IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

CORDANCE CORPORATION,

:

Plaintiff,

: Civil Action No. 06-491-MPT

:

AMAZON.COM, INC. and,

٧.

AMAZON WEB SERVICES, LLC,

:

Defendants.

MEMORANDUM OPINION

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Counsel for Defendant Amazon.com, Inc.

Wilmington Delaware February 22, 2010

Thynge, U.S. Magistrate Judge

I. INTRODUCTION

This is a patent infringement case. Cordance Corporation ("Cordance") and Amazon.com Inc. and Amazon Web Services, LLC (collectively, "Amazon") develop software and own patents pertaining to on-line internet-based transaction infrastructures. Amazon provides an interactive website that sells goods either directly or through third-party vendors. On that website, Amazon provides information about products for sale, such as pictures of the items and prices. Amazon customers can purchase items and can also create customer accounts prior to purchasing items. Information stored in Amazon customer accounts, such as information about payment methods and shipping addresses, can be used to make additional purchases from the website. Some of Amazon's webpages contain one or more buttons with the text "Buy now with 1-Click." Each "Buy now with 1-Click" button is associated with an item for sale.

Amazon customers can also enter reviews of products for sale on Amazon's website and rate other customers' product reviews. Amazon asks its customers to rate products on a scale of one to five stars, and, following any customer product reviews, Amazon presents the question "Was this review helpful to you?" and provides buttons labeled "yes" and "no." Additionally, because Amazon allows third parties to sell items on its website, Amazon customers can enter feedback about transactions with third-party sellers. This feedback includes star ratings and written comments and is submitted by clicking a button labeled "Submit feedback."

¹ Amazon.com Inc. is an internet retailer. Cordance is a software company engaged in the development and commercialization of digital addressing and automated data interchange technology.

II. PROCEDURAL BACKGROUND

On August 8, 2006, Cordance filed suit alleging that Amazon's trademarked "1-Click®" purchasing interface, featured throughout its website, infringed U.S. Patent No. 6,757,710 ("the '710 patent"). On September 7, 2006, Cordance filed its first amended complaint. On October 23, 2006 Amazon filed its answer asserting numerous counterclaims and defenses, including a counterclaim of patent infringement of its U.S. Patent No. 6,269,369 ("the '369 patent"). On November 11, 2007, Cordance filed its second amended complaint, which alleged that Amazon's information storage processes infringed U.S. Patent No. 6,044,205 ("the '205 patent") and that Amazon's systems for collecting, retrieving, and presenting product reviews and buyer and seller feedback infringe U.S. Patent Nos. 5,862,325 ("the '325 patent") and 6,088,717 ("the '717 patent"). Subsequently, Cordance and Amazon stipulated to a dismissal of claims and counterclaims relating to infringement of Cordance's '205 patent and Amazon's '369 patent. Therefore, the remaining patents in suit are Cordance's '325, '717, and '710 patents.

A jury trial commenced on August 3, 2009. Both Cordance and Amazon filed Rule 50(a)⁵ motions for judgment as a matter of law ("JMOL") on August 13, 2009. Cordance filed motions for JMOL that (1) the '710 patent is not invalid, (2) the '325 and

² On February 2, 2007, the parties consented to the jurisdiction of the United States Magistrate Judge, pursuant to 28 U.S.C. § 636(c) and Federal Rule of Civil Procedure 72, to conduct all proceedings and enter the order of judgment and the case referred to the magistrate judge on February 6, 2007.

³ All of the Cordance patents in this case are in the same patent family–three of them have the same specification (the '710, '325, and '717 patents), and one has a shorter specification (the '205 patent). ⁴ Additionally, on August 4, 2009, pursuant to Federal Rule of Civil Procedure 41(a)(1)(A)(ii), the parties stipulated to dismissal with prejudice of Amazon Web Services, LLC as a defendant in this action. ⁵ See generally Fed. R. Civ. Proc. 50(a).

'717 patents are not invalid, (3) Amazon infringes the '717 patent, (4) Amazon infringes the '325 patent, and (5) Amazon infringes the '710 patent. Amazon filed motions for JMOL (1) of no literal infringement, (2) that Cordance is not entitled to a conception date of November 1, 1993, (3) of no infringement under the doctrine of equivalents and no joint infringement, (4) that the '710 patent is invalid for failure to meet the written description requirement, and (5) on damages. The court granted Cordance JMOL that claim 112 of the '325 patent was not invalid and granted Amazon JMOL that Cordance is not entitled to a conception date of November 1, 2003. The court denied the parties' other Rule 50(a) motions.

On August 18, 2009, the jury reached a verdict, finding (1) Amazon does not infringe any of the asserted claims of the '325 and '717 patents or claims 2 and 9 of the '710 patent; (2) the asserted claims of the '325 and '717 patents are not invalid; (3) Amazon infringes claims 1, 3, 5, 7, and 8 of the '710 patent; and (4) claims 1, 2, 3, 5, 7, 8, and 9 of the '710 patent are invalid. The court entered judgment on September 9, 2009.

On September 23, 2009, Cordance filed a Renewed Motion for Judgment as a Matter of Law or, in the Alternative, for a New Trial. Cordance asserts that it is entitled to JMOL that (1) Amazon infringes the asserted claims of the '325 patent; (2) Amazon infringes the asserted claims of the '717 patent; (3) Amazon infringes the asserted claims 2 and 9 of the '710 patent; and (4) claims 1, 2, 3, 5, 7, 8, and 9 of the '710 patent are not invalid. Alternatively, Cordance moves for a new trial on the grounds that (1) the jury's verdict was against the clear weight of the evidence and a new trial is necessary to prevent a miscarriage of justice; (2) the jury applied incorrect claim constructions for

"feedback information" and "indication to initiate a purchase transaction"; (3) the jury applied incorrect law concerning the written description requirement under 35 U.S.C. § 112; (4) the court erred in granting Amazon JMOL that the claims of the '710 patent are not entitled to a conception date of November 1, 1993; and (5) the court erred in precluding Cordance from calling Drummond Reed, the inventor of the patents at issue, to testify concerning the written description support for the claims of the '710 patent. This is the court's decision on Cordance's September 23, 2009 motion.

III. JUDGMENT AS A MATTER OF LAW

Judgment as a matter of law is governed by Fed. R. Civ. P. 50. Pursuant to Rule 50, "a court may render judgment as a matter of law after the moving party is fully heard on an issue at trial if there is no legally sufficient evidentiary basis for a reasonable jury to find for the party opposing the motion on that issue." If the court denies a motion for JMOL during trial, the motion may be renewed within ten days of entry of judgment in the case.

When evaluating a party's renewed motion for JMOL, the court reviews the jury's decision to determine if it is reasonably supported by the evidence.⁸ To prevail on a motion for JMOL, the moving party "must show that the jury's findings, presumed or express are not supported by substantial evidence or, if they were, that the legal conclusions implied [by] the jury's verdict cannot in law be supported by those findings." "Substantial evidence is such relevant evidence from the record taken as a

 ⁶ Linear Tech. Corp. v. Monolithic Power Sys., No. 06-476-GMS, 2009 U.S. Dist. LEXIS 105823, at *4 (D. Del. Nov. 12, 2009) (citing Walter v. Holiday Inns, Inc., 985 F.2d 1232, 1238 (3d Cir. 1993)).
 ⁷ Fed. R. Civ. P. 50(b).

⁸ Arthrocare Corp. v. Smith & Nephew Inc., 310 F. Supp. 2d 638, 652 (D. Del. 2004).

⁹ Pannu v. Iolab Corp., 155 F.3d 1344, 1348 (Fed. Cir. 1998) (citations omitted).

whole as might be acceptable by a reasonable mind as adequate to support the finding under review."¹⁰ Defined another way, substantial evidence is evidence that a reasonable individual might accept as supporting the jury's decision.¹¹ To determine the sufficiency of the JMOL motion, a court must consider all of the evidence in a light most favorable to the non-movant,¹² and must draw all inferences in favor of the non-moving party:

In assessing the sufficiency of the evidence the court must give the non-moving party, as the verdict winner, the benefit of all logical inferences that could be drawn from the evidence presented, resolve all conflicts in the evidence in his favor, and in general, view the record in the light most favorable to him.¹³

The court may not determine the credibility of witnesses nor substitute its account of the facts for that of the jury.¹⁴ Motions for JMOL are granted "sparingly" and only in those circumstances in which "the record is critically deficient of the minimum quantum of evidence in support of the verdict."¹⁵

While the jury's factual findings receive deference on a motion for JMOL, the "legal standards that the jury applies, expressly or implicitly, in reaching its verdict are considered by the district court and the appellate court *de novo* to determine whether those standards are correct as a matter of law."¹⁶ The court must ensure that the correct legal standard or law is applied.

¹⁰ Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888, 893 (Fed. Cir. 1984).

¹¹ C.R. Bard Inc. v. U.S. Surgical Corp., 258 F. Supp. 2d 355, 358 (D. Del. 2003).

¹² Dana Corp. v. IPC Limited Partnership, 860 F.2d 415, 417 (Fed. Cir. 1988).

Arthrocare Corp., 310 F. Supp. 2d at 652 (citing Williamson v. Consol. Rail Corp., 926 F.2d 1344, 1348 (3d. Cir. 1991); Perkin-Elmer Corp, 732 F.2d at 893).

¹⁵ Johnson v. Campbell, 332 F.3d 199, 204 (3d Cir. 2003).

¹⁶ Markman v. Westview Instruments, Inc., 52 F.3d 967, 975 (Fed. Cir. 1995) (citing Baltimore & Carolina Line, Inc. v. Redman, 295 U.S. 654, 660 (1935)).

A. Cordance's Motions for JMOL that Amazon Infringes the Asserted Claims of the '325 and '717 Patents

Cordance contends that Amazon's systems for collecting, retrieving, and presenting product reviews and buyer and seller feedback information infringe the '325 and '717 patents. At trial, Cordance bore the burden to prove by a preponderance of the evidence that Amazon infringed the '325 and '717 patents. To do so, Cordance had to show that Amazon's alleged infringing practices contained every element of one of the asserted claims of the '325 or '717 patents. On August 18, 2009, the jury decided that Cordance did not carry its burden of proving infringement, finding that Amazon did not infringe any of the asserted claims of the '325 or '717 patents.

To prevail in its renewed motions for JMOL that Amazon infringes claims 109, 112, 119, and 124 of the '325 patent and claims 50, 74, and 96 of the '717 patent, Cordance bears the burden of showing that the jury's findings are unsupported by substantial evidence. In support of its September 23, 2009 renewed motion for JMOL, Cordance submits its August 13, 2009 Motions for JMOL. These previously denied motions broadly describe Amazon's allegedly infringing practices, contain a list of "documents proving infringement," and cite generally the entire testimonial record of five different witnesses. Left undeveloped, however, is discussion of how Amazon's allegedly infringing practices map to the limitations of the asserted claims of the patents. Such discussion does exist in the record, notably in the testimony of Cordance's expert Dr. Michael Shamos. However, Dr. Shamos's testimony and the descriptions of

¹⁷ D.I. 502 at Exhibits A–E.

¹⁸ See D.I. 502 at Exhibits A and C.

Amazon's practices in Cordance's JMOL motions, even if supportive of Cordance's allegations of infringement, do not by themselves undermine the jury's findings.

Cordance simply reiterates the support for its own arguments and does not demonstrate the absence of or the insufficiencies in evidence supporting the jury's findings. Thus, Cordance fails to aid the court in deciding the pertinent question: Did Amazon present substantial evidence that a reasonable individual might accept as supporting the jury's decision that Amazon did not infringe the '325 and '717 patents?

Unfortunately, like Cordance, Amazon fails to directly address the relevant question before the court, at least in the context of Cordance's renewed motion for JMOL. Amazon's opposition contains no argument rebutting Cordance's motions for JMOL that Amazon infringes the '325 and '717 patents. In fact, Amazon's opposition fails to even acknowledge that Cordance filed such motions. However, in arguing that Cordance is not entitled to a new trial based on what Cordance alleges are errors in this court's construction of the '325 and '717 patent claims, ²⁰ Amazon indicates that its expert witness, Dr. Lorenzo Alvisi, presented several grounds for non-infringement of

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¹⁹ Cf. Callaway Golf Co. v. Acushnet Co., 585 F. Supp. 2d 600, 609 (D. Del. 2008) (discussing the burden on a defendant in a motion for JMOL that a plaintiff's patents were obvious following a jury's determination that the patents were nonobvious), *rev'd on other grounds*, 576 F.3d 1331 (Fed. Cir. 2009).

It was defendant's burden to prove obviousness at trial by clear and convincing evidence The jury having declined to invalidate the [plaintiff's] patents, defendant must now demonstrate that the verdict of nonobviousness was not supported by substantial evidence. That is, defendant must show the absence of facts necessary to support a verdict of nonobviousness, such that no reasonable jury could conclude that defendant failed to meet its high burden of proof. Such a showing is nearly unattainable in view of the fact that plaintiff presented its own rebuttal expert, . . . who testified regarding both the scope of the prior art and the lack of a motivation to combine, a question of fact.

²⁰ See discussion infra Part IV.B.1.

the '325 and '717 patents.21

1. The '325 Patent

Cordance asserted claims 109, 112, 119, and 124 of the '325 patent against Amazon. Claim 109 of the '325 patent is an independent claim.²² Claims 112, 119, and 124 depend on claim 109.²³ Thus, if at trial Amazon presented substantial evidence from which a reasonable jury could conclude that Cordance failed to prove by a preponderance of the evidence that Amazon infringed claim 109, then the jury's decision that Amazon did not infringe any of the asserted claims of the '325 patent is supported.²⁴

Dr. Shamos testified that Amazon satisfied all of the limitations of claim 109, and thus infringed the '325 patent with its product review and feedback systems and its

²¹ See D.I. 508 at 19 ("Amazon presented several independent grounds for non-infringement and invalidity that are not affected by the constructions of the terms identified by Cordance.").

²² Claim 109 recites:

A computer-based communication method, comprising operating one or more computers to communicate by performing the steps of:

in a provider memory, storing information including provider information;

in a consumer memory, storing information including consumer information;

creating metadata describing associations with portions of said information and defining a control structure which is processed at least at said consumer memory to associate one or more processes for controlling communications of said associated information, said metadata including data exchange metadata associating a process for controlling the transfer of feedback information, said feedback information including at least a portion of said consumer information, to said provider memory;

transferring said information, including said metadata defining said control structure, from said provider memory to said consumer memory;

processing said metadata to execute instructions external to said control structure to perform said processes: and

communicating said feedback information from said consumer memory to said provider memory.

^{&#}x27;325 patent, 158:17-42.

²³ *Id.* at 158:62–65, 159:51–55, 160:33–43.

²⁴ See Monsanto Co. v. Syngenta Seeds, Inc., 503 F.3d 1352, 1359 (Fed. Cir. 2007) ("One may infringe an independent claim and not infringe a claim dependent on that claim. The reverse is not true. One who does not infringe an independent claim cannot infringe a claim dependent on (and thus containing all the limitations of) that claim.") (quoting Wahpeton Canvas Co., Inc. v. Frontier, Inc., 870 F.2d 1546, 1552 (Fed. Cir. 1989)).

internal web server/feedback server and web server/customer review server interactions.²⁵ Dr. Alvisi disagreed. With regard to Amazon's customer review and feedback systems, Dr. Alvisi testified that Amazon's alleged infringing practices did not satisfy (1) the "creating the metadata . . ." and "processes for controlling communications . . ." requirements of the third limitation of claim 109;26 (2) the "processing said metadata to execute instructions external to said control structure to perform said processes" limitation of claim 109:27 and (3) the "communicating said feedback information from said consumer memory to said provider memory" limitation of claim 109.28 With regard to Amazon's internal web server/feedback server and web server/customer review server interactions, Dr. Alvisi testified (1) he believed that Dr. Shamos incorrectly mapped claim 109's "consumer" and "provider" terms when Dr. Shamos identified the customer review server as the "consumer" because the customer review server in Dr. Alvisi's opinion is the "provider:"²⁹ (2) once the customer review server is properly identified as the provider, none of the elements of claim 109 that require processing at, transferring to, or communicating from "consumer memory" are met by interactions between Amazon's internal servers;³⁰ and (3) Amazon's internal

²⁵ See D.I. 493 at 864:18–887:25 (Dr. Shamos's testimony regarding Amazon's product review and feedback systems); *Id.* at 915:7–919:23 (Dr. Shamos's testimony regarding Amazon's web server/feedback server and web server/customer review server interactions).

²⁶ See D.I. 496 at 1711:10–1713:15.

²⁷ See *id.* at 1714:10–20.

²⁸ See *id.* at 1714:21–1716:4. Additionally, Dr. Alvisi testified that, in the vast majority of Amazon transactions, the feedback Amazon receives from its customers does not constitute "feedback information" as required by claim 109 and construed by the court. The court has not considered this argument in deciding whether Amazon presented substantial evidence of noninfringement because Cordance alleges errors in the court's construction of the term "feedback information." *See* discussion *infra* Part IV.B.1.

²⁹ See id. at 1732:25–1735:22.

³⁰ See *id.* at 1735:23–1736:12.

server interactions do not use the "control structure" required by the claims. 31

2. The '717 Patent

Cordance asserted claims 50, 74, and 91 of the '717 patent against Amazon.

Claim 50 of the '717 patent is an independent claim.³² Claims 74 and 91 depend on claim 50.³³ Thus, if at trial Amazon presented sufficient evidence from which a reasonable jury could conclude that Cordance did not prove by a preponderance of the evidence that Amazon infringed claim 50, then the jury's decision that Amazon did not

A method for use at a node of a computer-based communications system which includes multiple nodes arranged and adapted to intercommunicate via a communications network, said method characterized by the steps of:

- (1) transferring said information, including said metadata defining said control structure, to said second node to control at least one of,
 - (a) transferring said updated information to said second node,
 - (b) receiving said feedback information from said second node, and
 - (c) processing said feedback information, and
- (2) receiving said information, including said metadata defining said control structure, from said second node to control at least one of
 - (a) receiving said updated information from said second node,
 - (b) processing said updated information, and
 - (c) transferring said feedback information to said second node.

³¹ See id. at 1736:13-1740:23.

³² Claim 50 recites:

⁽A) providing storage means for storing information;

⁽B) associating portions of said information with metadata, said metadata defining a control structure:

⁽C) transferring said metadata in at least one direction between said node and a second node of said system to associate with said associated information one or more processes which execute instructions external to said control structure to control communications of said associated information, said metadata included at least one of

⁽¹⁾ update metadata which associates a process for determining when said portions of said information associated by said metadata have been up dated and transfer metadata which associates a process for controlling the transfer at least a portion of said updated information,

⁽²⁾ data exchange metadata which associates a process for controlling the transfer of feedback information, said feedback information including at least a portion of said information stored at the receiving node, and

⁽³⁾ receipt processing metadata which associates a process for determining the processing of said associated information by comparison to an associated version of said control structure; and

⁽D) at least one of

^{&#}x27;717 patent, 149:42-150:18.

³³ *Id.* at 152:21–28, 154:5–9.

infringe any of the asserted claims of the '717 patent is supported.³⁴

Dr. Shamos testified that Amazon satisfied all of the limitations of claim 50 and thus infringed the '717 patent with its product review and feedback systems and its internal web server/feedback server and web server/customer review server interactions.³⁵ Dr. Alvisi disagreed. With regard to Amazon's customer review and feedback systems, it was Dr. Alvisi's opinion that Amazon's systems did not satisfy the second, third, and fourth limitations (steps (B), (C), and (D))³⁶ of claim 50.³⁷ With regard to Amazon's internal web server/feedback server and web server/customer review server interactions, Dr. Alvisi testified that these interactions also failed to satisfy the second, third, and fourth limitations of claim 50.³⁸

(3) Cordance is not Entitled to JMOL that Amazon Infringes Either the '325 Patent or the '717 Patent

Cordance neither argues nor indicates where the record demonstrates that Amazon's evidence of noninfringement of claim 109 of the '325 patent and claim 50 of the '717 patent is insufficient to support the jury's finding of noninfringement. The jury in this case faced conflicting expert testimony and was entitled to resolve the issue of infringement in favor of Amazon.³⁹ This court may not "substitute its choice for that of

³⁴ See supra note 26.

³⁵ See D.İ. 493 at 888:21–899:4 (Dr. Shamos's testimony regarding Amazon's product review and feedback systems); Id. at 901:19–915:6 (Dr. Shamos's testimony regarding Amazon's web server/feedback server and web server/customer review server interactions).

³⁶ See supra note 34 (providing the full text of claim 50).

³⁷ See D.İ. 496 at 1719:19–1723:1.

³⁸ See *id.* at 1742:21–1746:17.

³⁹ See, e.g., Callaway Golf Co. v. Acushnet Co., 585 F. Supp. 2d 600, 614 (D. Del. 2008), where the court concludes:

[[]T]he court finds that substantial evidence supports the jury's verdict of nonobviousness. Of course, defendant presented evidence from which a jury could have found a motivation to combine. The court need not address this evidence, insofar as motivation to combine is an issue of fact and the jury in this case, *confronted with conflicting (expert) testimony*

the jury between conflicting elements of the evidence."⁴⁰ For these reasons, Cordance's renewed motions for JMOL that Amazon infringes the '325 and '717 patents are denied.

B. Cordance's Motion for JMOL that Amazon Infringes Claims 2 and 9 of the '710 Patent

Cordance asserted claims 1, 2, 3, 5, 7, 8, and 9 of the '710 patent against

Amazon, arguing (1) that Amazon's 1-Click shopping infringes claims 1, 2, 3, and 5 and
(2) that Amazon's 1-Click Shopping and Cart 1-Click Shopping infringe claims 7, 8, and
9.41 At trial, Cordance bore the burden of proving by a preponderance of the evidence
that Amazon infringed the asserted claims of the '710 patent. In its verdict of August 18,
2009, the jury decided that Cordance did not carry its burden of proving infringement of
claims 2 and 9 of the '710 patent. To prevail on JMOL, Cordance must show that the
jury's finding of noninfringement of claims 2 and 9 is not supported by substantial
evidence.

Unfortunately, neither Cordance nor Amazon directs the court's attention to evidence that would assist the court in determining whether Amazon presented substantial evidence that a reasonable individual might accept as supporting the jury's decision. Again, in support of its renewed motion for JMOL, Cordance puts forward only

on the issue was free to resolve the conflict in favor of the plaintiff. (emphasis added). See also Cordis Corp. v. Boston Sci. Corp., No. 03-027-SLR, 2006 U.S. Dist. LEXIS 28547, at *16 (D. Del. May 11, 2006) (noting that a jury is free to credit one party's expert testimony over an opposing party's expert testimony in deciding whether a patent is infringed); eSpeed, Inc. v. BrokerTec USA, L.L.C., 404 F. Supp. 2d 575, 580 (D. Del. 2005) ("The jury was entitled to rely on the testimony of [defendant's expert] and to reject the testimony of any witness deemed not to be credible. Credibility is solely an issue for the trier of fact The jury was entitled to credit [that expert's] testimony, and reject contrary testimony presented by [the plaintiff].").

⁴⁰ Arthrocare Corp. v. Smith & Nephew Inc., 310 F. Supp. 2d 638, 652 (D. Del. 2004) (citations omitted).

⁴¹ See D.I. 502 at Exhibit B (Cordance's JMOL motion that Amazon infringes the '710 patent).

its August 13, 2009 motion for JMOL that Amazon infringes the '710 patent, ⁴² which contains broad descriptions of Amazon's allegedly infringing practices, a list of "documents proving infringement," and general citations to the entire testimonial record of five different witnesses. As before, this evidence succeeds only in reiterating support for Cordance's own arguments and fails to establish an absence of or the insufficiencies in evidence supporting the jury's finding. Amazon, like Cordance, does little to assist the court's determination. Amazon offers no direct opposition to Cordance's motion for JMOL, again failing to even acknowledge that Cordance filed this motion, and, in this instance, the court is unable to find any argument in Amazon's opposition advancing evidence of noninfringement of claims 2 and 9 of the '710 patent. Nonetheless, the court is cognizant of its duty to consider all of the evidence in determining whether substantial evidence exists to support the jury's finding.

Claim 2 of the '710 patent recites: "The computer implemented method of claim 1, wherein the customer data is maintained as an object." Claim 9 recites: "The computer implemented method of claim 7, wherein the information provider data is maintained as an object." Thus, putting aside for the moment whether the independent claims upon which claims 2 and 9 depend were infringed or invalid, in determining whether Amazon infringed these two claims, the jury had to decide whether Amazon's allegedly infringing practices stored information as objects. On one hand, the jury heard Dr. Shamos explain, on direct examination, that an Amazon witness's

⁴² See D.I. 502 at Exhibit B (Cordance's JMOL motion that Amazon infringes the '710 patent).

^{43 &#}x27;710 patent, 144:53-54.

^{44 &#}x27;710 patent, 146:8-9.

⁴⁵ An object can be described as a computer program that combines data and instructions for accessing the data.

testimony indicated to him that "Amazon maintains customer data or keeps the customer data as an object." On the other hand, Dr. Alvisi testified that Amazon did not store information as objects. Additionally, Dr. Shamos admitted on cross examination that Amazon maintains customer data in relational databases and indicated that information in Amazon's relational databases is not stored as objects.

⁴⁶ D.I. 493 at 853:9–11.

⁴⁷ D.I. 496 at 1760:21–1761:15, 1763:11–17.

⁴⁸ See *id.* at 997:5–998:24, which provides the following testimony from Dr. Shamos:

Q. Now, Amazon stores customer data in relational databases; right Dr. Shamos?

A. It stores a lot of it in relational databases, yes.

Q. And when you keep data in a relational database, it is not kept as an object, is it?

A. Well, that is a matter of interpretation. The only use, according to the testimony of Amazon witnesses, that is made of customer data is that whenever it needs to be accessed, the properties that are stored in the database are wrapped into an object and a method is invoked on the object to obtain the data. And so the other computer programs that interact with this data only see it as an object.

Q. So what you are testifying is that when the data is accessed, it's accessed using an object; right?

A. Well, that is certainly true.

Q. Right. But the data as it's stored when it's not being accessed, is not stored as an object?

A. Again, it's a matter of understanding what it means to store something. There is a door behind here, and I never get to see what is behind the door. The only thing I get to see is what comes out of the door and what goes into the door, and I have complete ignorance about what is going on behind there. As far as I'm concerned, if what goes in is an object and what goes out is an object, as far as I'm concerned it's kept as an object.

Q. But we know what is behind the door at Amazon system; right? It's a relational database. So let's look at what is in the relational database?

A. We are humans, we're not computer programs. The computer programs interact with the data.

Q. That is not my question, sir. You know, I know it's stored in a relational database. When it's stored in a relational database, is it kept as an object?

A. According to the explanation that I just gave, yes. If you get to peak behind the door and see how it's stored, it's stored as a relational database behind the door.

Q. And a relational database is not an object?

A. For this purpose, it's safe to say that.

Q. There are object-oriented databases described in the patent. Relational database is not one of them; right?

A. You don't want me to give a full explanation of this. You can store objects in relationship databases. I'm not contending that this relational database is used to store the object. I was trying to avoid having to get into that flip note.

Once it was established that Amazon stores information in relational databases, the '710 patent itself provided further evidence for the jury to conclude that Amazon does not maintain customer data as objects. The '710 patent specification distinguishes between "[o]bject oriented data structures, databases, programs, and processing" and "other methods for storing, transferring, and processing information, such as *relational databases*" '710 patent, 16:53–62 (emphasis added).

The jury, faced with the above conflicting expert testimony, was entitled to resolve the issue of infringement of claims 2 and 9 in Amazon's favor. Cordance's motion for JMOL that Amazon infringes claims 2 and 9 of the '710 patent is therefore denied.

C. Cordance's Motion for JMOL that Claims 1, 2, 3, 5, 7, 8, and 9 of the '710 Patent are Not Invalid

Cordance moves for JMOL that claims 1, 2, 3, 5, 7, 8, and 9 of the '710 patent are not invalid. Cordance first contends that it is entitled to JMOL because the only basis for invalidity advanced by Amazon at trial was a lack of written description and 35 U.S.C. § 112 paragraph 1 "does not contain a written description requirement "49 Cordance then asserts that, if 35 U.S.C. § 112 paragraph 1 does contain a written description requirement, Amazon presented no evidence that claims 7, 8, and 9 of the '710 patent lack proper support. Amazon argues that 35 U.S.C. § 112 paragraph 1 does include a written description requirement; that Cordance failed to preserve its right to move for JMOL on the ground that no such requirement exists; that Amazon presented substantial evidence for the jury to find that claims 7, 8, and 9 of the '710 patent lack written description support; and that Amazon asserted other valid grounds for the jury's finding of invalidity, including derivation and anticipation.⁵⁰ With regard to Amazon's asserted anticipation and derivation arguments, Cordance argues that no reasonable jury could find the '710 patent anticipated by Amazon's 1995–96 Shopping Cart System—the only prior art asserted by Amazon—and that Amazon has failed to

⁴⁹ D.I. 504.

⁵⁰ D.I. 508.

show any basis for its derivation defense.

1. Cordance's Motion for JMOL that the '710 Patent Meets the Requirements of 35 U.S.C. § 112, Paragraph 1 Because There is No Written Description Requirement

Cordance asserts the following: "Cordance is entitled to JMOL that the '710 patent meets the requirements of 35 U.S.C. § 112, paragraph 1 because the statute does not contain a written description requirement separate from an enablement requirement, and Amazon's only argument under this statute at trial was that the '710 patent did not have written description support." Cordance is not so entitled.

"A motion under Rule 50(b) is not allowed unless the movant sought relief on similar grounds under Rule 50(a) before the case was submitted to the jury." Stated another way, a post-trial Rule 50(b) motion can only be made on grounds specifically advanced in the pre-verdict Rule 50(a) motion. Cordance never advanced the

⁵¹ D.I. 504 at 6.

⁵² Exxon Shipping Co. v. Baker, 128 S.Ct. 2605, 2617 n. 5 (2008); see also Fed. R. Civ. P. 50 advisory committee's note ("A post-trial motion for judgment can be granted only on grounds advanced in the pre-verdict motion.") (citing Kutner Buick, Inc. v. Am. Motors Corp., 868 F.2d 614 (3d Cir. 1989)); see generally Fed. R. Civ. P. 50(b) ("If the court does not grant a motion for judgment as a matter of law made under 50(a) . . . the movant may file a renewed motion for judgment as a matter of law and may include an alternative or joint request for a new trial under Rule 59.").

⁵³ See Duro-Last, Inc. v. Custom Seal, Inc., 321 F.3d 1098, 1107 (Fed. Cir. 2003) ("In view of a litigant's Seventh Amendment rights, it would be constitutionally impermissible for the district court to re-examine the jury's verdict and to enter JMOL on grounds not raised in the pre-verdict JMOL.") (citations omitted); Lightning Lube, Inc. v. Witco Corp., 4 F.3d 1153, 1173 (3d Cir. 1993) ("A motion for judgment as a matter of law pursuant to Rule 50(b) must be preceded by a Rule 50(a) motion sufficiently specific to afford the party against whom the motion is directed with an opportunity to cure possible defects in proof which otherwise might make its case legally insufficient.") (emphasis in original); Kutner Buick, Inc. v. Am. Motors Corp., 868 F.2d 614, 617 (3d Cir. 1989) ("The rule that a post-trial Rule 50 motion can only be made on grounds specifically advanced in a motion for a directed verdict at the end of plaintiff's case is the settled law of this circuit."); compare Tex. Instruments Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558, 1566 n.6 (Fed. Cir. 1996) (deciding as a matter of Federal Circuit law that a pre-verdict JMOL motion on infringement is sufficient to support a post-verdict JMOL motion on infringement under the doctrine of equivalents), and Malta v. Schulmerich Carillons, Inc., 952 F.2d 1320, 1324-25 (Fed. Cir. 1991) (same), with Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1579-80 (Fed. Cir. 1986) (deciding as a matter of Federal Circuit law that a pre-verdict JMOL motion on infringement does not support a post-verdict JMOL motion relating to willful infringement).

argument that Section 112 does not contain a written description requirement in its preventict Rule 50(a) motions for JMOL. Cordance, however, contends that it preserved its rights to move for JMOL in its post-trial Rule 50(b) motion on that basis because it "did move for JMOL that Amazon had not proven that the claims of the '710 patent do not satisfy § 112 ¶ 1."⁵⁴

In its pre-verdict Rule 50(a) motion for JMOL that the '710 patent is not invalid, Cordance asserted only that Amazon had failed to present sufficient evidence to support a finding by clear and convincing evidence that the '710 patent claims were not adequately described in the '710 patent specification. Cordance was therefore entitled to, and did, timely renew this motion, pursuant to Rule 50(b). Cordance's pre-verdict Rule 50(a) motion did not, however, entitle Cordance to move for JMOL that the '710 patent meets the requirements of 35 U.S.C. § 112, paragraph 1 based on Cordance's own assertion that § 112 does not contain a written description requirement.

Cordance maintains that it need not have preserved its right to move for JMOL

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⁵⁴ D.I. 511 at 5 (emphasis in original).

⁵⁵ See D.I. 502 at Exhibit E (providing Cordance's Motion for Judgment as a Matter of Law that the '710 Patent is Not Invalid). The following is the argument in Cordance's pre-verdict Rule 50(a) motion that relates to written description:

VI. Amazon Has Not Shown a Lack of Written Description

^{23.} The sections of the specification supporting the claims are identified in Exhibit A and were elaborated upon in the testimony of Dr. Shamos, Dr. Alvisi, Drummond Reed and Steve Mushero at trial.

^{24.} Amazon's presentation of a selectively-edited fraction of the supporting sections identified by Cordance cannot support a finding by clear and convincing evidence that the claims are not described in the specification.

⁵⁶ Discussed *infra* Part III.C.2.

⁵⁷ Notably, this assertion is grounded only in the Federal Circuit's recent decision to rehear en banc a case in which that court will consider whether 35 U.S.C. § 112, paragraph 1 contains a separate written description requirement and, if so, what the scope and purpose of that requirement should be. *See generally Ariad Pharms., Inc. v. Eli Lilly & Co.*, No. 2008-1248, 2009 U.S. App. LEXIS 18981 (Fed. Cir. Aug. 21, 2009) (per curiam) (granting rehearing en banc).

that the '710 patent meets the requirements of 35 U.S.C. § 112, paragraph 1 with a pre-verdict Rule 50(a) motion because its post-trial Rule 50(b) motion is premised on "an intervening change in the law." But Cordance fails to show that a change in the law has occurred. Cordance's motion is based only on an "expected intervening change in the law." 59

It is the court's opinion that an expectation of change does not constitute an intervening change. In arguing to the contrary, Cordance directs the court's attention to *Informatica Corp. v. Business Objects Data Integration.*⁶⁰ Quoting *Informatica Corp.*, Cordance asserts that "[w]here the 'only change is that the renewed motion is based on a different legal standard that did not exist at the time of the initial motion,' the 'renewed motion for judgment as a matter of law is not barred for this procedural reason.' The passage from which Cordance quotes provides in full:

Here, Defendant did raise the issue of willfulness in its pre-verdict Rule 50 motion, and now raises the same issue again in this motion for renewed judgment as a matter of law. The only change is that the renewed motion is based on a different legal standard that did not exist at the time of the initial motion. Plaintiff has cited no case in which an intervening change in the law occurring after the pre-verdict Rule 50(a) motion barred a renewed motion for judgment as a matter of law challenging the same issue but based on the new legal standard. Further, if Defendant had made an argument in its initial Rule 50 motion based on clairvoyance about the willfulness standard that was subsequently adopted in Seagate, the Court would have been constrained to follow the lower standard under existing Federal Circuit law. Defendant's renewed motion for judgment as a matter of law is not barred for this procedural reason.⁶²

Cordance, however, creatively splices this passage to omit the following sentence:

⁵⁸ D.I. 511 at 5 (citing *Ariad Pharms.*, No. 2008-1248, 2009 U.S. App. LEXIS 18981)).

⁵⁹ D.I. 511 at 4.

⁶⁰ Informatica Corp. v. Business Objects Data Integration, 527 F. Supp. 2d 1076 (N.D. Ca. 2007).

⁶¹ See D.I. 511 at 5 (quoting *Informatica Corp.*, 527 F. Supp. 2d at 1081–82).

⁶² Informatica Corp., 527 F. Supp. 2d at 1081–82 (citations omitted).

"Further, if Defendant had made an argument in its initial Rule 50 motion based on clairvoyance about the willfulness standard that was subsequently adopted in Seagate, the Court would have been constrained to follow the lower standard under existing Federal Circuit law." This omission is unsurprising because Cordance is presently asserting the exact type of clairvoyance concerning the possibility of a new written description requirement standard that the *Informatica Corp.* court explained it would have been obligated to ignore. The court recognizes that the Federal Circuit has heard oral argument in *Ariad Pharms., Inc. v. Eli Lilly & Co.*⁶³ and that the Federal Circuit's forthcoming decision in that case may alter the scope and purpose of the written description requirement.⁶⁴ However, this court, like the *Informatica Corp.* court, is constrained to follow existing standards under Federal Circuit law,⁶⁵ and Federal Circuit precedent "clearly recognizes a separate written description requirement."

For the above reasons, the court finds that Cordance is not entitled to JMOL that the '710 patent meets the requirements of 35 U.S.C. 112, paragraph 1 on the ground

⁶³ 2009 U.S. App. LEXIS 18981.

⁶⁴ See Koninklijke Philips Electronics N.V. v. Cardiac Science Operating Co., No. 2009-1241, 2010 U.S. App. LEXIS 86, at *10 (Fed. Cir. Jan. 5, 2010) ("The district court should note that this court recently heard arguments en banc to consider whether § 112, P 1 contains a separate written description requirement and, if so, what the scope and purpose of that requirement should be.") (citing *Ariad Pharms. Inc.*., No. 2008-1248, 2009 U.S. App. LEXIS 18981).

⁶⁵ See Hauth v. Lobue, C.A. No. 00-166-JJF, 2001 WL 1188216, at *3 (D. Del. Sept. 28, 2001) ("The Court 'must apply the law of the forum as we infer it presently to be, not as it might come to be.") (quoting *City of Philadelphia and Philadelphia Housing Authority v. Lead Industries Assoc. Inc.*, 994 F.2d 112, 123 (3d Cir.1993)); *cf. Eli Lilly & Co. v. Teva Pharms. USA, Inc.*, 2009 U.S. Dist. LEXIS 87763 (S.D. Ind. Sept. 23, 2009) (acknowledging the Federal Circuit's decision to hold a rehearing en banc in *Ariad Pharms*. but stating "under current Federal Circuit law, a separate written description requirement exists, and thus, we analyze this case in line with that precedent").

⁶⁶ Univ. Of Rochester v. G.D. Searle & Co., 358 F.3d 916, 922 (Fed. Cir. 2004); see also Carnegie Mellon Univ v. Hoffmann-La Roche Inc., 541 F.3d 1115, 1121 (Fed. Cir. 2008) ("[P]aragraph 1 of § 112 requires a written description of the invention—a requirement separate and distinct from the enablement requirement.") (citing multiple cases recognizing a written description requirement separate from the enablement requirement).

that no separate written description requirement exists.

2. Cordance's Motion for JMOL that Claims 7–9 of the '710 Patent are Not Invalid for Lack of Written Description because Amazon Presented Insufficient Evidence

Section 112 of the Patent Act sets forth requirements for a patent's specification, including the written description requirement. Paragraph 1 provides:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.⁶⁷

The written description requirement is satisfied if the patent specification describes the invention "in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention"⁶⁸ "The purpose of this provision is to ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor's contribution to the field of art as described in the patent specification."⁶⁹ Although exact description of the subject matter claimed is not required, the Federal Circuit has made clear that the specification must "convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the 'written description' inquiry, whatever is now claimed."⁷⁰

⁶⁷ 35 U.S.C. § 112 (emphasis added).

⁶⁸ Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997).

⁶⁹ Reiffin v. Microsoft Corp., 214 F.3d 1342, 1345 (Fed. Cir. 2000); see also Pandrol USA, LP. v. Airboss Ry. Prods., Inc., 424 F.3d 1161, 1165 (Fed. Cir. 2005) ("The purpose of the written description requirement is to prevent an applicant from later asserting that he invented that which he did not; the applicant for a patent is therefore required 'to recount his invention in such detail that his future claims can be determined to be encompassed within his original creation.") (quoting Amgen Inc. v. Hoechst Marion Roussel Inc., 314 F.2d 1313, 1330 (Fed. Cir. 2003)).

⁷⁰ Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1563–64 (Fed. Cir. 1991) (emphases in original).

Because a patent is presumed valid under 35 U.S.C. § 282, the evidentiary burden for "invalidating a claim requires a showing by clear and convincing evidence that the written description requirement has not been satisfied." Compliance with the written description requirement is a question of fact. In this case, the jury decided that the asserted claims of the '710 patent are invalid. To prevail here, Cordance must show that Amazon failed to present substantial evidence from which a reasonable jury could conclude that Amazon carried its burden to prove by clear and convincing evidence that the '710 patent lacked written description support.

Cordance maintains that Dr. Alvisi, Amazon's expert, "provided only bare, conclusory testimony that claims 7–9 of the '710 patent do not have written description support" and opined only generally about these claims, without ever referring to a single limitation. Relying solely upon Dr. Alvisi's testimony, Amazon asserts that it presented substantial clear and convincing evidence that all of the asserted claims of the '710 patent fail to satisfy the written description requirement. Amazon contends that Dr. Alvisi (1) explained in detail the '710 patent specification, (2) identified claim elements present in both claims 1 and 7, and (3) discussed how those claim elements are not described in the patent specification. Because the court's decision of whether to grant or deny Cordance's motion turns entirely on the sufficiency or insufficiency of Dr. Alvisi's testimony, his relevant testimony is reproduced in full below. The court's analysis is interspersed.

⁷¹ Invitrogen Corp. v. Clontech Labs., Inc., 429 F.3d 1052, 1072 (Fed. Cir. 2005).

⁷² Vas-Cath Inc., 935 F.2d at 1563.

⁷³ D.I. 504 at 9–10.

Dr. Alvisi's testimony begins:

Q. Now, [does] Cordance's '710 patent even describe what is claimed in the claims of the '710 patent?

A. No.⁷⁴

Taken alone, this testimony fails to constitute substantial evidence from which a jury could reasonably find that Amazon presented clear and convincing evidence that the '710 patent lacks written description support.⁷⁵

Dr. Alvisi's testimony continues:

- Q. Can you explain, stepping back a minute, is it your understanding that Cordance's position is that this payment partner server section of the patent is in the claim?
- A. That is my understanding.
- Q. Can you explain to us what that section of the patents [sic] actually describes?
- A. Yes. So one of the ideas, of the features of Cordance's invention was that in addition to having this the relationship, provided between providers and consumers, there would be some services that would be able to then ship their communication that controls structures and this control structure would be able to be used for a number of purposes.

So this would be control structures that would be useful to both providers and consumers. And one such service is this payment partner server what you see indicated as payment partner server out there.

So when we start the story, the patent actually describes in detail how those things that you see appear in the database of the customer and the merchant, how those are achieved. These are certificates, account certificates, that would have been associated – given to them by the payment partner server through interaction of another service I'm not showing here for simplicity, an authentication service.

These certificates can be used to authenticate whomever is carrying them, whoever says he or she – I mean it is.

Q. Sir, how does the patent describe by using this payment partner server

⁷⁴ D.I. 496 at 1776:24–1777:1.

⁷⁵ See Koito Mfg. Co. v. Turn-Key-Tech, LLC, 381 F.3d 1142, 1152 (Fed. Cir. 2004) ("General and conclusory testimony . . . does not suffice as substantial evidence of invalidity."); *Schumer v. Lab. Computer Sys., Inc.*, 308 F.3d 1304, 1316 (Fed. Cir. 2002) ("It is not our task, nor is it the task of the district court, to attempt to interpret confusing or general testimony to determine whether a case of invalidity has been made out Indeed, to accept confusing or generalized testimony as evidence of invalidity is improper.").

to actually make a purchase?

A. Okay. So we can – sorry. We can start going through the steps.

So the first thing that happens is, once a merchant has received one of these accounts, when it actually prepares its own communication object, it's going to attach to the communication object this merchant account certificate. And it's actually going to attach also a link, component object, so something that, a method that you can click on, that would allow to connect that – through that link, it would be possible to connect to the payment partner server.

Q. And these blowups, this is language from the patent that's described? A. That is correct.

Q. So -

A. So here you see that there are a couple of these circles. One is the payment service object. That's one of these communications objects that naturally has been provided by the payment partner server.

Remember that each of the parties here has its own communication object that they then pass around in order to be able to control communication with them.

So there would be a payment partner server object that has been given to the customer's computer. For our purposes, that's sufficient.

And there would be a merchant communication object that is sitting at the merchant.

Q. Okay.

A. And so when the merchant would be able to pass this merchant partner server object – merchant – merchant communication object to the customer's computer, and when the customer wanted to – indicated some desire to make a purchase.

And that would happen, if – through this merchant partner – this merchant communication object, it would be possible to create an order. And this would be done. So here you can see the merchant can indicate the services of such payment service objects by using this link method that I was telling you about.

So the merchant communication object would allow the user to actually be able to select the payment method that he wanted to use.

For instance, here, it would allow to select, if he wanted to use Visa or MasterCard or American Express, and he would also allow it to generate – would allow it to generate an order form. And so the combination, there would be an order form that would have to be filled and there would be the opportunity to choose a particular payment method that would be provided.⁷⁶

This testimony does not indicate where the specification fails to describe what is

⁷⁶ D.I. 496 at 1777:2–1780:5.

recited in claims 7–9. Thus, it does not constitute substantial evidence from which a jury could reasonably find that Amazon presented clear and convincing evidence that the claims of the '710 patent lack written description support.

Dr. Alvisi's testimony continues:

- Q. Okay. And does the patent describe what a user does to fill out this form?
- A. Yes. It says that the user first chooses the payment method. It says, when a customer chooses one of these options and submits a data exchange input form. So there are these two steps. One or at least these are described as two steps. One can select the payment option and then one can submit that exchange input form, which would be just a normal form.
- Q. All right. So does it describe anywhere that you can do all of this in 1-click?
- A. You mean the -
- Q. Choosing a payment method and submitting a -
- A. No. That would what you saw is the language of the patent. That's taken from the patent. It says, when a customer chooses one of these options and submits.
- Q. Does it say that you could submit the input form with 1-click?
- A. No, it does not. This is just what it says.⁷⁷

In this testimony, Dr. Alvisi opines that the '710 patent specification indicates that submission of a data exchange form cannot take place in one click of the mouse. He maintains that it takes two steps: (1) choosing a payment option; and (2) submitting a data exchange form. Dr. Alvisi states, "This is just what it says." This is not just what it, the '710 patent specification, says. What it says is: "When a customer chooses one of these options and submits a data exchange input form, the payment service object is used automatically."

Regardless of the accuracy or lack thereof of his recitation of this portion of the

⁷⁷ D.I. 496 at 1780:6–24.

 $^{^{78}}$ '710 patent, 121:31–33. Notably, Dr. Alvisi omits the final clause of this sentence from his testimony.

'710 patent specification, the court is not convinced that Dr. Alvisi's parsing of the above language effectively supports his argument. Nor is the court persuaded that this argument constitutes substantial evidence from which a jury could reasonably find that Amazon presented clear and convincing evidence that the claims of the '710 patent lack written description support. Importantly, Dr. Alvisi fails to link his testimony to any specific claim or limitation thereof in the '710 patent.

Dr. Alvisi's testimony continues:

- Q. What happens after the user selects the form of payment and submits the input ordering form?
- A. So what happens is that then it's possible to create the order, and this order would actually include this particular form that you see together with the merchant account certificate. And also a certificate that was associated with the customer. Okay?

So now what we – and this information would be sent to this payment service, to this payment service.

So the payment service, then, would receive an order, together with account certificate for the merchant that would identify – would allow to – the payment service to authenticate that the merchant is who he says he is. And customer account certificate that would allow the payment partner server to authenticate that – that the customer is what he says he is.

And in order for that to happen, in order for this authentication to occur, what had to happen was that the customer had to actually to sign, digitally sign, its order. And there was – so you had to enter the password.

Right. The authentication method also digitally signs the purchase order using the customer account certificate private key.

If you want, we can go into the description of private key.

- Q. We don't need to go into private key.
- A. Okay.
- Q. But does the user either have to enter a password or provide a key?
- A. Yes, yes, in order for this authentication, the authentication method that we described here.
- Q. All of this has to be done by the user before the order gets sent, the payment partner server?
- A. That's correct.

So if you recall, what happens so far is that the user has clicked by selecting which payment method it wants, and then there's the submission of the form and there's the entering of this password.

Q. Okay. And what happens with all this information once it's sent to the

payment partner service?

A. The information is sent to the payment partner server, and the payment partner server can the depict [sic] everything that's inside.

So this is a big encrypted thing. The payment partner server has the ability to open it up and decrypt it and realize that inside, there is a valid purchase order, a verified purchase order, verified account certificate and a verified merchant account certificate. In other words, it has a verified purchase order and it has proof that this purchase order came from whomever had the merchant account certificate and whoever had the customer account certificate. That's what the patent describes.⁷⁹

This testimony addresses, in part, the following section of the '710 patent specification:

The authentication method also digitally signs the purchase order using the customer account certificate private key As described above, this key may be stored as an encrypted element 141 in the payment service object 1310 and require a password from the customer to decrypt. Alternatively the customer may supply the key manually in some other way.⁸⁰

The court is not convinced, contrary to what Dr. Alvisi opines, that the above language requires that a customer either (1) enter a password or (2) manually supply a customer account certificate private key, to the exclusion of all other alternative methods of authentication. More importantly though, because Dr. Alvisi again fails to link his testimony to a single claim or limitation thereof in the '710 patent or explain how this section of the specification fails to provide adequate written description for such, the court is not persuaded that his testimony constitutes substantial evidence from which a jury could reasonably find that Amazon presented clear and convincing evidence that the claims of the '710 patent lack written description support.

Because none of Dr. Alvisi's above testimony would preclude this court from

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⁷⁹ D.I. 496 at 1780:25–1783:1.

^{80 &#}x27;710 patent, 122:2-9.

granting Cordance's motion for JMOL, support for Amazon's assertion that it presented substantial clear and convincing evidence of a lack of written description must come from the remainder of Dr. Alvisi's testimony, which provides:

- Q. Does the patent describe the payment partner server looking up any stored information based on what it received?
- A. No, it doesn't. It just said receives this, and it's able to, as you can see, it's able to verify that all of this information that is received is valid.

And then, what it keeps on saying – would you mind to go back? Q. Surely.

- A. What it keeps on saying is, now a data exchange method on the payment partner server can carry out the purchase order transaction using this information that it has received. It doesn't go into whether this information is used to retrieve any customer data, or anything of that sort.
- Q. And does it describe the steps that the payment partner server goes through in order to complete this purchase transaction?
- A. Well, this is the wording from the patent. It says, this may involve any sequence of steps between the payment partner server and other payment servers or data processing systems, such as the customer's bank or credit clearinghouse, a credit card processor, cybercash server, and so on.

So there is no discussion about what the steps are. There is no discussion whether the steps are performed with human input or not performed with human input. It's just a very generic description of any sequence of steps.

Q. And does this describe at all how the merchant actually gets the product to the customer or how the merchant otherwise learns about the order?

A. No, it doesn't. At least the patent does not contain that.

There is actually – yes. That's what I wanted to say. It talks about – if you wanted, we leave our heroes with these certificates in their hands and with a verified order, and we meet them again when the transaction has completed. There is nothing in between that actually explains how we go from this, these pieces of information, to the transaction being complete.

It says, when the transaction has been completed, the data exchange method creates a unique receipt number. This receipt number can now be used to verify the transaction with both the customer and the merchant.

There is no mention of goods anywhere, but it says that they received them, verified –

- Q. So in your opinion, does this describe what the claims of the '710 patent require?
- A. I don't think it does, because there are certain things that the claim requires. The claim requires, for instance, it requires to retrieve customer information using this metadata, and there is no discussion here of where the customer information is retrieved in order to complete the transaction.

It requires to complete the purchase transaction without any human intervention. And there is no discussion of whether there's any sequence of steps that are mentioned that would include human intervention or would not include human intervention.

So it's not possible to draw that conclusion.

Q. Thank you.

So, in summary, are these your opinions regarding what is described in the patent with respect to these claims?

- A. Yes, those would be my opinion.
- Q. Could you just read the first part?
- A. Yes. The patent does not describe receiving from the customer an indication to initiate a purchase, including this metadata associating said customer data with said transaction. Remember, it's the data that's used to retrieve data that is used to then complete the purchase.

And then, in response to the received indication, automatically completing the purchase. Here, we are not explicitly showing the –

- Q. Construction?
- A. The construction. If you want, we can go back to the construction, but the essence of my position is that once one applies the Court's construction, then I don't see where the '710 patent describes the construction.
- Q. And we've been focusing on the payment partner server, but have you examined the entire '710 patent to see if these steps are describe [sic]?
- A. I have not seen steps that describe situations in which data is retrieved in order to complete transactions or I have not described situations that describe where there is this automatically retrieving data and using then this data in order to complete the transaction without human interaction.
- Q. And have you read the entire 150 columns of the '710 patent?
- A. I did. I can't say that I have memorized every line of it, but I certainly did.
- Q. All right. You were talking about the Court's claim construction.

These are the Court's claim constructions. Did you apply them throughout all your analysis in this case?

A. Yes. That's what I was required to do.81

Amazon maintains that the above testimony presents substantial clear and convincing evidence of a lack of adequate written description support for (1) "automatically completing the purchase of an item" and (2) "accessing the information provider data to retrieve the information and process the retrieved information by processing said metadata associating said information with the proposed transaction so as to complete

⁸¹ D.I. 496 at 1783:2–1786:22.

the proposed transaction" ("the retrieve, process, and complete step"). These steps are required by the fourth limitations of both independent claims 1 and 7.82

(a) "automatically completing the purchase of an item"

The court construed "automatically completing the purchase of an item" to mean "completing the purchase without human input." Dr. Alvisi opines that this step lacks adequate written description because the payment partner server section of the specification indicates that the manner in which a purchase order transaction is carried out "may involve *any sequence of steps* between the payment partner server 1302 and other payment servers or data processing systems, such as the consumer's bank or credit clearinghouse, a credit card processor, a cybercash server, and so on."

⁸² Claim 1 recites:

A computer implemented method comprising:

providing a customer data storing information for a customer usable to automatically complete an online purchase of an item from a seller;

providing the customer with information from the seller with respect to an item:

receiving from the customer an indication to initiate a purchase transaction for purchasing the item including metadata associating said customer data with said transaction;

in response to the received indication, automatically completing the purchase of an item from the seller by by [sic] processing said metadata associating said customer data so as to complete the purchase transaction.

^{&#}x27;710 patent,144:38-52. Claim 7 recites:

A computer implemented method comprising:

providing an information provider data storing information for an information provider usable to automatically complete a proposed on-line transaction, including metadata associating said information with said transaction:

providing the information provider with information from an information consumer with respect to a proposed transaction;

receiving from the information provider an indication to complete the proposed transaction;

in response to the received indication, automatically completing the purchase of an item from the information consumer by accessing the information provider data to retrieve the information and process the retrieved information by processing said metadata associating said information with the proposed transaction so as to complete the proposed transaction.

^{&#}x27;710 patent, 144:65-146:5.

⁸³ D.I. 439 at 1.

^{84 &#}x27;710 patent, 122:31-35 (emphasis added).

According to Dr. Alvisi, there is no description of what those steps are or whether human input is involved in any way. What Dr. Alvisi does not explain is how, in light of other disclosures in the patent specification, the inclusion of the above quoted language in the payment partner server section of the specification precludes the specification from conveying with reasonable clarity to one skilled in the art that the '710 patent inventor was in possession of an invention that could automatically complete a purchase transaction.

Among other disclosures, the '710 patent specification provides the following:

A payment service object type (842, Fig. 17) is a specialized data exchange service object that operates in conjunction with payment partner servers 1302 to provide secure financial transaction services to providers and consumers. . . . Payment service objects allow such common payment services as credit card transactions, debit card transactions, electronic fund transfers, and cybercash transactions to take place easily, automatically, and securely in a communications object system.85

And also provides:

The merchant can indicate the services of such payment service objects 1310 by using the names or logos of the appropriate credit cards, debit cards, and so on in a product ordering input form, for example. When a customer chooses one of these options and submits a data exchange input form, the payment service object is used automatically.86

These passages fall within the five columns to which Dr. Alvisi's testimony relates, were previously cited by Cordance in this case as evidence of adequate written support for the claims of the '710 patent, 87 and appear to describe a merchant's automatic use of payment service objects that allow common payment services to take place

⁸⁶ '710 patent, 121:27–33.

^{85 &#}x27;710, 119:27-40 (emphasis added).

⁸⁷ See Cordance Corp. v. Amazon.com, Inc., 639 F. Supp. 2d 406, 426 (D. Del. 2009) (discussing Cordance's argument that genuine issues of material fact exist and preclude summary judgment that the '710 patent lacks adequate written description).

automatically. Yet Dr. Alvisi addresses neither of these passages in his testimony.⁸⁸ Cordance contends that Dr. Alvisi also fails to address support for the "automatically completing the purchase of an item" step which can be found in other columns of the patent specification, columns cited by Dr. Shamos in both his expert report and declaration opposing summary judgment.

Cordance maintains that Dr. Alvisi's testimony at best says that columns 119–124 "do not describe certain functionalities of a payment partner server." Amazon asserts that Dr. Alvisi opined that the entire patent specification, not just the payment partner server section of the specification, lacked adequate written description to support the claims. In a footnote, Amazon's opposition provides: "Dr. Alvisi also testified that not only the sections describing payment partner servers lack any description of the asserted claims, but the entire patent specification does not include the necessary description of the claims." Amazon cites the following testimony:

Q. And we've been focusing on the payment partner server, but have you examined the entire '710 patent to see if these steps are describe [sic]?

A. I have not seen steps that describe situations in which data is retrieved in order to complete transactions or I have not described situations that describe where there is this automatically retrieving data and using then this data in order to complete the transaction without human interaction.⁹¹

The court finds this testimony conclusory and thus insufficient to support a finding of

⁸⁸ In fact, as previously indicated, see *supra* note 80, Dr. Alvisi omits the "payment service object is used automatically" language from his testimony concerning the second passage of the specification reproduced above.

⁸⁹ D.I. 511 at 7.

⁹⁰ D.I. 508 at 13 n.3.

⁹¹ D.I. 496 at 1786:5–13.

invalidity.92

Because Dr. Alvisi's testimony focuses on five columns in the '710 patent that describe an unclaimed embodiment of the invention and ignores possible supporting description located both outside and *within* those five columns, the court finds that Dr. Alvisi failed to provide substantial clear and convincing evidence from which a jury could reasonably decide that the specification as a whole lacked adequate written description to support the "automatically completing the purchase of an item" steps of claims 1 and 7.

(b) The Retrieve, Process, and Complete Step

With regard to the retrieve, process, and complete step, first, Dr. Alvisi opines, "It [the '710 patent] doesn't go into whether this information is used to retrieve any customer data, or anything of that sort" and "it requires to retrieve customer information using this metadata, and there is no discussion here of where the customer information is retrieved in order to complete the transaction." This testimony is relatable to both the fourth limitation of claim 1, as construed by the court, and the fourth limitation of claim 7.

The fourth limitation of claim 1 provides "in response to the received indication, automatically completing the purchase of an item from the seller by by [sic] processing said metadata associating said customer data so as to complete the purchase

⁹² See Cytologix Corp. v. Ventana Med. Sys., 424 F.3d 1168, 1176 (Fed. Cir. 2005) (holding that the defendant presented insufficient evidence to support a finding of invalidity for lack of written description because the defendant's expert's testimony "consist[ed] of little more than the statement 'I believe that the claim would be invalid, because I can't find any support for [the claim] in the specification'"); see also supra note 77.

⁹³ D.I. 496 at 1783:13–15, 1785:1–4.

transaction."⁹⁴ The court construed "processing said metadata associating said customer data so as to complete the purchase transaction" as "processing the metadata to retrieve the stored customer data and processing the retrieved customer data to complete the purchase transaction."⁹⁵ The fourth limitation of claim 7 provides "in response to the received indication, automatically completing the purchase of an item from the information consumer by accessing the information provider data to retrieve the information and process the retrieved information by processing said metadata associating said information with the proposed transaction so as to complete the proposed transaction."⁹⁶

Cordance argues that Dr. Alvisi's use of the following language: "customer data," "retrieve customer information," "no discussion here of where the customer information is retrieved," and "receiving from the customer an indication to initiate a purchase" indicates that his testimony relates only to claim 1 and that Cordance is therefore entitled, at a minimum, to JMOL that claim 7 does not lack adequate written description. This argument is not persuasive. As Amazon points out, Dr. Shamos, Cordance's expert, consistently treated "information provider" and "information consumer"—as recited by claim 7—as equivalent to "customer" and "seller," respectively—as recited by claim 1.97

94 '710 patent, 144:45–49.

⁹⁵ D.I. 279 at 5.

⁹⁶ '710 patent, 145:9–146:4.

⁹⁷ See D.I. 493 at 857:3–864:10 (Dr. Shamos's testimony regarding Amazon's alleged infringement of claim 7). Additionally, Cordance previously urged this court to construe "information provider" in claim 7 to mean "a customer in an on-line transaction." See D.I. 279 at 6 (rejecting Cordance's urged construction and construing "information provider" as "provider of information" and "information consumer" as "user of information").

Second, Dr. Alvisi states, "The patent does not describe receiving from the customer an indication to initiate a purchase, including this metadata associating said customer data with said transaction. Remember, it's the data that's used to retrieve data that is used to then complete the purchase." The former sentence can only be directed toward the third limitation of claim 1.99 The latter sentence, however, could relate to the fourth limitation of claim 1 or claim 7 or both.

"[T]o accept confusing or generalized testimony as evidence of invalidity is improper." Dr. Alvisi's testimony concerning the retrieve, process, and complete step lacks clarity. Dr. Alvisi never states to which claim or limitation thereof his testimony relates, and his equivocal language seems to conflate an asserted lack of written description support for the third limitation of claim 1 with the same for the fourth limitations of claim 1, claim 7, or both, or vice versa. Moreover, as was the case with his testimony concerning "automatically completing the purchase of an item," Dr. Alvisi's testimony regarding the retrieve, process, and complete step is conclusory. As before, Dr. Alvisi limits his written description analysis of the '710 patent's specification to the five columns in the specification describing the payment partner server embodiment and addresses neither portions of the specification outside nor portions within that limited range which were specifically cited by Cordance prior to trial as containing support for

⁹⁸ D.I. 496 at 1785:17-21.

⁹⁹ The third limitation of claim 1 provides "receiving from the customer *an indication to initiate* a purchase transaction for purchasing the item including metadata associating said customer data with said transaction." '710 patent, 144:45–48 (emphasis added). Nowhere in claim 7 does the phrase "indication to initiate" appear. Further, the court's constructions of the terms "an indication to initiate a purchase transaction for purchasing the item," which is recited in claim 1, and "an indication to complete the proposed transaction," which is recited in claim 7, are distinctly different.

the retrieve, process, and complete step. 101

Prior to trial, Cordance's expert, Dr. Shamos, asserted that the '710 patent specification adequately describes (1) that a customer account certificate is one example of stored customer data that is retrieved and processed; (2) that each customer account (a) can be represented as a user object in a partner server database and (b) can include name, contact data, sensitive financial data, such as bank account numbers or credit references, etc.; and (3) that verified customer account certificates can be used to identify user objects stored in the payment partner server database that represent the accounts of customers submitting product order input forms.¹⁰²
Additionally, Dr. Shamos argued the following:

It is apparent from the description that the verified customer account certificate identifies the user object stored in the payment partner server database that represents the account of the customer that submitted the product order input form, and that at least some of the information for that account, e.g., the name, contact data, bank account numbers, etc., would be used by the payment partner server to determine whether to accept the selected payment instrument Accordingly, the specification discloses that the customer account certificate included in such a message object . . . would indisputably qualify as metadata under the Court's construction, i.e., "data that describes or associates other data." Furthermore, since it is used to identify a user object containing data that is to be used to complete the transaction it would qualify as "data [that describes or associates other

¹⁰¹ Prior to trial, Amazon urged the court to construe "processing said metadata associating said customer data so as to complete the purchase transaction" to mean "executing instructions contained in the metadata to complete the purchase transaction." D.I. 279 at 5. Cordance requested adoption of the construction "using the metadata to retrieve the stored customer data and using the retrieved customer data to complete the purchase transaction." *Id.* The court adopted Cordance's proposed construction, modified to read "processing the metadata to retrieve the stored customer data and processing the retrieved customer data to complete the purchase transaction." *Id.* In doing so, the court noted that "contrary to Amazon's position that the '710 patent does not disclose using the customer account certificate to retrieve the customer data, Cordance cites disclosures supporting such use and its proposed construction." *See id.* at 5–6 (citing '710 patent, 116:61–62; 119:41–120:54; 121:42–48; 121:21–33; 121:27–33; Fig. 38; 122:9–13; 122:27–31; 119:65–120:3; 121:42–48; 122:31–35).

¹⁰² See D.I. 509 at Exhibit D (Dr. Shamos's expert report concerning validity) (citing multiple sections of the '710 patent specification).

data] that is used to identify the stored customer data as data to be used in completing the transaction" [and] since the information in the identified customer account is processed to determine whether to accept the selected payment instrument, such processing would qualify as "processing the metadata to retrieve the stored customer data and processing the retrieved customer data to complete the purchase transaction" ¹⁰³

The court recognizes that it is not called upon here to determine the merit of any pretrial argument advanced by Dr. Shamos and that Cordance did not present the above arguments to the jury at trial. However, the court notes that Dr. Alvisi's testimony addresses little to none of the above alleged written description support for the retrieve, process, and complete step—alleged support of which he had ample notice. It is the opinion of the court (1) that Dr. Alvisi's testimony constitutes merely a conclusory assertion that the '710 patent specification lacks adequate written description support and (2) that such an assertion cannot provide substantial clear and convincing evidence of invalidity when it is unaccompanied by an explanation as to how the specification taken as a whole fails to describe the invention in sufficient detail such that one skilled in the art can clearly conclude that the inventor invented the claimed invention.

For the reasons set forth above, the court finds that Amazon presented insufficient evidence from which a jury could reasonably conclude that Amazon carried its burden to prove by clear and convincing evidence that the '710 patent lacked adequate written description for the fourth limitations of claims 1 and 7.¹⁰⁴ Cordance is therefore entitled to JMOL that claims 7–9 of the '710 patent are not invalid for lack of written description.

¹⁰³ Soo id

 $^{^{104}}$ Amazon did not advance evidence to show a lack of written description for any claims of the '710 patent other than claims 1 and 7.

3. Cordance's Motion for JMOL that Claims 1, 2, 3, 5, and 7–9 of the '710 Patent are Not Invalid as Anticipated by Amazon's 1995-96 Shopping Cart System

To succeed in its anticipation defense at trial, Amazon had to prove by clear and convincing evidence that every limitation of the asserted claims of the '710 patent was contained, either expressly or inherently, in a single prior art reference. "An 'anticipating' reference must describe all of the elements and limitations of the claim in a single reference, and enable one of skill in the field of the invention to make and use the claimed invention." "When the asserted basis of invalidity is prior public use, the party with the burden of proof must show that the subject of the barring activity met each of the limitations of the claim, and thus was an embodiment of the claimed invention." Anticipation is a question of fact. As explained above, the jury found claims 1, 2, 3, 5, 7, 8, and 9 invalid. To prevail here in its Rule 50(b) motion, Cordance must show that Amazon failed to present substantial evidence from which a reasonable jury could conclude that Amazon proved by clear and convincing evidence that claims 1, 3, 5, 7, and 8 of '710 patent were anticipated."

Cordance contends that no reasonable jury could find anticipation of the above claims of the '710 patent. Cordance asserts that Amazon's expert, Dr. Alvisi, "testified

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¹⁰⁵ Union Carbide Chems. & Plastics Tech. Corp v. Shell Oil Co., 308 F.3d 1167, 1188 (Fed. Cir. 2002).

¹⁰⁶ Merck & Co. v. Teva Pharms. USA, Inc. 347 F.3d 1367, 1372 (Fed. Cir. 2003).

¹⁰⁷ Juicy Whip, Inc. v. Orange Bang, Inc., 292 F.3d 728, 737 (Fed. Cir. 2002) (internal quotation omitted); see also Schering Corp v. Geneva Pharms., Inc., 339 F.3d 1373, 1377 (Fed. Cir. 2003) ("A patent is invalid for anticipation if a single prior art reference discloses each and every limitation of the claimed invention.").

¹⁰⁸ Advanced Display Sys., Inc. v. Kent State Univ., 212 F.3d 1272, 1281 (Fed. Cir. 2000) (citing In re Graves, 69 F.3d 1147, 1151 (Fed. Cir. 1995)).

¹⁰⁹ The anticipation of claims 2 and 9 was never submitted to the jury. D.I. 499 at 2246:25–2247:5. Counsel for Amazon conceded at trial that there was no evidence of anticipation of those claims. D.I. 498 at 2083:4–6.

unequivocally that Amazon's 1995-96 shopping cart does not anticipate the claims of the '710 patent "110 Cordance maintains that Dr. Alvisi's testimony, in essence, asserts the following: "(1) Amazon's 1-click is similar to its 1995-96 shopping cart system, so (2) if Amazon's 1-click infringes, (3) the ['710] patent is invalid over Amazon's 1995-96 shopping cart system."111 Cordance argues that this constitutes a defense of "practicing an equivalent of the prior art,"112 which is even less colorable than the "practicing the prior art" defense that has been rejected by the Federal Circuit. 113

¹¹⁰ D.I. 504 at 12. Cordance points to the following testimony from Dr. Alvisi:

Q. At your deposition, didn't you say that you thought Amazon's prior art shopping cart system did not anticipate the claims of the '710 patent?

A. I don't recall the wording that I used. I certainly said that I don't think that the Amazon prior art system meets the requirement of the patent, doesn't meet the patent. So in that sense, it doesn't.

If you recall what I was saying was, an [sic] this is also what I said today. I never said that the Amazon prior art system, in my opinion, invalidates the claim. What I said is that if I look at the theory that Dr. Shamos has put forward, I can recognize in the prior art system the same elements that Dr. Shamos has used to put forward this case for infringement, this case for infringement.

Q. But you do not think it invalidates the patent; is that right?

A. I think that neither the current Amazon system, nor the prior art system infringe the patent. But, as I said, I can recognize, if under the – if somehow one were to take the theory that Dr. Shamos put forward and embrace it, then by the same token, that theory would cover also the prior art system at Amazon.

D.I. 496 at 1836:4-25.

¹¹¹ D.I. 504 at 11.

¹¹² Id

¹¹³ See Zenith Elecs. Corp. v. PDI Commun. Sys., 522 F.3d 1348, 1363–64 (Fed. Cir. 2008), where the Federal Circuit provides:

Here, [defendant] did not establish that it is entitled to judgment as a matter of law that claim 1 of the [] patent [at issue] is invalid as anticipated by the [prior art]. [Defendant] provided no evidence whatsoever that the [prior art] satisfies the final two limitations of claim 1 Instead, with respect to those limitations, [defendant] merely argued that "to the extent the [allegedly infringing] [product] is considered to practice them, then so did the [prior art]."

Regardless of whether [defendant's] statement is correct, anticipation cannot be proved by merely establishing that one "practices the prior art." . . . Anticipation requires a showing that each element of the claim at issue, properly construed, is found in a single prior art reference. "[I]t is the presence of the prior art and its relationship to the claim language that matters for invalidity." Here, there has been no such showing. [Defendant] has provided no proof that the final two limitations of claim 1 are anticipated by the [prior art]. Thus, we vacate the district court's grant of summary judgment that claim 1 of the [] patent [at issue] is invalid as anticipated by the [prior art].

⁽internal citations omitted).

Amazon asserts that Dr. Alvisi did not present a "practicing the prior art defense" at trial but instead provided a detailed element-by-element anticipation analysis of the asserted claims of the '710 patent, as required by the Federal Circuit. In its opposition, Amazon first provides the following: "Dr. Alvisi explained that should the accused 1-Click system be found to infringe the asserted claims based on Cordance's theories of what the claims cover, Amazon's prior art system performed each and every element of the asserted claims under those same theories." This is, as Cordance contends, a "practicing the prior art defense" and it is therefore unpersuasive. Amazon then argues that Dr. Alvisi "map[ped] each element of the asserted claims to the functionality of Amazon's prior art shopping cart." The court must determine whether Dr. Alvisi's mapping of the '710 patent claims' elements to Amazon's 1995-96 shopping cart system provides substantial clear and convincing evidence from which a jury could reasonably conclude that such a system contained, either expressly or inherently, every element of claims 1, 3, 5, 7, and 8.

Claim 1 of the '710 patent recites:

A computer implemented method comprising:

providing a customer data storing information for a customer usable to automatically complete an online purchase of an item from a seller; providing the customer with information from the seller with respect to an item;

receiving from the customer an indication to initiate a purchase transaction for purchasing the item including metadata associating said customer data with said transaction;

¹¹⁴ D.I. 508 at 14.

¹¹⁵ *Id.* at 14–15.

¹¹⁶ Zenith Elecs. Corp., 522 F.3d at 1363–64.

¹¹⁷ D.I. 508 at 15.

in response to the received indication, automatically completing the purchase of an item from the seller by by [sic] processing said metadata associating said customer data so as to complete the purchase transaction.¹¹⁸

Amazon argues that Dr. Alvisi explained how the 1995-96 shopping cart system performed the first limitation with the following testimony:

So what we have to do is – what we are facing is a computer-implemented method comprising – providing customer data storing information for a customer usable to automatically complete an online purchase of an item from a seller, and here you see that Amazon was are storing customer information in its database. Yes, it was storing customer information in its database.¹¹⁹

Amazon maintains that Dr. Alvisi explained how the second limitation was performed with the following testimony:

Provide the customer with information from the seller with respect to an item. Certainly, Amazon was providing information with respect to information that sellers may be interested in. There it is underlining one million titles, so plenty of information for the sellers, for the customers.¹²⁰

Amazon asserts that Dr. Alvisi explained how the third and fourth limitations were performed with the following testimony:

Now, receiving from the customer an indication to initiate a purchase transaction for purchasing the item, including metadata. . . .

So if we go to – go back now to the Amazon system, we see that once the – if the user had actually logged in, the session, you may recall that Amazon was sending session IDs in the early days. When the user was logging in, then there would be an association between that session ID and a particular customer ID, and that customer ID would be associated with information that is stored on this. Okav?

And when the user confirmed the order, then the session ID would be sent to Amazon, and the session ID would be retrieved. And it would actually be associated with this customer data.

And then using the information that was actually retrieved, an order

¹¹⁸ '710 patent,144:38–52.

¹¹⁹ See D.I. 408 at 15 (citing D.I. 496 at 1768:13–19).

¹²⁰ *Id.* at 409 (citing D.I. 496 at 1768:23–1769:3).

would be created, and the order would be stored in the database, and a message would be sent to the customer, indicating that the order had been received. In fact, there was a thank you message that was sent.¹²¹

Because "[a]nticipation requires a showing that each element of the claim at issue, properly construed, is found in a single prior art reference,"122 the court will only discuss one element where it determines that Dr. Alvisi's above testimony does not make the requisite showing. The court construed the "automatically completing the purchase of an item" element of the fourth limitation as "completing the purchase without human input." 123 Dr. Alvisi never explains how Amazon's 1995-96 shopping cart system contained this element of claim 1. In fact, to the contrary, on cross examination Dr. Alvisi admitted that in the 1995-96 shopping cart system (1) customers were not using a 1-click shopping process; (2) purchases were not automatically completed in response to customers (a) adding items to their shopping carts, (b) pressing the checkout button, or (c) specifying the payment method; and (3) there were at least three steps that required human input to complete a purchase transaction. 124 Dr. Alvisi's testimony is therefore insufficient to support a reasonable jury's finding of anticipation of claim 1. Further, because claim 3 and 5 depend on claim 1, Dr. Alvisi's testimony is likewise insufficient to support a jury's finding of their anticipation.

With regard to claim 7, the following constitutes all of Dr. Alvisi's testimony and Amazon's evidence concerning whether that claim is anticipated:

Q. And did Dr. Shamos essentially provide the same analysis of Amazon's

¹²¹ *Id.* (citing D.I. 496 at 1769:4–1770:14)

¹²² Zenith Elecs. Corp., 522 F.3d at 1363.

¹²³ D.I. 439

 $^{^{124}}$ D.I. 496 at 1840:11–1843:16. "[T]hese human three steps were required of the old Amazon system." *Id.* at 1843:1–2.

current 1-click system with respect to Claim 7?

- A. That's my understanding of his analysis.
- Q. And if you provide if you performed the same analysis with respect to Amazon's prior art shopping, would it also meet the limitations of claim 7? A. I think it would.¹²⁵

Claim 7, like claim 1, recites "automatically completing the purchase of an item." Thus, for at least the same reason that Dr. Alvisi's testimony regarding claim 1 failed to provide sufficient evidence of that claim's anticipation, his testimony fails to provide sufficient evidence of anticipation of claim 7. And because claim 8 depends on claim 7, Dr. Alvisi's testimony is likewise insufficient to support a jury's finding of its anticipation.

For the reasons set forth above, Cordance is entitled to JMOL that claims 1, 3, 5, 7, and 8 of the '710 patent are not invalid as anticipated by Amazon's 1995-96 shopping cart system.

4. Cordance's Motion for JMOL that Claims 1, 3, 5, 7 and 8 of the '710 Patent are not Invalid under 35 U.S.C. 102(f)

At trial, Amazon also asserted that the '710 patent was invalid under 35 U.S.C. 102(f), which provides that a person is not entitled to a patent if "he did not himself invent the subject matter sought to be patented." Amazon argues that Drummond Reed, the '710 patent inventor, derived his invention from Amazon's prior art systems. The history of the '710 patent is as follows: it is a continuation of U.S. Patent No. 6,345,288 filed on May 15, 2000, which is a continuation of the '717 patent filed on August 31, 1998, which is a continuation of the '325 patent filed on September 27,

¹²⁵ D.I. 496 at 1775:21–1776:3.

¹²⁶ '710 patent,144:65–146:5.

¹²⁷ 35 U.S.C. § 102(f).

¹²⁸ A Continuation Application is a patent application filed during the examination process of an earlier application *which has the same disclosure as the original application* and does not include anything which would constitute new matter if inserted in the original application.

1996, which is a continuation in part¹²⁹ of the '205 patent filed on February 29, 1996.¹³⁰ The court ruled that the '710 patent is entitled to a priority and effective filing date of September 27, 1996-the '325 patent's filing date. 131

"Derivation focuses on 'originality'—who invented the subject matter." A finding of derivation under 35 U.S.C. § 102(f) is a question of fact. 133 To establish derivation at trial, Amazon had to show by clear and convincing evidence (1) prior conception of the invention by another and (2) communication of that conception to the patentee. 134 The former, prior conception, is a question of law based on underlying factual findings which must be supported by clear and convincing evidence. The latter, communication of conception to the patentee, which may be made by either public knowledge or private communications, must be sufficient to enable one skilled in the art to make the patented invention. 136 To prevail on JMOL, Cordance must show that Amazon failed to present substantial evidence at trial from which a jury could reasonably conclude that Amazon carried its burden to prove derivation by clear and convincing evidence.

Cordance contends that the '710 patent's September 27, 1996 effective filing date by itself entitles Cordance to JMOL that the asserted claims of the '710 patent are

¹²⁹ A Continuation-In-Part (C-I-P) Application is a patent application filed during the application process of an earlier application which repeats some or all of the earlier application and adds matter not disclosed in the earlier application to support the addition of new patent claims.

¹³⁰ The specifications of the '710, '325, and '717 patents are the same. They are not the same as

the '205 patent, which has a much shorter specification.

131 See D.I. 498 at 2125:20–23 (granting Amazon's Motion for JMOL that Cordance is Not Entitled to a Conception Date of November 1, 1993 (D.I. 463)).

¹³² Solvay S.A. v. Honeywell Specialty Materials LLC., 591 F. Supp. 2d 729, 739 (D. Del. 2008) (citing Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1576 (Fed. Cir. 1997)).

¹³³ Gambro Lundia AB, 110 F.3d at 1576.

¹³⁵ Price. v. Symsek, 988 F.2d 1187, 1190 (Fed. Cir. 1993).

¹³⁶ Gambro Lundia AB, 110 F.3d at 1578.

not invalid under 35 U.S.C. § 102(f).¹³⁷ Cordance argues that Amazon failed to introduce sufficient evidence of derivation because Amazon's only evidence regarding conception of the '710 patent invention prior to September 1996 was its implementation of a one-click shopping system one year later in 1997. Amazon does little to rebut this argument.

First, Amazon asserts that Cordance's only argument is that because there is no separate written description requirement in 35 U.S.C. § 112, paragraph 1 Amazon's derivation defense must fail. This is not Cordance's only argument regarding derivation. Cordance clearly asserts that Amazon failed to introduce any evidence of prior conception. 138

Second, Amazon argues that even if § 112, paragraph 1 does not contain a separate written description requirement, Amazon's derivation claim is supported by the new matter provision of 35 U.S.C. § 132.¹³⁹ Amazon maintains that this provision is a "corollary" to the written description requirement, and like the written description requirement serves to "ensure that the patent applicant was in full possession of the claimed subject matter on the application filing date." This is a correct statement of law, but it does little to rebut Cordance's above argument or aid this court in determining whether Amazon presented substantial evidence of derivation, especially in light of the

¹³⁷ See *Hyatt v. Boone*, 146 F.3d 1348, 1352 (Fed. Cir. 1998) ("The filing of a patent application serves as conception and constructive reduction to practice of the subject matter described in the application.").

¹³⁸ D.I. 504 at 9; D.I. 511 at 6.

¹³⁹ The portion of 35 U.S.C. § 132 relevant to Amazon's argument provides: "No amendment shall introduce *new matter* into the disclosure of the invention." 35 U.S.C. § 132 (emphasis added).

¹⁴⁰ D.I. 508 (quoting *TurboCare Div. of Demag Delaval Turbomachinery Corp. v. GE*, 264 F.3d 1111, 1118 (Fed. Cir. 2001)).

fact that Amazon never raised this "new matter" issue at trial and the jury received no instruction regarding § 132.

Amazon conceived of and reduced to practice its 1-click shopping system in 1997.¹⁴¹ At trial, Amazon presented no evidence that it conceived of that system prior to the '710 patent's September 27, 1996 effective filing date. Thus, Amazon failed to provide substantial evidence from which a jury could reasonably conclude that Amazon proved derivation by clear and convincing evidence.¹⁴² Accordingly, Cordance is entitled to JMOL that claims 1, 3, 5, 7, and 8 of the '710 patent are not invalid under 35 U.S.C. § 102(f).

IV. NEW TRIAL

Pursuant to Federal Rule of Civil Procedure 59, a court may grant a new trial "for any of the reasons for which a new trial has heretofore been granted in an action at law in federal court." The decision to grant or deny a new trial is within the sound

¹⁴¹ See D.I. 505 at Exhibit A (declaration from the founder of Amazon.com that explains the steps Amazon took to reduce 1-Click purchasing to practice in 1997). See generally U.S. Patent No. 5,960,411 (filed September 12, 1997).

¹⁴² See Gambro Lundia AB, 110 F.3d at 1576 ("To show derivation, the party asserting invalidity must prove both prior conception of the invention by another and communication of that conception to the patentee."). The court notes that Amazon's counsel indicated at trial that Amazon's derivation defense would be meritless if Amazon failed to prove that the claims of the '710 patent were not entitled to an effective filing date of September 27, 1996.

[[]Counsel for Amazon]: . . . But it's clear that Amazon conceived and reduced to practice in 1997. Mr. Reed knew about it before 2002. Okay.

So 2002 is the is the date that matters, and I understand your Honor's focus on 1996, but the '96 date only matters if we lose by showing there's no written description. But if we win on showing there's no written description, right, so then we're at 2002 when he files his claims.

By that point, we have reduced to practice. Reed knows about a reduction to practice. Reed copies our reduction to practice. Reed [sic] should be able to show derivation, and we can win under both their reasons.

There is a common element of fact to both, which is whether or not the 1996 application supports their claim. But once we show that it does not, we can kill it by written description, we can kill it by derivation, and we should be able to do both. . . .

D.I. 491 at 257:9-258:1.

¹⁴³ Fed. R. Civ. P. 59(a)(1)(A).

discretion of the trial court.¹⁴⁴ In deciding whether to grant a new trial, the court considers "the overall setting of the trial, the character of the evidence, and the complexity or simplicity of the legal principles which the jury had to apply to the facts."¹⁴⁵ The court need not view the evidence in the light most favorable to the verdict winner.¹⁴⁶ A. Cordance's Motion for a New Trial Alleging that the Jury's Verdict was Against the Clear Weight of the Evidence

Cordance moves for a new trial alleging that the jury's finding of invalidity of the '710 patent claims was against the clear weight of evidence. Amazon fails to oppose this motion. "[N]ew trials because the verdict is against the weight of the evidence are proper only when the record shows that the jury's verdict resulted in a miscarriage of justice or where the verdict, on the record, cries out to be overturned or shocks our conscience."

Cordance asserts that, should it be denied JMOL, it is entitled in the alternative to a new trial on the grounds that (1) 35 U.S.C. § 112, paragraph 1 does not contain a written description requirement; (2) Amazon presented no evidence that claims 7–9 of the '710 patent lacked adequate written description; and (3) no reasonable jury could find that the '710 patent was anticipated by Amazon's prior art shopping cart system. The court has addressed each of these grounds in the context of Cordance's motions for JMOL. The first is presently meritless.¹⁴⁸ The second and third need not be

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¹⁴⁴ Linear Tech. Corp., No. 06-476-GMS, 2009 U.S. Dist. LEXIS 105823, at *6 (citing Allied Chem. Corp. v. Daiflon, Inc., 449 U.S. 33, 36 (1980)).

¹⁴⁵ *Id.* (citing *Lind v. Schenley Indus., Inc.*, 278 F.2d 79, 89 (3d Cir. 1960)).

¹⁴⁶ Id. (citing Allied Chem. Corp. v. Daiflon, Inc., 449 U.S. 33, 36 (1980)).

¹⁴⁷ Williamson v. Conrail, 926 F.2d 1344, 1352 (3d Cir. 1991) (citing EEOC v. Del. Dep't of Health & Soc. Servs., 865 F.2d 1408, 1413 (3d Cir. Del. 1989)).

¹⁴⁸ See supra Part III.C.1.

addressed here because they have been rendered moot by the court's decision that Cordance is entitled to JMOL that claims 7–9 of the '710 patent are not invalid for lack of written description¹⁴⁹ and JMOL that claims 1, 3, 5, 7, and 8 of the '710 patent are not invalid as anticipated by Amazon's 1995-96 shopping cart system.¹⁵⁰

B. Cordance's Motion for a New Trial Alleging that the Jury Applied Incorrect Claim Constructions

To convince the court to set aside a jury verdict, based on a legal error, a party must establish that an error occurred and that the error had prejudicial effect.¹⁵¹ "More specifically, a party seeking to alter a judgment based on erroneous jury instructions must establish that (1) it made a proper and timely objection to the jury instructions, (2) those instructions were legally erroneous, (3) the errors had prejudicial effect, and (4) it requested alternative instructions that would have remedied the error." An error of law alone is not grounds for a new trial if it is harmless. 153

Cordances moves for a new trial on the ground that the jury was instructed to apply incorrect claim constructions for the terms "feedback information" and "an

¹⁴⁹ See supra Part III.C.2.

¹⁵⁰ See supra Part III.C.3.

¹⁵¹ See NTP, Inc. v. Research in Motion, Ltd., 418 F.3d 1282, 1311–12 (Fed. Cir. 2005) ("A jury verdict will be set aside, based on erroneous jury instructions, if the party seeking to set aside the verdict can establish that those instructions were legally erroneous, and that the errors had prejudicial effect.") (internal quotations omitted); see also Ecolab Inc. v. Paraclipse, Inc., 285 F.3d 1362, 1373 (Fed. Cir. 2002) ("An erroneous instruction regarding claim interpretation that affects the jury's decision on infringement is grounds for a new trial. A party seeking to alter a judgment based on erroneous jury instructions must establish that those instructions were legally erroneous, and that the errors had prejudicial effect.") (internal quotations omitted).

¹⁵² NTP, Inc. v. Research in Motion, Ltd., 418 F.3d at 1312 (internal quotations omitted). ¹⁵³ See Fed. R. Civ. P. 61, which provides the following standard for harmless error: Unless justice requires otherwise, no error in admitting or excluding evidence—or any other error by the court or a party—is ground for granting a new trial, for setting aside a verdict, or for vacating, modifying, or otherwise disturbing a judgment or order. At every stage of the proceeding, the court must disregard all errors and defects that do not affect any party's substantial rights.

indication to initiate a purchase transaction." Cordance maintains that it was prejudiced by this error. Amazon asserts that the court made no errors in its claim constructions and that even if the court did err in its claim constructions, any error was harmless.

1. "feedback information"

The term "feedback information appears in the asserted claims of the '325 and '717 patents. As previously discussed, Amazon, via Dr. Alvisi's testimony, presented several grounds for the jury's finding of noninfringement of those patents. With respect to the '325 patent, Dr. Alvisi testified (1) that Amazon's customer review and feedback systems did not satisfy the third, fifth, and sixth limitations of claim 109 and (2) that Amazon's internal web server/feedback server and web server/customer review server interactions did not satisfy the third, fourth, fifth, and sixth limitations of claim 109. With respect to the '717 patent, Dr. Alvisi testified that neither Amazon's customer review and feedback systems nor its internal web server/feedback server and web server/customer review server interactions satisfied the second, third, or fourth limitations of claim 50. 156

None of Dr. Alvisi's above arguments were dependent upon the court's construction of the term "feedback information." And Cordance again fails to either argue or indicate where the record demonstrates that this evidence of noninfringement is inaccurate, insufficient, or otherwise incorrect.¹⁵⁷ As a result, it is the opinion of the

¹⁵⁴ See supra Part III.A.1–2.

¹⁵⁵ See supra Part III.A.1 and testimony cited therein.

¹⁵⁶ See supra Part III.A.2 and testimony cited therein.

¹⁵⁷ Cordance merely asserts that it has provided sufficient evidence to support a jury verdict of infringement under its construction of "feedback information"—"information that includes an evaluative review and may also include information related to the review such as its subject or the evaluator." The court notes that Cordance's proposed construction for the term "feedback information" was rejected in part

court that, regardless of whether the court erred in its construction of the term "feedback information," Cordance has failed to show that it was prejudiced by any such error.

Thus, Cordance is not entitled to a new trial on the ground that the court erred in its construction of the term "feedback information." ¹⁵⁸

2. "indication to initiate a purchase transaction"

The term "an indication to initiate a purchase transaction" appears in claims 1, 2, 3, and 5 of the '710 patent. Cordance argues that it was prejudiced by the court's construction of this term because (1) it presented sufficient evidence to support a jury verdict that the '710 patent is not invalid under its construction and (2) the court's allegedly incorrect construction formed the bases for Amazon's lack of written description and anticipation arguments. Cordance's motion has been rendered moot because the court has decided that Cordance is entitled to JMOL that the asserted claims of the '710 patent are not invalid for either lack of written description or as anticipated by Amazon's 1995-96 shopping cart system.¹⁵⁹

C. Cordance's Motion for a New Trial Alleging that the Jury Applied Incorrect Law Concerning Written Description

Cordance moves for a new trial on the ground that 35 U.S.C. § 112, paragraph 1 does not contain a written description requirement and the jury therefore applied incorrect law. This motion has been rendered moot by the court's conclusion that Amazon presented insufficient evidence from which a jury could reasonably conclude

because the "evaluative review" of that construction is not found in the '325 and '717 patents' specifications.

¹⁵⁸ See Fed. R. Civ. P. 61 ("[T]he court must disregard all errors and defects that do not affect any party's substantial rights.").

¹⁵⁹ See supra Part III.C.2–3.

that the '710 patent claims lacked adequate written description. Nonetheless, it is the court's opinion that (1) the court did not err when it instructed the jury in accord with existing Federal Circuit law, which "clearly recognizes a separate written description requirement," and (2) by failing to timely object to the court's written description instruction, Cordance waived this challenge, per Rule 51. 162

D. Cordance's Motion for a New Trial Alleging that the Court Erred in Granting Amazon JMOL that the Claims of the '710 Patent are Not Entitled to a Conception Date of November 1, 1993

Cordance moves for a new trial on the ground that the court erred in granting

Amazon JMOL that the claims of the '710 patent are not entitled to a conception date of

November 1, 1993. Cordance asserts that it was prejudiced by this decision because
the jury was precluded from finding that the date of invention of the '710 patent was
prior to the only asserted item of prior art—Amazon's 1995-96 shopping cart system.

This motion has been rendered moot by the court's conclusion that Amazon presented

¹⁶⁰ See supra Part III.C.2.

¹⁶¹ Univ. Of Rochester v. G.D. Searle & Co., 358 F.3d 916, 922 (Fed. Cir. 2004). See also D.I. 2261:24–2263:2 (the court's written description requirement instructions to the jury).

¹⁶² See Fed. R. Civ. Proc. 51(c)(1) ("A party who objects to an instruction or the failure to give an instruction must do so on the record, stating distinctly the matter objected to and the grounds for the objection."); see also Dunn v. Hovic, 1 F.3d 1371, 1379 (3d Cir. 1993) (declining to review a jury instruction where the party attacking the instruction failed to make a specific and timely objection which would have afforded the court an opportunity to deliver a curative instruction to the jury). The court recognizes that Cordance's counsel provided the following general objection to the court's jury instructions: "I guess we would like to reserve our objections to the jury instructions as well, to the extent they were overruled, to the extent they were stated in our proposed instructions, the objections to Amazon's and not adopted." D.I. 498 at 2221:21-25. But Cordance's counsel never argued or proposed a jury instruction that 35 U.S.C. § 112, paragraph 1 does not contain a written description requirement. In fact, in advance of the pretrial conference, both Amazon and Cordance submitted proposed written description jury instructions, and Cordance raised no objection to those proposed instructions on the ground that 35 U.S.C. §112, paragraph 1 does not contain a written description requirement. Further, during trial, Cordance and Amazon agreed to the written description jury instruction the court gave to the jury. Finally, the court again notes that there has been no intervening change in law to excuse Cordance's failure to timely object to the court's written description requirement. See discussion supra Part III.C.1.

insufficient evidence to prove anticipation of the '710 patent. 163

E. Cordance's Motion for a New Trial Alleging that the Court Erred in Precluding Cordance from calling Drummond Reed to Testify Concerning Written Description

Cordance moves for a new trial on the ground that the court erred in precluding Drummond Reed, the '710 patent inventor, from testifying concerning written description. Cordance contends that it was prejudiced by this decision because it was prevented from presenting to the jury material and credible evidence concerning the validity of the '710 patent. This motion has been rendered moot by the court's conclusion that Amazon presented insufficient evidence of the '710 patent's lack of adequate written description. Nonetheless, the court is confident that it acted appropriately and within its broad discretion in limiting the parties to one expert per party on any given subject matter and in precluding Mr. Reed from testifying concerning written description. Expert testimony was required, and Mr. Reed was never identified as an expert, as required by Rule 26.

III. CONCLUSION

For the reasons contained herein, IT IS ORDERED, ADJUDGED and DECREED that Cordance's Motion for Judgment as a Matter of Law or, in the Alternative, for a New Trial is GRANTED IN PART, DENIED IN PART, and DISMISSED AS MOOT IN PART,

¹⁶³ See supra Part III.C.3.

¹⁶⁴ See supra Part III.C.2.

Sundance, Inc. v. Demonte Fabricating Ltd., 550 F.3d 1356, 1363 (Fed. Cir. 2008) ("[W]here an issue calls for consideration of evidence from the perspective of one of ordinary skill in the art, it is contradictory to Rule 702 to allow a witness to testify on the issue who is not qualified as a technical expert in that art."). See generally Fed. R. Civ. Proc. 702. Further, the court notes that its scheduling order made room for the allowance of additional experts upon a party's showing of good cause, and Cordance never attempted to make such a showing.

¹⁶⁶ Fed. R. Civ. Proc. 26(a)(2)(A) ("[A] party must disclose to the other parties the identity of any witness it may use at trial to present evidence under Federal Rule of Evidence 702, 703, or 705.").

as follows:

- Cordance's motion for JMOL that Amazon infringes claims 109, 112, 119, and
 of the '325 patent is DENIED;
- 2. Cordance's motion for JMOL that Amazon infringes claims 50, 74, and 96 of the '717 patent is DENIED;
- 3. Cordance's motion for JMOL that Amazon infringes claims 2 and 9 of the '710 patent is DENIED;
- 4. Cordance's motion for JMOL that the claims 1, 2, 3, 5, 7, 8, and 9 of the '710 patent are not invalid is GRANTED IN PART and DENIED IN PART, as follows:
 - a. Cordance's motion for JMOL that the '710 patent meets the requirements of 35 U.S.C. § 112, paragraph 1 because there is no written description requirement is DENIED;
 - b. Cordance's motion for JMOL that claims 7–9 of the '710 patent are not invalid for lack of written description because Amazon presented insufficient evidence is GRANTED;
 - c. Cordance's motion for JMOL that claims 1, 2, 3, 5, and 7–9 of the '710 patent are not invalid as anticipated by Amazon's 1995-96 shopping cart system is GRANTED;
 - d. Cordance's motion for JMOL that claims 1, 3, 5, 7 and 8 of the '710 patent are not invalid under 35 U.S.C. 102(f) is GRANTED;
- 5. Cordance's motion for a new trial on the ground that the jury's verdict was against the clear weight of the evidence and a new trial is necessary to prevent a miscarriage of justice is DISMISSED AS MOOT;

- 6. Cordance's motion for a new trial on the ground that the jury applied incorrect claim constructions for "feedback information" and "indication to initiate a purchase transaction" is DENIED IN PART and DISMISSED AS MOOT IN PART, as follows:
 - a. Cordance's motion for a new trial on the ground that the jury applied an incorrect claim construction for the term "feedback information" is DENIED;
 - b. Cordance's motion for a new trial on the ground that the jury applied an incorrect claim construction for the term "indication to initiate a purchase transaction" is DISMISSED AS MOOT;
- 7. Cordance's motion for a new trial on the ground that the jury applied incorrect law concerning the written description requirement under 35 U.S.C. § 112 is DISMISSED AS MOOT;
- 8. Cordance's motion for a new trial on the ground that the court erred in granting Amazon JMOL that the claims of the '710 patent are not entitled to a conception date of November 1, 1993 is DISMISSED AS MOOT.
- 9. Cordance's motion for a new trial on the ground that the court erred in precluding Cordance from calling Drummond Reed to testify concerning the written description support for the claims of the '710 patent is DISMISSED AS MOOT.

 An appropriate order consistent with this memorandum will follow.