UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
NORFOLK DIVISION

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

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

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I. INTRODUCTION

Defendants Renewed Motion for Judgment as a Matter of Law on Non-Infringement or New Trial ("Motion") simply repeats the arguments this Court has previously considered and rejected, some on multiple occasions. The crux of the Motion is Defendants' insistence that the jury should have agreed with Defendants' evidence of non-infringement, instead of agreeing with I/P Engine's considerable evidence of infringement. I/P Engine's infringement case rested upon multiple sources of evidence: Defendants' own documents; Defendants' own employees' testimony; the Google source code; the analysis, opinions, and conclusions of I/P Engine's infringement expert, Dr. Frieder, who provided detailed testimony regarding how each and every limitation of the asserted claims of U.S. Patent No. 6,314,420 and 6,775,664 is satisfied by Google's AdWords system, AdSense for Search system, AdSense for Mobile Search system, and AOL's Search Marketplace system (collectively "the Accused Systems"), and the admissions I/P Engine obtained from Defendants' own non-infringement expert, Dr. Lyle Ungar.

The jury's acceptance of I/P Engine's infringement evidence is not surprising because it was comprehensive and supported by multiple sources, whereas Dr. Ungar's non-infringement arguments were spoon-fed by Defendants' counsel, and were based on far-fetched interpretations of the Accused Systems and asserted claims. Under Rules 50 and 59, this Court cannot set aside the jury's verdict of infringement simply because Defendants disagree with the evidence.

II. STANDARDS FOR JMOL AND NEW TRIAL

Judgment as a matter of law is appropriate only if this Court "finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for" I/P Engine. Fed. R. Civ. P. 50(a). Rule 50(b) allows parties to renew a motion for judgment after trial. Fed. R. Civ. P. 50(b). Where a Rule 50 motion is renewed following a jury verdict, this Court may only grant the motion if, "viewing the evidence in a light most favorable to the non-moving party (and in

support of the jury's verdict) and drawing every legitimate inference in that party's favor, the only conclusion a reasonable jury could have reached is one in favor of the moving party." *Int'l Ground Transp. v. Mayor & City Council of Ocean City, Md.*, 475 F.3d 214, 218-19 (4th Cir. 2007). Defendants bear a "hefty burden" in establishing that the evidence is insufficient to uphold the jury's verdict. *Price v. City of Charlotte, N.C.*, 93 F.3d 1241, 1249 (4th Cir. 1996). "Although the district court may differ with the jury's conclusions, Rule 50(b) does not permit the court to weigh the evidence or assess the credibility of the witnesses – to do so is to usurp the fact-finding role of the jury." *Pitrolo v. County of Buncombe*, 407 Fed. Appx. 657, 659 (4th Cir. 2011).

On a motion for a new trial under Rule 59(a), "it is the duty of the judge to set aside the verdict and grant a new trial, if he is of the opinion that [1] the verdict is against the clear weight of the evidence, or [2] is based upon evidence which is false, or [3] will result in a miscarriage of justice, even though there may be substantial evidence which would prevent the direction of a verdict." *Atlas Food Sys. & Servs., Inc. v. Crane Nat'l Vendors, Inc.*, 99 F.3d 587, 594 (4th Cir. 1996) (citations omitted). Defendants bear the burden to demonstrate that a new trial is warranted. *See, e.g., Holman v. Mark Indus., Inc.*, 610 F.Supp. 1195, 1199 (D. Md. 1985). Further, "[t]o constitute proper grounds for granting a new trial, an error, defect or other act must affect the substantial rights of the parties." *Walker v. Bain*, 257 F.3d 660, 670 (6th Cir. 2001) (citing Fed. R. Civ. P. 61).

III. **AMPLE EVIDENCE SUPPORTS THE JURY'S VERDICT ON INFRINGEMENT, CONTRARY TO EACH OF DEFENDANTS' NON-INFRINGEMENT ARGUMENTS**

    A. **There is Sufficient Evidence That the AdWords System is a Search Engine System as Claimed in Claims 10 and 25 of the '420 Patent, a Search System as Claimed in Claim 1 of the '664 Patent and a Method for Obtaining Information as Claimed in Claim 26 of the '664 Patent**

Defendants make four arguments as to why the AdWords system is not a search engine or search system. All are without merit. First, Defendants argue (at 19) that "judgment as a matter of law is appropriate because the preambles are limitations of the asserted claims." First, as a general rule, a preamble is not a limitation, because it merely defines the environment for the claimed limitations. *See Aspex Eyewear, Inc. v. Marchon Eyewear, Inc*., 672 F.3d 1335, 1347 (Fed. Cir. 2012) ("This court has recognized that as a general rule preamble language is not treated as limiting.") (citing *Allen Eng'g Corp. v. Bartell Indus., Inc*., 299 F.3d 1336, 1346 (Fed. Cir. 2002)); *Symmes v. King*, 935 F.2d 279, at *2 (Fed. Cir. 1991) (when the preamble states a purpose or intended use for the invention, it is not limiting, but merely indicates the environment in which the claimed invention operates). At trial, after hearing extensive argument, the Court correctly ruled that Defendants made no showing that the preamble was a limitation. Trial Tr. at 90:1-24; 1188:12-1194:10. I/P Engine and its expert Dr. Frieder followed this Court's ruling and well-established claim limitation principles, and referenced the preamble to define the environment in which the Accused Systems operate and to set the stage for how the Accused Systems infringed the claimed limitations of each of the asserted claims. Trial Tr. at 411:15-497:8; 513:17-632:17. I/P Engine's evidence of infringement was consistent with this Court's claim construction, this Court's rulings during trial, and with well-established principles of claim construction. *See id*.; *see also Canon, Inc. v. GCC Intern. Ltd.*, 450 F. Supp. 2d 243, 249-50

(S.D.N.Y. 2006) ; *Echometer v. Lufkin Indus.*, No. 7:00-cv-0101, 2003 WL 21768011, at *3-4

(N.D. Tex. July 31, 2003).

Second, Defendants argue that judgment as a matter of law is appropriate because "it is

undisputed that the accused systems do not meet the preambles' 'search engine' or 'search

system' limitations." Motion at 19 (emphasis added). The record refutes Defendants' assertion.

Dr. Frieder testified that the Accused Systems operate in "a definite search engine environment"

as it is "a search process" because "[y]ou're entering a search." Trial Tr. at 482:4-9. Google's

internal documents described in detail the workings of the AdWords system, admitting that the

AdWords system "starts with end users when they enter a search query." PX 228 at 2. Google's

engineer, Mr. Furrow, likewise agreed. Trial Tr. at 1127:6-9 ("Q. So, Mr. Furrow, when you

start the process [of the AdWords system] you mentioned inserting a query, how this whole thing

starts, correct a user would insert a query? A. That's correct, yes."). The mere fact that

Defendants' expert, Dr. Ungar, disagreed, and called the Accused System "an advertising

system" (Trial Tr. at 1166:14-17)[1] is not determinative. An expert's differing opinion is not

sufficient to reverse the jury's verdict, especially when contradicted by considerable evidence to

the contrary. *See Power-One, Inc. v. Artesyn Tech., Inc.*, 599 F.3d 1343, 1351 (Fed. Cir. 2010)

("In evaluating the evidence, the jury was free to disbelieve [the defendant's] expert . . . and

credit [the plaintiff's] expert . . . ."); *Dennis v. Columbia Colleton Med. Ctr., Inc.*, 290 F.3d 639,

645 (4th Cir. 2002) ("[I]f reasonable minds could differ, [this Court] must affirm [the jury's

verdict]"). Moreover, Dr. Ungar cited no evidence - in the form of Google documents or

witness trial testimony - to support his bare conclusion.

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[1] Dr. Ungar's credibility was undercut by the fact that, whenever he described how the Accused
Systems operated, he always began with a user entering a query. *See, e.g.,* Trial Tr. at 1202:18;
1239:4-5.

Third, Defendants argue (at 16-17) that, because this Court did not allow them to "uncheck the preamble box" on a demonstrative exhibit while Dr. Ungar was testifying, the jury was confused and misled and thus Defendants were prejudiced. During Defendants' case, this Court properly ruled that the preamble was not a limitation, and thus not appropriate for Defendants to misleadingly argue (or "uncheck") that the Accused Systems lacked this fictional limitation.[2] Trial Tr. at 1188:12-1194:19. Defendants nevertheless were allowed - and did - introduce evidence that the Accused Systems are not search engine systems. Dr. Ungar testified that "AdWords is not a search engine," but instead "an advertising system for showing ads." Trial Tr. at 1166:14-17. The jury, however, disagreed.

Fourth, Defendants argue (at 17) that this Court's ruling "allowed Plaintiff to rely on the preamble in rebutting Defendants' invalidity case while avoiding Defendants' preamble rebuttal to its own infringement case." Defendants mischaracterize (at 16) the testimony of Dr. Carbonell (I/P Engine's validity expert) regarding the "tight integration" of the asserted claim limitations to distinguish Defendants' prior art references. Dr. Carbonell did ***not*** use the preambles as limitations to support his opinions. He instead relied *solely* upon the actual claim limitations:

> Lang and Kosak disclose a *tight integration* among all of the different parts. As you can see here from *element (d) of claim 10 of the '420 and element (c) of claim 1 of the '664*, they require all of the components, the filtering, the combining, the

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[2] The three cases cited by Defendants, *Meyer Intellectual Props*, *Sparks* and *Ellis* are inapplicable. None of those cases related to a court's refusal to permit an accused infringer to display a demonstrative exhibit that improperly suggested that a preamble was a substantive limitation. In fact, those three cases are far afield from the facts of this case. For instance, the court in *Meyer Intellectual Props. Ltd. v. Bodum, Inc.*, 690 F.3d 1354, 1377 (Fed. Cir. 2012) ordered a new trial after the district court excluded fifty-five prior art references and substantial witness testimony to limit the Defendants to argue obviousness based on only one reference. In *Sparks v. Gilley Trucking Co.*, 992 F.2d 50, 54 (4th Cir. 1993), the court granted a new trial where prejudicial and impermissible character evidence was admitted to prove negligence. The court in *Ellis v. Int'l Playtex, Inc.*, 745 F.2d 292, 305 (4th Cir. 1984), ordered a new trial after volumes of Center for Disease Control and state health department data that was crucial to prove causation was excluded from consideration by the jury.

pertaining feedback data, the content profile *and the relevance to the query to be tight or closely integrated.* In fact, they perform all of those operations, the filtering, the combining with the feedback *with respect to the query.* That is something that all of the cited prior art fails to do.

Trial Tr. at 1875:12-22 (emphasis added). Thus, contrary to Defendants' arguments, I/P Engine did not use the preamble in one way to prove infringement, and another way to avoid invalidity.

      B.   **There Was Sufficient Evidence That the AdWords System Scans a Network to Make a Demand Search for Informons Relevant to A Query from an Individual User as Claimed in Claims 10 and 25 of the '420 Patent, a Scanning System for Searching for Information Relevant to a Query Associated with a First User in a Plurality of Users as Claimed in Claim 1 of the '664 Patent and a Searching for Information as Claimed in Claim 26 of the '664 Patent**

Defendants contend (at 20) that "I/P Engine 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." Defendants' Motion is based on two assertions: (1) that "Dr. Frieder never once mentioned the Court's construction or opined regarding how this element for the claims is in AdWords," and (2) that I/P Engine failed to provide substantial evidence concerning the scanning, demand search and network elements of the asserted claims. Motion at 20-22. These arguments are refuted by substantial evidence.

I/P Engine presented (more than) substantial evidence on all aspects of the scanning/searching elements and the demand search elements of the asserted claims. For example, Dr. Frieder testified that these limitations require "a system for looking for or examining items in a network, to make a demand search for informons relative to the query from an individual user." Trial Tr. at 483:22-25. To that end, he testified that the Accused Systems satisfy this limitation, stating "targeting means finding . . . ads that best match the user's query. So by finding, you're looking for." *Id*. at 484:2-4. Likewise, Google's internal technical document, PX 228, states, "We apply Targeting *to find ads* that match the user's query" and

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"Targeting means *finding (and displaying) ads* that best match the user's query." PX 228 at 1 and 4 (emphasis added).

Dr. Frieder also testified "[y]ou are finding [i.e., looking for] the candidate ads that are stored." Trial Tr. at 484:23-25. He explained that the candidate ads "are scattered on a whole diverse machine. The machines have to be connected together somehow, and they are corrected [*sic*: connected] in the network. You are looking for them on a network." *Id*. at 485:9-12. Dr. Frieder's testimony followed the deposition testimony of Google's Mr. Alferness, who explained the different network components of the Accused Systems, and that the AdShards (also known as the ads databases) where the candidate ads are stored, were "distributed computing machinery," *i.e.,* a network. Alferness Depo. Tr. at 56:7-8 (played on Oct. 17, 2012).[3] And as shown above (*supra* Section III.B), Google's documents, witnesses, and Dr. Frieder agree that that the Accused Systems make a demand search, thereby meeting the scanning/searching element and the demand search element. Defendants' assertion that there was no evidence to support a finding of infringement of these limitations is incorrect.

Defendants' Motion obscures how the Accused Systems work. Defendants do so by claiming "Dr. Frieder's reliance on buzzwords [such as targeting] that appear in Google's [so-called] marketing materials" fail to show the technical details. Motion at 20. Dr. Frieder's testimony regarding targeting, however, is based on PX 228 – an internal Google technical document (not an external so-called marketing document) explaining how the AdWords system

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[3] Defendants' expert, Dr. Ungar, agreed that the Accused Systems, including the ads database, the Smart Ads server, and the creative server, is on a network. Trial Tr. at 1439:16-18, 1440:12-18; *see also* Trial Tr. at 1216:2-3 and 20 (Dr. Ungar testifying that Google's "[d]atabases are spread across multiple computers."); *id.* at 1433:19-25 (Dr. Ungar testifying that looking for items in a database is contemplated by this limitation of the asserted claims of the patents-in-suit.); *id.* at 1436:8-10 ("Q. So the scale of the ad keywords database is very large, isn't it? A. Yes. In fact, it's stored over multiple computers.").

works. Trial Tr. at 460:4-461:23. Dr. Ungar, Defendants' expert, agreed that PX 228 "is a

Google internal document for Google engineers" (Trial Tr. at 1417:9-11), and that PX 228

describes that targeting occurs in the Accused Systems. Trial Tr. at 1423:20-25 ("Q. Dr. Ungar,

you would also agree that Google's document, internal document for its software engineers,

shows that targeting takes place in what used to be called shards but is now the ads database,

isn't that right? A. Yes.").

        Dr. Ungar's only disagreement is that he contended the document's reference to

"targeting" is a "marketing term" and therefore has nothing to do with describing how the system

works. Trial Tr. at 1217:14-18. But, on cross examination, Dr. Ungar admitted that the

document was not "a marketing document" but was "for Google engineers" and that every other

step referenced in that figure referred to an actual function of the system. Trial Tr. at 1417:9-11;

1421:18-1422:12. He testified that he agreed that "Google's document, internal document for its

software engineers, shows that targeting takes place in what used be called shards but is now the

ads database." Trial Tr. at 1423:20-1423:25. Dr. Ungar further testified he heard Google's

engineer Mr. Furrow testify that the system does "a query rewrite and then [goes] to the ads

database to pull keywords" but, when asked if that is what is referred to as "targeting" in the

document, he revealed that he had never considered this, responding: "I'm not sure. We would

have to go through the document." Trial Tr. at 1424:1-9. The jury had PX 228 in evidence,

heard the testimony of the fact witnesses regarding how Google finds advertisements stored on

distributed computing machinery, heard the testimony of the expert witnesses, and rejected Dr.

Ungar's opinion.

        The jury likewise rejected Dr. Ungar's hyper-technical and incorrect assertions that 1)

"looking up" is not "looking for" (Trial Tr. at 1214:3-1215:6), and 2) advertisements are

provided "to" Google and thus Google doesn't "looking for them." *See* Trial Tr. at 1167:23-

1168:10. Compared to I/P Engine's evidence from Google's documents, Google's employees,

and Dr. Frieder's opinions, which showed that the Accused Systems were "looking for" relevant

advertisements to serve to users in response to a demand search (described above), Dr. Ungar's

bare opinion was the only contrary testimony.[4] The record evidence supported Dr. Frieder's

opinions, and "[i]n evaluating the evidence, the jury was free to disbelieve [Dr. Ungar]. . . and

credit [Dr. Frieder]. . . .". *Power-One, Inc.*, 599 F.3d at 1351.

> **C.   There Was Sufficient Evidence That the AdWords System Receives
> Informons And Filters Them on the Basis of Applicable Content Profile Data
> for Relevance to the Query as Claimed in Claims 10 and 25 of the '420
> Patent, and Searches for Information Relevant to a Query as Claimed in
> Claims 1 and 26 of the '664 Patent**

Defendants contend that I/P Engine failed to provide substantial evidence of content

filtering. Motion at 8-12. Defendants' contentions are based on five arguments:

1) I/P Engine failed to provide source code proof that AdSense for Search or AdSense for Mobile

Search met the content filtering element, 2) I/P Engine failed to provide source code proof that

QBB disabling met the content filtering element, 3) I/P Engine failed to provide any source code

proof that the AdWords system met the content filtering element before 2010, 4) I/P Engine

failed to prove that the mere notion of "keyword relevance" is content based filtering, and 5) I/P

Engine's infringement theory of content filtering contradicts its validity analysis. *Id*. None of

these arguments have merit.

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[4] Dr. Frieder also testified about a second process in the Accused Systems that practiced this
claim element: landing page relevance. Dr. Frieder, referring to PX 115, testified that the
Accused Systems follow "other links on a landing page." *Id*. at 485:21-486:1. He testified
"[w]hat you are scanning the network by looking at the landing page, the scanning based on the
link that I -- that are read in that particular landing page. So that would be another example of
scanning a network." *Id*. at 486:2-5. Contrary to Defendants' mischaracterization (at 20) Dr.
Frieder's landing page testimony shows an alternative way that the Accused Systems look for
items or attributes associated with the items, and was relevant to explaining these limitations.

Dr. Frieder testified that the content filtering limitation requires "finding out if your query is relevant to your ad, in terms of the content." Trial Tr. at 486:17-24. To that end, Dr. Frieder testified that the Accused Systems are "trying to find -- does your query match your ad content, and the system clearly does." Trial Tr. at 487:1-2. Bartholomew Furrow, Google's Staff Software Engineer and the man Google's expert described as having "built the system," ████████ ██ ██ This admission alone is sufficient evidence to support the jury's verdict.

I/P Engine's infringement evidence, however, is far deeper. Dr. Frieder identified numerous feature templates in Google's source code that perform the required content analysis. Trial Tr. at 523:15-556:17; PX 330, PX 227, PX 333, PX 332, PX 331. Google's documents describe this functionality "how relevant your keyword [which reflects the query][5] is to your ads" and "how relevant your keyword is to what a customer searches for [i.e., the customer's query]." PX 338; *see also* PX 229, p. 22, PX 7, PX 231, PX 302, p. 37, PX 52, PX 156, PX 232, PX 357, PX 112, PX 21, PX 22 and PX 201. I/P Engine's infringement evidence thus showed how the Accused Systems use feature templates that determine how well the query matches one's advertisement, which satisfies this claim limitation. This evidence is more than sufficient to sustain the jury's verdict.[6]

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[5] With respect to QBB disabling, while I/P Engine asserted it infringed literally, the evidence alternatively supported doctrine of equivalents infringement. The keyword of an ad is (at least) an equivalent of a user's search query, *i.e.*, a keyword represents a user's information need or request. As described below, Dr. Ungar, Defendants' expert, agreed. *See supra* fn. 8.

[6] Dr. Ungar agreed with I/P Engine. ████████ ██ ██ ██

Defendants attempt to obscure this evidence by first arguing that I/P Engine failed to offer any proof of infringement regarding AdSense for Search or AdSense for Mobile Search. Motion at 9-10. This is incorrect. With respect to AdSense for Search, Dr. Frieder testified that the AdWords system worked technically in the same manner as AdSense for Search. Trial Tr. at 553:10-21. Dr. Frieder then testified that he reviewed the source code for AdSense for Search and it confirmed that understanding. Trial Tr. at 553:22-554:1. In view of Dr. Frieder's confirmation that the two systems are substantially the same, his infringement analysis of one is equally applicable to the other. Similarly, with respect to AdSense for Mobile Search, Dr. Frieder testified that the AdWords system works in a substantially similar manner for Mobile as it does for Google.com. Trial Tr. at 543:23-25. Dr. Frieder then testified that he reviewed the source code for AdSense for Mobile Search and it confirmed that similarity to be present. Trial Tr. at 552:5-13. The same is equally true for AOL Search Marketplace. *Id*. at 629:24-630:8. Defendants' failed to obtain any admissions on cross regarding these opinions, and in fact almost wholly ignored them. Because Dr. Ungar offered no contrary source code testimony, the infringement facts Dr. Frieder offered on AdSense for Search and AdSense for Mobile Search are undisputed on the trial record.

Dr. Frieder's opinions also are confirmed by other evidence. Google's Director of Product Management, Jonathan Alferness, testified in I/P Engine's case in chief that the AdWords system, AdSense for Search system and AdSense for Mobile Search system, all operate the same way. Alferness Depo. Tr. at 212:1-6 and 213:25-214:7 (Oct. 17, 2012). AOL's Rule 30(b)(6) witness, Mr. Hickernell, also testified during I/P Engine's case in chief that the

AdWords system and the AOL Search Marketplace system are the same. Hickernell Depo. Tr. at

45:14-46:6; *see also id.* at 46:11-13 (Q. How do you know that AOL Search Marketplace is the

same as AdWords just branded differently? A. That's what Google has, has told us."). This

evidence alone is sufficient to support the jury's verdict. *See Leader Tech., Inc. v. Facebook,*

Inc., 678 F.3d 1300, 1307-08 (Fed. Cir. 2012) (finding sufficient evidence to support a jury

verdict where a party's own witnesses stated that earlier versions of its source code contained the

patented features).

Defendants argue that this is not good enough – that somehow the source codes and other

evidence related to the Accused Systems are insufficient. But, as the testimony during trial

demonstrated, these systems are the same for purposes of infringement. Dr. Ungar, Defendants'

expert, likewise testified that he was giving one opinion and non-infringement analysis for these

different systems because his "opinions for AdWords also apply to AdSense for Search and

AdSense for Mobile Search." Trial Tr. at 1270:12-15; *see also id.* at 1519:13-16. Moreover,

Defendants' own counsel agreed when he admitted in opening statements that "we are going to

be able to simplify things, because we are not going to need to talk about [the AdSense system]

twice." Trail Tr. at 141:18-24. Now that the jury has agreed with I/P Engine's evidence,

Defendants want to change course and argue that I/P Engine was required to spend the jury's

time going one-by-one through redundant source code evidence for the other systems to satisfy

its burden of proof on infringement. There simply is no merit to Defendants' characterization of

the source code, and disregard for all of the other evidence supporting I/P Engine's infringement

case.[7]

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[7] Though it is true that parties must "clearly disclose, discuss, and identify" for the jury the
supporting evidence upon which they rely, I/P Engine has done just that. In both *Fresenius USA,*
Inc. v. Baxter Int'l, Inc. (582 F.3d 1288, 1300 (Fed. Cir. 2009)) and *Koito Mfg. Co. v. Turn-Key-*

Second, Defendants argue that I/P Engine failed to offer any proof of infringement through the use of QBB disabling because Dr. Frieder failed to identify any attribute templates that perform the content filtering. Motion at 10. Yet, there is no legal requirement that I/P Engine identify specific source code templates to satisfy its burden of proof. Instead, I/P Engine needed to present substantial evidence that the AdWords system infringed the patents-in-suit – which it did. Dr. Frieder explained in detail his opinions, and showed how his opinions were based on Google documents, deposition testimony, and Google's source code, as well as his own extensive expertise. He testified that three alternative, independent filtering steps (including QBB disabling) infringed the patents-in-suit. Trial Tr. at 494:8-497:4. And, Dr. Frieder *did* present source code evidence for the QBB disabling models (PX 331) and explained that the source code confirmed his opinions of infringement. Trial Tr. at 556:6-17. Defendants did not cross examine Dr. Frieder on this topic, and Dr. Ungar did not present any testimony regarding the source code evidence for the QBB disabling models. That was Defendants' tactical choice. Now, they must live with the fact that Dr. Frieder's testimony in this regard is completely uncontroverted on the trial record.

Defendants also argue that QBB disabling cannot infringe any of the asserted claims because QBB disabling is query-independent. Motion at 10. As Dr. Frieder testified, QBB disabling considers content filtering based on its use of Quality Score. All parties' experts, and Google's fact witnesses, agree that Quality Score considers the similarity between the query and the creative. *See supra* Section III.C. QBB does this by comparing the keyword (which is a

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Tech., LLC (391 F.3d 1142, 1151-52 (Fed. Cir. 2004)) – the two cases relied upon by Defendants – no evidence was presented regarding a claim limitation or a specific reference. Here, as explained above, I/P Engine has presented substantial evidence proving that the AdSense for Search and AdSense for Mobile Search products met the content filtering limitation. Therefore, *Fresenius USA* and *Koito Mfg.* are inapplicable in this instance.

representation of the user's information need – a surrogate or equivalent of a query), and the creative.[8] None of the claims themselves, the specification, or this Court's claim construction, require that the comparison be a real-time comparison to the actual query. All that is required under the asserted claims is that the content of the creative (i.e., the informon or information) be compared to the user's interest or need (i.e., the keyword – an equivalent of the query) to determine its relevancy. And Defendants concede that such analysis supports I/P Engine's infringement theory, which the jury accepted. Motion at 10. So contrary to Defendants' argument, QBB disabling does infringe the asserted claims.

Third, Defendants argue that none of the templates on which Dr. Frieder relied upon were in use prior to 2010. Motion at 11. In essence, Defendants are arguing that unless there was specific source code with regard to every model of Google's source code used back to 2004 (I/P Engine's first date of infringement), under no circumstances can I/P Engine prevail – which is not the law. Not only did Dr. Frieder testify that he analyzed every version of source code that Google produced in this litigation (including historical versions) in concluding infringement for the entire time period, he also presented evidence in the form of Google's documents and Google's testimony, which also showed infringement beginning in 2004. Trial Tr. at 592:9-600:17; 543:8-13. These documents, Google deposition testimony, source code, as well as Dr. Frieder's expertise, form the basis for Dr. Frieder's conclusion that the AdWords system infringed since 2004. There is ample evidence to support the jury's conclusion of infringement.

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[8] Dr. Ungar testified that the use of the keyword is equivalent to the use of the query, when it comes to relevance of the query. ███████████████

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Fourth, Defendants argue that I/P Engine "attempted to satisfy the 'content-based filtering' limitation by arguing that Smart Ads tracks 'keyword relevance' or 'ad text relevance." Motion at 11. I/P Engine did no such thing. As explained above, Dr. Frieder relied upon both public non-technical and non-public internal technical documents, testimony from Google engineers and managers, source code, and his own expertise, to explain and support I/P Engine's proof of infringement. Contrary to Defendants' argument, I/P Engine presented substantial evidence of infringement at all relevant time periods – much more than the high level phrases referenced by Defendants' Motion. Trial Tr. at 515:1-9; 486:23-487:6; 518:23-519:18; 531:6-542:14:2:575:11-22; 594:3-598:9 (citing historical documents, source code, and fact witness testimony supporting the use of "content-based filtering" in the accused product).

Finally, Defendants argue that I/P Engine's experts, Dr. Frieder and Dr. Carbonell, testified inconsistently with respect to the content-based filtering limitation. Motion at 8. Defendants are wrong. Dr. Carbonell did not testify contrary to Dr. Frieder's infringement analysis. To make this argument, Defendants mischaracterize I/P Engine's infringement theory. Defendants cite to where Dr. Carbonell was asked whether "doing an operation where I match the query terms to key terms and use that to access a feedback score meets the content-based filter limitation of this patent?" Trial Tr. at 1930:12-16. However, this question does not reflect I/P Engine's infringement theory, as I/P Engine's infringement theory is not based on determining whether a *query* matches a *keyword* – but rather how well a query or keyword matches the content of an advertisement. I/P Engine presented its infringement case based on the comparison of the query (or the keyword as a surrogate for the query) to the ad's text to satisfy this limitation. *See* Trial Tr. at 487:1-488:6. Defendants' argument is therefore poorly

developed. Contrary to Defendants' assertions, I/P Engine is not interpreting the patents-in-suit

one way to avoid invalidity and another to find infringement.

> **D.   There Was Sufficient Evidence That the AdWords System Receives Collaborative Feedback Data From System Users Relative to Informons Considered by Such Users as Claimed in Claims 10 and 25 of the '420 Patent, and Receives Information Found to be Relevant to the Query as Claimed in Claims 1 and 26 of the '664 Patent**

Defendants argue that 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." Motion at 12-13. Defendants are simply rehashing their arguments from

trial and their failed claim construction arguments.

Specifically, Defendants argue that "I/P Engine introduced <u>no evidence</u> 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 serving ads." Motion at 13 (emphasis in original). As Dr.

Frieder testified, applying this Court's claim construction, "[c]ollaborative feedback data means

data from system users with similar interests or needs regarding what informons such users

found to be relevant." Trial Tr. at 488:9-489:1. Dr. Frieder testified, under that definition, that

"[c]ollaborative simply says that when users were shown this type -- this ad and this query, they

found that they liked it or didn't like it." Trial Tr. at 427:4-6.[9] Further, he testified that the

"query" used by the Accused Systems represents "the user's interest or need." Trial Tr. at

429:25-430:6.[10] So to meet this limitation, Dr. Frieder concluded that if the Accused Systems

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[9] When Defendants' counsel objected to Dr. Frieder's definition, which Defendants are doing again here, this Court stated "[t]he Court is looking at the [Court's] definition . . . [and] he's within the scope of what the Court is saying." Trial Tr. at 428:16-18.

[10] This Court agreed that Dr. Frieder's understanding was consistent with this Court's claim construction. *See* Trial Tr. at 430:10-12.

use click data from users that have run the same or similar query, then it meets the collaborative feedback data limitation.

Thus, as acknowledged by Defendants' Motion, the Accused Systems satisfy this claim limitation because they receive click information from users who ran the same or a similar query. Motion at 13. Dr. Ungar's opinion on non-infringement was based on a mistaken view that the claim was limited to a mindpool embodiment that must arrange users into groups. *See* Trial Tr. at 1443:16-1444:7. When asked if he agreed with "the query entered in the search box represents a user's information need" he stated "I haven't thought about that." Trial Tr. at 1454:19-21. He went on to concede that "indications of interest or needs is all that's required under the patents" and that a search for iPad, for example, "would be indicative of your information need." Trial Tr. at 1457:18-25. Dr. Ungar therefore admitted that the same or similar queries are similar interests or needs. *See also* Trial Tr. at 1450:23-25; 1454:19-23; 1455:10-13; 1456:14-17; 1457:14-25.

It is undisputed that the Accused Systems use click data related to queries run by users. In fact, Google's own engineer, Mr. Furrow, admitted that collaborative feedback data under Dr. Frieder's analysis is used in the Accused Systems. Mr. Furrow testified that ▮▮▮▮▮▮ ▮▮ ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ ▮▮▮▮ Mr. Furrow also testified that the Accused Systems use "all of [Google's] historical clicks and impressions to come up with those odd multipliers." Trial Tr. at 1120:7-8; *see also id.* at 1136:17-1137:2. And, Mr. Furrow testified that attributes used by the system track clicks for a particular query and components of the ad. Trial Tr. at 1123:18-23. He agreed with the

statement that "for those attributes, the feedback on which you were trained would be tied to the query." Trial Tr. at 1123:25:1124:4. Quoting Mr. Furrow's deposition testimony, Dr. Frieder explained that the Accused Systems are ██

███ Dr.

Ungar agrees. ██

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Further, Google's own documents admit that the Accused Systems use click data from user's prior queries. *See* PX 231, PX 302 at p. 37, PX 52, PX 156, PX 232, PX 357, PX 112, PX 21, PX 22, PX 201, PX 228 at p. 19, PX 7, PX 51, PX 95, PX 55, PX 40 and PX 46. For example, 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 (emphasis added). This description actually repeats Dr. Frieder's analysis. Dr. Frieder testified that this feedback data satisfies the collaborative limitation of the asserted claims. Trial Tr. at 489:2-10. So Defendants' assertion that "no evidence" was introduced is simply untrue.

This logic and analysis, as testified to by Dr. Frieder, equally applies to the claim language of claims 1 and 26 of the '664 patent, which require "receiving information found to be relevant to the query by other users." While this Court correctly ruled that this limitation does not require construction, the same evidence satisfies its plain meaning. The Accused Systems receive click data reflecting how relevant other users found the creative (*i.e.*, ad) was to the query/keyword. Trial Tr. at 519:19-520:19. Defendants' argument to the contrary lacks merit.

Defendants want this Court to reverse the jury's verdict on the basis of their failed claim construction argument that "groups of users with similar interests or needs" must be determined,

i.e., Defendants' improper mindpool argument. *See* Trial Tr. at 1236:4-7 ("[Defendants] think

that in order for something to be collaborative, you need to group users. You can't get at a

notion of similar interests or needs without grouping users. [Defendants] have said that from the

beginning."); *id*. at 1158:6-8 (Defendants' counsel arguing that "this is the only part of the patent

[, the mindpool disclosure,] that actually discusses how to use collaborative filtering."); *id*. at

1232:12-13 (Dr. Ungar testified that "[m]ind pools are groups of users with similar interests.").

However, as this Court correctly ruled and stated repeatedly during trial, Defendants' mindpool

argument does nothing more than confuse the issue and the jury. Trial Tr. at 1224:10-13 ("[O]n

this mind pool business, I rejected that because I was concerned that it might be misleading in

going to mind pools that has to do with one of the embodiments on this patent."). The concept of

mindpools is not an asserted claim; rather, the concept is related to unasserted claims. *See* PX 2,

Claims 17-19, 36 and 37. There are multiple ways to consider and define similar interests or

needs; mindpools is just one embodiment. Ironically, Defendants' expert Dr. Ungar, conceded

on cross examination that mindpools are *not* required by the claims of either of the asserted

patents. Trial Tr. 1445:7-10 ("Q. In your opinion, mindpools are not required by either of the

claims of the '420 patent or the '664 patent, are they? A. Mindpools are not required.").

Defendants further contend a new trial is necessary because Dr. Frieder allegedly

introduced false evidence. Motion at 15. Defendants' accusations are over-the-top. As

Defendants admit, Dr. Frieder testified that the collaborative data is the recorded clicks – not the

derived mathematical number calculated to determine how often an advertisement is clicked over

time, *i.e.,* click-through rate. For example, when Dr. Frieder explained the teachings of the

patents-in-suit, he testified that "[c]ollaborative simply says that when users were shown this

type -- this ad and this query, they found that they liked it or they didn't like it. How you know

they liked it, *they clicked on it*." Trial Tr. at 427:4-7 (emphasis added). Then, in his

infringement analysis, relying on Mr. Furrow's explanation of the Accused Systems he testified

that the collaborative limitations of the claims are satisfied because the Accused Systems ███

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████████████████████████████ (emphasis added). Dr. Frieder's analysis is based on

clicks being the collaborative data. Nothing about that testimony is false, and Defendants'

insinuation to the contrary illustrates their desperation.

E.   **There Was Sufficient Evidence That the AdWords System Combines as
        Claimed in Claims 10 and 25 of the '420 Patent, and Combines as Claimed in
        Claims 1 and 26 of the '664 Patent**

Defendants return to their flawed and rejected argument that I/P Engine failed to provide

substantial evidence of the "combination" that is required by all of the asserted claims. Motion

at 4-8. In particular, Defendants argue that (1) I/P Engine presented no evidence to show that the

Accused Systems filter "the combined information" as required by the asserted claims of the

'664 patent, and (2) I/P Engine cannot satisfy its burden of proof unless the "combination"

consists of the "merging" of two pieces of data.

First, I/P Engine presented substantial evidence that the Accused Systems met the

"filtering" limitation of the asserted claims of the '664 patent.[11] Dr. Frieder testified, with

respect to this limitation, about three independent filtering steps used by the Accused Systems

that infringe the "filtering" limitation of the asserted claims of the '664 patent:

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[11] Defendants admit that the scope of the asserted claims of the '420 patent include filtering
"based on" pCTR and that Dr. Frieder presented substantial evidence on that point. Motion at 5.
There can be no dispute as to whether a reasonable jury could have found infringement on that
point. Although I/P Engine was obligated to prove infringement of at least one asserted claim,
the jury found that all asserted claims were infringed. Defendants' argument is premised on the
fact that Dr. Frieder used this same evidence to meet the similar claim limitation in the asserted
claims of the '664 patent.

One's called disabling, which takes away bad ads before they reach the ad mixer, as written there; disabling 2 . . . eliminates low quality ads, keeping the better ones; and then, finally, promotion, which is basically making sure only eligible ads are up on top. . . . They are each independent but they all do [filtering] based on the pCTR, or predictive click-through rate, or Quality Score.

Trial Tr. at 612:6-18. Dr. Frieder went on to testify that the same evidence from his earlier '420 patent "filtering" analysis applies to the "filtering" limitation of the '664 patent. Trial Tr. at 613:8-9.

Defendants argue that I/P Engine presented no evidence that the Accused Systems filter the combined information, *i.e.*, the pCTR, and thus they cannot infringe as a matter of law the asserted claims of the '664 patent. But, during Defendants' cross examination, Dr. Frieder explained his analysis on this point:

Q: … So the pCTR is, you're saying, for purposes of claim 1 of the '664 patent, is the combined information, that is what you are saying right?

A: The pCTR score is a ranking indicator, is what I'm saying, that is correct.

Q: That is the combined information?

A: That is the representation of the combined information, correct.

Q: Right. So the pCTR, that is a score, I think you just said, right?

A: PCTR is a ranking, is a parameter, is an indicator, measure of goodness.

Q: Right. So pCTR is not filtered in the SmartAds system, right?

A: PCTR associated with a particular ad is what is being used to filter out the ad. I'm filtering out ads using the pCTR.

Trial Tr. at 702:15-703:8. Dr. Frieder then testified:

[p]CTR is used to filter the particular ad, the corresponding to that ad. In fact, the patent, in Figure 6, which explains exactly the combination, does exactly that. 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 what the patent does.

Trial Tr. at 704:1-7. I/P Engine thus provided substantial evidence demonstrating how the Accused Systems met this claim limitation of the '664 patent.

Knowing its evidentiary argument is without merit, Defendants accuse I/P Engine of "writing in" the "on the basis of" language from the '420 patent into the claim language of the '664 patent. Motion at 5-6. Defendants argue (at 5) that the plain and ordinary meaning of this limitation can only mean "'filtering the combined information,' not filtering something else 'based on' the combined information." This, however, is nothing more than differing opinions between the two experts. There is nothing in the specification to support Dr. Ungar's narrow scope of the asserted claims of the '664 patent. During trial, when challenged to do so during cross examination, Dr. Ungar was unable to point to one single word of support in the specification for his faulty interpretation of the claim language. Trial Tr. at 1400:21-1402:3 (admitting that he did not think his own interpretation was consistent with the specification). He was forced to concede that his interpretation would exclude the preferred embodiment. *Id.* Dr. Ungar's interpretation, therefore, cannot be correct. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996) ("[A]n interpretation [that excludes the preferred embodiment] is rarely, if ever, correct and would require highly persuasive evidentiary support.").

Dr. Frieder, on the other hand, did testify that his interpretation of the '664 patent claim was supported by the specification: "[i]f you look at the Figure 6 [of the patents-in-suit], it has the input coming in, . . . the score computed, and then it filters based on that. That is exactly what the patent does." Trial Tr. at 704:4-7. Here, the jury agreed with Dr. Frieder, as they found that the Accused Systems possessed the elements of all of the asserted claims of the '664 patent and therefore infringed.

Second, the "combination," as Defendants characterize it, is not limited to only "merging" two pieces of data. Defendants seek to avoid this conclusion by contending that using feature templates to look up a corresponding odds multiplier does not merge content-based information with feedback information. Motion at 6. Defendants' argument might be correct if the claims required two pieces of information to be *merged* – however, the asserted claims require "combining," not merging, two pieces of information. The specification discloses, in FIG. 6, that a complete rating predictor is formed based on inputs and that predictor is then used to filter items for relevance to a query. Trial Tr. at 450:4-456:19. While Dr. Frieder used a demonstrative exhibit that showed two numbers combining to form one averaged number for explanatory purposes in teaching the general concept of the patents-in-suit, there is nothing in the record or the specification that supports Defendants' limiting argument as to the asserted claims.

In fact, it was Defendants' position at claim construction that combining merely means "bringing together," as they admit.[12] Motion at 7. If Defendants are now arguing that their prior proposed claim construction is not the plain and ordinary meaning of this limitation, then such an argument lacks credibility in view of their prior claim construction position. And, even more detrimental, their own expert, Dr. Ungar, conceded under cross examination that the "combining" limitation of the asserted claims did *not* require "merging:"

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[12] Their examples were: a high school curriculum might combine math and English, an Indiana Jones costume may combine a fedora with a bullwhip, and a tropical vacation might combine sunbathing with scuba diving. Their own examples don't require the "merging" they now say is necessary.

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Dr. Frieder explained that, in Google's system "you have the collaborative part and you have the content part, and it's combined because Quality Score is based [on] those factors." Trial. Tr. 595:8-10. And Defendants do not dispute that Dr. Frieder explained precisely how this combination takes place within the Accused Systems, i.e., how pCTR is generated. Trial Tr. at 694:18-19 ("I am combining [the attribute with the odds multipler] because I'm taking the two sources and combining them."). Content is placed into a string of values within the templates, that string of values becomes the odds multiplier, and then the Accused Systems sum mathematically that data to arrive at the pCTR. *See* Trial Tr. 600:22-602:5 (Dr. Frieder explaining "meat grinder" demonstrative where content and feedback are combined to produce a quality score and/or predicted click through rate). That is a combination, a complete rating predictor as described in the patents, and it shows that the Accused Systems combine content-based information with feedback information. As Dr. Frieder testified, the source code, the documents, and Google's own witnesses confirm that the Accused Systems produce such combinations.

> **F.** **There Was Sufficient Evidence That the AdWords System Filters for Relevance to the Query as Claimed in Claims 10 and 25 of the '420 Patent, and Filters for Relevance to At Least One of the Query or The First User as Claimed in Claims 1 and 26 of the '664 Patent**

While admitting that Dr. Frieder testified about the filtering element of the asserted claims, Defendants contend that Dr. Frieder offered no opinion that the Accused Systems filter for relevance to the query as required by the asserted claims. Motion at 22. This argument is overwhelmed by the considerable evidence to the contrary. As described above, Dr. Frieder

testified that this claim limitation has two-steps: (1) to combine the feedback data with content profile data, and (2) to filter based on the relevance of the query. Trial Tr. 575:4-8. Dr. Frieder provides substantial evidence as to step one. *Supra* Section III.E. Dr. Frieder then testified, with respect to the second step, that there are three separate filtering steps in the Accused Systems: QBB disabling, AdMixer disabling and promotion disabling. As explained above, I/P Engine and its expert Dr. Frieder set forth in detail how the Accused Systems filter for relevance to the query. Mr. Furrow testified that the predicted click-through rate,[13] which is used to conduct each of the three filtering steps, is correlated with the advertisements relevance to the query. Trial Tr. at 1387:8-17; *see also id*. at 1388:18-24.

Defendants' only new argument, and it applies only to AdMixer disabling and promotion disabling, is that the Accused Systems filter based on an LTV score – not based on the value of the pCTR, and thus the Accused Systems cannot filter based on pCTR. Motion at 22-23. Mr. Furrow, however, admitted that LTV "includes the predicted click-through rate" of I/P Engine's infringement theory. Trial Tr. at 1132:19-22 (testifying that predicted click-through rate is one of the four signals used by the long-term value score). Hence, the Accused Systems do use pCTR in filtering. Trial Tr. at 1460:23-1461:12. The fact that additional factors are included in filtering for these two disabling steps does not eliminate or excuse Defendants' liability for infringement. *Scanner Techs. Corp. v. Icos Vision Sys. Corp., N.V.*, 00-cv-4992-DC, 2003 WL 1961565, at *1 (S.D.N.Y. Apr. 28, 2003); *Glaxo Group LTD v. Teva Pharms. USA, Inc.*, CIVA 07-713-JJF, 2009 WL 1220544, at *2 fn. 2 (D. Del. Apr. 30, 2009).

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[13] Predicted click-through rate is another name for Quality Score. *See* PX 176; Trial Tr. at 587:15-18; Trial Tr. at 729:5-6.

IV.   I/P ENGINE'S INFRINGEMENT CASE WAS BASED ON A WIDE RANGE OF EVIDENCE, AND NOT JUST ON SO-CALLED MARKETING DOCUMENTS

Defendants contend that I/P Engine improperly relied upon "marketing documents" to prove infringement. I/P Engine relied upon four sources of evidence to prove infringement: 1) Google's documents, which included both high level and internal technical documents, 2) deposition testimony of Defendants' employees, 3) the source code; and 4) Dr. Frieder's extensive expertise. Trial Tr. at 440:4-10. Based on his review of all of this evidence, Dr. Frieder concluded that the Accused Systems infringed. The jury also was able to rely on the significant admissions obtained by I/P Engine of the Defendants' expert, Dr. Ungar, during cross examination.

Disregarding the wealth of evidence from Google's internal documents, the deposition testimony, the source code, and Dr. Frieder's expertise, Defendants argue that relying on "marketing documents is insufficient to show infringement as a matter of law." Motion at 24. Not only is this premise incorrect as applied to this case, but it ignores the fact that I/P Engine proved infringement with a wide range of evidence, and did not rely solely or even principally on so-called "marketing" documents.

As an initial matter, Defendants' characterization of Google's high level documents as "marketing documents" mischaracterizes the documents, as reflected by the testimony of Google's own employees. Mr. Alferness testified that these documents are "a proxy or a -- an abstraction of what's actually happening under the covers" and that these documents "essentially are referring to metrics that are used behind the scenes under the covers for purposes of running" the AdWords system. Alferness Depo. Tr. at 14:20-15:1 (played on Oct. 17, 2012). Having been hoist on its own petard, Defendants now claim that the petard never should have been used. The fact is that the 22 Google documents that were admitted into evidence to support I/P

Engine's infringement case are not the type of "marketing" documents that are untethered from

the facts of how the Accused Systems operate, especially because I/P Engine used a wealth of

additional evidence to corroborate its evidence when proving its case.[14]

Second, Defendants argue that references to a "Quality Score between 1 and 10 shown to

AdWords advertisers," is irrelevant to the issue of infringement, is not an accused

instrumentality, and warrants judgment as a matter of law. Motion at 25. The evidence showed,

however, that "Quality Score" was a term with many meanings (Trial Tr. at 636:15-19; 642:14-

16; 1071:9-12; 1079:11-14). I/P Engine, however, did not present any documents or evidence

that related solely to the Quality Score shown to advertisers. I/P Engine instead referenced the

(infringing) Quality Score used to determine whether advertisements are *eligible* for the

AdWords auction. *See*, *e.g.,* PX 338; PX 232; PX 233. Dr. Frieder testified that "[e]ligibility

means it's good enough, it's filtering" in these documents. Eligibility refers to "the quality score

that is for the pCTR." Trial Tr. at 731:6-9; *see also* Trial Tr. at 465:2-11 (Dr. Frieder explaining

why determining eligibility is filtering). While Defendants attempted to discredit documents as

merely referencing a Quality Score shown to advertisers and not used within the system, I/P

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[14] Defendants rely on *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342 (Fed. Cir. 2007), to argue that I/P Engine's presentation of "marketing documents" is inappropriate. However, the advertising materials in *PharmaStem* merely referred to the patented features "only as possibilities" and did not equate to the documents here where Google describes with specificity its practicing of the patented features. *Id*. at 1351. Similarly, Defendants rely on *Whirlpool Corp. v. LG Elec., Inc.* (No. 1:04-CV-100, 2006 WL 2035215, at *8 (W.D. Mich. July 18, 2006)), though the advertising literature in that case were in direct contradiction to the facts regarding the actual operation of the accused product. There, the defendants presented evidence that the language used in the advertising literature was commonly used to describe a different feature. Additionally, *Scantibodies Lab., Inc. v. Immutopics, Inc.* (374 Fed. Appx. 968, 971 (Fed. Cir. 2010)) is inapplicable because it involves claim construction arguments where a court chose to view the claims based on their plain meaning rather than the language in marketing materials. Here, Defendants' public documents are specifically designed to describe the accused systems at a high level, I/P Engine has presented substantial evidence in addition to the public documents, and no evidence of record implicates the veracity of these documents. Therefore, these cases cited by Defendants are inapplicable.

Engine pointed out in its closing that the references to determining advertisement "eligibility" in the documents meant that they related to the Quality Score used for filtering. Trial Tr. at 2064:1013. As described above, pCTR is used in QBB disabling, AdMixer disabling, and promotion disabling – as admitted by Google's own witnesses, and are relevant to the issue of infringement.

V. THERE IS SUFFICIENT EVIDENCE IN THE RECORD TO SUPPORT A FINDING OF INDIRECT INFRINGEMENT

Defendants first argue that there cannot be induced infringement because there is no direct infringement. Motion at 27. As set forth above, I/P Engine presented substantial evidence that each of the defendants directly infringed the asserted claims of the patents-in-suit – and the jury agreed.

Defendants then argued that even if there was direct infringement, "I/P Engine failed to provide any evidence that Google actively induced others to infringe the patents-in-suit." Motion at 27. Defendants make similar arguments with respect to contributory infringement. Defendants' argument is without merit for two reasons.

I/P Engine can prove intent to induce infringement through circumstantial evidence. *Metabolite Labs. Inc. v. Lab. Corp. Am.*, 370 F.3d 1354, 1365 (Fed. Cir. 2004). The record contains sufficient circumstantial evidence to support the jury's verdict of induced infringement, if that was the basis for the jury's verdict. I/P Engine adduced evidence more than sufficient to show 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. *See* Christopherson Depo. Tr. at 19:15-19, 27:16-28:02 (played on Oct. 23, 2012); Denery Depo. Tr. 22:18-21; 22:25, 23:3-8 (played on Oct. 23, 2012); PX 260, PX 302, PX 242, PX 261. The non-

Google defendants entered into agreements with Google to use the AdWords system. *See e.g.*, PX 260, PX 261, PX 242. AOL used its own two versions, AdSense for Search and AOL Search Marketplace (which is the AdWords system under a different brand), under similar agreements with Google. Google also provided its customers with implementation guidelines and protocols for using the Accused Systems. *See e.g.*, PX 302.

The record shows that Google sold the Accused Systems for use with a third party's equipment with the intent that customers would use them to perform the patented method, thus supporting the jury's incorporation of these systems in its verdict of infringement. *See* Christopherson Depo. Tr. at 19:15-19, 27:16-28:02 (played on Oct. 23, 2012); Denery Depo. Tr. 22:18-21; 22:25, 23:3-8 (played on Oct. 23, 2012); PX 260, PX 302, PX 242, PX 261. This evidence is sufficient to show that Google induced infringement. The Federal Circuit has consistently found that such evidence is sufficient to support a finding of induced infringement. *See Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1322-23 (Fed. Cir. 2009).

There is also sufficient circumstantial evidence that Google knew that the combination for which accused features of the Accused Systems were especially made was both patented and infringing and the accused features have no substantial non-infringing uses.[15] I/P Engine's evidence also illustrates that the accused features of the Accused Systems are used only in a manner that infringes the patents-in-suit. This evidence is sufficient to support a showing that Google is liable for contributory infringement.

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[15] I/P Engine introduced evidence that the Patent Office cited the '420 patent to Google in response to an application filed in 2003. Trial Tr. 251:4-15; PX-416. This is sufficient circumstantial evidence to show Google's knowledge. In any event, the Court limited damages from the date of filing of the Complaint, which expressly put Defendants on notice of the asserted patents. As a practical matter, the inclusion of an indirect infringement instruction makes no difference in the calculation of damages, and at worst was harmless error.

VI. THERE IS SUFFICIENT EVIDENCE ON THE RECORD TO JUSTIFY THIS COURT'S SUBMISSION OF A JURY INSTRUCTION ON THE DOCTRINE OF EQUIVALENTS

Defendants contend that a new trial is necessary because the question of infringement under the doctrine of equivalents should not have been submitted to the jury since I/P Engine failed to submit proper proof on the issue. Motion at 29-30. This contention is without merit. As demonstrated above, the record is replete with instances in which I/P Engine went through the element-by-element proofs required. In each instance, I/P Engine offered substantial evidence that the claim limitations in the patents-in-suit were present in the Accused Systems, either literally or where necessary by a substantial equivalent. This Court agreed that "the Doctrine of Equivalents [was] reasonably raised by the testimony of Dr. Frieder" to support this issue going to the jury. Trial Tr. at 1979:18-20. Accordingly, this Court properly submitted the question of infringement by equivalents to the jury.

Defendants erroneously rely on *Lear Siegler, Inc. v. Sealy Mattress Co. of Mich., Inc.*, 873 F.2d 1422 (Fed. Cir. 1989). That case stands for the proposition that a plaintiff is not entitled to a jury instruction on the doctrine of equivalents if there is *no* evidence in the record. *Id.* at 1426-27. Here, there is sufficient evidence on the record to justify this Court's submission of a jury instruction on the doctrine of equivalents. *See, e.g.,* fn. 5, fn. 8, *supra.* Thus, Defendants' request for a new trial is without merit and unwarranted. Moreover, the jury verdict is well-supported even without reliance on the doctrine of equivalents, so any error in providing the instruction is, at best, harmless error.

VII. CONCLUSION

For the foregoing reasons, I/P Engine respectfully requests that this Court deny Defendants' Renewed Motion for Judgment as a Matter of Law on Non-Infringement or New Trial.

Dated: January 25, 2013

By: ___ /s/ Jeffrey K. Sherwood_____
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CERTIFICATE OF SERVICE

I hereby certify that on this 25th day of January, 2013, the foregoing **I/P ENGINE,**

INC.'S OPPOSITION TO DEFENDANTS' RENEWED MOTION FOR JUDGMENT AS

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