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

I/P ENGINE, INC.

Plaintiff,

Civil Action No. 2:11-cv-512

v.

AOL INC., et al.,

Defendants.

DEFENDANTS' MEMORANDUM IN SUPPORT OF MOTION FOR JUDGMENT AS A MATTER OF LAW ON NON-INFRINGEMENT

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Pursuant to Federal Rule of Civil Procedure 50(a), Defendants respectfully move the Court for entry of judgment as a matter of law on non-infringement.

### **INTRODUCTION**

Plaintiff I/P Engine alleges that Google's AdWords, AdSense for Search, and AdSense for Mobile Search systems infringe claims 10, 14, 15, 25, 27, and 28 of U.S. Patent No. 6,314,420 (the "'420 patent") and claims 1, 5, 6, 21, 22, 26, 28, and 38 of U.S. Patent No. 6,775,664 (the "'664 patent"). Yet I/P Engine has not met its burden of introducing substantial evidence of infringement of any of these claims. There is no legally sufficient evidentiary basis for a reasonable jury to find that any of the accused systems meet each and every limitation of the asserted claims. Defendants, therefore, respectfully request that the Court enter judgment as a matter of law of no infringement.

#### **LEGAL STANDARD**

The "grant or denial of a motion for judgment as a matter of law is a procedural issue not unique to patent law, reviewed under the law of the regional circuit in which the appeal from the district court would usually lie." *Summit Tech, Inc. v. Nidek Co.*, 363 F.3d 1219, 1223 (Fed. Cir. 2004). In this circuit, "[a] district court may grant a motion for judgment as a matter of law if the nonmoving party has been fully heard on an issue and the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue." *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 807 F. Supp. 2d 563, 565-66 (E.D. Va. 2011) (citing Fed. R. Civ. P. 50(a)). "[T]he party bearing the burden of proof must produce genuine evidence that creates a fair doubt; wholly speculative assertions will not suffice." *Id.* at 566 (quoting *Bongam v. Action Toyota, Inc.*, 14 F. App'x 275, 280 (4th Cir. 2001) (internal quotation marks omitted)).

Because each element contained in a patent claim is deemed material to defining the scope of the patented invention, it is I/P Engine's burden to prove by a preponderance of the evidence that the accused systems contain every limitation in the asserted claims. *See Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29 (1997); *see also Inpro II Licensing, S.A.R.L. v. T-Mobile USA, Inc.*, 450 F.3d 1350, 1357-58 (Fed. Cir. 2006); *Centricut, LLC v. Esab Group, Inc.*, 390 F.3d 1361, 1367 (Fed. Cir. 2005). "[F]ailure to meet a single limitation is sufficient to negate infringement of the claim . . . ." *Nomos Corp. v. Brainlab USA, Inc.*, 357 F.3d 1364, 1367 n.1 (Fed. Cir. 2004) (citation omitted).

Accordingly, where, as here, Plaintiff fails to present sufficient evidence at trial for a jury to find infringement, judgment as a matter of law is appropriate.

#### <u>ARGUMENT</u>

## I. NO REASONABLE JURY COULD FIND THAT DEFENDANTS DIRECTLY INFRINGE THE ASSERTED CLAIMS

### A. The Accused Systems Do Not Combine "Content" and "Collaborative"

All asserted claims require combining content information and collaborative data. (*See*, *e.g.*, '420 claim 10[d] ("the filter system combining pertaining feedback data from the feedback system with the content profile data..."); '664 claim 1[c] ("a content-based filter system for combining the information from the feedback system with the information from the scanning system...").) During trial, Plaintiff's expert, Dr. Frieder, testified that the content-based information, as claimed in the patents-in-suit, is allegedly satisfied by a few feature templates. (*See*, *e.g.*, Trial Tr. at 530:24-531:19.) According to him, these few feature templates require a "comparison" between the creative – *i.e.*, the text of an advertisement – and the query. (*See id.* at 529:17-20.) He continues that the features corresponding to the "comparisons" are then, in turn, used to look up odds multipliers. (*See id.* at 533:10-534:1.) Dr. Frieder further opined that the odds multipliers constitute feedback information. (*See id.*, 529:21-530:11.) Dr. Frieder then

concluded that looking up the odds multiplier associated with an attribute somehow amounts to a "combination" of content and feedback.

But this look-up process does not "combine" the alleged content-based information with the alleged feedback information. As Dr. Frieder conceded on cross-examination, the alleged "content-based" information (the attribute) is never merged with the alleged "feedback" component (the odds multiplier):

- Q: Well, the attribute is not combined with the odds multiplier at all, is it?
- A: <u>I'm taking the particular value and using it as a lookup and to get the particular feedback data</u>. So I view it as combined, yes.
- Q: It's a lookup. It tells you where it is?
- A: It gives you the corresponding value.
- Q: Right. So you don't take the attribute and merge it together with whatever the odds multiplier value is, right?
- A: I am combining it because I'm taking the two sources and combining them, but, no, I'm not merging them together, no.

(See Trial Tr. at 694:9-19 (emphasis added).) Dr. Frieder's unsupported conclusion that a combination occurs even though nothing is merged is contrary to the plain meaning of the claim language and common sense. (See also id. at 1020:5-6 (Plaintiff argues, "I think that argument is specifically targeted to this idea of merger and, as we heard, there's no requirement in the patent there has to be a merger"); compare PDX 71, showing Fig. 6 (which Dr. Frieder attested was "the heart and soul, because what happens here is the entire invention") that mathematically merges a score from "content data" with a score from "collaborative data" (Trial Tr. at 456:4-11), which Dr. Frieder conceded did not occur in AdWords (id. at 694:9-19).) As Plaintiff has presented no evidence that the

For example, using a bar number to look up an attorney does not "combine" the bar number with the attorney's name.

combination required by all asserted claims occurs in the accused products, Defendants infringe none of them.

### B. I/P Engine Failed To Offer Any Proof Of Infringement through AdWords Before 2010

During his testimony, Dr. Frieder conceded that, even in his opinion, not all templates used within the various Smart Ads models perform "content-based filtering" as required by the claims. (Trial Tr. at 694:24 to 695:2.) Rather, Dr. Frieder pointed to just four templates as evidence that the runtime pCTR used within AdWords meets the content limitations of the asserted claims. (Trial Tr. 518:23 to 519:18, 530:23 to 531:19, 534:12 to 536:9, 541:17 to 543:7.)

For two of these templates, the only evidence Dr. Frieder points to that AdWords ever uses them is the "google24" model of Smart Ads that was introduced in May 2012. In support of that allegation, Dr. Frieder pointed to exhibit PX330, source code files with templates, as evidence that Defendants meet the content filtering element of the asserted claims, and he identified as relevant two templates found on pages 1 and 3 of the exhibit. (*See* Trial Tr. at 531:1-19, 534:17-536:9.) However, Dr. Frieder acknowledged that these are "the template models that are used in the version [of the Smart Ads system] that was launched in May 9th, 2012." (*See id.* at 524:13-16.) Dr. Frieder also referenced a third template mentioned in Mr. Furrow's deposition when discussing the google24 model (but never relied upon by Dr. Frieder in his expert report). (*Id.* at 548:3-15.) Dr. Frieder, however, provided no evidence as to when this template was used by AdWords.

Dr. Frieder finally pointed to a fourth template from an earlier model, google17, dated 2010. (*See*, *e.g.*, *id*. at 540:13-15.) But he rendered no opinion that this template was used in any model earlier than google17.

Since there are templates that do not perform content analysis even under Plaintiff's theory, Plaintiff's failure to identify any alleged "content" templates used prior to 2010 means that it has failed to carry its burden of proof for any infringement prior to 2010. Dr. Frieder's conclusory assertion that the AdWords system has infringed the patents-in-suit since its launch in 2004 is not enough. (*See* Trial Tr. at 592:9-13.) Dr. Frieder just generally concluded, with no support, that the materials he reviewed, including source code, "all matched" and supported his conclusion, while acknowledging that source code is "as detailed as you get" in terms of understanding the system. (*Id.* at 592:14-593:9.) However, given he presented no opinions regarding any source code used before 2010, *I/P* Engine has failed to provide any evidence of infringement of the asserted claims before 2010. *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, or when indisputable record facts contradict or otherwise render the opinion unreasonable, it cannot support a jury's verdict.")

## C. I/P Engine Failed To Offer Any Proof Of Infringement Regarding AdSense For Search Or AdSense For Mobile Search

I/P Engine accuses AdSense for Search and AdSense for Mobile Search of infringing both asserted patents. However, I/P Engine has failed to offer proof of infringement for these products for all elements of the asserted claims. Specifically, Dr. Frieder pointed to the source code files in exhibits PX332 and PX333 as his evidence that AdSense for Search and AdSense for Mobile Search meet the content filtering element of the asserted claims. But Dr. Frieder provided no analysis or testimony as to which, if any, of the attribute templates performed the content filtering, or how they performed it. (*See* Trial Tr. at 552:5-12, 553:10-554:1.) Plaintiff's counsel conceded this at oral argument on this issue, saying he "didn't need to" point to specific templates. (*Id.* at 1015:5-9.)

Given that only certain templates perform the infringing functionality even under Plaintiff's infringement theories (Trial Tr. at 694:24 to 695:2), however, I/P Engine has failed to provide evidence of infringement for the asserted claims by AdSense for Search and AdSense for Mobile Search. *Brooke Group Ltd.*, 509 U.S. at 242.

## D. I/P Engine Failed To Offer Any Proof Of Infringement Through The Use Of QBB

As part of the Quality-Based (QBB) system, a predicted clickthrough rate (pCTR) (for the QBB system) is computed for each ad in advance of an ad being considered for display to the user and in advance of the system receiving a query from the user. The pCTR is then used to determine a Minimum Cost-Per-Click (CPC) price, also known as a "reserve price," for each candidate advertisement. (*See* Chen Dec. Ex. 1, Furrow Dep., Case Clip(s) Detailed Report at 3, ¶ 7.) In order for Google to consider displaying an ad, the advertiser's bid must be higher than the Minimum CPC. QBB thus disqualifies advertisements on the basis of their failure to meet the reserve price. (*Id.* at 3-4, ¶ 8.)

Here, Dr. Frieder pointed to the source code files in exhibit PX331 as evidence that QBB disabling meets the content filtering element of the asserted claims. But Dr. Frieder's "analysis" stopped there. He did not provide any analysis of which, if any, of the attribute templates performed the content filtering, and simply identifying allegedly relevant source code files is insufficient to meet I/P Engine's burden of proof given that not all templates infringe even under their theory. (*See* Trial Tr. at 556:10-17; *id.* at 694:24 to 695:2.) *Brooke Group Ltd.*, 509 U.S. at 242.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> In any event, QBB cannot infringe any of the claim elements as it is undisputed that its functionality is query-independent and occurs before any query is received. Accordingly, it cannot filter informons or information for relevancy to *the query* as required by all asserted claims. *See infra*.

# E. The Accused Systems Do Not "Filter the Combined Information," as Required by the '664 Patent

Both independent claims of the '664 patent require filtering the "combined information." (See claim 1 ("and a content-based filter system for combining the information from the feedback system with the information from the scanning system and for <u>filtering the combined information for relevance</u> to at least one of the query and the first user."); claim 26 ("combining the information found to be relevant to the query by other users with the searched information; and content-based <u>filtering the combined information for relevance</u> to at least one of the query and the first user.") (emphasis added).)

At trial, Dr. Frieder testified that the "combined information" in the accused systems is pCTR. (*See*, *e.g.*, Trial Tr. at 702:8-22.) Yet Dr. Frieder admitted that pCTR is <u>not</u> filtered and, in fact, that pCTR <u>cannot</u> be filtered in the accused systems. (*See id.* at 702:4-704:7 (explaining that pCTR is "used" to filter an ad).) Instead, Dr. Frieder asserts that the ads are filtered "based on" pCTR. (*Id.*) But the '664 claims require "filtering the combined information," not filtering *something else* "based on" the combined information. Accordingly, Defendants are entitled to judgment as a matter of law that they do not infringe any of the asserted '664 claims.

Unlike the '664 patent, Claim 10(b) of the '420 patent does include the requirement "filtering the informons *on the basis of* applicable content profile data for relevance to the query." (emphasis added). On oral argument on this point, Plaintiff argued that "With regard to defendant's attempt to import into the '664 claims something that is not in the '420 claim, I believe that's improper. Each claim stands on its own. And for their attempt to [write]<sup>3</sup> words in the '664 claim with regard to the '420 is inconsistent with the Court's claim construction and fundamental patent law." (Trial Tr. at 1014:7-13.) But it is Plaintiff that attempts to write in the

<sup>&</sup>lt;sup>3</sup> The word "write" was mis-transcribed as "aright."

language on the basis of from the '420 claim into the clear language from the '664 patent that requires "filtering the combined information." The claim language of Claim 1(c) of the '664 patent does not include the "on the basis" language, instead, requiring "a content-based filter system . . . for <u>filtering the combined information</u> for relevance to at least one of the query and the first user." (emphasis added). I/P Engine's misreading of the claim language has resulted in its failure to provide any evidence that this element is met.

### F. Google's AdWords Is Not A Search Engine or Search System

The preambles of asserted claims 10 and 25 of the '420 patent and Claim 1 of the '664 patent unambiguously recite the terms "search engine system" and "search system," respectively. The preamble in claim 26 of the '664 patent recites "[a] method for obtaining information relevant to a first user." Although the preamble of this claim does not expressly use the words "search" or "search engine" as the other asserted claims do, based on the intrinsic evidence, its meaning and effect on the scope of claim 26 is the same. Indeed, I/P Engine itself has treated Claim 26 as having the identical scope as claim 1 of the '664 patent. (See e.g., discussion of "feedback system" limitation, infra.)

The preamble of a claim limits the scope of the invention in three different circumstances: (i) when it recites essential structure or steps, or if it is necessary to give life, meaning, and vitality to the claim; (ii) when it provides a necessary antecedent basis for the body

<sup>&</sup>lt;sup>4</sup> For example, the title of the '664 patent is "Information filter <u>system and method for integrated content-based and collaborative/adaptive feedback queries.</u>" ('664 patent, Title (emphasis added).) Similarly, the Abstract of the '664 patent emphasizes that the asserted claims relate to a search engine: "[a] <u>search engine</u> system is provided for a portal site on the internet. The <u>search engine</u> system employs a regular <u>search engine</u> to make one-shot or demand searches for information entities which provide at least threshold matches to user queries. The <u>search engine</u> system also employs a collaborative/content-based filter to make continuing <u>searches</u> for information entities which match existing wire queries and are ranked and stored over time in user-accessible, system wires corresponding to the respective queries." ('664 patent, Abstract (emphasis added).)

of the claim; or (iii) when it was clearly relied upon during prosecution to distinguish the claimed invention from the prior art. *See Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808-09 (Fed. Cir. 2002).

Here, the preambles of the asserted claims meet at least one of these conditions and, therefore, limit the scope of I/P Engine's invention. For each claim, the preamble gives life, meaning, and vitality to the claim in that the preamble makes clear that the claimed systems and methods must actually search for resources in order to locate information, instead of merely retrieving information from a known location. (Trial Tr. at 479:8-480:3 (discussing the importance of the preamble)); *see Mems Tech. Berhad v. Int'l. Trade Comm'n*, 2011 WL 2214091, at \*9 (Fed. Cir. June 3, 2011) (finding that the preamble language "microelectromechanical system package" for claims directed to a microphone was necessary to give meaning to the claim).

The PTO itself relied on the '420 patent's preambles in allowing the claims generally over the prior art: "[t]he present invention is directed to a search engine operated with collaborative and content-based filtering." (See, e.g., DX-004, IPE 0002121) (emphasis added) It also stated "it would have been obvious to one of ordinary skill in the art at the time of the invention to have implemented the information filtering system of Lang et al. (U.S. Patent no. 5,867,799) wherein the computer network provided thereon (See Lang et al. Figure 1) would have incorporated a search engine" (DX-004, IPE 0002093; see also Koepnick Med. & Educ. Research Found., L.L.C. v. Alcon Labs., Inc., 2005 WL 3543012, at \*5 (Fed. Cir. 2005) (holding that the statements made by the PTO examiner in allowing claims can inform the construction of claim terms). Accordingly, the preambles in the asserted claims serve as limitations in both patents. Hakim v. Cannon Avent Group, PLC, 479 F.3d 1313, 1317-18 (Fed.Cir. 2007) (applying limitations used to distinguish prior art in the parent application to the child when applicant

failed to adequately inform the PTO of the desired expanded scope of the claims); *iLOR LLC v*. *Google Inc.*, 550 F.3d 1067, 1074-75 (Fed. Cir. 2008).

Moreover, Plaintiff's technical expert, Dr. Frieder, emphasized that the preamble explains the environment in which the accused systems must operate: "Okay. So that was the first box, which was the top box. That was for the environment, the search engine environment. That was the preamble." (Trial Tr. at 565:21-23.) Plaintiff further used a demonstrative at trial wherein Dr. Frieder through Plaintiff's counsel placed a "check mark" next to each claim limitation – including the preamble – to graphically illustrate that the accused systems purportedly infringed each limitation in the asserted claims. (*Id.* at 482:4-17.) Likewise, the Court relied on the preambles during claim construction when, for example, it construed the term "demand search" to mean "a single search engine query performed upon a user request." (*See* Dkt. 171, 19) (emphasis added). *Catalina Mktg. Int'l*, 289 F.3d at 808 ("when the preamble is essential to understand limitations or terms in the claim body, the preamble limits claim scope").

I/P Engine has not provided sufficient evidence that the accused systems meet these limitations. This failure of evidence is confirmed by I/P Engine counsel's own statements that Google's search engine functionality is not accused of infringement in this case:

And the way that the money is made is over here on the back of the technology at issue in this case, <u>not on the back of the search engine technology that you're all familiar</u> with . . . . Remember, it is two different worlds. I got ahead of myself there. Two different worlds; search information world and advertising world.

(Trial Tr. at 117:2-5 (emphasis added); 133:3-5.) For the foregoing reasons, the Court should grant judgment as a matter of law that the accused systems do not infringe any asserted claim.

## G. The Accused Systems Do Not Infringe The Asserted Claims Because They Do Not Scan or Search for Ads

Claims 10 and 25 of the '420 patent recite the limitation "scanning a network to make a demand search for informons relevant to a query from an individual user . . ." (emphasis added). During claim construction, the Court construed two terms in this limitation. First, it construed "scanning a network" to mean "looking for or examining items in a network." (See Dkt. 171, 15.) Second, it construed "demand search" to mean "a single search engine query performed upon a user request." Similarly, claim 1 of the '664 patent includes the same scanning concept, wherein it recites "a search system comprising: [a] scanning system for searching for information relevant to a query associated with a first user in a plurality of users..." (emphasis added). The Court construed the term "a scanning system" to mean "a system used to search for information." (Dkt. 171, 17.) Claim 26 of the '664 patent similarly requires "searching for information..." I/P Engine has failed to introduce evidence from which a reasonable jury could find the accused systems contain either the scanning/searching element or the demand search element of the asserted claims.

Scanning/searching element: As an initial matter, Dr. Frieder testified that AdWords supposedly looks for or examines items in a network when it attempts to find advertisements relevant to a user's query. (See Trial Tr. at 483:20-485:12.) But advertisers submit ads to Google for inclusion in a database in which Google organizes and stores these submitted ads based on associated keywords. (See Chen Dec. Ex. 1, Alferness Dep., Case Clip(s) Detailed Report at 13, ¶ 6.) As such, AdWords does not have to go out and look for ads in response to a user's query. It already has them, and it knows exactly where those ads reside in the database. (See Chen Dec. Ex. 1, Holt Dep., Case Clip(s) Detailed Report at 43-44, ¶¶ 77-81.) Under this database model, AdWords does not "look[] for or examin[e] items in a network" or "search[] for information relevant to a query" as required by this limitation.

Dr. Frieder attempted to cure I/P Engine's failure of proof when he testified that the scanning element was met when Google "targets" ads. (*See, e.g.*, Trial Tr. at 484:17-485:18.) But the notion of "targeting" is not specific functionality in AdWords and is not evidence of infringement.

Dr. Frieder's misdirection in citing the processing of landing pages should similarly be dismissed. (*See* Trial Tr. at 485:19-486:5.) All asserted claims require that the "informons" or "information" be later filtered. Dr. Frieder has not made any allegation that landing pages are filtered, as required by these later limitations. Nor did Dr. Frieder testify that Google must go out and find the landing pages, as opposed to have them given to Google by advertisers like ads. Accordingly, the accused systems do not infringe any of the asserted claims, and the Court should grant judgment as a matter of law.

Demand Search: Claim 10 of the '420 patent claims a system that performs a "demand search" via a search engine query in order to locate information relevant to a user's search query. Claim 25 of the '420 patent has a similar limitation. The Court construed "demand search" to be "a single search engine query performed upon a user request." (Dkt. 171, 19.) Yet, at no point during trial did I/P Engine even attempt to introduce evidence that the accused products perform a "demand search." Dr. Frieder never once mentioned the Court's construction or opined regarding how this element of the claims is in AdWords. I/P Engine has simply failed to address it, even though it is black letter law that literal infringement requires that each and every claim limitation be present in the accused product. See Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Int'l, Inc., 389 F.3d 1370, 1378 (Fed. Cir. 2004). Judgment as a matter of law of noninfringement as to the '420 claims is appropriate here.

**Network element:** Not only did I/P Engine fail to provide substantial evidence concerning the scanning element of the asserted claims, it also failed to do so concerning the

"network" component of the claims. As noted above, the Court has construed "scanning a network" as "looking for or examining items in a <u>network</u>." But there is a broad disconnect between looking for or examining items on a network as compared to the distributed database look up in AdWords. (*See* Chen Dec. Ex. 1, Holt Dep., Case Clip(s) Detailed Report at 43-44, ¶¶ 77-81.) Indeed at trial, Dr. Frieder made no attempt to explain how these two very different modes of operation could conceivably be the same. Again, Plaintiff's failure to meet its burden of proof entitles Defendants to judgment as a matter of law of noninfringement as to the '420 claims.

### H. The Accused Systems Do Not Use "Collaborative Feedback Data"

1. The Accused Systems Do Not Group Users With Similar Interests Or Needs

Each asserted claim in the '420 patent requires the use of "collaborative feedback data." For example, independent claim 10 of the '420 patent requires "a feedback system for receiving collaborative feedback data from system users relative to informons considered by such users" (emphasis added). Similarly, claim 25 of the '420 patent requires "receiving collaborative feedback data from system users relative to informons considered by such users (emphasis added). The Court construed "collaborative feedback data" to mean "data from system users with similar interests or needs regarding what informons such users found to be relevant." (Dkt. 212, 4.) I/P Engine has not provided sufficient evidence to show that the accused systems meet this limitation.

The accused systems do not rely on "collaborative feedback data" because they do not deliver ads based on feedback data from groups of users with similar interests or needs. Indeed, Dr. Frieder testified that the accused systems do not categorize ads <u>at all</u>, much less categorize them by the similar interests or needs of a particular subset of users. (*See, e.g.*, Trial Tr. at 427:3-8, 429:11-23 (discussing the collaborative limitation in terms of all users rather than users

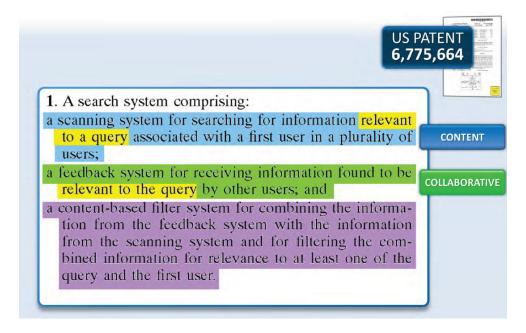
"with similar interests or needs"); Trial Tr. at 680:22-682:19.) This is fatal to I/P Engine's infringement allegations.

At trial, Dr. Frieder testified that the accused systems still meet this limitation because they receive information from users who ran the same or a similar query. (*See*, *e.g.*, Trial Tr. at 488:9-489:7; *id.* at 680:22-681:1.) Yet, I/P Engine introduced no evidence that Smart Ads actually tracks how often users click on a particular ad in response to a particular query, or that Google uses such information in searching ads. Nor would that reading of the Court's construction make any sense in the context of the patent as it would result in users receiving informons <u>irrespective</u> of their interests or needs and render the collaborative limitations meaningless and useless for its explicit purpose.

Here again, I/P Engine has not introduced evidence, much less substantial evidence, that the accused systems infringe this limitation of the '420 patent, and judgment as a matter of law of noninfringement of all '420 claims should be granted.

2. The Accused Systems Do Not Include A "[Feedback System for]
Receiving Information Found to be Relevant to the Query by Other Users"

Independent claims 1 and 26 of the '664 patent require a "[feedback system for] receiving information found to be relevant to the query by other users." In both the Court's June 15 and August 16 Orders, the Court declined to construe these terms in the '664 patent. (*See* Dkt. 171; Dkt. 212.) But Dr. Frieder states that this limitation in both claim 1 and 26 of the '664 patent should be interpreted to require collaborative feedback. (*See* Trial Tr. at 610:2-611:21: "[w]ell, basically in the claim it actually is requiring you to have the content-based information. It's requires the feedback system is a collaborative... It's just the way it's written, but it basically requires content, it requires collaborative, it requires combining it and basically it requires you to filter based on that combination." (emphasis added).) Dr. Frieder's trial demonstratives confirm this:



(*See* Dr. Frieder Tr. Demonstrative, PDX 131.) I/P Engine has effectively agreed that the '664 patent, like the '420 patent, requires the use of collaborative feedback data, and that limitation is crucial to whether the accused systems infringe claims 1 and 26 of the '664 patent. But, as explained above, the accused systems do not use "collaborative feedback data" and, therefore, do not meet the limitation of "[feedback system for] receiving information found to be relevant to the query by other users."

Accordingly, for the same reasons set forth as to the '420 patent, I/P Engine has failed to present substantial evidence that the accused systems use data from users with similar interests or needs, and the accused systems do not infringe the '664 patent. Defendants are entitled to judgment as a matter of law.

## 3. <u>The Accused Systems Do Not Track, Let Alone Use, Historical Clickthrough Rates To Serve Ads</u>

I/P Engine contends that several claim limitations are met by Google's alleged use of an "historical clickthrough rate" that purportedly plays a role in selecting which ad to display upon a user's search query. For example, Dr. Frieder, at least on direct, contended the collaborative requirements of the asserted claims are met by the use of a historical clickthrough rate (CTR).

(See, e.g., Trial Tr. at 489:2-7; 490:3-5.) I/P Engine's argument fails, however, because it is undisputed that the accused systems do not rely on historical CTRs in determining which ads to display.

In support of I/P Engine's argument on direct, Dr. Frieder cited to snippets from marketing documents where Google simply mentions the term historical CTR. This is inappropriate as a matter of law. *See Whirlpool Corp. v. LG Elecs., Inc.*, 2006 WL 2035215, at \*8 (W.D. Mich. July 18, 2006) (granting summary judgment because "[i]t is the [product], not the marketing materials, that are the subject of the infringement accusation. The marketing materials cannot override the actual operation of the [product]."). None of these documents, however, demonstrate that the accused systems <u>use or track</u> on any historical clickthrough rate to determine which ad to display. (*See, e.g.*, PX 302, 37.)

Contrary to Dr. Frieder's conclusory testimony and inaccurate interpretation of the marketing documents upon which he relied, the accused Smart Ads system does <u>not</u> track the historical CTR for any advertisement, query, or keyword. It certainly does not use historical CTR to determine which ads to display on a search results page. Indeed, Dr. Frieder himself confirmed this at trial. (*See* Trial Tr. at 673:12-13: "Q. There is no keywords click-through rate used in SmartAds, correct? A. True. That is correct."; *see also id.* at 677:11-18: "I agree there is not -- there are not a template that represent the click-through rate of an individual ad in an individual query there, yes.") As such, Dr. Frieder further conceded he is <u>not</u> relying on CTR as the collaborative data required by the claims. (Trial Tr. 10/23/2012 at 680:9-12 ("Q. But for purposes of AdWords, <u>you're not saying the CTR is collaborative data</u>, correct? A. <u>I am not saying that the CTR</u>, I'm saying the clicks are. And this is a representation thereof of that." (emphasis added).)

Judgment as a matter of law is appropriate.

### I. The Accused Systems Do Not Use "Content-Based Filtering"

The '420 claims both require "a content-based filter system" (claim 10[b], claim 25[b]). The '664 claims similarly require "a content-based filter system" (claim 1[c]) and "content-based filtering (claim 26[d]). As explained by the patents themselves, "content-based filtering is a process of filtering by extracting features from the informon, *e.g.*, the text of a document, to determine the informon's relevance." ('420 Patent, 4:23-26.) The accused systems do not perform content-based filtering.

### 1. The Accused Systems Do Not "Filter" Based On Attribute Templates

At trial, Dr. Frieder testified that the accused systems met the content-based filtering limitation of the asserted claims when certain attribute templates are used to look-up the odds multipliers used to calculate the pCTR of an advertisement. (Trial Tr. at 538:24-539:10.) Dr. Frieder has, at most, contended that the accused systems perform some type of content-based analysis, not content-based filtering as required by the claim. Analysis, however, is not the same thing as filtering. Indeed, no filtering is performed based on these attribute templates. As Dr. Frieder admits, the accused systems use these attribute templates to look up an odds multiplier for that specific attribute template. (*Id.* at 674:11-14.) It is these odds multipliers that are, in turn, combined with other odds multipliers to calculate the pCTR. (*Id.* at 692:9-13.)

# 2. <u>I/P Engine Has Failed To Prove That Keyword Relevance Is Content-Based Filtering</u>

Next, I/P Engine ignores this critical distinction by again relying on Google's marketing materials to allege that the accused systems perform content-based filtering. Based on those materials, I/P Engine specifically contends that Smart Ads tracks "keyword relevance" or "ad

<sup>&</sup>lt;sup>5</sup> Attributes are merely used to identify specific odds multipliers, which Dr. Frieder contends constitute feedback data. (Trial Tr. at 675:14-17.) As such, the use of attributes or attribute templates is not content-based analysis. Indeed, Dr. Frieder has effectively pointed to the same thing as meeting both the content and collaborative feedback limitations.

text relevance." But courts have routinely rejected this sleight of hand, recognizing that marketing materials shed little light on the inner workings of sophisticated technology, as is the case here. See Scantibodies Lab., Inc. v. Immutopics, Inc., 374 F. App'x 968, 971 (Fed. Cir. 2010) ("The use of language in marketing materials often means something quite different from the language used in a patent."); PharmaStem Therapeutics, Inc. v. ViaCell, Inc., 491 F.3d 1342, 1351-52 (Fed. Cir 2007) (affirming judgment as a matter of law that overturned the jury's verdict of infringement, finding the advertising materials to be insufficient evidence where scientific proof was lacking); Bauer Patent Corp. v. Westinghouse Elec. Corp., 193 F. Supp. 868, 873 (W.D. N.C. 1961) ("[I]n this action it seems without question that plaintiff has placed too much reliance upon this advertising data and too little upon actual comparison of the drawings of the patent as against the accused machines. Consequently plaintiff is not aided by its claim of infringement through advertising."). The Court should reach the same conclusion here. I/P Engine's reliance on marketing materials and the mere use of the terms "keyword relevance" and "ad text relevance" therein is plainly insufficient evidence for a reasonable jury to conclude that the accused systems perform content-based filtering.<sup>6</sup>

#### J. The Accused Systems Do Not Filter For Relevance To The Query

The accused Smart Ads system does not filter for relevance to the query as required by all asserted claims (claims 10 and 25 of the '420 patent: "filtering... for relevance to the query";

<sup>&</sup>lt;sup>6</sup> I/P Engine further fails to provide any explanation as to what the marketing terms actually mean in the context of how Google's systems function. Claiming that the accused systems use generic terms like "keyword relevance" or "ad text relevance" is insufficient as there are multiple ways of determining keyword/ad text relevance besides performing a content-based analysis. For example, a system could determine the keyword relevance of a website based on how many times users clicked on a document with that particular keyword. As Dr. Frieder admits, this analysis would be based on feedback data, not content. (*See* Trial Tr. at 695:14-696:5.) Similarly, even if Smart Ads did use some form of keyword relevance or ad text relevance, I/P Engine has failed to show how Smart Ads' method of making this determination is a content-based determination. Indeed, the only determinations of relevance it has identified in Smart Ads is the use of feedback data (in the form of odds multipliers) for calculations.

claims 1 and 26 of the '664 patent: "filtering ... for relevance to at least one of the query and the first user"). To begin with, Dr. Frieder offered no opinion that the accused products filter for relevance to the query. Indeed, his testimony focused filtering generally, not on filtering for relevance to the query.

Further, Dr. Frieder testified that AdWords performed filtering based on the pCTR of an advertisement, and that filtering in the patents must be performed based on "exactly" the pCTR to meet the claim. (Trial Tr. at 493:24-25 ("Q. So no check yet. What do we have to do to get a check in this box, then? A. You must filter based on <u>exactly</u> what you just combined.").) But, Dr. Frieder admitted that the accused disabling steps "filter" based on factors *other* than pCTR.

For Disabling 2 and Promotion, Dr. Frieder agrees that the accused products disable ads based on the Long Term Value (LTV) score, not the pCTR. (Trial Tr. at 697:23 to 698:7.) The use of the LTV score creates a "reserve price" such that advertisers must bid high enough so that their LTV score is greater than zero, with the Min CPC set to that amount. Advertisers whose bids are high enough to meet the reserve price are eligible for the auction; advertisers whose bids are not high enough are disqualified from the auction. (*Id.*) This is true for both the right hand side (Disabling 2 or Ad Mixer disabling) and above the search results (Promotion). (Trial Tr. at 729:24 to 730:20.) Thus, the alleged filtering is based on whether the bid is sufficiently high to overcome the reserve price, not based on the value of the pCTR. Even if pCTR were a measure of relevance to the query, and it is not, the fact that ads with low pCTRs might qualify for the auction and ads with high pCTRs might be disqualified from the auction is proof positive that AdWords does not filter based on pCTR.

 $<sup>^7</sup>$  I/P Engine has not asserted that any of the accused products filter "for relevance to [] the first user."

Further, as Google engineer Bartholomew Furrow explained in deposition testimony played during I/P Engine's case, Disabling 1, or QBB disabling, is performed without the query and before the user inputs a query. (*See* Chen Dec. Ex. 1, Furrow Dep., Case Clip(s) Detailed Report at 27, ¶¶ 19-23.) Accordingly, QBB disabling cannot be related to the relevance to the query. It happens before the query.

# II. NO REASONABLE JURY COULD FIND THAT GOOGLE INDIRECTLY INFRINGES THE ASSERTED CLAIMS

I/P Engine alleges that Google is liable for actively inducing and/or contributing to the infringement of the asserted claims in this case. However, during trial, it introduced no evidence of indirect infringement.

Active Inducement: I/P Engine's argument fails at the threshold: where there is no direct infringement, as explained above in Section I, there can be no indirect infringement. See Mirror Worlds, LLC v. Apple Inc., 692 F.3d 1351, 1360 (Fed. Cir. 2012) ("Inducement of infringement requires that there be a showing of an underlying act of direct infringement."); Fujitsu Ltd. v. Netgear Inc., 620 F.3d 1321, 1326 (Fed. Cir. 2010) (explaining that direct infringement is the first element of contributory infringement).

But even if there were direct infringement, I/P Engine failed to provide any evidence that Google actively induced others to infringe the patents-in-suit. To establish active inducement, I/P Engine must show that Google purposefully caused others to directly infringe the asserted claims in the patents-in-suit. Specifically, it must prove that Google (i) had actual knowledge of the patents-in-suit and (ii) specifically intended for others to perform acts that directly infringe one or more of the asserted claims. See Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060, 2068 (2011). Here, I/P Engine introduced no evidence at trial that Google had actual knowledge of either patent-in-suit. Moreover, I/P Engine presented no evidence that Google

specifically intended for others -i.e., users or the other Defendants in this case - to directly infringe one or more of the asserted claims.

Contributory Infringement: Likewise, even if there were direct infringement, I/P Engine failed to provide any evidence that Google contributed to others' infringement of the patents-insuit. To establish contributory infringement, I/P Engine must show "1) that there is direct infringement, 2) that the accused infringer had knowledge of the patent, 3) that the component has no substantial noninfringing uses, and 4) that the component is a material part of the invention." Fujitsu, 620 F.3d at 1326. This test is conjunctive. I/P Engine must provide substantial evidence for each element. As stated above, the accused systems do not directly infringe the asserted claims. But more than that, I/P Engine made no attempt whatsoever to introduce any evidence concerning the last three elements of this test for contributory infringement.

Accordingly, I/P Engine has not met its burden of proof as to indirect infringement of the patents-in-suit.

## III. NO REASONABLE JURY COULD FIND THAT DEFENDANTS INFRINGE THE ASSERTED CLAIMS UNDER THE DOCTRINE OF EQUIVALENTS

I/P Engine alleged that Google is liable for infringement under the doctrine of equivalents. Under the doctrine of equivalents, "a product or process that does not literally infringe ... the express terms of a patent claim may nonetheless be found to infringe if there is 'equivalence' between the elements of the accused product or process and the claimed elements of the patented invention." *Warner–Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997). A patent is infringed under the doctrine of equivalents if any difference between a given limitation in the asserted claim and the corresponding element in the accused device is insubstantial. *Voda v. Cordis Corp.*, 536 F.3d 1311, 1326 (Fed. Cir. 2008). But I/P Engine

presented no evidence or opinion that Defendants infringe any asserted claim under the doctrine of equivalents.

### **CONCLUSION**

For the foregoing reasons, Defendants respectfully request that the Court grant their Motion for Judgment as a Matter of Law on Non-Infringement.

DATED: October 30, 2012 /s/ Stephen E. Noona

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### **CERTIFICATE OF SERVICE**

I hereby certify that on October 30, 2012, 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:

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