### UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA NORFOLK DIVISION

I/P ENGINE, INC. Plaintiff,

v.

Civil Action No. 2:11-cv-512

AOL, INC., et al., Defendants.

#### **<u>REPLY BRIEF IN SUPPORT OF DEFENDANTS' RENEWED MOTION FOR</u>** JUDGMENT AS A MATTER OF LAW ON INVALIDITY OR NEW TRIAL

As Plaintiff's Opposition confirms, there are only three basic ways in which Plaintiff seeks to distinguish the asserted claims from the Culliss reference (on anticipation) or the other prior art references (on obviousness). *First*, Plaintiff cites its expert's testimony that Culliss does not engage in content analysis because the content portion of Culliss' scores will supposedly get "swamped" or diluted to insignificance by the feedback portion. This allegation is simply irrelevant. Even if the content portion of Culliss' scores was diluted to insignificance, <u>it still</u> exists, and that is all that is required for anticipation as a matter of law.

*Second*, Plaintiff argues that Culliss does not "filter" for relevance to the query because Culliss' filtering is supposedly not enabled. But <u>Plaintiff</u> bears the burden of proving that Culliss' filtering is not enabled, and Plaintiff has failed to carry that burden. Plaintiff merely cites its expert's testimony about two supposed deficiencies with Culliss' filtering – one of which has <u>no</u> support in Culliss itself and the other of which shows only that Culliss' filtering could be imperfect. But perfect efficacy is not required to show enablement as a matter of law.

*Third*, Plaintiff's only argument for distinguishing the asserted claims from Defendants' obviousness references is to say that Defendants' references did not use the search query when filtering. In the words of Plaintiff's expert, these references "tossed" search <u>results</u> "over the wall" to a content/collaborative filter, but did not toss the search <u>query</u> over the wall. Thus, even

under Plaintiff's view of the art, the only obviousness question posed for the Court is whether it would be obvious to toss the search <u>query</u> over the wall along with the search <u>results</u>.<sup>1</sup> Obviousness is a question of law, and (as explained below) it would be utterly obvious to toss the search query over the wall – *i.e.*, use the search query when filtering. Indeed, the Asserted Patents themselves acknowledge that conventional prior art search engines used the query when filtering. (DX-001 at 2:15-18.) Thus, using the query when filtering is not innovative at all.

## I. THERE WAS NO LEGALLY SUFFICIENT BASIS TO FIND THAT CULLISS FAILS TO ANTICIPATE THE ASSERTED CLAIMS

# A. Plaintiff's Arguments for Distinguishing Culliss Rest on Dr. Carbonell's Unsupported Opinions, Rather Than the Text of Culliss Itself

With respect to Culliss, Defendants' Rule 50(b) Motion and Plaintiff's Opposition show a consistent pattern – Defendants rely on the text of Culliss, while Plaintiff relies almost exclusively on the unsupported opinions of its validity expert, Dr. Carbonell. For example, Plaintiff argues that Culliss does not disclose content analysis because Dr. Carbonell says that it does not. (Opp., 7 ("Dr. Carbonell thus refuted Defendants' assertion that Culliss contained content analysis sufficient to meet the claim element.")) Similarly, Plaintiff argues that Culliss' filtering disclosure will not work because Dr. Carbonell says that it will not. (*Id.*, 8 (quoting Dr. Carbonell's testimony).) As discussed below, however, Dr. Carbonell's testimony on these points runs contrary to the plain text of Culliss itself. Even at the JMOL stage, Plaintiff cannot distinguish Culliss based on bare expert testimony that defies the plain language of Culliss

<sup>&</sup>lt;sup>1</sup> The technique of using the search query when filtering is reflected in the independent claims of the '420 Patent (which require filtering "for relevance to the query") and the independent claims of the '664 Patent (which require receiving information found to be relevant "to the query" by other users). Plaintiff does not dispute that Defendants' obviousness references disclose all the <u>dependent</u> claims limitations, nor does Plaintiff dispute that all the dependent claim limitations are also found in Culliss.

itself.<sup>2</sup> See PharmaStem Therapeutics, Inc. v. ViaCell, Inc., 491 F.3d 1342, 1361 (Fed. Cir. 2007) (directing JMOL of invalidity, despite expert testimony to the contrary, where the expert testimony "cannot be reconciled . . . with the prior art references themselves")

# B. The Only Claim Elements Allegedly Missing From Culliss Were "Content Analysis" and "Filtering" for Relevance to the Query

Plaintiff argues that Defendants' Rule 50(b) Motion does not address the actual claim limitations that the jury found lacking from Culliss. Plaintiff argues that Defendants instead focus on whether Culliss discloses "content analysis" and "filtering for relevance to the query." (*See* Opp., 5.) As an initial matter, Defendants' Rule 50(b) Motion expressly incorporated their Rule 50(a) Motion, which provided an element-by-element analysis of how Culliss discloses <u>all</u> claim elements. (D.N. 776, 3-11; D.N. 821, 4.) While the Rule 50(b) Motion itself did focus on "content analysis" and "filtering," that is because Dr. Carbonell stated at trial that these are the two things allegedly absent from Culliss:

Q: Now, on your direct examination I think you said that you thought Culliss didn't disclose filtering and didn't disclose content-based analysis; is that right?

A: That's right.

(Trial Tr. 1924:10-13.) Right after this exchange, Plaintiff's counsel told the Court that Dr. Carbonell "talked about <u>two</u> things that were missing <u>and he didn't talk about anything else in</u> <u>the reference</u>." (*Id.*, 1924:17-18.) To be sure, Dr. Carbonell opined that Culliss' lack of "content analysis" and "filtering" rendered several claim limitations unmet – but his only stated basis to

<sup>&</sup>lt;sup>2</sup> Plaintiff cites *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342 (Fed. Cir. 2012) for the proposition that Dr. Carbonell's testimony must be accepted as credible simply because the jury adopted his conclusions. (*See* Opp., 4.) But *Kinetic* actually held that plaintiff's expert testimony supported a verdict of non-obviousness given that the expert's testimony was "consistent with the [prior art] reference" and corroborated by statements by the prior art inventor. *See Kinetic*, 688 F.3d at 1363, 1364-65. *Kinetic* nowhere suggested that expert testimony which <u>defied</u> the plain text of a prior art reference would be sufficient to validate a patent over that reference.

find these limitations unmet was Culliss' alleged lack of content analysis and filtering. Thus, if Culliss <u>does</u> disclose content analysis and filtering, then Dr. Carbonell has provided no other rationale for distinguishing Culliss from the asserted claims.

#### C. Culliss Discloses Content Analysis

As explained in Defendants' Opening Brief, Culliss discloses content analysis because an article's key term score in Culliss can be initially set by counting how often terms from the user's query appear in the article. (DX-058, 14:34-36.) These initial content-based scores are then altered based on user feedback (*id.*, 4:37-49), so that the final scores are a combination of the initial content-based analysis and the subsequent feedback-based adjustments.

Neither Plaintiff nor Dr. Carbonell disputes this basic functionality of Culliss. Dr. Carbonell merely opined that Culliss' initial content score plays "virtually" no role when it comes time to serve articles based on their scores (Trial Tr. 1859:2-4) because the feedback-based adjustments allegedly dilute the initial content-based portion of the scores to insignificance. Dr. Carbonell explained that the initial content-based score gets "swamped" by the feedback-based adjustments (*id.*, 1932:14-15), so that "for all practical purposes, [Culliss] is not content-based filtering." (*Id.*, 1932:25-1933:2 (emphasis added).) Dr. Carbonell gave the specific hypothetical example of an article whose score is initialized at 1 based on content and then clicked on 1 million times. (*Id.* 1932:12-21.) According to Dr. Carbonell, the initial content-based score simply "doesn't matter" in this situation. (*Id.*, 1932:15.)

However, Dr. Carbonell's position that the content portion of Culliss' scores gets diluted to insignificance and thus "doesn't matter" is not a legally valid basis to find that the content portion is <u>absent</u> from Culliss. As the Federal Circuit held in *SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1345 (Fed. Cir. 2005), a prior art reference will be deemed to contain a claimed compound for purposes of anticipation even if the reference contains only

"trace amounts" of the compound. Here, even if the content-based portion of Culliss' scores could be diluted and "swamped" by the feedback-based adjustments, the final scores will still contain at least "trace amounts" of the initial content analysis. Under *SmithKline*, this compels a finding that the content analysis is still present for purposes of anticipation.

Plaintiff does not directly dispute this point. Plaintiff does not even address *SmithKline*, despite Defendants' reliance on *SmithKline* in their Opening Brief. Instead, Plaintiff cites Dr. Carbonell's testimony that Culliss' content analysis occurs during a preliminary "initialization" stage of Culliss' system. As Plaintiff states: "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." (Opp., 6-7 (Plaintiff's emphasis).)

But the fact that Culliss' content scores are generated at an "initialization" stage is irrelevant, because these initial content-based scores are the same scores that are then altered by feedback during the operation of Culliss' system. This is precisely how Culliss' scores come to embody the claimed combination of content and feedback. (*See* DX-058, 14:34-36 (scores initialized based on content); *id.*, 4:37-49 (scores altered based on feedback).) Therefore, according to Dr. Carbonell's own testimony, the score for a given article in Culliss consists of the article's initial content score plus any feedback-based adjustments to this score generated from user selections of the article. (Trial Tr. 1858:18-1859:17.)

Thus, Dr. Carbonell's testimony provided no sufficient basis to find that Culliss lacks content analysis. Even if the jury credited Dr. Carbonell's position that Culliss' content analysis

occurs at an initialization stage and then gets diluted to insignificance, that is insufficient as a matter of law to conclude that the requisite content analysis is <u>absent</u> from Culliss.<sup>3</sup>

### D. Culliss Discloses "Filtering" for Relevance to the Query

As explained in Defendants' Opening Brief, Culliss discloses filtering for relevance to the query in the embodiment where articles' key terms include "rating" key terms like X-rated, G-rated, etc. (DX-058, 11:8-12:41.) Like the other key term scores, the rating key term scores can be initially set by content analysis (*id.*, 14:23-25) and then altered by user feedback. (*Id.*, 11:47-51.) And these rating key term scores are used to filter the articles for relevance to the user's query: For example, articles with an X-rated key term score above a certain threshold will be filtered out and not displayed to searchers who entered G-rated queries. (*Id.*, 12:1-5.)<sup>4</sup>

In arguing that this embodiment does not disclose the requisite "content-based filtering," Plaintiff cites Dr. Carbonell's testimony for the proposition that "[i]n the 'X-rated filtering' addon part, [] 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." (Opp., 8.) But this defies the plain language of Culliss, which states that the rating key term scores are initialized by content analysis just like every other key term score: "Initially, the key terms, category key terms <u>and rating key terms</u> may be associated with words or other information in the article . . . . For example, the scores can be initially set to correspond with the frequency of the term occurrence in the article." (DX-058,

<sup>&</sup>lt;sup>3</sup> Plaintiff's invalidity position is also inconsistent with its infringement position. For invalidity, Plaintiff argues that Culliss' content scores are irrelevant because they might be only a very small portion of the overall scores given to Culliss' articles. But for infringement, Plaintiff argues that Google meets the "content" limitations by merely using content-based templates to look up corresponding feedback scores – even though the scores themselves are generated entirely by feedback and have no content portion at all. (*See* Trial Tr. 533:1-16; 538:24-539:10.)

<sup>&</sup>lt;sup>4</sup> Culliss knows whether a given user's query is G-rated or X-rated because the system "would permit or require the user to enter a rating key term in the search query. The invention would operate in a similar manner for the rating key terms as described above for the key terms alone  $\ldots$ " (DX-058, 11:40-43.)

14:23-25, 14:34-36 (emphasis added).) Again, Plaintiff cannot distinguish Culliss based on expert testimony that defies the plain language of Culliss itself. *PharmaStem*, 491 F.3d at 1361.<sup>5</sup>

Plaintiff next argues that Culliss' X-rated filtering is not enabled because it is "not even a workable filtering." (Opp., 8.) As recounted in Defendants' Opening Brief, and as Plaintiff does not dispute in its Opposition, Dr. Carbonell gave two reasons why this X-rated filtering is supposedly not workable: (1) he said that some G-rated searchers might have to view X-rated articles before the articles could be labeled as X-rated and filtered out of subsequent G-rated search results (Trial Tr. 1864:8-11); and (2) he said that Culliss may improperly label articles as X-rated just because adults like them. (*Id.*, 1863:12-1864:7.)

But Dr. Carbonell's Point #1 is legally irrelevant. The fact that some G-rated searchers might have to view X-rated articles before those articles can be filtered out of subsequent G-rated search results simply means that Culliss' X-rated filtering is not <u>perfect</u>. That does not mean that the filtering is non-enabled. *See Decca Ltd. v. United States*, 544 F.2d 1070, 1077 (Ct. Cl. 1976) ("The mere fact that the system has some drawbacks, or that under certain postulated conditions it may not work . . . does not detract from the operability of the disclosed equipment to perform its described function.").<sup>6</sup>

Meanwhile, Dr. Carbonell's Point #2 is utterly unsupported by Culliss itself. As discussed above, articles get X-rated scores in Culliss' system through a combination of two

<sup>&</sup>lt;sup>5</sup> Plaintiff states that Defendants ignored Dr. Carbonell's position that Culliss' X-rated filtering does not use content and only addressed Dr. Carbonell's position that Culliss' X-rated filtering is unworkable. (Opp., 8.) Defendants' Opening Brief focused on the "unworkability" point instead of the "no content" point because Dr. Carbonell's position that the X-rated embodiment does not use content is derivative of his position that Culliss' <u>overall</u> system does not use content. Nonetheless, as discussed above, Dr. Carbonell's position that the X-rated embodiment does not use content defies the plain language of Culliss.

<sup>&</sup>lt;sup>6</sup> By analogy, Plaintiff argued at summary judgment that the patented system might not work "perfectly," stating: "the system may not always be *perfect* at identifying a user's *exact* information need." (D.N. 427 at 20 (emphasis in original).)

factors: having X-rated terms in their content (DX-058, 14:23-25) and being clicked on by users who entered X-rated terms in their search queries. (*Id.*, 11:39-12:26.) <u>Nowhere</u> does Culliss state that an article will be deemed X-rated just because adults like the article. As noted above, Plaintiff cannot defeat invalidity JMOL by proffering expert testimony that has no support in the applicable prior art reference itself. *PharmaStem*, 491 F.3d at 1361.

Also, because Culliss is a patent, there is a presumption that Culliss <u>is</u> enabled. <u>Plaintiff</u> bears the burden of persuading the Court otherwise. *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1355 (Fed. Cir. 2003) ("[A]n accused infringer should be similarly entitled to have the district court presume the enablement of unclaimed (and claimed) material in a prior art patent," and the plaintiff bears the burden of rebutting this presumption by "present[ing] evidence of nonenablement that a trial court finds persuasive.") As stated above, Dr. Carbonell's arguments about the supposed unworkability of Culliss are far from "persuasive" and cannot carry Plaintiff's burden of proving that Culliss' filtering is so deficient as to be non-enabled.<sup>7</sup>

## E. Plaintiff Cannot Defeat Invalidity JMOL Merely Because Culliss was Before the PTO During the Prosecution of the Patent-in-Suit

At various points in its Opposition, Plaintiff references the fact that Culliss was before the PTO during prosecution of the Asserted Patents. (*See* Opp., 3, 10-11.) Of course, there are innumerable court decisions invalidating patents (at both JMOL and summary judgment) based

<sup>&</sup>lt;sup>7</sup> Plaintiff's non-enablement argument also rests on an improper legal standard. Specifically, Plaintiff argues that Culliss is non-enabled "because Culliss does not adequately teach how to make and use the filter required by the asserted claims." (Opp., 9.) But a prior art reference can be enabled for anticipation purposes even if it is not adequately described for one to use it. *Rasmusson v. SmithKline Beecham Corp.*, 413 F.3d 1318, 1325-26 (Fed. Cir. 2005). "The reason is that section 112 provides that the specification must enable one skilled in the art to 'use' the invention <u>whereas [section] 102 makes no such requirement as to an anticipatory</u> <u>disclosure.</u>" *Id.* at 1325 (emphasis added). Thus, even if there was any factual support (which there is not) for Dr. Carbonell's position that Culliss' X-rated filtering is so flawed as to be unusable, this filtering is still adequate for anticipation.

on prior art that was before the PTO during prosecution.<sup>8</sup> Indeed, "there is no heightened burden of proof when a reference was previously considered by the PTO." *Sciele Pharma Inc. v. Lupin Ltd.*, 684 F.3d 1253, 1260 (Fed. Cir. 2012). Thus, Plaintiff cannot defeat JMOL merely by arguing that Culliss was before the PTO during prosecution.

This is particularly true given that Culliss appears only in a list of references considered by the PTO; there is no explanation in the prosecution history as to <u>why</u> the Asserted Patents are patentable over Culliss. Furthermore, given the *ex parte* nature of prosecution, the PTO did not have the benefit of an adversarial party to argue for why Culliss invalidates the Asserted Patents. Nor did the PTO have the benefit of Plaintiff's infringement theory, which broadly interpreted the Asserted Patents to merely require filtering items based on scores that include a combination of content and feedback. *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1351 (Fed. Cir. 2001) ("A patent may not, like a 'nose of wax,' be twisted one way to avoid anticipation and another to find infringement."). For all these reasons, the fact that Culliss was before the PTO during prosecution is no grounds to deny anticipation JMOL based on Culliss.

# II. THERE WAS NO LEGALLY SUFFICIENT BASIS TO FIND THE ASSERTED CLAIMS NON-OBVIOUS

### A. The Obviousness Art Discloses Virtually Every Claimed Element

Before addressing the difference between the asserted claims and Defendants' obviousness references – and whether this difference would be obvious to overcome – it is important to clarify what Plaintiff cannot dispute. Plaintiff cannot dispute that Defendants'

<sup>&</sup>lt;sup>8</sup> See, e.g., PharmaStem, 491 F.3d at 1366-67 (ordering JMOL of obviousness based on prior art considered by the PTO during prosecution); *Liebel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1381 (Fed. Cir. 2007) (affirming summary judgment of anticipation based on prior art considered by the PTO during prosecution); *Celeritas Techs., Ltd. v. Rockwell Int'l Corp.*, 150 F.3d 1354, 1360-61 (Fed. Cir. 1998) (ordering JMOL of anticipation based on prior art considered by the PTO during prosecution).

obviousness references combine content-based filtering with collaborative filtering. For example, the Fab reference states: "By combining both collaborative and content-based filtering systems, Fab may eliminate many of the weaknesses found in each approach." (DX-050, 66.) The WebHound reference states: "This thesis claims that content-based filtering and automated collaborative filtering are complementary techniques, and the combination of ACF with some easily extractable features of documents is a powerful information filtering technique." (DX-049, Abstract.) And the Rose reference states: "The prediction of relevance is carried out by combining data pertaining to the content of each item of information with other data regarding correlations of interests between users . . . . The user correlation data is obtained from feedback information provided by users when they retrieve items of information." (DX-034, Abstract.)

Nor can Plaintiff dispute that these references perform content/collaborative filtering on <u>search results</u>. For example, WebHound states that "a WEBHOUND like front-end to a popular search engine such as Lycos, could enable users with WEBHOUND accounts to filter the results of their searches on the extensive databases complied by these search engines in a personalized fashion." (DX-049, 78.) Rose states that "[t]he relevance predicting technique of the present invention . . . can be employed to filter messages provided to a user in an electronic mail system and search results obtained through an on-line text retrieval service." (DX-034, 2:51-55.)<sup>9</sup>

### B. The Only Element Allegedly Missing from the Obviousness Art is *Using the Search Query* When Content/Collaborative Filtering Search Results

Plaintiff argues that these obviousness references are nonetheless lacking because they do not use the search <u>query</u> when performing their content/collaborative filtering on search <u>results</u>.<sup>10</sup>

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<sup>&</sup>lt;sup>9</sup> This disclosure of how Rose can "filter . . . search results" occurs in Rose's <u>Summary</u> of the Invention section, not "Rose's background section" as Plaintiff alleges. (*See* Opp., 14.)

<sup>&</sup>lt;sup>10</sup> At various points in its Opposition and at trial, Plaintiff also referred to using the search query when filtering as "tightly integrating" search with filtering. (*See, e.g.*, Opp.,14

For example, as for WebHound, Plaintiff cites Dr. Carbonell's testimony that search <u>results</u> are "thrown over the wall" to WebHound's content/collaborative filter, but that this filter does not consider the search <u>query</u>. (Opp., 13-14.) Similarly, as for Rose, Plaintiff argues that "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." (*Id.*, 15.) Thus, the obviousness question in this case is as follows: would it be obvious to use the search query when performing content/collaborative filtering on search results generated through that query? This obviousness question is a question of law that is the Court's province to answer. *Soverain Software LLC v. Newegg Inc.*, -- F.3d --, 2013 WL 216406 (Fed. Cir. Jan. 22, 2013) (reversing district court's judgment of non-obviousness and finding patent obvious as a matter of law).

## C. It Would Be Obvious to Use the Search Query When Performing Content/Collaborative Filtering on Search Results

The Court should answer this obviousness question in the affirmative: it <u>would</u> be obvious to use the search query when performing content/collaborative filtering on search results. For one thing, the PTO found that <u>all</u> the search-related elements of the '420 Patent – performing filtering on search results <u>and</u> using the search query when filtering – were obvious improvements over a system that just performed content/collaborative filtering of information with no search elements at all. The PTO made this decision when rejecting the '420 Patent as obvious over the '799 Patent – a predecessor patent that taught content/collaborative filtering but did not teach any search limitations. (Opening Br., 25-29; DX-004, IPE2092-93.) While the Court excluded testimony about this double-patenting rejection from reaching the jury, the

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<sup>(</sup>arguing that Rose "does not disclose a tightly integrated search system that could filter items for relevance to a query"); Trial Tr. 1888:10-12 ("I myself tried and did not succeed in arriving at this kind of tight integration in performing all these operations with respect to the query.").)

double-patenting rejection is still part of the trial record. Thus, the Court can and should consider it in deciding the legal question of whether the claims are obvious.

The PTO's obviousness opinion is supported by the testimony of Defendants' expert (Dr. Ungar), and by sheer common sense. As Dr. Ungar pointed out at trial: "[I]f you are filtering search results, it's obvious to keep around the query and use that also for filtering. . . . [J]ust think about it. If you ask a query of a search engine, you get a result, you just have the query sitting there with the result, why not use that also for filtering." (Trial Tr. 1317:25-1318:7.)

Critically, Plaintiff's position that it would be <u>non</u>-obvious to use the search query when filtering is belied by the Asserted Patents themselves. The Asserted Patents' shared specification states that "conventional search engines initiate a search in response to an individual user's query <u>and use content-based filtering to compare the query to accessed network informons</u>." (DX-001, 2:15-18 (emphasis added).) Thus, using the query when filtering was in the prior art, according to the Asserted Patents. This admission is dispositive – Plaintiff <u>cannot</u> allege that using the query when filtering is a non-obvious technique when the Asserted Patents admit that this technique was in the prior art. *Constant v. AMD, Inc.*, 848 F.2d 1560, 1570 (Fed. Cir. 1988) ("A statement in a patent that something is in the prior art is binding on the applicant and patentee for determinations of anticipation and obviousness"); *PharmaStem*, 491 F.3d at 1362 (same).

Culliss also shows how using the query for filtering was known in the prior art, because Culliss uses the search query when scoring and filtering items. (Opening Br., 17-18.) Plaintiff argues that Defendants cannot cite Culliss for obviousness because Dr. Ungar asserted Culliss as an anticipation reference instead of an obviousness reference. (Opp., 12.) But Dr. Ungar opined that any elements missing from his asserted obviousness references would be obvious to supply from the prior art <u>as a whole.</u> (Trial Tr. 1311:6-14.) This would include Culliss, which was

explicitly referenced during Dr. Ungar's obviousness testimony (*id.*, 1309:6-1310:2) and was later discussed extensively during his anticipation testimony. *See Johns Hopkins Univ. v. CellPro, Inc.*, 152 F.3d 1342, 1357 fn. 21 (Fed. Cir. 1998) ("[A]nticipation is the epitome of obviousness.") Moreover, Culliss is indisputably part of the trial record, and thus it should be considered by the Court in examining the legal issue of whether the asserted claims are obvious.

#### D. The Level of Ordinary Skill in the Art Further Shows Obviousness

In the face of all this obviousness evidence, Plaintiff relies heavily on Dr. Carbonell's testimony that search and filtering were different fields at the time of the Asserted Patents, so that one of ordinary skill in the art would supposedly be unable to apply the techniques of one field to the other. (*See* Opp., 14, 21.) But the agreed definition for a person of ordinary skill in the art (POSITA) in this case was merely "an individual with a bachelor's degree in computer science with at least 2 years of experience in the field." (D.N. 789, 8, 9.) This definition does not suggest that the POSITA would be in the filtering field alone (and thus supposedly ignorant of search techniques) or in the search field alone (and thus supposedly ignorant of filtering techniques). Thus, there is no basis for Dr. Carbonell's position that the POSITA could not understand both search and filtering techniques. *See also KSR Intern. Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007) ("When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, <u>either in the same field or a different one.</u>") (emphasis added).

As noted above, the binding admissions in the Asserted Patents also refute Dr. Carbonell's position that the prior art did not know how to apply search techniques to filtering. And Dr. Carbonell's own trial metaphor also refutes his position. According to Dr. Carbonell, prior art references such as WebHound and Rose ran a search and "tossed" the search results "over the wall" to a profile-based filtering system, but did not toss the search <u>query</u> over the wall

so it could be used by the filtering system. (*See* Trial Tr. 1834:9-1835:2; 1874:2-17; 1880:10-15.) Thus, the supposed "wall" between search and filtering had already been surmounted in the prior art, because prior art references like WebHound and Rose were able to send search results "over the wall" with ease. Bridging the gap between the obviousness art on the one hand and the Asserted Patents on the other would merely require tossing the search <u>query</u> over the wall (along with the search results) so that the filtering system could use the query when filtering. Noninnovative techniques such as "throwing the query over the wall" are precisely the type of patents that the Supreme Court held should be found obvious in *KSR*.

Contrary to Plaintiff's position, the jury interrogatory responses are not probative of nonobviousness on this point. The jury found that Defendants' obviousness references "do not disclose a tightly integrated search system and could not filter information relevant to a query." (D.N. 789, 8, 9.) But "tightly integrated" (or any variant thereof) appears nowhere in the asserted claims. And as for filtering information relevant to the query, none of the interrogatory responses purported to answer the pivotal legal question of whether this technique – *i.e.*, throwing the query over the wall – would be obvious to perform. Nor could they, as this question is the Court's to answer. *Soverain*, 2013 WL 216406, at \*2. As discussed above, performing this technique in the context of the claims would simply require using the search query for filtering – a technique that was in the prior art according to the Asserted Patents.

#### E. No Secondary Considerations Can Rebut the Obviousness Showing

Given the *prima facie* case of obviousness, <u>Plaintiff</u> bears the burden of rebutting the obviousness case by proving secondary considerations of non-obviousness. *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1327 (Fed. Cir. 2008). Where a *prima facie* case of obviousness is strong, evidence of secondary considerations must likewise be strong to overcome the *prima facie* case – thus, even "substantial evidence" of secondary considerations will often be

insufficient to overcome a strong *prima facie* case of obviousness. *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007). Here, Plaintiff failed to produce sufficient evidence to overcome the very strong *prima facie* obviousness case.

#### (a) No Evidence of Copying

Plaintiff argues that the jury's finding of copying was supported by Plaintiff's argument and evidence that "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 Google's patents prior to development of the infringing system." (Opp., 29-30.) But this provides no basis to find copying. For example, the mere citation of the '420 Patent in a Google patent is no evidence that Google copied the '420 Patent. If anything, the fact that the PTO allowed the Google patent over the '420 Patent suggests that the PTO thought the Google patent was an improvement over the '420 Patent, not a copy of it. Nor does Plaintiff's innuendo that "there was no Google development story" show copying. It is Plaintiff's burden to prove copying, and Plaintiff cannot meet this burden by merely claiming that Google did not produce evidence of how it developed its system. Finally, Plaintiff's allegation that "Google's system . . . incorporated all features of the asserted claims" (Opp., 25) does not show copying - if it did, then any plaintiff could prove copying by merely proving infringement. This is not the law. Tokai Corp. v. Easton Enter., Inc., 632 F.3d 1358, 1370 (Fed. Cir. 2011) (even "[a] stipulation of infringement, taken alone, is not probative of copying").

### (b) Inconsistent Findings on Independent Invention and Unsuccessful Attempts by Others

Plaintiff argues that the "scanning system" in the '420 Patent, a limitation not present in the '664 Patent, explains the jury's inconsistent findings as to the independent invention of the two patents. (Opp., 26-27.) But Plaintiff made <u>identical</u> non-obviousness arguments for both

patents, referring to them collectively as "the Lang and Kosak invention." (Trial Tr. 1875:10-23.) Plaintiff presents no evidence or explanation for how the "scanning system" limitation justified the jury's finding that the '664 invention was independently invented by others while the '420 invention was not. For example, there is no evidence that any third-party invention contained all the '664 limitations yet lacked the '420 "scanning system" limitation.

Plaintiff again cites the scanning system limitation to explain why the jury could have found "unsuccessful attempts by others" for the '420 Patent but not for the '664 Patent. (Opp., 24-25.) Yet Plaintiff does not even try to explain why the presence of the scanning system in the '420 Patent but not the '664 Patent justifies a finding that others had unsuccessfully tried to create the '420 invention but not the '664 invention.

#### (c) No Evidence of Acceptance by Others as Shown by Praise or Licensing of the Claimed Invention

Plaintiff's only cited evidence for "acceptance by others" is the fact that other patents cite the '420 Patent. (Opp., 26.) But Plaintiff cannot argue that a bald citation on the face of a patent constitutes "praise from others in the field." Accordingly, Plaintiff presented no evidence of "[a]cceptance by others . . . as shown by praise from others in the field or from licensing of the claimed invention." (D.N. 789, 9-10.)

#### (d) No Evidence of Commercial Success

In support of its assertion that the patented invention "has proven a commercial success," Plaintiff cites Dr. Carbonell's testimony about "modern search engines, Google included, that use the teachings of these patent claims." (Opp., 23.) But Plaintiff presented no evidence that Google's search engine or any other search engine practices the patents, much less that their success is attributable to the patents. (Trial Tr. 1886:25-1887:5.) In fact, Plaintiff stated at trial that search was not accused and not relevant to the case. (*Id.*, 116:7-12.) Furthermore, Dr.

Carbonell admitted that he did not know any details about which aspects of Google's systems <u>were</u> accused of infringement. (*Id.*, 1889:20-1890:10.) Thus, he could not and did not opine on what portion of Google's commercial success is attributable to the alleged infringement.

Further, contrary to Plaintiff's assertion, Plaintiff's damages expert did not testify that "inclusion of the infringing technology increased revenues by 20-40% for Google." (Opp. at 23). Rather, he testified that Google's implementation of the <u>entire Smart Ads system</u> supposedly led to a 20% increase in revenue. (Trial Tr. 902:11-17.) He then agreed that Google's advertising revenue is generated from innumerable technologies that are <u>not</u> encompassed by the asserted patents (*see, e.g., id.*, 918:8-23; 919:4-13) and admitted that <u>he did</u> <u>not evaluate</u> whether the patented technology is the basis for customer demand for the entirety of the accused systems. (*Id.*, 919:14-22.) Thus, his testimony is of no import.

#### (e) No Evidence of Other Secondary Considerations

Plaintiff also argues that "the long-felt need for better search results existed and was 'recognized even in the cited prior art.'" (Opp., 23-24 (citing Trial Tr. 1887:13-17).) But as Plaintiff itself admitted, "this case is not about search engine results." (Trial Tr. 107:21.) Both Google and other pre-existing search engines were already satisfying the need for high-quality search results, and, again, Plaintiff does not even accuse Google's search engine of infringement. (*Id.*, 116:7-12.) Thus, the supposed long-felt need for "better search results" had already been met, and could not have been met by the Asserted Patents in any event.

As to "unsuccessful attempts by others," Plaintiff cites Dr. Carbonell's conclusory statements about the supposed failure of himself and others. (Opp., 24.) But Dr. Carbonell provides no details about how he (or others) tried and failed to come up with the patented invention. He did not describe when he did the work, what work he completed, or why he failed. Thus, his conclusory statements on this point carry little to no weight. *Brooke Group Ltd. v.* 

*Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 242 (1993) ("When an expert opinion is not supported by sufficient facts to validate it in the eyes of the law . . . it cannot support a jury's verdict."); *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 294 (Fed. Cir. 1985) ("Lack of factual support for expert opinion going to factual determinations [] may render the testimony of little probative value in a validity determination."). Plaintiff's position appears to be that it can prove a secondary consideration of non-obviousness by having a single witness state, with no detail, that he failed to create the patented invention. This position is implausible and insufficient as a matter of law.

Plaintiff next argues that the Asserted Patents achieved "unexpected" results because they achieved "better" results than the prior art. (Opp., 25.) Initially, Plaintiff did not provide evidence of "better" results and Plaintiff points to nothing beyond unsubstantiated conclusions. Further, Plaintiff must show that its invention is an <u>unexpected</u> improvement over the prior art, not simply <u>any</u> improvement. "An applicant may make this showing with evidence that the claimed invention exhibits some superior property or advantage that a person of ordinary skill in the relevant art would find surprising or unexpected." *In re Mayne*, 104 F.3d 1339, 1343 (Fed. Cir. 1997). Plaintiff presented no evidence for why the one alleged improvement of the Asserted Patents – using the search query when filtering search results – was surprising or unexpected.

### III. IN THE ALTERNATIVE, DEFENDANTS ARE ENTITLED TO A NEW TRIAL ON ANTICIPATION AND OBVIOUSNESS

#### A. The Double-Patenting Exclusion Warrants a New Trial on Obviousness

Plaintiff argues that the Court properly excluded DDX 3.35—a demonstrative showing the PTO's obviousness-type double patenting rejection of the '420 Patent—and Dr. Ungar's testimony about DDX 3.35 under Fed. R. Evid. 402 and 403. However, the double-patenting rejection is both highly relevant and non-prejudicial, and its exclusion warrants a new trial.

As to relevance, it is undisputed that a patent's prosecution history should be considered when determining obviousness. (Opening Br., 27.) Plaintiff does not rebut this point, but rather admits that <u>it</u> successfully used portions of the prosecution history "to show the conclusions reached by the patent office" on the issue of invalidity. (Opp., 29.) Yet Plaintiff argues that Defendants' attempt to use the prosecution history for invalidity was improper.

In doing so, Plaintiff cites cases addressing a different question—whether <u>ongoing</u> reexaminations are probative of invalidity. (Opp., 27 & n.13.) But the reason why these cases give little weight to ongoing reexaminations is because they are <u>incomplete</u> and thus the final result is uncertain. *Transam. Life Ins. Co. v. Lincoln Nat'l Life Ins. Co.*, 597 F. Supp. 2d 897, 906 (N.D. Iowa 2009) ("Federal district courts have . . . conclude[d] that evidence of <u>incomplete</u> <u>patent reexamination proceedings</u> are inadmissible at trial on patent infringement claims and invalidity defenses.") (emphasis added). This is not the case with the double-patenting rejection that Defendants sought to introduce. The PTO's determination that the '420 Patent<sup>11</sup> was obvious over a content/collaborative filtering system was never withdrawn or backtracked from. The inventors got around the rejection by filing the terminal disclaimer, but the obviousness finding by the PTO remained. And the prosecution history at issue is closed and final.

Furthermore, admission of the double-patenting rejection would not be misleading or unfairly prejudicial as Plaintiff suggests. (Opp., 28.) Plaintiff's argument that a terminal disclaimer does not constitute acquiescence by the patentee to the PTO's obviousness finding is a red herring. The excluded slide specifically and accurately showed <u>the PTO's conclusion</u> that combining a content/collaborative filter with a search engine was obvious. This is not misleading because it accurately recites what occurred during prosecution and it places the '420

<sup>&</sup>lt;sup>11</sup> Defendants have explained how this finding is equally applicable to the '664 Patent, a point which Plaintiff does not dispute. (Opening Br., 28-29.)

Patent's allowance into its proper and complete context. Plaintiff's position that the jury should not be informed about the circumstances of the Patent's allowance is a more certain way to mislead the jury, as the jury could only be left with the false impression that the PTO did <u>not</u> find the Patent to be an obvious improvement over a content/collaborative filtering system. Indeed, this was precisely the false impression that was created when Plaintiff was allowed to introduce portions of the prosecution history supporting its invalidity position (Trial Tr. 1487:11-1490:10) while Defendants were not allowed to do the same through the double-patenting rejection.

Moreover, contrary to another of Plaintiff's arguments, the jury is fully capable of understanding the non-binding effect of PTO actions, as juries are tasked with understanding this principle every time invalidity is an issue in a patent case. Further, the jury had already been informed about the back-and-forth nature of patent prosecution through the video the Court showed at the beginning of trial, and Plaintiff would have been free to bring out the rationale behind filing a terminal disclaimer on cross-examination or through rebuttal testimony.

Finally, because of the importance of the double-patenting rejection, the Court's error was highly prejudicial. Plaintiff asserts that because the Court allowed a discussion of the terminal disclaimer, somehow this rendered any error harmless. (Opp., 29.) But Plaintiff does not explain how Defendants could have placed the terminal disclaimer in context without being able to discuss the PTO's obviousness decision that caused the terminal disclaimer to be filed.

Because the exclusion of DDX 3.35 and Dr. Ungar's related testimony constituted prejudicial error, Defendants are entitled to a new trial on obviousness.

DATED: February 15, 2013

/s/ Stephen E. Noona

Stephen E. Noona Virginia State Bar No. 25367 KAUFMAN & CANOLES, P.C. 150 West Main Street, Suite 2100 Norfolk, VA 23510 Telephone: (757) 624-3000 Facsimile: (757) 624-3169 senoona@kaufcan.com

David Bilsker David A. Perlson QUINN EMANUEL URQUHART & SULLIVAN, LLP 50 California Street, 22nd Floor San Francisco, California 94111 Telephone: (415) 875-6600 Facsimile: (415) 875-6700 davidbilsker@quinnemanuel.com davidperlson@quinnemanuel.com

Counsel for Google Inc., Target Corporation, IAC Search & Media, Inc., and Gannett Co., Inc.

/s/ Stephen E. Noona

Stephen E. Noona Virginia State Bar No. 25367 KAUFMAN & CANOLES, P.C. 150 W. Main Street, Suite 2100 Norfolk, VA 23510 Telephone: (757) 624-3000 Facsimile: (757) 624-3169 senoona@kaufcan.com

Robert L. Burns FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP Two Freedom Square 11955 Freedom Drive Reston, VA 20190 Telephone: (571) 203-2700 Facsimile: (202) 408-4400

Cortney S. Alexander FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP 3500 SunTrust Plaza 303 Peachtree Street, NE Atlanta, GA 94111 Telephone: (404) 653-6400 Facsimile: (415) 653-6444

Counsel for Defendant AOL Inc.

## **CERTIFICATE OF SERVICE**

I hereby certify that on February 15, 2013, I will electronically file the foregoing with the

Clerk of Court using the CM/ECF system, which will send a notification of such filing (NEF) to

the following:

Jeffrey K. Sherwood Kenneth W. Brothers DICKSTEIN SHAPIRO LLP 1825 Eye Street NW Washington, DC 20006 Telephone: (202) 420-2200 Facsimile: (202) 420-2201 sherwoodj@dicksteinshapiro.com brothersk@dicksteinshapiro.com

Donald C. Schultz W. Ryan Snow Steven Stancliff CRENSHAW, WARE & MARTIN, P.L.C. 150 West Main Street, Suite 1500 Norfolk, VA 23510 Telephone: (757) 623-3000 Facsimile: (757) 623-5735 dschultz@cwm-law.cm wrsnow@cwm-law.com sstancliff@cwm-law.com

Counsel for Plaintiff, I/P Engine, Inc.

/s/ Stephen E. Noona

Stephen E. Noona Virginia State Bar No. 25367 KAUFMAN & CANOLES, P.C. 150 West Main Street, Suite 2100 Norfolk, VA 23510 Telephone: (757) 624-3000 Facsimile: (757) 624-3169 senoona@kaufcan.com

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