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.

REPLY BRIEF IN SUPPORT OF DEFENDANTS' RENEWED MOTION FOR JUDGMENT AS A MATTER OF LAW ON NON-INFRINGEMENT OR NEW TRIAL

As Defendants demonstrated in their motion, Plaintiff failed to provide sufficient evidence to find that each of the Accused Systems meet all limitations of any asserted claim.

Rather than rebut Defendants' actual argument, Plaintiff simply misconstrues the testimony of both fact witnesses and experts. Plaintiff also continues to primarily rely on Google's marketing and high-level documents, despite admitting that these documents are irrelevant and that the best source of evidence as to how the Accused Systems actually work is the source code. Given Plaintiff's failure to prove that the Accused Systems infringe, Defendants' motion for judgment as a matter of law on non-infringement, or in the alternative for a new trial, should be granted.

I. I/P ENGINE FAILS TO CITE ANY EVIDENCE THAT THE COLLABORATIVE AND CONTENT LIMITATIONS WERE MET

A. I/P Engine Admits that the Accused Systems Do Not "Filter the Combined Information" as Required by the '664 Patent.

In its opposition, I/P Engine does not dispute that the '664 Patent's plain language requires filtering of the "combined information." (See '664 Patent, claims 1[c], 26[d].) Nor does I/P Engine dispute that the claim language of the '664 Patent differs from the claim language of claim 10[b] of the '420 Patent which requires "filtering the informons on the basis of applicable

content profile data for relevance to the query," or that this shows the patentees were clear when they intended the patents to require filtering something and when they required filtering on the basis of something. (See '420 Patent, claim 10[b] (emph. added).)

While Plaintiff concludes that Dr. Frieder provided evidence that the "Accused Systems filter the combined information" (Opp., 21), the evidence cited by I/P Engine actually demonstrates that Dr. Frieder and I/P Engine <u>failed</u> to show that the Accused Systems filtered the combined information. Plaintiff confirms that Dr. Frieder argued that "PCTR associated with a particular ad is <u>what is being *used to* filter out</u> the ad. I'm filtering out ads <u>using</u> the pCTR." (Opp., 21 (emph. added).) But as detailed in Defendants' motion, the claims required filtering "the combined information," not "<u>using</u>" what I/P Engine contends to be the combined information to filter something else. There is no factual dispute, here, judgment as a matter of law is appropriate. Fed. R. Civ. P. 50(a)(1).

While Plaintiff argues that this issue is "nothing more than differing opinions between two experts" (Opp., 22), that is incorrect. Dr. Frieder simply ignored the plain language of the claims when rendering his opinion.² Here too, Defendants' point is made by the testimony cited by I/P Engine: "If you look at the Figure 6, it has the input coming in, the input as the two types of input coming in, and the score computed, and then it filters based on that. That is exactly

¹ I/P Engine's argument in footnote 11 is nonsensical. Defendants do not agree that the scope of the asserted claims of the '420 Patent include "filtering based on pCTR." (Opp., 20 n.11.) I/P Engine's theory is that the Accused Systems filter <u>based on pCTR</u>. Defendants deny that this is correct, as seen by Section IV of their Motion. But even if Plaintiff were correct, Defendants <u>cannot</u> infringe the '664 Patent under this theory because the '664 Patent requires filtering "the combined information" not "based on" that information.

² I/P Engine argues that Dr. Ungar's interpretation excludes the preferred embodiment. However, in the testimony cited by Plaintiff, Dr. Ungar <u>does not</u> admit that his interpretation of "filtering the combined information" excludes a preferred embodiment of the '664 Patent or is in any way inconsistent with the specification. Instead, the testimony cited to by Plaintiff relates to the separate issue of what is "combining" information. (Trial Tr., 1400:18-1402:3.)

what the patent does." (Opp., 21 (emph. added).) This testimony makes clear that Dr. Frieder was improperly comparing the accused devices to a figure from the <u>specification</u> of the patent and <u>not</u> to the asserted claims. *Catalina Lighting, Inc. v. Lamps Plus, Inc.*, 295 F.3d 1277, 1286 (Fed. Cir. 2002) ("infringement is to be determined by comparing the asserted claim to the accused device, not by comparing the accused device to the figures of the asserted patent.").

B. The Accused Systems Do Not Combine "Content" and "Collaborative."

I/P Engine fails to identify any evidence that the Accused Systems combine "content" and "collaborative" analysis. Instead, in its Opposition, I/P Engine admits that under its infringement theory "[c]ontent is placed into a string of values within the templates, that string of value becomes the odds multiplier, and then the Accused Systems sum mathematically that data to arrive at the pCTR." (Opp., 24 (emph. added).) One thing becoming something else is not combining the two. Rather, combining, by its nature, requires at least two different inputs—otherwise there is nothing to combine.³

Here again, Plaintiff's citation to Dr. Frieder's testimony makes Defendants' point.

Plaintiff cites Dr. Frieder's testimony regarding Figure 6, which emphasizes that combining requires multiple inputs: "[t]his combination function can be from a simple, weighted, additive function to a far more complex neural network function." (Trial Tr., 450:12-14 (referring to '420 Patent, 19:30-34).) Plaintiff's infringement theory, however, uses one input, *i.e.*, the alleged content data or attribute value, to "lookup" another value, *i.e.*, the alleged collaborative data or odds multiplier. (Trial Tr., 694:5-19.) The Accused System then discards the alleged content data or attribute value—it does not "filter" anything on the basis of that value.

This is consistent with the examples (originally cited by Defendants in their claim construction brief) Plaintiff uses. (Opp., 23, n.12.) To make a high school curriculum, a person would use at least two inputs, *e.g.*, math and English. Similarly, to make an Indiana Jones costume you would need at least a fedora and a bullwhip.

Dr. Frieder's conclusory testimony that he is "combining it because I'm taking the two sources and combining them," does not provide sufficient evidence. (*Id.*, 694:18-19.) *See Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 1320 (Fed. Cir. 2006) (affirming JMOL of non-infringement where Plaintiff's infringement theory was based solely on expert's conclusory testimony). Dr. Frieder does not provide any explanation or evidence to show how the attribute values and the odds multipliers are combined. Rather, Dr. Frieder's testimony shows the opposite. His undisputed testimony is that the alleged content data is used to look up the alleged collaborative feedback data. (Trial Tr., 694:11-13.)

Moreover, I/P Engine does not dispute that content and collaborative data are <u>not</u> merged. Thus, regardless of whether the Court agrees that the claims require the merging of data or just performing filtering using at least two different inputs, I/P Engine has failed to show that the Accused Systems perform the requisite "combining." Accordingly, I/P Engine has failed to provide evidence that the Accused Systems "combine" the alleged content and feedback data.

C. The Accused Systems Do Not Perform Content-Based <u>Filtering</u>.

1. Claims require content-based "filtering."

Plaintiff does not dispute that, as Defendants argued, the asserted claims require content-based filtering, not just content-based analysis. (Br., 8.) In other words, <u>filtering</u> must be performed based on the content of the data; mere analysis of the content of the data without using the content data to filter is insufficient.⁴ While I/P Engine points to the use of feature templates by the Accused Systems (Opp., 10), evidence of <u>using</u> feature templates is not evidence of filtering, as no ads are discarded based on any feature template. At most, the use of

⁴ Comparing the "content-based filter[ing]" language used by the applicants against the '664 patents language of "filter[ing] the combined information" only further demonstrates that the applicants were able to differentiate filtering based on something as opposed to filtering something. *See Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371 (Fed. Cir. 2004).

feature templates would be content-analysis. (*Id.*) Indeed, this is what Plaintiff itself argues Dr. Frieder said: "Dr. Frieder identified numerous feature templates in Google's source code that perform the required content <u>analysis</u>." (*Id.* (emph. added).)

Plaintiff does argue that the Accused Systems filter based on the <u>pCTR</u>. (Opp., 21 (citing Dr. Frieder ("I'm filtering out ads using the pCTR.").) Plaintiff then attempts to argue that the pCTR is the <u>combination</u> of content and collaborative feedback information. (*Id.*, 24.) But even if Google did filter on the basis of pCTR—which it does <u>not</u> (Br., 22-23)—that alleged filtering cannot be <u>both</u> (1) filtering on the basis of the content data and (2) filtering on the basis of the content data combined with the collaborative feedback data. In other words, the <u>same</u> alleged "filtering" step cannot meet <u>both</u> filtering elements in the claims. Accordingly, the Accused Systems either do not infringe because they do not meet the content-based filtering limitations, or because they do not combine content and feedback information.

2. Plaintiff's infringement theory contradicts its validity case.

As detailed in Defendants' motion, Plaintiff's infringement theory for content based-filtering is inconsistent with its validity case. (Br., 8-9; *see* Trial Tr., 538:24-539:10, 674:11-14, 675:14-17, 692:9-13.) Dr. Carbonell sought to distinguish Culliss by arguing that using attributes (which may include a comparison between the article and a keyword) to lookup feedback data in the Culliss reference is not content-based filtering, the very thing Plaintiff asserts meets the content filtering limitation in the Accused Systems. (Trial Tr., 1929:13-17; 1930:13-17.) Plaintiff attempts to distinguish the positions taken by Dr. Carbonell by arguing that its infringement theory is based on "how well a query or keyword matches the content of an advertisement," not determining whether a query matches a keyword. (Opp., 15 (emph. added).) This proves nothing. Dr. Carbonell himself testified that Culliss teaches the same matching of keyword or "key terms" with content, here the content of an article, that Plaintiff

accuses. (Trial Tr., 1929:6-17 ("Q. Right, and those key terms come from words in the article in our example, right? A. In the initialization step only. . . Q. Right. So the key terms are associated with content in the article, correct? A. Yeah. We have been over this before. Yes. There are other ways of doing it as well. This is one of the ways."); DX-058 at 14:34-36 ("For example, the scores can be initially set to correspond with the frequency of the term occurrence in the article.").) No reasonable jury could have found infringement in light of Plaintiff's experts' testimony which offer opposite opinions over the same claim limitation. *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.").

3. Plaintiff failed to provide <u>any</u> evidence of infringement for contentbased filtering for AdSense for Search, AdSense for Mobile Search, QBB disabling and pre-2010 AdWords.

I/P Engine also fails to rebut its failure to demonstrate that all the Accused Systems contain the feature templates I/P Engine contends show content based filtering. First, besides the use of feature templates, I/P Engine has not identified any other content-based filtering in the Accused Systems. Moreover, Plaintiff agrees that only some feature templates perform the allegedly infringing content analysis. (Trial Tr., 694:24-695:2.) According to Dr. Frieder, these few feature templates meet the content limitations of the asserted claims because they require a "comparison" between the creative— i.e., the text of an ad— and the query. (Id., 529:17-20.) Accordingly, to prove that the AdSense for Search, AdSense for Mobile Search, QBB Disabling, and AdWords pre-2010 infringe the patents-in-suit, it was Plaintiff's burden to provide evidence that these systems included the alleged content-based feature templates, i.e. feature templates that "compare" the creative and the query. Plaintiff never did.

Plaintiff attempts to remedy this failure of proof by arguing that these products are "substantially the same." But, again, Dr. Frieder admitted that these products use different sets

of feature templates.⁵ (*See id.*, 544:4-7.) Plaintiff therefore cannot rely on feature templates in AdWords to prove infringement in the other Accused Systems. Plaintiff could not point to any specific feature or attribute which performs content-based analysis for any of the other Accused Systems because Dr. Frieder's expert reports contained <u>no</u> analysis of any feature templates in AdSense for Search, AdSense for Mobile Search, or QBB disabling. I/P Engine has failed to "clearly disclose, discuss, and identify" for the jury the supporting evidence they rely upon for infringement, and so judgment as a matter of law should be granted. *Fresenius USA*, *Inc. v. Baxter Int'l, Inc.*, 582 F.3d 1288, 1300 (Fed. Cir. 2009).

- D. There Was No Legally Sufficient Basis to Find That The Accused Systems Use Collaborative Feedback Data.
 - 1. Plaintiff did not provide evidence that the Accused Systems group users with similar interests or needs.

Plaintiff accuses Defendants of "rehashing" "their failed claim construction arguments" in asserting the collaborative feedback limitations were not met. (Opp., 16; *see also id.*, 18-19.) Not so. The Court adopted almost verbatim the construction of "collaborative feedback data" proposed by Defendants: "data from system users with similar interests or needs regarding what informons such users found to be relevant." (D.N. 212, 4.) Plaintiff and its expert have continually and repeatedly read out the requirement that collaborative feedback data refers to

The cited deposition testimony of Jonathan Alferness also explains "The closes[t] analogy is really the AdSense for search product that we just talked about. So in general, things operate very much the same way <u>except again</u> we are using a different and separate Smart Ads model such that they're trained for these properties in this mobile context." (D.N. 755-1, 14-15, ¶ 10 (Oct. 17, 2012 (emph. added); *see also id.*, 14, ¶ 9.) Moreover, in deposition testimony played by Plaintiff in its case in chief, Mr. Hickernell, AOL's 30(b)(6) witness, admitted that he did not have any knowledge regarding the internal functionality of AOL Search Marketplace. (*See* Declaration of Howard Chen in Support of Defendants' Reply Briefs, Ex. 1, 46:14-47:1 ("I don't know anything inside of AdWords or AOL Search Marketplace.").)

data from "users with similar interests or needs". Plaintiff does so because there is <u>no evidence</u> that the Accused Systems group users with similar interests or needs.

Rather than present evidence of "collaborative feedback" data, Plaintiff repeatedly argues that the Accused Systems infringe because they use "feedback" data. For example, Plaintiff argues that the Accused Systems "use click data related to queries run by users." (Opp., 17; *see also id.*, 18.) Plaintiff points to click data, again relying on PX 338, a marketing document:⁶

PX 338 admits that the Accused Systems use "[y]our keyword's past click-through rate (CTR): How often that keyword led to *clicks* on your ad." PX 338 at 2 (emph added). This description actually repeats Dr. Frieder's analysis. Dr. Frieder testified that this feedback data satisfied the collaborative limitation of the asserted claims. Trial Tr. at 489:2-10.

(Opp., 18.) But as Plaintiff admits, Dr. Frieder testified only about feedback data, reading out the requirement that this be <u>collaborative</u> feedback data.

Citing Mr. Furrow's testimony, Plaintiff also argues that "the Accused Systems are 'taking what other people have done with similar interests..., storing it and then harvesting it as a collaborative piece." (Opp., 17-18.) But, Mr. Furrow did <u>not</u> testify at deposition or trial regarding collaborative feedback data, or users with similar interests or needs. Instead, Mr. Furrow simply testified that if a SmartAds attribute considers the query, then it trains using that query. (Trial Tr., 1123:21-1124:4.)⁷ Mr. Furrow did not provide any testimony that AdWords groups users with similar interests or needs. Nor did Mr. Furrow state that AdWords tracks how

⁶ This citation only illustrates Plaintiff's continued improper reliance on marketing documents.

Notably, Plaintiff points to attributes that track the query in attempting to prove that the Accused Systems use collaborative feedback data. However, in attempting to prove that the AdWords systems "combine" content feedback data and collaborative feedback data, Plaintiff relies on odds multipliers that are associated with <u>different</u> attributes—ones that contain the alleged "content" analysis. (Opp., 24.) Thus, even if Plaintiff was correct about the Accused Systems using collaborative feedback data—which it is not—Plaintiff fails to show that this "collaborative feedback data" is "combined" with the alleged content data even under its own infringement argument.

ads perform given a query. Rather, he testified that Smart Ads is agnostic as to the identity of the ad and does not know how often a particular ad is clicked on, let alone how often it's clicked on in response to a given query. (*Id.*, 1110:7-10.)

Plaintiff also misrepresents Dr. Ungar's testimony at trial. Dr. Ungar <u>never</u> testified that mindpools were <u>necessary</u> for infringement.⁸ (Opp., 17-19; Trial Tr., 1445:7-10 (testimony from Dr. Ungar confirming his opinion that mindpools are not required for infringement).) Instead, he testified, consistent with the Court's claim construction, that collaborative feedback data must be collaborative, and thus must be data from system users with similar interests or needs. (Trial Tr., 1240:20-1241:8.) As a matter of common sense, in order to identify feedback data from users with similar interests or needs, it is necessary to group those users so that the feedback from such uses can be separated from users generally. Indeed, Plaintiff has never explained how this could be done without grouping users in some manner.

2. Dr. Frieder's misleading testimony regarding historical CTR warrants a new trial.

As Defendants detailed in their motion, Plaintiff purposefully elicited inconsistent and misleading testimony from Dr. Frieder during trial that SmartAds uses historical CTR. (Br., 14-15.) Plaintiff argues Dr. Frieder never stated that collaborative data is click-through rate. (Opp., 19.) Dr. Frieder's testimony illustrates otherwise. For example, Dr. Frieder relied on PX-338, a Google marketing document, to state "[a]s you see, it is in green, and from their own documents, it says, 'Your keyword's past click-through rate,' namely, 'how often that keyword led to clicks of your ad.' That is a function, it's a part of what they are using to calculate the quality score.

There is no doubt that that is collaborative." (Trial Tr., 489:2-7 (emph. added); see also id.,

⁸ Dr. Ungar explicitly stated that he was only using the mindpools as an example from the specification. (Trial Tr., 1232:3-13; 1445:2-20; 1446:18-22.) Dr. Frieder repeatedly used figures from the specification as examples in his analysis. (*See id.*, 445:5-450:4, 450:22-456:18.)

490:3-5.) While Dr. Frieder later testified on cross-examination that CTR was not used by SmartAds and that he was not relying on CTR as the collaborative data required by the claims (*Id.*, 680:9-12), Plaintiff unquestionably elicited testimony on direct to the contrary (knowing full well that at his deposition he testified in the same manner that he did on cross). Plaintiff then improperly relied on such testimony during its closing arguments, by repeatedly citing to historical CTR in its attempt to demonstrate that the Accused Systems meet the collaborative data limitations of the asserted claims. (PDX-418, PDX-419, PDX-423, PDX-424, PDX-425, PDX-426, PDX-427, PDX-428, PDX-429, PDX-430, PDX-431, PDX-432.) At a minimum, a new trial should be granted. *800 Adept, Inc. v. Murex Sec., Ltd.*, 539 F.3d 1354, 1369 (Fed. Cir. 2008); *Cline v. Wal-Mart Stores, Inc.*, 144 F.3d 294, 301 (4th Cir. 1998).

II. THERE WAS NO LEGALLY SUFFICIENT BASIS TO FIND THAT THE ACCUSED SYSTEMS ARE A SEARCH ENGINE OR A SEARCH SYSTEM

A. Plaintiff Successfully Relied On The Preamble In Order To Prove Infringement And Rebut Defendants' Invalidity Arguments.

The preambles of asserted claims 10 and 25 of the '420 patent and claim 1 of the '664 patent recite a "search engine system" and "search system," respectively. Plaintiff does not deny that Dr. Frieder relied on these preambles to illustrate that the Accused Systems purportedly infringe each limitation in the asserted claims. Instead, Plaintiff argues that Dr. Carbonell did not use the preambles as limitations. (Opp., 5-6.) Looking at Dr. Carbonell's full testimony, it is evident that he did rely on the preambles to support his opinion that the patents are valid. In particular, Dr. Carbonell testified that what distinguished the claimed inventions from the prior art was the tight integration of "collaborative analysis" and "content-based analysis with respect to a query". (Trial Tr., 1835:24-1836:19 (emph. added).) According to Dr. Carbonell, it was this use of the search engine/search system that made the claimed inventions valid: "In other words, to use the immediate information need, not just a long-term standing need, of the users, 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." (*Id.*)

B. Defendants Were Not Allowed to Introduce Evidence to Rebut Plaintiff's Infringement Argument.

Dr. Frieder was allowed to "check the box" to show that the Accused Systems met the "search engine" element in the preamble of the accused claims. Defendants were not allowed to "uncheck" the same box on the grounds that the preamble was not a limitation. This disparate treatment confused the jury and prejudiced Defendants. Because Defendants were not allowed equivalent treatment of their non-infringement case, Defendants are entitled to a new trial.

Meyer Intellectual Props. Ltd. v. Bodum, Inc., 690 F.3d 1354, 1377 (Fed. Cir. 2012).

C. The Preambles Of The Asserted Claims Are Limiting.

Defendants in their opening brief explained why the preambles in the asserted claims <u>in</u> this case are limiting to the scope of the claims, citing to the Federal Circuit's standard in support. (Br., 18-19 (citing *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808-09 (Fed. Cir. 2002)).) As Defendants demonstrated, for each asserted 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. (*Id.*) Plaintiff just ignores this.

D. The Accused Systems Do Not Meet The Preambles' "Search Engine" Or "Search System" Limitations.

Plaintiff argues that the Accused Systems have a "search engine environment" and a "search process." (Opp., 4.) In so doing, Plaintiff ignores its own admissions during trial. Plaintiff repeatedly stated that Google Search was not accused in this case. (*See*, *e.g.*, Trial Tr., 116:7-12, 117:2-5, 133:3-5.) As the evidence demonstrated at trial, there is no separate search engine for the Accused Systems—instead, queries are run in Google Search. (*Id.*, 1091:22-

1092:13.) Having admitted that Google Search is not accused, Plaintiff cannot now point to Google Search in order to meet the preambles' search engine or search system limitations.

According to Plaintiff, AdWords is a search system because the "AdWords system 'starts with end users when they enter a search query." (*Id.*, 4 (citations omitted).) Not only is this argument illogical, it is fundamentally flawed because Plaintiff never previously argued that the use of a query made AdWords a search engine or search system. Dr. Frieder did not make this argument either in his expert reports or at trial, nor did Plaintiff present any argument on this point at trial. Instead, Plaintiff repeatedly and specifically characterized the Accused Systems as advertising systems, in contrast to Google's search system. (*See, e.g.*, Trial Tr., 107:21-24, 133:3-5.) Having failed to present any such evidence at trial, Plaintiff cannot rely on it for the first time in post-trial motions to avoid its failure of proof at trial.

III. THE ACCUSED SYSTEMS DO NOT SCAN OR SEARCH FOR ADS

Scanning/searching element (All claims): Plaintiff does not dispute that advertisers submit their ads to Google for inclusion in a database or that Google organizes and stores these submitted ads based on their associated keywords. (D.N. 755-1, 13, ¶ 6.) Thus, it is undisputed that Google knows where each ad is stored and AdWords does not have to go out and look for an ad in response to a query. As such, AdWords does not have to "look[] for or examin[e] items in a network" or "search[] for information relevant to a query" as required by the asserted claims.

In its Opposition, Plaintiff continues to rely on "targeting" as its basis for claiming that the Accused Systems scan or search for ads. But "targeting" is just a high-level term, not a function in the Accused Systems. Plaintiff's only retort is that the document it relies on is circulated to internal software engineers. (Opp., 8.) Regardless of who the document is circulated to, Plaintiff <u>still</u> has not identified any instrumentality or specific functionality that performs this "targeting." *See Fresenius*, 582 F.3d at 1300.

Plaintiff next argues that the jury disregarded Dr. Ungar's "hyper-technical" interpretation. But Dr. Ungar was merely adhering to the Court's construction which requires "looking for" and not "looking up." *See Cordis Corp. v. Boston Sci. Corp.*, 658 F.3d 1347, 1357-1358 (Fed. Cir. 2011) (affirming judgment as a matter of law of no literal infringement when patentee's expert testimony of infringement was based on an "incorrect understanding of the claim construction"). As it is undisputed that the ads are organized and stored by AdWords, it is also undisputed that AdWords would need to look for the ads it wanted to retrieve. ¹⁰

Demand search (Claims 10 and 25 of the '420 Patent): Plaintiff has still failed to identify any evidence in the record that the Accused Systems meet the "demand search" limitation. Plaintiff cites Dr. Frieder's testimony, but this testimony addresses the scanning and "scanning a network" limitations. (See Trial Tr., 483:14-494:4 ("Q. Do you have the definition underneath of the claim on PDX-089 on the screen? A. Yes... What it simply means is, "Scanning a network means: Looking for or examining items in a network... so by finding, you're looking for. To find you need to look for.").) I/P Engine points to nothing in the record as evidence that the "demand search" limitation is met.

Network (Claims 10 and 25 of the '420 Patent): Plaintiff has also still failed to explain how the Accused Systems scan a network. Plaintiff argues that the candidate ads are stored on a set of connected computers, i.e., "AdShards (also known as the ads database)." (Opp., 7.)

Plaintiff, however, has not explained or provided any evidence that a database is the same as a

⁹ Far from being "hyper-technical," the different prepositions dramatically change the meaning of the phrase. Consider the difference between "looking <u>for</u> a friend" and "looking <u>up</u> a friend." Similarly, AdWords need not look <u>for</u> ads, as it already knows where they are. It need only look <u>up</u> information relating to the ads.

Plaintiff's citation to the landing page relevance (Opp., 9 n.4) is also not evidence of infringement as the claims require scanning/searching for "informons" and filtering the "informon[s]." It is undisputed that landing pages are not filtered, and, as such, Plaintiff points to no evidence of any such filtering. Any searching or scanning for landing pages is irrelevant.

network, let alone that "scanning a database" is the same as "scanning a network." Accordingly, Plaintiff has still failed to show that the accused systems scan a network.

IV. THERE WAS NO LEGALLY SUFFICIENT BASIS TO FIND THAT THE ACCUSED SYSTEMS FILTER FOR RELEVANCE TO THE QUERY

Dr. Frieder admitted that the Accused Systems disable ads based on the Long Term Value (LTV) score, not the pCTR. (Trial Tr., 697:23-698:7.) Plaintiff does not dispute this. Instead, Plaintiff argues that AdMixer disabling and promotion disabling both involve filtering for relevance to the query because "[t]he fact that additional factors are included in filtering for these two disabling steps does not eliminate or excuse Defendants' liability for infringement." (Opp., 25 (citations omitted).)

Plaintiff's argument misses the point. AdWords does not filter by pCTR—and therefore does not infringe—because a higher pCTR does not necessarily lead to an advertisement being eligible for the auction. Instead, because the use of the LTV score creates a "reserve price," advertisers' bids must be high enough to meet that reserve price in order to be eligible for the auction; advertisers whose bids are not high enough are disqualified from the auction. (Trial Tr., 697:23-698:7.) 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. (Trial Tr., 1103:25-1104:13, 1460:19-1461:12.)

Nor has I/P Engine explained how a "whole diverse machine" or how "distributed computing machinery" is a network. Plaintiff also points to discussion of how the SmartAds database is on the network. Plaintiff, however, has failed to show that the Accused Systems scan that "network" to find informons. Rather, even under Plaintiff's infringement theory, the only thing "scanned" is the ads database <u>not</u> the network the ads database resides upon.

Unlike the cases cited by Plaintiff, this is not a situation where a product infringes even though it includes additional features; here, the system simply does not infringe.

Plaintiff also argues that Defendants do not dispute that QBB disabling meets this limitation. (Opp., 25.) This is plainly false. As noted in Defendants' opening brief, Google engineer Bartholomew Furrow explained that QBB disabling is performed independent of the query and, in fact, before the user inputs a query. (Trial Tr., 1097:8-11.) Because QBB disabling happens before the query, it cannot be related to the query. Plaintiff makes no effort to dispute this point, and can cite to no evidence to the contrary.

V. PLAINTIFF RELIED ON IRRELEVANT MARKETING DOCUMENTS

Plaintiff's infringement case was fundamentally flawed because it relied primarily on marketing documents, encouraging the jury to ignore the most detailed evidence of how the Accused Systems work, the source code. While Plaintiff argues that it relied on additional evidence to prove infringement, Plaintiff does not even try to rebut that Dr. Frieder's only limitation-by-limitation infringement analysis relied on marketing documents. (Trial Tr., 486:17-490:18; PDX 57-59, 91-93, 98, 119, 126-128, 133-35, 139-41.) Indeed, throughout its opposition brief Plaintiff continues to rely on marketing and other high-level documents to support its argument that the Accused Systems meet the claim limitations. (Opp., 4, 6-8, 10, 18.) But Plaintiff cannot rely on marketing documents to override how those systems actually work. Whirlpool Corp. v. LG Elecs., Inc., 2006 WL 2035215, at *8 (W.D. Mich. July 18, 2006). 12

Defendants cited multiple cases illustrating that reliance on marketing documents is insufficient to show infringement as a matter of law. (Br., 24.) Plaintiff's attempts to distinguish these cases fail. (Opp., 27 n.14.) Plaintiff first argues that the marketing documents in *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1351-52 (Fed. Cir 2007) were less reliable than the marketing documents here because they "did not equate to the documents here where Google describes with specificity its practicing of the patented features." (*Id.*) However, Plaintiff and its infringement expert Dr. Frieder have admitted that Google's marketing documents discuss things that are not actually used in SmartAds, such as a keyword's

Moreover, as detailed in Defendants' brief, Plaintiff itself admitted during trial that the marketing documents it relied upon were not relevant because they pertained to the non-accused Quality Score 1 through 10, rather than an accused Quality Score. (Trial Tr., 645:15-19 (PX 338); *id.*, 647:3-5 (PX 51); 647:15-649:1 (PX 357); 650:1-651:9 (PX 112); 667:6-17 (Hal Varian video); 2064:1-19 (Plaintiff's counsel admitting during closing argument that these documents referred to the non-accused Quality Score).) But Plaintiff now argues that these documents relate both to the non-accused Quality Score and the accused Quality Score. (Opp., 26-27.) Even if Plaintiff were correct, this only further illustrates the problem with relying on these documents as evidence of infringement, especially when detailed evidence of how the systems actually work is available in the form of source code.¹³

historical CTR. (Trial Tr., 673:12-14; id., 677:11-18.) Given that these marketing documents discuss functionalities that are not actually practiced by the Accused Systems, they suffer from the same significant "gaps in proof" as in *Pharmastem*, and therefore do not provide a sufficient basis for a finding of infringement. Plaintiff next argues that Whirlpool Corp., 2006 WL 2035215, at *8, is distinguishable because "the advertising literature in that case were in direct contradiction to the facts regarding the actual operation of the accused product." (Br., 27 n.14.) Again, Plaintiff has admitted that Google's marketing documents directly contradict the facts regarding the actual operation of the Accused Systems. Just as in Whirlpool Corp., Plaintiff cannot rely upon Google's marketing documents to prove infringement. Finally, Plaintiff argues that Scantibodies Lab., Inc. v. Immutopics, Inc., 374 F. App'x 968, 971 (Fed. Cir. 2010) does not apply because "it involves claim construction arguments where a court chose to view the claims based on their plain meaning rather than the language in a marketing document." (Br., 27 n.14.) Again, Plaintiff's argument misses the point. As the Court in Scantibodies properly recognized, "[t]he use of language in marketing materials often means something quite different from the language used in a patent." Id. Language used in Google's marketing documents is insufficient to prove infringement, and Plaintiff's primary reliance on such documents is improper, especially in the face of contradictory evidence of how the systems actually work.

As both Google and Dr. Frieder himself testified, it is the source code that explains how the Accused Systems actually work. (Trial Tr., 593:2-3.) The testimony of Mr. Alferness that these documents are "a proxy or a – an abstraction of what's actually happening under the covers," cited by Plaintiff, is of no help to Plaintiff. (Opp., 26 (citing D.N. 755-1, 2, \P 6).) An "abstraction" is not evidence of infringement.

VI. PLAINTIFF FAILED TO PROVE INDIRECT INFRINGEMENT

Active Inducement: To establish active inducement, I/P Engine needed to show that Google purposefully caused others to directly infringe the asserted claims in the patents-in-suit. Specifically, it needed to 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. Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060, 2068 (2011). The Supreme Court, in Global-Tech, rejected the earlier Federal Circuit standard for intent, a standard that the Court described as akin to recklessness. Id. at 2070-2071. Instead, the Supreme Court held that specific intent requires actual knowledge that the induced acts constitute infringement. Id. Plaintiff's arguments and "evidence" fail to meet this standard. Plaintiff does not even try to present evidence that would meet the standard set by Global-Tech.

Instead, Plaintiff argues that there is evidence that Google had actual knowledge of the patents-in-suit, once again referring to the citation to the '420 Patent during prosecution of Google's own patent application. (Opp., 29.) This is insufficient as a matter of law to show actual knowledge of the patents-in-suit by Google. *Veritas Operating Corp. v. Microsoft Corp.*, 562 F. Supp. 2d 1141, 1285 (W.D. Wash. 2008) ("[H]aving 'knowledge' of a single patent only because it was cited during prosecution of two patents among thousands (and then only through imputing that knowledge from [the defendant's] attorneys) does not give [the defendant] sufficient 'knowledge' to formulate 'intent' required for inducement.").

Second, Plaintiff argues that there is "circumstantial evidence" that Google induced others to use the Accused Systems, and that "Google has induced others to directly infringe the '420 and '664 patents by making for and selling to (via revenue sharing agreements) third party publishers the AdWords system with material that provide instructions and information for using the AdWords system." (Opp., 28.) But instructing users how to use a system, even in an

allegedly infringing manner, does not give rise to inducement liability unless the defendant has "knowledge that the induced acts constitute patent infringement." *Global-Tech*, 131 S. Ct. at 2070-71 (emph. added). Moreover, Plaintiff has never come forward with any evidence that Defendants know or believe there is a high risk that they induce infringement of one or more of any asserted valid claim in any manner. There is no evidence that Defendants had pre-suit knowledge of the patents-in-suit, Plaintiff admitted that it did not contact Google prior to trial (Trial Tr., 205:1-4), and nothing that happened since demonstrates the necessary intent for any Defendant. Rather, Defendants' substantial non-infringement and invalidity defenses show that they reasonably and consistently have believed they do not induce infringement. (D.N. 821, 832.) *See Mikkelsen Graphic Engineering Inc. v. Zund America, Inc.*, No. 07–C–0391, 2011 WL 6122377, at *7-8 (E.D. Wis. Dec. 8, 2011).

Contributory Infringement: A party is liable for contributory infringement only if it "offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention," while knowing that it is "especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use." 35 U.S.C. § 271(c). To succeed on a claim of contributory infringement, the patentee must prove "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 Ltd. v. Netgear Inc., 620 F.3d 1321, 1326 (Fed. Cir. 2010). Thus, it is not enough to prove an act of direct infringement by another, I/P Engine must also prove that the Defendants "knew that the combination for which its components were especially made was

both patented and infringing' and that [Defendants'] components have no 'substantial noninfringing use[s]." *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1320 (Fed. Cir. 2009) (quotation omitted). As with inducement, Plaintiff ignores this standard—just as it chose not to present evidence to meet it at trial.

As outlined above, Plaintiff has failed to prove that Defendants directly infringe the patents-in-suit or that Defendants had the required knowledge of the patents-in-suit. Therefore, Plaintiff cannot show that any Defendant "knew that the combination for which its components were especially made was both patented and infringing." *Lucent Techs.*, 580 F.3d at 1320.

Nor does Plaintiff point to "a <u>component</u> of a patented machine, manufacture, combination or composition, or a material or apparatus" that it alleges is "especially made or especially adapted <u>for use in an infringement</u> of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use." 35 U.S.C. § 271(c). Instead, Plaintiff points to the entire Accused Systems, which are not components used in another system. And while Plaintiff argues that "the accused features have no substantial non-infringing uses," it identifies no evidence in support of this argument. (Opp., 29.) Plaintiff's bald statement is insufficient to support a finding of infringement. Finally, because Plaintiff does not point to an "allegedly infringing component," it cannot and does not assert that the allegedly infringing component is a material part of the invention.¹⁴

Plaintiff argues "the inclusion of an indirect infringement instruction makes no difference in the calculation of damages, and at worst was harmless error." (Opp., 29 n.15.) But Plaintiff's entire damages theory is based on a hypothetical negotiation in 2004, based on a 2004 date of first infringement—seven years prior to the filing of the Complaint, which affects the calculation of damages, and is not harmless error.

VII. PLAINTIFF FAILED TO PROVE INFRINGEMENT UNDER THE DOCTRINE OF EOUIVALENTS

I/P Engine presented no evidence at trial in support of its allegation that Defendants are liable for infringement under the doctrine of equivalents. Plaintiff provided no evidence to demonstrate that the Accused Systems "performs substantially the same function in substantially the same way to obtain the same result" as the invention claimed in the patents-in-suit. Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co., 520 U.S. 17, 38 (1997) (citation omitted). Nor did Plaintiff provide any evidence of insubstantial differences between the Accused Systems and the inventions claimed in the patents-in-suit. *Id.* at 40. Plaintiff's argument to the contrary is both conclusory and without merit—simply stating that it presented evidence "where necessary of a substantial equivalent" without citing to <u>any</u> trial testimony in support. (Opp., 30.)

Just as in Lear Siegler, Inc. v. Sealy Mattress Co., 873 F.2d 1422, 1426 (Fed. Cir. 1989), because Plaintiff did not provide evidence or argument "explicitly setting forth equivalence of result, function, and means, the trial court should not have instructed the jury on the doctrine." Moreover, because a separate interrogatory was not provided in the verdict form, it is impossible to know whether the jury found infringement under the doctrine of equivalents. Thus, the inclusion of a jury instruction on the doctrine of equivalents was not "harmless error" as Plaintiff alleges. (Opp., 30.) Instead, because no evidence or argument was presented about the doctrine of equivalents, Defendants are entitled to judgment as a matter of law that they did not infringe under the doctrine of equivalents. And because the jury was allowed to consider that doctrine in determining infringement but the Court did not submit a special interrogatory about it, the Court should grant a new trial to ensure the jury did not find infringement based on a wholly unsupportable theory. Warner-Jenkinson Co., 520 U.S. at 39 n.8.

DATED: February 15, 2013 /s/ Stephen E. Noona

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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:

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