UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA NORFOLK DIVISION

I/P ENGINE, INC.,)	
v.	Plaintiff,)))	Civ. Action No. 2:11-cv-512
AOL, INC. et al.,)	
	Defendants.)))	

I/P ENGINE, INC.'S OPPOSITION TO DEFENDANTS' RENEWED MOTION FOR JUDGMENT AS A MATTER OF LAW ON INVALIDITY OR NEW TRIAL

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I. INTRODUCTION AND SUMMARY

Defendants are not entitled to judgment or a new trial on invalidity. They simply disagree with the jury's findings and the Court's rulings on invalidity. I/P Engine presented extensive evidence, including the testimony of I/P Engine's expert, Dr. Jaime Carbonell, that supports the jury's findings that the patents are valid over all prior art references. Defendants find no gaps or holes in Dr. Carbonell's testimony or the other evidence I/P Engine presented (including the admissions of Defendants' invalidity expert during cross examination), and therefore simply reargue the evidence. Those types of arguments, however, must be rejected in a Rule 50(b) determination. And, in any event, the jury's verdict regarding anticipation and its factual findings on obviousness are reasonable and supported by overwhelming and extensive evidence, much more than is needed to sustain the verdict and to deny a new trial. This Court's finding of non-obviousness follows as a matter of law from those well-grounded factual findings.

II. APPLICABLE STANDARDS OF LAW

A. JMOL Standard

Judgment as a matter of law may be rendered only where "the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue." Fed. R. Civ. P. 50(a). Rule 50(b) allows parties to renew a motion for judgment after trial, and a "Rule 50(b) motion for judgment as a matter of law follows the same standard as a Rule 56 motion for summary judgment." *Dennis v. Columbia Colleton Med. Ctr., Inc.*, 290 F.3d 639, 644 (4th Cir. 2002). A District Court may grant a Rule 50(b) motion only if, "viewing the evidence in a light most favorable to the non-moving party (and in support of the jury's verdict) and drawing every legitimate inference in that party's favor, the only conclusion a reasonable jury could have reached is one in favor of the moving party." *Int'l Ground Transp. v. Mayor & City Council of Ocean City, Md.*, 475 F.3d 214, 218-19 (4th Cir. 2007). Thus, the moving party bears a "hefty burden" in establishing that the evidence is insufficient to uphold the jury's

verdict. *Price v. City of Charlotte, N.C.*, 93 F.3d 1241, 1249 (4th Cir. 1996). If reasonable minds could differ, this Court must affirm the jury's verdict. *Dennis*, 290 F.3d at 645.

B. New Trial Standard

On a motion for a new trial under Rule 59(a), the judge should set aside the verdict and order a new trial only "if he is of the opinion that [1] the verdict is against the clear weight of the evidence, or [2] is based upon evidence which is false, or [3] will result in a miscarriage of justice, even though there may be substantial evidence which would prevent the direction of a verdict." *Atlas Food Sys. & Servs., Inc. v. Crane Nat'l Vendors, Inc.*, 99 F.3d 587, 594 (4th Cir. 1996) (citations omitted). Further, "[t]o constitute proper grounds for granting a new trial, an error, defect or other act must affect the substantial rights of the parties." *Walker v. Bain*, 257 F.3d 660, 670 (6th Cir. 2001) (citing Fed. R. Civ. P. 61).

C. Invalidity Standard

A patent is presumed valid. 35 U.S.C. § 282. This presumption can only be overcome by clear and convincing evidence to the contrary. *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S.Ct 2238, 2243 (2011).

A claim is invalid as anticipated under 35 U.S.C. § 102 if *each and every element* appears in a single prior art reference. *Verdegaal Bros. Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Anticipation is a factual determination. *Koito Mfg. Co., Ltd. v. Turn–Key–Tech., LLC*, 381 F.3d 1142 (Fed. Cir. 2004).

A claim is invalid as obvious under 35 U.S.C. § 103 "if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103. "Obviousness is a question of law based on underlying factual findings: (1) the scope and content of the prior art; (2) the

differences between the claims and the prior art; (3) the level of ordinary skill in the art; and (4) objective indicia of nonobviousness." *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1360 (Fed. Cir. 2012) (citing *Graham v. John Deere Co.*, 383 U.S. 1 at 17-18 (1966)).

III. THERE IS SUBSTANTIAL EVIDENCE TO SUPPORT THE JUDGMENT OF VALIDITY

A. There is Substantial Evidence To Support The Jury's Finding That Culliss Does Not Anticipate the Asserted Claims

In their motion, the sole reference cited by Defendants for anticipation is U.S. Patent No. 6,006,222 to Culliss (DX-58), a reference the United States Patent & Trademark Office ("Patent Office") analyzed during prosecution of both of the patents in suit, and found the claims patentable thereover. *See* Trial Tr. at 1512:19-1513:12; DX-4 at IPE0002104 and PX-5 at IPE002302 (Patent Office considered Culliss); DX-4 at IPE0002120; PX-5 at IPE0002306 (Patent Office allowed the claims over the cited references, including Culliss). Dr. Carbonell, a chaired professor at Carnegie Mellon University and an expert in the field of search and information retrieval, provided additional evidence by testifying at trial to his opinion that the asserted claims are patentable over Culliss and providing a detailed analysis as to the specific claim elements absent from Culliss. Trial Tr. at 1854:23-1866:7; 1870:21-1872:9. The jury's findings were consistent with Dr. Carbonell's analysis, and the Patent Office's findings.

Defendants acknowledge that they were obligated to prove anticipation by clear and convincing evidence. They also acknowledge that the jury rejected their invalidity evidence, and instead adopted the views of Dr. Carbonell. Their sole argument is that no reasonable fact-finder could agree with Dr. Carbonell or the Patent Office. But, they are unable to identify any evidentiary omission on any fact the jury determined with respect to Culliss. They simply disagree. As a result, Defendants' motion is fundamentally at odds with the Rule 50(b) standard. In considering a motion for judgment as a matter of law under Rule 50(b), this Court views the

evidence "in a light most favorable to the non-moving party (and in support of the jury's verdict)" and "may not weigh the evidence or assess the credibility of the witnesses." *Pitrolo v. County of Buncombe, N.C.*, 407 Fed. Appx. 657, 659 (4th Cir. 2011); *see also Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1364-65 (Fed. Cir. 2012) (noting that "[b]ecause the jury concluded that [the defendant] failed to establish that the patents were obvious, [the Court] must assume that the jury found [the plaintiff's] expert to be credible and persuasive on this point" and that it was error for the District Court to "impermissibly re-weigh[] witness credibility"). Because there was overwhelming and extensive evidence for a reasonable jury to conclude that the patents in suit were valid over Culliss, Defendants are unable meet their high clear and convincing anticipation burden in the Rule 50(b) context.

1. Culliss Overview

The Culliss patent has a single figure, reproduced below:



Culliss discloses a system for ranking items using feedback from users. DX-58 at FIG. 1 (steps 30-60); 4:20-49; *see* Trial Tr. at 1859:24-1861:3. Specifically, users search for items (step 10) and receive search results (step 20). Users select items returned as search results (step 30) and

those selections are used to increment a score for the item (step 40). Items that are selected more will move up in the rankings in subsequent searches (steps 50-60).

2. Defendants Mischaracterize The Jury's Findings on Culliss

Defendants note that the jury found that Culliss lacks "any content analysis and filtering for relevance to the query." Defendants' Brief at 5-6 (quoting verdict form). But, the jury *further* and more specifically found that Culliss "did not disclose either limitation (b) . . . or (d) . . . of independent claims 10 and 25" and "did not disclose limitation (c) of the independent claims 1 and 26." D.I. 789 at 8, 9. These are the same claim elements that Dr. Carbonell described as absent from Culliss. Trial Tr. at 1855:7-13; 1883:16-20. Defendants do not mention, much less address, these claim elements in their brief. Defendants thus have failed to prove that no reasonable juror could find these specific claim elements to be absent from Culliss. This omission, by itself, is fatal to Defendants' motion.

3. There is substantial evidence to support the jury's finding that Culliss fails to disclose limitation (b) of claims 10 and 25 of the '420 patent ("a content-based filter system . . . filtering [each] informon for relevance to the query") because Culliss does not analyze an item's content for relevance to the query.

There is substantial evidence to support the jury's conclusion that Culliss fails to disclose limitation (b) of claims 10 and 25 of the '420 patent: "a content-based filter system . . . filtering

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¹ Defendants' "Overview of Culliss" section repeats a "Paris Museum Vacations" example that is not found in either the specification or figures of Culliss, but was instead concocted by Dr. Ungar. Trial Tr. at 1512:3-6.

² Defendants' brief addresses only the general concepts of "content analysis" and "filtering" and does so in isolation of how content analysis and filtering are used in the claims. Proving invalidity requires a comparison of the prior art to each and every element of the claims, and distilling an invention down to the "gist" or "thrust" of an invention is improper. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1548 (Fed. Cir. 1983). While I/P Engine's technical experts referenced these concepts in the claims using short forms ("content analysis," "filtering," "collaborative," etc.), they tied their analysis to the actual claim language. *See, e.g.,* Trial Tr. at 1875:12-22 (the claim limitations require "tight integration" in a single filtering step).

[each] informon for relevance to the query." This claim element requires the filter to be "content-based" and consider an item's "relevance to the query." *See* Trial Tr. at 1853:12-16.

I/P Engine presented evidence that Culliss does not perform a "content-based" analysis because it is a purely collaborative search system—it uses feedback in the form of user clicks to decide how to rank items. Trial Tr. at 1855:25-1856:4. Culliss, for example, describes that the "object of the present invention is to monitor the searching activity to organize articles in accordance with the searching activity of one or more users." DX-58 2:62-64. "As users enter search queries and select articles, the scores are altered" and "[t]he scores are then used in subsequent searches to organize the articles that match a search query." DX-58, Abstract, FIG. 1 (altering scores in index "according to selections made by first user"); see Trial Tr. at 1857:22-1858:5.

Dr. Carbonell presented Culliss's description of a collaborative ranking to the jury, and explained how the rating table is constructed from the user feedback. Trial Tr. at 1856:12-25. Dr. Carbonell testified that, based on the description at column 5, lines 57-64, the "rating table is purely collaborative." Trial Tr. at 1856:23-25. And, Dr. Carbonell explained that the search process described by Culliss "does not take into account the content of the article at all. It takes into account the search terms and it takes into account the popularity of the articles." Trial Tr. at 1858:6-11 (emphasis added). This evidence is sufficient basis for a reasonable juror to conclude that Culliss did not disclose limitation (b) of claims 10 and 25 of the '420 patent.

Defendants argue (at 6-7) that Culliss discloses a content analysis in the "initialization" step. Dr. Carbonell addressed this assertion, explaining that "[i]nitialization means before you start, before the system starts to function you can have some initial values." Trial Tr. at 1858:16-20. Dr. Carbonell distinguished initialization from the actual operation of the claimed invention,

and explained that, while initialization may consider content, "[t]he initial operation of the system is purely collaborative, pure profile, pure popularity-based system, and that's what governs." Trial Tr. at 1859:2-21 ("During the operational phase it will be purely collaborative."). Since Culliss does not use a content analysis in the context of the claims (i.e., in operation when considering an item's relevance to the query) it cannot meet this claim step requiring "a content-based filter system . . . filtering [each] informon for relevance to the query." When prompted, on cross-examination, to agree with Dr. Ungar's view that the "content-based initialization never goes away, correct?" Dr. Carbonell disagreed, explaining that "from an engineering perspective, the content goes away" and that it "doesn't have any effect." Trial Tr. at 1932:11-1933:1. Dr. Carbonell thus refuted Defendants' assertion that Culliss contained content analysis sufficient to meet the claim element. Dr. Carbonell's testimony regarding the Culliss disclosure provided ample evidence for the jury to conclude that Culliss failed to disclose the content-based filtering aspect of the claims, especially when viewing all facts in a light most favorable to I/P Engine and considering that Defendants bore the very high "clear and convincing" burden of proof on this issue.

4. There is substantial evidence that Culliss fails to disclose limitation (b) of claims 10 and 25 of the '420 patent ("a content-based filter system . . . filtering [each] informon for relevance to the query") because Culliss does not disclose any "filtering" of items based on their content.

I/P Engine also presented substantial evidence of a second *independent* reason that Culliss fails to disclose "a content-based filter system . . . filtering [each] informon for relevance to the query." This claim element requires a "filter" that is based at least in part on content, and the evidence shows that Culliss fails to disclose a content-based "filter."

I/P Engine presented evidence that Culliss describes a system for *ranking* items, not *filtering* them. *See* DX-58 at FIG. 1 ("Present Articles . . . Ranked by Scores in Index); Trial Tr.

at 1861:18-21 ("The main part . . . discloses only ranking"). After Culliss compiles user clicks and translates them into scores, the system "then organize[s] or rank[s] the articles by [comparing scores]." DX-58 at 5:66-67. Culliss does not describe filtering out items based on the scores. *See* Trial Tr. at 1860:25-1861:3 ("The last step . . . when [Culliss] presents the article, he presents it in ranked order, so he's disclosing ranking and not filtering.").

Defendants point to a separate "add-on part" to the Culliss system as disclosing "filtering." But, this part does not use the same type of key term scores relied upon by Defendants as meeting the content and collaborative claim features. *See* Trial Tr. at 1862:10-1863:25. The add-on part is what Defendants refer to as the "X-rated filtering embodiment" and Culliss describes it as a way to screen for adult content. DX-58 at 10:1-5. Defendants wrongly state that "Dr. Carbonell's only argument against this X-rated filtering embodiment is to say that this embodiment would not work well in practice." Dr. Carbonell actually gave two reasons that the X-rated embodiment does not disclose the claimed feature: "First of all, it is not content-based filtering and, second, it's not even a workable filtering." Trial Tr. at 1862:16-18. As discussed below, each of these reasons provides an independent and sufficient basis for a reasonable juror to conclude that the claim element is not met by Culliss.

First, the claims require that the filtering must be "content-based filtering." In the "X-rated filtering" add-on part, however, the system does not perform an analysis of the content of an item at all – the scores in this part are *entirely* based on user feedback. Trial Tr. at 1863:12-25. In other words, Culliss does not analyze the actual *content* of the item to determine if it is X-rated or G-rated; instead, that determination is made using only user feedback. *Id*.

³ Both Dr. Carbonell and Defendants' own witnesses agree technical differences exist between ranking and filtering. *See* Trial Tr. at 1511:18-21 (Dr. Ungar Testimony); 1846:17-1848:11 (Dr. Carbonell Testimony); Holt Depo. Tr. at 249:22-250:10 (played on Oct. 18, 2012).

Second, Dr. Carbonell explained that this X-rated embodiment was an attempt to come up with a way of rating based on user feedback, but "it does not work." Trial Tr. at 1864:12-17. Dr. Carbonell walked through the example table in Culliss to show that, even in Culliss' own example, the X-rated embodiment would not result in the filtering of adult content at all, and that this embodiment "does not work. It does not provide what Culliss wishes." Trial Tr. at 1863:12-1864:17. The jury therefore had substantial evidence on which to conclude that the disclosure in Culliss failed to anticipate "filtering" because Culliss does not adequately teach how to make and use the filter required by the asserted claims—that is, a "content-based filter" for filtering items "for relevance to the query." *See Elan Pharm. Inc., v. Mayo Found. for Med. Educ. & Reas*, 346 F.3d 1051, 1054 (a patent claim "cannot be anticipated by a prior art reference if the allegedly anticipatory disclosures cited as prior art are not enabled.") (citations omitted).⁴

5. There is substantial evidence that Culliss fails to disclose limitation (d) of claims 10 and 25 of the '420 patent ("the filter system combining pertaining feedback data... with the content profile data in filtering each informon for relevance to the query")

Element (d) of claims 10 and 25 of the '420 patent require a "filter system combining pertaining feedback data . . . with the content profile data in filtering each informon for relevance to the query." As described above, I/P Engine presented substantial evidence that Culliss does not disclose any filtering of items using content profile data. *See supra* Sections III.A.3-4.

Dr. Carbonell presented the jury with the demonstrative slide showing Dr. Ungar's evidence of disclosure for this element (DDX-3.107), and explained two deficiencies: (1) "[Dr. Ungar] claims that Culliss teaches a content profile, because of [the] initialization step that [was previously] discussed and dismissed as irrelevant"; and (2) "[Dr. Ungar] claims that [Culliss]

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⁴ The case cited by Defendants also states that anticipatory prior art must be enabled; it merely explains that the reference does not need to disclose a particular utility (or "efficacy"). *See Rasumusson v. SmithKline Beecham Corp.*, 413 F.3d 1318, 1325-26 (Fed. Cir. 2005).

discloses a filter system combining data because Culliss is talking about altering items in the index. For the life of me, I can't see how altering refers to combining or filtering. All it's doing is adding one to the collaborative score That is not combining; that is not filtering." Trial Tr. at 1864:19-1865:2-12. This testimony, combined with the earlier testimony as to Culliss's failure to disclose content-based filtering, provides ample evidence to support the jury's conclusion that this element was not present in Culliss.

6. There is substantial evidence that Culliss fails to disclose limitation (c) of claims 1 and 26 of the '664 patent (content-based filtering the combined information)

There is substantial evidence supporting the jury's conclusion that Culliss does not disclose limitation (c) of claims 1 and 26 of the '664 patent. Dr. Carbonell explained that this limitation requires "content-based filtering with respect to the query" and therefore the analysis of Culliss's failure to disclose this element was "the same analysis" as described with reference to the similar limitations of the '420 patent. Trial Tr. at 1870:8-13. As described above, there is no content-based filtering for relevance to a query disclosed in Culliss. *See supra* Sections III.A.3-4.

Limitation (c) of claims 1 and 26 of the '664 patent is the same element that the Patent Office cited as the reason for allowing the asserted claims of the '664 patent. The Patent Office, in allowing the claims, stated:

The application extends the functionality of the two patents by teaching a content-based filter system for combining information from the scanning system for a first user and information from feedback by other users, and filtering the combined information for relevance to the queries and the a first user. The prior arts searched and investigated from different domains do not fairly teach or suggest the teaching of information filtering through a combination of data from a first user and data from feedback by other users as recited in each of the independent Claims 2 and 27 [corresponding to allowed claims 1 and 26].

PX-5 at IPE0002308. Accordingly, the Patent Office, in allowing the application, noted that the prior art (including Culliss) does not disclose the step that requires filtering through a combination of data from the first user and data from feedback by other users as recited in the claim. This additional evidence supports the jury's verdict that Culliss does not invalidate the patents-in-suit.

B. There is Substantial Evidence that the Asserted Claims are Not Obvious

There is substantial evidence to support the jury's factual findings on obviousness, as well as the Court's conclusions of law based on those factual findings. As described below, there was substantial evidence to support the jury's findings that 1) the prior art, even viewed as a whole, failed to disclose certain elements of the asserted claims, 2) there were material differences between the claimed invention and the prior art, and 3) the vast majority of the secondary considerations (all 7 for the '420 patent and 6 of 7 for the '664 patent) provided additional evidence of non-obviousness. In view of those well-supported findings of fact, the Court's obviousness ruling was proper. *See Kinetic Concepts, Inc.*, 688 F.3d at 1371.

1. Scope and Content of the Prior Art

The jury found that certain elements of the asserted claims were not found in *any* prior art because (1) "the Bowman and Culliss references . . . lack any content analysis and filtering for relevance to the query" and (2) "[Defendants'] other references . . . relate to profile system[s] that do not disclose a tightly integrated search systems and could not filter information relevant to the query." This is entirely consistent with the evidence I/P Engine presented to the jury, showing that the following elements were not present in the prior art: element (d) in claims 10 and 25 of the '420 patent, element (c) of claim 1, and elements (c) and (d) of claim 26 of the '664 patent. *See, e.g.*, Trial Tr. at 1873:12-16. Each of these claim elements requires *filtering* items for *relevance to a query* using a combination of *content* and *collaborative* data, and none of the

prior art references perform such filtering. Trial Tr. at 1874:9-16. Defendants argue that the patents merely combine known elements, but this was specifically rejected by the jury's finding that these elements were absent from *all* of the prior art presented.

a. Defendants failed to offer evidence that Culliss rendered the asserted claims obvious

Defendants' argue (at 10) that the asserted claims are obvious due, in part, to the disclosure of the Culliss reference. Defendants' expert Dr. Ungar, however, conceded on cross-examination that he never provided any obviousness opinions based on Culliss:

Q. You didn't assert any obviousness in the position based on Culliss in your direct testimony, did you?

A. I did not...

Trial Tr. at 1515:1-3. Since Dr. Ungar did not express an opinion of whether Culliss made obvious the asserted claims, there is no evidence to support any finding that Culliss taught any missing claim elements, or any evidence that a combination of Culliss with another reference would render the asserted independent claims obvious. Dr. Ungar admittedly did not analyze Culliss's disclosure in view of the *Graham* factors or otherwise express an opinion regarding Culliss and obviousness. Accordingly, Defendants' unsupported reliance on Culliss to prove obviousness at this stage of the case must fail. *See Kinetic Concepts, Inc.*, 688 F.3d at 1369 (overturning District Court's obviousness ruling where "the record is devoid of any reason someone would combine [the] references").

⁵ Defendants' Brief asserts (at 10) that "one of ordinary skill could draw upon these Culliss disclosures (if necessary) in order to modify WebHound or Rose to use the search query for filtering," but this statement is wholly without support in the record.

⁶ Even if Defendants had presented evidence of a reason to modify or combine Culliss at trial, any reliance on Culliss for obviousness still fails. Dr. Carbonell explained that Culliss failed to disclose elements of each of the independent claims (*see*, *e.g*, sections III.A.1-6 above) and further testified that it would not be obvious to modify Culliss to include those features. Trial Tr. at 1872:15-18 ("My conclusions are that the asserted claims of the '420 and '664 [patents] are not

b. There is substantial evidence showing that Webhound does not render obvious the asserted claims

There is substantial evidence to support the jury's finding that WebHound (DX-49) is a profile system and does not teach or suggest the claimed filtering of items for relevance to a query. Dr. Carbonell explained, for example, that WebHound does not "teach to do anything with respect to the query. It does not process the user's immediate information need." Trial Tr. at 1879:2-6. Instead, "[WebHound] constructs a profile of a user, a profile, not a query, long-term need, long-term interest" and uses that for filtering by "compar[ing] the profile to the profile of other users." Trial Tr. at 1879:13-18.

Defendants rely on a Lycos search mentioned in WebHound as disclosing the query aspect of the claims. Dr. Carbonell, however, explained that this section does not describe the claimed filtering step that uses content and collaborative data to filter for a query because the section describes "operations where a search engine such as Lycos produces results" and "[t]hese results are then thrown over the wall to the [WebHound] system [which] then uses them as input to do its profile systems." Trial Tr. at 1880:7-18. In other words, "it's talking about putting one in front of the other for WebHound to then do its filtering on the output of a search engine." Trial Tr. at 1896:1-9 ("it does not say anywhere that [the WebHound] filtering is done with respect to the query." Trial Tr. at 1896:5-7. See also Trial Tr. 1834:9-1835:15 (further describing "over-the-wall" systems). The data about how well the content of an item matches the query is not used in the subsequent filtering step, therefore the approach does not have the advantageous effects of the claimed filtering. See Trial Tr. at 1880:16-18 ("The query itself is not even accessed by [WebHound's] method"). Accordingly, there is substantial evidence to

rendered obvious by the cited prior art, namely the [WebHound], Fab and Rose by themselves or in combination with Culliss"). Accordingly, there is sufficient evidence for a reasonable juror to conclude that the prior art, even including Culliss, fails to render the claims obvious.

support the jury's conclusion that WebHound "relate[s] to [a] profile system that do[es] not disclose a tightly integrated search system and could not filter information relevant to the query."

Defendants' expert provided no rationale for modifying WebHound or combining it with other references to cure its deficiencies, and where "the record is devoid of any reason someone would combine [the] references," there is no basis for an obviousness finding. **Tinetic**

*Concepts, Inc., 688 F.3d at 1369.** Dr. Carbonell, on the other hand, explained it would not be obvious to modify WebHound's profile system to instead filter with respect to a query because these were two entirely different fields. *See, e.g., Trial Tr. at 1838:5-6.**

c. There is substantial evidence showing that Rose does not render the asserted claims obvious

There is substantial evidence to support the jury's findings that the Rose reference (DX-34) is inapplicable because it is a profile system and does not disclose a tightly integrated search system that could filter items for relevance to a query. First, there is substantial evidence that Rose does not teach filtering because it only discloses a system for *ranking* items. Trial Tr. at 1877:3-9 ("Rose teaches ranking. It mentions ranking throughout."). Dr. Carbonell explained that Rose does not disclose any system that filters items in any way; instead, it consistently discloses a ranking system. Trial Tr. at 1877:7-9. Defendants' own witnesses testified that filtering is different from ranking. *See* Trial Tr. at 1511:18-21 (Dr. Ungar Testimony); Holt Depo. Tr. at 249:22-250:10 (played on Oct. 18, 2012). The mere mention of the word "filtering" in Rose's background section does not mean Rose discloses the claimed filtering of items for

⁷ In their brief (at 10-11), Defendants state that all elements of the claim are found in WebHound, but this statement makes no sense. If all of the asserted patent's elements were actually disclosed in WebHound, then the reference would anticipate the claims. Defendants, however, never asserted that WebHound anticipates the asserted claims, nor did their expert offer such an opinion. Trial Tr. 1493:4-8.

relevance to a query. *See* Trial Tr. at 1874:9-16. And, Defendants failed to present any reason why it would be obvious to modify the system of Rose to filter instead of rank items.

Second, there is substantial evidence that Rose does not teach the claimed filtering for relevance to the query because the Rose ranking is purely collaborative. Dr. Carbonell explained that "Rose does not teach relevance to the query" and "[i]n fact, Rose doesn't have a query, doesn't have access to a query." Trial Tr. at 1877:12-16 (referencing FIG. 7 of Rose). Instead, similar to WebHound, Rose is a "profile system focusing on long-term likes, long-term needs, long-term interests of users." While Defendants suggest the "on-line text retrieval" mentioned in Rose discloses a search, this search is disclosed in the same manner as the Lycos search in WebHound: the search merely collects items to provide an input to Rose's profile ranking system. See, e.g., Trial Tr. at 1907:6-12 (Dr. Carbonell explaining that, Rose "says there explicitly that [the ranking] can be applied to the output" or in Rose's words the "results . . . obtained from an on-line text retrieval system") (emphasis added). Accordingly, any subsequent filtering allegedly disclosed in Rose fails to filter items for "relevance to the query" because that filtering does not consider the query at all—it uses user profiles. There is therefore substantial evidence to support the Jury's conclusion that WebHound "relate[s] to [a] profile system that do[es] not disclose a tightly integrated search system and could not filter information relevant to the query."

As with the WebHound reference, Defendants' provided no rationale for modifying Rose or combining it with other references to cure its deficiencies. I/P Engine, on the other hand, presented substantial evidence as to why it would not be obvious to combine collaborative

⁸ Defendants contend only that Rose obviates (but does not anticipate) the patents-in-suit, but have not identified which elements are missing, nor why it would be obvious to modify Rose to include those elements or combine Rose with another reference disclosing that element.

profile systems such as Rose and WebHound with content searches in the manner recited in the independent claims. *See infra* Sections III.B.2-3.

d. There is substantial evidence showing that Fab does not render the asserted claims obvious

The evidence showed that Fab (DX-50) is a profile system and does not disclose a system that filters information relevant to the query. Fab is a position paper and illustrates its proposal in the following figure:

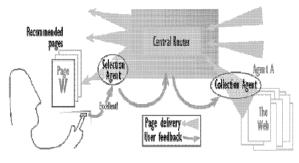


Figure 2. Overview of the Fab architecture

As Dr. Carbonell explained, Fab is a recommendation system, and it uses user feedback to determine if an item liked by one user should be shown to another. Trial Tr. at 1882:1-9. Fab does not disclose searching using queries, it "is also a profile system very similar to [Rose and WebHound]." Trial Tr. at 1882:7-9 ("Nowhere here do you see search, nowhere here do you see query, nowhere do you see relevance to the query."). Since Fab does not disclose determining if the content of an item matches a query, it cannot disclose filtering an item for relevance to a query using a combination of content and collaborative data. The jury therefore had substantial evidence to support its factual finding that the scope and content of Fab do not disclose the claimed filtering for relevance to a query.

Defendants concede (at 12) that Fab only discloses three of the independent claim elements, but like the other references asserted as obviating, describe no rationale for modifying Fab or combining it with other references to cure its deficiencies.

e. The jury's findings on scope of the prior art are supported by substantial record evidence

The obviousness section of the verdict form demonstrates that the jury found that "no prior art applies because (1) the Bowman and Culliss references identified by Defendants lack any content analysis and filtering for relevance to the query and (2) other references identified by Defendants relate to profile systems that do not disclose tightly integrated search systems and could not filter information relevant to the query." Both conclusions are well-supported by the evidence.

First, I/P Engine presented substantial evidence that the Culliss reference lacked content analysis and filtering for relevance to the query. As described above, Dr. Carbonell explained that Culliss ranks based on collaborative data (not content analysis) and that it does not filter for relevance to a query (the only purported filtering is a collaborative filter that does not consider the query). *See supra* Sections III.A.3-4.

Second, I/P Engine presented substantial evidence that the other references identified by Defendants (Fab, Rose, and WebHound) could not filter information for relevance to the query. As described above, these references were profile systems, and to the extent they included filtering at all, the filtering is a purely collaborative filter that operates on the results of a search system, not a filter that is based on relevance to a query. *See supra* Sections III.B.1-2.

Defendants belatedly object to what they describe as "Plaintiff's interrogatories" in the obviousness section of the verdict form. During trial, Defendants were provided an opportunity to object to the verdict form, but made no objections to the obviousness section. Trial Tr. at

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⁹ Their characterization of these as "Plaintiff's interrogatories" is incorrect. The Court prepared the verdict form, not I/P Engine. Pursuant to the Court's instructions during the charge conference, the parties drafted their respective portions of the verdict form summarizing their contentions. The Court incorporated into the form the proposed language of each party, subject to the Court's modifications.

1976:2-1978:22. Defendants thus waived their objections. *See Deadwyler v. Volkswagen of America, Inc.*, 884 F.2d 779, 782 (4th Cir. 1989) ("[A] party who fails to object to the form of special interrogatories cannot complain for the first time on appeal.").

Even if not waived, Defendants objections lack merit. These special interrogatories are precisely what the Supreme Court and others have prescribed as a way to ensure that the underlying factual findings for obviousness are clear. The special interrogatories were drawn directly from the Supreme Court's guidance in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966), and required that the jury make factual findings relating to (1) the scope and content of the prior art; (2) differences between the prior art and the claims; and (3) secondary considerations. See D.I. 789 at 8-10. Defendants' statement that reliance on the findings of the jury was improper because "the options presented to the jury were divorced from the *Graham* factors and thus the jury's findings on obviousness were flawed" is nonsensical – this section of the verdict form is the first *Graham* factor. Defendants' assertion that the interrogatories "do not seek the scope and content of the prior art as a whole, but instead suggest that all claim elements must be found in each prior art reference" simply mischaracterizes the verdict form. The interrogatory asks: "what was the scope and content of the prior art" and provides an option to

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¹⁰ See Microsoft Corp. v. i4i Ltd. P'ship, 131 S.Ct. 2238 (2011) (Breyer, J. concurring, joined by Scalia, J. and Alito, J.) ("Courts can help to keep the application of today's 'clear and convincing' standard within its proper legal bounds by separating factual and legal aspects of an invalidity claim . . . by using interrogatories and special verdicts to make clear which specific factual findings underlie the jury's conclusions."); Agrizap, Inc. v. Woodstream Corp., 520 F.3d 1337, 1343 (Fed. Cir. 2008) (referring to a verdict form addressing only the ultimate question of obviousness as a "black box" and noting that it does not "provide any detail into the specific fact findings made by the jury"); Peter S. Menell et al., Patent Case Management Judicial Guide, Second Edition 8.3.4 (2012) ("[T]he court can submit only the relevant Graham factors to the jury for its determination through special interrogatories, with or without an advisory verdict on the legal question of obviousness, and then determine the ultimate question of obviousness itself based on the jury's factual determinations.").

¹¹ There was no material dispute as to the level of ordinary skill in the art.

indicate that "all elements were found in the prior art." This option can be selected if the elements of the claims were found *anywhere* in the prior art, and there is no reasonable reading that requires the elements to be found in *each* piece of prior art to select this option. Had the jury agreed with Defendants that each element of the claims existed *somewhere* in the prior art, they would have selected this first option. They did not. The jury found that there were elements absent from *any* of the prior art, and that finding is supported by substantial evidence.

2. Substantial Evidence Supports the Differences Between the Asserted Claims and the Prior Art

I/P Engine presented substantial evidence on the difference between the prior art and the claims. As described above in Sections III.B.1-2, there are certain claim elements that are not present in any of the prior art references. Dr. Carbonell explained the primary difference between Messrs. Lang and Kosak's invention and the prior art as follows:

Lang and Kosak disclose a tight integration among all of the different parts. As you can see here [referencing a slide showing the language of the claims] from element (d) of claim 10 of the '420 and element (c) of claim 1 of the '664, they require all of the components, the filtering, the combining, the pertaining feedback data, the content profile and the relevance to the query to be tightly or closely integrated. In fact, they perform all of those operations, the filtering, the combining with the feedback with respect to the query. That is something that all of the cited prior art fails to do.

Trial Tr. at 1875:12-22. The "tight integration" described by Dr. Carbonell flows directly and solely from elements (d) and (c) of the claims, not from the preamble as Defendants have mistakenly argued in their brief.¹² The referenced claim elements "integrate" the features (combining content data and collaborative data, filtering, and determining relevance to a search query) because they require a *filter* to use both *content data* and *collaborative feedback* to *filter*

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¹² Defendants fail to accept that the "tight integration" is found in the body of the claim (specifically, the final element of each claim), and therefore invent an entirely irrelevant argument with respect to the preamble. Dr. Carbonell's testimony regarding "tight integration" did not rely upon or require the preamble. *See* Trial Tr. at 1876:3-11.

items for *relevance to a query*. And, it is the use of both types of data in filtering items for relevance to the query that provides the improved results. Dr. Carbonell explained that this solution is better than prior systems (such as WebHound, Rose, and Fab) using a preliminary search followed by a collaborative filter, because:

If you perform a multi-factor analysis, you combine the content, you combine the profile, you combine the collaborative and, most importantly, you combine the immediate information need as represented in the query in order to find the best possible items that satisfy a combination of all of these ingredients. That yields better results. That's why this reflects the current practice.

Trial. Tr. at 1876:3-11.

Dr. Carbonell's testimony provided substantial evidence as to why it was not obvious for the prior art to be modified to include the claimed integrated filtering step. He explained that the prior art largely consisted of systems that were divided into one of two camps: systems that "processed a query and provided immediate results based on the immediate needs of a user" and "profile systems." Trial Tr. at 1834:9-13. When prior art systems attempted to use both systems together, "[a]t best, [the] prior art suggested that the output of one could serve as the input to the other." Trial Tr. at 1834 13-15. Those systems would not use the query information when processing the results, instead they would use "long-term information desires or preferences of that user or those of other users which have very similar profiles." Trial Tr. at 1835:11-14. Dr. Carbonell described that Mssrs. Lang and Kosak's innovation was to "find a way to tightly couple, tightly integrate the two, collaborative analysis, content based analysis with respect to the query. In other words, to use the immediate information and then filter also with respect to the query, filter with respect to the immediate need, not just simply filter with respect to what they generally liked." Trial Tr. at 1835:23-1836:6.

While Dr. Carbonell provided extensive testimony regarding the differences between the prior art and the asserted claims, including reasons why it would not be obvious to combine or modify the references to account for the differences, Defendants provided no specific combinations of features from references or modifications to be made to the references. "[O]bviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR Intern. Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Accordingly, even absent Dr. Carbonell's testimony, a reasonable juror could have found Defendants' obviousness claims deficient as lacking evidence of how and why one of skill in the art would modify or combine the references.

3. Level of Ordinary Skill in the Art

The parties' experts largely agreed on the level of skill in the art. Trial Tr. at 1882:20-1883:3-5. I/P Engine presented substantial evidence that a person of ordinary skill in the art at the time of invention of the patents-in-suit would not have found the claims obvious. Dr. Carbonell testified that, in his view, "it would have been very far from obvious" for one of ordinary skill in the art to have created the missing claim elements. He said it would have "required deep skill in both camps, in the search camp and in the profile camp" and "[t]hat did not happen until some event such as the acquisition of WiseWire by Lycos." Trial Tr. at 1883:21-1884:7. Dr. Carbonell also testified that one of skill in the art at the time would not have appreciated the advantages of "taking all of the different factors into account, especially the immediate information [need and] relevance to the query." Trial Tr. at 1884:8-17. He cited an industry document showing that filtering was considered a contrasting technology to ad hoc retrieval (*i.e.*, demand search) at the time. See Trial Tr. at 1848:15-1850:24; PX-434. The lack of obviousness was also evidenced by the prior art the Defendants cited, all of which "does not

suggest performing the collaborative or the content-based analysis or the filtering with respect to the query. Not only does it not teach how, it doesn't even suggest doing so." Trial Tr. 1884:18-24.

Dr. Carbonell explained why the state of the industry at the time supported a finding of non-obviousness:

Well, first of all, the two camps were indeed separate. The camp that did the profile had no deep knowledge of how a search method worked, and the same was true the other way around. You needed somebody that was well steeped in both camps to be able to see how to do this tight integration and perform the profile and content analysis with respect to the query and the filtering also with respect to the query.

Trial Tr. at 1838:5-12. According to Dr. Carbonell, achieving the invention "required a skill that was not present by somebody of ordinary skill in the art" because a person of ordinary skill in the art at the time "certainly did not have the skill in all the different art that would have been required to perform the combination and to have invented the missing elements in the claims." Trial Tr. at 1885:15-25. In fact, Dr. Carbonell stated: "To attest to the difficulty, I was working in the area at the time, the thought occurred to me that it would be a good idea to do this and I failed to come up with an effective method." Trial Tr. at 1838:13-16. Dr. Carbonell's experience and education far exceeded one of skill in the art, and he testified that he was unable to come up with an effective solution.

Additionally, Dr. Carbonell testified that the superior results achieved by the systems of the asserted claims would not have been predictable. Trial Tr. at 1885:4-8 ("it definitely would not have been predictable" because "[those of ordinary skill in the art] did not know how to do it and they did not know what the outcome of doing it would have been").

4. The Jury's Factual Findings Regarding Secondary Considerations Are Supported By The Evidence

a. Commercial Success

There is substantial evidence to support the jury's conclusion that the patented invention has proven a commercial success. Dr. Carbonell testified that "the commercial success of modern search engines, Google included, that use the teachings of these patent claims is strong evidence that the commercial success criterion is met, and yet nobody else had come up with that invention at that time." Trial Tr. at 1886:19-1887:4. Defendants' only response to this evidence is that I/P Engine never presented evidence that the success of these products was due to the claimed inventions. This is incorrect. I/P Engine presented evidence that the inclusion of the infringing technology increased revenues by 20-40% for Google (see Trial Tr. at 902:11-17; PX-336 at G-IPE-0426040), and that Google itself referenced the infringing Quality Score formula as the source of its high quality advertising results (see PX-021 ("Quality Score helps ensure that only the most relevant ads appear "); see also PX-112). Google's engineer, Mr. Cook, testified that at least one of the filtering steps accused of infringement could not be removed from the Google system. Cook Depo. Tr. at 131:18-132:5 (played on Oct. 23, 2012). Accordingly, the jury's conclusion that the infringing product was a commercial success due to its use of the claimed invention was reasonable, and the jury's finding of commercial success of the claimed invention is supported by the record evidence.

b. Long-Felt But Unmet Needs

There is substantial evidence to support the jury's conclusion that there were long felt but unmet needs. Dr. Carbonell stated that, in this instance, the long felt need for better search results existed and was "recognized even in the cited prior art" but when those in the art "talked about possible combining [of search and profile systems] they came up with the over-the-wall

method, the output of one becomes the input of the other." Trial Tr. at 1887:13-17. He concluded that "those needs were there, but they were not met" by the existing systems. Trial Tr. at 1887:16-17. While Defendants claim that prior art references already solved the problem of combining content and collaborative filtering, this ignores the substantial evidence that the prior art solutions did not include a single filtering step that combined content and collaborative data to filter items for relevance to a query, as described in the claims. This evidence demonstrates that the prior art did not meet the needs (better search results) because it failed to achieve the superior results obtained through this integrated filtering described in the claims.

c. Failure of Others

There is substantial evidence to support the jury's conclusion, for the '420 patent, that there were unsuccessful attempts by others to find the solution that is provided by the claimed invention. Dr. Carbonell testified that "others have tried, the prior art have tried" and "I myself have tried and did not succeed in arriving at this kind of tight integration in performing all these operations with respect to the query, with respect to the immediate information need." Trial Tr. at 1888:7-11; *see also* Trial Tr. at 1887:8-17 ("those needs were there, but they were not met"). Dr. Carbonell's testimony thus covered the failure of the prior art, and also evidenced his own personal unsuccessful attempt to arrive at the solution patented by Ken Lang and Don Kosak. This provides substantial support for the jury's finding that others had unsuccessfully attempted to find the solution provided by the claimed invention.

Defendants focus on the alleged inconsistency in the jury's finding of this secondary consideration for the '420 patent but not the '664 patent. The '664 patent claims, however, have less elements than the '420 patent claims, and do not require the "scanning system" described in the '420 patent. In any event, the alleged inconsistency is of little consequence. The jury's rejection of invalidity of the '420 patent finds sufficient record support and should be sustained.

The '664 finding of no failure of others may not provide objective indications of non-obviousness on that point, but it is not critical to the Court's judgment, given the overwhelming evidence found in the other *Graham* factors.

d. Copying

There is evidence in the record for the jury to conclude that the patents in suit had been copied by others. The jury heard evidence that the '420 patent was cited by the Patent Office in response to a 2003 Google patent application. Trial Tr. 251:4-15; PX-416. The jury also heard evidence that Google's system, once developed, incorporated all features of the asserted claims. *See, e.g.*, Trial Tr. at 614:21-619:19. Google, on the other hand, did not present any evidence about how Smart Ads was developed, and in fact Google did not present a single witness with knowledge as to how the infringing system was initially developed. Based on this record, there was sufficient evidence for the jury to conclude that the invention had been copied by Google.

Defendants' argument is largely that I/P Engine should have been precluded from introducing the evidence supporting the copying conclusion. Arguments going to the admissibility of evidence, however, are not relevant to the Rule 50(b) determination where the question is whether the jury's verdict finds support in evidence.

e. Unexpected and Superior Results

There is substantial evidence to support the jury's finding that the patented invention had unexpected and superior results. Dr. Carbonell testified that the results achieved by the claimed invention were "surprising, in the sense they are better." Trial Tr. at 1836:20-1837:21. Prior art systems used a sequential process where a search was followed by a collaborative filtering. Dr. Carbonell explained that, when using that approach, "you miss some things" because when you are filtering in a second pass you "are only filtering those things that are actually provided, not the ones that you missed that may have proved better by the combination of all the criteria."

Trial Tr. at 1836:15-19. In other words, the combined filtering is superior because the sequential system may miss items at the first stage and those items would never reach the second stage, where they may have been found to be very relevant. Dr. Carbonell's testimony therefore supports the jury's findings that the patented invention had unexpected and superior results.

f. Acceptance by others

There was substantial evidence to support the jury's conclusion that the claimed inventions were accepted by others in the field (shown by praise from others in the field or from the licensing of the claimed invention). One of the inventors, Mr. Lang, testified that there were 165 other patents that cited the '420 patent. Trial Tr. at 252:24-253:12. In fact, I/P Engine presented evidence that one of Google's own patents cites the '420 patent. *See* Trial Tr. at 251:4-251:15; PX-416. These citations indicate that other patentees recognized Ken Lang and Don Kosak's work and likely used concepts from that work to build upon in their own inventions. This evidence provides sufficient evidence for the jury to conclude that the claimed inventions had been accepted by others in the field.

g. Independent Invention

For the '664 patent, the jury found there to be independent invention by others before or at about the same time as the named inventor. This single secondary consideration finding, which is likely due to the later date of the '664 patent, cannot overtake the other overwhelming evidence of non-obviousness discussed above (*i.e.*, certain elements not present in *any* of the prior art and five other secondary considerations found).

Defendants state that the jury should have also found independent invention of the '420 patent, because "the evidence introduced did not support any distinction between the two patents on this basis." This is incorrect. Dr. Frieder testified that the '420 patent included additional features not present in the '664 patent, including the "scanning system" limitation. *See* Trial Tr.

at 602:8-603:8. In addition, the '420 patent was filed nearly three years before the '664 was filed as a continuation in part. Accordingly, the jury's findings are not inconsistent; Defendants merely do not agree with one of the two findings.

C. Defendants are Not Entitled to a New Trial on Invalidity

Defendants' alternative proposal of a new trial due to the exclusion of evidence or because of the jury's findings on secondary considerations is without merit. The exclusion of the non-final Patent Office rejection was proper (and would be harmless error even assuming, *arguendo*, it was improper), and the jury's well-supported findings on secondary considerations are supported by the evidence of record and provide ample basis for the Court's ruling that the asserted claims are not obvious.

1. The Court's Exclusion of The PTO's Interim Finding Was Proper

The Court properly excluded demonstrative exhibit DDX 3.35, which showed a Non-Final Office Action that included a provisional double-patenting rejection from the prosecution history of the '420 patent. This evidence is not relevant, misleading, and highly prejudicial.

First, the evidence was properly excluded under Fed. R. Evid. 402 as not relevant. The provisional double patenting rejection was *not* a *final decision* by the Patent Office. Numerous courts have found that non-final Patent Office actions (such as in the context of Reexamination), are not admissible under Fed. R. Evid. 402 for two reasons: (1) the non-final status means it does not have probative value on the issue of invalidity, ¹³ and (2) the standard of proving invalidity

¹³ See, e.g., Transamerica Life Ins. Co. v. Lincoln Nat. Life Ins. Co., 597 F. Supp. 2d 897, 907 (N.D. Iowa 2009) ("evidence of incomplete reexamination proceedings is not admissible to prove invalidity of a patent, because it has no probative value on that issue."); see also Callaway Golf Co. v. Acushnet Co., 576 F.3d 1331, 1343 (Fed. Cir. 2009) (stating that non-final reexamination determinations "of little relevance to the jury's independent deliberations on the factual issues underlying the question of obviousness" in contrast to the risk of jury confusion)

(clear and convincing evidence) is completely different than the standard for conclusions of examiners.¹⁴ Both apply here.

Second, the evidence was properly excluded under Fed. R. Evid. 403 as having a "probative value that is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury." Defendants wanted to show the jury the Non-Final Office Action for the misleading purpose of implying that the Patent Office found the patents invalid, when exactly the opposite was true. Trial Tr. at 1264:1-1268:27. It is well established that a terminal disclaimer may be filed in response to a double-patenting rejection, and the terminal disclaimer dispenses of the rejection according to its statutory function *without admitting the propriety of the rejection.*¹⁵ Introduction of the provisional rejection would have required instruction on the legal effect of a subsequent terminal disclaimer obviating that rejection, and would have been likely to confuse and mislead the jury to I/P Engine's prejudice. Moreover, that single piece of weak purported obviousness evidence (to the extent it would have been considered evidence at all by the jury) could not overcome the significant amount of evidence introduced by I/P Engine regarding the non-obviousness of the claims. *See* Section III.B.

Defendants' argument that I/P Engine "opened the door" to evidence of the provisional rejection is without merit. I/P Engine introduced the Notice of Allowance for the '664 patent.

Trial Tr. at 1487:11-1490:10. This was the final determination of allowability by the Patent

¹⁴ See, e.g., Tesco Corp. v. Weatherford Int'l, Inc., 2010 U.S. Dist. LEXIS 121054 at *25 (S.D. Tex., Sep. 27, 2010).

¹⁵ See Ventana Med. Sys., Inc. v. Biogenex Labs, Inc., 473 F.3d 1173, 1184 n. 4 (Fed. Cir. 2006) ("[t]he filing of a terminal disclaimer simply serves the statutory function of removing the rejection of double patenting, and raises neither presumption nor estoppel on the merits of the rejection") (quotation omitted); Quad Envtl. Techs. Corp. v. Union Sanitary Dist. 946 F.2d 870, 874 (Fed. Cir. 1991)("a terminal disclaimer is of circumscribed availability and effect. It is not an admission of obviousness of the later-filed claimed invention in light of the earlier-filed disclosures, for that is not the basis of the disclaimer").

Office, which was properly used to show the conclusions reached by the patent office at the end of prosecution. It was also shown as a direct rebuttal to Defendants showing the Notice of Allowance for the '420 patent to the jury. Trial Tr. at 1191:5-17. Accordingly, there is clear relevance and no likelihood of confusion or prejudice. The proper use of these final actions does not open the door to the use of non-final determinations.

Finally, any improper exclusion of DDX 3.35 would be harmless error. *See* Fed. R. Civ. P. 61. The Court expressly permitted Defendants to show the terminal disclaimer and place it in context using their expert, but they chose not to. Any incremental prejudice through exclusion of the Non-Final Office Action certainly does not require a new trial.

2. The Jury's Findings Related to Obviousness Are Wholly Supported

As described above, each of the jury's factual findings on obviousness is supported by more than substantial record evidence. *See* Section III.B. Defendants argue that the questions presented to the jury relating to the scope of the prior art and the differences between the prior art rely on an incorrect standard, yet those instructions directly incorporate the language of *Graham* and rigidly follow its structure of analysis. Defendants also waived any objection to the language of the verdict form.

Defendants' objections to the introduction of evidence that supported the jury's finding on the secondary consideration of copying are misguided. First, I/P Engine did not argue that Google copied the invention, and therefore did not contravene the Court's order. The portions of the opening and closing statements cited by Defendants merely state uncontroverted facts that were proven at trial: Google did not present any documents to explain how the system was developed, there was no Google development story, and the '420 patent was cited on one of

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¹⁶ I/P Engine of course did not object to Defendants' use of this final determination.

Google's patents prior to development of the infringing system.¹⁷ Moreover, the Court's order was directed to precluding arguments related to copying for the purposes of willfulness, not to precluding evidence of secondary considerations. See D.I. 682 at 2-3; D.I. 705 at 7. Willfulness was not argued and was not at issue during trial, but secondary considerations were. The record provided evidence to support a factual finding of copying, and the jury so found.

IV. CONCLUSION

The Court should deny Defendants Rule 50(b) motion for judgment as a matter of law on invalidity and Defendants motion for new trial on invalidity.

Dated: January 25, 2013 By: /s/ Jeffrey K. Sherwood

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¹⁷ Defendants did not object to the statements in closing at trial, and have waived any objection as to those statements.

CERTIFICATE OF SERVICE

I hereby certify that on this 25th day of January, 2013, the foregoing **OPPOSITION TO**

DEFENDANTS' RENEWED MOTION FOR JUDGMENT AS A MATTER OF LAW ON

INVALIDITY OR NEW TRIAL, was served via the Court's CM/ECF system, on the

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