IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

i4i LIMITED PARTNERSHIP and INFRASTRUCTURES FOR INFORMATION, INC.,	§ § § §	
Plaintiffs	§ §	**CASE NO. 6:07CV113** **PATENT CASE**
vs.	§ §	
MICROSOFT CORPORATION,	§ §	
Defendant	§	

MEMORANDUM OPINION AND ORDER

Before the Court are Microsoft's motion for judgment as a matter of law ("JMOL") or motion for new trial ("MNT") regarding willful infringement (Docket No. 345); i4i, Inc. and i4i, LP's (collectively "i4i") motion for enhanced damages and attorneys' fees (Docket No. 346); Microsoft's motion for JMOL and MNT regarding indirect infringement (Docket No. 347); Microsoft's JMOL and MNT regarding noninfringment (Docket No. 348); i4i's motion for a permanent injunction (Docket Nos. 349 & 364); i4i's motion for post-verdict damages, prejudgment interest, and post-judgment interest (Docket No. 350); Microsoft's MNT or remittitur regarding damages (Docket No. 351); Microsoft's MNT regarding invalidity (Docket No. 353); Microsoft's JMOL and MNT regarding anticipation and obviousness in light of Rita and DeRose (Docket No. 356); Microsoft's JMOL and MNT regarding anticipation and obviousness in light of S4 (Docket No. 359); Microsoft's motion to stay injunctive relief (Docket No. 370); and i4i's motion to strike (Docket No. 389). For the reasons stated below, i4i's motion for enhanced damages and attorneys' fees (Docket No. 346) is **GRANTED** in part, i4i's motion for permanent injunction (Docket Nos. 349 & 364) is

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GRANTED, i4i's motion for post verdict damages, prejudgment interest, and post-judgment interest (Docket No. 350) is **GRANTED**, and all other motions are **DENIED**. Furthermore, this opinion sets forth the Court's findings of fact and conclusions of law regarding Microsoft's equitable defenses of laches and inequitable conduct.

BACKGROUND

The technology in this case focuses on a particular type of electronic documents. Generally, a "document" as manifested in a computer program has two distinct parts: the content (i.e. the text that the user has created in the document) and the structure (the encoding that allows the computer to recognize the meaning of the text). A type of structural information within an electronic document sometimes comes in the form of "metacodes." Standardized computer languages were developed that utilized metacodes to allow a computer to understand the meaning behind certain text that a user placed in a document. An early example of these languages is the Standard Generalized Markup Language ("SGML"). Later, a markup language was developed called the Extensible Markup Language ("XML"). Asserted U.S. Patent No. 5,787,449 (the "'449 patent") is entitled "Method and System for Manipulating the Architecture and the Content of a Document Separately from Each Other." The '449 patented invention created a reliable method of processing and storing content and metacodes separately and distinctly. The data structure primarily responsible for this separation is called a "metacode map." According to the patent, the "metacode map" allows a computer to manipulate the structure of a document without reference to the content.

Microsoft is the developer of popular word processing and editing software known as Word ("WORD"). Over the years, WORD has had many versions with increasing functionality. In 2003, Microsoft introduced a version of WORD with XML editing capabilities. This functionality

continued in the latest version of WORD, "Word 2007." On March 8, 2007 i4i LP[1] filed this action

alleging that Microsoft infringed the '449 patent. A jury trial commenced on May 11, 2009. At trial,

i4i contended that Microsoft's use of certain WORD 2003 and all of WORD 2007 products for

processing XML documents with custom XML elements infringed claims 14, 18, and 20 of the '449

patent.[2] i4i further argued that Microsoft's infringement of the patent was willful. Microsoft

claimed that its WORD products did not infringe the patent and that the patent was invalid.

Following a seven day trial, the jury returned a verdict finding the patent valid and infringed and

awarding i4i $200,000,000 in damages. The Court also conducted a bench trial regarding

Microsoft's additional equitable defenses of laches and inequitable conduct.

MICROSOFT'S MOTIONS FOR JMOL & NEW TRIAL

JMOL Standard

"The grant or denial of a motion for judgment as a matter of law is a procedural issue not

unique to patent law, reviewed under the law of the regional circuit in which the appeal from the

district court would usually lie." *Summit Tech. Inc. v. Nidek Co.*, 363 F.3d 1219, 1223 (Fed. Cir.

2004). In the Fifth Circuit, JMOL may not be granted unless "there is no legally sufficient

evidentiary basis for a reasonable jury to find as the jury did." *Hiltgen v. Sumrall*, 47 F.3d 695, 700

(5th Cir.1995) (internal quotation marks omitted). A court reviews all the evidence in the record and

must draw all reasonable inferences in favor of the nonmoving party, however, a court may not make

credibility determinations or weigh the evidence, as those are solely functions of the jury. *See*

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[1] i4i Inc. was later joined as a co-plaintiff. For ease of reference, both i4i entities will be referred to collectively as "i4i."

[2] All of the asserted claims at trial were method claims.

Reeves v. Sanderson Plumbing Prods., Inc., 530 U.S. 133, 150-51 (2000).

New Trial Standard

Under Rule 59(a) of the Federal Rules of Civil Procedure, a new trial can be granted to any party to a jury trial on any or all issues "for any reason for which new trials have heretofore been granted in actions at law in courts of the United States." "A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course." *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612-13 (5th Cir. 1985).

MICROSOFT'S JMOL & MNT - NO DIRECT INFRINGEMENT

Microsoft first moves for JMOL arguing that no reasonable juror could find that its accused WORD products infringed the '449 patent literally or by the doctrine of equivalents. Microsoft's motion presents three general arguments.

First, Microsoft argues that i4i presented no evidence that the accused WORD products created "a data structure" as required by the Court's construction of the claim term "metacode map." The Court construed and instructed the jury that "metacode map" and "map of metacodes" in the '449 patent meant "a data structure that contains a plurality of metacodes and their addresses of use corresponding to mapped content." Claim Construction Opinion, Docket No. 111 at 11. The Court further construed "mapped content" as meaning "the content of a document corresponding to a metacode map." *Id.*

During trial Dr. Rhyne, one of i4i's technical experts, explained that the meaning of "a data structure" was "a physical or logical relationship among data elements designed to support specific data manipulation functions." TT 5/12/09 p.m. at 154:14-16 (citing to the IEEE dictionary). Dr.

Rhyne also provided extensive testimony over the physical and logical interrelationships present in the various "data structures" comprising WORD's XML metacode and content mapping. *Id.* at 101:21-106:13; Plaintiffs' Illustrative 1. Furthermore, another of i4i's technical experts, Dr. Martin, established that various elements within the accused WORD products constituted a single data structure because of their physical and logical interrelationships. *See* TT 5/13/09 p.m. at 27:22-30:11.

Microsoft's principal argument is that the "data structure" that Dr. Rhyne found in WORD could be broken down into smaller logical "data structures." *See* TT 5/13/09 a.m. at 73:2-10. Microsoft argues that since there could be multiple "data structures" found within WORD's source code, the jury could not find a single "data structure" that "contained a plurality of metacodes and their addresses of use." However, Microsoft's technical expert conceded during trial that Microsoft had urged at the Court's claim construction hearing that a "data structure" was "a collection of pieces of data that are organized in a particular way . . . [and] can be stored in numerous different places." TT 5/19/09 a.m. at 23:17-24:25. Further, Microsoft's motion does not identify or request any alternative definition of "data structure." Microsoft even concedes that the multiple "data structures" that it identified during Dr. Rhyne's cross examination could be broken down even further. *Id.*

Though Microsoft makes broad statements suggesting that the "view of 'data structure' urged by Dr. Rhyne is inconsistent with the teachings of the patent," its argument reduces to a mere disagreement with the jury verdict. *See* Microsoft's Motion, Docket No. 348 at 12. The jury was called upon to decide whether WORD met the Court's definition of "metacode map." Without asserting that i4i exceeded the scope of the Court's definition, or suggesting that the Court's definition is erroneous, Microsoft now contends, after the verdict, that a "metacode map" requires

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the logically smallest subdivision of a data structure to contain "a plurality of metacodes and their addresses of use." "[L]itigants waive their right to present new claim construction disputes if they are raised for the first time after trial." *Conoco, Inc. v. Energy & Envtl. Int'l, L.C.*, 460 F.3d 1349, 1359 (Fed. Cir. 2006). As Microsoft has never suggested a definition of "metacode map" that limits a "data structure" to its logically smallest subdivision, its argument is waived. Furthermore, as recounted above, i4i presented legally sufficient evidence for the jury to conclude that the WORD products contained a "data structure" within the Court's definition of "metacode map."

In the alternative to literal infringement, i4i alleged that the accused WORD products met the "metacode map" claim limitation by the doctrine of equivalents. Essentially, i4i argued that even supposing the jury viewed the "data structure" within the WORD products to be several "data structures," the products still infringed by equivalence. Microsoft additionally argues that i4i failed to present legally sufficient evidence of infringement by the doctrine of equivalents because Dr. Rhyne's testimony was incredible and conclusory.[3] After a review of the record, i4i clearly presented sufficient testimony based on credible expert analysis that the accused WORD products contained a "metacode map" equivalent to that described in the asserted claims of the '449 patent. *See, e.g.*, 5/12/09 p.m. 161:7-11 (explaining the doctrine of equivalents standard), 161:1 (explaining that differences between multiple data structures and "a data structure" are insubstantial), 161:15-162:9 (explaining that several data structures with logical relationships among them are considered a single data structure to those skilled in the art). Thus, Microsoft's arguments regarding the "metacode map" claim limitation are rejected.

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[3] Of course, since i4i presented legally sufficient evidence of literal infringement, consistent with the Court's construction of "metacode map," the jury did not need to base its verdict on the doctrine of equivalents. However, the Court addresses this portion of Microsoft's JMOL motion for the sake of completeness.

Second, Microsoft contends that i4i presented legally insufficient evidence that the accused WORD products contained "metacodes" as required by the claims. The Court defined "metacode" as "an individual instruction which controls the interpretation of the content of the data." As background, it is undisputed that markup languages (such as XML) generally use "tags" to denote the use of a metacode. TT 5/13/09 a.m. at 44-48. These "tags" contain a code that describes the content (such as "memberid" to describe to the computer that the content between the tags is a "member ID number"). The "tags" also contain characters (such as "<" and ">") called delimiters. *Id.* at 47:8-11. These characters are generally used to indicate to the computer that content has ended and what follows is a description of the content. *Id.* For example, a "tag" along with content would generally take the form of "<memberid>12345</memberid>."

It is undisputed that the codes in the accused WORD products do not contain delimiters. Again, Microsoft argues, after the verdict, that the Court's claim construction requires that "metacodes" contain delimiters. This argument is a direct extension of the claim construction position that Microsoft raised during the Court's claim construction hearing and was expressly rejected. *Compare* Microsoft's Motion, Docket No. 348 at 14 (arguing that the definition of metacodes should include the phrase "i.e., it differentiates content") *with* Claim Construction Opinion, Docket No. 111 at 5 (expressly rejecting the addition of the phrase "i.e., it differentiates content" as unnecessarily limiting the claims). Despite this express rejection, Microsoft vigorously cross-examined Dr. Rhyne concerning the absence of delimiters in Microsoft's accused products. Again during closing arguments Microsoft essentially argued that the Court's construction required delimiters. *See* TT 5/13/09 a.m. at 44-48; TT 5/20/09 at 52-58. For the same reasons provided for in the Court's claim construction opinion, the definition of "metacode" is simply "an individual

instruction which controls the interpretation of content."

Given the Court's construction of "metacode," i4i clearly presented legally sufficient evidence to show that the "codes" contained within the accused WORD products met the claim limitation. Dr. Rhyne explained, consistent with the Court's definition of "metacodes," that a "tag" was not necessarily a "metacode" as defined in the '449 patent. *See, e.g.*, TT 5/13/09 a.m. at 46:2-6, 47:2-4. He further explained why delimiters were not necessarily included within the Court's definition and why the accused WORD products fit within the claim limitation. *See, e.g.*, TT 5/13/09 a.m. at 47:4-7; TT 5/12/09 p.m. at 149:8-11. Furthermore, any argument that "metacode" should have been defined to expressly include delimiters has never been specifically raised with the Court and is therefore waived.[4] As a result, Microsoft's arguments regarding the "metacode" claim limitation are rejected.

Finally, Microsoft argues that a new trial is warranted because the Court incorrectly construed several terms in its claim construction opinion including "distinct map storage means," "mapped content storage means," and "mapped content storage." The Court has thoroughly explained the rationale behind its constructions of those terms and has previously rejected Microsoft's proposed definitions. *See* Claim Construction Opinion, Docket No. 111. Microsoft's arguments are again rejected for the reasons expressed in the Court's claim construction opinion.

In accordance with the aforementioned reasoning, Microsoft's motion for JMOL and new trial regarding direct infringement and infringement by the doctrine of equivalents of claims 14, 18, and 20 of the '449 patent is denied.

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[4] In fact, regarding this very issue, Microsoft was offered the opportunity to revisit the Court's claim construction of "metacodes" and declined the invitation. TT 5/18/09 a.m. at 27:13-15 ("We assured the Court that we would not be rearguing claim construction and that is exactly what we are not doing.").

MICROSOFT'S JMOL & MNT – NO INDIRECT INFRINGEMENT

Microsoft next moves for JMOL and a new trial with regard to i4i's claims of contributory and induced infringement. Infringement is a question of fact that is reviewed for substantial evidence when tried to a jury. *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1332 (Fed. Cir. 2008). A cause of action for contributory infringement flows from 35 U.S.C. § 271(c). That section provides:

> Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

35 U.S.C. § 271(c).

Induced infringement is a separate cause of action from contributory infringement. "In order to prevail on an inducement claim, the patentee must establish first that there has been direct infringement, and second that the alleged infringer knowingly induced infringement and possessed specific intent to encourage another's infringement." *ACCO Brands, Inc. v. ABA Locks Mfr. Co.*, 501 F.3d 1307, 1312 (Fed. Cir. 2007) (internal quotation marks omitted). "[I]nducement requires evidence of culpable conduct, directed to encouraging another's infringement, not merely that the inducer had knowledge of the direct infringer's activities." *Id.* at 1306. Furthermore, "[t]he plaintiff has the burden of showing that the alleged infringer's actions induced infringing acts and that he knew or should have known his actions would induce actual infringements." *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293 (Fed. Cir. 2006) (quoting *Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 553 (Fed. Cir. 1990)).

Both forms of indirect infringement require the plaintiff to prove corresponding acts of direct infringement. *See DSU Med. Corp.*, 471 F.3d at 1303. Importantly however, a patentee may prove both indirect infringement and the corresponding direct infringement by circumstantial evidence. *See Liquid Dynamics Corp. v. Vaughan Co.*, 449 F.3d 1209, 1219 (Fed. Cir. 2006). "There is no requirement that direct evidence be introduced, nor is a jury's preference for circumstantial evidence over direct evidence unreasonable per se." *Id.* Moreover, "[t]he drawing of inferences, particularly in respect of an intent-implicating question . . . is peculiarly within the province of the fact finder that observed the witnesses." *Rolls-Royce Ltd. v. GTE Valeron Corp.*, 800 F.2d 1101, 1110 (Fed. Cir.1 986); *see also Fuji Photo Film Co. v. Jazz Photo Corp.*, 394 F.3d 1368, 1378 (Fed. Cir. 2005) (declining to disturb jury's verdict because intent to induce infringement "is a factual determination particularly within the province of the trier of fact").

Regarding contributory infringement, Microsoft presents three arguments wherein it asserts that i4i failed to present sufficient evidence on certain elements of contributory infringement. First, it asserts that i4i failed to produce legally sufficient evidence that Microsoft knew that WORD was both "patented and infringing." *See Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 488 (1964). The Federal Circuit has commented that the required showing of mental state for indirect infringement is "minimal." *See DSU Med. Corp.*, 471 F.3d at 1303. Microsoft's argument seems to imply that i4i was required to show direct evidence that its infringing product was both patented and infringing. However, as noted above, legally sufficient evidence can be composed of either direct or circumstantial evidence. i4i presented evidence that Microsoft was provided with an explanation of i4i's patented technology along with the patent number starting in April 2001 and continuing through 2003. *See, e.g.*, TT 5/12/09 a.m. at 79:20-81:22, 79:5-9, 82:4-11,138:9-140:22;

PX 13; TT 5/15/09 p.m. at 5:16-8:1; TT 5/12/09 a.m. at 8:7-9:22; PX 19; PX 39; PX 16; PX 23; TT

5/13/09 a.m. at 16:5-18:18; PX 49. i4i even presented an internal Microsoft email from January of

2003 containing i4i's product name, the patent number, and a statement from a Microsoft employee

that i4i's technology would be made "obsolete" by the accused WORD product (which admittedly

added XML functionality to the previous version of Microsoft's WORD product). PX 49. Viewing

the evidence in the light most favorable to the jury and drawing all inferences in favor of i4i, there

is legally sufficient evidence to support the conclusion that Microsoft knew that its WORD products

containing XML functionality would infringe the '449 patent if used by its customers.

Second, Microsoft contends that i4i failed to present legally sufficient evidence that WORD's

XML feature[5] did not have a substantial non-infringing use. At trial, the parties' experts agreed that

the XML feature in the accused WORD products could be used in three non-infringing ways: first,

opening a file containing custom XML elements in a ".doc" format (the "binary format" use);

second, opening a ".xml" file containing custom XML elements but no content (the "no content"

use); finally, creating a blank document, associating a schema definition file, adding custom XML

elements using the XML structure pane of WORD's graphical user interface ("GUI"), adding content

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[5] A portion of Microsoft's briefing is devoted to an analysis of *Ricoh Co., Ltd. v. Quanta Computer Inc.*, 550 F.3d 1325 (Fed. Cir. 2008) where the Federal Circuit addressed the issue of whether the "substantial non-infringing use" analysis focused on an entire product or an accused separable feature. The court concluded that an accused infringer "should not be permitted to escape liability as a contributory infringer merely by embedding [the infringing product] in a larger product with some additional, separable feature . . . ." *Id.* at 1337. Microsoft attempts to distinguish *Ricoh* by arguing that products must be "physically separable," as opposed to software containing many separate features as in the case of WORD, for the analysis to apply. However, despite Microsoft's arguments, the holding in *Ricoh* is highly relevant to the present case considering that hundreds of separate features in WORD existed before the infringing XML feature was added and i4i presented evidence of stand alone XML editors available in the marketplace. Thus, i4i has sufficiently made any threshold showing of "separability" that may be required by the *Ricoh* decision and "substantial non-infringing use" will therefore be analyzed within the context of the accused feature and not the product as a whole. Indeed, Microsoft's briefing seems to concede this conclusion considering that the majority of its brief focuses on evidence of "substantial non-infringing uses" within WORD's XML feature. *See* Microsoft's Response, Docket No. 347 at 14-17.

using WORD's GUI, then saving the file in the ".xml," ".doc," ".docx," ".rtf," ".html," or ".docm" file formats without reopening the document (the "mere creation" use). *See* TT 5/13/09 a.m. at 29, 117-123. The parties vigorously disputed whether any of these uses was "a substantial non-infringing use." Microsoft argues that i4i's evidence only amounts to an explanation of why the accused uses were "substantial" and that i4i presented no evidence that the uses mentioned above are not "substantial non-infringing uses."

A "substantial" use of an accused feature is one that is not occasional, farfetched, impractical, experimental, or hypothetical. *See, e.g., Hoffmann-La Roche, Inc. v. Promega Corp.*, 33 U.S.P.Q. 2d 1641, 1648 (N.D. Cal.1994) ("Whether a use is 'substantial' or not depends on how likely and often the use will occur. Thus, occasional aberrant use of a product does not make that use 'substantial.' Similarly, inefficient and uneconomical uses are less likely to be deemed 'substantial.'"). i4i's infringement expert, Dr. Rhyne, testified that the "binary format" use involves saving an XML document in a proprietary Microsoft format as opposed to a non-proprietary format, such as ".xml," readable by other applications. TT 5/13/09 a.m. at 30:24-31:3, 140:6-15. In Dr. Rhyne's opinion, the essential advantages of XML (i.e. the ability of other applications to search documents identifying the "meaning" behind content) were subverted by saving the documents in a format readable only by Microsoft products. *See id.*; TT 5/13/09 a.m. at 28:11-24. Thus, he opined, that such a use was impractical given the purpose of custom XML.

Likewise, Dr. Rhyne explained that the "no content" use involved creating a form using custom XML tags, but never using that form by adding content. TT 5/13/09 a.m. at 140:21-141:8. He testified that such a use would not be substantial considering that XML documents (especially forms) are designed to enable a user to add content to the document. *See id.* at 141:4-9, 29:4-9, 34:4-

6, 121:9-11. Finally, Dr. Rhyne opined that the mere creation use involved creating an XML document and never reopening it. *Id.* at 33:16-21. In his opinion, a WORD document is designed to be opened and saved repeatedly. *Id.* at 33:22-34:1. Thus, a use where a document is merely created and never reopened was insubstantial. *Id.* at 33:16-21.

Dr. Rhyne is not required to opine over the number of people actually using WORD in non-infringing ways in order to prove "insubstantiality." Rather, Dr. Rhyne's testimony focusing on the impracticality of using custom XML given the purpose of the invention is both relevant and probative to "substantiality." Thus, while Microsoft points to contradictory testimony by its expert explaining that these uses are "substantial," the jury was presented with legally sufficient evidence to conclude that Microsoft's proposed non-infringing uses were insubstantial.

Finally, Microsoft argues that no reasonable juror could find that Microsoft "sold" or "offered for sale" any product within the scope of § 271(c). Microsoft's essentially legal argument is that no software could form the basis of contributory infringement because i4i only asserted "process" claims during trial. However, Microsoft failed to raise this argument before the case was submitted to the jury. None of Microsoft's other objections or requests prior to submission of this case to the jury addressed the issue of whether i4i was required prove the sale of something tangible used in the infringing processes. Furthermore, Microsoft did not object to the Court's jury instructions on these grounds or request a particular instruction addressing this very specific issue. *See* Joint Proposed Instructions, Docket No. 320-2 at 30-32. As a result, Microsoft's JMOL on this issue is waived. *See Flowers v. S. Reg'l Physician Servs. Inc.*, 247 F.3d 229, 238 (5th Cir. 2001) ("If a party fails to move for judgment as a matter of law under Federal Rule of Civil Procedure 50(a) on an issue at the conclusion of all the evidence, that party waives both its right to file a renewed post-verdict Rule

50(b) motion and also its right to challenge the sufficiency of the evidence on that issue on appeal.").

Regarding i4i's claims of induced infringement, Microsoft again asserts that i4i presented insufficient evidence to show that Microsoft had the specific intent to induce infringement. As was the case for contributory infringement, circumstantial evidence that Microsoft knew of the patent number, in connection with an in-depth knowledge of i4i's products, along with statements that WORD would render i4i's products "obsolete," provides a legally sufficient basis for the jury to conclude that the intent requirement for inducement was satisfied. Additionally, Microsoft asserts that a survey conducted by one of i4i's damages experts (the "Wecker survey") was an insufficient evidentiary basis for proving the "direct infringement" elements of the indirect infringement causes of action. As explained elsewhere in this opinion, the Wecker survey passes the legally required threshold level of reliability and was qualified to be relied upon by the jury.

Microsoft also moves for a new trial based on alleged errors in the jury instructions for both contributory and induced infringement. Microsoft argues that the Court's instruction that Microsoft could be held liable for induced infringement if it "intended to cause acts that constitute infringement" was erroneous. Microsoft's proposed instruction required a specific intent to cause infringement. However, the very next sentence in the Court's charge instructs the jury that they "must find specifically that the inducer intended to cause the acts that constitute the direct infringement and must have known or should have known that its action would cause the direct infringement." Court's Charge, Docket No. 323 at 12. The instruction specifically tracked the language in *DSU Medical Corp. v. JMS Company* and properly instructed the jury regarding the mental state requirements of inducement. 471 F.3d 1293 (Fed. Cir. 2006). Microsoft's argument is overruled.

Microsoft finally argues that the Court improperly instructed the jury regarding contributory infringement. It argues that the Court improperly instructed the jury that Microsoft could be found liable for contributory infringement if the jury found that it sold "a material component for use in practicing the patented method." Court's Charge, Docket No. 323 at 13. Microsoft submitted an instruction that required a "material or apparatus" to be sold, rather than a software component. This argument has been foreclosed by the Federal Circuit's *Ricoh* decision. 550 F.3d at 1340 (reversing district court's granting of summary judgment because there was a "material issue of fact [over] whether [the defendant's] optical disc drives contain hardware or software components that have no substantial noninfringing use other than to practice [the plaintiff's] claimed methods"). The Court's instruction was correct.

Accordingly, as all of Microsoft's arguments have been rejected, its motion is denied.

MICROSOFT'S JMOL & MNT - NO WILLFULNESS

Microsoft next moves for JMOL on the jury finding that it willfully infringed the '978 patent. To prevail on a charge of willful infringement, the patentee must show the accused infringer acted with objective recklessness. *In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007). First, the patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions infringed a valid patent. *Id.* The accused infringer's state of mind is irrelevant to this objective inquiry. *Id.* If the patentee meets this threshold objective standard, the patentee must further demonstrate that the accused infringer knew or should have known of this objectively high risk. *Id.* Whether infringement is willful is a question of fact and reviewed for substantial evidence. *Metabolite Labs., Inc. v. Labs. Corp. of Am. Holdings*, 370 F.3d 1354, 1359 (Fed. Cir. 2004).

Initially, Microsoft's arguments are premised on an overly broad reading of *Seagate*. It argues that the objective prong of the willfulness analysis is met if and only if a defendant failed to present valid defenses during the infringement proceedings. For instance, Microsoft asserts that the very fact that pretrial summary judgment was granted on certain asserted claims of the '449 patent, i4i voluntarily dismissed other claims, and Microsoft asserted defenses at trial (including its equitable defenses) bars it entirely from willfulness liability.

In support of this expansive view of the "objective" prong of willfulness, Microsoft heavily relies on *Black & Decker, Inc. v. Robert Bosch Tool Corp.*, 260 Fed. Appx. 284 (Fed. Cir. 2008). First and foremost, the issue of whether all defenses presented throughout an infringement proceeding could foreclose a willfulness finding as a matter of law was not before the court in *Black & Decker*. *See id.* at 291 ("In light of our disposition of the claim construction issue on appeal, and consequent vacating of the infringement verdict, the issue of willful infringement becomes moot."). Second, the case is distinguishable. There, the jury found several asserted claims invalid and the Federal Circuit reversed the infringement verdict on the remaining claims. *See id.* Here, the sum of the jury's findings along with the size of the verdict indicate that Microsoft's arguments regarding the asserted claims at trial were rejected wholesale.

Finally, and most disturbingly, Microsoft's arguments invite the Court to adopt a view of willful infringement that would allow an accused infringer to stay willfully ignorant despite a high likelihood that its actions infringe a valid patent. Such a view would allow an infringer to escape a finding of willfulness regardless of its conduct at the time the infringement began as long as it presented many defenses after a formal action was filed. Such a view is inconsistent with both *Seagate* and generally accepted legal principals regarding "objective" legal analysis.

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Traditionally and overwhelmingly, "objective" tests focus on the facts and circumstances available to an actor at the time that the action under scrutiny was taken. *See e.g.*, *Maryland v. Macon*, 472 U.S. 463, 470 (1985) ("Whether a Fourth Amendment violation has occurred "turns on an objective assessment of the officer's actions in light of the facts and circumstances confronting him at the time . . . ."); *Carmichael v. United States*, 298 F.3d 1367, 1372 (Fed. Cir. 2002) ("In applying this test, duress or coercion is measured by an objective evaluation of all the facts and circumstances."); *Grawey v. Drury*, 567 F.3d 302, 310 (6th Cir. 2009) ("In determining whether an excessive force constitutional violation occurred, we must look at the objective reasonableness of the defendant's conduct, which depends on the facts and circumstances of each case viewed from the perspective of a reasonable officer on the scene and not with 20/20 hindsight.").

The Federal Circuit's discussion in *Seagate* bolsters this view of "objective" analysis. There, the court distinguished a "reckless" standard for willfulness with one that would require only "negligence." *See In re Seagate*, 497 F.3d at 1370. To that end, the Federal Circuit overruled the standard announced in *Underwater Devices Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1389-90 (Fed. Cir. 1983), requiring a willfulness finding when an accused infringer failed to investigate a patent owner's rights prior to acting. The new "recklessness" standard, repeated above, adopted by the *Seagate* court was taken from a general accepted meaning of the term in civil law. *See In re Seagate*, 497 F.3d at 1370. Thus, the "objective" prong of the *Seagate* standard focuses on an "objective" view of the facts and circumstances surrounding an accused infringer at the time that it acts.

As a consequence, the number of creative defenses that Microsoft is able to muster in an infringement action after years of litigation and substantial discovery is irrelevant to the objective

prong of the *Seagate* analysis. Rather, the correct analysis focuses on whether, given the facts and circumstances prior to Microsoft's infringing actions, a reasonable person would have appreciated a high likelihood that acting would infringe a valid patent. *See id.*; Restatement (Second) of Torts § 500, comment b (1965) ("Conduct cannot be in reckless disregard of the safety of others unless the act or omission is itself intended, notwithstanding that the actor *knows of facts* which would lead any reasonable man to realize the extreme risk to which it subjects the safety of others.") (emphasis added). The subjective prong of the analysis then focuses on whether Microsoft knew or should have known of that likelihood.

Given these principles, Microsoft's arguments must be rejected. First, Microsoft argues that the facts that 1) this Court granted summary judgment invalidating certain claims of the '449 patent; 2) it asserted defenses to the remaining claims of the '449 patent; and 3) i4i voluntarily dismissed certain accused products before trial, entitles it to JMOL regarding willfulness. As Microsoft does not argue (and did not argue to the jury) that any of these "defenses" would have been apparent and considered by a reasonable person in Microsoft's position prior to its infringing activity, these arguments are irrelevant and inappropriate. Furthermore, the pretrial summary judgment and i4i's voluntary dismissal of accused products are irrelevant to the remaining claims that the jury found were valid and the remaining products that the jury found were willfully infringing. Additionally, Microsoft's remaining defenses of invalidity were rejected by the jury and i4i presented sufficient evidence to support its infringement and validity positions.

Second, Microsoft argues that i4i presented insufficient evidence under the subjective prong of *Seagate*. Microsoft effectively argues that anything short of a "cease-and-desist" letter would be ineffective to put it on notice of an objective risk of infringement. In fact, i4i presented sufficient

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evidence, both direct and circumstantial, that Microsoft was aware of the likelihood that its activities were infringing. *See, e.g.*, 5/12/09 a.m. at 76-80, 130-40; PX 19; PX 20; PX 13; PX 39; PX 103; PX 49; PX 100.

Finally, Microsoft asserts three bases for which a new trial should be granted. First, it argues that the Court erred in rejecting a "curative instruction" regarding wilfulness. The instruction that Microsoft proposed was that "[n]otice of another's ownership of a patent does not give rise to a duty to investigate that patent." Docket No. 320-2 at p. 37. Microsoft analogizes the Court's rejection of this instruction with the improper instruction given in *Voda v. Cordis Corp.*, 536 F.3d 1311, 1327-28 (Fed. Cir. 2008). There, the Federal Circuit rejected an argument that the district court's instruction applying an affirmative duty to investigate to the willfulness analysis was "harmless." *Id.* Here, no affirmative duty of care was insinuated in the Court's willfulness instruction. The instruction given tracked the language of *Seagate*, and Microsoft does not point to any language in the Court's instruction that was improper. Microsoft's proposed instruction was cumulative of the specific language defining the willfulness standard in *Seagate* and was properly rejected.

Microsoft also argues it is entitled to a new trial because the Court improperly excluded evidence relevant only to its equitable defenses from the jury. The Court took no such action. In ruling on Microsoft's motion in limine regarding this issue, the Court instructed Microsoft that the relevance of its evidence on equitable issues would be determined on a case-by-case basis. Pretrial Hearing Transcript 5/7/09 at 16-17. In addition, as i4i points out, Microsoft actually presented evidence regarding its equitable defenses during trial. *See, e.g.*, TT 5/15/09 p.m. at 39, 43-44; 5/18/09 p.m. at 59-74. Microsoft never sought to introduce other evidence regarding its equitable defenses during trial and no offer of proof in this regard was ever made. As the Court did not

exclude any of Microsoft's evidence, any objection to its purported exclusion has been waived.

Finally, Microsoft argues that it is entitled to a new trial because the Court excluded evidence of reexamination of the '449 patent. Microsoft's arguments are meritless. As explained elsewhere in this opinion, the simple fact that a reexamination decision has been made by the PTO is not evidence probative of any element regarding any claim of invalidity. *Procter & Gamble Co. v. Kraft Foods Global, Inc.*, 549 F.3d 842, 848 (Fed. Cir. 2008). Even if it were, the evidence was substantially more prejudicial than probative. FED. R. EVID. 403.

Accordingly, as all of Microsoft's arguments have been rejected, its motion is denied.

MICROSOFT'S JMOLS & MNTS - OBVIOUSNESS AND ANTICIPATION

In three separate motions, Microsoft argues that it is entitled to JMOL or a new trial on the issues of anticipation and obviousness. The motions involve six instances of prior art, and Microsoft forwards various arguments concerning how the prior art either anticipates the '449 patent or renders the invention obvious. Specifically, Microsoft moves for 1) JMOL arguing that the Rita SGML editor ("Rita") in combination with U.S. Patent No. 5,587,902 ("Kugimiya") renders the '449 patent obvious; 2) JMOL arguing that U.S. Patent No. 6,101,512 ("DeRose") in combination with Kugimiya renders the '449 patent obvious; 3) a new trial arguing that Rita and DeRose anticipate the '449 patent or render it obvious when combined with Kugimiya; 4) a new trial arguing that Microsoft's Macword 5 and WORD 6 products both anticipate the '449 patent; 5) JMOL or a new trial arguing that Semi's S^4 ("S4") product anticipates the '449 patent or renders it obvious in combination with Kugimiya; 6) a new trial on the basis that the Court improperly instructed the jury with regard to Microsoft's burden of proof on its invalidity defenses; and 7) a new trial on the basis that the Court improperly excluded evidence that the '449 patent was under reexamination by the

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Patent and Trademark Office ("PTO").

The invalidity arguments regarding the six prior art references are either based on the premise that there is no genuine issue of material fact regarding invalidity (in the case of the JMOL motions) or that the verdict is against the great weight of the evidence (in the case of the motions for new trial). Microsoft never moved for summary judgment on any of these invalidity arguments. Additionally, Microsoft only moved for a pre-verdict JMOL regarding the S4 reference. TT 5/19/09 p.m. at 6-8 ("The second motion is for invalidity based on the SEMI S4 system. We believe the evidence presented establishes conclusively that it was sold more than a year before and that it embodied the patented invention."). FED. R. CIV. P. 50(b); *Duro-Last, Inc. v. Custom Seal, Inc.*, 321 F.3d 1098, 1108 (Fed. Cir. 2003). Microsoft's trial arguments regarding S4 rested on a very specific theory of invalidity, and its motion for JMOL mentioned only anticipation. While, Microsoft's JMOL as to S4 was sufficient to preserve its right to a post-verdict JMOL regarding that specific prior art reference, it was insufficient to put either this Court or i4i on notice that Microsoft intended to challenge the sufficiency of the evidence with regard to its other theories of invalidity. *See id.* at 1107 (noting that pre-verdict JMOL regarding a specific on-sale bar theory of invalidity was insufficient to preserve a post-verdict JMOL regarding obviousness because various theories of anticipation and obviousness require different elements of proof). Consequentially, Microsoft never challenged the sufficiency of i4i's evidence in opposition to its anticipation and obviousness defenses based on Rita, DeRose, or Kugimiya (including the combination of S4 and Kugimiya) before the verdict. It has waived its right to a post-verdict JMOL on those references.

However, regarding S4, Microsoft preserved its right and does move for post verdict JMOL on the issue of anticipation. In order to show that it is entitled to JMOL on its affirmative defense

of invalidity Microsoft is required to prove the essential elements of that defense to a virtual certainty. *Bank Of La. v. Aetna U.S. Healthcare Inc.*, 468 F.3d 237, 241 (5th Cir. 2006) ("For a defendant to obtain summary judgment on an affirmative defense, it must establish beyond dispute all of the defense's essential elements."). During trial, Microsoft sought to prove that S4 violated the on-sale bar of 35 U.S.C. § 102(b). In order to prove anticipation by the on-sale bar, a defendant must show by clear and convincing evidence that (1) the invention was the subject of a commercial sale or offer for sale and (2) the invention was "ready for patenting" at the time of the offer or sale. *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 67 (1998). The defendant must further show that both prongs occured before the critical date.

It is undisputed that the inventors of the '449 patent, Mr. Vulpe and Mr. Owens, sold the S4 system in the United States prior to the June 2, 1993 critical date. The main issue of contention during trial was whether the S4 system practiced the claims of the '449 patent. While Microsoft did present evidence on this issue, i4i also presented evidence either directly contradicting or discrediting Microsoft's evidence.

Mr. Vulpe and Mr. Owens both testified that the invention embodied in the '449 patent was only conceived of slightly before the patent application was filed and well after the critical date. TT 5/11/09 p.m. at 111:10-115-12; TT 5/15/09 a.m. at 118:7-120:15; *see also* PX 594; PX 595; PX 627. Furthermore, the inventors testified that the S4 system that was sold prior to the critical date never implemented the invention contained in the patent. TT 5/11/09 p.m. at 109-110, 152-54; TT 5/15/09 p.m. at 87:23-88:5. In specifically explaining how the S4 system operated, Mr. Owens testified that S4 did not to contain a "metacode map" as required by the '449 patented claims. TT 5/11/09 p.m. at 152:14-153:15. The other co-inventor, Mr. Vulpe, testified similarly. TT 5/15/09 at 90:20-22.

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Finally, i4i presented expert testimony, through Dr. Rhyne, that it was impossible to directly compare S4's operation with the claims of the '449 patent because S4's source code is unavailable. TT 5/19/09 p.m. at 51-54. Dr. Rhyne further attacked the opinion of Microsoft's technical expert, Mr. Gray, because Mr. Gray rendered an opinion regarding S4's anticipatory ability without reviewing the program's source code. *Id.*

Microsoft seems to suggest that it is i4i's burden to present corroborating documentation for nearly every statement made by Mr. Vulpe and Mr. Owens. Simply because Microsoft chooses to base its anticipation defense on prior art created by the inventors of the patent-in-suit does not shift a burden onto those inventors to prove both the conception date of the patented invention and to disprove that the prior art anticipated. *Cf. Shu-Hui Chen v. Bouchard*, 347 F.3d 1299, 1309 (Fed. Cir. 2003) ("It is well established *that when a party seeks to prove conception* via the oral testimony of a putative inventor, the party must proffer evidence corroborating that testimony.") (emphasis added). The burden remained on Microsoft to prove invalidity by clear and convincing evidence. i4i's expert testimony attacking Mr. Gray's opinion as to anticipation and Mr. Owen's testimony that S4 did not practice the invention embodied in the '449 patent was legally sufficient to rebut Microsoft's case of anticipation. The remainder of Microsoft's arguments urge that the testimony of Mr. Vulpe and Mr. Owens is incredible and "self-serving." These arguments are improper considering that the Court "may not make credibility determinations or weigh the evidence" when deciding a motion for JMOL. *Thompson v. Connick*, 553 F.3d 836, 851 (5th Cir. 2008).

Furthermore, even if the Court were to weigh the evidence, Dr. Rhyne's testimony that no one could assess whether S4 met the claims of the '449 patent without the relevant source code was compelling. Mr. Gray's testimony regarding S4's ability to meet the '449 claim limitations failed

to approach the specificity or detail that was applied by the parties to the infringing WORD products or the other prior art. *Compare* TT 5/18/09 p.m. at 163:4-173:13 *with* TT 5/18/09 p.m. at 91:20-92:16. In sum, there was a sufficient evidentiary basis for the jury to disbelieve that S4 embodied the '449 patented invention. As this was an essential element of Microsoft's claim of anticipation, there was legally sufficient evidence for the jury to find that S4 did not anticipate the '449 patent. Additionally, because the jury's verdict is also not against the great weight of the evidence, Microsoft's motion for new trial regarding S4's anticipation is denied.

Further, with regard to anticipatory prior art under § 102, Microsoft argued to the jury that its own products, MacWord 5 and WORD 6, anticipated the claims of the '449 patent. Microsoft now argues that the jury's verdict necessarily rejecting this argument was against the great weight of the evidence. It is undisputed that Macword 5 and WORD 6 were both sold prior to the critical date. The parties' dispute centered around whether a feature generally referred to as "bookmarks" and its underlying data structure within Macword 5 and WORD 6 constituted "metacodes" and a "metacode map" as defined by the Court.

As mentioned above, the Court defined "metacode" as "an individual instruction which controls the interpretation of the content of the data" and "metacode map" as "a data structure that contains a plurality of metacodes and their addresses of use corresponding to a mapped content." Microsoft's technical expert, Mr. Gray, testified that the bookmark was both a metacode and that the data structure supporting a bookmark constituted a "metacode map" as required by the claims of the '449 patent. TT 5/18/09 p.m. at 124-5, 127-30, 132-36; TT 5/18/09 a.m. at 111-12. In substance, Microsoft argues that Mr. Gray's testimony shifted the burden to i4i to prove that the prior art WORD products and the accused products were materially different.

Even if this were the case, i4i presented evidence that the vast majority of "data structures" contained within the infringing products are not contained within Macword 5 and WORD 6. TT 5/18/09 a.m. at 109:1-110:6; Defendant's Illustrative 4. Dr. Rhyne also explained how the lack of these additional data structures in the prior art versions of WORD failed to create "metacodes" or "metacode maps" as required by the claims of the '449 patent. TT 5/19/09 p.m. at 49:5-51:1. In fact, i4i introduced evidence that Microsoft's own computer dictionary defined "bookmarks" as "a marker inserted in a specific point in a document to which the user may wish to return for later reference." *Id.*; PX 526. This definition is far from the Court's claim construction definition of "metacodes." i4i further presented circumstantial evidence that "bookmarks" did not support the functionality defined by the '449 patent. Microsoft's WORD 2003 Development Lead, Robert Little, testified that "bookmarks" were considered by the development team as a structure for implementing XML but concluded that "the bookmark approach would be too fragile." *See* TT 5/18/09 p.m. at 27:20-28:2. Furthermore, i4i presented a host of evidence showing that the functionality embodied within the accused WORD products was not contained in any prior versions of WORD. *See, e.g.*, PX 270 at MS-i4i00299587 ("I don't think we have any ideas how to do [custom XML] for Word"); PX 44 at MS-i4i00299478 (identifying custom XML within Word 2003 as a "new technology"); PX 45 at MS-i4i00299583 ("[a]n XML authoring tool would be a logical new product for Microsoft. If Word was to morph in an XML direction, that would refresh that product and provide one more reason for users to upgrade.").

The jury was free to disbelieve Mr. Gray's expert testimony, and there existed contrary testimony by Dr. Rhyne for the jury to conclude that MacWord 5 and WORD 6 did not meet the "metacode" and "metacode map" limitations of the '449 patent. In sum, the jury's finding was not

without support and certainly not against the great weight of the evidence.

Microsoft further moves for a new trial arguing that the jury's finding that Rita and DeRose did not anticipate the claims of the '449 patent was against the great weight of the evidence. Rita is a software application enabling users to create and edit documents using "tags" such as SGML documents. DX 2075. The DeRose patent discloses a system for generating, analyzing, and navigating electronic documents containing markup, such as SGML. DX 2179.

With regard to Rita, i4i contested that the software application was sold before the critical date. Microsoft produced evidence that a single sale of a computer program called "Rita SGML editor" was sold in 1989. *See* DX 2080. Microsoft also presented evidence that there existed several publications discussing the operation of a computer called the "Rita SGML editor." *See* DX 2075, DX 2076, DX 2077, DX 2078, DX 2079. In fact, Mr. Gray's testimony regarding Rita's anticipation was based on an amalgam of the Rita source code and the papers written about the Rita program. *See* TT 5/18/09 p.m. at 143:17-24 (explaining Mr. Gray based his opinion on the source code and the publications). Dr. Rhyne testified however that Microsoft's invalidity analysis was based upon a later version of the Rita program than the one sold in 1989. *See* TT 5/19/09 p.m. at 46:6-16. Further, the Rita source code itself shows dates where the code was modified after the single sale occurred. *Id.*; PX 298. Dr. Rhyne concluded that, based upon the evidence, it was impossible to know the characteristics of the Rita program as sold in 1989 or which particular version of Rita was described in the publications. TT 5/19/09 p.m. at 46:11-14. In order for a claim to be anticipated, every limitation must be found in a single prior art reference. *Planet Bingo, LLC v. GameTech Int'l, Inc.*, 472 F.3d 1338, 1346 (Fed. Cir. 2006). i4i presented enough evidence to cast doubt on whether any single "Rita" prior art reference contained each and every claim limitation.

Furthermore, i4i presented evidence (assuming the amalgam of Rita references were a single prior art reference) that neither Rita or DeRose taught or practiced the "mapped content," "metacode map," or "address of use" limitations of the '449 claims. The issue properly submitted to the jury was whether a data structure known as a "tree structure" disclosed in Rita and DeRose could meet the Court's definitions of "mapped content," "metacode map," or "address of use." i4i presented voluminous testimony regarding this issue. *See, e.g.*, TT 5/19/09 p.m. 35:2-5, 35-47. Microsoft presented contrary evidence. TT 5/18/09 p.m. at 144-160. Ultimately, there was conflicting testimony regarding this precise issue and the determination fell upon the credibility of the parties' expert analysis. The jury's determination that Rita and DeRose did not meet all the limitations of claims 14, 18, and 20 of the '449 patent was not against the great weight of the evidence.

Microsoft further moves for a new trial because the great weight of the evidence supports its argument that the Rita, DeRose, and S4 references render the '449 patent obvious when combined with Kugimiya. Obviousness is ultimately a question of law, based on underlying factual determinations. *Altana Pharma AG v. Teva Pharms. USA, Inc.*, 566 F.3d 999, 1007 (Fed. Cir. 2009). "The factual determinations that form the basis of the legal conclusion of obviousness include (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) evidence of secondary factors, known as objective indicia of non-obviousness." *Id.* Secondary considerations include commercial success, long felt but unresolved needs, and failure of others. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). "Evidence of secondary considerations . . . are but a part of the 'totality of the evidence' that is used to reach the ultimate conclusion of obviousness." *Richardson-Vicks Inc. v. Upjohn Co.*, 122 F.3d 1476, 1483 (Fed. Cir. 1997). In some cases, such evidence is dispositive. *Id.*

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Microsoft's obviousness arguments regarding Rita, DeRose, and S4 are the same. It argues, alternatively to its anticipation arguments, that each of those references practice all the limitations of the asserted '449 claims except the "metacode maps" and "mapped content" limitations. It then asserts that Kugimiya contains the missing limitations.

There was directly contradictory evidence on whether Kugimiya was in a different field, addressed a different problem, had a different configuration, or yielded different results from Rita, DeRose, or S4. *See* TT 5/19/09 at 60-61. In essence, Dr. Rhyne's testimony regarding Kugimiya was that it was an invention directed at an entirely unrelated field and subject matter (translation) than Rita, DeRose, or S4 (document editing processing). *Id*. Microsoft cites evidence that it refers to as "conclusive" concessions by i4i that Kugimiya meets the "metacode map" limitation. *See* DX 2002 at 123 (failing to argue, in the prosecution history of the '449 patent, that Kugimiya lacked a metacode map); TT 5/15/09 p.m. at 66:3-67:15 (inventor conceding that he did not invent a metacode map). Even if the Court were to accept the dubious conclusion that this evidence "conclusively" proves that Kugimiya teaches a "metacode map," the obviousness analysis requires more than proof that a single claim limitation is met by a prior art reference.

As discussed above, i4i also presented abundant evidence contesting whether Rita and S4 were even complete prior art references and also contesting whether DeRose contained the "mapped content," "metacode map," and "address of use" limitations of the '449 patented claims. Also, in addition to the evidence combating whether Kugimiya, Rita, DeRose, and S4 were in the same field of innovation, i4i presented abundant evidence of secondary considerations of non-obviousness. i4i presented evidence that Microsoft both noted the absence of i4i's patented technology in its previous WORD products as well as praised the utility of i4i's products. *See, e.g.,* PX 49; PX 271 at

i4i0003274; PX 103 at MS-i4i00717147. i4i was presented an award from the PTO for its commercial embodiment of the '449 patent. Plaintiffs' Illustrative 6. Further, i4i presented evidence that Microsoft struggled to design a dynamic custom XML editor. *See, e.g.,* PX 281 at i4i019733; PX 270 at i4i00299585, i4i00299587; PX 195 at 3. There was also evidence of a long felt need in the industry for a dynamic custom XML editor. *See, e.g.* PX 81 at 1-2; PX 270 at MS-i4i00299588, i4i00299584; PX 45 at MS-i4i00299583; PX 270 at i4i00299587 (specifically addressing the need for separate content and metacodes). i4i also presented evidence of the success of commercial embodiments of the invention. *See, e.g.,* TT 5/13/09 p.m. at 44-178; 5/15/09 a.m. at 19-104. In the wake of i4i's voluminous evidence of secondary considerations supporting nonobviousness, Microsoft's modest showing of Kugimiya combined with Rita, DeRose, or S4 does not render the jury verdict against the great weight of evidence.

Next, Microsoft argues that it is entitled to a new trial on the basis that the Court improperly instructed the jury that Microsoft was required to prove invalidity by clear and convincing evidence regarding prior art not before the PTO. Microsoft bases its claim off of dicta found in the Supreme Court's decision in *KSR International Co. v. Teleflex Inc.* that the rationale behind the clear and convincing evidence standard seems "much diminished" when defendants present evidence of prior art not considered by the PTO. 550 U.S. 398, 426 (2007). First, the *KSR* Court did not specifically hold that the clear and convincing standard was inapplicable when the PTO did not consider the particularly relevant prior art. Second, the law remains overwhelmingly that patents are to be presumed valid and it is the defendant's burden to prove invalidity by clear and convincing evidence. *See z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1354-55 (Fed. Cir. 2007); 35 U.S.C. § 282. Finally, Microsoft has cited no authority firmly supporting its proposed "preponderance of the evidence"

instruction either during the charge conference or now. Microsoft's argument is overruled.

Finally, Microsoft moves for a new trial on ground that the Court erroneously excluded evidence regarding the PTO's ex parte reexamination of the '449 patent. At the time of trial, the PTO had granted reexamination, necessarily finding that there was a "substantial new question of patentability" regarding the '449 patent. *See* 35 U.S.C. § 312(a)(1). Microsoft's arguments are meritless. The simple fact that a reexamination decision has been made by the PTO is not evidence probative of any element regarding any claim of invalidity. *Procter & Gamble Co.*, 549 F.3d at 848 ("As this court has observed, a requestor's burden to show that a reexamination order should issue from the PTO is unrelated to a defendant's burden to prove invalidity by clear and convincing evidence at trial."). Even if it was, its probative value is substantially outweighed by its prejudicial effect in suggesting to the jury that it is entitled to ignore both the presumption of validity and the defendant's clear and convincing burden at trial. *See* FED. R. EVID. 403. Microsoft's argument is overruled.

Therefore, for the foregoing reasons, Microsoft's various motions for JMOL and for a new trial regarding anticipation and obviousness are denied.

MICROSOFT'S MNT OR REMITTITUR - DAMAGES

Microsoft moves for JMOL on the issue of damages contending that i4i presented legally insufficient evidence to support the jury award for two main reasons: 1) the Wecker survey supporting the damage award is inherently unreliable and should have been excluded; 2) i4i's damages expert's, Mr. Wagner, opinion as to the amount of damages was inherently unreliable.

Regarding the Wecker survey, Microsoft first argues that the Court erred in admitting the physical survey because it is hearsay. Though the survey was extensively explained by i4i's experts

and the survey results and questionnaire were both admitted into evidence, the true "evidence" supporting i4i's damages calculation is the opinion of i4i's damages expert, Mr. Wagner, along with the opinion of Dr. Wecker supporting the reliability of the survey. Both Dr. Wecker's and Mr. Wagner's opinions relied upon the survey results. Therefore, the admissibility of the survey itself (including the raw results and the questionnaire) is not governed by the hearsay exceptions, but rather, Federal Rule of Evidence 703. That rule provides: "[f]acts or data that are otherwise inadmissible shall not be disclosed to the jury by the proponent of the opinion or inference unless the court determines that their probative value in assisting the jury to evaluate the expert's opinion substantially outweighs their prejudicial effect." FED. R. EVID. 703. In all of its objections to the Wecker survey, Microsoft only argues that the survey is "prejudicial" because it is "unreliable" under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and Federal Rule of Evidence 702. Thus, whether the survey was properly before the jury is a question falling squarely under the *Daubert* analysis rather than traditional hearsay rules. *Soden v. Freightliner Corp.*, 714 F.2d 498, 502-03 (5th Cir. 1983) ("[U]nder Rule 703 an expert can discuss as the basis for an opinion facts or data which are otherwise inadmissible hearsay, '[i]f of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject.'") (quoting FED. R. EVID. 703).

Nevertheless, Microsoft cites *Schering Corp. v. Pfizer*, 189 F.3d 218 (2d Cir. 1999), for the proposition that hearsay rules always apply when determining the admissibility of survey evidence. There, a district court excluded five surveys from evidence for all purposes at a preliminary injunction hearing. *Schering*, 189 F.3d at 223. The surveys were offered to directly show that the defendants were engaged in ongoing violations of a settlement agreement. *Id.* at 224. The surveys

themselves were the primary evidence in support of the plaintiff's preliminary injunction motion. *Id.* The Second Circuit discussed the surveys' admissibility in light of various exceptions to the hearsay rule, including the residual exception. *Id.* at 224-40. The court also discussed the "trustworthiness" of the surveys as it applied to Federal Rule of Evidence 807. *Id.* at 231-36. However, the *Schering* court had no occasion to discuss the admissibility of survey evidence under Rule 703. However, the court did note that Rule 703 was an acceptable basis to admit survey evidence. *Id.* at 227 ("the advisory committee for the Federal Rules of Evidence has suggested that surveys are sometimes best admitted as bases of expert testimony pursuant to Rule 703").

In the present case, i4i sought admission of the survey and its results for the sole purpose of supporting Mr. Wagner's opinion regarding damages. Additionally, i4i also presented Dr. Wecker's testimony for the sole purpose of supporting the reliability of the survey. Unlike *Schering*, this is a case where survey evidence is best admitted through Rule 703, rather than the hearsay rules. The *Schering* opinion is inapplicable. Further, Microsoft's suggestion that survey results must fall under a hearsay exception to qualify as "reliable" under Rule 703 is rejected. Microsoft cites no authority that "reliability" under Rule 703 is intimately linked to the various hearsay exceptions and *Schering* certainly does not support Microsoft's argument. Rather, as is apparent from the Rule's plain text, Rule 703 is an independent basis for admitting evidence that is "otherwise inadmissible." *See* FED. R. EVID. 703.

Under Rule 703, surveys are admissible "if they are pertinent to the inquiry, upon a showing that the poll is reliable and was compiled in accordance with accepted survey methods." *C. A. May Marine Supply Co. v. Brunswick Corp.*, 649 F.2d 1049, 1054 (5th Cir. 1981). Here, the survey was prepared by Dr. Wecker, a highly qualified expert in statistics and applied mathematics. *See* TT

5/15/09 a.m. at 22:14-26:18, 29:1-5. Dr. Wecker testified that this survey was designed specifically

to provide a reliable statistical sample of a population for extrapolation over the entire population.

TT 5/15/09 p.m. at 26-19.   He also provided extensive testimony concerning his use of accepted

methodology in designing the questionnaire, selecting the sample, collecting the information, and

analyzing the raw result data for extrapolation. *Id.* at 29:6-51:24. The survey was actually

performed by telephone interview by a survey company called Opinion Research Company ("ORC").

Dr. Wecker testified that neither ORC or the respondents to the telephone interview knew the

purpose of the survey. TT 5/15/09 a.m. at 40:14-21; PX 365.

Microsoft argues that the survey was unreliable because it was not directed at individual

computer users within an organization. The survey was directed to computer administrators within

an organization who would have personal knowledge concerning how individuals within that

organization used the accused WORD products. *See* 5/15/09 a.m. at 35:24-38:1, 67:8-68:23; PX

365. Dr. Wecker testified that an "I don't know" response was added to the survey questions in

order to minimize estimation by the respondents. TT 5/15/09 a.m. at 35:24-38:19, 64:13-65:24, 68:2-

69:12. In the face of testimony concerning the reliability of the survey's respondent pool, Microsoft

does not present any authority requiring that reliable survey data come only from a particular subset

of individuals with personal knowledge of underlying events. As trial testimony revealed, the survey

was designed to identify those individuals with direct personal knowledge of how an organization's

workstaff used the accused WORD products. The simple fact that the survey did not ask each

individual within an organization about their use of the accused products is not essential to

reliability,[6] and in fact, would defeat the very purpose of a "statistical sample" survey.

Microsoft also argues that the survey was inherently unreliable because it failed to distinguish between infringing uses of custom XML and non-infringing uses. First, i4i presented evidence that non-infringing uses of custom XML were rare and defeated the purpose of using the feature. *See* TT 5/13/09 p.m. at 80-83. Second, there was expert testimony that a user utilizing WORD's XML feature in a non-infringing manner would also use it in an infringing manner. *Id.* Finally, within Mr. Wagner's "reasonable royalty" calculation, he excluded the percentage of users, based on Microsoft's own internal survey data, who used XML in the most frequent of non-infringing manners. TT 5/13/09 p.m. at 81-83, 85-86.

Microsoft also alleges that Dr. Wecker's interpretation of the survey data was unreliable because he "changed" several survey responses because of logical inconsistencies.[7] Dr. Wecker testified that inconsistent responses within survey results is a common problem in the field and is solved using an accepted statistical practice known as "logical imputation," which generally acts to adjust logically inconsistent responses by determining whether a respondent's understandable misunderstanding of a survey question resolves the logical inconsistency. TT 5/15/09 a.m. at 42:6-

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[6] Microsoft also argues that the survey is unreliable because it failed to define various technical terms used within the survey. In fact, the survey does define, with precision, several terms used throughout the operative portions of the questions. *See* PX 365 at 3. Some terms that Microsoft's expert expressly asserted are undefined in the survey are explicitly defined. *Id.* (defining "custom XML"); 5/18/09 a.m. at 39:1-10 (asserting the "custom XML" went undefined). Further, the survey defines terms in such a way that someone trained in computer administration might actually understand the survey questions better than an individual user. Thus, as Dr. Wecker explained, the survey was tailored to its target respondents. TT 5/15/09 a.m. at 67:8-68:23.

[7] In a much-discussed example during trial Dr. Wecker altered a response literally indicating that the respondent's business had 4 computers and 3% of those used WORD products in an infringing manner. Because 3% of 4 is obviously logically inconsistent, Dr. Wecker testified that it was logical to conclude that the respondent had simply provided the number of computers (rather than the percentage) within the business that used the WORD products in an infringing manner. *See* TT 5/15/09 a.m. at 43-45. Thus, replacing "3%" with "3 computers" resolved the logical inconsistency in a manner that preserved the integrity of the data-point. *See id.*

47:22.

Finally, the purpose of this Court's "gatekeeper" function under *Daubert* is served by "ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert*, 509 U.S. at 597. The Court has found that there is sufficient evidence that the Wecker survey is both relevant and rests on a reliable foundation. Additionally, "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Id.* at 596. Microsoft vigorously cross-examined both Dr. Wecker and Mr. Wagner concerning the survey and their opinions generally. *See, e.g.*, TT 5/13/09 p.m. at 97-101, 103-107, 131-133, 140-42. Further, Microsoft presented its own experts who attacked the Wecker survey on every basis set forth in its motion. *See, e.g.*, TT 5/18/09 a.m. at 32-76; TT 5/19/09 a.m. at 88-90, 96-97. Therefore, any remaining complaints that Microsoft had about the survey concerned its weight and not its admissibility. *See Scott Fetzer Co. v. House of Vacuums Inc.*, 381 F.3d 477, 488 (5th Cir. 2004) ("Usually, methodological flaws in a survey bear on the weight the survey should receive, not the survey's admissibility.").

Microsoft next contends that Mr. Wagner's opinion regarding a reasonable royalty rate was unreliable. First, Microsoft argues that using the listed price of a third party product, "Xmetal," as a benchmark for a royalty rate was improper. Mr. Wagner testified that he reviewed several products, available in the market around the time infringement began, with stand-alone XML capabilities. *See* TT 5/13/09 p.m. at 54:14-55:21. One of these products was to serve as a beginning point for determining a reasonable royalty rate. *Id.* Mr. Wagner explained that he ultimately chose Xmetal because the other products he considered either had too high of a price or did not have

similar capabilities as the XML functionality in the accused products. *Id.* at 55:22-56:19. Further,

Xmetal was being used internally within Microsoft during the relevant time period. *See id.* at 56:20-

57:7. He further testified that Xmetal was a true market example of what customers specifically

desiring XML functionality would have paid for the product. *Id.* at 57:8-58:6. Microsoft cites no

authority for the proposition that using such a method is unreasonable or unreliable. In the face of

Mr. Wagner's testimony that such a method is generally appropriate when estimating market value,

the question of whether Xmetal was the "best" basis for a royalty calculation was properly submitted

to the jury. In fact, the factors for calculating a reasonable royalty under *Georgia-Pacific Corp. v.*

U.S. Plywood Co., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), make the character of the commercial

embodiment of the invention, the benefits to those who have used the invention, the extent to which

the infringer has made use of the invention, and any evidence probative of the value of that use

specifically relevant to the "reasonable royalty" analysis. As the value of Xmetal in the marketplace

was relevant to all of these factors, it was properly considered by Mr. Wagner in his analysis.

Next, Microsoft asserts that Mr. Wagner's application of a "25% rule of thumb" concerning

royalty rates was improper. Mr. Wagner testified that it was customary within his field to apply a

"25% rule of thumb" whereby an inventor will generally receive 25% of the profit from the sale of

that invention by a licensee. *See* TT 5/13/09 p.m. at 53:23-54:9, 54:10-13, 74:6-20, 120:23-121:2.

Microsoft both cross-examined Mr. Wagner on the application of the rule of thumb and presented

contrary evidence. *See e.g.*, id. at 53-54, 57:2-7; TT 5/19/09 at 94-96. Again, the *Georgia Pacific*

factors make "the portion of the profit or of the selling price that may be customary in the particular

business or in comparable businesses to allow for the use of the invention or analogous inventions"

relevant to the damages analysis. Thus, considering the foundation laid by Mr. Wagner's testimony,

his application of the 25% rule was relevant and appropriately considered.

Finally, Microsoft asserts that Mr. Wagner's opinion comparing his damages calculation with Microsoft's total operating profit off the accused WORD products was improperly admitted. Microsoft essentially argues that this portion of his testimony was a "back-door" attempt to argue an "entire market value" theory of royalties to the jury. Mr. Wagner testified that as a "reasonableness check" on his damages calculation he compared his $200-207 million royalty calculation with the total operating profit earned by Microsoft from the sale of the accused WORD products. First, this objection was never made by Microsoft at the time the opinion was introduced. TT 5/13/09 p.m. 87-89. Second, i4i never argued an "entire market value" theory to the jury and never insinuated that Mr. Wagner's "check" be considered for such a purpose. Indeed, had i4i been permitted to argue an "entire market value" theory, it would have been entitled to a substantially larger portion of Microsoft's operating profit than under Mr. Wagner's theory of damages.[8] *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1331 (Fed. Cir. 2009) (explaining that the entire market value rule "permits a patentee to recover the entire value of an apparatus that contains both patented and unpatented components"). Thus, Mr. Wagner's "reasonableness check" testimony was properly admitted.

Alternatively to JMOL, Microsoft requests remittitur. Microsoft does not present any additional grounds for remittitur other than those already stated in its request for JMOL. Remittitur is within the sound discretion of the trial court and is only appropriate when the damages verdict is "clearly excessive." *See Thompson v. Connick*, 553 F.3d 836, 865 (5th Cir. 2008). Microsoft's

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[8] Mr. Wagner testified that his $200-207 million damages estimate was less than 1 ½ % of Microsoft's total profit off of the accused WORD products. *See id.* at 89.

request for remittitur is denied for the same reasons outlined above and for the additional reason that it has failed to show or even discuss why the verdict was "clearly excessive." *See supra* n.8. In sum, Microsoft's motion for JMOL regarding damages or remittitur is denied.

i4i's MOTION FOR JUDGMENT ON THE JURY VERDICT AND ENHANCED DAMAGES

As stated above, the jury found that Microsoft willfully infringed the '449 patent. i4i now moves for judgment on the jury verdict and for enhanced damages and attorneys' fees in accordance with the jury finding. A court may in its discretion enhance damages up to three times when there is a finding of willful infringement or bad-faith on the part of an infringing party. 35 U.S.C. § 284; *see SRI Int'l, Inc. v. Advanced Techs. Labs., Inc.*, 127 F.3d 1462, 1468-69 (Fed. Cir. 1997). "Bad faith" in this context refers to an infringer's lack of due care with regard to avoiding infringement and is more properly called "bad faith infringement." *Jurgens v. CBK, Ltd.*, 80 F.3d 1566, 1571 (Fed. Cir. 1996). Although "bad faith" acts such as litigation misconduct are not sufficient alone to support an enhancement of damages, assuming the requisite culpability is present, such acts can be considered in determining whether to award enhanced damages and how much to award. *See id.* at 1570-71. A finding of willful infringement provides sufficient culpability to justify the enhancement of damages under § 284. *See id.* at 1571, 1573.

Enhanced damages are a punitive measure taken by a court to penalize a willful infringer for his or her increased culpability. *See id.* at 1570. However, a court can refrain from awarding enhanced damages in light of a finding of willfulness based on the weight of the evidence supporting willfulness and the closeness of the issues at trial. *See Brooktree Corp. v. Advanced Micro-Devices, Inc.*, 977 F.2d 1555, 1582 (Fed. Cir. 1992); *Laitram Corp. v. NEC Corp.*, 115 F.3d 947, 955 (Fed. Cir. 1997). "The paramount determination in deciding enhancement and the amount thereof is the

egregiousness of the defendants' conduct based on all the facts and circumstances." *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826 (Fed. Cir. 1992), abrogated on other grounds by *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 975 (Fed. Cir. 1995) (en banc). Factors courts consider in deciding whether to enhance damages and the amount of enhancement include: (1) whether the infringer deliberately copied the ideas or design of another; (2) whether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed; (3) the infringer's behavior as a party to the litigation; (4) the defendant's size and financial condition; (5) closeness of the case; (6) duration of the defendant's misconduct; (7) remedial action by the defendant; (8) the defendant's motivation for harm; (9) whether the defendant attempted to conceal its misconduct. *Id.* at 827.

In addition, attorneys' fees and costs may be awarded in "exceptional cases" to the "prevailing party." 35 U.S.C. § 285. i4i argues that an award of fees and costs are appropriate because of a finding of willfulness alone. However, "exceptional cases" may, but are not required to, include the jury's finding of willfulness. *Insituform Techs., Inc. v. Cat Contracting, Inc.*, 518 F. Supp. 2d 876, 895 (S.D. Tex. 2007) (citing *Avia Group Int'l, Inc. v. L.A. Gear Ca., Inc.*, 853 F.2d 1557, 1567 (Fed. Cir. 1988)). "The decision to increase damages is committed to the discretion of the trial judge . . . ." *Modine Mfg. Co. v. Allen Group, Inc.*, 917 F.2d 538, 543 (Fed. Cir. 1990). However, in cases where there has been an express finding of willfulness, the trial court must, in denying attorneys' fees, "explain why the case is not 'exceptional' within the meaning of 35 U.S.C. Section 285." *Id.*

The evidence at trial established that Microsoft was aware that i4i had obtained a patent in support of its XML editing software. *See* TT 5/12/09 a.m. at 75:24-77:21, 81:2-81:22; PX 13; TT

5/12/09 a.m. at 80:4-81:1; PX 92; TT 5/13/09 a.m. at 17:18-18:10; PX 49. Despite this, Microsoft

did not present any evidence (or argue to the jury) that it ever conducted any investigation regarding

the patent or i4i's products. Particularly damaging on this point is a January 22, 2003 email sent by

Martin Sawicki, a member of Microsoft's XML for Word development team. *See* PX 49. The email

is a response to another Microsoft employee who forwarded a message to Mr. Sawicki from i4i

explaining its products and specifically mentioning the '449 patent. *Id.* In the email Mr. Sawicki

notes "we saw [i4i's products] some time ago and met its creators. Word 11 will make it obsolete.

It looks great for XP though." *Id.* The email confirms Microsoft's awareness of the '499 patent, its

relationship to i4i's products, as well as Microsoft's intention to implement similar capabilities in

WORD.

Conversely, i4i did not present evidence (or argue) that Microsoft deliberately copied the

patented invention or any of i4i's products or that Microsoft attempted to conceal its intention to

subvert i4i's product. Microsoft is undisputedly, "the worldwide leader in software, services, and

Internet technologies for personal and business computing." DX 2037. Microsoft's 2008 revenue

was $60.42 billion. PX 144. Although the jury award is substantial, it is a small fraction of the

profit that Microsoft has gained from sales of its WORD products alone. *See* TT 5/13/09 p.m. at

87:20-89:7. Rather than secrecy, the trial evidence revealed that Microsoft's intention to move

competitors' XML products to obsolescence was quite bold. *See* PX 100 at MS-i4i00717664 ("My

main concern with I4I [sic] is that if we do the work properly, there won't be a need for their product

. . . ."); PX 48 at MS-i4i00312029 ("The absence of a strong XML authoring environment targeted

at the middles to low end of the market may be indicative of an implied industry expectation that this

area really belongs to Word and Word will eventually make obsolete any competitive attempts by

third parties to conquer that market.").

In sum, the evidence shows that Microsoft knew of i4i's patent protection in 2001 and 2003, did no investigation, and never formed a good-faith belief of non-infringement. The evidence further shows that Microsoft started using the infringing products beginning in 2002 and did not conduct an infringement investigation after being notified of the patent again in 2003. TT 5/15/09 a.m. at 99:11-14. Microsoft's arguments that somehow i4i's evidence is weak, insubstantial, or unsupported are baseless. Microsoft simply argues the credibility of i4i's evidence supporting enhancement and presents no evidence showing that Microsoft ever concerned itself with a strong likelihood of infringement. As the jury determined, i4i's evidence is persuasive and credible. The uncontradicted evidence (as discussed above) relates that Microsoft had knowledge of the patent and its relation to i4i's products and willfully chose to render the technology obsolete while simply ignoring the patent.

Further, the fact that Microsoft presented many defenses within the context of this litigation and even succeeded in invalidating certain claims of the '449 patent during pretrial does not excuse its pre-infringement conduct or motivations. Microsoft also fails to cite any authority holding that successful defenses relating to claims not asserted at trial should weigh against enhancement. The remainder of Microsoft's arguments regarding enhancement relate to its equitable laches defense. As that defense will be thoroughly discussed elsewhere in this opinion, it will not be repeated here. It will suffice to note, however, that the time i4i took to prepare for trial was unusually long, thus enhancing the amount of damages ultimately found by the jury. i4i's delay in bringing suit, though generally reasonable, weighs against enhancement.

Accordingly, *Read* factors 2, 4, 6, 7, and 8 support enhancement while factors 1 and 9 along with i4i's delay weigh against enhancement. Regarding the "closeness of the case" factor, the jury

found for i4i on every issue (including the amount of damages). *Cf. Mass Engineered Design, Inc. v. Ergotron, Inc.*, No. 2:06 CV 272, 2009 WL 1035205 at *22 (E.D. Tex. 2009) (Davis, J.) (denying enhancement where the jury expressed deadlock on the issue of infringement during deliberation and ultimately returned a verdict of validity and infringement but agreeing with defendants' valuation of damages). Without commenting on the relative "strength" of Microsoft's defenses, the factor is at best neutral.

Finally, also favoring enhancement is Microsoft's counsel's litigation conduct, specifically during trial. Throughout the course of trial Microsoft's trial counsel persisted in arguing that it was somehow improper for a non-practicing patent owner to sue for money damages. He further persisted in improperly trying to equate i4i's infringement case with the current national banking crisis implying that i4i was a banker seeking a "bailout."

These improper arguments were made in spite of the Court's warnings. Microsoft's trial counsel began voir dire by asking the following question to the jury panel:

> So an example might be that somebody has a patent that they're using not to protect a valuable product but someone's copying, but because they are attacking somebody because they just want to try to get money out of them. So it fits, for example, with the litigation question Mr. Parker asked. So if somebody felt that -- let's take this case for an example. If somebody felt that the patents were being used in a wrong way, not to protect a valuable product but a wrong way, could you find that patent invalid or noninfringed?

Voir Dire Transcript 5/11/09 a.m. at 47:13-48:5 (emphasis added). In response, the Court *sua sponte* had counsel approach the bench and outside the hearing of the jury asked:

> THE COURT: I understand that you just told the jury if somebody was using the patent not to compete, that that was the wrong way to use the patent?
> MR. POWERS: No, not to compete; just to get money, not to protect anything. That's what I asked.
> THE COURT: What about protecting the patent?

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MR. POWERS: I'll ask it that way again.
THE COURT: I just -- you know, I think you're sort of misstating the law, and I don't want to embarrass you in front of the jury. But I would appreciate it if you would clean that up.
MR. POWERS: I appreciate that. I will do that.

Voir Dire Transcript 5/11/09 a.m. at 48:14-49:5. Despite this admonition, Microsoft's trial counsel continued to misstate the law and directly appeal to the jurors' perceived prejudices. During opening statement, he stated that "we're here because the bankers decided to achieve liquidity" and that "the banker cases are the ones where you don't have a very successful product, and the bankers decide to try to get their money out another way." TT 5/11/09 p.m. at 42:6-8; 32:1-16. Again, the Court sought to temper these statements with a specific instruction to the jury. Court's Charge, Docket No. 323 at 30 ("The law recognizes no distinction among types of patent owners. A patent owner may be a competitor of an accused infringer, but it does not have to be. The characterization of a patent lawsuit as good or bad or as misuse of the patent laws based upon the status of the patent owner is inappropriate and should not play any part in your deliberations."). Regardless of this instruction, Microsoft's trial counsel's improper statements were again reinforced during closing argument. TT 5/20/09 at 90:13-91:5 ("[i4i] had a product that failed. They had a patent that doesn't work. They're asking for a bail-out. President Tyler [sic] didn't give bankers a bail-out. We would ask for you not to give one here either.").

As these arguments were persistent, legally improper, and in direct violation of the Court's instructions, they are best considered within the framework of the *Read* factor analysis. Therefore, Microsoft's trial misconduct also supports enhancement.

Therefore, while the Court could enhance damages against Microsoft up to three times the jury verdict of $200,000,000, or $600,000,000, under the totality of the circumstances, enhancing

damages to the maximum extent allowable under § 284 is not warranted. Accordingly, the Court

awards an additional $40,000,000 to the jury award, making a total of $240,000,000 to be paid by

Microsoft to i4i.

For the same reasons that a maximum enhancement is not warranted, this is not an

"exceptional case" under § 284. First, while improper, Microsoft's litigation misconduct did not rise

to the level of "exceptional" and is properly reflected in the damages enhancement. *Cf. z4 Techs.,*

Inc. v. Microsoft Corp., No. 6:06-cv-142, 2006 WL 2401099 at *22-25 (E.D. Tex. 2006) (Davis, J.)

(concluding that attorneys' fees were properly awarded where Microsoft withheld critical evidence,

misled the Court regarding facts probative to the admissibility of certain evidence, and marked nearly

3500 exhibits while only admitting 100 of those at trial). This, combined with a lack of evidence

that Microsoft intentionally copied i4i's patent or products and i4i's lengthy delay prior to filing suit

preclude an "exceptional" finding in this case.

i4i'S MOTION FOR POST-VERDICT DAMAGES TO JUDGMENT, PREJUDGMENT INTEREST, AND POST-JUDGMENT INTEREST

i4i moves for prejudgment interest, post-verdict damages until the time of judgment, and

post-judgment interest. i4i's request for post-judgment interest is uncontested and is, accordingly,

granted pursuant to the provisions of 28 U.S.C. § 1961.

Regarding post-judgment damages, i4i requests that the jury verdict of $200,000,000 be

extrapolated as necessarily finding a royalty rate of $98 dollars per infringement over a royalty base

of 1470 infringing units per day. This calculation would yield an ongoing royalty of $144,060 per

day of infringement until final judgment.

Importantly, Microsoft never contests that post-verdict damages are properly awarded in this

case and never provides an alternative calculation for post judgment damages (even when an alternative calculation was directly requested at the hearing). Rather, Microsoft argues that i4i's calculation of damages by extrapolating the damages found by the jury is an unreliable calculation of damages. First, Microsoft re-raises its complaints regarding the unreliability of the Wecker survey. Those arguments are overruled for the same reasons discussed above.

Second, Microsoft argues that the damages calculations by Mr. Wagner cannot be properly extrapolated into the future. In fact, Dr. Wecker testified that the survey was specifically designed for extrapolation. TT 5/15/09 p.m. at 26-19. Furthermore, Mr. Wagner's testimony reflected a per diem extrapolation based on both the survey data and other *Georgia-Pacific* factors. PX 631; TT 5/13/09 at 78-80. Microsoft failed to object to the extrapolation data or Mr. Wagner's testimony as "unreliable." TT 5/13/09 at 9.

Additionally, While the jury clearly based its damages award on Mr. Wagner's testimony (considering that Microsoft's damages model would have yielded a much smaller award), it was free to consider other evidence relevant to the *Georgia Pacific* factors when determining a "reasonable royalty." This calculation is inherently based on some speculation. *See Lindemann Maschinenfabrik GmbH v. Am. Hoist & Derrick Co.*, 895 F.2d 1403, 1406 (Fed. Cir. 1990) ("When a 'reasonable royalty' is the measure, the amount may again be considered a factual inference from the evidence, yet there is room for exercise of a common-sense estimation of what the evidence shows would be a "reasonable" award."). Here, however, the jury's award was clearly based on a particular damages model where the royalty rate and base that was applied can be determined with some specificity. The extrapolation suggested by i4i is simply a continuation of the damages calculation adopted by the jury. Considering Microsoft did not object to the method of extrapolation at trial and its underlying

challenges to the reliability of all the damages testimony have been overruled, Microsoft does not raise any new compelling arguments leading to the conclusion that i4i should simply not be compensated for post verdict, prejudgment, infringement. *See Nat'l Instruments Corp. v. Mathworks, Inc.*, 2:01-CV-11, 2003 WL 24049230 at *4 (E.D. Tex. June 23, 2003) (Ward, J.) ("A failure to award such damages would grant an infringer a windfall by enabling it to infringe without compensating a patentee for the period of time between the jury's verdict and the judgment."). Accordingly, i4i's request for post-verdict damages is granted in an amount of $144,060 per day of infringement from May 21, 2009 until final judgment.

With regard to prejudgment interest, i4i requests interest compounded annually on the jury verdict which yields $37,097,032 in interest up to May 20, 2009 and simple interest at the current prime rate of 3.25% until the day of judgment (or $21,102 per day until judgment). Microsoft's only argument is that i4i delayed in filing suit. Prejudgment interest must be awarded and any justification for withholding the award must have a relationship with the award of pre-judgment interest itself. *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 657 (1983). Where delay in filing suit is self-serving and resulted in prejudice to the defendants, witholding an award of prejudgment interest is appropriate. *Crystal Semiconductor Corp. v. TriTech Microelectronics Int'l, Inc.*, 246 F.3d 1336, 1362 (Fed. Cir. 2001) (finding plaintiff's intentional withholding of notice of patent from defendant warranted denial of prejudgment interest). Here, as discussed elsewhere in this opinion, i4i's delay in filing suit was not intentional and was merely for the purposes of prosecuting its patent. Furthermore, there was evidence that Microsoft was both aware of the patent number, i4i's relationship with the patent, as well as the fact that i4i practiced the patented invention. As explained at length above, the jury found that Microsoft willfully infringed the '449 patent. Thus,

the evidence and the jury verdict fail to support any argument by Microsoft that additional notice of

infringement would have ameliorated any prejudice caused by i4i's delay. For those reasons,

Microsoft has failed to show that i4i is not entitled to prejudgment interest. Accordingly, i4i is

awarded prejudgment interest of $37,097,032 up to May 20, 2009 and $21,102 per day thereafter

until final judgment. i4i's motion is granted in all respects.

i4i'S MOTION FOR A PERMANENT INJUNCTION

i4i requests an order permanently enjoining Microsoft from infringing the '449 patent. i4i

proposes the following language:

> Microsoft is enjoined from performing the following actions with Microsoft Word 2003, Microsoft Word 2007 and Microsoft Word products not more than colorably different from Microsoft Word 2003 or Microsoft Word 2007 (collectively "Infringing and Future Word Products") during the term of the '449 patent:
>   1. making, selling, offering to sell and/or importing in or into the United States any Infringing and Future Word Products that have the capability of opening a .XML, .DOCX, or .DOCM file ("an XML file") containing custom XML;
>   2. using any Infringing and Future Word Products to open an XML file containing custom XML;
>   3. instructing or encouraging anyone to use any Infringing and Future Word Products to open an XML file containing custom XML;
>   4. providing support or assistance to anyone that describes how to use any infringing and Future Word Products to open an XML file containing custom XML; and
>   5. testing, demonstrating or marketing the ability of the Infringing and Future Word Products to open an XML file containing custom XML.
>
> This injunction does not apply to any of the above actions wherein the Infringing and Future Word Products open an XML file as plain text. This injunction also does not apply to any of the above actions wherein any of the Infringing and Future Word Products, upon opening an XML file, applies a custom transform that removes all custom XML elements.

See i4i's Motion for Permanent Injunction, Docket No. 349 at 1-2. Importantly, i4i does not request

that Microsoft disable the infringing custom XML functionality contained in current versions of the

infringing WORD products that have been sold prior to the entry of any permanent injunction.

In determining whether to issue a permanent injunction in patent cases, courts apply the four factor test provided for in *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 394 (2006). A party is entitled to a permanent injunction only if: "1) [the party] has suffered an irreparable injury; 2) that remedies at law, such as monetary damages, are inadequate to compensate for that injury; 3) that, considering the balance of hardships between the [parties], a remedy in equity is warranted; and 4) that the public interest would not be disserved by a permanent injunction." *Id.* at 391. The Supreme Court held "the decision whether to grant or deny injunctive relief rests within the equitable discretion of the district courts, and that such discretion must be exercised consistent with traditional principles of equity, in patent disputes no less than in other cases governed by such standards." *Id.* at 1841.

First, i4i has overwhelmingly shown that it has been irreparably injured by Microsoft's continuing infringement of the '449 patent and could not be compensated with monetary damages. The fact that there is direct competition in a markplace weighs heavily in favor of a finding of irreparable injury. *See Brooktrout, Inc. v. Eicon Networks Corp.*, 2:03-CV-59, 2007 WL 1730112, at *1 (E.D. Tex. June 14, 2007) (Ward, J.). i4i's founder and co-inventor of the '449 patent, Michel Vulpe, testified that Microsoft is i4i's direct competitor within the custom XML marketplace. TT 5/15/09 at 16:16-18; TT 5/12/09 a.m. at 25:7-21. There was also testimony that this direct competition was a result of Microsoft's inclusion of the infringing custom XML functionality within its popular WORD product. TT 5/12/09 a.m. at 25:7-21. i4i's damages expert also testified that Microsoft's entry into the custom XML marketplace rendered i4i's products obsolete in 80% of that market. *See* TT 5/13/09 p.m. at 66:10-68:4, 143:2-18. Microsoft also identified i4i as a "potential

distraction" within the custom XML market before the release of its infringing products. PX 51.

Also prior to the infringing products, Microsoft recommended i4i's products as a solution for its

customers seeking custom XML functionality. *See, e.g.*, PX 172; PX 214; PX 18; PX 103; PX 39

at i4i752374; TT 5/12/09 a.m. at 138:21-140:22. Finally, Microsoft recognized that the addition of

custom XML into its WORD product would not only directly compete with i4i's products, but render

them obsolete within the market. *See* PX 100 at MS-i4i00717664 ("My main concern with I4I is that

if we do the work properly, there won't be a need for their product."); PX 94 at MS-i4i00348452-53

("Word 11 will make [i4i's product] obsolete. It looks great for XP though.").

In response to this evidence, Microsoft first argues that i4i's "unreasonable delay" in filing

suit evidences a lack of irreparable harm. While delay is a factor in considering irreparable harm,

as discussed elsewhere in this opinion, i4i's delay was not unreasonable. *See Cordis Corp. v. Boston

Scientific Corp.*, 99 Fed. Appx. 928, 934 (Fed. Cir. 2004); *Polymer Techs., Inc. v. Bridwell*, 103 F.3d

970, 976 (Fed. Cir. 1996) (discussing the relevance of delay to the "irreparable harm" analysis in the

context of preliminary injunctions). Furthermore, i4i's delay in filing suit does not outweigh the

overwhelming influence of Microsoft's entry into the custom XML market.

In response to i4i's claims of direct competition, Microsoft presents evidence that i4i's

current products are designed to be compatible with Microsoft's infringing WORD products and that

Microsoft's entry into the market allowed such "add-on" products to succeed. DX 2018 (i4i founder

explaining that Microsoft's entry into the market created opportunities for i4i); DX 2242 at

2242.004; TT 5/13/09 p.m. at 144. This argument entirely misses the point. The fact that i4i is

capable of existing in a marketplace where Microsoft is infringing does not negate the injury incurred

as a result of Microsoft's infringement. As Microsoft's own documents suggest, there was a void

in the custom XML market that Microsoft filled with infringing products. As a result, i4i was unable to sell its products within the same market space. Confirming Microsoft's dominance of the XML market is evidence that i4i's current business model is based off of customer pressure to create products that add functionality to the infringing WORD applications. TT 5/15/09 p.m. at 105:16-20; 106:8-12. Simply because i4i adapted to a market where Microsoft fills 80% of the market space does mean that i4i has not suffered an irreparable injury. The evidence shows that i4i lost a, perhaps irretrievable, opportunity in the early days of the custom XML market. *See* PX 172. This continuing loss of market share and brand recognition is the type of injury that is both incalculable and irreparable.

Microsoft argues that future damages are not incalculable because i4i has shown willingness to license the '449 patented technology to Microsoft. As evidence for this willingness Microsoft points to i4i's damages expert's, Michael Wagner, testimony regarding a hypothetical negotiation. Mr. Wagner assumed for the purposes of his damages analysis that i4i was willing to license the '449 patent. *See* Wagner Expert Report Excerpt, Docket No. 369-3 at 24. In fact, Mr. Wagner recognized that there was no clear policy regarding whether i4i was willing to license its technology. *Id.* However, Mr. Wagner's analysis concerned a hypothetical negotiation at the time the infringement began. The evidence clearly shows that i4i has not generated revenue by licensing its technology, and there is some documentary evidence to suggest i4i sought to retain exclusivity with regard to the '499 patent. DX 2324 at 2324.007 ("License any piece that is not core to i4i IP value proposition (authoring) . . . .").

Microsoft further argues that an injunction is inappropriate because custom XML functionality is simply a small part of the infringing WORD products. *See eBay*, 547 U.S. at 396-97

(Kennedy J., concurring) (explaining monetary damages may be sufficient when the patented technology is a small component of a larger product). While XML might be a small part of Microsoft's WORD products, the irrefutable evidence (and Microsoft's own documents) shows that there is an independent market for stand-alone custom XML. In fact, Microsoft does not contest that there are other stand-alone XML editors available in the market. *See* TT 5/13/09 p.m. at 54:14-55:21. The fact that Microsoft added the independently marketable technology to a larger program does not make the technology a "component" as described by Justice Kennedy. Rather, custom XML is an independent technology with a dedicated marketplace. As discussed above, the continuing loss of market share, customer goodwill, and brand recognition within that market are the type of losses that monetary damages are insufficient to cure. *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 440 (E.D. Tex. 2006) (Davis, J.).

The balance of hardships also favors i4i. As i4i notes, Microsoft is the world's largest software company with yearly revenues exceeding $60 billion. TT 5/13/09 p.m. at 59:17-60:16; 167:9-19; DX 2037; PX 144. i4i's business is comprised almost exclusively of XML authoring products based off of the '449 patent. TT 5/15/09 p.m. at 16:9-15; TT 5/15/09 a.m. 133:17-134:8. The impacts of this disparity are not insignificant. As discussed, there is no doubt that Microsoft has cornered the custom XML editing market. This fact has forced i4i to adopt a business model that supports infringing WORD products rather than one that could ever eventually lead to leadership within the XML market. On the other hand, as Microsoft concedes, custom XML is merely one of thousands of features within WORD. 5/13/09 p.m. at 89:22-90:3, 95:13-16. In addition, Microsoft's own data suggests that less than 1% of its customers use custom XML. TT 5/18/09 at 51:5-15; 5/13/09 at 61:22-62:16, 63:13-23; PX 631 (i4i's survey data showing roughly 2% of Microsoft's

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customers use the infringing functionality). Thus, the evidence clearly indicates that while custom

XML is a small fraction of Microsoft's business, it is central to i4i's.

Microsoft argues that redesigning current and upcoming WORD products is an enormous

task. Microsoft suggests that compliance with i4i's proposed injunction would take approximately

five months to re-release the currently infringing products. *See* Tostevin Decl., Docket No. 369-7.[9]

While there is also some disagreement over whether Microsoft has the capability to disable the

infringing functionality with a mere "software patch," the Court will assume for the purposes of this

analysis that complying with i4i's injunction poses a not insubstantial burden on Microsoft.

Regardless, Microsoft has not presented any evidence on alternative methods for compensating i4i

for its previous and ongoing loss of customers, market share, and brand recognition. While

Microsoft concedes it has the ability to comply with an injunction encompassing i4i's proposed

language, i4i will be continuingly injured without it. *See Tivo v. EchoStar Commc'ns Corp.*, 446

F. Supp. 2d 664, 669 (E.D. Tex.2006) (Folsom, J.), rev'd on other grounds, 516 F.3d 1290 (Fed. Cir.

2008) (explaining that so called "sticky customers" continually shaped the market to patentee's

disadvantage). Thus, the balance of hardships must favor the injured party.

With regard to the public interest, i4i does not request that Microsoft disable infringing

WORD products that are sold prior to the effective date of any injunction. i4i also indicated at the

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[9] i4i separately filed a motion to strike the Tostevin declaration on grounds that Tostevin was never disclosed under Federal Rule of Civil Procedure 26(a) or in response to i4i's interrogatories seeking information regarding why i4i would not be entitled to a permanent injunction. As Microsoft notes, there is no instance either before or during trial where the "ease" of compliance with i4i's proposed injunction was, or could have been, raised. The first instance where the information in Tostevin's declaration became relevant to these proceedings was when i4i filed its motion for permanent injunction including its proposed injunctive language. Furthermore, the information provided in the Tostevin declaration is highly relevant to the effect of any injunction on Microsoft's operations. The Court could not effectively evaluate the relevant *eBay* factors without this information and, had Microsoft not voluntarily provided it, it would have been requested by the Court. As such, i4i's motion to strike the Tostevin declaration is denied.

hearing, that it would be amenable to Microsoft providing support to customers who purchased infringing WORD products before the effective date of its proposed injunction. Thus, i4i's proposed injunction would have little effect, if any, on the daily operations of Microsoft's current customers. In addition, where products do not relate to a significant compelling public interest, such as health or safety, this factor weighs in favor of an injunction. *See Tivo*, 446 F. Supp. 2d at 670 ("The public has an interest in maintaining a strong patent system. . . . The infringing products are not related to any issue of public health or any other equally key interest."). Custom XML does not relate to any of such key social interests. As a result, this factor also favors an injunction. Because all four *eBay* factors weigh in favor of injunctive relief, i4i's motion is granted.

Finally, with regard to the scope of the injunction, Microsoft argues that restricting it from "making" the infringing products is outside of the infringing activities asserted in this case because the asserted claims were method claims. Rather than contest this argument, i4i merely contends that "making" does not broaden the scope of the injunction. Microsoft is correct. Simply "making" the accused products is beyond the scope of the asserted method claims. In accordance with the Court's duty to narrowly tailor injunctive language, a restriction on "making" accused and future related products will not be included in the injunctive language. *See Fiber Sys. Int'l v. Roehrs*, 470 F.3d 1150, 1159 (5th Cir. 2006). In all other respects, i4i's proposed injunctive language is adopted with the additional exception that Microsoft is permitted to provide support or assistance regarding the XML functionality to anyone purchasing the infringing WORD products before the injunction takes effect.

MICROSOFT'S MOTION TO STAY INJUNCTION

Microsoft moves to stay the injunction on three grounds: 1) Microsoft is likely to succeed

on appeal; 2) Microsoft and the public will be irreparably harmed absent a stay; and 3) the pending

re-examination of the '449 patent requires a stay. Whether to grant a stay under Federal Rule of

Civil Procedure 62(c) requires consideration of 1) whether the stay applicant has made a strong

showing that he is likely to succeed on the merits; 2) whether the applicant will be irreparably injured

absent a stay; 3) whether issuance of the stay will substantially injure the other parties interested in

the proceeding; and 4) where the public interests lies.

Regarding the first factor, Microsoft argues that it has presented substantial legal questions

regarding nearly every issue and that, since some of these questions are pure questions of law, they

will be reviewed de novo. Indeed, this very situation is present in nearly every patent case following

a jury verdict. For additional assistance in assessing this factor, the Fifth Circuit has held "the

movant need only present a substantial case on the merits when a serious legal question is involved

and show that the balance of the equities weighs heavily in favor of granting the stay." *Ruiz v.*

Estelle, 650 F.2d 555, 565 (5th Cir. 1981). Here, as discussed above, the balance of equities strongly

favors i4i nearly every day Microsoft continues to sell its infringing products. As explained

throughout this opinion, Microsoft does not present such a compelling case, either legally or

factually, that would override the irreparable harm that its infringement imposes on i4i. This factor

weighs against a stay.

Also as mentioned above, it is likely that Microsoft will incur a loss as a result of an

injunction. However, given Microsoft's size and financial condition, the loss can not be considered

irreparable. This factor also weighs against a stay.

On the other hand, i4i will continue to be irreparably injured absent a stay. As discussed, the

evidence shows that Microsoft's presence in the custom XML market has altered the very nature of

the marketplace for smaller competitors such as i4i. The fact of Microsoft's infringement causes i4i to suffer irreparable harm for every new XML customer that purchases an infringing Microsoft product. To stay any injunction would only prolong that harm without providing any remedy. Finally, as discussed above, the injunction is narrowly tailored to cause minimal disruption to the public. This factor does not support a stay.

Microsoft further argues that it is entitled to a stay pending reexamination of the '449 patent. At this time, the claims of the '449 patent have been provisionally rejected by the PTO. i4i has yet to respond in the reexamination proceedings. Courts typically consider the following factors when deciding whether to grant a stay pending reexamination: 1) whether a stay will unduly prejudice or present clear tactical disadvantage to the nonmoving party, 2) whether a stay will simplify the issues in question and the trial of the case, and 3) whether discovery is complete and whether a trial date has been set. *Soverain Software LLC v. Amazon.com, Inc.*, 356 F. Supp. 2d 660, 662 (E.D. Tex. 2005) (Davis, J.). Here, discovery has been completed, the issues have been resolved, and the case is ripe for final judgment. None of these factors favor a stay pending reexamination. Microsoft's request for a stay is denied.

Microsoft additionally proposes that, in lieu of an injunction, for its upcoming WORD 2010 product, it would be able to 1) hide any XML functionality from the purchasers of WORD 2010, 2) activate the XML functionality upon demand from its customers, 3) track the use of such functionality, and 4) pay an ongoing royalty for such use. As i4i points out, this option would amount to a compulsory license, while ignoring i4i's ongoing injury by way of loss of brand recognition and market share. It is clearly improper, and Microsoft's request is denied.

However, the Court finds it necessary to note that there has been an ongoing disagreement

between the parties over the burden faced by Microsoft in complying with an injunction regarding

current versions of WORD. Microsoft has presented evidence that it may take five months to

implement any injunction. *See* Tostevin Decl., Docket No. 270-5 at ¶ 16. However, i4i has

presented evidence that it is possible to design a software patch that can remove a user's ability to

operate the infringing functionality. Oddly, Microsoft's proposal regarding WORD 2010 seems to

imply an ability to manipulate its software beyond what has been previously indicated by Microsoft

in its opposition to an injunction.

Therefore, after considering this competing evidence, considering the ongoing irreparable

injury faced by i4i, the amount of time that has already passed since the jury's verdict, the burden

on Microsoft, and given the uncertainty surrounding what period of time would be "reasonable" to

expect Microsoft to comply with any injunction, the Court orders that Microsoft comply with the

foregoing injunction within 60 days of the date of this order.

FINDINGS OF FACT AND CONCLUSIONS OF LAW REGARDING MICROSOFT'S EQUITABLE DEFENSES[10]

Laches

Microsoft contends that the equitable doctrine of laches bars i4i from collecting damages for

infringement prior to its filing suit. The basis of this argument is Microsoft's assertion that i4i

intentionally delayed filing suit and never notified Microsoft of probable infringement prior to filing.

"Laches focuses on the dilatory conduct of the patentee and the prejudice which the patentee's delay

has caused." *A.C. Aukerman Co. v. R.L. Chaides Const. Co.*, 960 F.2d 1020, 1031-32 (Fed. Cir.

1992). To prove a defense of laches, a defendant must establish that 1) "the plaintiff delayed filing

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[10] To the extent that any conclusion of law is deemed to be a finding of fact, it is adopted as such; and likewise, any finding of fact that is deemed to be a conclusion of law is so adopted.

suit for an unreasonable and inexcusable length of time from the time the plaintiff knew or reasonably should have known of its claim against the defendant" and 2) "the delay operated to the prejudice or injury of the defendant." *Id.* at 1032. There is generally a six year presumption of delay and prejudice starting from the time a patent owner knew or should have known of the accused infringement. *Id.* at 1035-36. Here, both parties agree that the delay was shorter than six years. Therefore, Microsoft has the burden of proving both factors by a preponderance of the evidence.

As background, i4i filed this suit on March 8, 2007. The first public distribution of the infringing WORD 2003 product was in late 2002. DX 2037; 2038. Microsoft presented evidence that i4i's business strategy at the time of Microsoft's infringement was focused on providing additional XML functionality to Microsoft's products. TT 5/15/09 p.m. at 39:18-40:4; 5/12/09 p.m. at 12:3-20. Additionally, there was evidence that i4i received and tested beta versions of WORD 2003 by late 2002. TT/5/15/09 p.m at 40:23-41:1. 41:12-21, 42:19-44:16. Indeed, Microsoft can show clearly that i4i had used the product it later accused of infringement by late 2002. TT 5/15/09 p.m. at 43:24-44:1. However, Microsoft did not offer WORD 2003 for sale until October 2003. PX 349. Microsoft has also proven that i4i did not have any additional contact with Microsoft regarding infringement between the time they received advanced copies of the infringing word products and the time of filing suit. TT 5/12/09 a.m. at 32:8-34:17; TT 5/15/09 p.m. at 39:15-17; DX 2370. However, Microsoft concedes that i4i conducted formal investigations into whether Microsoft was infringing the '449 patent subsequent to using the accused products between 2002 and the time this suit was filed. TT 5/20/09 a.m. at 148:20-155:4.

i4i responds that its founder, Michel Vulpe, first started investigating possible infringement in early 2004. TT 5/12/09 a.m. at 38:8-14; 5/20/09 at 148:20-149:11. i4i's board of directors then

formed a task force to investigate possible infringement at Mr. Vulpe's recommendation. 5/12/09 a.m. at 32:8-22; 5:20 at 149:12-22. At that time, i4i retained a software engineer, Mike Sweet, to conduct an evaluation of both infringement and the prior art. TT 5/20/09 at 149:18-150:20. In approximately February 2005, after Mr. Sweet reported that there was reason to suspect Microsoft of possible infringement, i4i contacted several law firms regarding potential claims. TT 5/20/09 at 150:11-151:2. i4i then retained Robins, Kaplan, Miller & Cirese L.L.P. as counsel. *Id.* at 150:21-151:12. i4i alleges that it finally concluded in late 2005, after its initial investigation and after consulting with outside counsel, that it had an infringement claim against Microsoft. *Id.* at 151:13-21, 153:1-11.

The evidence produced a trial was clearly of a very technical nature. The infringement and invalidity arguments in this case were, by no means, superficial. For Microsoft to contend that i4i was reasonably notified of possible infringement because its employees used the infringing products in 2002 is absurd. However, i4i's own admissions and evidence do support a conclusion that they should have reasonably known of infringement by the time their outside counsel and a technical expert confirmed probable infringement. i4i further explains, that at the time it knew of the infringement, it was financially unable to both continue to operate and pursue any claims against Microsoft. TT 5/12/09 a.m. at 33:14-25:22. Thus, i4i searched for investors and eventually secured the assistance of Northwater Capital Management on September 22, 2006. TT 5/19/09 a.m. at 51:9-52:9; PX 7. Within six months after financial backing was secured, suit was filed. Thus, i4i knew and reasonably should have known of infringement by late 2005. The parties collectively estimate that they have spent nearly $30 million dollars prosecuting this lawsuit. Though a substantial period of time, a year and a half of delay prior to filing suit in order to secure financial backing is not

equitably unreasonable.

In the meantime, during the same period, there is abundant evidence that Microsoft had notice of the patent, notice that i4i sold products that embodied the patent, and an intention to produce the same functionality in the infringing WORD products. *See, e.g.*, PX 49 at MS-i4i00348452-53. Further, Microsoft has not produced any evidence that its actions would have changed had i4i's specifically notified Microsoft of i4i's belief that Word 2003 infringed the '449 patent. The evidence provides a strong indication that Microsoft would not have stopped selling the accused products or redesigned them in any way. In fact, even after several years of litigation and a jury verdict of infringement, Microsoft requests the ability to continue selling the infringing products and release an upcoming product with the same infringing functionality. The evidence does not support Microsoft's conclusion that it has suffered any significant financial prejudice as a result of i4i's delay. The evidence supports a conclusion that, no matter when Microsoft was notified of possible infringement, its actions would not have changed.

Regardless, Microsoft argues that it suffered evidentiary prejudice because of the loss of the S4 source code. The S4 system is relevant to Microsoft's invalidity and inequitable conduct defenses. Mr. Vulpe and Mr. Owens, the creators of S4, admittedly could not remember the internal operation of S4. TT 5/11/09 p.m. at 157:12-158:8, 158:22-25; TT 5/15/09 p.m. at 109:20-110:6. They also admitted that the source code was discarded and could not be found. TT 5/11/09 p.m. at 157:12-158:8; TT 5/15/09 p.m. at 110:7-111:11. Though Microsoft has no evidence of when the code was discarded, it argues that Mr. Vulpe's and Mr. Owen's recollections would have certainly been better in 2002, when i4i first received a beta version of WORD 2003. In fact, i4i presented evidence that S4 was a one-time project for one customer that was completed and delivered in

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February of 1993, nine years before Microsoft contends that i4i could have first filed suit. Furthermore, it is uncontested that Microsoft was provided users manuals, technical specification, and various documents related to S4. Interestingly, this is more information about a product created in 1993 than i4i had in 2002 regarding WORD 2003.

Microsoft raised technical and lengthy defenses on non-infringement, laches, equitable estoppel, and invalidity based on six instances of prior art. It introduced numerous documents and hours of testimony regarding the S4 system alone. Though the source code of S4 certainly would have been an ideal and key piece of evidence, the testimony reveals that, even by 2002, it is extremely unlikely that S4's source code would have been in existence. In any event, Microsoft can not show that it was deprived of a "full and fair defense" because of the non-existence of the S4 source code. *See A.C. Aukerman*, 960 F.2d at 1033.

Ultimately, this is not a case where the "patentee [ ] intentionally [lay] silently in wait watching damages escalate." *Id.* i4i made a concerted effort to carefully analyze the accused products, determine the extent of its infringement case, and then secure the financial ability to assert its claims. In the mean time, as the jury concluded, Microsoft ignored the '449 patent and i4i. As Microsoft did not prove either "unreasonable delay" or "prejudice" by a preponderance of evidence, Microsoft's request for relief based on laches is denied.

Inequitable Conduct

Microsoft moves the Court to find the '449 patent invalid for inequitable conduct based on grounds that the inventor failed to disclose the S4 system to the PTO. The standard for showing inequitable conduct is stringent and well known. "Inequitable conduct resides in failure to disclose material information, or submission of false material information, with an intent to deceive, and

those two elements, materiality and intent, must be proven by clear and convincing evidence."

Kingsdown Med. Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 872 (Fed. Cir. 1988); *see also*

Praxair, Inc. v. ATMI, Inc., 543 F.3d 1306, 1313 (Fed. Cir. 2008). Because an actual "intent to

deceive" is required, "[m]istake or negligence, even gross negligence, does not support a ruling of

inequitable conduct." *Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1353 (Fed. Cir. 2008). A court

only has discretion to invalidate a patent for inequitable conduct after a showing of both materiality

and intent to deceive. *Id.* When examining intent, the alleged conduct must be "viewed in light of

all the evidence, including evidence indicative of good faith." *Kingsdown*, 863 F.2d at 876.

However, when a "failure to disclose" is alleged, intent to deceive may be inferred when 1) highly

material information is withheld, 2) the applicant knew of the information and knew or should have

known of the materiality of the information, and 3) the applicant has not provided a credible

explanation for the withholding. *Praxair*, 543 F.3d at 1313-1314.

There is no dispute that the application for the '449 patent was filed on June 2, 1994. DX

2001. Michel Vulpe and Stephen Owens are named co-inventors of the patent. *Id.* There is also no

dispute that the S4 system was not specifically disclosed in the '449 patent application and that it is

prior art. The S4 system was designed by Mr. Vulpe and Mr. Owens in cooperation with Martin

Hensel in 1992. S4 is a system for opening, displaying, editing, and storing documents containing

SGML codes and content. *See* DX 2002 at 004-006. The S4 system was sold or offered for sale to

Semiconductor Equipment and Materials International ("SEMI") in California in 1992 and was put

to use by February 1993. DX 2013; DX 2058; TT 5/15/09 p.m. at 17:5-11; TT 5/18/09 p.m. at 59:2-

60:3. This was more than a year before the '499 patent application was filed. The parties dispute

whether S4 was material to the '449 patent's patentability because it taught the "metacode map"

limitation and whether Mr. Vulpe had deceptive intent in failing to disclose the prior art.

Materiality

On April 1, 1997, the patent examiner rejected the claims of the application as anticipated by Kugimiya. *See* DX 2002 at 106-08. The examiner noted that Kugimiya disclosed "the claimed metacodes as tags, separating the tags from the words, locating and addressing them into a mapping table." *Id.* at 108. In response, the applicants argued that Kugimiya did "nothing with the tags except keep them aside temporarily until they are needed to be re-inserted into the translated document." *Id.* at 123. The claims were rejected again on September 16, 1997 as unpatentable over Kugimiya. *Id.* at 125-28. Finally, on December 10, 1997, Mr. Vulpe had an in person meeting with the patent examiner arguing that Kugimiya did not teach persistent separation of content and metacodes. TT 5/15/09 p.m. at 64:11-67:15. On January 13, 1998, the patent examiner allowed the claims and the patent issued *See* DX 2002 at 135-136; DX 2001.

Microsoft's expert, Mr. Gray, testified that S4 would anticipate or, in combination with Kugimiya, render the '449 patent obvious because it disclosed a method of persistently storing a metacode map separating metacodes from content. TT 5/20/09 at 112:1-123:13, 124:15-19. As discussed, the source code of S4 was destroyed and unavailable for trial. Therefore, in making this conclusion, Mr. Gray relied on screen shots in the S4 user manual to determine that the separation between content and metacodes was persistent. TT 5/18/09 p.m. at 164:5-16; TT 5/18/09 p.m. at 164:5-16; 5/18/09 at 165:13-173:14; 5/20/09 at 126:2-127:3; DX 2202 at 111-113. Contrarily, i4i presented evidence that it was impossible to show that content and metacodes were persistently separated in a data structure through a user manual and non-technical testimony. TT 5/19/09 p.m. at 51:13-54:24; TT 5/18/09 a.m. at 78:5-14, 87:14-21; TT 5/13/09 p.m. at 23:6-24. To support this

testimony, Mr. Vulpe testified that he had not conceived of persistent separation of metacodes and content until late 1993. 5/11/09 p.m. at 111:10-112:25, 159:10-20. In fact, he testified that S4 stored content and metacodes together. 5/15/09 p.m. at 89:13-90:19, 90:20-22. There was additional testimony that S4 intermingled content and metacodes. TT 5/11/09 p.m. at 157:12-24, 170:22-171:19; TT 5/18/09 p.m. at 57:11-17, 71:8-10, 74:16-75:10; TT 5/15/09 p.m. at 107:22-108:2.

The testimony over whether S4 contained a metacode map was clearly conflicting. However, in light of the highly specific and detailed testimony regarding other prior art during the remainder of the trial, Mr. Gray's testimony regarding S4 was simply unpersuasive. A user's manual and screen shots of a product do not reveal anything about its underlying programing, and Mr. Gray did not testify regarding how they might. There was also ample evidence to support a conclusion that S4 did not contain a metacode map. The jury rejected Mr. Gray's testimony in rendering its verdict of validity. Again, Microsoft has failed to prove by clear and convincing evidence that S4 was material to the patentability of the '449 patent.

Intent

Of course, the fact that Microsoft has failed to prove materiality counsels against finding that Mr. Vulpe had a deceptive intent in failing to disclose S4. A lesser showing of materiality requires a greater showing of intent. *See Digital Control, Inc. v. Charles Mach. Works*, 437 F.3d 1309, 1313 (Fed. Cir. 2006). In order to create an inference of deceptive intent, Microsoft must prove that Mr. Vulpe knew or should have known of S4's materiality. *Praxair*, 543 F.3d at 1313-1314.

Microsoft relies on two pieces of evidence to show deceptive intent. First, in 1994, after the '449 patent application was filed and two years after S4 was delivered, Mr. Vulpe sought funding from the Canadian Government and submitted an application to that effect. He submitted a proposal

that, in part, spoke of the '449 patent application and represented that "[t]he initial implementation is embedded into [i4i's] S4 product." DX 2395.001. Further, Mr. Vulpe submitted a letter to potential investors that stated "[t]he basis of the patent and preliminary work on the validation precedes [i4i]." DX 2051; TT 5/20/09 a.m. at 170:19-171:11. Mr. Vulpe admitted on the stand that he lied to investors about the creation date of the '449 patent. TT 5/15/09 p.m. at 35:24-36:19. There is also no doubt that Mr. Vulpe understood his obligation to the PTO. TT 5/11/09 p.m. at 163:11-167:11.

However, there was testimony that "S4" had continued to develop through 1994 and beyond. TT 5/15/09 a.m. at 139:2-142:10; PX 626. Though the product retained the same name, i4i contends that it began to integrate the '449 patented invention over time. TT 5/15/09 p.m. at 92:12-95:10; TT 5/15/09 a.m. at 138:18-139:9. There is also other documentary evidence supporting the explanation that S4 was under constant development in multiple iterations over a substantial period of time. TT 5/15/09 a.m. at 126:3-8, 127:4-7; PX 627 at i4i107100. The documentary evidence further supports a conclusion that Mr. Vulpe considered the 1992 S4 and the post-application S4 very different products. TT 5/15/09 a.m. at 129:2-6.

Ultimately, Microsoft failed to clearly show Mr. Vulpe's deceptive intent to the PTO. Though Mr. Vulpe's credibility is questionable with regard to certain investors, the totality of evidence supports a conclusion that Mr. Vulpe was candid with the PTO and never considered the early version of S4 relevant or vital to the '449 patent application. Considering that the evidence of materiality is also lacking, Microsoft cannot meet its high burden regarding intent. As a result, the Court does not find that the '449 patent is invalid on the basis of inequitable conduct.

CONCLUSION

For the aforementioned reasons, i4i's motion for enhanced damages and attorneys' fees is **GRANTED** in part, i4i's motion for permanent injunction is **GRANTED**, i4i's motion for post verdict damages, prejudgment interest, and post-judgment interest is **GRANTED**, and all other motions are **DENIED**. The permanent injunction provided for herein will be memorialized in a separate order.

So ORDERED and SIGNED this 11th day of August, 2009.

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LEONARD DAVIS
UNITED STATES DISTRICT JUDGE