IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

ORACLE CORPORATION and ORACLE U.S.A., INC.,	)	**REDACTED - PUBLIC VERSION**
Plaintiffs-Counterdefendants,	)	
v.	)	C.A. No. 06-414 (SLR)
EPICREALM LICENSING, LP,	)	
Defendant-Counterclaimant.	)	

ORACLE'S BRIEF IN OPPOSITION TO EPICREALM'S *DAUBERT* MOTION TO EXCLUDE TESTIMONY OF DR. MICHAEL SHAMOS

MORRIS, NICHOLS, ARSHT & TUNNELL LLP
Mary B. Graham (#2256)
James W. Parrett, Jr. (#4292)
1201 N. Market Street
P.O. Box 1347
Wilmington, DE 19899-1347
(302) 658-9200
mgraham@mnat.com
jparrett@mnat.com
Attorneys for Oracle Corporation and Oracle U.S.A., Inc.

OF COUNSEL:

James G. Gilliland
Theodore T. Herhold
Joseph A. Greco
Robert J. Artuz
Eric M. Hutchins
TOWNSEND AND TOWNSEND AND CREW LLP
379 Lytton Avenue
Palo Alto, CA 94301
(650) 326-2400

Dorian Daley
Peggy E. Bruggman
Matthew M. Sarboraria
ORACLE CORPORATION
ORACLE U.S.A., INC.
500 Oracle Parkway
Redwood Shores, CA 94065

DATED: August 21, 2008
Redacted Filing Date: August 28, 2008

TABLE OF CONTENTS

Page

I. NATURE AND STAGE OF THE PROCEEDINGS 1

II. SUMMARY OF ARGUMENT 1

III. STATEMENT OF FACTS 2

A. Dr. Shamos Performed an Invalidity Analysis Under Both Parties' Proposed Claim Constructions 2

B. EpicRealm and Its Expert, Dr. Finkel, Failed to Timely Disclose Evidence Relating to Secondary Considerations of Nonobviousness 5

C. Although It Was Not Oracle's Initial Burden to Do So, Dr. Shamos' Opening Expert Report Responded to EpicRealm's Alleged Evidence of Secondary Considerations of Nonobviousness 6

IV. Legal Standards for the Exclusion of Expert Testimony Under Federal Rule of Evidence 702 7

V. ARGUMENT 9

A. Dr. Shamos' Invalidity Opinions Should Not be Excluded Because He Performed a Reliable Invalidity Analysis Using Both Parties' Proposed Claim Constructions 9

1. Dr. Shamos' Expert Report and Deposition Testimony Show which of the Parties' Proposed Constructions He Used and How He Used them to Reach His Invalidity Opinions 9

a) Dr. Shamos' application of competing proposed constructions 11

b) Dr. Shamos' application of constructions that have only been proposed by Oracle 19

c) Dr. Shamos' application of proposed constructions that do not appear to be in dispute 22

2. The Legal Authority on which EpicRealm Relies Is Not Applicable to the Facts of this Case 24

3. Dr. Shamos' Analysis of Dr. Chen's Patent Enforceability Report is Irrelevant to the Reliability of Dr. Shamos' Invalidity Analysis 25

B. Dr. Shamos' Rebuttal Opinions Regarding EpicRealm's Belated Evidence of Secondary Considerations of Nonobviousness Are Reliable and Admissible 27

1. Although It Was EpicRealm's Initial Burden to Offer Secondary Considerations Evidence, It Failed to Timely Do So 27

2. Dr. Shamos Considered EpicRealm's Secondary Considerations Evidence and Rejected It as Being Inadequate to Overcome Strong Evidence of Obviousness 28

3. If Dr. Finkel is Permitted to Offer Belated Opinions at Trial with Respect to Secondary Considerations of Nonobviousness, Dr. Shamos Should be Permitted to Offer Rebuttal Testimony 31

C. The Court Should, at a Minimum, Exercise Its Broad Discretion and Admit Dr. Shamos' Opinions Because Complete Exclusion Is the Exception Rather than the Rule 31

VI. CONCLUSION 33

TABLE OF AUTHORITIES

Page

Cases

Bayer Ag v. Sony Elecs.
229 F. Supp. 2d 332 (D. Del. 2002) 28

Daubert v. Merrell Dow Pharms., Inc.
509 U.S. 579 (1993) ..... passim

Demaco Corp. v. F. Von Langsdorff Licensing, Ltd.
851 F.2d 1387 (Fed. Cir. 1988) 28

Floorgraphics, Inc. v. News Am. Mktg. In-Store Servs.
546 F. Supp. 2d 155 (D.N.J. 2008) 32

Graham v. John Deer Co.
383 U.S. 1 (1966) 5

Heller v. Shaw Indus., Inc.
167 F.3d 146 (3d Cir. 1999) 7

Hill v. Reederei F. Laeisz G.M.B.H. Rostock
435 F.3d 404 (3d Cir. 2006) 31

In re Huang
100 F.3d 135, 139 (Fed. Cir. 1996) 28

In re Paoli R.R. Yard PCB Litig.
35 F.3d 717 (3d Cir. 1994) 7, 8, 32

Konstantopoulos v. Westvaco Corp.
112 F.3d 710 (3d Cir. 1997) 8

Leapfrog Enters. v. Fisher-Price, Inc.
2006 U.S. Dist. LEXIS 13907 (D. Del. March 30, 2006) 30

Motorola, Inc. v. Interdigital Tech. Corp.
121 F.3d 1461 (Fed. Cir. 1997) 30

Oxford Gene Tech. Ltd. v. Mergen Ltd.
345 F. Supp. 2d 431 (D. Del. 2004) 24, 25

Stecyk v. Bell Helicopter Textron, Inc.
295 F.3d 408 (3d Cir. 2002) 33

TruePosition, Inc. v. Andrew Corp.
C.A. No. 05-747-SLR, 2007 WL 2429415, 2007 U.S. Dist. LEXIS 62705 (D. Del. Aug. 23, 2007) 24, 25

United States v. Mitchell
365 F.3d 215 (3d Cir. 2004) 8

Winner Int'l Royalty Corp. v. Wang
202 F.3d 1340 (Fed. Cir. 2000) 28

Statutes

35 U.S.C. §112 3

Federal Rule of Evidence 702 ..... 7, 8, 24

I. NATURE AND STAGE OF THE PROCEEDINGS

Plaintiffs and Counterdefendants Oracle Corporation and Oracle U.S.A. Inc. (jointly "Oracle") submit the following opposition to Defendant and Counterclaimant epicRealm Licensing LP's ("epicRealm") *Daubert* Motion to Exclude Testimony of Dr. Michael Shamos.

Oracle incorporates by reference its summary of the Nature and Stage of Proceedings set forth in its Opening Claim Construction Brief (D.I. 203), filed on July 31, 2008. EpicRealm asserts in this case that Oracle infringes claims 1-5 and 7-11 of U.S. Patent No. 5,894,554 and claims 2 and 16 of U.S. Patent No. 6,415,335 (the "asserted claims" of the "patents-in-suit"). On May 2, 2008, Oracle served on epicRealm the expert report of Dr. Michael Ian Shamos, in which Dr. Shamos opines that the asserted claims are invalid as anticipated or obvious in view of many prior art references in view of both parties' proposed claim constructions.

II. SUMMARY OF ARGUMENT

1. Dr. Shamos' invalidity opinions regarding the anticipation or obviousness of the asserted claims in view of asserted prior art references are reliable and admissible because: (1) he adequately considered and applied both parties' proposed claim constructions in reaching his invalidity opinions, and (2) he thoroughly performed a claim element-by-element invalidity analysis for each prior art reference, which separately compared each claim element to specific disclosures in each prior art reference.

2. It is epicRealm's burden to show evidence of secondary considerations of nonobviousness. Dr. Shamos fully considered all of the evidence that epicRealm had disclosed at the time of his report, and he properly rejected such evidence as being inadequate to overcome strong evidence of obviousness. EpicRealm then belatedly disclosed additional alleged secondary considerations evidence after Dr. Shamos submitted his report. Dr. Shamos had no opportunity to consider that evidence before submitting his report. Dr. Shamos has now

responded to such evidence with rebuttal opinions in his declaration filed herewith. Dr. Shamos' obviousness opinions are reliable and admissible.

III. STATEMENT OF FACTS

A. Dr. Shamos Performed an Invalidity Analysis Under Both Parties' Proposed Claim Constructions

During discovery in this action, Oracle retained Dr. Michael Ian Shamos to analyze and opine on the validity of U.S. Patent Nos. 5,894,554 and 6,415,335 (the "patents-in-suit"). At the time of his retention, Dr. Shamos was already working as an invalidity expert for defendants in similar actions pending in the Eastern District of Texas where epicRealm was accusing numerous defendants of infringing the patents-in-suit (the "Texas actions"). Declaration of Dr. Michael Ian Shamos in Support of Oracle's Opposition to EpicRealm's Motions ("Shamos Opp. Decl.") at ¶ 10. In the Texas actions, the parties, including epicRealm, had already gone through the claim construction process, and the district court had issued an order construing certain disputed claims terms of the patents-in-suit. *Id.*; A33.[1] Accordingly, at the time of his retention in this case, Dr. Shamos was already well aware of the claim construction and infringement arguments epicRealm was asserting with respect to the patents-in-suit. Shamos Opp. Decl. at ¶10. EpicRealm has asserted many of the same arguments in this action. *Id.*

Oracle worked with Dr. Shamos in this action to determine proposed constructions for the claim terms that Oracle believed needed to be construed. *Id.* at ¶11. On December 14, 2007, pursuant to the Court's Scheduling Order, Oracle and epicRealm exchanged proposed claim

---

[1] Appendix Exhibits 1-71 are contained in Oracle's Appendix of Exhibits in Support of Oracle's Opening Claim Construction Brief and Motions Filed on July 31, 2008. Appendix Exhibits 72-110 are contained in Oracle's Supplemental Appendix of Oracle Exhibits Filed on August 21, 2008. All such Exhibits are subsequently referred to herein by number as "A___."

constructions. D.I. 29 at p. 4. Oracle provided those proposed construction to Dr. Shamos for his invalidity analysis.[2] Shamos Opp. Decl. at ¶11. Being well aware of both Oracle's and epicRealm's proposed claim term constructions in this action, Dr. Shamos researched and analyzed the prior art and reached opinions concerning the invalidity of the patents-in-suit in view of both parties' proposed constructions. *Id., see, generally,* A86. Particularly, Dr. Shamos determined that under both parties' proposed constructions the asserted claims are invalid as anticipated or obvious in view of numerous prior art references. *Id.* Dr. Shamos proceeded to draft an expert report setting forth or referencing the claim construction he used in his analysis and his opinions regarding anticipation, obviousness and invalidity under 35 U.S.C. §112. *Id.* On May 2, 2008, Dr. Shamos' expert report was served on epicRealm. Excerpted at A86.

In the opening paragraphs of his invalidity expert report, Dr. Shamos made the following statement setting forth precisely what opinions he was asked to provide and what methodology he used to reach those opinions:

> I have been asked by counsel for Oracle to offer an expert opinion on the validity of claims 1-11 of Lowery et al. U.S. Patent 5,894,554 (the '554 Patent) and claims 2, [16] and 29 of Lowery et al. U.S. Patent 6,415,335 (the '335 Patent), collectively the "Asserted Claims" of the "Patents" ***based on the claim constructions propounded by Oracle and epicRealm***. I note that many of these constructions are identical or similar to Markman Constructions in the Texas Actions . . . . I will refer to the constructions in the Texas Actions as the "Markman Constructions" even though I am aware that this Court had not made such constructions yet in the present case. . . . The fact, however, that I rely on the Texas Court's claim constructions or epicRealm's proposed claim constructions should not suggest that I necessarily I agree with those constructions or positions. Where I agree or disagree with certain constructions or positions, I have

[2] Since the parties exchanged proposed constructions for disputed claim terms, they have filed with the Court a final list of disputed claim terms and proposed constructions. D.I. 187. The final list contains substantially fewer claims terms than those listed in Oracle's initial proposed list. Pursuant to the Court's Discovery Plan and Scheduling Order, claim terms that Oracle has dropped from its initial proposed list will be construed according to their ordinary meaning. *See* D.I. 29 at p. 5.

> expressly stated so. ***In connection with my analysis, I have reviewed the Patents, their prosecution histories and the documents listed in Exhibit 1, attached hereto.***

Id. at ¶8 (emphasis added). In Exhibit 1 to his report, Dr. Shamos listed documents including "Plaintiffs' Identification of Claim Terms that Need Construction and Preliminary Claim Constructions" and "Defendant's Proposed Claim Constructions" as materials he reviewed and considered in reaching his invalidity opinions. *Id.* at pp. 202-203. Accordingly, Dr. Shamos made clear at the outset of his report that he conducted an invalidity analysis taking into account both parties' proposed claim constructions.

The body of Dr. Shamos' report consists of 172 pages and contains a discussion of the patents-in-suit, the prior art and substantial portions of Dr. Shamos' invalidity analysis including claim element-by-element anticipation and obviousness analyses for numerous prior art references. Throughout the 172 pages of the main body of his report, as demonstrated below, Dr. Shamos consistently references the parties' proposed claim constructions indicating where and how he was relying on such constructions in reaching his invalidity opinions. *See, e.g.*, Section V.A.1., *infra*. Unless otherwise specifically stated in his report, all of Dr. Shamos' conclusions as to whether or not a particular claim element is disclosed in a prior art reference are based on both parties' proposed constructions, if any, associated with that claim element. *See id.*; Shamos Opp. Decl. at ¶12.

As a supplement to the body of his report, Dr. Shamos attached several exhibits including a spreadsheet (Exhibit 3) containing a summary chart of Dr. Shamos' element-by-element invalidity analysis of the claims for numerous prior art references. *See, e.g.*, A86 at Ex. 3 (excerpt). This Exhibit 3 chart summarizes much of the information contained in the body of Dr. Shamos' report and provides a convenient reference for showing where each element of each asserted claim is disclosed in the prior art references. *Id.*; Shamos Opp. Decl. at ¶13.

Additionally, the chart provides information that supplements the opinions disclosed in the body of the report. *Id.* Dr. Shamos disclosed in the body of his report the various proposed claim constructions on which he relied *for the entirety of his invalidity analysis*. This includes the opinions he reached in Exhibit 3; therefore, it was not necessary for Dr. Shamos to repeat all this information in his Exhibit 3 chart. *Id.*

B. EpicRealm and Its Expert, Dr. Finkel, Failed to Timely Disclose Evidence Relating to Secondary Considerations of Nonobviousness

On June 11, 2007, Oracle served its Interrogatory No. 12 on epicRealm asking it to "state why each [of its alleged] invention[s] is not obvious . . . and whether and how such non-obviousness is supported by 'objective evidence' or 'secondary considerations' in accordance with *Graham v. John Deer Co.*, 383 U.S. 1 (1966)." A94 at p. 9. EpicRealm did not provide a substantive response to Oracle's Interrogatory No. 12 until November 9, 2007 when it served a short response on the issue consisting of approximately 2-3 pages of conclusory secondary considerations contentions. A92 at pp. 4-6. Although it was epicRealm's burden to seasonably supplement its interrogatory responses, it waited until May 2, 2008, ***six months*** after its belated initial response, to supplement its response to Interrogatory No. 12, which was the last day the parties could supplement their interrogatory responses. May 2nd was also the deadline for Dr. Shamos to submit his invalidity expert report, so it was impossible for him to offer opinions in response to epicRealm's last-minute supplementation.

Pursuant to the Court's Scheduling Order and agreement between the parties to extend the expert report deadlines, the parties were required to submit expert reports ***on issues for which each party has the burden of proof*** by May 2, 2008. D.I. 29 at p. 2. Although epicRealm bears the burden of offering evidence of secondary considerations of nonobviousness, epicRealm's expert, Dr. Finkel, failed to offer any opinions on the issue in his May 2nd expert report. Dr.

Finkel instead waited until June 6, 2008 when his rebuttal report was due to first disclose any opinions related to secondary considerations. A85 at ¶¶185-194. In addition to his opinions being late, Dr. Finkel's secondary considerations opinions disclosed new theories and arguments that epicRealm failed to disclose to Oracle during fact discovery. *Compare id.* [Finkel's secondary considerations opinions] *with* A95 at pp. 11-14 [epicRealm's May 2 supplementation to Oracle's Interrogatory No. 12].

C. Although It Was Not Oracle's Initial Burden to Do So, Dr. Shamos' Opening Expert Report Responded to EpicRealm's Alleged Evidence of Secondary Considerations of Nonobviousness

Although it was not Oracle's initial burden to do so, Dr. Shamos did in fact review epicRealm's November 9, 2007 response to Interrogatory No. 12 prior to submitting his report and fully considered epicRealm's alleged evidence of secondary considerations of nonobviousness. Dr. Shamos' opening report provides a discussion of epicRealm's proffered evidence and concludes by stating:

> I understand that certain objective factors, sometimes known as "secondary considerations" may also be taken into account in determining whether a claimed invention would have been obvious. One of these factors is contemporaneous development of the claimed invention by others. I may discuss that factor in this report, as it weighs in favor of a finding of obviousness. I have reviewed epicRealm's Response to Interrogatory No. 12 regarding "secondary considerations" and do not believe that such alleged considerations weigh in favor of nonobviousness, especially in view of the numerous prior art references discussed herein that anticipate the Asserted Claims and the numerous individuals and companies, including Oracle, discussed or referenced herein that developed the claimed inventions of the epicRealm patents prior to their filing dates.
>
> To the extent that epicRealm seeks to raise other secondary considerations, I reserve the right to supplement my report to provide a rebuttal.

A86 at ¶¶24.f.; *see also id.* at ¶¶799-804. Dr. Shamos, however, had no opportunity to consider or opine on epicRealm's May 2, 2008 supplementation because it was disclosed on the same day Dr. Shamos submitted his expert report. Additionally, Dr. Shamos had no reason to consider or

rebut any of Dr. Finkel's opinions regarding secondary considerations because epicRealm's expert did not offer any such opinions in his May 2 expert report, which was supposed to report on issues for which the party bears the burden of proof.

IV. LEGAL STANDARDS FOR THE EXCLUSION OF EXPERT TESTIMONY UNDER FEDERAL RULE OF EVIDENCE 702

Federal Rule of Evidence 702 "confides to the judge some gatekeeping responsibility in deciding questions of the admissibility of proffered expert testimony." *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 600 (1993). FRE 702 provides in relevant part:

> If scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

FRE 702. The party offering the expert testimony has the burden of proving admissibility. *See Daubert*, 509 U.S. at 592 n.10 (citation omitted).

In determining "whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact," the court must assess whether the methodology underlying the testimony is scientifically valid and whether it can properly be applied to the facts in issue. *Id.* at 592-93. As part of that inquiry, the court "must examine the expert's conclusions in order to determine whether they could reliably follow from the facts known to the expert and the methodology used." *Heller v. Shaw Indus., Inc.*, 167 F.3d 146, 153 (3d Cir. 1999).

The determination of whether to exclude expert evidence is committed to the court's discretion. *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 749 (3d Cir. 1994). The Third Circuit has noted, however, that: "because the reliability standard of Rules 702 and 703 is somewhat amorphous, there is a significant risk that district judges will set the threshold too high and will in fact force [parties] to prove their case twice. Reducing this risk is particularly important

because the Federal Rules of Evidence display a preference for admissibility." *Id.* at 750. Accordingly, "the importance of the excluded testimony should be considered." *Konstantopoulos v. Westvaco Corp.*, 112 F.3d 710, 719 (3d Cir. 1997) (citations and quotations omitted). In making the decision to exclude evidence, the court must balance the need for the challenged evidence against the risk that it will confuse the jury and delay trial. *See In re Paoli R.R.*, 35 F.3d at 746.

When the district court's exclusion of expert opinion testimony will result in a summary or directed verdict, "the Court of Appeals will give those rulings a hard look to determine if a district court has abused its discretion in excluding evidence as unreliable." *Id.* (citations and quotations omitted). Accordingly, "the exclusion of critical evidence is an extreme sanction, not normally to be imposed absent a showing of willful deception or flagrant disregard of a court order by the proponent of the evidence." *Id.* at 791-92 (citations and quotations omitted); *see also* FRE 702, 2000 Amendments ("the rejection of expert testimony is the exception rather than the rule"). "*Daubert* did not work as a seachange over federal evidence law and the trial court's role as gatekeeper is not intended to serve as a replacement for the adversary system." *United States v. Mitchell*, 365 F.3d 215, 245 (3d Cir. 2004) (citations and quotations omitted). *Daubert* itself emphasized the point: "Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." 509 U.S. at 596.

V. ARGUMENT

A. Dr. Shamos' Invalidity Opinions Should Not be Excluded Because He Performed a Reliable Invalidity Analysis Using Both Parties' Proposed Claim Constructions

1. Dr. Shamos' Expert Report and Deposition Testimony Show which of the Parties' Proposed Constructions He Used and How He Used them to Reach His Invalidity Opinions

EpicRealm does not challenge Dr. Shamos' credentials or qualifications as an invalidity expert in this case. EpicRealm instead argues that the Court should wholly preclude Dr. Shamos from testifying regarding the invalidity of the patents-in-suit because he allegedly "failed to state in his expert report or anywhere else which of the various claim constructions he was applying or assuming to support his proposed invalidity testimony."[3] EpicRealm Br. at p. 4. EpicRealm is wrong and its *Daubert* motion should be denied. As demonstrated below, Dr. Shamos made clear in his expert report and deposition testimony what claim constructions he applied during his invalidity analysis.

First, Dr. Shamos represented at the beginning of his expert report that, except where explicitly stated otherwise, he based his invalidity analysis on both parties' proposed claim constructions:

> I have been asked by counsel for Oracle to offer an expert opinion on the validity of claims 1-11 of Lowery et al. U.S. Patent 5,894,554 (the '554 Patent) and claims 2, [16] and 29 of Lowery et al. U.S. Patent 6,415,335 (the '335 Patent), collectively the "Asserted Claims" of the "Patents" ***based on the claim constructions propounded by Oracle and epicRealm***. I note that many of these constructions are identical or similar to Markman

---

[3] Although epicRealm has challenged the admissibility of Dr. Shamos' invalidity opinions in this case, epicRealm has made no challenges to similar opinions of Dr. Shamos involving the same prior art references in the following actions: (1) *epicRealm Licensing, LLP v. Autoflex Leasing, Inc. at al.*, CA No. 5:07-CV-125 (E.D. Tex.); (2) *epicRealm Licensing, LLP v. Franklin Covey Co. et al.*, CA No. 5:07-CV-126 (E.D. Tex.); and (3) *epicRealm Licensing, LLP v. Various, Inc.*, CA No. 5:07-CV-135 (E.D. Tex.).

> Constructions in the Texas Actions . . . . I will refer to the constructions in the Texas Actions as the "Markman Constructions" even though I am aware that this Court had not made such constructions yet in the present case. . . . The fact, however, that I rely on the Texas Court's claim constructions or epicRealm's proposed claim constructions should not suggest that I necessarily I agree with those constructions or positions. Where I agree or disagree with certain constructions or positions, I have expressly stated so. In connection with my analysis, I have reviewed the Patents, their prosecution histories and the documents listed in Exhibit 1, attached hereto.

A86 at ¶8. Additionally, Dr. Shamos represented that in performing his invalidity analysis he relied on the documents listed in Exhibit 1 of his report, which include the parties' proposed claim construction charts that were exchanged on December 14, 2007. *Id.* at ¶8 and pp. 202-03.

EpicRealm primarily complains that Dr. Shamos did not identify the constructions he used in the cells of his spreadsheet of Exhibit 3. ER Br. at p. 4. EpicRealm focuses on one or two exhibits of Dr. Shamos' report while ignoring the important fact that his report includes much more. It is the report's main body which includes Dr. Shamos' methodology, claim construction references and primary invalidity opinions. Exhibit 3, as well as his other exhibits, is an extension to the report's body and, accordingly, its conclusions necessarily incorporate and are based on the claim constructions that Dr. Shamos identifies in his report's 826 paragraphs. Examples of such claim constructions are discussed below. As Dr. Shamos testified during deposition, it was not necessary to provide a separate spreadsheet exhibit for each set of competing claim constructions, because Dr. Shamos' opinions are based on the understanding that the broader of the two competing constructions subsumes the other. *See, e.g.*, A83 [Shamos Dep.] at pp. 85:24-89:8; Shamos Opp. Decl. at ¶12. In other words, unless Dr. Shamos states otherwise in his report, a prior art reference listed in Exhibit 3 must meet the narrower of any two proposed constructions for the same claim term. Naturally, if an Exhibit 3 prior art reference meets the narrower of any two competing proposed constructions then it must also meet the broader. *Id.*

Although the claim constructions that Dr. Shamos used in performing his invalidity analysis are plainly stated in the proposed claim construction charts identified in his report, Dr. Shamos also consistently identified those proposed claim constructions throughout the body of his report. The following are examples of where Dr. Shamos identified the proposed claim constructions he used for the entirety of his invalidity analysis. The below examples are not an exhaustive list of every instance where Dr. Shamos references the parties' proposed claim constructions for purposes of his invalidity analysis, but they amply demonstrate that Dr. Shamos based his analysis on the parties' proposed claim constructions.

These examples are divided into three categories: (1) Dr. Shamos' application of competing proposed constructions; (2) Dr. Shamos' application of constructions that have only been proposed by Oracle; and (3) Dr. Shamos' application of proposed constructions that do not appear to be in dispute.

a) Dr. Shamos' application of competing proposed constructions

For the claim term "said page server receiving said request and releasing said Web server to process other requests," for example, Dr. Shamos explained in his report that in his invalidity analysis he applied both Oracle's and epicRealm's proposed constructions for that disputed term. First, Dr. Shamos identified the Texas Court's construction of "releasing," which is identical to Oracle's proposed construction for that term in this case, and stated that he used epicRealm's interpretation of that construction for purposes of his invalidity analysis:

> Applicants chose to claim an express act of releasing. ***The Texas Court has interpreted "releasing," as used in the phrase, "said page server receiving said request and releasing said Web server to process other requests," to mean "said page server receiving said request and said page server performing an act (separate from merely receiving the request) to free the Web server to process other requests."*** It appears from various epicRealm papers that it believes that any of the following acts can constitute releasing: (1) an express release indication, e.g. a message or other communication overtly informing the Web server that it is being released; (2) a status indication that the request has been received;

> or (3) an indication that the page server has accepted the request and has agreed to process it. I believe that only (1) constitutes an act of releasing, but ***for invalidity purposes I have adopted epicRealm's theories***.

A86 at ¶72 (emphasis added). Dr. Shamos discussed further what he believed did not meet Oracle's proposed "releasing" construction:

> Sending an acknowledgement [] is not ***"an act (separate from merely receiving the request) to free the Web server to process other requests," as required by the Texas Court***, for the simple reason is that the Web server is free to process other requests on its own and does not need to be "freed" to do so. The proof of this is that the Web server will continue to process other requests even if no acknowledgement is ever received.
>
> Nevertheless, ***epicRealm has contended that the required step of "releasing" is satisfied by the TCP acknowledgement (this contention is hereinafter called "TCP Releasing").*** The apparent justification for this assertion is that the result of the acknowledgment is that certain resources at both ends of the connection are no longer needed. Even if this is true, the use of those resources was not preventing the Web server from processing other requests, so releasing them does not have the effect of freeing the Web server to process other requests.

Id. at ¶¶74-75 (emphasis added); *see also Id.* at ¶¶76-78. Again, although Dr. Shamos disagrees with epicRealm as to what "acts" can satisfy Oracle's proposed "releasing" construction, he adopted epicRealm's theories for his invalidity analysis. *Id.* at ¶72. Additionally, as he did for other claim terms, Dr. Shamos specifically linked the analysis he did for "releasing" in the body of his report with element-by-element invalidity analysis he documented in his report's Exhibit 3:

> [F]or purposes of invalidity analysis I will conditionally adopt epicRealm's various releasing contentions and show that every claim is anticipated under one or more of epicRealm's varieties of "releasing." ***Every one of the references in Exhibit 3 utilizes implicit releasing in addition to any releasing it may perform under epicRealm's contentions.***

Id. at ¶91 (emphasis added).

Additionally, Dr. Shamos represented in his expert report that he equally applied epicRealm's proposed construction for "releasing" (*i.e.*, "freeing") because it did not introduce any specific language that distinguished it from Oracle's proposed construction:

> The Texas Court has construed the limitation "said page server receiving said request and releasing said Web server to process other requests" to

> mean "said page server receiving said request and said page server performing an act (separate from merely receiving the request) to free the Web server to process other requests." ***In this action, epicRealm has proposed that "releasing" should be construed to mean "freeing," but this is no different because it still requires the page server to perform some overt act to "free" the Web server to process other requests.***

Id. at ¶789 (emphasis added). Dr. Shamos further explained that he interpreted epicRealm's proposed construction (*i.e.*, "freeing") to require the same affirmative "act" as that of Oracle's proposed construction. If the Court, however, were to interpret "freeing" to simply mean implicit releasing (*i.e.*, releasing by virtue of merely handing off a request), then every prior art reference on which he relied would perform such "freeing":

> In this action, ***epicRealm proposes that "releasing" simply means "freeing."*** However, because "releasing" is recited as a positive claim step, this cannot mean implicit freeing, but requires an express act of freeing. That which was not tied up, however, cannot be "freed," so even express acts performed by the page server or messages communicated to the Web server cannot "free" it if was already processing other requests.
>
> ***In the event that the Court construes "releasing" to mean implicit releasing, then every prior art reference cited herein performs such releasing.***

Id. at ¶79-80 (emphasis added). Dr. Shamos' report goes on to explain how he applied the parties' proposed constructions to all of the prior art discussed in his report:

> ***If "releasing" means, as construed by the Texas Court, that the page server must perform "some act (separate from merely receiving the request) to free the Web server to process other requests," then inquiry is required into the nature of what that act might comprise.*** Presumably some indication would be passed back to the web server, either directly or indirectly, such as an acknowledgement of receipt of the request by the page server. For this to "free" the web server, however, the web server would have to be waiting for the indication before proceeding, which effectively requires an express act of releasing. For purposes of this report, ***I have performed an invalidity analysis under two separate theories of "releasing," both the TCP acknowledgement theory and express releasing.***
>
> The prior art teaches all three forms of "releasing": (1) express releasing as construed by the Texas Court and the other two forms of releasing advanced in epicRealm's contention: (2) acknowledgement of receipt of a request; and (3) indication that the page server has accepted the request. ***No matter which form of releasing is chosen, it was well known in the prior art, as was implicit releasing.***

> Recently, in the Texas Actions, epicRealm has advanced a new theory of releasing in the Texas Actions. It now says . . . that "socket()-bind()-listen() calls" can constitute releasing.
>
> * * *
>
> In any event, the web server is not "released" in any sense by the execution of such calls because it was not being prevented form processing other requests in the meantime. It does not wait for any instruction to proceed – it simply proceeds. Since it is not being restrained, it cannot be "released." However, consistent with epicRealm's new contention, ***I have assumed that "socket()-bind()-listen() calls" can constitute releasing, which I will refer to in shorthand as "SBL releasing."***

A86 at ¶¶83-87 (emphasis added).

The parties have also proposed competing constructions for the term "dispatching." In his expert report, Dr. Shamos explained that in his invalidity analysis he applied both parties' proposed construction for that term:

> epicRealm has represented in the Texas Actions that "dispatching" means "examining a request to make an informed selection of which page server should process the request based on dynamic information maintained about page servers, the dynamic information indicating which page server can more efficiently process the request, and sending the request to the selected page server." . . . ***My analysis below is also consistent with Oracle's proposed construction for the term "dispatching,"*** namely, "analyzing a request to make an informed selection of which page server should process the request, and sending the request to that page server."

Id. at ¶102 (emphasis added). Again, as he did for other claim terms, Dr. Shamos specifically linked the analysis he did in the body of his report with element-by-element invalidity analysis he documented in his report's Exhibit 3:

> Dispatching is taught in at least the following references: 002, 00H, 00J, 00K, 00O, 00Q, 00W, 010, 016, 019, 051, 058, 141, 153, 161, 162, 172, 173, 180, 194, 195, 196, 401, 501/502, 601, 604/605 and 607 (together, the "Dispatching References"), ***as shown in Exhibit 3***. It is also taught separately in "Understanding SQL*Net, Release 2.2" and "Understanding SQL*Net, Release 2.3," two of the Oracle 1.0 References.

Id. at ¶112 (emphasis added).

Additionally, Dr. Shamos confirmed at his deposition that any prior art reference that disclosed "dispatching" under epicRealm's proposed construction also disclosed it under Oracle's

because Oracle's proposed construction is broader:

> Q. Your discussion here of dispatching, is that discussion in the context of what you perceive the term "dispatching" to mean in the claims?
>
> A. It's not what I perceive. ***It's based on the Texas construction, and the construction in the Oracle case is more general.*** So if something satisfies dispatching in the Texas case, it satisfies dispatching in the Oracle case.
>
> * * *
>
> Q. Okay. Under epicRealm's construction, do you believe that that is dispatching?
>
> A. Well, I think I've said so in my report and in the spreadsheet of my Exhibit 3. The informed selection that's going on there is based in some cases on load balancing and in other cases on the existence of page servers capable of handling the request. ***So, yeah, it certainly meets that, and if it meets that, then it he automatically meets Oracle's, Oracle's construction because the epicRealm's construction is narrower.***

A83 at pp. 115:21-116:4 and 148:24-149:10 (emphasis added). Dr. Shamos goes on to explain in his report how he applied epicRealm's proposed "dispatching" construction to all of the prior art discussed in his report:

> epicRealm has accused certain systems having only a single page server of infringing claims containing dispatching limitations. Therefore, I will assume for purposes of invalidity analysis that prior art references teaching only a single page server also teach dispatching, which I will refer to as "Single-Server Dispatching."
>
> ***Under epicRealm's proposed construction, dispatching requires consideration of dynamic information maintained about page servers.*** Dynamic information is information that can change and is not an inherent feature of the architecture. Information does not need to change on a minute-to-minute basis to be dynamic. Some systems maintain files, sometimes referred to as configuration files, which maintain information about page servers such as their network addresses and the resources available to them. These configuration files can be changed at any time, and the test for use of dynamic information is not the frequency with which the information changes, but whether a change to the configuration file affects the choice of page server made by the dispatcher. Because epicRealm has accused of infringement certain systems which make use of configuration files for dispatching, for purposes of invalidity analysis I will adopt epicRealm's contention and will refer to such dispatching herein as "Configuration File Dispatching."

A86 at ¶¶105-106 (emphasis added); *see also* ¶¶107-111. At his deposition, Dr. Shamos confirmed, for example, that, consistent with his invalidity analysis, prior art references including Oracle 1.0 and Oracle 2.0 both disclose "dispatching" under both parties' proposed constructions for that term:

> Q. Is it your opinion that Oracle 1.0 included dispatching?
> A. Yes.
> Q. Is it your opinion that Oracle 2.0 included dispatching?
> A. ***Yes, under both constructions, both of them under both constructions.***

A83 at p. 163:9-15 (emphasis added).

As another example, Dr. Shamos explained in his report that in his invalidity analysis he applied both parties' competing constructions for the term "intercepting said request at said Web server":

> The Texas Court has construed "intercepting said request at said Web server" to mean "intercepting the handling of a request at a Web server." It is my understanding that epicRealm has proposed the same construction for 'intercepting' in this action. This construction clarifies that intercepting involves not only redirecting the request itself, but also the processing (handling) of the request. ***My analysis below is also consistent with Oracle's proposed construction for the term "intercepting," namely, "receiving a request at the Web server and diverting the request before the Web server executable can process the request."***

A86 at ¶¶92-94 (emphasis added). Similarly, Dr. Shamos confirmed at his deposition that, consistent with his invalidity analysis, a particular prior art reference discloses "intercepting" under both parties' proposed constructions:

> Q. Would you explain to me how intercepting is disclosed in Reference 141?
>
> A. Sure, intercepting occurs when a decision is made that the web server is not going to process a request but somebody else is going to process a request, and the request is deflected or pushed onto someone else so the web server does not process it.
>
> Q. Would that be intercepting even if the web server never processes a request on its own?
>
> * * *

A. ***Let's go to the construction.***

Q. Sure.

A. All right. ***I'm first looking at epicRealm's construction of intercepting.*** Intercepting, the handling of a request at a web server. I think we've discussed before I'm not real happy with that because it's not clear what handling means. It's also further not clear what at a web server means. Does that mean right before the web server or in the middle of the web server. But if there is code that says this is going to get handled by somebody else, not the web server, ***that's intercepting according to [epicRealm's] construction. Now let's look at Oracle's construction.*** Intercepting, receiving a request at the web server and diverting the request before the web server executable can process the request. Well, ***what you just described also is intercepting under Oracle's construction*** because the web server is not processing it. Somebody else is.

A83 at pp. 269:12-270:22 (emphasis added).

As another example, Dr. Shamos explained in his report that in his invalidity analysis he applied both parties' competing constructions for the term "page server":

> ***epicRealm has proposed that the term "page server" be construed to mean "page-generating software that generates a dynamic Web page," and that "Web page" be construed to mean "Web content displayable through a Web browser," which are the constructions arrived at by the Texas Court.*** Therefore, according to epicRealm, a page server is software that generates dynamic Web content displayable through a Web browser.
>
> * * *
>
> I understand that epicRealm takes the position that, despite the teaching in the patent against multi-threading, software running on a single computer, including a web server, interceptor, dispatcher and page server, falls within the ambit of all claims. Oracle disputes this position. Indeed, contrary to epicRealm's proposed construction, Oracle's proposed construction for "page server" reflects the asserted patents' teaching that the page server must operate on a separate machine (i.e., use a separate processor) from that of the Web server in order to realize the claimed benefits of the claimed inventions. ***I will adopt epicRealm's position for purposes of [my] invalidity analysis, although I disagree with it and do not concede its correctness.*** To the extent, however, the Delaware Court adopts Oracle's proposed construction, it was known and obvious to one of ordinary skill in the art to offload web page requests from a Web server to a page server running on a separate machine from the Web server such that the Web server and page server could process requests at the same time.

A86 at ¶¶186-188 (emphasis added).

Another claim term for which the parties have proposed competing claim constructions is "Web page." Again, as stated in paragraph 8 of his expert report, Dr. Shamos reached his invalidity opinions based on both parties' proposed constructions, except where he stated otherwise in his report. Particularly, Dr. Shamos applied Oracle's proposed construction for "Web page," namely, "a file containing embedded commands ***in a Web formatting language such as HTML***, capable of being displayed on a Web browser." Dr. Shamos confirmed this at his deposition:

> Q. Do you believe that a web page has to include HTML?
>
> A. You've just raised a question that is one of the most difficult issues in this case. No, it doesn't have to be HTML, but it -- ***I believe that one of skill in the art would understand that a web page contains some web markup. It could be XML, it could be something else, but it's not simply text.*** I realize that the Texas Court didn't go along with that, and thereby created a mess.

A83 [Shamos Dep.] at pp. 219:16-220:1 (emphasis added); *see also* A86 at ¶659 (Shamos confirming that, consistent with Oracle's proposed construction, "the very nature of dynamic web page generation suggests the use of HTML."). Dr. Shamos also confirmed in his expert report that, although he did not agree with it, he also applied epicRealm's broader construction for Web page for purposes of his invalidity analysis:

> ***epicRealm has proposed that the term "page server" be construed to mean "page-generating software that generates a dynamic Web page," and that "Web page" be construed to mean "Web content displayable through a Web browser," which are the constructions arrived at by the Texas Court.*** Therefore, according to epicRealm, a page server is software that generates dynamic Web content displayable through a Web browser.
>
> * * *
>
> epicRealm appears to take the position that any dynamic data whatsoever, even if it is not a complete web page suitable for delivery to the user and is not the page that was requested, is nonetheless a "Web page" for purposes of infringement simply because a Web browser would be capable of displaying it. epicRealm has accused an item of software known as MySQL as being a page server. MySQL is a database management system capable of responding to SQL queries for dynamic data. Normally the data produced by a MySQL query is inserted into an HTML template or otherwise surrounded by HTML tags to turn it into a completed Web page. Logically, the software which finishes making up the page is the

> page server. However, epicRealm seems to be arguing that any software that it used in the preparation of a page is a "page server" because its intermediate output could be (but is not) displayed on a Web browser. I do not agree with this position. ***However, for purposes of invalidity analysis, I will refer to a page server which produces unfinished dynamic pages as a "Partial Page Server" based on epicRealm's contentions.***

Id. at ¶¶186-187 (emphasis added); *see also* A83 [Shamos Dep.] at pp. 220:2-221:9.

b) Dr. Shamos' application of constructions that have only been proposed by Oracle

In his invalidity analysis, for example, Dr. Shamos only applied Oracle's proposed construction for "dispatcher" because epicRealm failed to propose a construction for that term:

> Q. What is a dispatcher as used in claim 1 to your understanding?
>
> A. Well, I think ***there are constructions of dispatcher, and if we look at epicRealm's proposed claim constructions,*** I don't think that the word "dispatcher" is there, but dispatcher is something that performs dispatching I suppose, whereas Oracle was more careful about it, and ***Oracle said that a dispatcher is a software program for determining which page server should be used to process a dynamic web page generation request, so it makes the determination.***

Id. at pp. 151:7-19 (emphasis added). Because Oracle's proposed construction is more precise than epicRealm's proposal that the term not be construed, if the prior art satisfies Oracle's proposal, it must satisfy the "dispatcher" requirement. EpicRealm has proposed no limitations on "dispatcher" beyond these that Oracle proposes.

Similarly, although epicRealm has not proposed a construction for the term "routing" in this case, Dr. Shamos applied both the construction that epicRealm proposed in the Texas actions and the construction that Oracle proposed in this case:

> epicRealm has proposed in the Texas Actions that "routing" means "sending or forwarding data along a path towards a destination." . . . ***My analysis below is also consistent with Oracle's proposed construction for the term "routing," namely, "transmitting."***

A86 at ¶99 (emphasis added). Additionally, Dr. Shamos confirmed at his deposition that he found all the prior art references on which he relied to disclose "routing" under both parties'

proposed constructions:

> Q. Well, if there's no difference, then I guess the question again becomes did you do the analysis that we just discussed about whether or not there is routing for each of the approximately 30 references that you believe anticipate claim 1 of the '554?
>
> A. There was no need to do a separate analysis because the answer would have been the same in each case.
>
> Q. What analysis did you do to determine that there is routing of the request as set forth in claim 1 with respect to the approximately 30 references that you believe anticipate claim 1?
>
> A. I think I just answered that question. ***I don't consider there to be a substantive difference between epicRealm's and Oracle's construction of routing and, therefore, it's the same analysis. So whatever analysis I did for the one construction applies to the other construction.***

A83 at pp. 205:17-206:12 (emphasis added).

As another example, Dr. Shamos only applied Oracle's proposed construction for the term "connection cache" because epicRealm failed to propose a construction for that term:

> The purpose of a connection cache, according to the Patents, is to reduce the time needed to establish connections to data sources: "One embodiment of the claimed invention utilizes connection caching and page caching to improve performance. Each Page server can be configured to maintain a cache of connections to numerous data sources. For example, as illustrated in FIG. 4, Page server 404(1) can retrieve data from data source 406, data source 408 or data source 410. Page server 404(1) can maintain connection cache 412(1), containing connections to each of data source 406, data source 408 and data source 410, thus eliminating connect times from the Page servers to those data sources." '554 6:56:65. ***This stated purpose is consistent with Oracle's proposed construction for the term "connection cache," namely, "a store of information identifying open connections to data sources for eliminating subsequent connect times to those data sources."***

A86 at ¶123 (emphasis added).

As another example, Dr. Shamos only applied Oracle's proposed construction for "logging in" because epicRealm failed to propose a construction for that term:

> "Logging in" to a data source is claimed in '554 claim 6 and '355 claims 6 and 20. Logging in to a data source has two meanings in the art. ***Oracle has proposed that "logging in" means "presenting credentials that allow access to," such as a user name and password.*** The specification of the

> Patents provides no explanation of "logging in," and epicRealm has not proposed any construction for the term "logging in" in this action. If, however, "logging in" means simply "connecting" to a database, then logging would occur anytime any system accesses a database.
>
> * * *
>
> Both meanings of "logging in" were known to those of skill in the art, and the need to establish a connection and possibly present authentication credentials were part and parcel of access to data sources.
>
> * * *
>
> It was well known to require login credentials to access data sources because of the generally proprietary nature of business data. If access to such a data source is necessary to generate a dynamic page, it is inherent that logging in would be required. ***It is also taught, for example, by the Logging In References.*** This is the step of '554 claim 5. The fact that there are 22 Logging In References listed above indicates that the technique was so widespread as to be suggested by common sense to one of skill in the art.

Id. at ¶¶131-133 and 648 (emphasis added).

As another example, Dr. Shamos only applied Oracle's proposed construction for "page cache" because epicRealm failed to propose a construction for that term:

> Caching of web pages for various purposes was well known in the prior art. Caching is an expedient to reduce network load and processing time. Browsers cached web pages so if the user requested them again it would not be necessary to have them retransmitted over the network. Web servers cached pages in main memory so it would not be necessary to retrieve them from hard disk or some other server, thus reducing latency time. Dynamic pages were cached to avoid the expense of regenerating them. All of this was amply taught in the prior art. ***My analysis of page caching in this report is consistent with Oracle's proposed construction for the term "page cache,"*** namely, "a memory that stores finished Web pages which the page server uses to fulfill requests instead of re-accessing the one or more data sources."

Id. at ¶137 (emphasis added).

As another example, Dr. Shamos only applied Oracle's proposed construction for "HTML Extension Templates" because epicRealm failed to propose a construction for that term:

> A "template" in the context of dynamic page generation is a pattern for a page that can be instantiated to form an actual page by filling in markers in the template with dynamically retrieved data. The specification of the Patents states that these markers can determine both the physical location of the data on the page and the place at which the data can be found. It refers to "customized HTML templates that specify the source and placement of retrieved data." '554 6:36-37. ***My analysis below is also consistent with Oracle's proposed construction for the term "custom HTML extension templates," namely, "custom files using non-HTML***

> ***markers for specifying where data from data sources should be inserted to create an HTML file."***

Id. at ¶148 (emphasis added); *see also id. at* ¶¶149-153.

As another example, Dr. Shamos only applied Oracle's proposed construction for "machine readable medium" because epicRealm failed to propose a construction for that term. Particularly, Dr. Shamos applied Oracle's proposed construction for "machine readable medium," namely, "a hard disk, floppy disk, CD-ROM, magnetic tape, or other magnetic or optical data storage medium." Dr. Shamos confirmed this at his deposition:

> Q. Do any of the references that you rely on as anticipating claim 11 of the '554 patent disclose a machine readable medium as you understand that term's use in claim 11?
>
> A. Yeah, all of them, at least by inherency. They are all computer systems. Computers read their instructions from computer readable medium. If you don't have a computer readable medium, you've got no computer these days. It was different in the old days when you hardwired computers to do things, but you don't hardwire them anymore. You read the instructions off a medium.
>
> * * *
>
> The fact is that the instructions, if you have a separate web server and a separate page server, the instructions for both of them have to be on machine readable media or a computer cannot interpret the instructions.
>
> And so if I draw the box around, if there's more than one medium, if I draw it around the two of them and say that's the medium, is the medium a single thing, or is the medium, for example, ***a compact disk or a magnetic tape or a floppy? What is it? There's always machine readable medium these days when you have a computer system.***

A83 [Shamos Dep.] at pp. 221:10-22 and 247:7-20 (emphasis added).

c) Dr. Shamos' application of proposed constructions that do not appear to be in dispute

A claim term for which the parties have proposed nearly identical claim constructions is "HTTP-Compliant Device." Oracle proposes that this term means "a device running software

that implements the Hypertext Transfer Protocol," and, similarly, epicRealm proposes it means: "a device that is compliant with the communication protocol known as HyperText Transport Protocol (HTTP)." In his expert report, Dr. Shamos stated that in his invalidity analysis he applied a construction that is consistent with both parties' proposed constructions for that term:

> The term "HTTP-compliant" was known in the prior art to mean a device or program that comports with the Hypertext Transfer Protocol.
>
> * * *
>
> The term "HTTP-compliant device" is not and was not a recognized term of art. The only references to it that are contemporaneous with the Patents that I have been able to find are the Patents themselves. The fact that it is not a term of art does not mean that it is not understandable to one skilled in the art, however. ***It means a device that implements, i.e. "complies with" the HTTP protocol.***
>
> * * *
>
> It was obvious to refer to a web server as an "HTTP-compliant device" and therefore to generalize any process involving dynamic web page generation and web servers to use HTTP-compliant devices.

A86 at ¶¶189-192 (emphasis added).

Similarly, the parties have proposed nearly identical constructions for the terms "means for generating a request," "means for receiving a request," and "page server processing means." Dr. Shamos confirmed in his expert report that for purposes of his invalidity analysis in this case he applied the Texas Court's constructions for those terms, which are identical to epicRealm's proposals in this case and effectively identical to Oracle's proposals.

> The Texas Court has construed "means for generating a request" to mean "a processor of a computer that is, or has, a Web client running a Web browser" or equivalents thereof. Any system in which requests are generated by a web browser includes such a means.
>
> * * *
>
> The Texas Court has construed "means for receiving said request from said first computer" to mean "a processor of a computer that is, or has, a Web server running Web server executable" or equivalents thereof. Any system which has a Web server that receives dynamic page generation requests includes such a means.
>
> * * *
>
> The Texas Court has construed "page server processing means" as "a processor of a computer that runs Page server software (wherein Page server software is page-generating software that generates a dynamic Web page)." Any computer system that has a page server has such a "page server processing means."

Id. at ¶¶313, 315 and 322.

As demonstrated above, Dr. Shamos fully and adequately disclosed how he applied the parties' proposed constructions to the prior art and, in many cases, even specifically identified what party contentions he considered when applying those constructions. In an effort to paint a picture that does not exist, epicRealm completely ignores this abundant evidence demonstrating that Dr. Shamos conducted a proper invalidity analysis.

Dr. Shamos' invalidity opinions should be admissible under FRE 702 because: (1) his opinions are based upon sufficient facts or data including the parties' proposed claim constructions and the prior art references; (2) his opinions are the product of reliable principles and methods because he understood that he must construe the claims before applying them to the prior art; and (3) he applied the principles and method reliability to the facts of the case because he identified the claim constructions he applied and used them to perform a claim element-by-element invalidity analysis for each prior art reference. EpicRealm has failed to meet its heavy burden of demonstrating otherwise. Of course, if epicRealm continues to believe Dr. Shamos' analysis is somehow flawed or incomplete, it is free to cross-examine him at trial.

2. The Legal Authority on which EpicRealm Relies Is Not Applicable to the Facts of this Case

EpicRealm primarily relies on two cases to support its argument that Dr. Shamos should be precluded from offering invalidity testimony in this case: *Oxford Gene Tech. Ltd. v. Mergen Ltd.*, 345 F. Supp. 2d 431 (D. Del. 2004) and *TruePosition, Inc. v. Andrew Corp.*, C.A. No. 05-747-SLR, 2007 WL 2429415, 2007 U.S. Dist. LEXIS 62705 (D. Del. Aug. 23, 2007). The facts of those cases can be easily distinguished from the facts of this case.

In *Oxford*, the Court excluded the opinions of plaintiff's invalidity expert because he failed to (1) set forth the claim constructions he used in performing his invalidity analyses, and

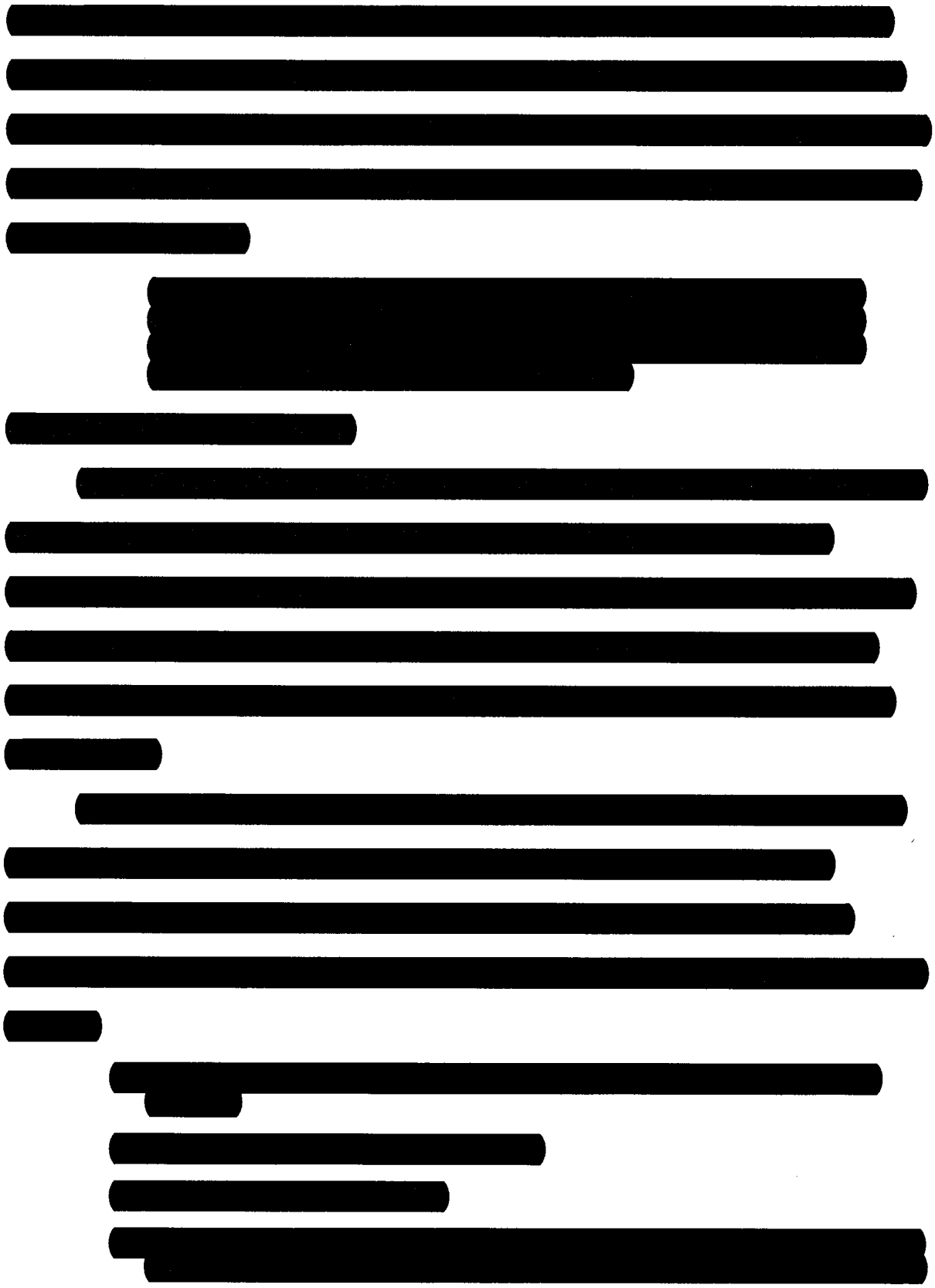
(2) perform an element-by-element comparison of each claim to each prior art reference. 345 F. Supp. 2d at 436-37. As discussed above, Dr. Shamos did both of these things in performing his invalidity analysis. First, as evidenced by his expert report and deposition testimony, Dr. Shamos identified which claim constructions he applied and how he took into account epicRealm's infringement contentions when he formed his opinions regarding anticipation and obviousness. *See,* Section V.A.1, *Supra.* Second, Dr. Shamos clearly performed an element-by-element comparison of each asserted claim to each prior art reference. Exhibit 3 of Dr. Shamos' report, for example, breaks down each asserted claim into its separate elements and compares each of those element to corresponding disclosures in the appropriate prior art references. *See, e.g.*, A86 at Exh. 3 (excerpt). The facts of *Oxford* are simply inapposite to the facts of this case.

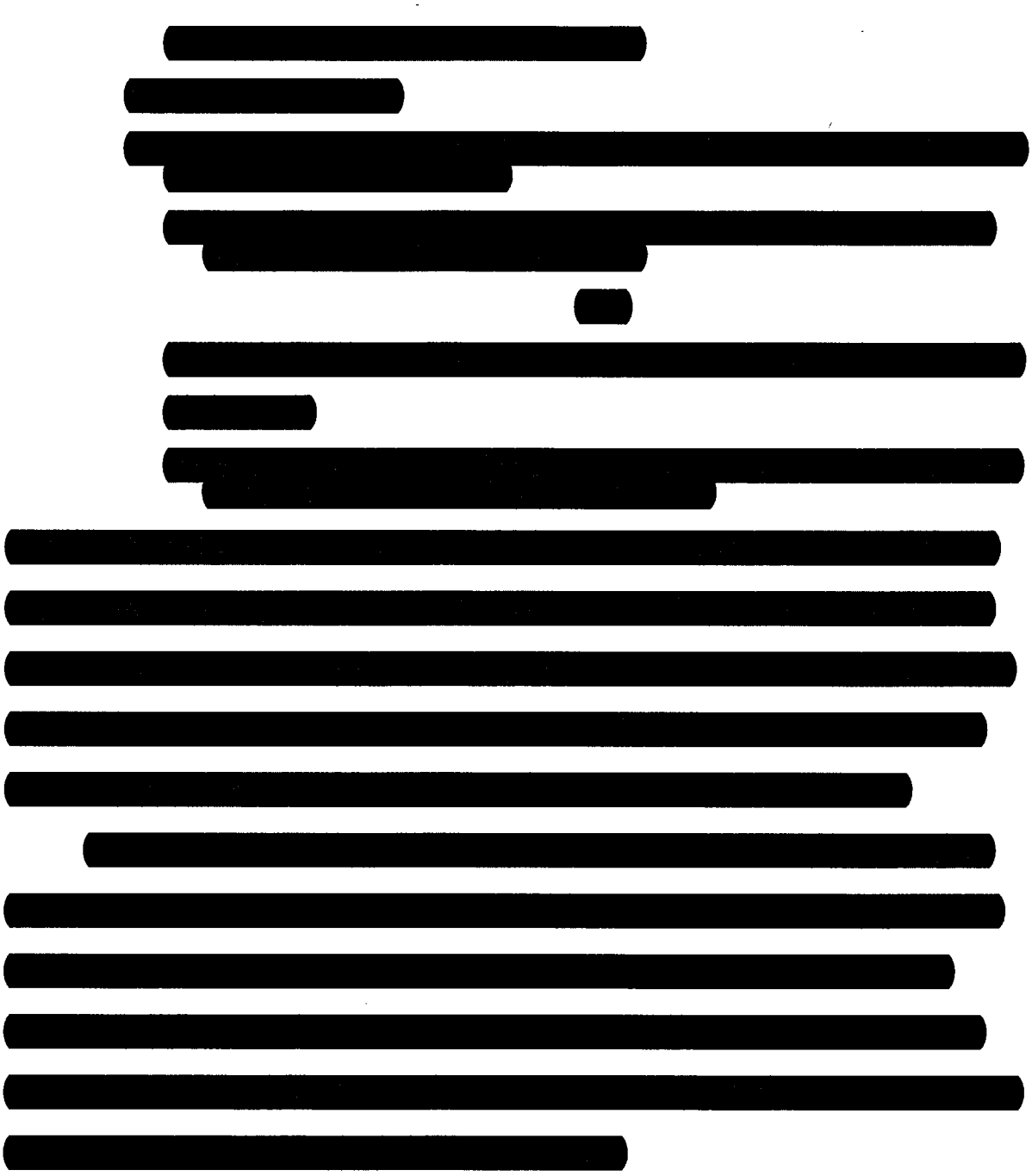
In *TruePosition*, the Court excluded the opinions of plaintiff's invalidity expert because, like in *Oxford*, the expert in question failed to set forth the claim constructions he used in performing his invalidity analysis. *TruePosition*, 2007 U.S. Dist. LEXIS 62705 at *3-4. Again, this case is inapposite because, as discussed above, Dr. Shamos did set forth the claim constructions he used in performing his invalidity analysis.

3. Dr. Shamos' Analysis of Dr. Chen's Patent Enforceability Report is Irrelevant to the Reliability of Dr. Shamos' Invalidity Analysis

Knowing that its *Daubert* motion against Dr. Shamos is unsupported by the facts, epicRealm desperately looks to testimony from Dr. Shamos regarding a patent enforceability report written by Dr. Shuang Chen. Oddly, epicRealm argues that Dr. Shamos' review of Dr. Chen's report somehow shows that Dr. Shamos did not perform an adequate invalidity analysis. EpicRealm misrepresents the facts and Dr. Shamos' testimony.

[redacted]





B. Dr. Shamos' Rebuttal Opinions Regarding EpicRealm's Belated Evidence of Secondary Considerations of Nonobviousness Are Reliable and Admissible

1. Although It Was EpicRealm's Initial Burden to Offer Secondary Considerations Evidence, It Failed to Timely Do So

It is epicRealm's burden in this case, not Oracle's, to come forward with evidence of

secondary considerations of nonobviousness. *See Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1350 (Fed. Cir. 2000) (holding that once a prima facie case of obviousness has been established, the burden shifts to the patentee to come forward with evidence of nonobviousness to overcome the prima facie case); *In re Huang*, 100 F.3d 135, 139 (Fed. Cir. 1996) (same); *see also Demaco Corp. v. F. Von Langsdorff Licensing, Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988) ("When a patentee asserts that commercial success supports its contention of nonobviousness, there must of course be a sufficient relationship between the commercial success and the patented invention. . . . The burden of proof as to this connection or nexus resides with the patentee."); *Bayer Ag v. Sony Elecs.*, 229 F. Supp. 2d 332, 356 (D. Del. 2002) (same).

Oracle established a prima facie case of anticipation and obviousness early on in this case with service of its invalidity contentions on September 7, 2007 and several supplementations thereto during the course of discovery. *See, e.g.*, A91. It was epicRealm's burden, therefore, to disclose in its opening expert report any opinions relating to the issue of secondary considerations of nonobviousness. *Id.*; D.I. 29 at p. 2 (opening expert reports must address "issues for which the parties have the burden of proof"). Although opening expert reports were due May 2, 2008, epicRealm's expert, Dr. Finkel, did not offer any opinions on the issue until June 6. A85 at ¶¶185-194. Surprisingly, epicRealm now accuses Dr. Shamos of not considering epicRealm's secondary considerations evidence when the majority of such evidence was disclosed ***after*** Dr. Shamos had already submitted his invalidity expert report.

2. Dr. Shamos Considered EpicRealm's Secondary Considerations Evidence and Rejected It as Being Inadequate to Overcome Strong Evidence of Obviousness

EpicRealm accuses Dr. Shamos of "ignoring" alleged evidence of secondary considerations of nonobviousness in his invalidity analysis. EpicRealm Br. at p. 6. EpicRealm is wrong. Dr. Shamos, at a minimum, fully considered the 2-3 pages of perfunctory evidence

that epicRealm disclosed in its November 9, 2007 interrogatory responses prior to Dr. Shamos submitting his expert report. At his June 30, 2008 deposition, Dr. Shamos testified that he relied on that evidence in forming his opinion:

> Q. Did you do a careful examination of the seconddary considerations?
>
> A. A careful examination, I think that the secondary considerations occupy one to one and a half pages. They are expressed at a very high level, and I'm not sure what would be meant by a careful examination. ***I did an examination enough I believe to form an opinion.***

A83 [Shamos Dep.] at pp. 309:18-310:1 (emphasis added). Unlike epicRealm's expert, Dr. Shamos disclosed his initial opinions regarding secondary considerations in his opening expert report:

> Q. Am I correct that separate from the obviousness section of your report you have a section on secondary considerations?
>
> A. I believe so.
>
> Q. It begins, Dr. Shamos, I believe at paragraph 799 if that's helpful.
>
> A. Yes.

Id. at pp. 309:1-7. At his deposition, Dr. Shamos went on to explain, as he did in his expert report, that in view of the strong evidence in this case showing that the asserted claims of the patents-in-suit are either anticipated or obvious, epicRealm's proffered evidence is inadequate to overcome his *prima facie* case of obviousness:

> Q. You state in paragraph 800 that, in part, epicRealm's allegations are completely controverted by the published prior art.
>
> A. Yes.
>
> Q. What did you mean by that?
>
> A. Okay. So the -- you can glean from a large number of litigated cases what factors are considered in secondary considerations. It is routine in some experts' reports

> to, by rote, simply make a list of every one of the secondary considerations that a Court has recognized and allege, without factual basis, that that secondary consideration applies in this case.
>
> Now, you can argue all you want to that there are secondary considerations of nonobviousness; however, when the prior art clearly shows that the invention is at least obvious over numerous pairs of references and anticipated, the secondary considerations do not come into play because they are secondary, they are not primary, and so they are irrelevant, just not so, because the entire art was veering in this direction.

Id. at pp. 310:9-311:7. Accordingly, Dr. Shamos did not ignore epicRealm's secondary considerations evidence; he fully considered it and rejected it as irrelevant because it is not adequate to overcome what he has found in this case to be strong evidence of obviousness.

Dr. Shamos' methodology and conclusion with respect to secondary considerations are supported by the law. While it is true that a court must always consider evidence of secondary considerations when determining whether an invention is obvious, that evidence, even if strong, can be rejected as inadequate and irrelevant when there is even stronger countervailing evidence of obviousness. *See Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1472 (Fed. Cir. 1997) ("In reaching an obviousness determination, a trial court may conclude that a patent claim is obvious, even in the light of strong objective evidence tending to show non-obviousness"). As this District has held:

> While it is true that Leapfrog adduced substantial evidence of [secondary considerations of nonobviousness], the court is not convinced that they overcome the very strong case of obviousness presented by Fisher-Price through the testimony of Mr. Milner. Thus, "although the record shows a highly successful product, the record also establishes such a strong case of obviousness based on . . . the teachings of the prior art, including . . . reference[s] not considered during examination, that the objective evidence of nonobviousness does not persuade [the court] to reach a contrary conclusion." Consequently, the court finds by clear and convincing evidence that claim 25 of the '861 patent is invalid as obvious.

Leapfrog Enters. v. Fisher-Price, Inc., 2006 U.S. Dist. LEXIS 13907, at *14-15 (D. Del. Mar. 30, 2006) (citations omitted), *aff'd,* 485 F.3d 1157, 1162 (Fed. Cir. 2007). Accordingly, Dr. Shamos should be permitted to testify at trial that he considered epicRealm's evidence of

secondary considerations and determined that such evidence is not adequate to overcome other evidence he will present showing that epicRealm's claimed inventions are invalid as anticipated and obvious.

Epicrealm's *Daubert* motion to exclude testimony of Dr. Shamos relating to obviousness should be denied. Based on the information available to him at the time of his report, Dr. Shamos performed an adequate obviousness analysis fully considering epicRealm's secondary considerations evidence. His obviousness opinions, expressed in his report and in his deposition testimony, are reliable and should be admissible at trial.

3. If Dr. Finkel is Permitted to Offer Belated Opinions at Trial with Respect to Secondary Considerations of Nonobviousness, Dr. Shamos Should be Permitted to Offer Rebuttal Testimony

As discussed above, Dr. Shamos could not fully respond to epicRealm's secondary considerations evidence because the majority of epicRealm's contentions on the issue were disclosed after Dr. Shamos' invalidity expert report was served. Particularly, Dr. Finkel did not disclose any opinions on the issue until the service of his rebuttal expert report on June 6, 2008. To the extent Dr. Finkel is permitted to testify regarding epicRealm's belated secondary considerations evidence, Dr. Shamos should have an opportunity to present rebuttal evidence. Dr. Shamos has reviewed Dr. Finkel's new opinions and has formed opinions to rebut Dr. Finkel's opinions. *See* Shamos Opp. Decl. at ¶¶125-137.

C. The Court Should, at a Minimum, Exercise Its Broad Discretion and Admit Dr. Shamos' Opinions Because Complete Exclusion Is the Exception Rather than the Rule

"The permissible scope of expert testimony is quite broad, and district courts are vested broad discretion in making admissibility determinations." *Hill v. Reederei F. Laeisz G.M.B.H. Rostock*, 435 F.3d 404, 423 (3d Cir. 2006). With that said, "the rejection of expert testimony is the exception rather than the rule." *Floorgraphics, Inc. v. News Am. Mktg. In-Store Servs.*, 546 F.

Supp. 2d 155, 165-66 (D.N.J. 2008) (quoting FRE 702, 2000 Amendments); *see also In re Paoli R.R.*, 35 F.3d at 745 (the reliability requirement "must not be used as tool by which the court excludes all questionably reliable evidence.").

Here, Dr. Shamos has submitted a lengthy expert report consisting of hundreds of pages of reliable opinions showing how, under both parties' proposed claim constructions, each of the asserted claims are invalid in view of multiple prior art references. Even assuming epicRealm were to identify minor flaws in Dr. Shamos invalidity analysis, such flaws cannot be so severe as to warrant the wholesale exclusion of Dr. Shamos' invalidity opinions. *See In re Paoli R.R.*, 35 F.3d at 746 (When the district court's exclusion of expert opinion testimony will result in a summary or directed verdict, "the Court of Appeals will give those rulings a hard look to determine if a district court has abused its discretion in excluding evidence as unreliable."). At a very minimum, there are good grounds for admitting Dr. Shamos opinions. *See id.* at 744 (observing that "good grounds" for admitting an expert's opinion may exist "even if the judge thinks that a scientist's methodology has some flaws"). As evidenced by his expert report and deposition testimony, for example, Dr. Shamos has disclosed very detailed opinions regarding the patented technology, the state of the relevant art at the time of the alleged invention, the parties' proposed claim constructions, epicRealm's application of the claim constructions in its infringement contentions, and the disclosures and teachings of the prior art. Dr. Shamos' opinions should be admitted because they will undoubtedly assist the trier of fact in determining whether or not the asserted claims are invalid.

Further, *Daubert* itself has emphasized that "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." 509 U.S. at 596; *Stecyk v. Bell*

Helicopter Textron, Inc., 295 F.3d 408, 414 (3d Cir. 2002) ("A party confronted with an adverse expert witness who has sufficient, though perhaps not overwhelming, facts and assumptions as the basis for his opinion can highlight those weaknesses through effective cross-examination."). To the extent epicRealm can identify any deficiencies in Dr. Shamos invalidity analysis, the Court can best deal with those deficiencies by giving epicRealm the opportunity to expose them at trial, and not by wholly excluding Dr. Shamos' opinions.

VI. CONCLUSION

For the reasons stated above, the Court should deny epicRealm's *Daubert* motion to exclude testimony of Dr. Michael Shamos.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

/s/ James W. Parrett, Jr.

Mary B. Graham (#2256)
James W. Parrett, Jr. (#4292)
1201 N. Market Street
P.O. Box 1347
Wilmington, DE 19899-1347
(302) 658-9200
mgraham@mnat.com
jparrett@mnat.com
Attorneys for Oracle Corporation and Oracle U.S.A., Inc.

OF COUNSEL:

James G. Gilliland
Theodore T. Herhold
Joseph A. Greco
Robert J. Artuz
Eric M. Hutchins
TOWNSEND AND TOWNSEND AND CREW LLP
379 Lytton Avenue
Palo Alto, CA 94301
(650) 326-2400

Dorian Daley
Peggy E. Bruggman
Matthew M. Sarboraria
ORACLE CORPORATION
ORACLE U.S.A., INC.
500 Oracle Parkway
Redwood Shores, CA 94065

August 21, 2008

CERTIFICATE OF SERVICE

I hereby certify that on August 28, 2008, I caused the foregoing to be electronically filed with the Clerk of the Court using CM/ECF which will send electronic notification of such filing to the following:

Richard L. Horwitz
David Ellis Moore
POTTER ANDERSON & CORROON, LLP

Additionally, I hereby certify that true and correct copies of the foregoing were caused to be served on August 28, 2008 upon the following individuals in the manner indicated:

BY E-MAIL

Richard L. Horwitz
David Ellis Moore
POTTER ANDERSON & CORROON, LLP
1313 N. Market St., Hercules Plaza, 6th Floor
P.O. Box 951
Wilmington, DE 19899-0951

rhorwitz@potteranderson.com
dmoore@potteranderson.com

BY E-MAIL

George S. Bosy, Esquire
JENNER & BLOCK
330 N. Wabash Avenue
Chicago, IL 60611-7603

gbosy@jenner.com

/s/ James W. Parrett, Jr.

James W. Parrett, Jr. (#4292)