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14 Attorneys for Defendants and Counterclaimants
 15 SAMSUNG ELECTRONICS CO., LTD., et al.

16 UNITED STATES DISTRICT COURT
 17 NORTHERN DISTRICT OF CALIFORNIA

18
 19 ADVANCED MICRO DEVICES, INC., et al.,

20 Plaintiffs and Counterdefendants,

21 v.

22 SAMSUNG ELECTRONICS CO., LTD., et al.,

23 Defendants and Counterclaimants.
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Case No. 3:08-CV-0986-SI

**DECLARATION OF JACK D. GRIMES
 IN SUPPORT OF DEFENDANTS AND
 COUNTERCLAIMANTS' MOTION
 FOR SUMMARY JUDGMENT OF
 NON-INFRINGEMENT OF U.S.
 PATENT NO. 6,784,879**

DATE: May 7, 2010

TIME: 9 a.m.

COURTROOM: 19th Floor, Courtroom 10

JUDGE: THE HONORABLE SUSAN
 ILLSTON

1 I, Jack D. Grimes, declare as follows:

2 1. My name is Jack D. Grimes, and I reside at 5025 Wine Cellar Drive, Sparks, NV
3 89436. I am an independent consultant. I have prepared this Declaration for consideration by the
4 United States District Court for the District of Northern California. I am over eighteen years of age,
5 I have personal knowledge of the matters set forth in this declaration, and I would otherwise be
6 competent to testify as to the matters set forth herein if I am called upon to do so.

7 2. I have written this Declaration at the request of Samsung Electronics Co., Ltd. I
8 have been retained by Samsung as an expert in this case. No part of my compensation is dependent
9 upon the outcome of this case or any issue in it.

10 3. In making this declaration and in forming the opinions set forth herein, I rely on my
11 personal knowledge and experience in the fields of electrical engineering and computer science and
12 on documents and information referenced in this Declaration.

13 4. I earned B.S. and M.S. degrees in Electrical Engineering, and a Ph.D. degree in
14 Electrical Engineering (with a minor in Computer Science), all from Iowa State University. I also
15 earned an M.S. degree in Experimental Psychology from the University of Oregon. I have been
16 active in several professional societies and have worked in the computer and electronics fields for
17 over thirty-five (35) years.

18 5. I have extensive practical experience in software engineering and development and
19 have participated in and directed both small and large commercial software projects. I have also
20 worked at Intel Corporation, where we developed graphics processors for personal computers. I
21 have published over 40 conference and journal papers and have made hundreds of technical
22 presentations around the world on object-oriented and other software technology.

23 6. I have testified at two jury trials, four ITC hearings, and three *Markman* hearings. I
24 have also testified as an expert in dozens of depositions in the past four years. My expertise
25 includes Computer Graphics, Ergonomics/Human Factors, Video Capture and Overlay Systems,
26 Video display devices, User Interface Design, Video Graphics Architecture, Engineering
27 Development Practices, and Software Development.

28 7. Details of my education and work experience are set forth in my curriculum vitae,
which is attached as Appendix A.

8. I have read and am familiar with U.S. Patent No. 6,784,879 (“the ’879 patent”),
entitled “METHOD AND APPARATUS FOR PROVIDING CONTROL OF BACKGROUND
VIDEO.”

1 9. The patent purports to describe and claim a method and apparatus for controlling
2 background video on a computer display. Specifically, the patent relates to a particular design for
3 several features of a user interface on a computer operating in a window-based environment.

4 10. One of ordinary skill in the art would understand the '879 patent to be directed to a
5 user interface for a general purpose computer operating in a window-based environment. This is
6 based on the description of the patented inventions and the background of the invention described
7 in the patent specification, and on the nature of the problem purportedly addressed by the '879
8 patent.

9 11. First, the patent specification defines the term "computer" as follows:

10 Computers are known to include a central processing unit, cache memory, hard drive
11 memory, floppy disk drive memory, CD ROM drive, audio processing circuitry, and
12 video processing circuitry. The computer further includes a computer monitor
13 which provides visual representations of the data being manipulated. Such visual
14 representations are originated from, for example, a word processing algorithm, a
15 drawing algorithm, and more recently, the displaying of video images.

16 [C1:11-17, '879 patent]. To one of ordinary skill in the art, this description of a computer refers to
17 a general-purpose computer that can be used for a variety of applications, such as word processing,
18 spreadsheets, databases, web browsers, e-mail, games, and other software programs. General
19 purpose computers (typically personal computers, or PCs) were the types of devices available on
20 the market at the time of the '879 patent that had "hard drive memory," "floppy disk drive
21 memory," "CD ROM drive[s]," "word processing algorithm[s], and a "computer monitor."

22 12. I understand that AMD has accused other types of end-user products of infringing
23 the '879 patent: specifically, televisions, mobile phones, camcorders, and digital cameras. These
24 types of devices are not addressed by the '879 patent specification and are not general-purpose
25 computers operating in a window-based environment. Such devices do not have a "CD ROM
26 drive," "floppy disk drive memory," "computer monitor," printing capability, or the other types of
27 attributes typical of a general-purpose computer. Moreover, televisions, telephones, cameras, and
28 camcorders are generally not capable of running multiple applications at once in a window-based
environment even to this day, much less at the time of the '879 patent. Rather, televisions, mobile
phones, camcorders, and digital cameras have specific, limited functions that are pre-programmed
for the end-user. These end-user products are of a class called "embedded systems" where the fact
that they might contain a microcomputer is "hidden" from the user because the product has a set of

1 embedded, “fixed” functions and are not “programmable” in the sense of PCs or other general-
2 purpose computers.

3 13. The problem in the prior art that the ’879 patent addresses is a problem inherent in
4 general-purpose computers operating in a window-based environment. The patent specification
5 explains that when a user watches live video “as the desktop pattern” of a computer screen, a user
6 may wish to work on another application, something the patent refers to as “applications that were
7 in focus (i.e., actively being displayed and/or being worked upon),” or “in focus, i.e., overlaying the
8 live background video” [C1:34-43, C2:25, ’879 patent]. “Actively being displayed” is a term of art
9 that refers to the window in a window-based environment that is displaying content and/or capable
10 of receiving cursor movements, commands, and text entry. The problem of the prior art is that
11 when the user wishes to adjust an attribute of the live video, such as adjusting the volume, “the live
12 video must be brought forward, or brought into focus.” [C1:34-36, ’879 patent]. This interrupts the
13 user’s work on the “applications that were in focus,” because “[w]hen an attribute of the live video
14 is to be changed, other applications that were in focus (i.e., actively being displayed and/or being
15 worked upon) must go into a background mode (i.e., taken out of focus).” [C1:41-44, ’879 patent].
16 “As such, the adjusting of attributes of the live video consume the activity of the computer until
17 such attributes have been changed and the live video is returned to background mode. As one can
18 readily appreciate, this can be somewhat burdensome to the user and is an ineffective user of the
19 computer system.” [C1:45-48, ’879 patent]. To one of ordinary skill in the art, this describes a
20 problem inherent in general-purpose computers operating in a window-based environment—the
21 inability to adjust attributes of a window without bringing it into focus. In a window-based
22 environment, there is typically an active window, which is the window that can currently receive
23 input from the user. In such a system, in order to adjust attributes of another open window or
24 application, the user must bring that window into focus, which usually puts the currently active
25 window out of focus, as stated in the ’879 patent specification. [See C1:41-44, ’879 patent].

26 14. This problem described in the ’879 patent is inapplicable to televisions, cameras,
27 camcorder, and telephones. I understand that AMD has identified battery meters, time codes, and
28 picture-in-picture windows as the “application . . . in focus” in these accused devices. But a user
does not “work[] upon” these user interface features and, as a result, does not encounter problems
with having to take them out of focus. One of ordinary skill in the art would not understand battery
meters and time counters to be “applications.” An “application” refers to a computer program that
a user has caused to run and interacts with; it is distinguished from utilities, which manage the

1 computer itself, and icons or indicators, which may be a part of an application, but which do not
2 constitute separate applications. This is made clear by dictionary definitions for the term
3 “application,” that were in circulation at the time of the ’879 patent. For example, the Microsoft
4 Computer Dictionary defined “application” as follows:

5 **application** A computer program designed to help people perform a certain type of
6 work. An application thus differs from an operating system (which runs a
7 computer), a utility (which performs maintenance or general-purpose chores), and a
8 language (with which computer programs are created). Depending on the work for
9 which it was designed, an application can manipulate text, numbers, graphics, or a
10 combination of these elements. Some application packages offer considerable
11 computing power by focusing on a single task, such as word processing; others,
12 called integrated software, offer somewhat less power but include several
13 applications, such as a word processor, a spreadsheet, and a database program.

14 Microsoft Computer Dictionary (1994) at pp. 23-24. True and correct copies of excerpts from this
15 dictionary are attached hereto as Exhibit 6 to this declaration.

16 15. I understand that AMD has claimed that the accused televisions, mobile phones,
17 camcorders, and cameras infringe the ’879 patent under the doctrine of equivalents. I disagree. I
18 understand that in order to prove infringement under the doctrine of equivalents, AMD will have to
19 establish that the accused products perform substantially the same function in substantially the same
20 way to obtain substantially the same result as the claimed user interface for general purpose
21 computers and that any differences are insubstantial. But substituting a television, mobile phone,
22 camera, or camcorder for a general purpose computer in the claimed inventions results in an
23 entirely different system from a general purpose computer running in a window-based environment;
24 in other words, such a substitution does not achieve substantially the same result as the inventions
25 claimed in the ’879 patent. One does not work upon the battery meters, time codes, and picture-in-
26 picture windows AMD has alleged correspond to the claimed “application . . . in focus,” and this
27 deprives the ’879 patent of its central purpose: providing a user interface that allows a user to
28 continue work on applications that were in focus while simultaneously adjusting video playing as
the desktop pattern of the computer screen. Because the substitution AMD proposes results in
entirely different systems from those addressed by the ’879 patent, and makes inapplicable the
proposed solution to the problem in the prior art identified in the ’879 patent, this substitution
achieves a different result from the patented inventions.

16 16. My opinion is further supported by the fact that the particular user interfaces AMD
17 has accused of infringing the ’879 patent were available in at least televisions, cameras, and
18 camcorders at the time of the ’879 patent.

1 17. For example, the RCA ProScan Television, available for sale in the United States in
2 September, 1995, had a picture-in-picture window playing over background video, and a video
3 control icon allowing the user to bring up a control panel to control the background video, all while
4 the picture-in-picture window remained in focus, just like the user interface in televisions that
5 Samsung accuses of infringing the '879 patent. The Sony Trinitron television, available for sale in
6 the United States in 1996, also had these features. Attached hereto as Exhibit 1 is a chart matching
7 the limitations of the '879 patent to the features of the RCA ProScan Television. Attached hereto
8 as Exhibit 2 is a chart matching the limitations of the '879 patent to the Sony Trinitron television.

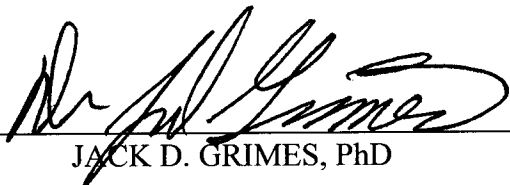
9 18. As another example, the Casio QV-300 digital camera, which was available as of
10 November 20, 1996, displayed a low battery indicator superimposed on video images, as shown in
11 the user manual for that product, attached as Exhibit 3. This is no different from the user interface
12 in digital cameras that AMD has accused of infringing the '879 patent.

13 19. As another example, the Nikon CoopPix 300 digital camera, available on April 1,
14 1997, displayed a battery level icon when the camera was in recording mode, just like the user
15 interface in digital cameras that AMD has accused of infringing the '879 patent. The user manual
16 for this camera, attached as Exhibit 4, states on page 21, “[w]hen the camera is in recording mode,
17 battery level is shown iconically in the status bar of the touch panel display.”

18 20. As another example, the Sony Video8 Handycam camcorder, available in 1996,
19 displayed a time code and a battery meter in the viewfinder when the camcorder was in camera
20 mode, just like the user interface in camcorders that AMD accuses of infringing the '879 patent.
21 This is stated on page 54 of the user manual, attached as Exhibit 5.

22 21. As a result, if the '879 inventor had wanted to alert one of ordinary skill in the art
23 that his invention applied to these types of products, he could have easily stated so explicitly in his
24 patent, rather than referring some twenty-four times to “computer” throughout the patent
25 specification. Moreover, if the '879 inventor had informed the patent office that he intended his
26 invention to be broad enough to encompass user interfaces in televisions, cameras, and camcorders,
27 it is my opinion that the patent office would not have issued the patent in light of these prior art
28 devices discussed above.

1 I declare under penalty of perjury that the foregoing is true and correct and that this
2 declaration was executed on this 26th day of March 2010 at Sparks, Nevada.

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4 By  _____
5 JACK D. GRIMES, PhD
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APPENDIX A

Jack D. Grimes, Ph.D.

Expertise

- Wireless data systems
 - Computer Graphics
 - Ergonomics/Human Factors
 - Internet Architecture & Security
 - Internet Payment Systems
 - Smart Card Technology
 - Internet Platform Technology
 - Video Capture & Overlay Systems
 - Video Display Devices, ASIC Design
 - User Interface Design
 - Video Graphics Architecture
 - Engineering Development Practices
 - Software development
 - Object oriented, software systems
 - Compressed Video
 - Consumer Television
 - Digital Satellite TV Technology
 - System Reliability
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Professional Summary

Over twenty years experience at the senior levels of management in large and small high technology companies. Dr. Grimes has been responsible for incorporating original technology in a number of new products. His expertise includes: Internet platform technology, including Java, security and payments; Internet payment systems, including credit and debit cards, SET, ACH and other payment methods, including chip cards. He is recognized as an industry technologist and spokesman with excellent verbal and written communication skills. Dr. Grimes is an experienced and well-regarded testimonial expert in intellectual property and contract disputes related to video and other technologies.

Employment History

From: 1989 **Independent Consultant**

To: Present San Jose, CA

Provide studies, strategies and opinions to industry and the legal profession, with particular emphasis on the following areas:

- Internet commerce strategies including Java, ASP, Unix, NT, scalability, security and payments.
- Payment security, including digital certificates, DES and other encryption based approaches.
- Internet data security approaches, e.g., CKM
- Financial payments strategies for Internet commerce, including credit & debit cards, SET, ACH, and other methods, with special emphasis on chip cards.
- User interfaces & ergonomics.
- Computer graphics & television video systems.
- Business, marketing and engineering practices for startup

companies.

- Engineering practices for large, object-oriented projects.
- Engineering practices for electronics design and manufacturing.

From: 1999 **ServiceHub Corporation**
To: 2000 Cupertino, CA
Title: *Chief Technical Officer*
Responsible for Internet technology architecture, strategy and market development for this internet startup (www.servicehub.com). Developed the company's business plan that combines web-based dispatch services with wireless data to SMS and browser capable mobile phones. Initiated business alliances with leading European Operators that feature data services. Represents the company at major wireless data conferences and trade shows in the US and Europe.

From: 1996 **Visa International**
To: 1999 San Francisco, CA
Position: *Senior Vice President, Technology, Architecture & Strategy*
Responsibilities included developing the strategies for Visa in chip card technology, management of large-scale software projects, and the evaluation of investments in technology companies. Duties included management of two technology and strategy groups containing over 30 people. One group provided chip card and related technology development for new products and services, including SET. The other was responsible for the global network and processing architecture strategy to replace the current VisaNet services. Internal consultant on Internet payment systems.

From: 1996 **ICVerify**
To: 1996 Qakland, CA
Position: *Vice President, Development*

- Startup, developing and marketing payment systems for mid-sized merchants.

Responsibilities included managing the development group, staffing, budgets, etc. for this payment systems company. Developed a product for Internet payment systems.

From: 1992 **Taligent, Inc.**
To: 1996 Cupertino, CA
Position: *Director, Technology Evaluation and Evangelism*

- Taligent was founded as a \$200M joint venture formed by Apple, IBM and Hewlett Packard that employed 350 people. Taligent's charter was to develop and deliver a

new, object-oriented application environment. In December 1995, the joint venture became a subsidiary of IBM.

1994-1995: Director, Technology Evaluation and Evangelism

Managed strategic technology acquisitions and major account, pre-sales consulting. Duties included:

- Initiated strategic acquisitions for the products so that the technology could be more rapidly delivered to the market.
- Developed the technology valuation methodology for the HP investment. HP became 15% equity owner.
- Lead the effort to convey benefits to key customers (personally and at conferences) within the US, Canada, Europe and Japan.
- 234 formal briefings, including 12 conference presentations. 53 press interviews/conferences. 12 conference and journal papers.

1992-1993: Manager, User Environment Department

Managed one of 5 engineering departments. Promoted to Director. Achievements included:

- Grew and managed seven technical groups, containing 45 people. Areas included: User Interface implementation, User Studies, Human Interface design, High Level Utilities, Compound Document, Data Management, Text and Internationalization. These teams provided the key, upper level capability of the system.
- Managed a \$6M+ development budget.
- Trained managers providing technical direction when needed.
- Established uniform document architecture over multiple subsystems.
- Brought the projects in on time using internally developed scheduling practices.

From: 1989 **Mass Microsystems**
To: 1991 Sunnyvale, CA
Position: *Vice President, Engineering*

Start-up company of 70 people. Developed, manufactured, marketed and distributed storage and video peripheral products for the Apple Macintosh. Joined as the VP Engineering, Corporate Officer and was the senior technical person. Key contributor to road show for public offering in November 1989. Grew and managed the engineering staff of 12 people. Accomplishments included:

- Developed & implemented formal milestone and tracking process for engineering that resulted in on-time high quality products ready for high volume production.
- Developed the “QuickImage” video capture product family that included 6 hardware products and 2 software products.
- Developed the “ColorSpace” video overlay product family that included 2 hardware products and 2 software products
- Prosecuted three patents to strengthen IP portfolio.
- Established major, in-house ASIC development capability for new products that achieved a huge technical advantage over competitors in the marketplace.
- Developed new technology, including:
 - Custom ASIC for video overlay products.
 - Video architecture for next generation overlay products.
 - Teleconferencing application.
 - Object-oriented titling overlay application.

From: 1984 **Intel Corporation**

To: 1989 Santa Clara, CA

Position: *Strategic Marketing, Computers and Coprocessors*

Joined Microprocessor Division of Intel to provide systems expertise to develop a new family of graphics chips. As Strategic Marketing for Computers and Coprocessors performed key corporate role to win new accounts for graphics chips and RISC coprocessors and to battle Texas Instruments and National Semiconductor in this market. Chaired Product Planning Committee for Graphics Business Unit. As Product Line Architect for Computer Graphics Components, defined the architecture for a family of computer graphics components and infused systems and software experience into a component-oriented business. Conducted primary and secondary market research to guide graphics chip specifications. Conducted interviews and presentations with strategic customers for strategic accounts. Developed 4 approved business/product proposals; three-business/product implementation plans and managed the technical applications group for the Graphics Business Unit.

From: 1981 **IT&T**

To: 1984 Stratford, CT

Position: *Director, Advanced Programming Technology Group*

Directed a group of 15 professionals, with a \$2M operating budget. Developed the architecture, technology and prototypes of programming environments. Served as Chairman of the Programming Key Technology Steering Group. Major achievements include:

- Promoted to Director after one year.
- Evaluated and approved budgets for a \$60M, five year,

world-wide technology program

- Planned, coordinated and reviewed IT&T's long range R&D in programming technology, worldwide.

From: 1971 **Tektronix, Inc.**

To: 1981 Beaverton, OR

Position: *Engineering Manager, Graphic Computing Systems Division*

- Technical leader of a major programming project. Received increasing management responsibility ending as Engineering Manager for the Graphic Computing Systems Division. Directed a group of 35 professionals, responsible for moving a graphics workstation from concept to market. The key to success was balancing innovation with schedule risk and potential product volume.

System Development Manager, Information Display Systems

- Directed 15 people for market and application development in mechanical engineering drafting and design and analysis segments.
- Directed final implementation of a finite element modeling application system, the FEM181, on a Tektronix graphics workstation.

Development Manager, Division, Information Display Systems

- Responsible for concept development of high level language machines.
- Defined language issues and CPU architecture.
- Developed technology forecasts.

Software Manager, 4051 Desktop Computer

- Staffed and managed a group of six people.
- Defined and planned implementation of operating system and BASIC language translator for this forerunner of the personal computer.

From: 1974 **Oregon State University**

To: 1980 Corvallis, OR

Position: *Assistant Professor, Computer Science*

Initiated Computer Science Master's Degree program at Tektronix. Developed and taught graduate courses in computer systems.

From: 1965 **Iowa State University**

To: 1971 Ames, Iowa

Position: *Assistant Professor, Electrical Engineering (1970-71)*

Taught undergraduate & graduate courses in EE and CS.

Litigation Support Experience

- Date: 2009-10 Hunton & Williams, Atlanta, GA and Richmond, VA
Case Travel Tags v. UV Color and InComm, Case No. 0:09-cv-1619-JRT-AJB (MN) and InComm/UV Color v. Travel Tags, Case No. 1:09-CV-1720 TWT (GA), (on behalf of Defendants)
Project: Patent Infringement, debit gift cards
 Declaration
Status: Pre Markman
- Date: 2009-10 Hogan and Hartson, LA
Case St. Clair v. Panasonic Corporation, Nokia Corp., Fujifilm Corporation, HTC Corp., et al; Case Nos. C.A. No. 04-1436, 06-403, 06-404, 08-371, and 08-373-JJF-LPS, (on behalf of several Defendants)
Project: Patent Infringement, digital cameras
 Expert Report on Invalidity
Status: Post Markman
- Date: 2009 Quinn Emanuel, NYC and Redwood Shores, CA
Case Sony Corporation v. Visio, Inc., Case No. SACV 08-01135-RGK (FMOx), US District Court, Central District, Western Division (LA), (on behalf of Sony)
Project: Patent Infringement
Status: Post Markman, Settled Oct 2009
- Date: 2009 Standley Law, Dublin, OH
Case Alexam v. Evolution Benefits, and Humana, Inc., US District Court, Eastern District of TX, Marshall, Case No. 2-07CV-288-DF (on behalf of Humana)
Project: Patent Infringement, Multi-function debit payment cards, Rebuttal Expert Report
Status: Post Markman, Case settled November, 2009
- Date: 2009 Ropes & Gray, NYC and WDC
Case Motorola, Inc v. VTech Communications, Inc. VTech, Ltd. Eastern District, Texarkana, TX, No. 5:07-CV-00171 - DF - CMC (On behalf of Motorola, four patents)
Project: Patent Infringement, Telephone Devices, Infringement Expert Report, Expert deposition
Status: Post-Markman, Case settled November, 2009
- Date: 2008 Jones Day, Los Angeles, CA
Case Technology Development & Licensing v. DirecTV Group, District of Nevada, Case No. 2:06-cv-00912-RLH-LRL (on behalf of

DirecTV)
 Project: Patent Infringement, TV programming system
 Status: Expert declaration, pre-Markman, Settled Jan 2009

Date: 2008 McKool Smith, Dallas, TX
 Case i2 Technologies v. SAP, ED Texas, Marshall Division, Civil Action
 No. 2-06CV-352 (on behalf of i2)
 Project: Patent infringement
 Status: Post Markman, case settled June 2008, SAP paid i2 \$83.3 million

Date: 2008 Hunton & Williams – Richmond, Virginia
 Case Verve, LLC v. Hunton & Williams LLP
 Project: Arbitration - patent representation, Invalidity Expert Report
 Status: Settled, August 2008

Date: 2008 DLA Piper US LLP (East Palo Alto)
 Case Zoran v. ArcSoft, Superior Court of California, County of
 Alameda, case No. RG07311855; (On behalf of Zoran)
 Project: Breach of Contract - ArcSoft owed note repayment to Zoran
 Status: Pre-trial, case settled May 2008

Date: 2007-8 Kecker and Van Nest, San Francisco
 Case Finisar v. Comcast, No. Dist of CA, Case No. C06-04206 WHA;
 (On behalf of Comcast)
 Project: Patent Infringement, Rebuttal Expert Report, Expert Deposition
 Status: Pre-trial, Expert Report submitted, scheduled vacated pending
 appeal in previous Finisar case heard Jan 2008.
 Case ended after Comcast won a MSJ on invalidity – July, 2008

Date: 2007-9 Jones Day (New York, NY)
 Case Soverain v. CDW Corporation, et al. including Newegg, Inc.
 Eastern District, Tyler, TX, No. 6:07-CV-511 - LED
 (On behalf of Soverain, three patents)
 Project: Patent Infringement, electronic commerce;
 Claim Construction Tutorial, Expert Reports and Declaration,
 Expert Deposition
 Status: Post-Close of Expert Discovery, Pre-Trial

Date: 2007-9 Orum & Roth, Chicago, IL
 Cases: Card Activation Technology v. (several matters)
 Project: Patent Infringement, debit payment card transactions
 PTO re-exam analysis
 Status: Several Declarations in the several matters, most settled.

Date: 2007-8 DLA Piper US LLP (East Palo Alto)
 Case Acer v. HP, and cross complaint, US Dist Court, Western Dist of

Project: Wisconsin, 07-CV-620-BBC
 Status: Patent Infringement
 Status: All pending cases settled on terms favorable to HP, June 2008

Date: 2007-8 DLA Piper US LLP (East Palo Alto)
 Case HP v. Acer, ITC Inv. No. 337-TA-606; (On behalf of HP)
 Project: Patent Infringement, 2 patents, Rebuttal Expert Report ('119 patent)
 Status: Patent withdrawn, defense withdrawn, ITC Hearing Feb. 2008
 Case settled prior to ID being issued, June 2008

Date: 2006-7 Heller Ehrman, San Francisco, CA
 Case Systems America, Inc. v. Rockwell Software, Inc., and Rockwell Automation, Inc., Case No.: 03-CV-02232 JF (RS), Northern District of California, (on behalf of Systems America).
 Project: Trade Secret & Copyright matter
 Status: Pre-trial, Expert Report submitted, case inactive/abandoned

Date: 2006-7 Jones Day, Los Angeles, CA
 Case Forgent Networks, Inc v. Echostar Communications Corp, et al, Civil Action No. 6:06-CV-208 (LED), Eastern District of Texas, Tyler Division, (on behalf of DirecTV).
 Project: Patent Infringement, Video conferencing system
 Status: Expert Report, Cable Group & DirecTV settled.
 Echostar went to trial, won in invalidity

Date: 2006-7 Howrey Simon Arnold & White, LLP (Chicago, IL)
 Case Rasterex Holdings, LLC. v. Research in Motion Limited, et al, Civil Action No. 2003 CV76785; Superior Court of Fulton County, State of Georgia; (On behalf of RIM, et al).
 Project: Trade Secret matter
 Status: Pre-trial, Expert Reports submitted by both sides, deposition
 Case settled, May 2008

Date: 2005-9 Blank Rome (Washington, DC)
 Case Centillion Data Systems, LLC v. Convergys Corp., Qwest Communications International, Inc. and QWEST Corp.; So. Dist. Indiana, Indianapolis Div., Case No. 1:04-CV-00073-LJM-WTL; (On behalf of Centillion/CTIG)
 Project: Patent infringement, Telecom billing system
 Claim Construction Expert Declarations (2), Expert Reports (2), Expert depositions (2)
 Status: Case concluded via MSJ, Oct 2009

Date: 2005-7 Blank Rome (Washington, DC)
 Case CTI Group (Holdings) Inc. v. BT Group PLC; UK, Claim No. PAT04041; (On behalf of Centillion/CTIG).

Project: Patent infringement, Telecom billing system
 Infringement Case, Expert Declaration
 Status: Trial scheduled for Oct 2007, case settled

Date: 2009 Kilpatrick Stockton (Atlanta, GA)
 Case Data Treasury v. First Data Corporation, Civil Action No. 2:06 CV 72 (E.D. Marshall, TX) (on behalf of M&T, BB&T, Comerica, co-defendants)
 Project: Patent Infringement. Remote image capture, Expert Reports (2), Expert deposition
 Status: Comerica, M&T and BB&T settled, early 2010

Date: 2006-8 Sidley Austin (Los Angeles, CA)
 Case Data Treasury v. First Data Corporation, Civil Action No. 5:03 CV 39 (E.D. Tx.) (on behalf of First Data Corp., co-defendant)
 Project: Patent Infringement. Remote image capture
 Status: Pre-Trial, case was consolidated with another, schedule vacated

Date: 2006 Hunton & Williams (Washington, DC)
 Case Ingenio v. GameLogic and Scientific Games Corp.; Civil Action No. 04-1532 (KAJ), Delaware. (On behalf of Ingenio)
 Project: Patent infringement, Lottery game. Infringement Expert Report. Rebuttal Validity Expert Report, Expert Depositions.
 Status: Case settled

Date: 2005-6 Hunton & Williams (Washington, DC)
 Case MercExchange v. eBay and Half.com; Civil Action No. 2:01cv736, ED VA, Norfolk. (On behalf of MercExchange)
 Project: Payment systems related. Expert declarations to PTO (2)
 Status: Post-trial, post-appeal. Patent Office Re-examination

Date: 2004-5 Hunton & Williams (Washington, DC)
 Case Alessam, Inc. v. FSV Payment Systems, et al. Case No. 2-03CV-337, Eastern Dist. Court, Marshall, TX (On behalf of Interactive Communications International–InComm)
 Project: Patent Infringement, payment systems related. Invalidity Expert Report.
 Status: Markman Order, case settled on terms favorable to InComm, 7/05.

Date: 2004-6 DLA Piper Rudnick Gray Cary (Palo Alto & San Diego, CA)
 Case Gateway v. HP and HP v. Gateway, 2 matters. ITC Inv. No. 337-TA-519; (On behalf of HP, one patent) Dist. Court, San Diego, CA (04-CV00613-B); (On behalf of HP, four patents)
 Project: Patent Infringement, computer systems related; Declaration on

Claim Construction, Expert Reports, Expert Depositions,
 Testimony at ITC Hearing, May, 2005.

Status: ITC 519 matter: ID issued, HP prevailed (claims invalid, claims not enabled, patent unenforceable due to inequitable conduct) 10/2005 San Diego: Post Markman.
 Settlement of all litigation. Gateway paid HP \$47 Million 3/2006

Date: 2005 Jones Day (New York, NY)
 Case Soverain v. Amazon.com and The Gap
 Eastern District, Tyler, TX, No. 6:04-CV-528
 (On behalf of Soverain, two patents)

Project: Patent Infringement, electronic commerce; Declaration on Claim Construction

Status: Post-Markman, settled on terms very favorable to Soverain, 8/2005.

Date: 2004-5 Jones Day (New York, NY)
 Case Soverain v. Amazon.com and The Gap
 Eastern District, Tyler, TX, No. 6:04-CV-14
 (On behalf of Soverain, three patents)

Project: Patent Infringement, electronic commerce; Declaration on Claim Construction, Expert Report on Infringement, Rebuttal ER, Expert Depositions

Status: The Gap settled prior to Markman, amount undisclosed.
 Trial was scheduled for August 2005, settled on terms very favorable to Soverain, 8/2005
 Amazon paid Soverain \$40 Million to settle all litigation.

Date: 2004 McAndrews, Held, & Malloy (Chicago, IL)
 Case Guidant v. Medtronic.
 Minneapolis, MN, Civil File No. 00-1473
 (On behalf of Guidant, three patents)

Project: Patent Infringement, atrial defibrillators

Status: Post-Markman, case settled on terms very favorable to Guidant

Date: 2004-5 DykemaGossett (Bloomfield Hills, MI)
 Case Ditzik v. Samsung, et al.,
 Eastern Dist of Michigan, Civil Action No. 03-74043 (GER)
 (On behalf of Samsung, '373 & '955 patents)

Project: Patent Infringement, computer displays, Expert Declaration, Expert Reports

Status: Pre-Markman, case settled on terms favorable to Samsung, 7/05.

Date: 2003-6 Hunton & Williams (Charlotte, NC and WDC)
 Case TradeCard v. S1 Corp and Bank of America, N.A., Civil Action
 No. 03-CIV-1468 (AKH), So. Dist of NY
 (On behalf of BofA & S1, '588 patent)

- Project: Patent Infringement, automated trading system. Declaration on claim construction, Expert Reports on Invalidity and Non-infringement, Expert Depositions, Testified at trial.
- Status: Trial 3/06, Jury verdict: non-infringement and patent invalid.
- Date: 2003-4 Jenkens & Gilchrist (Chicago)
Case STMICROELECTRONICS, INC., v. BROADCOM CORPORATION, Civil Action No. 4:02 CV 362 (E.D. TX, Sherman) (on behalf of STM, counter defendant)
- Project: Patent Infringement, '712 patent, Expert Report on Claim Construction, deposition on Claim Construction; Expert testimony at Markman Hearing, Sept. 2003; Expert Report on Invalidity; Rebuttal Expert Report on Non-infringement, Expert Depositions.
- Status: Post Markman, Case settled on terms very favorable to STM, 2/04.
- Date: 2003-4 Fish and Richardson (WDC)
Case Genesis v. MRT, MStar & Trumpton, ITC Inv. No. 337-TA-491 (on behalf of Genesis, '867 patent)
- Project: Patent Infringement, LCD panel controller
Expert Reports, Expert depositions, Expert testimony at ITC Hearing, January – February, 2004.
- Status: ID issued in favor of Genesis re: '867 patent, April, 2004.
- Date: 2003 Fish and Richardson (WDC)
Case Data Treasury v. J. P. Morgan Chase, et al., Civil Action No. 5:02 CV 124 (E.D. Tx.) (on behalf of ACS, co-defendant)
- Project: Patent Infringement. Remote image capture, 112(6) Expert Report.
- Status: Case settled June, 2003 (Pre Markman)
- Date: 2003 Jones Day (NY)
Case Research In Motion v. Good Technology, Inc., Civil Action No. 02-556-JJF (Delaware) (on behalf of RIM)
- Project: Patent infringement of 4 patents. Wireless data. 25 term, claim construction chart
- Status: Settled, June 2003 – Final May 2004
- Date: 2002-3 Fish and Richardson (San Diego)
Case Broadcom v. Intel Corporation, Civil Action No. 501cv302 (E.D. Tx.) (on behalf of Intel) – Judge Folsom
- Project: Patent Infringement. 3D graphics. Expert Depositions on claim construction & non-infringement and prior art, Expert testimony at Markman Hearing, 12/02, prepared Expert & Rebuttal Expert Reports
- Status: SJ motion on '210 patent in favor of Intel, granted July, 2003
- Date: 2002-4 Fish and Richardson (WDC)

Case Genesis v. MRT, SmartASIC & Trumpion, ITC Inv. No. 337-TA-481 (on behalf of Genesis, '867 patent)

Project: Patent Infringement, LCD panel controller, Expert & Rebuttal Expert Reports; Expert deposition; Testified at ITC Hearing, July 2003

Status: ITC Hearing, July 2003. ID issued, Oct 2003. Reversed, in part, and remanded, January 2004. Remand ID issued May, 2004 in favor of Genesis against both MRT and Trumpion.

Date: 2002 Hunton & Williams (WDC)

Case First USA Bank v. PayPal, in Delaware (on behalf of First USA)

Project: Patent infringement, Expert Report on Infringement

Status: Settled on terms very favorable to FUSA, October 2003

Date: 2002 Burns Doane Swecker & Mathis (VA)

Case Elonex v. AOC International (on behalf of AOC)

Project: Patent infringement, CRT monitor, power savings circuit analysis

Status: Settled

Date: 2002, 4 Howrey Simon Arnold & White

Case MicroStrategy v. Business Objects (on behalf of MicroStrategy) Eastern District of Virginia, Civil Action No. 2:01cc826

Project: Patent Validity, wrote three rebuttal expert reports on validity. May, 2004, Additional rebuttal expert report, Expert deposition.

Status: Patents re-examined by PTO, 2003, All Claims held valid, 2/2004. Trial scheduled for June, 2004
SJ issued in favor of Business Objects on non-infringement, no ruling on validity portion of case.

Date: 2001-2 Morrison & Foerster (San Francisco)

Case Gemstar v. EchoStar, et al (on behalf of EchoStar) – Judge Luckern

Project: Patent Infringement (ITC venue)
Expert Depositions, wrote expert reports (Claim Construction, Non-infringement, Invalidity, & Domestic Industry Opinions), Expert testimony at ITC Hearing December 2001

Status: ID issued favor of EchoStar, et al., on non-infringement, lack of domestic industry and patent misuse in June 2002.

Date: 2000-02 McDonnell Boehnen Hulbert & Berghoff (Chicago)

Case E-Pass v. Palm (on behalf of Palm)

Project: Patent Infringement, prior art research

Status: Court ruled in favor of Palm, Summary Judgment – August 2002
An appeal overturned SJ (based on erroneous Markman ruling), Sept. 2003

Date: 1999 Sheppard, Mullin, Richter & Hampton (LA)
Case: Hyundai v. Princeton Graphics Systems (on behalf of Hyundai)
Project: Product quality contract dispute, analysis of returned computer monitors. Quality analysis report.
Status: Closed. Arbitration never completed

Date: 1999-2001 Kecker & Van Nest (San Francisco) & Fulbright & Jaworski (TX)
Case: Harris Corporation v. Sanyo, et al (on behalf of Harris)
Project: Patent infringement, created expert reports, Expert testimony at trial
Status: Harris won at jury trial

Date: 2000 Weil, Gotshal & Manges
Case: SmartPipes, Inc. v. Kovert Soft Tech. (on behalf of SmartPipes)
Project: Contract dispute, created declaration
Status: Settled

Date: 2000 Morrison & Foerster, LLP
Case: OnCommand v. magiNet (on behalf of OnCommand)
Project: Contract dispute, royalties based on patent infringement, Expert deposition
Status: Settled in favor of OnCommand

Date: 2000 Electronic Processing Inc. (re: PHiTECH, Inc.)
Case: Due Diligence on behalf of EPI
Project: Assessed JAVA software product for eCommerce Application, created evaluation report for EPI
Status: Closed

Date: 1996 Thelen, Marrin, Johnson & Bridges
Case: Standard Transport v. Hyundai (on behalf of Hyundai)
Project: Provide expert opinion on Video Display Terminal products, deposition, (continuation of 1993 matter)
Status: Settled in favor of Hyundai

Date: 1994 George Ellis v. A-Squared Systems (on behalf of A-Squared Systems) Partnership Dispute
Project: Evaluation of software for A-Squared Systems
Status: Settled

Date: 1993 Cooley Godward
Case: Air Gage v. Acer America (on behalf of Acer)

Project: Product Liability Video Terminals. Assessment of product specifications for manufacturing environment
 Status: Closed

Date: 1993 Thelen, Marrin, Johnson & Bridges
 Case Standard Transport v. Hyundai (on behalf of Hyundai)
 Project: Provide expert opinion on Video Display Terminal products, testimony at arbitration hearing
 See 1996: Continuation:
 Status: Arbitration Ruling in favor of Hyundai

Date: 1992 Fish & Neave and Finnegan, Henderson, Farabow, Garrett & Dunning
 Case Cadtrack v. Commodore (on behalf of Commodore)
 Project: Patent Infringement. Assisted research team in preparation of patent validity and infringement arguments
 Status: Closed

Date: 1992 Hoge, Fenton, Jones & Appel
 Case: Azuray v. Tom Collins
 Project: Legal Malpractice. Assess viability of high resolution graphics product
 Status: Closed

Date: 1991 Fish & Neave
 Case Ampex v. Abekas (on behalf of Ampex)
 Project: Patent Infringement. Provide expert consulting for infringement analysis
 Status: Settled in favor of Ampex

Date: 1991 Wilson Sonsini Goodrich & Rosati
 Case Brewer v. RasterOps (on behalf of RasterOps)
 Project: Contract Dispute. Studied depositions and gave opinion on value of Brewer contribution to product

Education

<u>Year</u>	<u>University</u>	<u>Degree</u>
1970	Iowa State University	Ph.D., Electrical Engineering with a minor in Computer Science
1981	University of Oregon	MS, Experimental Psychology
1968	Iowa State University	MS, Electrical Engineering
1965	Iowa State University	BS, Electrical Engineering

Professional Associations and Achievements

- Member, ACM

- Life Senior Member, IEEE
- Member, Sigma Xi
- Member, Human Factors & Ergonomics Society
- Initiated and taught human factors tutorials for 6 years at SIGGRAPH
- Organization and program committees for IEEE CompCon
- Served on three professional society editorial boards
 - IEEE Computer Graphics & Applications
 - IEEE Software
 - ACM Computer Surveys
- Past Technical editor of *Computer*
- Past member of IEEE Computer Society Governing Board

Invention

- Named inventor on U.S. Patent No. 4,106,011 for a Keyboard Circuit

Publications (1986 to Present)

Grimes, Jack, "Internet Based Dispatching Application—Case Studies," W@P Developers' Symposium Proceedings, June 29, 1999, San Francisco, CA, p. 18.

Grimes, Jack and Potel, Mike, "Software is Headed Toward Object-Oriented Components," invited contribution in "Where is Software Headed?" edited by Ted Lewis, *IEEE Computer*, 1995, pp. 24-25.

Davis, Mark, and Grimes, Jack D., "International Support in Applications and Systems Software," *Objects in Europe*, Volume 2, No. 3, May-June 1995, pp. 10-14, SIGS Publications.

Davis, Mark, Grimes, Jack D., and Knoles, Debbie, "International Support in Taligent's CommonPoint Application System," *Objects in Europe*, Volume 2, No. 4, July-August 1995, SIGS Publications.

Davis, Mark, Grimes, Jack, and Knoles, Debbie, "Unicode and International Support in Taligent's CommonPoint Application System," *IBM Journal of Research and Development*, Circa 1995.

Grimes, Jack D., and Potel, Michael J., "The Taligent Application Environment: An Approach to Object-Oriented Systems Development," *American Programmer*, special issue on Operating System Technology, August, 1994, Volume 7, No. 8, pp. 7-13.

Grimes, Jack D., "Objects 101—An Implementation View," CompCon Spring94 Conference Proceedings, March 1-4, 1994, San Francisco, CA, pp. 106-111.

Grimes, Jack, and Carrie Heeter, "Selective Update: Virtual reality goes commercial with a blast," *IEEE Computer Graphics & Applications*, Volume 12, No. 2, March 1992, pp. 16-17

Grimes, Jack, "Selective Update: Virtual reality '91 anticipates future reality," *IEEE Computer Graphics & Applications*, Volume 11, No. 6, November 1991, pp. 81-83.

Grimes, Jack, & Potel, Mike, "Guest Editors' Introduction: Multimedia-It's Actually Useful!," Special Issue of *IEEE Computer Graphics & Applications on Multimedia*, Volume 11, No. 4, July 1991, pp. 24-25.

Grimes, Jack, & Potel, Mike, "What is Multimedia?" *IEEE Computer Graphics & Applications*, Invited Paper for Special 10th Anniversary Issue: Retrospective & Prospect, Volume 11, No. 1, January 1991, pp. 49-52.

Grimes, Jack, "Video on the Macintosh," *Video Systems*, Volume 16, No. 2, February 1990, pp. 32-44.

Salzman, David, & Grimes, Jack D., "Guest Editors' Introduction: Graphics Superworkstations and the Last Hurrah," Special Issue of *IEEE Computer Graphics & Applications on Superworkstations*, Volume 9, No. 4, July 1989, pp. 27-29.

Grimes, Jack D., Kohn, Les, and Bharadhwaj, Rajeev, "The Intel i860 64-bit Processor: A General-Purpose CPU with 3-D Graphics Capabilities," *IEEE Computer Graphics & Applications on Superworkstations*, Volume 9, No. 4, July 1989, pp. 85-94.

Kohn, Les, and Grimes, Jack D., "A New Microprocessor with Vector Processing Capabilities," *Professional Program Session Record Electro'89*, Session No. 16, IEEE, New York, April 1989, pp. 4/1-4/8.

Grimes, Jack D., and Kohn, Les, "A New Processor with 3-D Graphics Capabilities," NCGA'89, *National Computer Graphics Association conference proceedings*, April 17-20, 1989, Philadelphia, PA, pp. 275-284.

Grimes, Jack D., and Hootman, Joe, "Guest Editors' Introduction: Another Cost-Effective Design Tool," Special Issue of *IEEE Micro on Embedded Processors*, Volume 8, No. 3, June 1988, pp. 8-9.

Grimes, Jack D., and Shankman, Richard, "Design a graphics board for an IBM personal computer," *Electronic Design*, Volume 36, No.6, March 17, 1988, pp. 87-94.

Grimes, Jack D., "Graphics Coprocessors in PC's and Workstations," NCGA'88, *National Computer Graphics Association conference proceedings*, March 20-24, 1988, Anaheim, CA.

Grimes, Jack D., "Position Paper on the Importance and Application of Video Mixing Display Architectures." in course notes for *Siggraph'87* Tutorial #23 titled: Introduction to Window Management, July 1987.

Grimes, Jack D., "Two Architectural Features of the 82786 Graphics Coprocessor," 1987 Conference Proceedings Volume 1, *Systems Design & Integration Conference*, Santa Clara, CA. February 10-12, 1987, pp. 1-7, Session 3/4.

Grimes, Jack D., & Dill, John C., "Guest Editors' Introduction: VLSI for Graphics," Special Issue of *IEEE Computer Graphics & Applications on VLSI for Graphics*, Volume 6, No. 10, October 1986, pp. 22-23.

Formal Conference & Panel Presentations, (1987 – Present)

Grimes, Jack D., “Taligent: What went Wrong?” *HOTChips 15*, August 18, 2003, Stanford, CA.

Grimes, Jack D., “Unicode and International Support in Taligent’s CommonPoint Application System,” *Seventh International Unicode Conference*, September 15, 1995, San Jose, CA.

Grimes, Jack D., and Potel, Mike, “Software is Headed Toward Object-Oriented Components,” invited presentation at OOPSLA’95 *Workshop on Design and Construction of Large-Scale Components*, ACM, October 1995.

Grimes, Jack D., “Frameworks for Component Construction,” Software Development ’95 East Conference, October 6, 1995.

Grimes, Jack D., “Application Frameworks: Maximizing Code and Design Reuse,” Keynote Address, OOP, March 1995, Munich, Germany.

Grimes, Jack D., “Taligent Object Services,” Chairman of paper session, *CompCon Spring95 Conference Proceedings*, March 5-9, 1995, San Francisco, CA, pp. 350-371.

Grimes, Jack D., “Programming the Colossal,” Nineteenth Annual Asilomar Microcomputer Workshop, April 28-30, 1993.

Grimes, Jack D., “Future Technology to Support Workflow,” invited presentation at Groupware Outlook Exchange, sponsored by The Institute for the Future, Menlo Park, CA, workshop held in Cambridge, MA, June 30-July 2, 1993.

Grimes, Jack D., “Video Architectures for Multimedia,” *MacWorld Technology and Issues Conference*, Multimedia Session, June 27-29, 1990, received a presentation award.

Grimes, Jack D., “Computer Graphics Futures,” presentation as part of a *Computer Graphics Tutorial* given by Carl Machover, Machover Associates Corporation at Electronic Imaging West '89, The Pasadena Center, Pasadena, CA April 10-13, 1989.

Grimes, Jack D., “Tutorial: Shrink Wrapped Unix Software,” NCGA'89, *National Computer Graphics Association conference*, April 17-20, 1989, Philadelphia, PA, three hours in length, received a presentation award.

Grimes, Jack D., “Graphic Coprocessors,” Dataquest 1987 Electronic Printer Industry Conference titled: *Electronic Printers: Expanding Horizons*, Napa, CA, March 25th, 1987.

Grimes, Jack D., “What Next After EGA?,” Panel session DP-1 titled: *What Next After EGA?*, 12th ComputerFaire, Moscone Center, San Francisco, CA, March 26th, 1987.

Grimes, Jack D., "Silicon Support for Windowing Software," Panel session titled: *Windows and Standards, CHI+GI'87*, Conference on Computer-Human Interaction, Toronto, Canada, April 7, 1987.

Grimes, Jack D., "The Intel 82786 Video Architecture," Panel session titled: *A Comparison of VLSI Graphic Solutions*, Siggraph'87 Conference on Computer Graphics, Anaheim, CA July 31, 1987.

Quoted in "Picking the right computer graphics chip," edited by Rodney Myrvaagnes, in an *Electronics Products* forum, published in *Electronics Products*, November 15, 1987, pp. 25-33.