking film).
-zentrum tonal or acoustic center (of "gravity") of frequencies.
-zerlegung, -zersetzung analysis of sound. -zusatz, **Licht-** photographic sound on film head or attachment. -zusatz, **Nadel-** sound on disk attachment or head. -zuschlag aluminous flux.

Topf can, shield; pot. **Sperr-** wave trap.

Topf-kreis tank circuit. -magnet shielded magnet, ironclad m.

-photometer photometric integrator.

Tor unit of millimeter mercury column.

Tor, Strom- thyratron.

Torfkohle peat charcoal.

torkeln wobble, tumble, stagger.

Torsions-kopf torsion head.

-modulus rigidity modulus, torsion m., shear m. -wage torsion balance.

tot(es)Feld dead zone (of a ribbon microphone), plane of ribbon.

-(*er*)Gang lost motion, backlash.

-(*es*)Material inert material, stable m.; neutral m., inactive m.

-(*e*)Wiedergabe dead reproduction.

-(*e*)Windung dummy turn, d. spire, idle turn, dead end.

-(*e*) Zone skip zone, dead z.

tot,schall- non-resonant, acoustically inactive or inert, non-oscillable.

Totale medium-long shot, full shot, full-length figure (m.p.)

Halb- (close)medium shot.

totbrennen overburn.

Töter,Krach- automatic silent tuning means, noise suppressor; n. gate (film recording).

Touren-Belastungskennlinie speed-load characteristic.

Trabanten satellites (spectr.).

träge inert, inactive, neutral, sluggish, slow-responding, lagging.

Träger carrier, bearer, supporter, foundation, bed, supporting means,

base (of something), vehicle, backing; beam, girder.

Träger, positiver positive carrier, ion. **Aufzeichnungs-** recording or sound track or support (sound on film, on disk, etc.).

Blenden- diaphragm carrier.

Film- film base, f. support, f. foundation. **Hilfs-** auxiliary carrier, sub-carrier. **Ladungs-** charge carrier. **Lichtton-** photographic sound track support.

Mikroskop- microscope stage.

Objekt- object support, o. carrier (plate), specimen holder (e.g., celluloid skin or film), slide, mount, stage, stand.

Schirm- carrier, foundation or support of screen (coated with phosphor substance, in cathode-ray tubes). **Wicklungs-** former, skeleton form, winding frame, coil form. **Zusatz-** missing or suppressed carrier re-introduced in receiver (in side-band signal transmission). **Zwischen-** sub-carrier.

Träger-folien supporting foils.

-**frequenzfernmesung** carrier telemetering (e.g., metamer of GE Co.). -**plättchen**, **Objekt-** object support, o. lamina, o. slide. -**seite** film base side or face. -**strom, zeitlich veränderlicher** wobbled carrier current, warbled c.c. -**underdrückung** carrier suppression (in quiescent c. telephony).

-**wegtastung** carrier gating, c. suppression, c. interruption (in synchronizing work). -**zusatz** re-insertion of carrier.

Trag-fähigkeit buoyancy, lift, bearing, carrying or supporting strength, carrying capacity; yield, productiveness. -**flächenholm** wing spar. -**flügelprofil** aerofoil section.

Trägheit inertia, sluggishness, inertness, slowness, persistence (of eye or retina), time-lag.

Netzhaut- retinal persistence.

Trägheitsmoment moment of inertia.

Trag-körper(des Magnetsystem)

chassis (of magnet system).

-stütze supporting stay, s. prop.
tränken steep, soak, saturate, im-
pregnate.

Transformator, Abwärts- step-down
transformer. Anpassungs-
matching transformer. Anzapf-
tapped transformer (especially
center-tapped t.), split t.

Aufwärts- step-up transformer.

Ausgleich- hybrid- transformer,
three-winding t., balanced t.,
differential t. Dreiwicklungs-
hybrid transformer, three-
winding t. Käfig- shielded
transformer. Netz- mains trans-
former, power t. Phasen- phase
shifting transformer. Reduktions-
step-down transformer. Saug-
booster transformer, suction t.,
sucking t. Spar- auto transformer.
Treiberöhre- driver tube trans-
former. Zwischen- inter-stage
transformer.

Transformator-gehäuse transformer
shell, t. container, t. tank.
-kurve amplification curve of a
transformer.

Translations-fläche translation
plane, slip p. (cryst.) -linie
slip band (cryst.) -streifung
translation gliding striae,
crystal ridges.

Transparenz transparency, trans-
mittancy, transmissivity (for
light). -schwankungen modulus
of transmission (film).

Transponierungs-empfang heterodyne
reception. -steilheit slope or
mutual conductance (of mixer tube).

Transport,Film- film feed, f. move-
ment, film travel. Moment- mo-
mentum transfer.

Transporteur vernier, protractor.

Transport-kette conveyor chain,
transfer c. -mechanismus feed
mechanism, conveyor m. -querschnitt
transport cross-section. -rolle,
Film- picture film feed sprocket.
-rolle, Ton- sound film feed
sprocket. -theorie, impuls-
momentum transport theory (of

turbulent flow). -theorie,
Wirbel- vorticity transport
theory. -trommel intermittent
sprocket.

Transversalmethode variable-area
method (of sound recording).

Trapezfehler keystone, trapezium
or trapezoidal distortion (due to
dissymmetry to earth of deflec-
tion plates, to electron beam
angle, etc.)

Trefferzahl number of impacts or
shocks.

Treffweite (=Brennweite in Optik)
focal length (of electrons = f.
distance in opt.)

T Regler T-type section attenuator.

Treiber driver, punch; propelling
means. -röhre-Transformer
driver tube transformer. -system
driver system.

Treib-mittel driver, driving,
motor or motive fluid or sub-
stance, fuel, propellant.

-probe cupping test. -sitz
driving fit. -werk, Schall-
loudspeaker operating or driving
mechanism or means, motor m.

Tremolostimmung, Tremulant
tremolo, tremulant effect.

trennen separate, sever, sunder,
divide, resolve, decompose.

Trenn-faktor separating factor.

-festigkeit separating strength,
static crack s. -filter divid-
ing filter, separating f.

-frequenz cut-off frequency.

-netzwerk dividing network.

-röhre isolating tube, buffer t.

-schalter isolating switch, dis-
connecting link, isolator.

-schärfe selectivity, filter
discriminator. -schärferegelung
automatic bandwidth selection.

-stromröhre spacing valve (in
telegraphy).

Trennung selection, filtering,
separation (by filtering network,
etc.); sorting (of ions, in
mass spectrometer).

Trennungs-fläche parting plane,
cleavage p., surface of separa-
tion. -linie dividing line,

boundary l., partition l., demarcation l., l. of separation. -winkel angle of separation (of solid moving through fluid.)

Treppe, Roll- escalator.

treppenförmig (s.a. Stufen) in the form of stairs, stepped, echeloned, terraced.

Treppenrost step grate. -stoss lap joint.

treppenweise echeloned, scalariform, stepwise, by stages, by degrees, gradually.

Tretkurbel foot pedal, treadle.

Treue, Farb- color fidelity (of color film), c. match, orthochromaticity.

treue Wiedergabe faithful reproduction, fidelity of r., orthophonic r. (of sound).

Trichter horn (of loudspeaker, with throat at narrow end and mouth at end with largest flare); funnel, hopper, cone, gate (in foundry); electromagnetic horn (of wave guide).

Trichter, Exponential-, abgestufter multi-flare exponential horn.
-, aufgewundener twisted or curled exponential (loudspeaker) horn.
-, gefalteter folded exponential horn.

Trichter, Riffel- corrugated horn.

Rippen- ribbed funnel.

Schweige- cone of silence marker (for airplane landing).

Trichter-einlage filter cone.

-hals throat of (loudspeaker) horn.
trichterloser Lautsprecher hornless loudspeaker, direct radiator l.

Trichter-mundöffnung mouth (opening) of horn, largest flare.

-mundstück throat of horn, narrow inlet of h. -mündung mouth opening of horn, largest flare.

-rohr funnel tube, tube funnel.

-vorhof air chamber of loudspeaker (between cone and horn). -wand, schallharte rigid or non-absorbing horn wall.

Trick trick, artifice, slight of hand, stratagem; trick effect or "stuff" (m.p.). -bilder trick

shots, t. pictures. -film, Ton-sound animated cartoon. -film, Zeichen- animated cartoon. -filmzeichner animator. -kamera trick camera. -tonfilm sound cartoon.

Trieb, Spindel-worm drive.

Zahnrad- rack and pinion drive, toothwheel drive mechanism.

Trieb-element motor element (of loudspeaker) -gehäuse gear housing, g. casing, g. box. -knopf milled head, pinion head (in microscope). -kraft moving force, motive power, propelling f. -mittel driving or motor means; fuel, propellant. -schraube coarse adjustment (in microscope). -werk machine, engine, drive mechanism, motor element (loudspeaker, etc.); gearing, transmission gear.

Triftröhre (cf Laufzeitröhre) drift tube, beam t. (e.g., Klystron).

Trillerklappe shake key (wind instrument).

trillern trill, quaver, warble.

Trillernote (cf Wechselnote, Heulton) trill note, warble note.

Triograph electrocardiograph with CR tube.

Trielpunkt triple point (in metallography).

Tritt kommen, in (cf Phasenaussortierung) come in step or phase, bunching, p. focussing (of electrons).

Trittschall impact sound (transmission). -dämpfung foot fall sound attenuation.

Trocken-apparat drying apparatus, drier, desiccator, dehydrator.

-entgasung dry distillation.

-gerüst drying frame, d. rack, -gleichrichter copper rectifier, cuprous-oxide r., selenium-oxide r., metal r., dry r.

-kompass dry compass. -kondensator dry electrolytic condenser.

-linse dry objective, non-immersion o. -mittel drying agent,

drier, siccative, desiccative.
-rückstand dry residue. **-stoff**
 siccative, drier, drying substance.
Trog, elektrolytischer electrolytic
 tank (for field pattern mapping).
Trogbatterie trough battery.
Trommel drum, cylinder; tympanum.
 -**, grosse** bass drum. -**, kleine**
 snare drum.
Trommel, Belichtungs- exposure drum,
 recording d. (on which film is
 exposed to modulated light beam).
Linsen- lens drum (scanner).
Loch- scanning drum (of Jenkins).
Mess- graduated drum. **Nachwickel-**
 lower take-up reel. **Schalt-**
 intermittent sprocket (m.p.).
Sprossen- sprocket drum. **Teil-**
 divided drum, graduated d. **Ton-**
 scanning drum. **Transport-** in-
 termittent sprocket. **Vorwickel-**
 upper pull-down sprocket. **Wirbel-**
 high side drum. **Zacken-** sprocket
 wheel.
Trommel-blende scanner drum, d. with
 scanning apertures. **-fell** drum-
 head; tympanic membrane, tympanum
 (of ear). **-flöte** fife. **-schlägel,**
 -stock drum stick. **-welle,**
 Antriebs- drive sprocket shaft.
Trompete trumpet.
tropfbar capable of forming drops
 or of dropping or dripping, liquid.
Tröpfchen globule, spherule, drop-
 let, small bead. **-methode, Öl-**
 oil drop method.
Tropf-düse dripping nozzle.
 -**elektrode, Quecksilber-** dropping
 mercury electrode.
tropfen drop, drip, trickle.
Tropfen, Schweiss- welding dribble,
 w. bead.
Tropfenmesser stalagmometer,
 stactometer.
Tropf-gewichtsmethode drop weight
 method. **-hahn** dropping cock.
 -**trichter** dropping funnel.
Tropfungszeit dropping time.
Trübe dross, pulp, slush, slurry,
 slime; turbidity, cloudiness.
trübe turbid, cloudy, dull, thick,
 veiled, foggy, frosted, dim,

opaque, muddy.
Trübglass frosted glass, opal g.,
 glass diffusing light.
Trübung (cf *Enttrübung*) tarnishing
 (on metal surface); clouding
 (of glass), opacity; night and
 other effects tending to impair
 sharpness of zero in d.f., wavering
 of signal beam, blurring (of
 minimum). **Funk-** blurring of
 minimum signal or of zero point
 in radio d.f. or radio bearings,
 uncleared zero.
Trübungsgrad degree of turbidity.
-koeffizient coefficient of
 turbidity, Angstrom c., degree of
 t. **-messer** (cf *Belichtungsmesser*)
 turbidimeter, opacimeter, nephelometer
 (type of photometer).
-spannung potential causing QE
 (quadrantal errors).
Trug-bild illusion, phantom, fata
 morgana. **-schluss** erroneous
 conclusion, fallacy, fallacious
 argument.
Trumm film strip. **-, schlaffes**
 slack end (or driven portion) of
 a belt, rope, etc. **-, straffes**
 driving or taut end (of a belt).
Trümmer fission products, f. frag-
 ments, remains.
Tubus, Ansatz- extension tube.
Auszieh- draw tube (of microscope).
Einstell- micrometer adjusting
 means, adjuster tube (in electron
 microscope). **Optik-** optical
 barrel. **Projektions-** projection
 tube (micr.)
Tubus-schlitten tube slide.
 -**träger** tube support.
Tunneleffekt tunneling effect.
Tüpfelanalyse spot analysis, drop
 a.
tüpfeln dot, spot, speckle, stipple,
 mottle.
Turbine, Anzapf- bleeder turbine.
Elektronen- cyclotron and inverted
 (or Hollmann) forms thereof,
 magnetic resonance accelerator,
 induction electron accelerator
 (also called rheotron).
Turbinen-dichtung turbine (labyrinth)

seal. -dichtung, Kämmen der -
rubbing of turbine seals.
-unterbrecher turbine interrupter,
t. break.

Turmwickel- mandrel.
Turmalinkristall tourmaline crys-
tal.
Türöffner, lichtelektrischer
photo-electric door opener.

U

Überakustischer Raum (mit übertriebener Nachhalldauer) abnormally live space (having undue reverberation period).

Überanpassung, Widerstands- overmatching of impedance (load resistance greater than internal resistance).

überanstrengen over-exert, overstrain.

Über-anzeige overswing (of volume indicator). -belichtung overexposure. -besserung over-correction, o.-compensation.

Überblasen over-blow (of a flute).

Überbleibsel residue, residuum, remainder, remnant.

überblendens dissolve, fade-over, mix, lap.

Über-blender fader, means to cause change-over from one projection to the next (m.p.); sound fader, means for fading in and out, blending and mixing (sometimes with central tap); fading mixer (telev.) -blendung, Ton- sound fading, s. fade. -blendungsblende dissolving shutter, lap-dissolving s. (for gradual transition from one scene into another).

überbrücken shunt, bridge, by-pass.

Überbrückungskondensator by-pass condenser, bridging capacitor.

über-dauern outlive, outlast, survive. -decken swamp, blanket, mask, cover up, eclipse, conceal.

Überdeckung, Zeilen- line overlap.

Über-drehen super-speed operation (in film work). -drehzahl excessive speed. -druck, Atmosphären- (Atü) atmospheres excess pressure.

Übereinandergreifen overlap (in diffraction pattern, scanned lines in telev., etc.); engage over one another.

Übereinanderlagerung superposition, superimposition.

Übereinanderliegend superjacent, superposed.

Über-einanderschweissung lap weld.

-einkommen agreement, arrangement, convention, contract, compact.

Über-einstimmen agree, coincide, harmonize, acquiesce in, correspond, register (one part with another), be in unison or synchronism (of phases). -endlich transfinite. -entwickelt overdeveloped, overdone, "cooked" (m.p. slang). -exponiert overexposed.

Überfahren des Mosaikschildes durch Strahl sweep out mosaic with beam.

Überfällig overdue.

Über-fallrohr overflow pipe.

-fang covering. -fanggläser flashed opal glasses. -fangschicht glass liner, g. lining.

Über-feine Struktur hyperfine structure. -flüssig superfluous, overabundant, in excess, excessive; overflowing. -führen convert, transport, transfer, convey, reduce (to practice or to a practical form); convict.

Überführung, Weg- overpass, overhead crossing.

Überführungs-geräte(Kabelkasten) terminal equipment (cable box).

-kasten test box; cross-connecting terminals. -zahl transport number (of ions), transference n.

Übergang transition, passage, crossing, (gradual) change (from one place or condition to another), blending, shading (of colors). -von... zu transition or change from....to; replacement of....by, substitution of....for.

Übergang, erlaubter permitted transition (in accordance with selection principle). -, erzwungen forced transition, non-spontaneous t. -, unerlaubter, -, verbotener forbidden transition. -, verflauter

softly shaded transition (lacking definition) (telev.).

Bewegungs- motional transient.

Phasen- phase transition.

Quantum- quantum transition, q. leap.

Übergangs-einrichtung change-over (from one projector to another).

-glieder transition types, t. members. -leitwert transconductance, transfer characteristic.

-punkt transition point, place of t. or transfer. -schicht transition layer (opt.) -stelle transition point, place of t. or transfer.

-töne transients. -verlust contact loss, transition l., junction l. -wahrscheinlichkeit (der Elektronen von einem Niveau zum andern) transition probability (of electrons to leap from one level to another). -widerstand contact resistance. -zahlen transference numbers (of solution). -zustand intermediate stage, intermediary s., transition s., transiency.

Übergewicht overweight, extra w., unbalance, desequilibrium, preponderance, predominance.

über-glasen glaze, overglaze.

-greifen overlap, engage over, encroach, transgress, cross a boundary. -helles Stimmungsbild high-key picture. -hitzen superheat (beyond saturation), overheat.

Überhöhung bank or cant (in a curve), hump, super-elevation (of rails), lobe (as on a cam).

überholen overreach, outstrip, outrun, overtake, catch up with.

Über-holungsgebiet der Elektronen catchup, overtake or bunching range of electrons (in phase focusing, in beam-tube drift-space).

-hörfrequenz supersonic, ultra-sonic, ultra audible, superaudible or ultra-audion frequency.

Über-individuell super-individual.

-kalten supercool, undercool.

Über-korrektur overcorrection, overcompensation. -kreuzungspunkt, Elektronen- electron crossover

(point where principal rays from first lens cross axis = exit pupil in optics; in electron optics, crossover lies between cathode and first anode).

-krümmung excessive curvature.

-kühlung supercooling, overcooling, underc.

-lader super-charger (of engine). -lagerer

heterodyne, local oscillator (based on beat principle) e.g., of endodyne, autodyne or self-heterodyne type. -lagerer, Selbst-autodyne, self-heterodyne.

Überlagerung heterodyning, production of difference frequency or beat; superposition, impression of one wave or f. upon another.

Ton- AF modulation, tonal m.

Überlagerungs-empfang heterodyne reception, beat r. -kreis circuit in which heterodyne or beat action is produced, heterodyne c. -stufe mixer stage, first detector (in superheterodyne receiver). -summer heterodyne warbler oscillator.

überlappt schwelßen lap-weld, scarf-weld.

Überlapping over-lap (of lines, in telev. image).

überlastet overloaded; overrun (by working a lamp in overvolted condition).

Überlastung overload, overcharge, overtax; overrunning (of a lamp by operating it at voltage far above rated), overvolting.

Über-legung consideration, reflection, deliberation. -leitfähigkeit superconductivity, suprac.

-lichtung over-exposure. -mass allowance (in press fits).

-mikrometer ultra-micrometer.

-mikroskop, Durchstrahlungs- transmission type ultra-microscope, super-m., electron m.

-mikroskop, Selbststrahlungs-self-emissive electron microscope, self-illuminating m. (based on electrons arising on object surface). -nahme, Strom- transfer of current, tapping of c., c. tap.

-regulierung overshooting, excessive regulation, e. compensation, over c.

über-rot infrared, ultra-red.

-sättigen supersaturate.

Überschall-lichtzelle supersonic light relay or valve. -wellen supersonic, ultra-sonic or u.-audio waves. -wellenanhäufung (zone of) accumulation of ultrasonic waves. -zelle supersonic light relay or valve.

Überschiebung transvection. -schlag nose over (of an airplane).

-schlag, Funken- sparkover, flash-over, breakdown (say, of a spark-gap). -schmelzung superfusion, enameling. -schniedung overlapping, intersection (of lines), intercept; overcutting (when adjacent record grooves touch).

-schreien overmodulation. -schreitung exceeding (a certain limit, mark, level or value); transgression.

-schrift heading, caption, title.

überschwellige Schallreize super-threshold (sound) intensity levels.

- Sichtbarkeit super-threshold visibility.

Übersee-Empfänger transocean receiver, transatlantic r.

übersehen oversee, overlook, survey, sweep (with eye).

Übersetzung, Frequenz- frequency transformation.

Übersetzungs-rohr converter tube (used in avc schemes between regulating and regulated tubes).

-verhältnis transformation ratio, gear r.

Übersicht survey, review, summary, extract, synopsis, abstract, digest.

über-sichtig long-sighted, hypermetropic. -sichtlich easily followed up, easily understandable, visible, clear and simple, not complicated or intricate.

Übersichtsspektrum general spectrum.

überspannt(er)Betrieb overvoltage operation, overvolted o., overrunning. -(e)Entladung overvolted discharge.

Überspannung overvoltage, excess v.,

overrunning, overvolting.

Über-spannungsfunkenstrecke

surge arrester, s. gap, s.

absorber. -spielen re-recording.

-sprecherscheinung cross-talk, babble (when from several channels), "monkey chatter"; distortion, lack of sensitivity.

über-stehend projecting, protruding, salient, standing over, surmounting; surnatant, supernatant (of liquids). -steuern overshoot, overload, overmodulate. -steuert over-"shoted" (m.p.)

Übersteuerung overloading (of tubes, causing blasting); over-modulation (in film recording), sound overshooting.

Übersteuerungs-abschneider overload chopper. -messer overload indicator. -punkt overload point (of a recorder). -schutz overload limiter (for film).

Über-strahlen der Ramanlinien

swamping or outshining of Raman spectral lines. -strahlung ir-radiation. -streichen des

Leuchtschirmes sweep out of television screen. -streichung eines Frequenzbereichs durch einen Kondensator sweeping of a frequency range by a condenser, coverage of f. band, scanning a range.

-struktur superlattice; superstructure.

übertragen transfer, transmit, transport, convey; translate, transcribe; assign, vest in, delegate, confer, grant, cede.

Übertragender assignor, grantor, transferor.

Übertrager, Brücken- differential transformer. -Stromstoss- impulse repeater.

Übertrager-kondensator grid condenser (in audion or grid-current detector). -kreis intermediate circuit, transformer c.

Übertragung, mehrwegige multipath transmission, multichannel t.

Bild- fade-over (m.p.).

Einseitenband- single-side-

band or vestigial s.-b. transmission. Leitungs-wired radio, w. wireless, carrier telegraphy or telephony, wire broadcast.

Übertragungs-band signal band.

-einrichtung, Schall- (public) address system, electroacoustic transducer. -erklärung assignment (declaration), deed of transfer. -faktor transfer factor, image t. constant. -frequenzlinie transmission-frequency characteristic. -gegenstand teleview object, televised o., o. to be televised or transmitted by video signals. -güte transmission performance (in rating). -kanal transmission channel. -kurve transmission-frequency characteristic. -mass image transfer, attenuation constant. -mittel transmission medium, t. means. -schwingungen signal oscillations, s. waves. -urkunde deed of assignment, assignment. -weg transmission channel, t. path, t. medium.

Über-tretung contravention, offense, violation, transgression.

-verdichtung supercharging.

-vergrösserung extra or supplementary magnification, over-m. überviolett ultraviolet, of vita-ray nature (when of wave-length 2900-3200 Å).

Über-wachslungen overgrowths.

-wachung tell-tale device, monitoring, supervision, watching. -wachungsschalter od.-schlüssel monitoring key.

Überwiegend preponderant, predominant, prevalent.

Überwucht unbalance, imbalance.

Überziehen cover, coat, line, plate, overlay, put on or over.

Überzug flashing, coat, cover, skin, plating, lining, envelop; incrustation, crust. Gummī-, auf Rollenlaufbahn rubber-tread of roller.

üblich conventional, customary, usual, common, ordinary.

u.f., uff. and the following, et seq(q).

Uhr, Film- film footage counter.

Haupt-, Mutter- master clock.

Neben- secondary clock.

Uhrschaubenlehre dial micrometer.

U K W (Ultrakurzwellen) (cf Wellen-abgrenzung) ultra-short waves, micro w., midget w., uhf w., quasi-optical w.

Ulbricht'sche Kugel Ulbricht sphere type photometer.

ultrakurze Wellen (cf Wellen-abgrenzung) ultra-short waves, uhf w., quasi-optical w., micro w., midget w.

ultrarot infrared, ultrared.

Ultradot-abtastung noctovisior scan. -durchlässigkeit diathermancy, ultrared or infrared transmittancy.

ultrarotundurchlässig athermanous, opaque to infrared.

Ultra-schallzelle supersonic light valve. -schärzung blacker-than-black condition, infra-b.c.

Ultrastrahlung, kosmische cosmic rays or radiations.

ultraviolette Strahlen ultraviolet rays, vita r. (between 2900 and 3200 Å).

Ultra-wasser optically empty water.

-zentrifuge ultra-centrifuge, high-speed c.

umändern alter, change, modify, amend (an application).

Umänderungsprozess, Kern- nuclear disintegration.

um-biegen bend over, round or back, double-back, crimp.

-bilden re-model, re-form.

-bördeln bead over, flange (all around). -drehen turn around, twirl, rotate, revolve.

Umdruck reprint, circular. -papier transfer paper.

um-fällen dissolve and re-precipitate. -falzen crimp over, bead.

Umfang circumference, periphery, circuit, circle, contour; scope, extent, compass, range, dimension, latitude, size, volume, confines. **Aufzeichnungs-** recording range. **Helligkeits-** brilliance, brightness or contrast range, key (of a picture), brightness relationship.

Lautstärke- volume range. **Licht**-range of light oscillations.

Negativ- intensity range of negative (in subject). **Schall**- sound intensity range, s. contrast.

Schwärzungs-range or latitude of densities, density scale. **Ton**-tonal range, compass.

Umfang-kopieen,Gross- "hi-range" or wide-range prints. -**Kopien,Klein**- "lo-range" prints. **-kraft** tangential force, circumferential f., peripheral f.

Umfangs-geschwindigkeit circumferential or peripheral speed.

-**geschwindigkeitsmesser** tachometer (e.g., stroboscopic, with strobotron). -**schwingungen** circumferential oscillations or vibrations.

umfassen embrace, comprise, span, encompass.

umfassend comprehensive, extensive, embracing.

Umfäche circumferential, contour or ambient surface.

umfliessen flow around or in contact with, circumcirculate, skirt in flowing.

Umformbarkeit re-formability, deformability.

Umformer converter, inverter (from d.c. to a.c.), thyratron; transducer. **Mess**- measuring transducer. **Pendel**- vibrating rectifier. **Schweiss**- welding converter.

Um-gangsklappe by-pass (clack) valve. -**gebung** surroundings, environment, ambient, ambiency.

umgehen by-pass, circumvent, obviate, dodge, avoid, evade; go around, circumnavigate.

Umgehungsschaltung by-pass circuit, b.-p. connection.

umgekehrt proportional inversely proportional.

umgekehrter oder umgestülpter Fuss re-entrant squash or press (of a tube).

umgiessen re-cast; cast around (something).

Umgrenzungslinie contour, boundary, peripheral or circumferential line.

Umgrösserung enlargement or reduction, change in size or dimension.

Umgrösserungsverhältnis ratio of enlargement, r. of magnification.

Umguss transfer (by pouring), decantation; recasting, recast.

Umhängerliemen shoulder strap.

Umhüllung covering, wrapping, casing, envelope, jacket, sheathing, shrouding.

Umhüllung,Papier- paper wrapping.

Umhüllungslinie envelope, contour line.

Umkehr,Selbst- self-reversal (of spectral lines)

Umkehr-absorptionskanten reverse absorption edges or limits.

-**bad** reversing bath.

umkehrbar reversible, revertible, capable of being turned over or out.

Umkehrentwicklung reversal processing, r. developing.

Umkehrer,Phasen- phase inverter, p. reverter.

Umkehr-erscheinung(bei Beleuchtung von Schichten) photographic reversal or solarization (in layer exposure). -**film** film resulting from developing by reversal.

-**prisma**(cf. **Umkehrungspr.**) inverting prism. -**punkt** reversal point. -**röhre** converter tube.

Umkehrung,Band- speech band inversion or transposition (in garbled or scrambled secret telephony). **Bild**- image inversion, i. reversion (when two axes, i.e., right and left, top and bottom simultaneously interchanged); solarization (reversal of gradation sequence, due to overexposure) **Silben**- syllable inversion (in garbled telephony).

Umkehrungsprisma,Doppel- inversion prism (inverts in both axes of image).

umkippen unlock time base.

Umklappen reversal (say, of motion).

um-kleiden line, sheath, cloak, surround. **-klöppeln** braid, put braiding around.

Umkopie optical reduction print, o. p. of altered dimensions.

Umkopieren optical printing.

Umkreis periphery, circumference; perimeter; surroundings.

umkreisen circle, encircle, revolve, spin, rotate, gyrate (around).

Umkristallisieren re-crystallizing (resulting in offsetting in tungsten wires).

Umladung change in charge, c. in sign (of molecules and atoms).

um-lagern re-arrange, re-group.

-laufen revolve, rotate, circulate, gyrate (spirally).

-laufend circulating, circular, gyrating, revolving.

Umlauf-frequenz rotational frequency (of electrons). **-getriebe** planetary gear, sun and planet g.

-integral contour integral.

-räder planetary wheels.

-schwingungszahl rotation frequency. **-spannung** magnetomotive force, mmf (line integral of magnetizing force). **-verschluss** rotary shutter. **-verschlussblende**, rotierende rotary (flicker) shutter, light cut-off.

umlegbarer Klappsucher reversible or folding finder.

umlegen reverse, tilt, tip, throw (a switch); lay over or around, wrap.

!Umlenk-prisma deviating prism.

-rolle flanged idler roller, deviating r.

um-lernen learn anew, unlearn and re-learn. **-manteln** jacket, sheath, case, encase.

Um-modulierung re-modulation.

-polung reversal of polarity.

umpressen press (-fit) around, put or apply (around something) by pressure.

Umrandungskurve envelope.

Umrechnung re-calculation, re-computation, conversion.

Umrechnungs-faktor conversion fac-

tor, reduction f., change ratio. **-tafel** conversion scale (say, meters to kilocycles).

Um-richter (cf Wechselrichter und Gleichr.) transverter (to change a-c to d-c or vice versa). **-risszeichnung** linear drawing, sketch, outline illustration, **-roller** re-winder. **-satz, Leistungs-** energy exchange, transduction.

umschaltbar adapted to circuit changes or changes in connection, switchable, reversible (by switch or similar action).

Umschalter (cf Schalter) reverser, commutator switch, switch, reversing gear; switchboard or panel. **Gabel-** hook switch.

Steck- plug-in switch.

Umschaltung, Lauf- reversal of motion.

Umschaltungseinrichtung, Ton- fading or shading device, fader.

Umschlag cover, covering, wrapper, envelope; sudden change; hem, collar. **Anker-** armature travel, a. excursion, a. transit.

Umschlagspunkt transition point.

umschlingen wind around, wrap a., clasp, loop, cling to, embrace.

Umschlingungswinkel looping angle.

umschmelzen re-cast, re-melt, refound; melt around (something).

!umschnürung, Faden- serving of thread (on a cable).

Umschreiben re-writing, transcription, circumscription, description (math.); re-recording, electric transfer of sound track onto film or disk.

umschreibender Kreis circumscribing circle.

Umsetzung transposition, double decomposition, conversion, change, transformation, transduction.

!umsetzungsgerät transducer, transductor.

Umspanner, Schweiss- welding transformer.

um-spielen re-record, play back. **-spinnen** cover, braid or spin around.

Um-springen jumping, abrupt

- reversing, arising of sudden irregularity or unsteadiness.
-spulen re-winding (of film).
umspülen flow around or in contact with, skirt, circumcirculate.
Umstände, mildernde extenuating circumstances.
umstellen re-adjust, re-adapt; reverse, transpose, invert.
Umstellungspunkt transposition point.
umströmen flow around, f. in contact with.
umstülpen overturn, invert, put upside down or inside out.
Umwandler mutator, converter, transformer, transducer, sink. Energie-transducer, sink.
Umwandlung transmutation, conversion, transformation, change. Kern-nuclear transmutation.
Umwandlungs-einrichtung, Schall- (electro-) acoustic transducer.
-punkt transformation point, transition p. -steilheit mutual conductance or slope (of tube).
-tabelle conversion table.
-vorrichtung transducer, sink.
-wärme heat of transformation.
Um-wegleitung by-pass (lead).
-welteinfluss environmental influence.
um-wenden turn, turn over, about, sideways or upside-down, invert, revert. -wickeln wrap round, cover, wind on or over; re-wind.
Umwindung convolution.
unabgestimmt untuned, aperiodic, unresonated, non-resonant.
unabhängig, frequenz- free from frequency effect, independent of f., not a function of f.
Unabhängigkeit, Frequenz- frequency independence, condition of a quantity of being independent of, or unaffected by, frequency.
Unabhängigkeitssatz independence theorem.
un-auffällig inconspicuous, concealed, attracting no attention.
-aufgelöste Linienbilder unsolved line patterns. -ausdehnbar
inexpansible, non-ductile, inextensible.. -bearbeitet raw, crude, unwrought, unfinished, in blank form or b. condition.
!nbefugter intruder, unauthorized person.
un-belastet unloaded. -bemannter Ballon unmanned balloon.
-benannt unnamed, anonymous; indefinite (math.) -beschadet without prejudice to.
-beschichteter Blankfilm uncoated plain film base. -besetztes Band empty band. -bestimmt undetermined, indeterminate, indefinite.
Unbestimmtheitsrelation indeterminacy relation, uncertainty r.
un-bewaffnetes Auge unaided eye, naked e. -bezogene Farben unrelated colors. -bunte Farben hueless colors, achromatic c., c. devoid of hue. -dehnbar inextensible; non-ductile. -dicht untight, pervious, leaky. -durchdringlich impermeable, impervious, impenetrable. -durchlässig impermeable, impervious, opaque.
undurchlässig für aktinische Strahlen adiactinic. -für Ultrarot. athermanous (to infra-red rays).
-für Roentgenstrahlen radiopaque.
licht- light-light, opaque or impervious to light, non-diaphanous.
wärme- athermanous or impervious to heat, heat insulating.
un-durchsichtig opaque, impervious, non-transparent, non-diaphanous.
-echt pseudo..., non-genuine, imitated. -echte Längenmessung indirect measurement of length.
-edel base, not noble or rare.
-elastisch gestreut unelastically scattered. -empfindlich insensitive, non-reactive, non-responsive, immune from, neutral, inert, unsusceptible. -empfindlich, richtungs- non-directional, astatic.
Unendlicheinstellung infinity adjustment (opt.)
un-endliche Reihe infinite series.

-**entflammbar** flame-proof, non-inflammable, non-ignitable, non-combustible. -**entflammbarer Film** safety film. -**entgeltlich** gratuitous, gratis, free (of charge). -**entwickelt** implicit (math.) -**erlaubter Übergang** forbidden transition. -**erwünscht** undesirable, objectionable. **Unfähigkeit** disability, inability, incapacity, incapability. **unfrei** constrained, engaged, tied, bound. **Ungänze, kleine** minor discontinuity or defect. **un-gebundene Ladung** free charge. -**gedämpfte Anzeige** ballistic or non-aperiodic reading or indication (of instrument). -**gedämpfte Schwingung** undamped oscillation, sustained o., continuous wave (c.w.), persistent w. -**gefasstes Glas** rimless lens. -**geordnete Geschwindigkeit** velocity of agitation. -**geordneter Zustand** disordered state, d. arrangement. -**gepufferte Lösung** unbuffered solution. -**gerade** uneven, out of true, not straight, non-linear, crooked, odd (harmonic, multiple). -**geradwertig** of odd valence. -**gerichtet(e) Antenne** non-directional antenna. -(es) **Mikrophon** astatic microphone, non-directional m. -**geschaltet** unwired. -**gesehnte Wicklung** full-pitch winding. -**geteilter Ring** unsplit ring, solid r. **Ungewissheitsprinzip** uncertainty principle, indetermination p., indeterminacy p. **ungleich** unequal, unlike, uneven, dissimilar, odd, not uniform, different, unmatched. **Ungleichgewicht** desequilibrium, unbalance, imbalance. **un-gleichnamig** unlike, opposite (of poles). -**gleichseitig** scalene (triangle). **Un-gleichung** inequality, non-equality. -**gültigkeit** invalidity, nullity, state of being void, annulled or not in force.

unhaltbar untenable. -**hämmbar** non-malleable. **Universal-gelenk** universal joint, Cardan j., ball and socket j. -**glimmlampengerät** universal neon tube tester. -**nebenschluss** Ayrton shunt, universal s. -**prüfer** multiple-purpose tester, multi-meter. -**tastatur** universal keyboard. **unkennbar** undiscernible, unrecognizable. **Unkosten, General-** general expense, overhead e. **un-lauterer Wettbewerb** unfair competition. -**lösbar** undissolvable, indissoluble; undetachable, locked. -**messbar** immeasurable, incommensurable (math.) -**mischbar immischierbar** immiscible. -**mittelbare Betrachtung** direct viewing. -**okular** monocular. -**paarwertig** of odd valence. -**periodisch** aperiodical, non-periodic, deadbeat, non-recurrent. **Unruhe** fluctuation, irregularity, instability (of physical quantities); disquiet, unsteadiness; balance (of time piece). **Anoden-** fluctuation of anode feed current, rippled condition in plate c. **Heiz-** fluctuation in heating or filament current, f. c. ripples. **Netz-** mains or supply line fluctuations (of potential or load); mains ripples. **un-rund** non-circular, cornered, out of round. -**scharf** unfocused, poorly defined, out of focus, blurred, fuzzy or ghosty (of image or picture). **Unschärfe** insufficient focus, lack of f., out-of-focus condition, blur or fuzziness, lack of definition (of picture); flat tuning condition. **Tiefen-** insufficient depth of focus, lack of d. of f. **unselbständige Entladung** assisted discharge, non-self-sustaining d., non-spontaneous d. -**fremdgesteuerte Klippschwingungen** distant-controlled or signal-c., non-self-running time-base (telev.) **Unselektivität** lack of selectivity.

unsichtbaren Strahlen, Abtastung mit noctovisor scan with invisible (or infra-red) rays.

Unsinn, offenbarer manifest absurdity or nonsense.

un-starre Moleküle non-rigid molecules. -stät, stetig unsteady, unstable, variable.

Unstetigkeit im Filmzug flutter in film pull.

Unstetigkeitsstelle point of unsteadiness, instability or discontinuity.

Unstimmigkeit discrepancy, disparity, lack of harmony.

unstreckbar non-extensible, non-ductile, non-malleable.

Unsymmetrie asymmetry, dissymmetry; (condition of) unbalance, unilaterality.

Unter...sub-...., fractional, partial.

unterabteilen subdivide, make sub-compartments or partitions.

Unter-anpassung under-matching (of impedance). -anspruch sub-claim.

-anzeige underswing (of volume indicator). -art subvariety, subspecies. -belastung under-load. -belichtungsbereich toe range (of under-exposure).

unterbrechen interrupt, break, stop, arrest, make discontinuous.

Unterbrecher, Motor- motor-driven make-and-break. Quecksilberstrahl- mercury (jet) interrupter. Selbst- trembler, self-interrupter, buzzer. Stimmgabel- tuning-fork interrupter. Turbinen- turbine interrupter or break.

Unterbrechung und Schliessung break and make.

Unterbrechungs-bad short-stop bath, interruption b., short-s. trough. -funken break spark, circuit-opening s., wipe s. -schwingungen quench oscillations (in super-regeneration). -vermögen circuit-breaking, rupturing or opening capacity or power (of a switch).

unterdrehen low-speed shooting.

Unterdruck reduced pressure (below

atmosphere), partial vacuum.

Unterdrückung, Fluoreszenz- quenching or suppression of fluorescence (by killer, poison, etc.) Seitenband-side-band suppression. Tatsachen-concealment or suppression of facts. Träger- suppression of carrier (in quiescent telephony).

Unterdrückungs-schwingungen quench oscillations (in super-regeneration). -stromkreis, Geräusch-noise reduction, quelching, suppression or silencing circuit.

Unter-fläche under surface, under face, under side, base. -form sub-variety, subspecies. -formanten sub-formants. -führung, Weg- underpass.

Untergehen swamped state, swamping (of a station). -der Bildspannung im Störspiegel swamping or blanketing of picture signal by noise level.

untergeordnet subordinate, subsidiary, secondary (in rank, quality or order), immaterial.

Untergericht inferior court, lower c. (of law).

untergeschoben spurious, supposititious.

Unter-glasur underglaze. -grund background, subsoil, subterranean soil, underground.

-grund, Spaltungs- fission background. -gruppe subsidiary group, subordinate g. -haltungswert entertainment value.

-hörfrequenz sub-audio frequency, infrasonic f. -hülle sub-shell.

unterirdisch subterraneous, subterranean, underground.

Unter-korrektur undercorrection, undercompensation. -kühlung supercooling, undercooling, overcooling.

Unterlage support, base, substratum, backing, foundation, lining, bed, carrier. Filz-felt base, f. support, f. under-layer, f. foundation.

Vergleichs- basis of comparison.
unterlagert subjacent, infraposed, underlying.
Unter-lagerungstelegraphie subaudio-frequency telegraphy system, composite operation (telegraph and telephone signals passed over one line wire; often attended with thump noise). -**lagscheibe** washer, supporter disk.
unter-lassen omit, abstain or refrain from, fail, default, neglect. -**legen** lay under, underlay, put under, infrapose.
Unter-legescheibe washer, supporting disk. -**licht** horizontal light.
unter-liegend subjacent, underlying, placed below or underneath, infraposed, by subject to. -**ordnen** subordinate, make secondary or of minor rank.
Unter-ordnung subordination, submission. -**patent** sub-patent.
-resonanzfrequenz submultiple resonance (of a subsynchronous frequency). -**sagung** inhibition, prohibition, forbidding, interdict, interdiction, restraint, injunction. -**schale** sub-shell (of electrons). -**schallwelle** infrasonic wave, sub-audio w.
unter-schätzen underestimate, undervalue, underrate. -**scheidbar** distinguishable, discernible, discriminable, differentiable.
Unterscheidungs-markierung distinctive marking, telltale m. -**vermögen**, **Farb-** color discrimination faculty of power. -**vermögen**, **Tiefen-** power of differentiating depths.
Unter-schiebungsklage suit for passing off goods as though of another person. -**schied**, **Gang-** phase difference, path d. (of rays, waves, etc.)
unter-schneiden undercut (groove too shallow or lateral movement of stylus too small). -**schreiten** fall below or short of (a certain value). -**schwellig** subliminal, below a threshold.
Unterschwingung subharmonic oscillation, subfrequency o.

unter-setzender Verstärker scaling down vacuum tube. -**setzt** geared down. -**spannen** subtend; sub-volt. -**spannter Betrieb** undervolted operation.
Unterspannung under-running voltage, undervolting.
unterstellen presuppose, assume, allege, impute, charge.
Unter-steuerung under-modulation, insufficient m. -**stützung eines Einspruches** argued support of an opposition.
untersuchen analyze, examine, inspect, check up, investigate, search, research, inquire, scrutinize.
Untersuchung investigation, research, examination, probing, inspection, test.
Untersuchungsobjekt test specimen, t. sample, t. piece.
untersynchrone Resonanz subsynchronous resonance, submultiple resonance.
Unter-taste long key, white k.
-tauchung immersion, submersion, deep dip. -**teilung** subdivision, submultiplication; partition, partitioning. -**teilungspunkt** tap (of a battery, etc.).
-wagenantenne under-car antenna.
-wasserschallempfänger hydrophone, submarine or subaqueous microphone, pickup or sound detector, asdic (submarine detector).
unterwegs en route, on the way.
Unterwind forced draft (introduced from below).
un-tilgbar indelible.
-trennbar inseparable, indivisible, unseverable, undetachable.
-übersehbar uncontrollable, hard to follow up or inspect, complex, intricate. -**übertragbar** nontransferrable, unassignable, inalienable.
-übertrefflich unexcelled, unsurpassable, unrivaled. -**verbrennbarer Film** slow-burning film, safety f. -**verfaulbar** unprefirable, imputrescible.
Unvergänglichkeit imperishableness, ever-lastingness.

unver-gängliches Lichtbild imperishable picture. -**hältnismässig** disproportionate.

Unverständlichkeit unintelligibility.
un-verträglich inconsistent, incompatible. -**verwechselbarer Stecker** non-interchangeable plug. -**verwüstlich** indestructible. -**verzeichnetes Bild**, -**verzerrtes Bild** orthoscopic image, undistorted picture.

Unvollkommenheit imperfection, im-
perfection, faultiness, flaw,
defect.

un-vollkommener Isolator imperfect insulation, leaky dielectric.
 -**wandelbar** immutable, invariable, unchangeable, imperishable.
 -**widerleglich** irrefutable, unrebuttable. -**wirksam** inactive, ineffective, inefficient, inert.
 -**wirksam machen** render inoperative or inactive, disable, de-
activate, deactivate.

Unwucht unbalance, imbalance,
desequilibrium. -**erreger**, -**masse** unbalance weight.

un-zeitgemäß untimely, unpropitious.
 -**zeitlich** untimely, immature.
 -**zerlegtes Licht** undispersed light. -**zerstörbar** indestructible, non-corrodible. -**ziehbar** non-ductile. -**zugänglich** inac-

cessible. -**zweideutig** unequivocal, unambiguous, clear.

Uran-tonbad uranium toning bath.
 -**verstärker** uranium intensifier.

Ur-atom primordial atom.

-**eichkreis** master reference sys-
tem. -**gewicht** standard weight,
primary s.w.

Urheber author, originator, founder.
 -**recht** copyright, rights of an
author or inventor.

Urkunde ausstellen execute a docu-
ment.

Urkunde,Besitz- title deed.

Übertragungs- deed of assignment.

Urmass primary standard.

ursächlich causal, causative.

Ursprung origin, source, provenience.

ursprünglich original, primitive,
parent..., primary, first.

Ursprungs-bild original subject
copy. -**type** prototype, original
or primordial type or specimen.

Urstoff primary matter, element.

Urteil judgment, decision, ver-
dict, opinion. -**fällen** render
a decision, judgment, award,
decree, sentence or verdict.

Urteil,Versäumnis- judgment by
default.

Urteilsvollstreckung execution of
a sentence, carrying out a judg-
ment.

V

vagabondierende Ströme leakage currents, stray c., vagabond c.
Vakuole pinhole, vacuole.
Vakuumdicht vacuum-tight, sealed (airtight) to insure a vacuous state.
Vakuum-dichtung vacuum plumbing, v. sealing, v. packing. -fett vacuum grease. -gitterspektrograph vacuum grating spectrograph. -hahn vacuum tap.
-mantelgefäß thermos or Dewar vessel with exhaust jacket.
-messer,-meter vacuometer, vacuum gage, ionization g. -pumpe, Vorfore-pump, rough-vacuum p.
-schleuse airlock (of electron microscope). -thermoelement vacuum thermo-couple. -zelle vacuum photo-electric cell.
Valenzkette, Haupt- primary valence chain.
Variationsmethode variational method.
Variometer, Ballon- balloon statoscope. **Klapp-** hinged-coil variometer.
Vater metal master (in disk manufacture).
Vektor, absoluter tensor. Vierer-four-component vector.
vektorielle Darstellung vectorial representation.
Vektorindikation vector response index.
Ventil, Ablass- discharge valve, drain v. **Etagen-** multi-seat valve. **Licht-** light valve, l. relay. **Rückschlag-** check valve.
Ventilküken plug of a valve.
 -stopfen valve stopper, s. within v.
Venturidüse constricted or nozzle-like reducer, throat piece of Venturi meter.
ver-allgemeinern generalize.
 -änderlich variable, changeable,

fluctuating, unstable, unsteady, non-constant. -änderlich, laufend running variable.
Veränderliche variable, variable quantity (math.)
veränderlich(er) **Brennweite und Grösse, Linse** von zooming lens for variable focus and variable magnification, "vario-objective."
 -(e)Kopplung vario-coupler.
Veränderung, Farben- change of color, discoloration.
Veränderungen, Seiten- turns and banks (in avigation).
verankern anchor, stay or guy (a pole).
Veranlassung von, auf at the request or suggestion of, on behalf of.
ver-antwortlich responsible, answerable, liable, chargeable. -arbeiten process, work.
Verarbeitung, Film- film processing.
veraschen incinerate.
Verband union, association; binding, bandage, fastening, tie, bond (in bricklaying).
Verbesserungs-mittel corrective. -patent patent of improvement.
verbiegen bend, buckle, warp.
Verbindlichkeiten eingehen incur liabilities.
Verbindung mit angeschärften Enden scarf'd joint. -, stumpfe butt joint. **Dreiweg-** three-way connection. **Einlagerungs-** intercalation compound.
Glasschliff- ground-glass joint.
Muffen- sleeve joint. **Sauerstoff-** oxygen compound.
Verbindungs-fähigkeit affinity, combining power. -glied connecting link. -klammer brace, clip connector. -klemme connecting means, binding post, terminal.
 -kraft bonding strength, affinity, combining power. -punkt joining,

connecting or union point, junction, juncture.

Verbleiung leading, lead lining.

Verblitzen des Films dendriform exposure of film (due to static charges).

Verbot prohibition, inhibition, interdict, interdiction, injunction.
verboten(e) Linie forbidden line (spectr.) -(er)Platz..forbidden place (cryst.) -(er)Übergang forbidden transition.

Verbrauch, Energie- energy consumption, e. dissipation. **Energie-, ohne** non-dissipative, wattless.

Verbraucher load, consuming device, consumer.

Verbrauchs-messer supply meter.
 -zähler, **Blind-** reactive volt-amp. hour meter, sine m., wattless component m., var m. -zähler,

Schein- apparent power meter.

verbraucht spent, exhausted, used up, worn out, consumed, stale (of air), dissipated.

verbreitern widen, broaden, spread (out).

Verbreiterung spread (of image).

Druck- pressure broadening (of gas-spectrum). **Linien-** line broadening (telev.) **Spektral-linien** broadening of spectral lines. **Stoss-** impact broadening. **Zeichen-** signal spread (due to echo effect). .

verbrennlich inflammable, combustible, burnable.

Verbrennungsschiffchen combustion boat.

Verbund-glass compound glass, multilayer g. -röhre compound tube.

verdampfbar evaporable, vaporizable, volatile.

Verdampfer evaporator, drier, dehydrator, carburetter (water gas).

verdampfungsfähig evaporable, vaporizable, volatile.

Verdampfungsquelle source of evaporation, s. of volatilization.

verdecken cover (up), mask, conceal,

hide, eclipse, occult.

verdeckte Zeichen, durch Störer signals swamped by interference.
Verdeckung masking(ac.), overriding (of noise).

Verdeckungsscheinung masking effect.

ver-derben spoil, damage, ruin, decay, rot. -dichtbar condensable, compressible.

-dichten condense, condensate, concentrate, compress, compact, press, together, concrete, make denser, inspissate, consolidate.

Verdichter, Kreisel- rotary compressor, centrifugal c.

Verdichtungswelle compression wave.

ver-dicken thicken, concentrate, inspissate; coagulate, jell, become viscous. -drahteter Empfänger fully wired receiver set.

Verdrahtung, Blank- bare wiring.

ver-drallen twist, strand (together). -drängen displace, drive out, remove, expel, supplant, supersede.

Verdrängung, Strom- skin effect, current displacement.

Verdrängungsstrom displacement current, dielectric c., capacitance c.

verdrehen distort, twist, wrench, subject to torsional stress, stagger (rotationally), shift (a phase).

Verdrehung (cf. Zerdrehen) rotation, turn (of a picture); twist, warping, torsion.

Verdrehungs-dauerhaltbarkeit endurance under torsion stress.

-fähigkeit torsibility.

-moment torsional starting torque, moment of rotation.

-wechselfestigkeit strength under alternating torsion stress.

-winkel angle of torsion, twist a.

Verdreifachung, Frequenz- frequency tripling.

ver-drosseln provide with choke coil. -dübeln dowel.

Verdunkelung, Rücklauf- flyback

elimination, return-trace or return-path e., blackout or blanking of flyback trace (by gating and blanking pulse).

Verdunkelungskapazität shading condenser. -phase dark interval.
ver-dünbar dilutable, rarefiable, capable of being diluted. -dünnen dilute (liquid), rarefy (gas), attenuate, thin, de-concentrate, reduce or dim (light). -dünntes Helium low-pressure helium.

Verdünnungsgrad, Helligkeitsloss or reduction of brightness.
 -mittel diluent, attenuant.
 -welle rarefaction wave.

verdunstbar evaporable, vaporizable, capable of being evaporated.

Verdunstungsgefäß evaporimeter.

veredeln (cf. *vergüten*) improve, elevate, refine, ennable, purify, perfect; plate with a higher grade of metal.

Veredler, Ton- high-frequency filter, hf cutoff, sound clarifier, tone control, tonalizer.

Vereinfachung simplification, reduction (math.)

Vereinheitlichung standardization, normalization, make for uniformity, regularization, co-ordination.

Vereinigungs-koeffizient combination coefficient. -stelle junction, joining, meeting or union point.

Vereisung ice formation, icing (on wings).

ver-enigen narrow, contract, constrict, squeeze. -erzen mineralize.

Verfahren process, method, procedure, proceeding, mode (of action), technique, processing (of film). **Beschwerde-** appeal action or procedure. **Billigkeits-** equity suit.

Verfärbung discoloration, shading.

verfestigen make firm or strong, solidify, consolidate, concrete, set, harden.

Verfestigungs-kurve plastic stress-strain curve (cryst.) -zeit time of set (of gels).

verfilzen felt, mat.

verflachen level off, flatten, be-

come even, smooth (down), lose selectivity, become flatter or less steep, slope down, broaden or make broad-topped (as a resonance curve).

verflauter Übergang shaded-off transition (definition lacking).
ver-flechten inter-weave, involve.
 -flüchtigen volatilize, evaporate.
 -flüssigen liquefy.

Verfolgung, Ziel- tracking a target (by detecting and ranging means using a slewing motor).

Verfolgungs-aufnahme running shot.
 -stativ follow-shooting tripod, running t.

verformbar deformable, plastic, fictile, kneadable, moldable.

Verformung deformation, working, warping, strain.

Verformung unter Fließen, Wissenschaft der rheology.

-, **plastische** plastic deformation, p. working.

Verformungsvermögen degree of deformation, deformability.

Verfügung action (of Patent Office), order, decree, decision.

Vergangenheit, Wärme- thermal antecedent, prior heat treatment.

Vergänglich perishable, transient.

vergasbar gasifiable, vaporizable.

Vergaser gasifier, vaporizer, carburetor.

Vergasung, Tieftemperatur- low-temperature distillation or carbonization, partial c.

Vergenz vergency (either convergence or divergence).

Vergiften poisoning, contamination, killing (of phosphor).

Vergitterung grating, gridding, lattice, grille.

verglasbar vitrifiable.

Verglasung vitrification, glazing, glaze.

Vergleich comparison, contrast, matching. **Farben-** color matching.

Vergleicher, Tonhöhe- tonvariator, pitch pipe.

Vergleichsfeld matching field (in photometry). -masstab standard

of comparison, s. of reference, yardstick. -prisma comparison prism.

Vergleichung comparison, contrasting, matching.

Vergleichunterlage basis of comparison.

vergrössern enlarge, magnify, increase (in size).

Vergrösserung, lineare magnification in diameter. **Fernrohr-** telescopic magnification. **Über-** supplementary or extra magnification, overm.

Verguss-kammer-Einführung isolator pothead (lead-in) insulator.

-masse filler or sealing compound,

vergüten refine, improve (quality), temper, coat (a lens).

vergütete Probe quenched or tempered test piece or specimen.

Vergütung, Glass- refining or treating of optical glass (e.g., by producing low-reflectance coating, dimming, etc., as by Bausch & Lomb Balco magnesium-fluoride anti-reflection film on glass).

Verhältnis proportion, ratio, rate, relation, connection, circumstance. **Aufteilungs-** potentiometer ratio. **Molen-** mole ratio.

Öffnungs- aperture ratio, relative a. **Stromstoss-** impulse ratio. **Winkel-** angular ratio.

Verhältnis-anzeiger exponent (math.) -arme ratio arms (of a bridge).

verhältnismässig proportional, proportionate, commensurable, commensurate.

Verhandlung pleading, proceeding, hearing, argument, discussion.

zur mündlichen - gelangen to be called for oral hearing or argument. einer Sache, Termin zur - anberaumen set a date for hearing a case.

verhärteten harden, indurate, set (cement).

verharzen resinify, resining.

verheddern tangle (of antenna wire, etc.)

Verhinderung, Korrosions- corrosion inhibition.

verholzen lignify, turn woody.

Verhör hearing, interrogation, examination, trial, questioning.

Verjährungsgesetz law of limitations or superannuation.

ver-jüngen point, taper, thin, diminish, reduce, constrict, narrow, contract (a tensor). -kabelte **Leitung** cable line, stranded-wire l.

Verkabelung, Amts- central wiring, office w.

verkanten twist, tilt (of camera).

Verkehr, Fernsprech- video telephone traffic.

Verkehrsbezirk, Funk- radio controlled aerial navigation (or avigation) district or zone.

Nah- approach or local control zone.

Verkehrs-flughafen commercial airport, civil a. -kontrolle, **Luft**-airways traffic control, avigation regulation. -luftfahrt commercial aviation, c. avigation.

verkehrt proportional inversely proportional.

Verkettung linking, linkage, concatenation, bonding.

Verkettung, Fluss- flux linkage.

Verkettungsspannung interlinked voltage.

ver-kitten cement, lute, seal.

-kittete **Linse** cemented lens.

-kleben cement, lute, paste, glue, cover, seal or close with adhesive or agglutinant.

-kleiden face, case, line; disguise, mask. -kleidet faired (of airplane).

Verkleinerungskopie reduction print.

verkleistern paste (up), turn into p., agglutinate.

Verkleisterung gelatinization (of starch), agglutination, glutinization.

verklingen decay, die out (of waves, etc.).

Verkohlung carbonization, coking, dry distillation, destructive d., charring.

Verkokungszeit coking time.

Verkopplung spurious, stray or undesired coupling.

verkürzen shorten, abbreviate, condense, abridge, contract, curtail.
Verkürzungskondensator shortening condenser, padding c., aerial series c., antenna c.

Verlagerung displacement, shift, dislocation, misalignment. **Bildpunkt-** spot shift (causing plastic effect, in telev.). **Nullen-** zero setting, electric biasing (in film recording). **Peil-** bearing shift, error or distortion. **Zeilen-** migration or shift of line position.

verlängern lengthen, extend, prolong; produce (math.).

Verlängerung, Frist- extension of time, e. of term, respite. **Patent-** renewal of a patent.

Verlängerungsspule, Antennen- aerial load coil.

Verlauf pattern, plot, path, shape, trend, course, slope. **Feld-** field map, f. pattern, f. configuration. **Kopplungs-** coupling coefficient, c. factor.

Verlauf-filter sky filter.

Verlegung, Kabel- cable laying, burying of c. **Rohr-** pipe laying.

Verleihkopie release print, distributing p. (of film).

verletzen infringe, violate, transgress, contravene, prejudice, injure.

Verletzten, dem - eine Geldsumme zu sprechen adjudicate a sum of money to aggrieved or injured party.

Verletzung offense, violation, infringement (upon patent rights).

Verletzungsklage, Patent- action or suit for infringement on patent rights.

Verlorener Kopf deadhead, waste-head, crop end.

Verlust loss, dissipation, drop

(of potential), absorption (light).

Verlust, Belag- surface leakage loss (of condenser). **Einführungs-** insertion loss. **Erwärmungs-** Joule loss, joulean heat (dissipation).

Luftreibungs- windage loss. **Nachwirkungs-** residual loss. **Spannungs-** voltage drop. **Sprüh-** corona discharge or brush d. loss. **Strahlungs-** corona loss. **Übergangs-** contact loss, transition l., junction 1.

verlustarmes Kabel low-loss cable.

Verlust-dämpfung damping (loss) resulting in dissipation of energy (by ohmic resistance). **-faktor** phase angle difference (of a condenser). **-kapazität** imperfect capacity, leaky c. **-konstante** attenuation constant. **-leistung,** **Anoden-** anode dissipation, effective power d. **-leistung, Auffangplatten-** collector dissipation (in multiplier).

verlustlos non-dissipative free from loss, lossless.

Verlust-strom watt current, active c., energy c. **-widerstand** non-reactive, effective, dissipative or ohmic resistance. **-winkel** phase angle difference, loss angle (of a condenser). **-ziffer** phase angle difference.

Verminderer, Machleucht- killer, poison (of phosphors).

Vermittelung agency, intermediary, means, mediation, interposition, intervention, adjustment.

vermöge by or in virtue of, according to.

Vermögen, Abbildungs- resolving power.

Brems- stopping power, retarding p., braking p. **Emissions-** emissivity, emitting power. **Reflexions-** reflectance, reflectivity, reflecting power.

Vermutung assumption, supposition, surmise, conjecture.

vernachlässigen disregard, neglect.

Vernachlässigung neglect, disregard, omission.

vernebeln atomize (under high

- pressure).
- verneinenden Falles** in the negative case.
- Verneinung** negation, denial, disavowal, contradiction.
- Vernetzung** network, reticulation.
- Vernichtungsstrahlung** annihilation radiation.
- ver-pflichtet** obligated, bound, under obligation. **-puffen** puff off, deflagrate, explode, detonate; vaporize, atomize.
- regnete** Film rainy film.
- riegeln** block, lock, inter-lock, cut off, gang (condensers), bolt, latch. **-riegelnde Spannung** cutoff biasing potential.
- Verriegler** suppressor. **-relais** locking relay.
- Verrückung** displacement, disturbance, derangement, shift, dislocation, dislodgment. **Atom-** atom displacement.
- verröhren** mix by stirring, stir up.
- Versäumnisurteil** judgment by default.
- verschachteln** nest, insert into one another.
- verschiebbar** displaceable, shiftable, movable, sliding, slidable.
- posaunenartig** shiftable trombone-fashion, telescoping.
- Verschiebe-fehler** lack of synchronism; out of frame condition.
- zackenspur** bilateral variable-area sound track.
- Verschiebung** displacement, dislocation, drift, slip (in geology), shift (of phases), dephasing.
- , dielektrische** dielectric displacement.
- Verschiebung, Bild-** slow drift of picture, hunting of p. **Bild-, seitliche** lateral shift of image.
- Druck-** pressure shift (of spectral lines). **Isotopie-** isotope effect, i. shift. **Längs-** axial adjustment (of electron microscope). **Parallel-** translatory motion, t. shift. **Phasen-** phase displacement, p. shift, dephased
- or out-of-phase condition.
- Zeilen-** interlacing, interlaced scan, line-offset s. **Zeit-** time lag, t. shift.
- Verschiebungs-konstante** (**Dielek-zitätskonstante**) displacement constant, specific inductive capacity (for vacuum).
- linie** line of displacement.
- satz** displacement law. **-strom** displacement current, dielectric d.c., capacitance c.
- verschiedenfarbig** varicolored.
- verschieden gegliederte Bildteile** picture portions of dissimilar make-up, nature or organization.
- Verschlackung** scorification.
- Verschlag** partition, compartment.
- Verschlechterung** impairment, deterioration, spoiling, debasement, vitiation.
- verschleieren** veil, make turbid, fogged, or cloudy, befog.
- Verschleierung** veiling, glare (of projected image), foggy or fogged condition (of film).
- Verschleiss** wear and tear, abrasion, attrition. **-prüfung** abrasion test.
- verschlüngene Blitzbahn** tortuous path of lightning flash.
- Verschluss** closing, closure, shutting, shutter, stopping, stopper, fastening, lock, clasp, trap, seal, zipper, seal-off (of ignition mercury pool, etc.).
- Verschluss, elektro-optischer** electro-optical shutter.
- , luftdichter** airtight seal, hermetic s. **End-** cable box, termination b. **Fallschieber-,** drop shutter. **Gas-** gas seal, ball and hopper, cup and cone arrangement (of furnace). **Reiss-** slide fastener, zipper. **Rouleau-roller** blind shutter. **Schlitz-** focal plane shutter. **Sektoren-** sector shutter. **Umlauf-** rotary shutter. **Wasser-** water seal.
- Verschlussblende, flimmerfreie non-**

non-flicker shutter. **Umlauf-**, rotierende rotary flicker shutter or light cutoff.

Verschlüsselung coding, cryptography.

Verschluss-kopf cable terminal.

-ring locking collar (of magnifier).

-stück plug, stopper, seal.

Verschmälerung des Tonstreifens

squeezing of sound track, matting.

verschmelzen melt, smelt, fuse,

melt together, blend, merge,

alloy.

Verschmelzung merging (of pictures).

Verschmelzungsfrequenz critical

flicker frequency, fusion or no-flicker f.

verschmieren smear, daub, lute.

verschmoren scorch, freeze together (of contacts).

ver-schobene Phase displaced phase, shifted p., dephased or out-of-p. condition. -schränken toggle, cross, interlace. -schrumpfen shrink, contract.

Verschweigung concealment.

ver-schwimmen blur, become indistinct; blend. -schwinden vanish, disappear, evanesce, fade (away).

-schwommen indistinct, foggy, indefinite, blurred, bleary, woolly (of zero signal point in df apparatus); fuzzy (lack of sharpness of sound track). -schwommenes

Aussehen bleary, blurred or foggy appearance (of image).

Versegelung distance sailed or covered (between two bearings); deviation from right course, yaw.

verseilen strand, cable, twist together.

Verseilung cable lay up, stranding (of wires or leads).

ver-sengen singe, scorch. -senken

sink, submerge. -senkter Schalter,

halb- semi-sunk switch, semi-recessed s. -setzbar capable of

being mixed or treated. -setzen mix, treat, compound, alloy, add (one substance to another); stag-

ger, displace, shift. -setzt

staggered, offset, displaced, dislocated, shifted (of phases, in quadrature = 90° , in opposition

= 180°), dephased, out of phase.

Versetzung dislocation (cryst.), permutation, alligation (math.); alloy (metal). **Flugzeug-drift**, lateral displacement or shift of airplane, deviation from course. **Metall-alloying**, alloy. **Perforations-** slipping of perforation, dislocation.

verseuchen vitiate, poison, infect.

Versicherung, **eldesstattliche** affirmation in lieu of oath, statutory declaration. -**eidliche** affidavit, sworn statement, testimony or declaration.

versickern ooze or seep away.

versinnbildlichen symbolize, express or represent by symbols.

Versorgungs-gebiet service area, supply district. -**spannung** supply (source) potential.

verspannen stay, guy, span.

versperren obstruct, block, lock.

Verspiegeling, **Hochheim'sche**

Hochheim special mirror plating or "silvering" substance (of I.G. Farben).

verspleissen splice.

Versprödung embrittling.

Verständigung intelligence transmission, signal t. -**im Flugzeug** inter-phone. -**zwischen Flugzeugen** inter-aircraft communication or signaling. **Eigen-interphone** (on board airplane).

Verständlichkeit intelligibility (teleph.), transmission audibility, articulation (consonant, vowel, with the use of logatoms).

Silben- syllable articulation, s. intelligibility.

Verstärkbarkeitsgrenze limiting amplifiability, maximum (practical) amplification or gain.

verstärken amplify, multiply, intensify; re-inforce, strengthen, increase, fortify, concentrate, magnify, boost; truss (poles, etc.)

Verstärker amplifier, multiplier, intensifier (RF stage between antenna and receiver input), repeater (in a telephone line).

Verstärker, A- class A amplifier, pre-amplifier (with operating angle of 360 degrees). **B-** class B amplifier (operating angle 180-360 degrees). **C-** class C amplifier (operating angle less than 180 degrees). **-ausgeglichen** balanced amplifier. **-detonierender** heterodyne amplifier. **-mit negativem Widerstand** kallirotron, dynatron type of tube (with negative resistance). **-mit zwei gegeneinander geschalteten Röhren** push-pull amplifier. **-untersetzender** scaling down vacuum tube. **Aufnahme-** recording amplifier. **Bildfrequenz-, Bildpuls-** amplifier for frame synchronizing impulses, low-sync a. **Direkt-** straight-ahead amplifier, non-heterodyne a. **Druck-Zug-** push-pull amplifier. **End-** power amplifier, final a. **Geradeaus-** straight-ahead amplifier (in non-heterodyne receiver). **Gleichakt-** in-phase amplifier. **Kaskaden-** cascade amplifier, repeating a. **Kathoden-cathode follower** (scheme). **Kraft-, Leistungs-** power amplifier. **Leitungs-** telephone (circuit) amplifier or repeater. **Mehrfach-** multi-stage amplifier. **Mikrophon-microphone** pre-amplifier, m. amplifier. **Nach-** amplifier above input stage, (mostly) power a. **Nadelton-phonograph-type** amplifier. **netz-mesh** amplifier, m. multiplier (with electron-permeable targets of fine mesh or gauze). **Photo-zellen-** electron multiplier phototube; photo-cell amplifier. **Regel-** variable-gain amplifier, avc (automatic volume-control) a.; noise-reduction or silencing a.; any amplifier in which regulator or control potentials are operative. **Richt-** amplifying detector, plate-current detector. **Schirmgitter-Richt-** screen-grid tube with plate-current rectification. **Steuer-** amplifier between power and input stage (operates on pure voltage amplification).

Uranium- uranium-intensifier (phot.) **Vor-** input amplifier, pre-amplifier (class A RF amplifier in superheterodyne receiver). **Zeilenimpuls-** amplifier to increase line synchronizing impulses, high sync a. **Zusatz-** booster amplifier. **Zwischen-** (inter-) stage amplifier. **Verstärker-brett** amplifier rack, a. panel. **-bucht,-bunker** amplifier or repeater rack or bay. **-geräusch** amplifier noise, tube n. **-gestell** amplifier or repeater rack or bay. **-gleichrichter** amplifying detector. **-kette** amplifier cascade. **-netz** amplifier channel. **-stufe** (zwischen Antenne und Verstärker-eingang) intensifier (tuned RF) stage, intermediate circuit. **-zug** amplifier channel. **Verstärkung, Wirk-** transducer gain. **Verstärkungs-anlage, Sprach-** (public address system. **-begrenzer** output limiter, o. suppressor, gain spoiler. **-faktor** amplification factor, voltage f. **-mass** unit of gain, repeater gain, equivalent r. g. **-mittel, Schall-** sound reinforcing system (for halls, etc.). **-schirm** intensifying screen (x-ray work). **-unterdrücker** gain spoiler, output suppressor. **-zahl** amplification constant, a. coefficient, a. factor, **verstecken** hide, conceal. **Versteifung** stiffening, propping, bracing, strutting. **Versteilung (Vergroßerung des Amplituden-** verhältnisses zwischen Zeilen oder Signalen) exaggeration of amplitude differences (emphasizing the stronger and suppressing the weaker one of two or more signals), expansion. **-der Konturen** insuring higher definition (telev. pictures), improvement in resolution and black-white contrast (of an image), expansion. **Versteinung** devitrification (glass); petrifaction.

- verstellen** shift, move, transpose, adjust.
Verstellpropeller feathered (variable-pitch) propeller.
Verstellung, Höhen- adjustment in elevation.
Verstellungs-knopf, Bild- framing knob (m.p.) -welle, **Bild-** framing shaft (m.p.)
verstimmt detuned, out of tune, dissonant, untuned, disharmonious, dissyntonized, tuned off resonance.
Verstimmungsschalter wave (length) change switch.
verstopfen stop, choke, clog, obstruct, stopper (up).
verstopfte Trompete stopped trumpet.
Verstopfung, Rohr- pipe clogging, stop-up, choke or obstruction in a pipe or piping.
verstreichen fill or stop up, caulk, spread or coat over; elapse, expire.
verstümmelt mutilated, obliterated, maimed, clipped (teleph., ac.).
Verstümmelung, Wörter- clipping of words, obliteration of w.
verstürzen fall to pieces, scatter.
Versuch, Beregnungs- rain test, wet t. (of an insulator).
Drehschwingungs- oscillation torsion test. **Rotbruch-** hot breaking test. **Verwindungs-** torsion test.
Vorführungs- demonstration experiment. **Vorlesungs-** classroom experiment, lecture demonstration.
Versuchs-fehler experimental error.
 -feld proving ground, field for making tests and experiments.
 -laboratorium experimental or research laboratory. -stab test rod, t. bar.
Vertagung adjournment, postponement.
vertäubtes Ohr deafened ear.
vertauschen exchange, interchange, play reverse rôles, transpose.
Vertauschung exchange, interchange, permutation (math.), transposition (of wires).
Verteidigungsschrift argued statement of defense, plea.
verteilen distribute, divide, disperse, diffuse, scatter, spread, space apart.
Verteiler, Bildpunkt- picture scanner (at receiving end).
Licht- beam splitter (m.p.).
verteilte Induktion oder Induktivität distributed inductance, continuous loading (opposite of lumped or concentrated i.).
-Kapazität distributed capacitance, self-c. (as distinguished from lumped c.) -Wicklung distributed winding.
Verteilung, räumliche spatial distribution, geometric d.
Empfindlichkeits- sensitivity distribution. **Farbenempfindlichkeits-, des Auges** spectral response of eye, color sensitivity of eye. **Geschwindigkeits-** velocity distribution, d. in energy. **Geschwindigkeits-, Apparat zur Bestimmung der** velocity selector. **Gleich-equipartition.** **Lichtstärke-** light intensity distribution (on photo-cathode). **Maxwell'sche** Maxwellian distribution (law).
Raum- spatial distribution, geometric d. **Reichweiten-** range distribution.
Verteilungs-anlage relay equipment, distribution gear.
-fläche, Licht- isophotic curve.
-gesetz distribution law, partition l. -konstante distribution or partition constant or coefficient. -kurve, **Fehler-** error distribution curve. -satz principle of distribution, d. law.
Vertikalausbreitung von Schall vertical diffusion of sound.
Vertikal-hinlauf vertical scansion. -navigation vertical guidance, v. aviation. -wechsel vertical or frame synchronizing pulse or cycle.
vertonte Oberfläche surface bearing sound track, s.-impressed surface or area.
Vertonung, Nach- dubbing.
vertraglich contractual, (bound)

- by contract.
verträglich compatible.
vertraglich verpflichtet contractual-
 ly bound or obligated.
Vertragspartei party to contract,
 contractant.
Vertrauensbruch breach of confidence.
Vertrieb eines Filmes releasing or
 distribution of a film.
Vertrocknung drying (up), desicca-
 tion.
verunreinigen vitiate, soil, con-
 taminate, pollute, adulterate,
 make impure.
Verunreinigungskerne impurity
 nuclei.
ver-ursachen cause, produce, occa-
 sion, result in. -*urteilen* pass
 judgment against, sentence, fine,
 condemn, convict, adjudicate.
 -vielfachen multiply.
Vervielfacher, Farnsworth- multipac-
 tor, F. multiplier. **Netz-** mesh
 multiplier, m. amplifier (works
 with secondary emission, cascaded
 electron-permeable mesh or gauze
 targets). **Pendel-** reciprocating
 and acceleration electron mul-
 tiplier predicated on secondary
 emission. **Sekundäremissions-**
 electron multiplier (with plurali-
 ty of secondary-emission targets
 or reflecting electrodes).
Vervielfacherzelle, photo-elek-
 trische, mit Sekundäremission
 electron multiplier photo tube,
 photo-electric electron-m. tube
 (with reflecting electrodes or
 dynodes).
Vervielfältiger, Gitter- mesh-type
 multiplier.
Vervielfältigung copying, printing
 (of film).
Vervielfältigungs-faktor multiplic-
 ation factor. -*kondensator* con-
 densor-type d.c. multiplier.
 -*oberfläche* dynode (in Farnsworth
 multiplier). -*röhre* multiplier
 tube, multipactor.
Vervierfacher quadrupler.
Verwachsungen inter-growths, inter-
 crescences.
- Verwackeln des Bildes** unsteadiness
 of frame.
verwandelbar transformable, con-
 vertible, transmutable.
verwandeln transform, convert,
 change, turn.
Verwandlung, Paschen-Back- P.B.
 magneto-optic effect.
Verwandschaft relation, affinity.
verwaschen obliterated, blurred,
 viated, bleary.
Verwaschungszone blurred zone,
 bleary z., z. lacking definition,
 confusion z. (telev.).
Verwehung draft of air, wind.
verweilen dwell, sojourn, stay.
verweisen, Berufung an den Gerichtshof
 refer appeal to the court.
verwerfen warp, distort, twist;
 repudiate, reject.
Verwerfung rejection, repudiation;
 warping, deformation; slow fre-
 quency drift (in radio apparatus,
 after tuning).
Verwertungsperiode evaluation period.
verwickelt complex, complicated, in-
 volved, intricate.
verwinden twist, subject to torsional
 stress.
Verwindungsversuch torsion test.
Verwirklichungsform practical em-
 bodiment (of an invention).
ver-wischen blot out, efface,
 obliterate, blur, make bleary.
 -*wittern* disintegrate, effloresce.
 -*würfeln* jumble, garble. -*zähnen*
 tooth, cog, indent, provide with
 (gear) teeth, serrate.
Verzahnung, Evolventen- involute
 tooth gear.
Verzahnungsgetriebe, Winkel- double
 helical gear.
verzapfen joint, mortise; dispense
 by tap.
verzehren consume, spend, dissipate,
 abate (smoke).
Verzeichnung faulty delineation or
 re-creation of a picture, distor-
 tion of a p. (e.g., pincushion,
 barrel, etc., distortion, in tele-
 vision).
Verzeichnung, anisotrope anisotropic

shear distortion, distortion of orientation (telev.) -, kissenförmige pincushion distortion, pillow d., negative d.

-, nichtlineare non-linear distortion. -, tonnenförmige barrel distortion, positive d.

verzeichnungsfreie Linse orthoscopic lens, distortion-free l.

Verzerrer, Dynamik- dynamic compress-or.

Verzerrung durch Ein- und Aus-schwingung transient (non-linear) distortion, build-up and decay d. -durch Feldkrümmung distortion due to field curvature, curvilinear distortion.

Verzerrung, Ausschwing- decay distortion, non-linear d., over-throw or underthrow d. (in facsimile transient). Bild-(cf Verzeichnung) picture distortion (in facsimile: jiggers, f. transients known also as hangover, tailing, overthrow and underthrow distortion). Dämpfungs- frequency distortion; tone d. Einschwing- build-up or transient (non-linear) distortion. Frequenz- attenuation-frequency distortion, amplitude f.d., attenuation d., frequency d. Laufzeit-transit-time distortion, phase d. Lichtfleck-spot distortion. Phasen- phase distortion.

verzerrungsfrei distortionless, d.-free, non-distorting. -(es) Okular orthoscopic eyepiece, distortion-free e.

Verzerrungs-leistung distortion power (in terms of d. volt-amperes). -toleranz tolerance of distortion.

Verzicht disclaimer, renunciation, waiver.

verzichten(auf Anmeldung, Patent, etc.) abandon, drop or relinquish (an application, patent, rights, etc.), disclaim, renounce, waive rights.

Verzichtleistung disclaimer, renunciation, waiver, abandonment.

verziehen warp, buckle.

Verziehung warpage, buckling.

Verzinkung, Feuer- hot galvanization, pot g.

Verzögerer, Vielfach- Barkhausen-Kurz type of tube (retarding-field t., magnetron, etc.)

Verzögerung retardation, deceleration, braking, delay, lag, checking. Funken- spark lag. Phasen-phase delay, phase lag, (phase) angle of lag.

Verzögerungsbad restraining bath.

verzögerungsfrei inertialess, free from lag, delay or sluggishness.

Verzögerungs-kette delay network.

-linse cutoff or stopping (electron-optic) lens. -relais

slow-acting relay, time-lag r.

-schalter time-lag switch.

-spannung delay voltage, delayed-action v. (in avc circuits).

Verzug time delay, t. lag.

Ausschwingungs- hangover, tailings (in facsimile). Entladungs-discharge delay, d. lag.

Fliess- yield cr flow distortion or deformation.

Verzugsrechner acoustic corrector (sound location).

verzweigte Ströme branched currents, branch c. -Stromkreise divided circuits, branched c.

Verzweigung by-pass, shunt, branching (of transmutation products), ramification.

Verzweigungs-struktur lineage structure (cryst.). -verhältnis branching ratio.

Verzwillingen twinning.

Vibrations-galvanometer, kompensierte Abraham's rheograph (inertia and damping compensated).

-schwelle vibrational threshold.

-tastgerät vibrato-tactile device.

vieldeutig ambiguous, non-equivocal, capable of various interpretations.

Viel-doppelzackenschrift multiple double-edged variable-width track.

-ebene multiplane. -eck polygon.

vieleckig polygonal, multiangular.

vielerlei various, multifarious, variegated.

vielfach manifold, multiple, poly...,

- multi..., various, frequent.
gleich- equimultiple.
- Vielfach-abtastung** multiple scanning.
-beschleuniger cyclotron (type of) tube (with two dees and spiral beam), betatron (of G.E.Co.)
-echo multiple echo, flutter e.,
Vielfaches, ganzes integral multiple, whole m. -, gerades even multiple. -, ungerades odd multiple.
Vielfach-konturen multiple outlines along edges of objects or of lines (in pictures or images), general masking of details.
-schaltung connection in multiple. -schwingungserzeuger multivibrator. -streuung multiple scattering. -telegraphie multiplex telegraphy. -verzögerer Barkhausen-Kurz type of tube (retarding-field, magnetron, etc. tubes). -zackenblende shutter or light stop for making multilateral sound track. -zackenschrift multilateral sound track or s. recording.
- Vielfall** multiplicity.
- vielfarbig** many-colored, multi-c., variegated, polychromatic.
- Vielfach** polyhedron.
- viel-flächig** polyhedral.
-gestaltig multiformal, manifold, diverse. -gliedrig polynomial (math.). -gliedriger Kettenleiter multi-mesh network.
- Viel-kanalaufzeichnung** multi-channel recording. -kantscheibe polyhedral mirror (of scanner).
- vielkernig** multinuclear, poly-nuclear, polynucleate; polycyclic.
- Viellinien-spektrum** discrete band spectrum, manyline spectrum.
-system many-lined system.
- vielseitig** many-sided, polyhedral, multilateral; having diversity, versatile.
- Vielfspiegelung** multiple of image.
- vielstimmig** polyphous, polyphonic (of organ).
- Vielstufenwärmeaustauscher** multi-pass heat-exchanger.
- vierteilig** multipartite, of many parts; polynomial (math.)
- Vielwegehahn** multiple-way stop-cock.
- vielwertig** multivalent, polyvalent.
- Vier-bandlichtschleuse** four-band light valve, four-ribbon l.v.
- eck, Gelenk- linked or articulated quadrilateral or quadrangle.
- viereckig** four-cornered, square, quadrangular, oblong (of reading glass).
- Vierervektor** four-component vector.
- Vierfachspiralloch scheibe** quadruple-spiral scanning disk.
- Vierflach** tetrahedron.
- vier-flächig** tetrahedral, 4-faced.
-gliedrig four-membered, tetragonal (cryst.); quadrinomial (math.). -gliedrige Farbgleichung four-color equation, four-stimulus e.
- Vierpol** quadripole, four-terminal network, transducer, ideal artificial line (with two input and two output terminals).
- Teil-** section of recurrent structure.
- Vierpol-dämpfung** image attenuation constant. -lautsprecher balanced armature loudspeaker (with permanent magnet).
-winkelmaß image phase constant.
- Vierseit** quadrilateral.
- vierstellige Zahl** four-figure number.
- Vier-stoffsystem** quaternary system.
-teilung quadripartition.
-telkreis quadrant.
- viertelkreisige D-Werte** quadrantal error (Q.E.) values (due to airplane fuselage, etc., in d.f.)
- Vier-telperiode** quarter period.
-weghahn four-way cock.
- Vignettierapparat** vignetter.
- Vignettieren des Lichtbündels** vignetting of cone of light.
- Vignettier-maske** vignetting mask.
-wirkung durch Linsenfassung trimming of pencil intensity caused by lens mount, vignetting effect.

Viola viola, tenor violin.
Violin E violin E string.
Visier sight (of gun, etc.), visor.
Abdrift- drift meter. **Bomben-**
 bomb sight.
visieren sight, aim, gage.
Visier-einrichtung view-finder.
 -linie line of sight. -mattscheibe
 focusing screen. -richtung line
 of sight, direction of vision.
 -scheibe focusing screen.
 -vorrichtung (visual) sight for
 taking direct bearings. -zirkel
 gaging calipers.
Vogel-augenahorn bird's eye maple.
 -orgel bird's organ. -perspektive
 bird's eye view. -pfeife bird
 whistle.
Vokale, Halb- liquid consonants,
 semi-vowels, liquidae.
Vokaleinsatz beginning of vowel
 sound.
Vollanode unsplit anode (of magnetron). -bogen semi-circular rail
 (of microscope).
vollfarbig of full (saturated)
 color.
Voll-flächner holohedron. -leiter
 compact, unstranded or solid
 conductor. -macht ausstellen
 execute a power of attorney.
 -machtgeber principal, mandator.
 -netzanschluss all-electric sup-
 ply, mains s. -niete solid rivet.
 -opalscheibe pot opal diffuser
 disk.
vollstreckbar enforceable, executa-
 ble, executory.
Voll-wegleichrichter full-wave
 rectifier. -ziehungsbefehl
 writ of execution warrant.
Voltampere (Scheinleistung) var (unit
 of reactive power).
Voltapotential Volta potential, V.
 emf, V. effect.
Voltmesser, Gleichrichter- rectify-
 ing voltmeter. **Ionenwind-** ionic
 wind voltmeter. **Röhren-, selbst-**
gleichrichtendes self-rectifying
 tube voltmeter. **Scheitelpunktspannungs-**
 peak voltmeter, crest v.
Voltsekunde weber (magnetic flux
 unit).

Volumen, Mol- molar volume.
Volumen-gleichrichtung volume
 rectification. -schwankung
 volume flutter. -verlust
 loss in volume.
Volum-gewicht volume weight,
 weight of unit v. -prozent
 percent by volume. -verhältnis
 volume relation, proportion by
 v.
Vomhundertsatz percentage.
Voramt, Hilfs- sub-control station.
vorangehend preceding, leading,
 antecedent.
Voranode first anode (c.-r. tube);
 screen grid connected with cathode
 and acting as "fore-anode" in
 power pentode (Pierce circuit).
voraus, Backbord port bow. -, recht
 right ahead. -, Steuerbord star-
 board bow.
voraus-gehend preceding, leading,
 previous, prior, antecedent.
 -nehmend anticipatory (patent
 law).
Voraussetzung postulate, premise,
 assumption, supposition, pre-
 sumption, hypothesis.
Vorbedingung prerequisite, precon-
 dition, conditio sine qua non.
vorbei-führen (cf vorbeistreifen)
 skirt, conduct or direct past
 (something), lead past at a
 glancing angle. -sehen not to
 look straight at each other (in
 two-way television telephone).
 -streichen, -streifen skirt,
 glance, graze, pass by, brush
 against (in more or less close
 contact with something).
Vor-beladung pre-charge, preliminary
 c. (of sorptive in sorbent).
 -belichtung priming exposure or
 illumination, pre-exposure. --,
Zellen- primary illumination of
 a cell. -benutzung, offenkundige
 oder öffentliche prior use,
 public use. -bereitung prepara-
 tion, line-up, readying.
 -bereitung für Bildaufnahme lin-
 ing up for shooting pictures.
 -bescheid preliminary action (of

Patent Office Examiner), interim decision. -bild pattern, model, copy, prototype, type, exemplar.
vorbringen argue, plea, reason.
Vorder-ansicht front elevation, f. view. -blende anterior stop, field s.
vordere Brennebene front focal plane. -(r) **Brennpunkt** first focal point.
Vorder-glied predecessor, antecedent. -licht front light (studio).
 -linse front lens, field l.
 -mann stehen, auf lie in the shadow of. -satz premise, antecedent.
 -seite front side, front, obverse, face, panel.
Vordruck first impression, proof.
voreilen lead.
Vor-eilung, Phasen-phase lead.
 -eilungswinkel angle of lead (of phases). -einflugzeichen fore marker, outer m. (beacon) (of air-field). -entladung pre-discharge.
 -entladungskanal pre-discharge track. -form gathering mold (in glass manufacture).
vorführen demonstrate, display, bring out, produce.
Vorführer projectionist, motion-picture operator.
Vorführung, Film- film projection; exposure of f. (in gate).
Vorführungs-film display film.
 -kabine, -raum projection room or booth (m.p.) -versuch demonstration experiment.
Vorgang process, action, event, phenomenon, reaction, proceeding, procedure, occurrence, happening.
Vorgang, einmaliger non-recurrent action, unique a., singular a., event or phenomenon. -, un-
periodischer non-recurrent action, non-periodic a. or phenomenon.
 -, zeitlich veränderlicher action subject to time variation, a. variable with time. **Ausgleich-transient**. **Bewegungs-** motional action, cinematographic a.
Einzel- single or separate process, action, phenomenon or event.
Schalt- switching operation, process or action.

Vor-gänger predecessor, antecedent, progenitor. -gelege transmission gearing, connecting gear. -geschichte previous history, antecedents.
vorgespannt pre-stressed (mech.), initially tensioned; biased (electrical potential).
vorgetäuschte Sehschwäche simulated amblyopia.
Vorglimmlicht-gebiet sustaining voltage range, pre-phologlow region (arises at a voltage slightly below striking v.).
-zelle photo-emissive gas-filled cell operating at sustaining voltage (in pre-glow region).
vorhallen over-emphasize; preverberate, pre-echo (ac.)
Vor-halbewinkel drift angle, a. of lead. -hangblende curtain fading shutter. -hängeaufblendung curtain fade-in. -hof, Trichter-air chamber (adjacent horn of loudspeaker).
vorionisierte Spur pre-ionized track.
Vor-kammer pre-chamber, ante-chamber; forehearth (oven). -kehrung precaution, provision, precautionary measure or step.
 -kehrungen, sicherstellende preventive measures.
vorkommen occur, happen.
Vorkonzentration (cf **Vorsammellinse**) preliminary focusing, pre-focus, first focus action (in c.-r. tube).
vorladen cite, serve, subpoena, summon,
Vor-ladung appointment, summons, subpoena, writ, citation, notice, notification. -lage original copy, copy, pattern; receiver, condenser (zinc smelting).
 -lauf lead or precession of sound (in relation to picture = 19 frames = 361 mm). -läufer forerunner, precursor; sign, indication, clue.
vorläufig provisional, preliminary, advance (e.g., notice).
Vor-legierung key alloy.

-lesungsversuch classroom experiment or study, lecture demonstration.

vorliche Kurslinie ahead course or direction, "go-to" indication.

Vorlicht priming or biasing illumination.

vormagnetisierte Spule, gleichstrom- d.c. controlled saturable coil, three-legged reactor.

Vormagnetisierung bias magnetization, magnetic polarization.

Vormagnetisierungsstrom biasing current.

vorn in front, anteriorly.

vornherein, von from the outset, from the first, to begin with.

Vor-prüfer examiner (in Patent Office). -prüfungsverfahren

preliminary examination, preliminary search or action.

-pumpe fore-pump, backing p. (for vacuum). -rang priority, precedence, superiority, first rank. -rat, Metall-, Quecksilber- mercury pool (in rectifier).

Vorrats-flasche "Winchester", stock bottle. -leitung spare circuit, standby c. -lösung stock solution.

-röhre input tube. -rolle, -spule magazine, m. roll.

Vorraum ante-chamber, fore-c., outer c.

Vorröhre input tube.

vorrücken feed (forward), advance, progress, step forward, notch forward (e.g., a switch or controller).

Vor-sammelinse first focusing lens, cathode l. (like Wehnelt cylinder, apertured disk, etc., in c.-r. tube). -satz, Peil- direction-finder means added to standard receiver apparatus. -satzgerät attached or accessory device, head (m.p.) -satzlinse anteriorly attached lens, front l. attachment, magnascope (to enlarge projector image).

vorschalten cut in circuit, connect in series.

Vorschaltwiderstand series resistance; multiplier (of a voltmeter).

vorschlagbar capable of being moved, dropped, let or folded down on hinges.

Vorschrift, Bedienungs- service direction, working instructions, directions for use.

Dienst- service or working rules and regulations.

Gebrauchs- directions for use.

Vorschub feed, conveyance. **Papier-** paper feed.

Vorschub-bewegung, Zeilen- line sweep, l. traversing motion. -rad feed wheel.

Vor-selektion pre-selection.

-sichtsmassregel precaution, precautionary step or measure.

-signal first or outer marking signal, caution or warning s.

-spann label (of a print); leader (of a film). -spannprogramm prologue.

Vorspannung biasing potential (of a grid, magnet, etc.), bias, polarizing p.; inherent bias tension (as in a spring) to restore normal position, normally tensed or tensioned condition, initial tension, pre-stress (in metal, etc.); anode, drive or positive p. (of a photo-cell). -verriegelnde cut-off biasing potential.

Gitter-, automatische automatic bias or self-biasing of grid.

Vor-spektrum preliminary spectrum (of Goldstein).

vorspringen project, protrude, be salient or prominent.

Vor-sprung projection, salient, lug, shoulder, protrusion, prominence. -stellung mental picture, conception, ideas, notion; representation, demonstration, performance, display. -stoss adapter, lap (of a tile), edging.

-strom dark pre-sparking current.

-stufe first or preliminary step; input or first stage (of an amplifier); primer. -synchronisieren pre-scoring (first sound, then picture).

vortäuschen simulate, mislead,

delude, deceive, cause an illusion.
Vortexring vortex (ring).

Vortransport supply sprocket.

-trieb positive drive, forward d., torque. -vakumpumpe fore-pump, rough-vacuum p., backing p. -verfahren preliminary procedure or proceedings. -veröffentlichung anticipatory reference, anticipation (in patent or magazine literature), earlier publication.

-verstärker input amplifier, pre-a. (class A RF amplifier, in a super-heterodyne). -verstärkung gain amplification.

vorwalzen rough down (rolling mill work).

Vor-wärzung pre-heating, fore-warming.

-warnung alert signal.

Vorwärts-bewegung active stroke (in film feed), forward motion,

translatory movement. -gang direct action (camera). -regelung direct control, forward-acting regulation.

vorwegnehmend anticipatory (in the form of a disclosure in prior art).

Vorwickel pull-down sprocket.

-rolle, -trommel supply reel, (upper) feed sprocket, pull-down sprocket.

Vorwickler upper feed sprocket.

Vorwiderstand series resistance.

vorwiegend preponderant, predominant, especially, chiefly.

Vor-wölbung protrusion, anterior curvature. -wurf subject (phot.)

-zeichen indication, symptom, sign (math.). -zerleger filter (for ultraviolet) mounted anteriorly of monochromator entrance slit).

-zugsrichtung privileged direction.

W

wabenartig honeycombed, pitted (of structure).
Wabenspule honeycomb coil, lattice-wound c., duo-lateral c.
Wachfrequenz watch frequency, f. of international automatic alarm signal, distress f., mayday (in radiophony).
Wachs-abdruck impression in wax.
 -paste cerate or encaustic paste.
 -platte (soft) wax disk, w. master (in disk manufacture).
 -tuch oilcloth, cerecloth (obs.).
 -tum, *Kristallisations-* germination, crystal growth. -tumkurve growth curve. -tumzentrum nucleus, center of growth, kernel.
Wackelkontakt loose contact, variable or defective c.
wackeln shake, totter, rock, sway, quake.
Wackelung, Ver- frame unsteadiness.
Wage, Dreh(feder)- torsion balance:
 Feder- spring balance, s. scales.
 Fein- precision balance; micro-b.
 Hebel- beam scale, lever s.
 Mikro- micro balance, precision b.
 Stoss- ballistic pendulum.
 Strom- -ampere balance.
Wagebalken beam of balance, scale b.
Wagen, Aufnahme- pickup camera truck, dolly. *Fernsehaufnahme-* television pickup camera truck, video bus. *Lautsprecher-* loud-speaker truck, sound t. *Ton-* (film)- sound truck, location t., lorry set, sound van.
Wagenfett axle grease.
Wageschaltung, Ab- comparator circuit organization.
Wagschale weighing-dish, scale or balance pan.
Wahl, Nummern- impulse action, stepping (automatic telephony).
Wähler, Schrittschalt- step-by-step selector.
Wähler-bucht bay of selector.

-hebeschritt vertical step of selector. -scheibe dial type selector switch. -segment bank of (stationary) contacts.
wahllos at random, haphazardly, without choice or selection, non-selective.
Wahlschalter selector switch.
wahlweise selective, directional (in signal transmission).
wahre Peilung true bearing.
Wahr-heitsbekräftigung affirmation.
 -nehmbarkeit perceptibility, noticeability, observability, visibility, discernibility, audibility.
wahrnehmen perceive, sense, notice, observe, be sentient.
Wahrnehmung perception, sensation, observation, percipience, sentience. *Farben-* color vision, c. perception. *Schall-, des menschlichen Ohres* human sound or tone perception. *Ton-* acoustical perception, auditory or sound sensation.
Wahrscheinlichkeit, Ansprech-, eines Zählrohres efficiency of counter tube (probability to respond or register).
Wahrscheinlichkeits-gesetz probability law. -rechnung calculus of probability.
Walzhorn French horn, concert h.
Walkerde fuller's earth.
Walze roller, roll, cylinder, drum, wheel, barrel. *Bild-* picture cylinder (in Bakewell's p. transmitter).
walzen roll, mill, laminate.
 vor- rough down (by rolling mill).
walzenförmig cylindrical, barrelshaped.
Walzen-mühle roller mill. -strecke roll train.
Walzwerk, Draht- wire rod mill.
Wand wall, partition, side, cheek, shell, panel, screen, baffle.

wand, Bild- picture (projection) screen. Durchprojektions- translucent screen. Ganzmetall-all-metal (projection) screen. Schallbaffle (board) of a loudspeaker; sound panel (for s. absorption or reflection). Signal- wall of signals, curtain of s. Tonbild-transoral screen (m.p.).

Wandbekleidung, schallschluckende wall draping, w. lining, baffle, blankets, sound absorbing material put on walls or panels, often portable, called "gobos" or "tormentors" (m.p. and sound stage). -durchführungsisolator wall lead-in insulator, bushing i.

Wanderlicht (Personenabtaster)

splotlight scanner for persons. -marke wander mark, measuring m. (in range finder).

wandern migrate, shift, crawl, creep, wander (of beam), travel (of waves or surges, over electric lines).

wandernder Lichtstrahl flying spot, scanning spotlight.

Wanderung, Material- creep or flow of material (or metal),

wanderungs-geschwindigkeit rate of migration, crawl or creep (in telev., ions), m. velocity. -sinn direction of migration (of ions).

wander-welle traveling wave, transient w., surge. -wellengenerator surge generator, impulse g., "lightning" g. -wellenmesser klydonograph, surge indicator, s. recorder.

Wandler transformer, converter (of picture or image), transducer.

-, lichtelektrischer photo-cell.

Bild- image converter, picture transformer, transducer (changes optical into electric images or patterns, etc.) Durchführungs-bush-type transformer. Fernseh-photo-cells, light relays and similar devices(changing light into currents and back), television transducer. Frequenz-frequency transformer, f. changer. Kurzwellen- short-wave converter. Mess- measuring

transformer, instrument t.

Wandlerspeicherröhre, Bild- super-iconoscope.

Wand-stoffbekleidung draping, baffle, blanket, sound-absorbing material, called gobo or tormentor when in form of portable wall (m.p. studio). -strom wall current (of a tube).

Wange cheek, side piece, end p.

Wanne trough, tub, casing (of a multiple condenser and its plates). -, pneumatische pneumatic trough (in gas drying).

Warmblasen hot blasting (water gas manufacture).

warmbrüchig hot-short, brittle when hot.

Wärme, gebundene latent heat.

Arbeitswert der mechanical equivalent of heat. **Bildungs-** enthalpy, heat of formation.

Eigen- specific heat, body heat, animal h.

Wärme-abführung, -abgabe, -ableitung, heat dissipation, h. evacuation, loss of h., h. "abduction", the carrying or conducting away of h.

-arbeitswert mechanical equivalent of heat. -austauscher,

Vielstufen- multi-pass heat exchanger. -bewegung thermal agitation, heat motion.

wärmedurchlässig diathermic, thermanous.

Wärme-durchschlag breakdown due to thermal instability. -einheit (W.E.) thermal unit, heat u.

-elektrizität thermo-electricity.

-entbindung, -entwicklung development, disengagement or evolution of heat, loss of h. -fluss heat flow, thermal f. or flux.

-geräusch thermal noise (sort of Brownian motion of electrons in input circuit).

wärmegleich isothermal.

Wärme-ionisation thermal ionization, temperature i. -kapazität thermal capacity. -kraftlehre, -mechanik thermodynamics. -leitvermögen, -leitzahl thermal conductivity.

- Wärmemesser thermometer, calorimeter.
 - , thermoelektrischer thermel.
 Sonnen- solarimeter, pyroheliometer.
Wärme-rauschen thermal noise (thermal agitation or motion of electrons).
 -schwingung heat vibration.
 -speicher heat accumulator, re-generator. -stoff caloric, thermo-gen. -strahlung thermal radiation, temperature r., heat r., radiant heat. -tod heat death. -tönung heat tone (in thermochemistry), heat quantity, h. effect.
Wärmeundurchlässig athermanous, impervious to heat, heat insulating.
Wärme-vergangenheit thermal antecedents, prior heat treatment.
 -verlust heat loss, thermal l.
 -wirkung temperature effect, heat action, thermal a.
warm-fest heat resistant. -gepresst hot-pressed, hot-press-fitted, subjected to thermo-plastic treatment.
Warnsignal (cf Entwarnen) air-raid alarm, caution signal.
Warnung, Vor- alert signal.
Warze wart, nipple, pin, knob, boss.
Wasser, Ultra- optically empty water.
Wasser-abguss, Fagott- bassoon syphon.
 -ablass, -ableitung water drain, w. drainage, w. outlet.
Wasser-abstossend repelling water, w. repellent, non-hygrosopic.
 -anziehend water or moisture attracting, hygroscopic. -beständig stable in water or towards action of w. -bindend hydrophylic, water-absorbent, w. imbibent.
Wasser-blase bubble of water; vessel or container for water heating. -druck hydraulic pressure. -entziehung dehydration, removal of water, desiccation.
wasser-fest water-tight, w.-proof, resistant to w. -frei dehydrated, desiccated, anhydrous.
Wasserhahn water cock, w. tap, faucet.
wasserhaltig hydrous, hydrated, aqueous, containing water, w. bearing.
wässerig watery, hydrous, aqueous.
- Wasser-kraftlehre** hydrodynamics.
 -kühlröhre water-cooled tube.
 -luftpumpe water vacuum pump.
 -mantel water jacket.
wassern airplane traveling in contact with water. ab- rise or start from water. an- "land", alight or descend on water.
Wasser-schalter hydroblast switch.
 -schluss water seal, trap.
 -siedemesser hypsometer.
Wasserstoff, schwerer deuterium (mass of 2), tritium (mass of 3).
 -ionenkonzentration pH value, hydrogen-ion concentration.
 -kern hydrogen or H particle or nucleus. -knallgas detonating gas (explosive mixture of hydrogen and oxygen). -strahl H ray (consisting of H particle or positive hydrogen ion). -zahl hydrogen-ion concentration, pH value.
Wässerung washing (of film, etc.)
Wässerungsgestell washing rack (phot.)
wasserunlöslich insoluble in water.
Wasser-verschluss water seal.
 -wert water equivalent (of a calorimeter).
Watte absorbent cotton, wadding (of cotton, glass wool, etc.), pad.
Watt-leistung, -zahl wattage, power in terms of watt.
W.E. (Wärmeeinheit) heat unit, thermal u.
Wechsel change, shift, alternation, cycle. **Bild-** (cf **Vertikal-**) picture cycle, moving period, feed stroke (m.p.) **Horizontal-** horizontal or line sync impulse or cycle. **Last-** cyclic stress, stress application cycle. **Licht-** variation of exposure. **Pol-** reversal of polarity, change of p. **Vertikal-** vertical or frame synchronizing pulse of cycle.
Zeilen- s. **Horizontal-**
Wechsel-beziehung inter-relation, correlation, mutual or reciprocal relationship. -blende alternating shutter (in stereoscopy); masking disk (with spiral slot

cyclically cooperating with quadruple scanner disk or drum apertures), auxiliary rotary shutter disk with spiral slot.

-druck alternating pressure.

-festigkeit, Biege- alternating bending strength. **-festigkeit, Verdrehungs-** strength under alternating torsion stress.

-frequenz, Bild- picture or frame frequency, repetition f.

-frequenz, Zeilen- line frequency.

-getriebe, Geschwindigkeits- change-speed gear. **-hahn** change cock. **-induktion** mutual inductance. **-kardioide** switched cardioid (d.f.) **-kontakt** make-and-break contact. **-licht** light intensity variations (striking photo-cell). **-note** warble note, warble sound (in airplane alarms); appoggiatura note (mus.)

-periode, Zeilenzug- field frequency ($= 2 \times$ frame f.) **-richter** inverter, inverse or inverted (d.c. to a.c.) rectifier, d.c. to a.c. transverter (mostly combined with transformer).

-richter, Pendel- vibratory inverter, vibrator. **-satz** exchange principle. **-schalter** double-throw switch.

wechselseitig reciprocal, mutual, interchangeable, alternate.

Wechselsprechen, Funk- alternate two-way radiophone communication.

Wechselstrom alternating current, indirect c., a.c. (specifically, single-phase current is mostly meant), any periodic c. **Leitungs-** conduction alternating current.

Wechsel-stromempfänger a.c. electric radio set or receiver apparatus. **-stromton** hum in a telev. picture (causing wavy edge or sides, pairing of lines, etc.)

-tastverfahren reversing switch method (in d. f. work); make-and-break switch or keying method.

-ton warble note or sound (used in airplane alarms); appoggiatura note (mus.) **-verhältnis** reciprocal relation, r. proportion.

-winkel alternate angle.

-wirkung inter-action, mutual or cooperative a., reciprocal effect.

Wechselwirkungs-energie mutual potential energy. **-glieder** interaction terms. **-potential** interaction potential.

Wechsel-zahl, Bild- frame frequency, picture f., repetition f. **-zahl,** **Last-** alternating stress number.

-zeit, Bild- frame frequency, picture f., repetition f.

Wechsler, Objektiv- revolving nose-piece (in microscope). **Platten-** record changer (in phonograph). **Strom-** commutator, reverser.

Wechslung, Fallsystem- drop system record changer.

Wecker, Schnarr- buzzer alarm.

Weg (in Mechanik) displacement (in centimeters, in mechanics, equivalent to charge, in coulombs, in electricity, and to volume displacement, in cubic centimeters, in ac.)

Weg, Eisen- iron path, magnetic or ferro- m. circuit. **Gleis-** rail track. **Gleit-** glide path, landing curve (of an airplane), landing beam. **Neben-, by-path, by-pass.**

Übertragungs- transmission channel, t. path, t. medium.

Weg-ablenkung, Peilstrahl- distortion of bearing, deviation (due to diurnal or seasonal factors, weather, terrain, local conditions, etc.); lateral deviation.

-abschnitt element of path, length or distance, portion, fraction or subdivision of length.

weg-diffundieren diffuse away.

-heben, sich cancel out (math.)

wegig, ein- single-channel, one-way, simplex. **mehr-** of multi-channel or m.-path nature.

Weglänge, mittle freie mean free path.

Schall- sound path length.

Weg-leitung directions for tracking trouble. **-strecke** distance, stretch, (element of) length.

-tasten des Trägers, Synchronierung durch carrier interruption, suppression or gating of c.,

synchronizing impulse by c. gating. -überführung overpass, overhead crossing. -unterführung underpass. -winkel transit angle (of klystron and other beam tubes). -zeitkurve trajectory.

Wehneltzylinder Wehnelt cylinder, W. grid, W. shield (telev.)

weich gentle, smooth, yielding, soft; weak or of low contrast (of picture or image).

weich,schall- sound absorbent.

weiche Röhre soft valve, ionic tube, gas-filled t., gassy t.

Weiche dividing network, d. filter, separator (for sync and video signals) comprising limiter tube and network.

Weiche,Strom- current divider (filter).

weichen soak, steep; yield, give way; soften, plasticize.

weichlöten soft-solder.

Weichzeichner soft-focus lens.

weigern refuse, decline.

Weihnachtsbaumantenne christmas tree antenna.

Weiser pointer, indicator, hand, guide. **Kurs-,Richt-** radio beacon, r. range.

weissbrüchig white fracture, pale f.

Weissbuche white beech.

weisser Elektronenstrahl heterogeneous beam (of electrons).

weissglühend white-hot, incandescent.

Weiss-guss white metal (cas.).

-lot soft solder. -metallfutter,

Lager mit babbitted bearing.

-wert bright level value (telev.)

Weisung direction-finding, guiding (by radio compass, etc.). **Fehl-** directional or d.f. error, quadrantal e. (Q.E.), compass deviation.

Weite,lichte inside diameter, i. width, lumen. **Bild-** distance between screen and lens, image intercept, i. distance. **Brenn-** focal distance, f. length, convergence d. **Einstell-** focal range, focusing r. **Gegenstands-** distance from object to lens, o.

distance, d. from electron source (or from stop or crossover) to main l. **Schnitt-** distance from back lens to image, intercept length. **Schwingungs-** amplitude of vibration, a. of oscillation. **Seh-** distance of vision, visual range. **Sicht-** optical distance, line of sight, direct-sight range or distance. **Start-** (der Elektronen) distance from origin, d. from object to lens, object d.

Weiter-bildung further development (of an invention), evolutionary development or progress. -drehen des Schaltarmes stepping around or notching forward of the wiper, controller handle, etc. -führung einer Anmeldung prosecution of an application (for letters patent). **weit-gehend** far-reaching, substantial, thorough, appreciable; broad (of a patent specification, its disclosure or claim).

-geöffneter Konus wide-open cone or pencil. -maschiges Gitter open or wide-meshed grid, coarse g. -sichtig far-sighted, long-s., hyperopic.

Weitwinkelbild wide-angle picture, "Wide-scope" p.

weitwinklig wide-angled (phot., etc.) -(e) Aufnahme magnascopic picture. -(en) Kohlenstiften, Bogenlampe mit scissors-type arc lamp.

Welle (cf. wellenabgrenzung) wave; shaft, arbor, axle, spindle, roll, roller.

Welle,direkte ground wave, direct w. ("hugging" curvature of earth). -,ebene plane wave.

-,extremkurze ultrashort wave.

-,fortschreitende progressing or progressive wave. -,gedämpfte discontinuous, damped or decadent wave. -,gleichstromüberlagerte wave superposed on or with d.c. -**impulsmodulierte** pulse-modulated wave (used in radar).

-,linkslaufende sinistro-propagating wave or surge.

-,-rechteckige square wave.
-, rechtlaufende dextro-propagating wave or surge. -, reflektierte reflected wave. -, rücklaufende retrogressive wave, reflected w.
-, stehende standing wave, stationary w. -, ultrakurze ultra-short wave, quasi-optic w.
-, ungedämpfte undamped wave, persistent w., continuous w. (c.w.).

Welle, Anregungs- exciton (strictly an electron in a crystal moving in a field of a positive hole).

Antriebszahntrömmel- drive sprocket shaft. **Boden-** direct or ground wave ("hugging" curvature of earth).

Bug- (eines Geschosses) nose wave (of a projectile). de Broglie-de Broglie wave, electron w., phase w. Dehnungs- dilational wave.

Dezimeter- micro-wave, decimeter w.

Eigen- natural wave. **Elektronende Broglie** electron wave, phase w. **Elementar-** wavelet (of Huygens).

Feld- field wave. **Front-** onde de choc, impact wave, bow w. (preceding a projectile's nose). **Hohl** (metall) **rohr-** metal-sheath conducting wave (in tubular or hollow pipe wave guide). Huygens'sche

Elementar- Huygen wavelet. **Knall-** shock wave. **Kopf-** onde de choc, impact wave, bow w., shell w., ballistic w. (ballistics).

Kreis- circular (electric) wave. **Kugel-** spherical wave. **Leitbahn-** transit-time or electron-path oscillation.

Luft- sky wave, space w., indirect w. **Mantel-** wave on outer surface of co-axial cable, "shell" wave.

Materie- de Broglie elementary particle (electron or proton) wave, elementary w., phase w. **Mikro-** micro wave, hyper-frequency w. (1-100 centimeters). **Nuten-** slot ripple. **Phasen-** de Broglie wave, phase w., electron w. **Raum-** space wave, sky w., indirect w.; spherical w. **Raumladungs-** space-charge wave. **Rohr-** dielectric or conducting wave (solid or hollow pipe wave guide). **Rundfunk-**(cf

Wellenabgrenzung) broadcast wave, medium-frequency w. **Schalt-** wiper shaft, switch s. **Spiegel-** reflected wave. **Staub-,Kundt'sche** acoustic dust pattern (showing nodes and antinodes). **Steuer-** control wave (in chain broadcast). **Stirn-** onde de choc, impact w., bow w. **Störungs-** garbling wave (in secret or coded telephony); parasitic w., interfering w., jamming w. **Stoss-** percussion wave, impact w., impulse w.; wave impacting upon a joint (say, in a pipe). **Überschall-** supersonic wave, ultra-audio w., ultrasonic w. **Ultrakurz-**(cf. **Wellenabgrenzung**) ultra short wave, uhf w., quasi-optical w. **Unterschall-** subaudio wave, infrasonic w. **Verdichtungs-** compression wave. **Verdünnungs-** rarefaction wave. **Wander-** traveling wave, transient (wave), surge. **Zeichen-** marking wave, signal w., keying w. **Zwerg**(cf **Wellenabgrenzung**) micro wave, midget w., dwarf w. **Zwischenzeichen-** spacing wave, back w.

Wellenabgrenzung und -Einteilung frequency and wave-band designation suggested by Fed. Communic. Comm. (FCC): very low-frequency (vlf) 10-30 kc; low-f. (lf) 30-300 kc; medium-f. (mf) 300-3000 kc; high-f. (hf) 3-30 mc; very-high f. (vhf) 30-300 mc; ultra-high f. (uhf) 300-3000 mc; super-high f. (shf) 3,000-30,000 mc.

Wellen-antenne wave antenna, Beverage a. **-anzeiger** cymoscope (obs.), wave detector, oscillation detector, coherer. **-aufzeichner,** Schall- phonodeik (record on film), phonograph. **-ausbreitung in Hohlmetallrohr** wave propagation in hollow metal pipe, metal-sheath conducting wave p. in wave guide. **-bereichmelder** wave band indicator. **-berichschalter** wave band switch. **-berg**

- peak, crest or hump of a wave.
-berglochweite distance separating peaks, intercrest d. **-betrieb**, Gleich- operation of stations on one wave, chain operation (from key station), network operation.
-bündel wave packets, beam of electrons and ions. **-bündelung** beaming, directional effect of waves. **-dämpfungskonstante** wave attenuation constant. **-detektor** cymoscope, wave detector, oscillation d., coherer. **-echo** radio (signal or wave) echo (involving single-, double- or multiple-hop).
-feld wave field. **-fläche**, Fresnel'sche Fresnel zone (of half-period elements).
wellenförmig undulatory, wavy, corrugated, rippled.
Wellen-front, geneigte tilted wave front, l. wave head. **-frontwinkel** wave front angle, w. tilt.
-führung wave guide (either dielectric or conducting). **-funktion** wave function.
wellengerader Kondensator straight-line wave-length condenser.
Wellen-geschwindigkeit wave velocity, phase v. **-gipfel** peak, crest, or hump of a wave. **-gleichung**, d'Alembert'sche d'Alembertian wave equation. **-konstante** wave constant (meters per millimeter of piezo-electric resonator).
-länge, Grenz- limiting wave-length. **-leitung** wave-guide (for dielectric or conducting waves).
-linie wavy line, undulatory l., sinuous l., rippled l. **-mechanik**, Geometrisierung der geometric derivation of wave equation.
wellenmechanisch wave mechanical.
Wellenmesser (cf Frequenzmesser) wave meter, Fleming's cymometer, frequency meter, ondometer.
Schwingaudion- autodyne wave meter or frequency m. **Summer-** buzzer wave meter.
Wellen-rückstrahlung wave reflection (by hop to ionosphere and back). **-sauger** smoothing choke, series reactor, wave trap.
- schalter** wave-band switch.
-schlucker(cf-sauger) wave trap (of absorptive or of impedance type). **-schwanz** wave tail (in facsimile). **-spannung**, **Bild**-video wave potential (telev.)
-spannung, **Ton-** audio wave potential (telev.) **-spektrum**(cf **-abgrenzung**) spectrum of electromagnetic waves, radio wave spectrum. **-stirn** wave face, w. front, w. head. **-strom** pulsating current, ripple c. **-stromfilter** ripple filter. **-stumpf** butt end of a shaft. **-tal** trough or valley of a wave. **-telegraphie**, **Draht**-wired-wave telegraphy, wired-radio t. **-widerstand** characteristic impedance, surge i. (distinguished by some authors).
-zahl wave number. **-zugfrequenz** group or wave-train frequency, spark f. **-zugkohärenzlänge** coherence length of wave trains. **wellig** wavy, rippled, undulated, pulsating. **-lang** long-wave, of great w.-length. **-(e)** **Gleichspannung** ripple potential, pulsating p.
Welligkeit ripple, rippled condition, humpiness (of resonance curve), pulsation factor; lack of linearity. **Mehr-** multi-wave property (of a crystal).
Wellrohr corrugated tube or tubing.
Wellung rippling, corrugation, undulation.
Welt, Aussen- external world.
Welt-beschreibung cosmography.
-raumstrahlen cosmic rays.
weltzeitlicher Anteil des Potentialgefälles universal diurnal variation component of potential gradient.
Wendekurve turn in landing (in ZZ method), U turn.
Wendel spiral, helix, coil.
Kehrdoppel- reversed double loop.
Wendelsystem, Doppel- biplane filament system.
Wendepunkt inflection point, reversing p., cusp, turning p.
Wender, Strom- current reverser,

commutator. Ton- tone converter.
Wende-schalter reversing switch, r. key. -tangente tangent to reversing point. -zeiger turn meter, t. indicator (of airplane).
Wendigkeit maneuverability, manageability, ease of handling or operating.
Werbung, Licht- light-advertising, propaganda using illumination effects.
werfen, sich wärp, distort, deform.
Werfer, Bild- picture projector.
Strahlungs- beacon or beam station.
Werg oakum, tow.
Werk, Lauf- feed mechanism, drive m.
Schalt- film feed mechanism, intermittent m. (m.p.)
Werk-blei raw lead. -photo studio still. -stoff, technischer industrial, technical or commercial material. -stoff, Austausch- substitute material. -stück work, piece of material or metal (to work on), blank to be machined or tooled, etc.
Wert, quadratischer Mittel- root-mean-square (rms) value, virtual v. **Behaglichkeits-** comfort value.
Bei- constant, coefficient, factor, parameter, co-ordinate.
Effektiv- effective value, root-mean-square v. (rms), virtual v.
Nenn- nominal, normal, assessed, face or rated value. **Schwarz-** black-level value. **Unterhaltungs-** entertainment value. **Weiss-** bright-level value (telev.)
Wertanzeiger, Maximum- peak indicator, crest i. **Minimum-** minimum indicator (for instance, of voltage).
Wertbestimmung valuation, evaluation, appraisal, estimate.
Werte, auseinandergehende divergent or discrepant values.
wertig, gerad- of even value.
Wertigkeitsformel valence formula, linkage f.
Wertung valuation, evaluation, appraisal, estimate.
Wesen (einer Erfindung) essence or essential feature of an invention,

Widerbeklagter
 (main) object of invention.
Wettbewerb, unlauterer unfair competition.
Wetter-forschung, Radiosonde für radiometeorographic sonde, radiosonde. -messinstrumente mit funkentelegraphischer Fern-übertragung radio-telemeteorologic or telemetric instruments.
Wetzstein whetstone.
Wichte specific gravity (sp.gr.), unit of weight.
Wickel, Kondensator- tubular condenser, paper capacitor, rolled or wrapped fixed condenser (of metal foils and paper or mica insulation), Mansbridge c. **Vor-** pull-down sprocket.
Wickel-blockkondensator tubular condenser, paper capacitor, wound or wrapped c. of fixed value (with metal foils and paper or mica insulation), Mansbridge c. -drähte, Gitter-grid coil wires. -körper coil form, former.
wickeln wind, wrap, roll, twist.
Wickelturm mandrel.
Wickler, Nach- lower take-up sprocket. **Vor-** pull-down sprocket.
Wicklung, angezapfte, in der Mitte center-tapped winding. -, gesehnte short-pitch winding, chord w. -kleine bobbin. -, schrittverkürzte short-pitch winding. -, verteilte distributed winding. - **Bifilar-** bifilar winding, Ayrton-Perry w.
Dämpfer- amortisseur winding, damping w. **Dritt-** tertiary winding (of a transformer). **Durchmesser** full-pitch winding. **Erst-** primary winding. **Korb-** basket winding, low-capacitance w.
Stufen- banked winding, pile w.
Zweidraht- bifilar winding, Ayrton-Perry w. **Zweit-** secondary winding.
Wicklungs-faktor space factor, copper f. -halter, -träger winding form, coil form, c. support, skeleton form, former.
Wider-beklagter cross-claim

defendant, counteraction d.
 -druck counterpressure, reaction.
 -haken barb. -hall repeated echo, e. reflection, reverberation, resonance. -hall, Flatter- flutter echo, multiple e. (between two parallel surfaces). -hallzeit reverberation period, r. time. -kläger cross-claim plaintiff, counteraction p.
 -lager abutment (immovable point or surface sustaining pressure or reaction). -legung rebuttal, refutation, disproof.
wider-rechtlich illegal, unlawful, contrary to law. -sinnig in or of opposite or contrary sense or direction (say, of rotation); devoid of sense or logic, nonsensical, illogical, irrational, absurd. -spiegeln reflect.
 -sprechend contrary, contradictory, inconsistent, opposite.
widerspruch opposition, protest, objection, inconsistency, in opposition or conflict with.
Widerstand ein- und ausschalten cut in and out resistance.
 -, induktionsfreier non-inductive resistance, ohm r. -, innerer (im Innern) volume resistance, insulation r. -, magnetischer reluctance, magnetic resistance.
 -, ohm'scher ohmic resistance, d. c. resistance. -, spezifischer resistivity (mass or volume), specific resistance. -, winkel-freier resistance with zero phase angle.
Widerstand, Ableitungs- leak resistance, leakance, resistance leak (of a tube). **Abschluss-** termination or terminal resistance or impedance.
Abzweig- leak coil, l. resistance (of a telegraph repeater).
Ausbreitungs- diffusion resistance.
Ausgleich- compensating resistance, balancing r., build-out r.
Ballast- ballasting resistance, ballast resistor. **Beruhigungs-** steadyng resistance, ballasting

r. Bewegungs- motional impedance.
Blind; induktiver inductive reactance, positive r., magnetic r. **Blind-, kapazitiver** capacitive reactance, negative r.; condensation. **Dämpfungs-** non-reactive, active, dissipative or ohmic resistance. **Dunkel-** dark resistance (of a cell). **Durch-gangs-** volume resistance (exclusive of surface r.), insulation r. **Durchlass-** forward resistance (of a rectifier). **Eisenwas-serstoff-** iron-hydrogen resistance. **Entknurrungs-** anti-growl resistance, r. to suppress growling noise due to RF or tickler coil in regenerative path. **Erder-** grounder resistance. **Fahr-** aerodynamic drag (of an airplane). **Falz-** folding resistance. **Federungs-** compliance (ac.). **Fusspunkt-** terminating impedance, base-loading i. (of antenna). **Haut-** dermal or skin resistance; s. effect r. **Isola-tions-** insulation resistance, insulation (reciprocal of leakance). **Kenn-** characteristic impedance, image i., indicial i. **Kenndämp-fungs-, Ketten-** iterative impedance. **Klemmen-** terminal impedance, t. resistance. **Kopplungs-** coupling resistance. **Längs-** line resistance, series r. (of a filter or network). **Leerlauf-** open-circuit impedance. **Luft-** air resistance, aerodynamic drag (of airplane). **Massen-** inertance. **Nutz-** (of **Wirkwiderstand**) useful resistance, signal r. **Oberflä-chen-** surface resistance; skin effect r. **Quer-** cross resistance, shunt r. (of a network). **Reibungs-** (Schall) acoustic resistance (sound). **Reihenverlust-** equivalent series resistance (of condenser). **Richt-** unidirectional resistance, valve effect. **Schall-** ratio pressure amplitude: velocity a. **Schallreibungs-** acoustic resistance. **Schallwellen-**

acoustic impedance (comprising a. resistance and reactance).
Schallwirk- acoustic resistance.
Schein- impedance, apparent resistance; impedor (part having i.) **Schein-, Blindkomponente** reactive component of impedance. - **Wirkkomponente** active or dissipative component of impedance.
Schieber- slide rheostat.
Schwächungs- gain controller, g. reg lator, potentiometer. **Sieb-** contact resistance (in barrier cell). **Stirn-** (front) end resistance, leading end r.
Strahlungs- effective resistance (of loudspeaker, antenna, etc.), radiation r., characteristic impedance. **Strömungs-** aerodynamic resistance, drag (of air).
Übergangs- contact resistance.
Übergangs-, einer Probe flow resistance of test specimen.
Verlust- non-reactive, effective, ohmic or dissipative resistance. **Vor-** series resistance.
Vorschalt- series resistance; multiplier (of voltmeter).
Wellen- characteristic impedance, surge i. **Wirk-** non-reactive, active, effective, dissipative or ohm resistance. **Zersetzungs-** electrolytic resistance.
Widerstand-Reaktanzverhältnis
Q factor, magnification f.
Widerstands-ballast resistance ballast, ballasting r. - **brücke** resistance bridge, Wheatstone b.
- **büchse** resistance box.
- **fähigkeit, Knick-** folding endurance (of film). - **falschanpassung** mismatching of impedances. - **kette** voltage divider, potentiometer.
- **körper** baffle, damper.
widerstandsloser Kreis resistanceless circuit (devoid of resistance or impedance).
Widerstands-messer ohm meter, megger.
- **moment** section modulus (metal testing). - **rauschen** circuit noise (due to Brownian movement).
- **reziprok** inverse resistance, r. reciprocal. - **überanpassung**

overmatching of impedance (load resistance exceeds internal tube r.) - **unteranpassung** under-matching of impedance.
- **Verteilung (im Potentiometer)** taper (called linear t. if distribution of resistance is uniform per unit of length).
widerstrahlen reflect, re-radiate.
widrigenfalls in default of, failing which.
Wieder-abtretung re-assignment.
- **aufbau** re-construction (of a facsimile picture). - **aufnahme** re-opening (of a legal case); re-take (m.p.). - **belebung** re-activation, rejuvenation (of a thoriated filament, etc.). - **einführung** re-insertion, restoration.
wiedereinschalten re-close (a switch), cut or connect in circuit again.
Wieder-erlangung recovery.
- **eröffnung** re-opening (of a law suit).
wiedererstatten return, re-imburse, restitute.
Wiedergabe, flache flat reproduction.
- , **flimmerfreie** flicker-free reproduction. - , **getreue** good definition (of image by a lens, by telev. or facsimile, etc., receiver); orthophonic reproduction (of loudspeaker). - , **hohle** boomy reproduction (hf cut off). - , **kontinuierliche** flicker-free reproduction. **Farben-** color reproduction. **Frequenz-** frequency response (characteristic).
Wiedergabe-brillanz brilliance of sound reproduction, "bounce."
- **dose** sound pickup (head).
- **natürlichkeit** faithfulness, fidelity or realism of reproduction, brilliance. - **optik, Ton-** soundhead lens, s. optic.
- **qualität** quality or faithfulness of reproduction (with "atmosphere" or "room tone"). - **röhre, Braun'sche** Braun c.-r. tube or electronic picture reproducing tube.
wiedergewinnen recover, recuperate, re-claim.

Wiederhall (repeated) echo, r. reflection, reverberation, resonance.
Flatter- flutter echo, multiple e.
-formel Eyring formula.
wiederholbar reproducible, repeatable, reiterable.
Wieder-holungsaufnahme re-take.
-holungsfrequenz repetition frequency; f. of recurrence.
-instandsetzung re-conditioning, restoration, renovation.
wieder-kehrend recurrent (periodically or not).
Wieder-kehrspannung recovery voltage.
-schein reflection, reflex.
wieder-spiegeln,-strahlen reflect.
Wieder-vereinigung re-combination (of ions in gas); focusing (of rays, electrons, etc.). **-zündung** re-striking, re-ignition.
wilde Kopplung stray or spurious coupling, undesired c.
willkürlich arbitrary, haphazard, (at) random. **-verteilt** randomly distributed, scattered at random.
Wilson-kammer cloud chamber, expansion c., fog c. **-nebelstrahmethode** Wilson cloud track method (using streak of droplets and ionizing particle).
Wind, dem - entgegendrehen head into the wind, crab. **gegen den - fliegen** fly up wind. **mit dem - fliegen** fly with tail. wind.
Wind, Gegen- head wind, contrary w.
Kücken- tail wind. **Schall-** flow or draft of matter particles.
Seiten- side or cross wind, wind on the beam, wind blowing across course.
Winddreiecksrechnung airdrift triangulation.
winden wind, coil, wrap.
Wind-geschwindigkeit air velocity.
-geschwindigkeitsmesser anemometer, wind meter. **-kurs** course heading in wind (coincides with map or head-c. in absence of wind). **-kurs, rechtweisender** true heading.
-lade wind chest, sound box (of organ). **-maschine** fan, blower.
-sack wind cone, w. hose (airport).

-sammler air reservoir, compressed-air tank.
wind-schief warped, deformed or twisted (out of shape).
schnittig streamlined.
Windstärkemesser, Schalen- cup anemometer.
Windungen, Ampere- ampere turns (a.s.).
Windungs-fluss turn-flux, flux-turns, magnetic linkage.
-ganghöhe pitch (of turns).
-kapazität internal capacitance, inter-turn c., self-capacitance.
-schlussprüfer inter-turn short-circuit tester or continuity tester.
Windwinkel angle of the wind, angle between head-on course and direction of w., yaw angle.
Winkel,einspringender re-entrant angle. **-räumlicher** solid angle (measured in steradian units).
Winkel, Abgangs- angle of departure.
Ablenkungs- angle of deflection, a. of refraction. **Abprall-** angle of ricochet. **Achsen-** axial angle. **Anlauf-** angle of approach. **Anstell-** angle of attack; a. of pitch, blade a.
Aufnahme- shooting angle. **Ausfall-** angle of emergence, a. of reflection. **Aussprung-** angle of reflection. **-beugungs-** diffraction angle. **Bild-** angle of image, a. of view. **Blick-** angle of view. **brechungs-** angle of refraction. **Dämpfungs-** phase angle difference, loss a.
Drall- angle of twist. **Einfall-** angle of incidence. **Einspring-** re-entrant angle. **Ergänzungs-** complementary angle. **Erhebungs-** angle of elevation. **Fall-** angle of inclination. **Fehl-** phase displacement angle, shift a. **Flächen-** plane angle. **Gesichts-** visual angle, optic a., facial a., camera or viewing angle. **Glanz-** glancing angle. **Gleit-** glide angle.
Grenz- critical angle, limiting a. (of refractometer). **Grenzflächen-** interfacial angle.

(between two adjacent crystal faces). **Grundrichtungs-** base angle. **Halb-** half angle. **Halböffnungs-** semi-apertural angle. **Haupteinfall-** angle of principal incidence. **Höhen-** angle of elevation, azimuth a., angular height, vertical visual a. **Inklinations-** magnetic inclination, m. dip. **Komplement-** complementary angle. **Konvergenz-** angle of convergence. **Kurs-** azimuth of target (gunnery); magnetic a. **Lauf-** transit angle. **Leitstrahl-** angle of beam. **Luft-** angle of the wind. **Luv-** drift angle, a. of lead. **Nacheil-** angle of lag. **Neben-** adjacent angle, adjoining a. **Neigungs-** inclination (angle), a. of slope, a. of dip. **Öffnungs-** aperture angle, apertural a. **Phasen-** impedance angle, phase a.; f factor, quality f. **Polarisations-** polarizing angle, Brewster a. **Prall-** angle of reflection. **Rand-** angle of contact (between wall and liquid), wetting angle. **kaum-** solid angle. **Reflexions-** angle of reflection. **Ruhe-** angle of repose, angle of friction (rarely used). **Schärfen-** angular resolving power, focal angle. **scheitel-** opposite angle, vertex a., vertical a. **Scherungs-, Schiebungs-** angle of shear. **Schiel-** angle of strabismus, a. of squint. **Schneid-** cutting angle (called dig-in a. or drag angle when other than 90 degrees, in record making). **Schütt-** angle of repose, a. of friction (rare). **Schwenkungs-** angle of traverse (in gunnery). **Seh-** visual angle. **Sehschärfengrenz-** angular resolving power, critical angle of visual acuity. **Senkungs-** depression angle. **Sicht-** angle of sight. **Sinus-** sine of angle. **Steig-** rise angle. **Stoss-** butting angle, a. of joint. **Streu-**

angle of scattering. **Tiefen-** angle of elevation below horizontal, a. of depression. **Trennungs-** angle of separation (in solid moving through fluid). **Umschlingungs-** looping angle (m.p.). **Verdrehunys-** angle of torsion, twist a. **Verlust-** phase angle difference (of condenser), loss a. **Voreilungs-** angle of lead (of airplane). **Vorhalte-** drift angle, angle of lead. **Wechsel-** alternate angle. **Weg-** transit angle (of klystron). **Wellenfront-** wave front angle. **Wind-** angle of the wind, angle between head-on course and wind direction. **Zentri-** sector angle, center a. **winkel-abhängigkeit** angle dependence, as function of an angle. **-abweichung** angular deviation. **-aufblendung** angle fade-in. **-bild, Weit-** wide-angle picture, "Wide-scope" p. **-eikonal** angle iconal (opt.). **winkelfreier Widerstand** resistance with zero phase angle. **winkel-frequenz** angular frequency, radian f., pulsatance. **-funktion** trigonometric function, angular f. **-geschwindigkeit** pulsatance (ω), angular velocity, frequency in radians. **-grad** degree of angle, radian (unit of circular measure of angle). **-halbierende** bisector, bissectrix (of angle). **-hebel** bell crank lever, angle l. **-konvergenz** half-convergence error. **-linie** diagonal. **-mass** phase constant, wave-length c. (denotes phase shift between input and output potential, and is the imaginary component of image transfer constant); set square. **-mass, Kenn-** iterative phase constant. **-mass, Vierpol-** image phase constant. **Winkelmesser** protractor, goniometer, angle gage (for eyes), theodolite (for surveys), angleometer (for measuring external angles). **Karten-** map protractor. **Neigungs-**

clinometer. Öffnungs- apertometer.

Winkel-messung, Kristall- crystallographic goniometry. -minute one-sixtieth of one angular degree. -punkt infection point (of a curve).

winkel-randig with beveled edge.

-recht right-angled, rectangular, orthogonal.

Winkelstellung angular position
winkel-treu of true angle or bearing.

Winkelunterschied, Konvergenz-
binocular parallax difference.
-verhältnis angular ratio.
-verteilung angular distribution,
d. in angle. -verzahnungsgtriebe
double helical gear.

winklig, gleich- equi-angular, equi-angled, isogonal. scharf- acute-angled. schief- oblique-angled. spitz- acute-angled. stumpf- obtuse-angled. weit- wide-angled (phot.)

winzige Gewebegebilde ultramicros (of eye tissue).

Wippe rocker, balance, counterpoise b. Pohl'sche - Pohl commutator (double-pole, d.-throw switch). Röhren- Kipp relay, trigger circuit.

Wirbel vortex, whorl, eddy, turbulence; spigot, button, collar, swivel, peg (in string instrument). Stimm- wrest pin.

Wirbelbewegung vortex motion, eddy m., eddying, whirl.

wirbel-frei irrotational. -lose Strömung flow free from vortices, eddies or turbulence, irrotational f.

wirbeln whirl, spin, warble.

Wirbel-strasse vortex avenue.

-transporttheorie vorticity transport theory. -trommel high side drum.

Wirkdämpfung transducer loss.

wirken act, work, operate, effectuate, effect, result in.

Wirk-komponente energy, active, watt, dissipative or wattful component, in-phase c. -leistung active

power, actual p., true p. (in watts). -leitwert active admittance, conductance, -samkeit activity, effectiveness, efficacy, efficiency. in - setzen render operative, throw in gear, start. -schema actual or practical operating or working diagram. -strom active current, energy c., watt or wattful component.

Wirkung, Fern- telemetric action, distance a., remote effect.

Wirkungs-grad, Gesamt- overall efficiency, total e., commercial e. -grösse action magnitude, a. quantity. -kreis sphere of action, s. of influence, action radius.

wirkungslos inactive, ineffectual, inefficient, ineffective.

Wirkungs-quantum, Planck's Planck's constant, quantity of action.

-querschnitt effective cross-section or c.-sectional area.

Wirk-verbrauchsmesser active power meter. -verstärkung transducer gain. -widerstand non-reactive, active, effective, dissipative or ohm resistance. -widerstand-Blindwiderstandverhältnis Q factor, quality f.

Wischkontakt self-cleaning or -wiping contact.

wissentlich deliberately, wilfully, knowingly.

wobbeln wobble (intentional frequency variation, as by wobbulator, used in f.-response test of radio apparatus); warble (as in secret telephony).

Wohnsitz legal or postal address, residence, place of living, domicile, office (in case of a company).

wölben vault, arch, make arcuate, curve, camber.

Wölbung buckling, curvature (of image); arching, vaulting.

Bildfeld- curvature of image field, lack of flatness. **Film**- film buckling.

wölbungsfrei flat, uncurved, non-buckled, flattened (of image or field).

Wolfram-bogenlampe tungsten arc-lamp, pointolite. -faden, **thoriumhaltiger** thoriated tungsten wire or filament. -faden, **wiederbelebter** rejuvenated or re-activated tungsten filament, (subjected to flashing). **Wolfraumsaures Calzium** calcium tungstate.

Wolke, Elektronen- electron cloud; e. shell. **Ionen-** ionic atmosphere. **Raumladungs-** concentration or accumulation of space-charges.

Wolkenbildung formation of clouds, clouding.

Wollastonprisma Wollaston prism, double-image p.

Wollfilz wool felt.

Wortabschneidung clipping, obliteration or mutilation of words (in telephony).

Wörter-buch, Sach- encyclopedia. -verstümmelung clipping, obliteration (of words).

wörtlich verbal, verbatim, literal, literatim.

wubbeln wobble, warble (by wobbulator, in coded telephony).

Wucht, Elektronen- collision or bombarding force of electrons, impact of e. **Mündungs-** kinetic energy at the muzzle. **Über-** unbalance, imbalance.

Wuchtsteigerer dynamic expander.

Wulst, Ring- torse, torus, toroid,

"doughnut." **Röhren-** tubular tore. **Sprühschutz-** guard ring (against corona).

wulstförmig toroidal, doughnut-shaped. **wunder Punkt** snag, trouble, difficulty, moot point.

Wünschelrute divining rod, dousing r. **Wünschelrutengänger** douser.

Wurf throw, cast, projection (of pictures). **Schatten-** sound shadows.

Würfel, Lummer-Brodhun'scher L.-B. contrast photometer, cube p. (with cubical cavity).

Pyramiden-tetrahedron.

Würfelchen, Abbe'sches Abbe drawing cube.

Würfeleck corner of cube, cubic summit (cryst.)

Wurfelektrode, Bild- target electrode.

würzelförmig cubic, cubical.

Wurf-kraft projectile force.

-lehre ballistics. -linie line of projection, curve of p., trajectory. -parabel trajectory parabola.

Würmerkriechen swarming (indicative of excessive graininess, m.p.)

wurstförmig toric, tire-shaped.

Wurzel, Kubik- cube root. **Quadrat-** square root.

Wurzel-zeichen radical, root sign.

-ziehen extracting a root, process of evolution.

X

x-Einheit unit of wave-length for Röntgen rays, etc., Siegbahn unit.

Y

y-geschnittete Platte Y-cut plate or crystal.

Yucon (cf. schweres Elektron)

x-geschnittene Platte X-cut plate or crystal.

Yukawa particle or heavy electron (barytron, now known as mesotron).

Zacke prong, tine, tooth, jag, serration.

Zackenblende vane with serrated or triangular edge, t. aperture (used in sound recording).

Vielfach- light stop for making multi-lateral sound track.

Zackenrolle sprocket wheel.

Zackenschrift variable-area sound track, v.-width s. recording.

Mehrfach- multilateral sound track.

Zweifach- bilateral track.

Zackenspur, Abdeckdoppel- duplex variable-area track. **Abdeck einfach-**, **Einfach-** unilateral variable-area sound track. **Gegentakt-** push-pull variable-area track. **Verschiebe-** bilateral variable-area track.

Zacken-tonspurbreite breadth of variable-width or variable-area sound track. **-trommel** sprocket drum, s. wheel.

zackig jagged, toothed, indented, serrated.

zäh tough, tenacious, viscous, viscid (liquids).

Zähflüssigkeit viscosity; refractoriness.

Zähigkeits-einheit (poise) unit of viscosity. **-kehrwert** fluidity (inverse of viscosity). **-messer mit Fallkörper** viscosimeter, viscometer of balldrop type.

Zahl, dreistellige three-figure number.
-ganze integer, integral number.
-gerade even number. **-natürliche** natural number. **-unbenannte** indefinite number. **-ungerade** odd number. **-vierstellige** four-figure number, four-place n.

Zahl, Bild- picture frequency, frame f., repetition f. **Dehnungs-** coefficient of expansion, c. of extension. **Güte-** figure of merit; quality of Q factor (ratio reactance-resistance of coil).

Hallraum- chamber coefficient (ac.).

Haupt- cardinal number. **Kenn-** characteristic factor; office code. **Kerbwirkungs-** fatigue stress concentration figure. **Kernladungs-** nuclear charge number. **Koordinations-** co-ordination number.

Massen- mass number. **Ordnungs-** ordinal number, atomic n., serial n. **Stellen-** position number, atomic n.; index (math.). **Überführungs-** transport number (of ions), transference n., Hittorf n. **Übergangs-** transfer number (of solutions).

Zählerader meter wire, pilot w., marked w.

Zahlen-blank figure space, f. blank. **-lehre** arithmology, arithmetic, numerology.

zahlenmäßig numerically, as far as numbers are concerned. **-erfassbar** numerically evaluable.

Zahrentafel table of figures, numerical table of tabulation.

Zähler, Bild- frame indicator, f. counter. **Blindverbrauchs-** reactive volt-amp.-hour meter, sine m., wattless component m., var-hour m.

Blutkörper- haemacytometer, blood counter. **Faden-** thread counter, linen tester. **Film-** footage counter (m.p.) **Funken-** spark counter. **Meter-** footage counter (m.p.). **Scheinverbrauch-** apparent power meter, trivector. **Spitzen-** needie counter (e.g., of Geiger). **Staub-** dust counter.

..zählig ...nary (binary, ternary, etc.) ...fold.

Zahn und Trieb rack and pinion.

Zahn, Sperr- ratchet tooth, pawl, detent.

zähneln, zähnen tooth, indent, denticulate, notch, mill, knurl.

Zahn-getriebe, Schrauben- helical gear, spiral g., worm. **-kranz** tooth-wheel, gear rim, toothed r. **-motor mit Stimmgabelsteuerung**

Zahnrad phonic drum motor, p. wheel (of La Cour). -radfeinbewegung slow-motion gear. -sirene tooth-wheel synchronizer, tone-wheel. -stange rack (rod), tooth rack. -trieb rack and pinion drive, tooth-wheel d. -trommelwelle, Antriebs- drive sprocket shaft. -werk gearing.

Zain ingot, bar, rod, pig.

Zängchen small forceps or tweezers.

Zange (pair of) tongs, pincers, nippers, pliers, forceps, tweezers.

Zange, Feder- spring pliers.

Zäpfchen, farbenempfindliche color distinguishing cones (of eye).

Zapfen peg, tenon, pin, plug, pivot; tap, spigot, bung; axle, journal, trunnion.

Zapfen, Dreh- pivot, trunnion.

Lager- journal. **Lauf-** journal, neck (of rolling mill). **Stirn-** trunnion, end journal.

Zarfen-kurve spectral response curve of eye (cones). -lager plain bearing, socket, bush, collar.

Zapfstelle tap, tapping point, tap connection.

Zapon varnish.

Zaser fiber, filament.

Zeemanstruktur, aufgelöste resolved Zeeman pattern.

Zehneck decagon.

Zehner-logarithmus logarithm to the base 10. -system decimal base, d. system.

Zehntellösung tenth-normal solution.

zehntelnormale Lösung decinormal solution.

Zeichen signal, sign, symbol, mark, stamp, imprint.

Zeichen, durch Störer verdeckte swamped signals.

Zeichen, Akten- serial number, file n., docket n. **betrachtungs-** reference letter, r. numeral, symbol. **Bezugs-** reference symbols (numerals or letters, used in drawings). **Bodenfunkstellenruf-** ground station call signal or sign. **Einflug-** boundary marker signal. **Funkruf-** radio call signal or sign, code signal,

"signature". **Gleichheits-** equality sign. **Gleichlauf-** synchronizing pulse, sync signal. **Haupteinflug-** inner marker signal, main entrance s. **Kenn-** characteristic feature, mark, sign, indication, clue, symptom; object (of an invention or patent). **Kurz-** symbol, symbolic denotation. **Mehrfach-** multiple (or multiplied echo) signal. **Mot-** distress signal, SOS s. or call. **Peil-** call sign, code signal (e.g., of ground station). **kuf-** call or code signal or sign, "signature" (of a station). **Schalt-** symbols of circuit elements. **Schau-** optical signal, visual s., indicator s., tell-tale means. **Sender-** transmission signal, transmitter s., station s. **Voreinflug-** fore or outer marker (of beacon). **Wurzel-** radical sign, root s., radical. **Zeit-** time signal.

Zeichen-frequenz signal frequency. -schiefer pencil slate. -spannung signal potential. -stromröhre marking valve. -trickfilm animated cartoon. -verbreiterung signal spread (due to echo effect).

zeichnen, eine Kurve plot a curve, map a graph.

zeichnende Linse, scharf- achromatic lens. **Zeichner, Schall-** sound recorder. **Trickfilm-** animator (of animated cartoons). **weich-** soft-focus lens.

Zeichnung drawing, sketch, cut, view, illustration, delineation or re-creation (of an image, etc.), tracing, graphic representation. **Zeichnung, Akten-** drawing in docket, in case-records or file wrapper (of a patent application or legal case). **Block-** block diagram, schematic drawing, diagrammatic illustration. **Fern-** perspective drawing. **Schnitt-** cross-sectional drawing, illustration, view or picture. **Umriss-** linear drawing, sketch or outline.

Zeiger pointer, hand, index hand,

needle, indicator; measuring instrument, meter (e.g., wattmeter, etc); index, vector (math.).

Zeiger,kurs- navigator's compass.
Leucht- dial light resonance or tuning indicator. **Licht-** spot lighting, point l. **Maximumwert-** peak indicator, crest i. **Messer-** knife-edge pointer. **Peil-** pointer of d.f. apparatus. **Schatten-** shadowgraph (tuning indicator). **Sekunden-** seconds hand. **Spannungs-** voltmeter; voltage vector. **Strom-** ammeter; current vector. **Wendeturm** indicator, t. meter (of airplane).

Zeiger-diagramm vector diagram.

-instrument pointer-type instrument. -länge length of brush or pencil (in cathode-ray tube).
-synchronisator dial scoring machine (m.p.)

Zeile,Dipol- dipole array.

Zeilen-ablenkung line scan, l. scansion, l. sweep. -abstand separation between lines, pitch, inter-line distance (telev.)
-bewegung line scan (telev.)
-breite line width, strip w., spot diameter (telev.). -durchlauf, **Bild-** line traversal (telev.)
-flimmen,Zwischen- inter-line flicker, shimmer, weave (telev.).
-folgeimpulse fractional scan or partial s. impulses, line-sequence or l. - set i. (in interlaced scanning). -frequenz line frequency, strip f., horizontal (scan) f. -hinlauf (cf Rücklauf) active line trace, scansion (of pencil or spot). -kippeinsatz incipient flyback. -kipper line time base. -kippeschwingung line time base impulse. -raster, **Zwischen-**interlaced scan.
-raster,Zwischen-,ungerader odd-line interlaced scanning.
-rücklauf flyback, return, re-trace (of pencil or spot).
-schaltung picture traversing, vertical stepping down movement.
-spiegelrad line scanning mirror drum (of Scophony) -sprungfaktor

interlace factor or ratio.

-sprungmethode interlaced, intermeshed or interleaved scanning method. -spulen line scan coils, line sweep c. -steuerung velocity modulation, variable speed m.

Zeilensynchronisierungs-impuls line synchronizing impulse, high sync i. -lücke (cf Lückensynchronis.) line gap or interval (for introduction of line sync pulse).

Zeilen-teilung line pitch (telev.). -überdeckung line overlap, spot o. -verlagerung migration or shift of line position.

-verschiebung interlacing; line offset scan. -verstärker line or high sync impulse amplifier (telev.). -vorschubbewegung line sweep, line traversing motion. -wechselfrequenz line frequency. -zug line sequence, l. series. -zugwechselperiode field frequency (= 2 x frame f., telev.)

Zeit,Abkling- decay period, die-out p., quench p. (in super-regeneration). **Anfach-** building-up period (time required for oscillating to start). **Anheiz-** (cathode) heating time (till stable temperature is reached), warm-up period, thermal time constant. **Ankling-** starting time, onset t. (of a tone). **Anschwing-** build-up period (time required for oscillating to start).

Aufbau- formation time (in spark discharge). **Aufschaukel-** time constant of resonant amplification. **Ausregel-** decline period (of control potential). **Bildspur-** Watkins factor, development f. (film). **Dunkel-** dark interval, d. period. **Einregelungs-** building-up or waxing period (of control potential). **Einschwing-** build-up period (required for starting of oscillations).

Eintauch- immersion period. **Nachhall-** reverberation period. **Nachwirk-** hang-over period, decay p. **Zerfall-** decay time.

Zeit-ablenkung time base. -abschnitt element of time, interval of t.
-aufnahme time exposure. -blinker chronograph, time recording camera.
-dauer, Abstoppen von stopwatch measurement of time values or intervals of time. -dehnaufnahme high-speed camera shooting or picture (for slow-motion projection).
-dehner slow-motion device.
-dehnung high-speed camera shooting; time scale. -dehnung, Ton-acoustic slow motion. -festigkeit time strength, endurance s. (found by time test). -folge time sequence, consecution. -funk time topics program, timely t. -härtung time hardening. -kreiskondensator time-base condenser.

zeitlich temporal, concerning time, temporary. -veränderlicher Trägerstrom wobbled carrier current.
-veränderlicher Vorgang action variable with time, a. subject to time variation. -(er) Verlauf shape of curve as function of time, t. slope.

Zeit-lupenverfahren high-speed take and low-speed projection method, slow-motion or retarded-action m.
-marke, -mass time scale, marking of time (for synchronization).
-masstab time scale. -messer chronometer, time piece, watch, clock. -messer, registrierender chronoscope, chronograph.
-messgerät chronographoscope.
-messgerät, Mikro- microchronograph.
-modulation velocity modulation, variable-speed m., variable-speed scanning. -raffaufnahmeverfahren time-lapse photography, low-speed shooting for high-speed projection. -raffer time-lapse-motion camera, stop-motion device.

zeitraubend time-consuming, tedious.
Zeit-rechnung chronology.
-regulierband timing tape. -relais, Invert- inverse-time relay.
-schnellschalter high-speed circuit breaker or switch.
-schriftenliteratur journal literature, magazine l. -signal time

signal. -skaleninstrument time-scale instrument. -spirale time spiral. -verschiebung time lag, t. shift. -zeichen time signal.
zellähnlich cell-like, celloid, cellular, pitted, honeycomb-like.
Zelle, lichtelektrische od. photo-elektrische photo-electric cell, electric eye (either photo-conductive, p.-voltaic or p.-emissive, the latter preferably called photo-tube). -, photo-elektrische, mit Sekundärelektronen -Vervielfachung photo-electric electron-multiplier tube, e.-m. with photo-cathode.

Zelle, Alkali- alkali-metal (photo-emissive) cell. Einheits-unit cell, elementary c., unit crystal, lattice u. Elektrophorese-electrophoresis cell. Elementar-unit cell, elementary c., u. crystal, lattice u. Gas-gas-filled (photo-emissive) cell. Gleichrichter- rectifier cell, barrier-layer c. Glimm- photo-emissive gas-filled cell (operated at potential slightly below critical discharge p.), photo-glow tube. Haar- hair cell, capillary c. Hinterwand- photo-voltaic barrier-layer cell with posterior metallic l. Licht-photo (-electric) cell.

Lichtsteuer- (Debye-Sears)

supersonic light valve, D.-S. light modulator. Mehrfachplatten-, von Karolus-Kerr Karolus multiple-plate Kerr cell. Piez Quarz-supersonic light valve (predicated on Brillouin and Debye-Sears effect). Selenium- selenium (photo-conductive) cell. Sperr(schicht)-barrier-layer photo-voltaic or photronic cell, rectifier c. (operating with a blocking or stopping layer). Streu- scattering cell. Thallium (sulfid)-thalofide cell. Überschall-supersonic light valve. Vakuum-vacuum photo (-electric) cell, photo-emissive (alkali) c. Vervielfacher-, mit Sekundäremission

- electron multiplier photo-tube (working with dynodes).
- Vorderwand-** photo voltaic barrier-layer cell with anterior metallic layer. **Vorglimmlicht-** photo-emissive gas-filled cell operated at a sustaining potential in pre-glow region (slightly below striking or critical discharge p.).
- zellenartige Struktur** honeycomb, pitted or cellular structure.
- Zellen-kabel, Photo-** low-capacitance shielded cable (connecting photocell and amplifier), video cable, concentric c., co-axial c.
- verstärker, Photo-** electron multiplier phototube; photocell amplifier. -**vorbelichtung** priming illumination of a cell.
- zellig, zwischen-** intercellular.
- Zellstoff** cellulose, pulp (paper). -**pappe** pulp board, carton, mill-board.
- Zentralstrahl** central ray.
- zentral-symmetrisch** centro-symmetrical.
- Zentren, Farb-** F centers. **Keim-** grain centers.
- zentriert, flächen-face-centered** (cryst.). **raum-** body-centered, space-c. (cryst.)
- Zentrierungsfeder** spider (of loud-speaker coil).
- Zentrifuge, Ultra-** high-speed centrifuge.
- zentrifugieren** centrifuge, centrifugalize.
- zentrisch** centric, central, co-centric.
- Zentriwinkel** center angle, sector a.
- Zentrum, Kurbel-** crank center.
- Massen-** center of mass, c. of inertia, centroid. **Ton-** tonal center, acoustic c. (of "gravity") of frequencies. **Wachstum-** center of growth, nucleus kernel.
- zerbrechlich** breakable, fragile, brittle.
- Zerbrechungsfestigkeit** resistance to breaking strain, b. strength.
- zerbröckeln** crumbling, crumbly, friable.
- Zerdehnung, Bild-** radial distortion of picture or image (pincushion effect).
- Zerdrehung, Bild-** rotational or tangential distortion, twist (barrel effect; telev. pictures).
- Zerdrückfestigkeit** resistance to crushing or compression strain, crush strength.
- Zerfall** decomposition, dissociation, disintegration, decay.
- Atom-** disintegration of atom, splitting or fission of a.
- Korn-** grain disintegration.
- Mesonen-** meson decay.
- Zerfallbarkeit, Nicht-** non-disintegrability.
- Zerfallelektronen** electrons resulting from disintegration (say, mesotrons), decay e.
- zerfallen** decompose, dissociate, disintegrate, undergo fission, break up, divide, crumble, fall apart, decay, breakup.
- Zerfall-kurve** decay curve.
- produkte, radioaktive** metabolons, successive disintegration products of radioactivity. -**prozess** decomposition process.
- Zerfalls-elektronen** decay electrons (resulting from disintegration, say, mesotrons). -**konstante** disintegration constant, transformation c., radio-active c., decay coefficient.
- Zerfallzeit** decay time, disintegration t.
- zerfliessen** deliquesce, melt, dissolve, run.
- Zerhacker** chopper. **Licht-** light chopper, episcotister.
- zerhackt** flicked off, chopped.
- zerlegen** decompose or split up (light beam), refract, diffract; take apart, demount, cut up, dissect, analyze, resolve, separate, knock down.
- Zerleger** scanner, dissector (of Farnsworth), exploring means.
- Bildfeld-** picture scanner, image dissector. **Vor-** filter mounted anteriorly of monochromator (for ultraviolet rays).
- blende** dissector aperture,

scanning hole.

zerlegtes Licht, spektral- spectroscopically dispersed or separated light.

Zerlegung (cf **zerlegen**) analysis, decomposition, dissection, dispersion, resolution, definition. **Bildfeld-** image (field) definition. **Licht-** light dispersion, l. decomposition, l. refraction. **Ton-** sound analysis.

Zerlegungsvorrichtung scanner, exploring means.

Zerplatzen, Kern- nuclear fission, n. disintegration. **Vakuumröhren-, nach innen** implosion, inward collapse or burst of a tube.

Zerrbild distorted picture, p. made with an anamorphotic lens.

zerreiben pulverize, powder, triturate, disintegrate or comminute by grinding or abrasive action.

zerreiblich friable, crumbly, triturable.

Zerreißung pulverization, trituration, attrition, comminution (by abrasion).

zerreißen tear, lacerate, break, rend, rupture, wear out, shred.

Zerreissprobe breaking test, tensile t., rending t.

Zerrlinse anamorphosing lens, distorting lens.

Zerrungskreis annulating network; suppressing n.

zerschlagen break in pieces, smash, shatter, crush, batter.

zersetzen dissociate, decompose, disintegrate, analyze.

Zersetzung, Ton- analysis of sound.

Zersetzungs-kunst analysis, art of analyzing. **-widerstand** electrolytic resistance.

Zerspanbarkeit free cutting and machining property.

Zerspanung removal of metal by cutting tool (chipping, turning, shaving, etc.).

zerstäuben spatter, sputter, disintegrate, vaporize, atomize, reduce to dust or mist, spray.

Zerstäubung disintegration, sputter,

sputter or spatter (of cathode); spraying, atomization.

zerstörend, holz- lignicidal.

Zerstörung, lochfrassähnliche pitting, destruction in form of pits, honeycombing.

zerstörungsfreie Prüfung non-destructive test.

zerstossen pound (to pieces), bray, bruise, powder, pulverize.

Zerstrahlung annihilation radiation (due to collision and mutual annihilation of atoms, electrons and positrons).

zerstreuen disperse, scatter, dissipate, diffuse.

zerstreuend, licht- light dispersive, l. diffusive, l. scattering.

Zerstreuung dispersion, diffusion.

Energie- scatter of energy.

Farben- chromatic aberration, c. dispersion, chromatism.

Richtungs- scatter of direction (of beam).

Zerstreuungs-bild image formed by divergent lens. **-bilder des Auges** blur circles of eye.

-kreis circle of diffusion, blur c. **-linse** dispersive lens, divergent l., negative l.

-schelbchen circle of (least) diffusion, blur c. **-vermögen** dispersive power (opt.) **-wirkung** scattering (of electrons, etc.)

zerteilt, fein- finely divided.

zertrümmerbares Material fissionable or disintegrable substance.

Zertrümmerbarkeit der Materie disintegrability of matter.

Zertrümmerung fragmentation, breaking up into fragments, shattering, smashing, disintegration, fission (of atom).

Zertrümmerungswahrscheinlichkeit probability of transmutation or disintegration.

Zessionar assign, assignee, transferee.

Zettel label, slip of paper, card, ticket, check, note.

Zeugelinie generatrix, generating line.

zeugen testify, give or bear testimony; produce, create, generate.

Zeugengebühren witness fees.
 Zeugnis testimony, testimonial, evidence, witness. - ablegen bear testimony or witness.
 Zickzack-Reflexion staggered reflection.
 ziegelrot brick-red.
 Ziegenleder kid-leather.
 ziehbar ductile.
 Zieh-diamant diamond die. -eisen drawing die, dieblock, draw plate, die p. (for drawing wire).
 ziehen (cf Ziehvorgänge) draw, pull, tug, drag; warp; describing a phenomenon in which oscillating suddenly ceases on loosening feed-back coupling.
 Ziehen eines Bildes photographic travel ghost.
 Ziehen, Kubikwurzel- extraction of cubic root. Quadratwurzel- extraction of square root. Wurzel- root extraction, process of evolution.
 Zieh-fähigkeit, Tief- cuppability, capability of being drawn or cupped in drop press. -grad ductility.
 -kraft drawing or tractive power, traction. -presse drop (forge) press (for drawing and forming sheet metal articles, etc.).
 -probe tensile test, t. t. specimen. -riefen fissures, drawing grooves or scratches. -vorgänge pulling, oscillation hysteresis, resonance discontinuity, protraction or instability phenomena.
 Ziel goal, aim, object, end, destination, mark, target, objective, boundary, limit.
 Ziel-abflug flight away from object.
 -anflug flight towards object.
 -aufsuchen detection of target or object (by radar or sonar, etc.).
 zielen auf aim at, strive for, direct or tend to, adjust (sight).
 Zieler, Geschütz- gunlayer.
 Zielfernrohr sight telescope, bombsight, rifle s., telescopic s.
 Doppelblick- double direct sight-ing telescope.
 Zielflug, Gehör- aural homing flight.
 Sicht- visual homing flight.

-empfänger homing receiver apparatus. -verfahren point to point avigation method, homing method.
 Ziel-gerät course indicator.
 -kontrollapparat radio timing apparatus.
 Ziel-kurs, ablaufender course away from transmitter or beacon.
 -, anlaufender course towards transmitter or beacon.
 -, missweisender magnetic course to steer. -, rechtweisender true course to steer.
 Ziel-linie finish line (in racing); line of sight, l. of collimation (opt.). -marke sight graticule or reticle.
 Zielpeilung, rechtweisende Richtung vom Flugzeug zur Bodenpeilstelle true reciprocal course (from airplane to ground station).
 -, missweisende Richtung vom Flugzeug zur Bodenpeilstelle magnetic reciprocal course (from airplane to ground station).
 Zielpunktes, Anzielen des sighting of target.
 zielstrebig purposive.
 Ziel-sucher radar (radio detection and ranging apparatus), sonar (under-water sound navigation and ranging). -verfolgung tracking a target (with detecting and ranging equipment and with directors, using a slewing motor).
 Zierschiene grille bar.
 Ziffer figure, digit, number, cipher.
 Anteil- percentage share. Form- shape factor, theoretical stress concentration f. Kenn- index (of a log.), characteristic, code number. Verlust- phase angle difference ($\tan \delta$).
 Zifferblatt, Leucht- luminous dial.
 Zinkbecher zinc case or cylinder (of dry cell).
 Zinken (cf Zacke) prong, tine (of tuning fork); spike, tooth, jag, lug.
 Zink-pfeife zinc pipe. -pol zinc pole, cathode.
 Zinnpfeife tin pipe.

Zipfel lobes, ears, secondary beams, stray or side radiations (of a beacon station).

Zipfel, Haupt- major lobe (of space pattern). **Neben-** minor lobe or ear (of space pattern).

Zirkel circle; pair of compasses.

Spitzen-compasses, dividers.

Taster-, Visier- gaging calipers.

Zirkonbrenner zirconium burner, z. filament.

zischen hiss, sizz, fizz, sizzle.

Zischlaute sibilants, friccatives.

Zither, Akkord- auto harp.

Zitter-bewegung circular fluctuation movement (of spin). **-elektrode** vibrating electrode, vibratory e.

zittern tremble, shake, quiver, vibrate, quake.

Zittern, Bild- unsteadiness of picture, jumping of p.

Zone, stille oder tote skip zone, dead z. (radio reception).

Zone, Anhäufungs- zone of accumulation (of ultrasonic waves).

Auslösch- dead spot, skip distance, skip region (of silence). **Leit-** equisignal zone, glide z. or path.

Schlieren- dead zone, skip z., shadow z., shadow. **Schweige-** skip distance, shadow region, zone of silence (airplane landing).

Verwaschungs- confusion zone, z. lacking definition, blurred or bleary z. (telev. pictures).

Zonen-blende limiting stop (diaphragming out a given zone or area). **-fehler** zonal aberration.

zu dicht overdense. **-flach** too low a gamma.

Zubehörteile accessories, spare parts.

zubereiten prepare, dress, finish, make ready.

züchten grow, raise, produce, cultivate.

Züchtung growth or growing (of crystals).

Züchtungsgefäß growing vessel.

Zuckanzeige ballistic, kick or flash (instrument) reading or indication (d.f., etc.)

Zuckerbestimmung saccharimetry, de-

termination or analysis of sugar (with polarimeter).

zuerkennen adjudge, adjudicate, award. **-eine Entschädigung** award damages.

zuerteilen award, allot.

zufällig accidental, incidental, haphazard, casual, random, by chance, fortuitous.

Zufälligkeit accidentalness, casualness, chance, probability, vagary, fortuity.

Zufalls-ergebnisse fortuitous results, f. findings. **-gesetz** law of chance, l. of probability.

Zufluss flow, flux, afflux, influx, inlet, admission.

Zufuhr admission, inlet (for instance, in water-cooled tube), feed, supply, afferrence.

Zug drawing, pull, traction, draft, train, stroke, flue, drawtube (of microscope).

Zug(e), im - des Verstärkers in the channel or cascade of an amplifier.

im - des Tonspaltes along the slit, in line with s.

Zug, künstlicher forced draft.

Banden- band progression.

Haupt- main, principal or outstanding feature or trait, main object (of an invention or a patent). **Kurven-, abklingender** decay train. **Verstärker-** amplifier channel. **Zeilen-** line sequence, l. series.

zugänglich accessible, amenable.

Zügen, in rohen in rough outline, roughly, approximately, practically, substantially, closely.

Zugentlastung traction relief.

zugestandenermassen admittedly, concededly.

Zug-feder tension spring, traction s., retractile s. **-festigkeit** tensile strength, tenacity.

-gitter positive grid; space charge g.

zügiger Gang intimate or positive threading (without play or backlash).

Zug-kraft traction, tractive force or effort, tension, attraction.

- linie tractrix. -loch vent hole, air h. -luft (air) draft.
- posaune slide trombone. -rohr air pipe, vent p. or tube, stack.
- wechselperiode, Zeilen- field frequency ($= 2 \times$ frame f.)
- Zuhörer auditor, audience (plurality of listeners).
- Zuleitung, Antennen- antenna lead, downlead, feeder line, transmission l.
- Zuleitungsinduktivität lead inductance.
- zumischen admix, mix with, add.
- Zündelektrode ignitor (in ignitron).
- zünden ignite, start (an arc), set afire, kindle, light.
- Zünder lighter, igniter, fuse, tinder.
- Zünder, Dampfdruck- vapor-pressure igniter. Doppel- time and percussion fuse. Druck- pressure igniter. Selbst- (pyrophorous) self-igniter, automatic lighter.
- zunderfest tinder-proof.
- Zünd-flämmchen pilot flame. -kirsche ignition pellet. -löschspannungs-differenz striking-extinction potential difference. -papier ignition paper (phot.). -spannung firing potential, striking p. (of arc-lamp, rectifier, thyratron, ignitron, etc.), break-down p. (of insulator), flashover (of spark-gap), glow p. (at which initial glow-discharge begins, in photocell), p. at which, in glow-tube, discharge changes from assisted to self-sustained form. -stab ignitor, ignition rod, striking r. (in ignitron).
- Zündung ignition, priming. Fehl-failure to fire or ignite (in rectifier, ignitron, etc.); mis-firing (of engine). Früh-pre-ignition, premature i. Rück-backlighting, arc-back, back-firing, backlash (in imperfect valve rectification).
- Zündungseinsetzen initiation or incipience of striking or firing.
- Zunge blade, reed, ditton, tongue, vibrator, keeper (of a magnet).
- Kontakt- spring contact, reed,
- blade, ditton.
- Zungen-frequenzmesser vibrating reed frequency meter. -öffner latch opener.
- Zungenfeife reed pipe or flute.
- Doppel- double-tongued flute.
- Orgel- reed organ pipe.
- Zungentelephon reed telephone receiver, Brown-type t.r.
- Zuordnung correlation, co-ordination, assignment, allotment.
- zupassen fit, adjust.
- zupfen pick, pluck, tug, pull.
- zurechtmachen get ready, make ready, ready, prepare, adjust, line-up.
- Zurichten prepare, make ready, dress, finish, straighten, adjust.
- zurückdrehen turn off, turn down (as in a lathe).
- Zurückfallen in Grundzustand return or re-transition to ground state or lowermost energy level (of an atom).
- zurück-führen trace (back), ascribe, attribute, fly or lead back, re-convene, reduce, return, restore. -halten retain, hold back, retard, stop. -prallen rebound, recoil, be reflected. -weisen dismiss, reject, refuse, disallow.
- Zurückweisung overruling, rebuttal, dismissal, disallowance, rejection (of an application, petition, etc.)
- zurückwerfen throw back, reflect (light waves), reverberate (sound waves), echo back, bend back (a ray, by ionosphere).
- zusammenbacken cake, stick together, conglomerate, agglomerate.
- Zusammenballen bunching of electrons in groups (by phase focusing, in drift space of beam tubes); agglomeration, conglomeration, coagulation (of colloids and smoke particles).
- Zusammen-ballungen bunching (of charges or electrons). -bau erection, assembly or mounting work.
- zusammenbrechen collapse, break down, implode (as an inwardly

collapsing vacuum vessel).

Zusammendrückbarkeit compressibility.
zusammen-drücken compress, squeeze, crush, compact, consolidate.

-**fallen** collapse (as a field), implode (as a vacuum tube); coincide, register, come together. -**fallend** coincident, be in congruity or in registration. -**fassender Bericht** survey, summarizing report or article.

Zusammen-fassung summary, résumé, compilation, abstraction, recapitulation. -**gehörigkeit** correlation (of things).

zusammengesetzt(er) Klang complex musical sound. -(e) **Leitung** compound circuit. -(e) **Schwingung** complex harmonic wave.

zusammengesprengte Prismen broken-contact prisms (closely adjoined without cement, as in Cornu p.)

Zusammenhalt cohesion, unity.

zusammen-hängende Photokathode plain mirror or continuous (non-mosaic) photo-cathode (as in Farnsworth dissector and super-emitron). -**häufen** heap or pile up, accumulate, aggregate, gather together. -**klappbar** collapsible, foldable, knock-down. -**laufen** run together, converge, blend, coagulate, concur.

Zusammen-pressung der Luftteilchen compression or condensation of air particles (in sound wave).

-**schrönen von Kontakten** scorching, freezing or melting together of contacts. -**setzblende** scanning hole, picture recreator aperture (to focus beam, in Farnsworth oscillograph receiver).

zusammensetzen compose, compound, assemble, fit together.

Zusammensetzungsvorrichtung, Bild- picture scanning disk (of telev. receiver), picture reproducer, recreator or delineator.

zusammensprengen join or fit together, without cement, as prisms or objectives, in a broken-contact assembly.

Zusammen-stellung, Linsen- lens combination. -**ziehung, Quer-** lateral

contraction. -**ziehung, Querschnitts-** contraction or reduction of cross-sectional area, necking, formation of a waist (in piece under tensile test).

Zusatz addition, addendum, appendix. **Lichtton-** sound-on-film head or attachment. **Nadelton-** sound-on-disk attachment.

Zusatz-einrichtung accessory, ancillary or auxiliary means or equipment. -**gerät, Tonfilm-** sound film head or attachment. **zusätzlich** additional, supplemental, accessory, auxiliary, boosting.

Zusatz-linse supplementary lens.

-**nachbildung** building-out section (of transmission line). -**patent** patent of addition (to parent p.) -**spannung** booster potential, addition p. -**träger** suppressed carrier re-inserted in receiver (in side-band transmission of signals). -**verluste** stray load losses. -**verstärker** booster amplifier.

Zuschauer audience, (movie) patrons, spectators, viewers and/or listeners (sound film). -**raum** auditorium.

Zuschlag flux.

Zuschlagsgebühr extra tax or fee, supplementary fees, dues or charges.

-**zuschmelzen** seal, melt together.

-**zusetzen** alloy, admix, add.

-**zuspitzen** point, sharpen, taper, tip.

zusprechen, dem Verletzten eine Geldsumme adjudicate or award a sum of money to injured or aggrieved party.

Zustand state, condition, situation, circumstance.

-**eingeschwungener** steady state oscillation. -**geordneter** ordered state or arrangement (of a structure), preferred configuration (of units in crystal lattice). **Augenadaptations-** (state of) retinal adaptation. **Dauer-** steady state. **Elektronen-, entarteter** degenerate electron

state. Entstehungs- nascent state, status nascendi.

Gleichgewichts- state of equilibrium, state of balance, stable s.

Grund- ground state (of nucleus).

Grund-, Zurückfallen in return or re-transition into ground state or lowermost energy level. Ruhe- state of rest, repose or quiescence, steady, stationary or neutral s. or condition, no-signal or Q s. (of a tube). (For additional terms cf. Ruhe...)

zuständig sein als Berufungsinstanz to have appellate jurisdiction.

zuständiger Gerichtshof court of competent jurisdiction or venue.

Zustands-diagramm phase diagram.

-formel state formula. -gleichung equation of state. -grössen variables of state. -summe partial function. -verschiebung change in state, displacement of s. Zustimmung assent, accession, acquiescence, consent, agreement, permission.

zuteilen allot, assign, delegate, give over, allocate; adjudicate, award.

Zutritt, Luft- access or admission of air, in the presence of a.

Zuweisung der Wellenlängen frequency allocation or assignment.

Zwiderhandlung act in contravention of.

Zwang(es), Prinzip des geringsten principle of least constraint or resistance.

Zwang, Ausführungs- compulsory working (of a patent). Synchronisier- locked synchronism.

zwangsläufig (cf kraftschlüssig) positive, by positively acting means, by constraint, in a locked manner, nor-slip (in drive).

Zwangslizenz compulsory license.

-schwingung forced oscillation.

-Vollstreckungsbefehl writ of (compulsory) execution.

zwangswise by mandamus, by compulsion, compulsorily.

Zweckbeleuchtung, Zwei- dual-purpose illumination.

Zwecke tack, pin, peg. Kamm- tack. zweckmäßig suitable, appropriate, expedient, adapted, fit.

zwei-achsrig biaxial. -adrig bifilar. -atomig diatomic.

-äugiges Sehen binocular vision, stereoscopic v.

Zweibandspieler two-unit dubber.

Zwei-chöriges Piano bichord piano, two-string p. -deutig ambiguous, equivocal, double meaning, double entendre.

Zwei-drahtwicklung bifilar winding, Ayrton-Perry w. -elementkristall bimorph crystal (either of bender or twister type).

Zweier-schalen duplet rings.

-verfahren two-line-series or two fractional scans per frame (interlaced scanning method).

zweifach dual, double, two-fold.

Zweifach-diödengleichrichter, -zweipolröhre duodiode rectifier, d. valve.

zwei-fädig bifilar. -farbiger Schleier dichroic fog, dichromatic f., silver or red f.

Zweifeldröhre drift or beam tube working with two fields (of Heil, etc.)

zweiflächig dihedral, two-faced.

Zweig branch, leg, arm (of a bridge or filter). Längs- line arm, series arm (of a filter or network).

Mess- measuring arm. -P- P branch (spectrum lines). Quer- cross arm, shunt a. (of network).

zweigliedrig binary, two-membered, binomial (math.) -(er) Kettenleiter two-section network.

Zweiglinien, Null- zero branch lines. -stromkreis divided circuit, branch c.

Zweiheit duality, dyade, couple.

Zweihöckrige Resonanzkurve double-hump resonance curve.

Zwei-koffergerät outfit in two carrying cases. -kreisempfänger two-circuit receiver. -kristallspektrometer double-crystal spectrometer.

Zweiohriges Hören stereophonic or binaural hearing, plastic audition

or hearing, two-channel listening (with auditory perspective).
Zweipackverfahren bipack method.
zweipoliger Hebeleinschalter double-lever switch.
Zweipol-röhre, Zweifach- duodiode (tube). -strecke dipole tube, dipole path.
zweischenklig having two limbs, legs or branches, two-legged.
Zwei-schleifenoszillograph two-string oscilloscope. -schlitz-magnetron two-split magnetron, two-segment m.
zweischneidig double-edged, two-e.
Zweiseitenbandüberträger side-band transmitter with suppressed carrier.
zweiseitig two-sided, bilateral.
 -(es) Arbeiten two-way operation, double action.
zweispitzige Kurve double-peak curve, double-hump c.
Zwei-stärkenbrille bifocal spectacles.
 -stoffsystem binary system.
zweistufiger Nocken double-lift cam (with two lobes).
zweiteilig bipartite, consisting of two parts.
Zwei-teilung bipartition, bisection.
 -tellergerät two-turntable type of player.
Zweitwicklung secondary winding.
zweiwellige Resonanzkurve two-hump resonance curve, double-hump r.c.
Zweiwelligkeit two-wave property (of a tube, crystal, etc.).
Zwei-zackenschrift bilateral track (sound film). -zenterproblem two-center problem. -zweckbeleuchtung dual-purpose illumination.
Zwergwelle (cf Wellenabgrenzung) micro wave, midget w., dwarf w.
Zwickbohrer twist drill.
Zwickel wedge, trycock. Balg-gusset.
Zwiebellinse biconvex lens.
Zwillingsbildung twinning, twin formation. -gleitung twin slipping.
 -kerne twin nuclei. -kristall twin crystal. -prisma biprism.
Zwinge clamp, cramp, vise, ferrule, hoop.

Zwischen-bild intermediate image, first i. (in super-microscopy).
 -bürstenmaschine metadyne, meta-dynamo. -fehler zonal aberration. -filmmethode intermediate-film method (telev.) -flügel intermediary blade, anti-flicker b., balancing b. (m.p.).
 -fluoreszenzschirm intermediate fluorescence screen (supermicroscopy). -flüssigkeit intermediate liquid. -form passage type.
 -frequenz intermediate frequency, i. beat or transfer f. (in superhet. receiver). -frequenzempfänger mit Kristallsteuerung crystal stabilized superheterodyne receiver, stenode radiostat.
 -gefäß intermediate vessel, i. receptacle.
zwischengeschichtet inter-stratified.
Zwischengitter-ion interstitial ion. -platzmechanismus interstitial mechanism (of alloys).
Zwischen-glied intermediate member, connecting m., link, intermediate.
 -hörbetrieb duplex operation, transmitter and receiver alternately connected with aerial, alternate two-way communication. -kern compound core, intermediate.
 -kopie lavender copy. -körper intermediate medium or substance, interposed m. or means. -lagscheibe washer.
zwischenlegen interpose, interlay, intercalate, insert.
Zwischen-linienflimmer interline flicker, shimmer, weave. -masse interstitial matter, cement (geology). -mittel intermediate medium or substance, interposed m. or means. -modulation intermodulation.
zwischenmolekulare Kräfte intermolecular forces.
Zwischen-optik intermediate optic, interposed o. or optical means.
 -phase inter-phase (liquid dielectric). -positiv master positive. -raum intermediate space, intervening s., interstice,

interspace, interstitial s., interval (of space). -raum, Pol-pole clearance, interpolar space or gap. -ring adapter (of microscope).

zwischenschalten interpose, interpolate, cut in between, cut in circuit, insert, include, intercalate.

Zwischen-sender re-transmitter, repeater station. -stecker adapter plug, socket a. -stecker, Röhren-tube adapter, valve a. -stromröhre spacing valve. -ton medium tone, intermediate t. or shade (of colors). -träger sub-carrier. -transformator inter-stage transformer. -tubus intermediate tube (super-microscope). -verstärker stage amplifier. -wand partition, separating wall. -zeichenwelle spacing wave, back w.

Zwischenzeilen-flimmer inter-line flicker, shimmer, weave (telev.). -raster interlaced scanning. -raster, ungerader odd-line scanning.

Zwischenzeit time interval, interim, meanwhile, intervening t.

zwischenzellig intercellular.

Zwitschern birdies, canaries (extraneous high-frequency noise).

Zwitscherfeife bird warbler.

Zwitter-apertur split focus (Walton scanning arrangement). -ion dual ion, amphoteric i., hybrid i. Zwölf-eck dodecagon. -flach dodecahedron.

zwölfstufiges System duodecimal scale (tonal system).

Zyklotron (cf Resonanzbeschleuniger) cyclotron comprising two dees or half hollow cylinders and spiral beam. (Other models of resonance accelerators using a bent beam are known as induction electron accelerators, rheotron, synchrotron, etc., all of them to be distinguished from a late 1946 model of accelerator which is of the linear, non-spiral type of accelerator gun).

Zylinder, Sammel-focusing cylinder.

Steuer- Wehnelt grid or cylinder, focusing g., control electrode, shield (c.-r. tube).

Zymbal dulcimer, cymbal.

ZZ Verfahren ZZ (airplane) landing method.



