2009-1504

IN THE
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

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i4i LIMITED PARTNERSHIP and
INFRASTRUCTURES FOR INFORMATION INC.,
Plaintiffs-Appellees,

v.

MICROSOFT CORPORATION,
Defendant-Appellant.

Appeal from the United States District Court for the Eastern District of Texas in case no. 07-CV-113, Judge Leonard Davis.

BRIEF FOR i4i LIMITED PARTNERSHIP AND INFRASTRUCTURES FOR INFORMATION INC.

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September 8, 2009

CERTIFICATE OF INTEREST

Counsel for Plaintiffs-Appellees i4i Limited Partnership and Infrastructures for Information Inc. certify the following:

1. The full name of every party or amicus represented by us is:

   i4i Limited Partnership and Infrastructures for Information Inc.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by us is:

   N/A.

3. All parent corporations and any publicly held companies that own 10% or more of the stock of any party represented by us are:

   None.

4. The names of all law firms and the partners or associates that appeared for the parties now represented by us in the trial court or are expected to appear in this Court are:

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TABLE OF ABBREVIATIONS

Parties

i4i	Plaintiffs-Appellees i4i Limited Partnership and Infrastructures for Information, Inc. (collectively)
i4i Inc.	Infrastructures for Information, Inc.
Microsoft	Defendant-Appellant Microsoft Corporation

Cites

A__	Joint Appendix at page(s) __
MSBr.__	Brief for Defendant-Appellant Microsoft Corporation at page(s) __
WLFBr.__	Brief of Washington Legal Foundation as *Amicus Curiae* in Support of Defendant-Appellant Supporting Reversal at page(s) __

Terms

’449 patent	U.S. Patent No. 5,787,449
DeRose	U.S. Patent No. 6,101,512
Kugimiya	U.S. Patent No. 5,587,902
Mizuta	U.S. Patent No. 5,280,574
SGML	Standard Generalized Markup Language
XML	eXtensible Markup Language

STATEMENT OF RELATED CASES

No appeal in or from the same civil action or proceeding in the lower tribunal was previously before this or any other appellate court. Counsel is not aware of any case that may be directly affected by this Court's decision.

I. STATEMENT OF THE ISSUES

1. The claimed invention is directed to a computer system for editing documents containing "metacodes" (information about how documents' contents should be interpreted) so that the metacodes, which ordinarily are *intermixed* with the content when the document is *displayed*, are kept *distinct* from the content, in a metacode map, for *editing* and *storage*.

a. Did the district court properly reject Microsoft's contention that the claims are limited to inoperable systems in which editing the document's content has no effect on its metacode map (or vice-versa), where the patent only describes systems wherein editing the document's content automatically changes the document's metacode map?

b. Did the district court properly reject Microsoft's contention that the claims require a document's metacode map and content to be stored in different *files* (as opposed to *distinct* portions of memory), where the patent does not discuss any reason why separate *files* would be required (or even desirable) and the patent explicitly states that it can work on a document "irrespective of its mode of storage"?

2. Did the district court properly deny Microsoft's JMOL motion for noninfringement where:

a. Microsoft's only reason for why it lacked certain limitations was based on the claim construction arguments (see issue 1) the court properly rejected; and

b. Microsoft's indirect infringement defenses were either waived or rejected by the jury, which heard substantial evidence of Microsoft's intent and that the accused functionality lacked any substantial noninfringing uses?

3. Did the district court properly deny Microsoft's JMOL and new-trial motions concerning invalidity where:

a. Microsoft preserved only one invalidity attack in its pre-verdict JMOL motions;

b. substantial evidence showed that the prior art Microsoft's attack depended on (a product sold by i4i that preceded the invention) lacked numerous claim limitations, including those related to the distinct editing and storage of metacodes; and

c. the other prior art Microsoft relied on also lacked key claim limitations?

4. Did the district court abuse its discretion in admitting survey evidence and expert testimony that formed the basis of i4i's damages claim, where:

a. the survey was directed to 988 businesses, included screening questions to identify the most qualified people to respond to the survey, allowed respondents to answer "don't know" to any question, and assumed that any business that did not participate, pass the screening questions, and know the answers did not infringe; and

b. the damages expert chose a reasonable third-party benchmark to estimate value (because Microsoft gave away the inventive technology to entice customers to buy a new version of Word)?

5. Did the district court properly enhance damages where:

a. the jury, which was properly instructed in accordance with post-*Seagate* case law, found that Microsoft willfully infringed the '449 patent; and

b. Microsoft repeatedly violated the court's order to refrain from improper arguments?

6. Did the district court properly grant an injunction requiring Microsoft to remove the infringing functionality from its products, where:

a. i4i began selling its patented products before Microsoft's infringement; and

b. Microsoft's infringement destroyed i4i's ability to compete in the market for its patented products?

II. STATEMENT OF THE CASE

A. Preliminary Statement

Microsoft repeatedly attacks the district court's performance as a "gatekeeper." But Judge Davis has a substantial track-record in patent cases, and Microsoft's criticism of him as unable (or unwilling) to fulfill his duties is nothing less than an unfair attempt to divert attention from what really happened. When it suited its purposes, Microsoft touted i4i as a "Microsoft Partner" able to provide software that Microsoft could not. But behind i4i's back, Microsoft usurped i4i's invention, destroying i4i's ability to compete in the market that it had created.

Consider Microsoft's argument that the court "accorded a critical claim term no meaning whatsoever, effectively erasing it from the patent." MSBr.1. What Microsoft is alluding to is the word "distinct," which appears in a number of claim phrases, including "metacode map distinct storage means" and "mapped content distinct storage means." The court did not separately construe the word "distinct," but did construe both phrases, *including the word*. Indeed, it is Microsoft that is attempting to ignore the law in arguing that the invention's notion of "distinctness" meant that the claims should be construed to include two additional limitations—"independent manipulation" and "two separate files"—neither of which finds any support in either the claim language or the specification. Further, adopting Microsoft's proposed constructions would have meant that the patent covered none

of the embodiments of the invention that automatically update one part of a document based on edits to another part.

Or consider Microsoft's assertion that the court failed to act as a gatekeeper in connection with Microsoft's validity defenses. MSBr.2. Microsoft's complaint is that the court rejected its argument that the jury could not properly accept the inventor's testimony regarding the on-sale bar because it lacked corroboration. But the court correctly rejected Microsoft's argument. Unlike in priority disputes, where requiring corroboration of an inventor's testimony makes sense, there is no reason to require corroboration *in all instances*, and this Court has never required it. Moreover, the point in dispute was whether a prior i4i product incorporated the claimed invention, and that was corroborated in multiple ways.

While Microsoft also criticizes the court, at length, for its treatment of damages issues (MSBr.2-5), its attacks are misguided. For example, in criticizing the survey testimony that formed the basis of i4i's damages claims, Microsoft demands a level of perfection that this Court has never required and few surveys would ever meet. i4i's survey was designed, conducted, and analyzed using accepted methodology, and its admissibility was beyond legitimate question. Similarly, the *Georgia-Pacific* analysis undertaken by i4i's expert, including his testimony regarding the "25% rule," followed this Court's law to the letter. In

short, i4i's damages evidence was proper and well within the guidance of this Court's case law.

While Microsoft further criticizes the court for its decision to enhance damages (MSBr.4), the court's discussion of the issue shows a careful balancing of the relevant facts (it did not, after all, award the maximum enhancement, or anything close to it), and its decision was amply warranted. The court properly rejected Microsoft's arguments that a reasonable person would have considered its "defenses" sufficient to avoid infringement (A21-22), and it found that the "uncontradicted evidence" showed that "Microsoft had knowledge of the ['449] patent and its relation to i4i's products and willfully chose to render the technology obsolete while simply ignoring the patent" (A45). Further, the court relied on Microsoft's litigation misconduct as an additional factor favoring enhancement, noting that Microsoft's counsel repeatedly made arguments to the jury that were "in direct violation of the Court's instructions." A46-47.

Microsoft's brief reflects numerous other instances where it tells only part of the story. Microsoft ignores, for example, that the district court found that Microsoft waived its contention that software cannot form the basis of a sale under section 271(c) (A17) and also that it never preserved its ability to challenge many of the jury's factual findings by moving for JMOL at the close of evidence (A25). Moreover, in arguing that i4i's survey respondents were inadequately screened

(MSBr.56), Microsoft relies on inaccurate and cropped quotes from the screening questions. Most egregiously, though, Microsoft repeatedly distorts this Court's case law.

In arguing that it did not have the intent required for indirect infringement, for example, Microsoft cites *Voda v. Cordis Corp*, 536 F.3d 1311 (Fed. Cir. 2008), as holding that despite its knowledge of i4i's patent (and its contents), it had no duty to investigate. MSBr.54. But *Voda* was a willfulness case (536 F.3d at 1327-29), and in *Broadcom Corp. v. Qualcomm, Inc.*, 543 F.3d 683, 699 (Fed. Cir. 2008), this Court expressly refused to apply willfulness law in the inducement context (*id.* at 699) and upheld the jury's inducement verdict based on evidence of the same type provided here—"a failure to investigate, a failure to explore design around approaches, a failure to take remedial steps—and, of course, a failure to seek legal advice" (*id.* at 700). Similarly, in contesting the court's enhancement decision, Microsoft asserts that "[t]his court has been absolutely clear that 'attorney . . . misconduct during litigation' is 'not sufficient for an increased damages award under section 284." MSBr.73. But what this Court has actually held is not only that acts of litigation misconduct are not "*by themselves*" a sufficient basis for enhancing damages, *Jurgens v. CBK, Ltd.*, 80 F.3d 1566, 1570 (Fed. Cir. 1996), but that such acts "may be used as a factor in determining

whether or how much to increase a damages award once sufficient culpability is found" (*id*. at 1571).

In sum, in conducting the trial of this case, the district court did an exceptional job following this Court's case law. The jury weighed the facts, including the credibility of the witnesses, and found *overwhelmingly* in i4i's favor. And the court agreed, crafting an extremely thorough, 65-page opinion in which it decided to sustain the jury's verdict, enhance the damages award, and enter an injunction. Judgment for i4i should be affirmed.

B. The Parties and Their Products

i4i Inc. sells "add-on" software that expands Microsoft Word's capability of working with documents containing special codes, known as XML. As described below, XML encodes information into documents that identifies what kind of information the documents contain.

Word, the dominant word processing software, could not always work with XML documents. In fact, when the U.S. government requested that functionality in 2001, Microsoft turned to i4i for help and the two companies worked together to provide a solution. The partnership ended, however, when Microsoft incorporated into Word (then the 2003 version) the capability that i4i had been providing (i.e., the ability to work with XML documents). Since then, i4i has struggled to maintain any position in the market.

C. Course of Proceedings and Disposition Below

On May 20, 2009, after a seven-day trial, the jury rendered a verdict in i4i's favor. A236-37. Following extensive briefing on post-verdict motions (including seven filed by Microsoft), the district court issued its order on August 11, 2009, denying all of Microsoft's motions. A5-6. Additionally, the court enhanced damages and issued an injunction requiring that Microsoft disable Word's infringing XML functionality, something Microsoft had done before to tailor its Word products to different markets. A51-57. The court denied Microsoft's motion to stay the injunction pending appeal (A60), but on September 3, 2009, this Court issued an order staying the injunction pending appeal.

III. STATEMENT OF FACTS

A. Electronic Document Markup

Markup languages use "tags" intermixed with content to enhance the information in documents processed by a computer. A249(2:25-54). While tags can be added to a document for formatting purposes (A249(2:25-31)), they can also describe the meaning of a segment of text or the structure of a document (A249(2:41-54)). For example, formatting tags might designate certain text for display in boldface, while descriptive (content-based) tags might identify text as a phone number.

A tag generally includes a delimiter (one or more characters that set the tag apart from the content) and its name. A1310. For example, a document containing

"202-555-0100" could be augmented to "<phone_number>202-555-0100</phone_number>", where "<" and ">" are delimiters and the name "phone_number" describes the content. Markup languages include SGML and XML, a subset of SGML. A7704-06.

B. i4i's Early Efforts with Electronic Document Processing

Michel Vulpe formed a software consulting company in 1989, which later became Infrastructures for Information ("i4i Inc."). A1628. One of Vulpe's early clients was SEMI, a standards organization. A1628-29. SEMI asked Vulpe to create a database and distribution system for its documents using SGML, and also to create software for SEMI's Macintosh-based computers so SEMI could edit SGML documents. A1629. Vulpe hired a computer consultant, Stephen Owens, to help him. A761;A1629-30. In early 1993, they delivered a product called S^4 to SEMI. A1630-32.

SEMI-S^4 allowed a user to add SGML tags to a document. A765. It also allowed the document to be divided into chunks, or "entities"—portions of an SGML-encoded document containing tags intermixed with content—which could then be stored. A825-26;A832-33;A1981-82(74:16-75:10).

Vulpe and Owens received mixed feedback regarding SEMI-S^4. Of particular concern were comments criticizing the way users had to interact with the document's metacodes and content at the same time. A761-62(81:9-82:13);A789-

91(109:14-111:9). Then, around November 1993, in what Vulpe described as a "eureka moment," Vulpe and Owens conceived of the invention at the heart of this case and started working to develop a software implementation. A1632-33;A1638-39;A791-92. Vulpe faxed a brief description of the invention to a patent attorney in February 1994 showing the essential characteristics of what he and Owens had conceived. A7788-91;A1633-34. The invention manages markup by creating a "map" of the various elements of markup and where each is placed in the content. A7788-91 This map may be edited separately from the document's content, an approach that differed significantly from the approach used in SEMI-S^4 (and other SGML editors), which could not edit a document's metacodes separately from content, making the document difficult to work with. A761-62(81:9-82:13);A821-26;A1750-51.

Owens prepared a draft patent application in April 1994, which was revised and filed in June 1994. A7775-87;A1639-40;A795-96;A239. Simultaneously, Owens wrote software to implement the invention and developed a working prototype. A1647-48;A792-93;A7239. Unlike SEMI-S^4, Owens wrote the source code for IBM PCs rather than Macintosh computers because he was more familiar with PC software, including PC software for processing SGML tags. A794.

Reporting to the i4i Board of Directors in June 1994, shortly after the invention's conception (and approximately a year after delivering SEMI-S^4), Vulpe

explained that he was proceeding with two separate projects: one "productizing" SEMI-S^4 so it could be sold to customers other than SEMI (A1640-42;A7797) and the other implementing the subject of the patent application (A1642-43;A7797). Vulpe explained, however, that "Infrastructures does not plan to aggressively market or promote the patent technology at this point. It is fundamental to Infrastructures competitive advantage and is an advantage that must be closely guarded." A7797.

Eventually, after changing the S^4 product to run on PCs rather than Macintosh, Vulpe and Owens merged the two projects by adding the patented idea to what had been the S^4 product. A1648-49. After limited success, i4i focused on just the patented functionality, as the SGML Application Server, which served as the base of an implementation for Word—S4/Text or Tagless Editor—and sells the current implementation as x4o. A1652-54. Because i4i had moved away from Macintosh, Owens never went back to add the functionality of the new invention to SEMI-S^4. A794-95. Ultimately, i4i finished its work with SEMI and discarded the SEMI-S^4 Macintosh-based source code altogether. A1632.

In August 1994, Vulpe applied for funding from Canada's Industrial Research Assistance Program ("IRAP") (A1688-89) and summarized Owens's modifications of S^4 to incorporate the invention. A1753-56;A3759("initial

implementation" of the pending patent application had been "embedded into Infrastructures' S^4 product");A3770.

C. The '449 Patent

1. The '449 Patent's Specification

The '449 patent concerns "content-based" markup that identified the content's *meaning* (as opposed to "formatting" markup, which controls its appearance, s*ee supra* at 9). The patent refers to content-based markup as "metacodes." A250(4:14-17).

The '449 patent addresses two basic problems associated with using metacodes—inflexibility and inefficiency. Inflexibility arose because existing applications *intermixed* metacodes with the content and therefore could only edit them concurrently with the content. A250(3:21-34). Moreover, intermixed metacodes made it difficult to create multiple versions of a document with the same content used in different ways (using different metacodes). *Id*. Inefficiency arose because existing document-editing programs had to process metacodes and content together. A250(3:35-60).

a. The Invention's Creation of "Distinct" Metacode "Maps" and "Mapped" Content

The '449 patent describes a novel solution to these problems by separating the structure of a document—the metacodes—from its content. A250(4:3-10);A779. A metacode "map" stores metacodes and the locations within the

document's content that the metacodes affect (called "addresses of use"). A250(4:5-10,4:17-20,4:29-30);A253(10:3-10). The document's content is kept as "mapped content," which the addresses of use identify a location within, thus correlating the document's metacodes with its content. A250(4:5-10,19-20). The patent shows an example of a metacode map, which lists the position for three regions of markup applied to a document, each with a start and stop position:

Metacode Map

Element Number	Element	Character Position
1	<Chapter>	0
2	<Title>	0
3	</Title>	23
4	<Para>	23
5	</Para>	39
6	</Chapter>	46

A253(10:1-10).

The invention's key is to treat the metacodes and content distinctly, such that each may be treated as a "separate entity." A2796;A2812. This allows users to apply different metacode maps to a document's content, essentially repackaging the content to create multiple documents. *See* A768. For example, the invention allows the same content to be used for entirely different purposes, such as in a technical paper for trade meetings or a product manual for customers. A251(6:26-43).

The invention can treat content and metacodes as distinct entities because it stores the two as distinct entities. A250(4:3-13) ("[T]he metacodes of the

document are separated from the content and held in distinct storage in a structure called a metacode map, whereas document content is held in a mapped content area."). This does not mean, however, that the two must be stored in *separate files*. To the contrary, the patent never discusses any need or even advantage to storing the metacode map and content in separate files. Indeed, the Summary of the Invention broadly defines the documents that can processed with the invention and states that a document can be processed "irrespective of its mode of storage." A250(4:57-59).

b. The Invention Performs Automatic Updating of Metacode Maps After Changes to the Content

Although stored as distinct entities, the content and metacode map must interact. After a user changes the document's content, the system updates the metacode map(s) corresponding to the content to synchronize the two parts. A255-56(14:49-15:5) (describing how Figure 9's "processing system . . . reads the changes to the mapped content . . . and uses the changes to update . . . the metacode maps"); *see also* A256, claim 10 (claiming a "means for amending a plurality of maps in consequence of an amendment to mapped content.").

c. The Invention Allows, But Does Not Require, Restriction of a User's Access to One Portion of a Document

While still allowing automatic updating as described above, there may be some situations where a document's "owner" wants a particular user to be able to

modify a document's metacodes but not its content. The invention is flexible enough to provide that capability:

> The present invention provides the ability to work solely on metacodes. . . . This allows changes to be made to the appearance or structure of a document by individuals who may not be allowed to modify the content.

A252(7:6-16).

2. The '449 Patent's Prosecution

The '449 patent's prosecution spanned several years. A239. Microsoft, however, cites only two events as relevant to the issues on appeal: the PTO's rejections of the claims over Mizuta and Kugimiya. MSBr.26-27.

The PTO rejected all the claims over Mizuta, which allegedly anticipated claim 20 and rendered claims 1-19 obvious. A2802-04. In response, i4i pointed out that Mizuta neither teaches nor suggests certain important claim features. A2813-16. Specifically, Mizuta describes "meta-information" (information about the document itself, e.g., who authored it and when), not metacodes (information that identifies how content is to be interpreted). A2813-14. Accordingly, argued i4i, "Mizuta does not show the presently claimed 'map of metacodes stored in distinct metacode storage means'" of claim 20. *Id.* Similarly, regarding claims 1-19, i4i observed that Mizuta's meta-information is different from the invention's metacodes. A2815-16. To prove that Mizuta did not disclose a metacode map, i4i cataloged the contents of Mizuta's "document file": "a document file (15A)

includes a matter part (41A), a form part (42A) and an arrangement fashion storage area (17A)." A2816 (citing A7821(MizutaFig.1B)). i4i then stated that this is an *exhaustive* list of the document information Mizuta disclosed because "in Mizuta *all* document information is stored in one file—the document file." *Id*. (emphasis added). Thus, concluded i4i, "Mizuta *lacks any notion of a metacode map*, let alone such a map in a 'metacode map distinct storage means,' as presently taught and claimed." *Id*. (emphasis added).

Although i4i stated that Mizuta's "document information is stored in one file," i4i did not distinguish Mizuta on that basis. Indeed, just a few sentences later, i4i confirmed that as far as i4i's invention was concerned, the way the document was stored had no significance. *Id.* ("[I]n the present invention, as noted above, a document broadly refers to 'a non-random aggregation of data *irrespective of its mode of storage* or presentation.'" (emphasis added)(quoting A251(6:57-59)).

The PTO also rejected the claims over Kugimiya. A2828. Kugimiya teaches a system for translating documents from one language to another (e.g., English to Japanese). As part of the translation process, Kugimiya removes the markup, stores it as a separate file, translates the content of the document, then replaces the markup in the translated document so it is structured the same way as the original. A3721;A3726(2:52-63). After replacing the markup, the file that was

created is discarded. A2841-42. Moreover, nowhere in the Kugimiya translation process is the markup file provided to the user for editing. *Id.* Accordingly, explained i4i, Kugimiya fails to teach "providing the document as the content of the document and the metacode map of the document." A2842. The PTO initially disagreed. A2846-47. In an interview, however, i4i explained how Kugimiya failed to teach the "providing" limitations of the claims. Moreover, i4i showed that Kugimiya also lacked "persistent storage for the metacode map," since Kugimiya only temporarily stores the metacodes as a separate entity during the translation process and then intermixes them with the content. A2853. In the invention, however, "the metacodes are separate from the content and managed separately from the content." A2854. Ultimately, the examiner agreed that Kugimiya does not teach the "providing" limitations and allowed the claims. A2849;A2855.

3. The Asserted Claims

At trial, i4i asserted claims 14, 18, and 20. The issues on appeal relate to independent claims 14 and 20, each of which contains limitations directed to the metacode map, the mapped content, addresses of use, and distinct storage for the metacode map and mapped storage (the contested limitations are italicized):

> 14. A method for producing a first map of metacodes and their *addresses of use* in association with mapped content and stored in *distinct map storage means*, the method comprising:

providing the mapped content to *mapped content storage means*;

providing a menu of metacodes; and

compiling a *map of the metacodes* in *the distinct storage means*, by locating, detecting and addressing the metacodes; and

providing the document as the content of the document and *the metacode map* of the document.

20. A method for producing from a document made up of metacodes and content, a map of metacodes and their *addresses of use* in association with mapped content of the document and stored in *distinct map storage means*, the method comprising:

(a) reading the content of the document until a metacode is found;

(b) copying the content and storing the copied content in a *mapped content storage*;

(c) noting in the map the found metacode and its position in the content;

(d) repeating the processing of (a)-(c) until the entire document has been processed; and then

(e) providing the document as the content of the document separately from the *metacode map* of the document.

A256.

D. Microsoft Recognizes the Commercial Significance of i4i's Invention

In March 1999, i4i released S4/Text, a software product based on the '449 patent's teachings. *See* A884. S4/Text provided an important extension to Word

that Microsoft could not itself provide. Indeed, Microsoft had tried to provide a custom XML editor, recognizing that it was "absolutely critical to build a generic XML edit[or]" for custom XML. A7588;A7291("If we're betting the farm on the XML revolution, an XML editor should be an absolutely fundamental component of our product arsenal.");A7353-58;A7708-11. As Bill Gates put it, "Now the market wants a great XML editor. . . . It's hard to say we are the leader of the XML revolution if we don't have an editor." A7592. Microsoft Press's director of development wrote to Gates in March 2001: "An 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." A7291.

Microsoft, however, struggled with the problems i4i had solved, recognizing that its failure to support custom XML was a "problem we [have] always had with Word since years and years and Word failed to deliver on this vision." A7589. Indeed, one Microsoft executive noted that, "I don't think we have any ideas how to do this for Word." A7591. As Microsoft's senior director of XML architecture put it in January 2000: "Please do not be fooled by what we at Microsoft are building today: there is absolutely no client in Microsoft which can consume, manipulate, modify, author, [and] present the data in a user friendly way to the user and let her take advantage of generic XML schemas." A7557;A7555-63.

But Microsoft was aware that i4i already provided the desired functionality. In fact, Mark Belk, from Microsoft's U.S. Government sales office, asked i4i in April 2001 to come to DC to meet with Microsoft. A941-47;A974;A1928-29;A7373. An internal notice sent before the meetings described i4i as a "Microsoft Partner" and described i4i's patented product as "the simplest way to enable your entire workforce – non-technical as well as technical – to create XML collaborative content without a costly investment in proprietary software and training." A7373.

During the meetings, i4i provided sales kits that contained an "i4i at-a-glance" datasheet identifying the '449 patent and describing i4i's business and product. A942-43;A7240. An i4i representative, Keith Thomas, discussed the architecture of i4i's product, explaining how it separated markup from the content of a document and enabled Word to act as an XML editor, and provided a demonstration. A998-1002;A1044-45;A7257. Thus, Microsoft learned about i4i's product and the '449 patent. A43-45;A946-47;A7359-64.

Microsoft's Belk contacted i4i because several federal defense and security agencies were looking to Microsoft for a custom XML solution. A7242;A944-45. That Microsoft needed i4i to provide the government the XML functionality it sought was confirmed when Microsoft invited i4i representatives to a meeting with members of the intelligence community and Microsoft's XML for Word team—

Chris Pratley, Martin Sawicki, Brian Jones, and Andy Zukerberg. A1000(134:17-23), A1005(139:9-18);A7279-88. At that meeting, Pratley said that Microsoft did not have any plans to offer the custom XML editing that the government wanted, but instead promoted i4i's ability to provide specialized solutions. A7279-88;A1005-06(139:21-140:8).

Microsoft's Belk also praised i4i for having "a capability that [Microsoft] only ha[s] on the drawing board" (A7593) and demonstrated the S4/Text Tagless Editor working with Word XP to defense-community representatives in both June and August 2001. His presentation highlighted i4i's S4/Text as being the heart of "Evolving Office to handle Intelligence Processing" (A7571) and "the Microsoft proposed solution" (A7586). Later, Belk again lauded i4i, noting that the only way Microsoft could have succeeded with the government "was with a third party plug in and I4I came through for us." A7368. And that fall, a Microsoft program manager recommended i4i as the *only* source for customers who needed custom-XML authoring capabilities in Office XP: "The only company I can think of right now is i4i." A7546.

E. Microsoft Decides to Create Its Own XML Editor and Render i4i's "Obsolete"

Microsoft had received demands from customers for the ability to author custom XML in Word (A1103-04) and believed that Word gave it a great advantage in the custom-XML authoring market, making it difficult for third-party

XML authoring providers to compete (A7295; *see* A7291). Accordingly, at the same time Microsoft was praising the improved functionality that i4i's product brought to Word, and touting i4i as a "Microsoft Partner," Microsoft was working behind i4i's back to make i4i's product obsolete. Just five days after i4i's initial meeting with the XML for Word team, for example, Microsoft executives discussed plans for Word and how it would affect the custom-XML authoring market, noting that it would "eventually make obsolete any competitive attempts by third parties to conquer that market." A7295.

In a June 2001 e-mail, when Belk suggested adding i4i's Thomas to the Office/XML Advisory Council (A7368;A7371), Zukerberg made Microsoft's position clear internally: "[I]f we do the work properly, there won't be a need for [i4i's] product." A7367;A44. Although Belk responded that he would like to inform i4i of that possibility (A7367), that never happened. Instead, Zukerberg told Thomas that membership on the Advisory Council was full. A7374.

Later in 2001, before Word 2003 was released, Microsoft cut off all contact with i4i. A1019. In one of several efforts by i4i to reestablish the relationship, i4i sent Microsoft an e-mail in January 2003 reminding Microsoft of the '449 patent and i4i's patented product. A44;A7302-03. The e-mail was forwarded to Sawicki and Jones, who had previously met with i4i. In an internal e-mail, Sawicki noted Microsoft's high regard for i4i's patented editor, but explained Microsoft's plans to

make it obsolete: "[W]e saw that tool some time ago and met its creators. Word 11 will make it obsolete. It looks great for XP though." A7302-03;A1200-02. Again, no one told i4i.

F. Microsoft Destroys the Market for i4i's Product

i4i's custom-XML products, including S4/Text, x4o, and A4L, practice the claimed invention. A1653-56;A987;A992-93;A995-96;A2314-18;A7747;A7753-55;A7633-7635. x4o is S4/Text's successor (A1674), while A4L is an implementation of x4o customized for the pharmaceutical industry (A7100;A7747).

Since Microsoft incorporated the accused custom-XML functionality (which allows users to define their own metacodes and Microsoft refers to as "customer-defined schemas" (*see* A7566)), Microsoft has sold over 100 million copies of Word 2003 and Word 2007. Further, Microsoft touted XML as a core technology to Word 2003 and 2007 (A7684) and stated both that support for custom-XML constituted 90% of the value to using XML (A7553) and that custom-XML was "the most important effort [it] did on XML in Office since ever" (A7565). As Microsoft predicted, including custom-XML functionality in Word rendered i4i's products obsolete in "80% of the market." A1476.

i4i now operates almost entirely in the specialized niche market of the pharmaceutical industry. A889-90. Thus, when i4i's Thomas was asked, he

agreed that Microsoft and i4i do not directly compete in the "pharmaceutical space." A1027-28. Even so, now that Microsoft provides custom-XML, both Johnson & Johnson and Pfizer told Vulpe that they would use Word (A1676-77;A7764-66) and other potential customers are unwilling to purchase i4i's custom-XML product (A1764-67;A7091;A7099), showing that Microsoft and i4i directly compete in the custom-XML market (A1677;A1399-401;A891).[1]

G. i4i Sues Microsoft for Infringement

After Microsoft released Word 2003—the first version with custom-XML functionality—i4i investigated possible infringement. Once i4i determined that Microsoft might be infringing, it sought the funding needed to bring suit. A2140-42;A891;A1399-401;A1476;A7304; A7367;A7302-03. i4i obtained the assistance of Northwater Intellectual Property Fund L.P., and formed a limited partnership (i4i LP) owning the patent to bring suit. i4i LP sued Microsoft for infringement in March 2007, and subsequently granted i4i Inc. an exclusive license and joined it as a plaintiff.

1. Claim Construction

Among the parties' many disputes regarding claim construction was whether "metacode map distinct storage requires a separate file for the metacode map."

[1] While i4i's losses in 2003 and 2004 were lower than in some previous years, that resulted from i4i reducing its operating expenses—investing in research and development has been expensive for i4i throughout its history (A2340;A874-75)—not from any increase in revenue (A7231-32,7237;A7199;A882-83;A931-32).

A99. Microsoft contended (as it does here) that the specification and prosecution required the claimed metacode map and mapped content to be stored in separate files. *Id.* In particular, Microsoft pointed to the patent's repeated references to storing the metacode "separately" and "distinctly" from the mapped content. A3861. Microsoft also pointed to i4i's observation during prosecution that "in Mizuta all document information is stored in one file." A3862; *see supra* at 17.

The court rejected Microsoft's attempts to limit the claims. In particular, the court noted that while the patent repeatedly stresses that the metacode map and mapped content should be stored separately, it nowhere suggests that this had to be done in separate *files*. A99. Regarding i4i's prosecution statements concerning Mizuta, the court concluded that they do not rise to the "unmistakable" and "unambiguous evidence of disclaimer" this Court requires. A100. Instead, the court concluded that the intrinsic evidence requires "the claimed computer system or method to differentiate between the stored metacode map and mapped content," and it continued that, "[w]hether the computer system or method requires the metacode map and mapped content to be stored in separate files depends on a computer's operating system and how a program interfaces with the operating system to access and store data." A101. Thus, the court construed the term "distinct map storage means" as "a portion of memory for storing a metacode map." *Id.*

In discussing the "separate files" issue, the court observed (in connection with the embodiment of the invention that *allowed* a user to edit the metacodes without being able to edit the content (*see supra* at 15)) that "the claimed invention provides the ability to change the structure of a document independently from the document's content and allows individuals to modify a document's structure when they may not be allowed to modify the document's content." A99. More than a year later, on the eve of trial, Microsoft used this isolated statement to argue that the claims *required* what Microsoft now called "independent manipulation" of the metacode map and mapped content. A70-71. But the court disagreed, concluding that the patent's description of this capability (and the court's discussion of it) "was clearly permissive and [did] not imply a claim limitation." A71. Further, the court chastised Microsoft for not reading the court's claim-construction order "as a whole and taking a single statement out of context." *Id.*

2. Trial

a. Infringement

At trial, i4i presented detailed evidence showing that the custom-XML feature in Microsoft Word 2003 and 2007 ("Word") meets the limitations of claims 14, 18, and 20 of the '449 patent. One of i4i's experts, Dr. David Martin, discussed how he reviewed the source code for the custom-XML feature in Word and prepared figures summarizing the data structures used by the feature. A1353-

55;A7756-57. As Martin explained, Word creates data structures to store information about XML elements in a document. A1358-63;A1365-69.

Another i4i expert, Dr. V. Thomas Rhyne, compared Word's data structures and functionality (as Martin had explained them) to the asserted claims. A1105-68;A7238. In particular, Rhyne explained why Word's data structures meet the "metacode map" limitation: "a data structure that contains a plurality of metacodes and their addresses of use corresponding to mapped content." A1161-70. Rhyne also explained how Microsoft stored this metacode map in a "distinct map storage means" and, particularly, how the metacode map is stored in a separate part of memory from the mapped content. A1132-34;A1146-48;A1179-80.

Rhyne also addressed contributory infringement, where he focused on the custom-XML functionality because he believed that by providing Word 2003 both with and without the infringing functionality, Microsoft showed that it was separable from the rest of Word. A1211. Rhyne discussed Microsoft's three asserted "substantial noninfringing uses" for custom-XML in Word: (1) working with XML documents with metacodes but no content; (2) creating XML documents that are never reopened; and (3) working with XML documents saved in Word's proprietary binary format (".doc" or ".dot" files) that cannot be shared with other systems. A1213-16. Regarding use without content, Rhyne explained that the only purpose of that would be to later add content, thus infringing at the

later time. A1324-25. He also testified that creating documents but never reopening them had no relevance to how people actually use computer documents. A1217. Finally, he explained that the binary file format contravenes XML's fundamental purpose—sharing documents across systems—and that Microsoft showed agreement by switching to the infringing .docx format as the default in later versions of Word. A1213-17;A1324;A7726;A7704-06. Thus, Rhyne concluded that custom-XML in Word did not have any substantial noninfringing uses. A1218.

i4i also alleged that Microsoft induced others to infringe. Specifically, Rhyne discussed the evidence showing that Microsoft knew about the patent (A7302-03; *see supra* at 21) and provided support showing customers how to use custom-XML in an infringing manner (A7704-06;A7930) and therefore intended to cause the acts of infringement. A1199-1206. Next, Rhyne showed actual instances of infringing use (A7931-32), a Microsoft training document that reported examples of customer use (A7941-49), and a stipulation that custom-XML has been used within an XML document. A1206-09. Rhyne explained that Microsoft knew or should have known that its instructions would result in others infringing because simply reading the patent—which anyone in Microsoft's position should have done—would have shown that using Word infringes. A1209-10.

b. Invalidity

Microsoft also challenged the '449 patent's validity, relying on, inter alia, (1) i4i's SEMI-S^4 product, (2) a system known as Rita, and (3) a patent to DeRose. A2475. Microsoft argued that SEMI-S^4 (*see supra* at 10) practiced all the elements of the '449 patent. In response to Vulpe's and Owens's testimony concerning the fundamental difference between SEMI-S^4 and the invention—that the invention maintained content distinct from metacodes—and that they conceived of the invention in the '449 patent after installing SEMI-S^4, Microsoft accused both men of lying. *See* A2459;A2481. Microsoft was unable, however, to back up its allegations. It was undisputed, for example, that nobody could know how the system stored a document's markup and content without access to the source code (which had been discarded years ago, *see supra* at 12). A2299-302;A1958-59. Instead, Microsoft attempted to rely on the SEMI-S^4 user's manual, the testimony of a sales employee with no technical understanding of the system, and Vulpe's description of the invention to IRAP (*see supra* at 12). MSBr.40-42. Rhyne considered all this evidence and explained to the jury how it was consistent with Vulpe's and Owens's testimony concerning the differences between SEMI-S^4 and the invention. A2299-306.

Microsoft's expert, Stephen Gray, then discussed anticipation based on a collection of materials concerning "Rita," a SGML tag-editing program. Rita was

described in several academic papers (A2890-915;A3044-266) and embodied in commercial software. A2890-915;A2927-3043;A3044-266;A3227-412; MSBr.35. Microsoft asserted the on-sale bar based on a single sale of the Rita software in the U.S. prior to the critical date (A3414), notwithstanding that the source code Gray analyzed had been changed after that sale, making it impossible to know the characteristics of what was sold. A2294(46:6-16);A7601-32. One of the authors of the Rita papers, Dr. Donald Cowan, testified during his deposition that he neither wrote the Rita source code nor recalled what changes were made after the 1989 sale. A2126-27(36:6-37:-6). Cowan thought the changes were made "primarily" to fix bugs and improve performance but admitted he was unsure. A2135-36(45:20-46:7). Nevertheless, Gray relied on the source code for support (A2056(149:17-19);A2058(151:4-7);A2060(153:12-15)) and tried to buttress his conclusions regarding Rita by becoming unspecific and referring collectively to the "Rita" papers and software (*see, e.g.*, A2051(144:6-7,22)) (the court later described Gray's testimony as "based on an amalgam of the Rita source code and the papers written about the Rita program," A30). But the asserted claims require certain details regarding how data from a document is decomposed and maintained in memory, and Rhyne testified that the Rita references did not include enough detail to invalidate the claims. A2294-95.

Gray also analyzed DeRose. Rather than creating a metacode map with addresses of use associated with mapped content, both Rita and DeRose stored the tag names and content *intermixed* in what is called a "tree structure" (A2283-84;A2899;A2289-91;A3438;A3439):

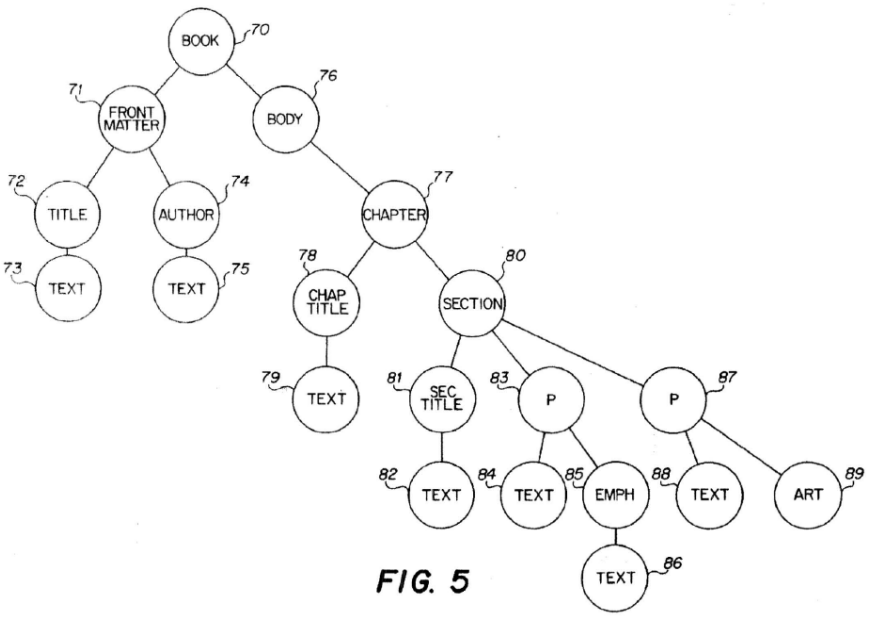


FIG. 5

A3438. The SGML standard documents mentioned in the '449 patent's Background also discuss storing a document in a tree structure. A249(2:41-43);A2285;A5432. Rhyne testified that because a tree structure intermixes metacodes and content, it fails to meet the "metacode map" and "mapped content" limitations, and using "pointers" within a tree structure meant it also lacked an "address of use." A2286-88;A2291-92. Microsoft's contention that Rhyne "acknowledged that trees . . . separate metacodes from the content" (MSBr.36) misconstrues his testimony. Rhyne explained that each piece of content is separate

from the other pieces of content—not from the metacodes. A2286(38:7-18);A3438. That is consistent with Figure 5 from DeRose and distinctly different from the '449 patent. *Id*.

Finally, Gray presented his theories of obviousness to the jury, stating that any element missing from a particular reference could be found in another reference. A2081. For his analysis, Gray considered Rita and DeRose, each in combination with Kugimiya (discussed *supra* at 17). A2082-83;A2084-86. Notably, he did not present any other theories of obviousness.

Countering this, Rhyne explained why a person skilled in the art at the time would not have found any reason to combine Kugimiya with Rita or DeRose. A2308-09. Specifically, because Kugimiya addressed a different problem in a different field (language translation) and, in fact, destroyed its temporary data structure after translation was complete, Rhyne concluded that a person of ordinary skill in the art would have no reason to make the combinations proposed by Gray and that none of the combinations would invalidate the claims of the '449 patent. A2308-09;A2039.

Next, Rhyne presented a comprehensive list of secondary considerations that supported the nonobviousness of the invention claimed in the '449 patent, including commercial success (primarily pointing to Microsoft's infringing product), failure of others to achieve the results of the patent, long-felt need,

disbelief or skepticism, and industry praise. A2310-13; *see also supra* at 19;A7596 (describing Microsoft's failure).

c. Damages

Dr. William Wecker, an expert in statistics and applied mathematics, testified for i4i regarding the amount of infringing use by businesses. A1533-618. Wecker testified that because he could not ask all business users of Word whether they had used the infringing technology, he conducted a survey designed to select a statistically valid sample of participants for extrapolation. A1541-43. As Wecker explained, such surveys are routinely used by the federal government and others to estimate the behavior of large populations. A1542. He testified that, in this case, the survey was designed, conducted, and analyzed using accepted methodology. A1543-65.

Wecker explained that he worked with a well-known survey company to design and implement the survey. A1548-49. After asking screening questions to identify the IT or computer administrator whose job it was to know what software had been installed and used within the business (A1549-52;A1581-82;A7962-75), the survey asked forty substantive questions (A1564). Respondents could respond that they were knowledgeable about usage in only a portion of their entire organization, or answer any question with "don't know." A1552;A1578-79;A1582-83.

Wecker testified regarding the methodology used to select the 988 businesses contacted for the survey. A1544-48. Of the 988 respondents, 46 participated in the survey, and of those 46, 19 used the infringing technology. *Id*. But Wecker did not assume that 19 out of every 46 Word users (41.3%) infringed. Rather, he assumed that *all* 942 businesses that did not respond to the survey did not infringe, yielding an infringement rate of just 1.9%. A1562-63. Indeed, when a representative (1) could not be reached, (2) was reached but was unwilling to participate, (3) did not pass the screening questions, or (4) did not know the answers to the questions, Wecker imputed "zero" infringing use, thus assuming *none* of them infringed. A1563. Wecker testified that these assumptions were very conservative and that, in his opinion, the survey *underestimated* infringing use. A1563;A1566;A1419-20.

While a few respondents gave a small number of inconsistent responses, Wecker testified that inconsistent results in surveys are common and he used a standard statistical practice known as "logical imputation" to correct the few inconsistencies. A1556-61;A8047;A8051-93;A8095-104. For example, respondent #168 provided a response of "4" when asked, "How many different computers at your business ever had Microsoft Word 2007 as an installed application at any time during calendar year 2008?" A1557. A response of "3" was recorded for a subsequent question about what *percentage* of those computers

used Word to open an XML document containing custom XML. A1557-58. Wecker interpreted this answer not as 3% (because there is no 3% of 4 computers), but as 3 of 4 computers, or 75%. A1559;A38.

i4i also presented testimony from a damages expert, Michael Wagner. Wagner apportioned the invention's value by calculating a $98 royalty rate only on Word products that were actually used in an infringing manner by businesses. A1383-85. He explained that, in calculating this rate, he considered the *Georgia-Pacific* factors (A1381-82;A1386;A1397;A1407), selected a benchmark to apportion the value in the marketplace for an XML editor (A1386-91), and applied the well-accepted 25% rule—i.e., that "when an inventor allows someone else to use [his] invention, [he'll] keep 25 percent of the profits from the sale of that infringing product" (A1386-87).

Wagner explained that he chose XMetal as a conservative benchmark because (1) it was the cheapest of the three competing XML editors that Microsoft identified, (2) it was cheaper than the stand-alone SGML editor that Microsoft tried to sell several years earlier, and (3) Microsoft itself used XMetal prior to developing the infringing technology. A1387-90. He also testified about the need to use a benchmark in this case given Microsoft's business strategy of adding new features (like the infringing XML technology) to Word without raising the price in order to induce customers who already own Word to upgrade to the new version.

A1392-94. Wagner also explained that if the $98 royalty rate was spread out evenly across all Microsoft Word products capable of infringing (rather than just the copies actually used to infringe), it would amount to only $2 per unit. A1396-97. Based on the Wecker survey results, however, Wagner concluded that approximately 1.85 million installations infringed the patent between November 2003 and November 2008. A1410-13;A7977. Wagner calculated—through extrapolation—that an additional 262,282 installations infringed between November 2008 and the date of the trial, bringing the royalty base to 2.1 million. A1412-13;A7810. Wecker later testified that Wagner's extrapolation was reasonable. A1616-17. Wagner multiplied the $98 royalty rate by the 2.1 million infringing installations in the royalty base and deducted 3.5% to account for installations opening an XML file with a custom transform (which Microsoft contended did not infringe) to arrive at $200 million. A1418-19;A7808.

While Microsoft offered testimony on the survey from Dr. Simonson (survey expert) and Dr. Ugone (damages expert), it did not ask Simonson to conduct his own survey to test the accuracy of Wecker's results. And Microsoft did not file a JMOL motion on damages.

3. The Jury's Verdict

The jury found that Microsoft willfully infringed all three asserted claims and awarded damages of $200,000,000. A236-37. It further found that none of the asserted claims of the '449 patent was invalid. *Id.*

Microsoft raised a number of issues in its post-trial motions. Citing *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 452 (2007), Microsoft contended that a software manufacturer cannot be liable for contributory infringement because section 271(c) does not cover "intangible" software. A8029. Several of the court's holdings regarding waiver, including its ruling on this issue, are particularly relevant in this appeal. In particular, the court held that Microsoft had not argued, before the case went to the jury, that software could not form the basis of infringement under section 271(c). A17. Accordingly, the court held that "Microsoft's JMOL on this issue is waived." *Id.*

The district court denied all of Microsoft's post-trial motions. A5-42;A60-69. Regarding infringement, the court recognized that Microsoft's arguments concerning the "distinct map storage means" (and similar) limitations were based on the claim construction arguments the court had already rejected (*see supra* at 25). A12.

Regarding invalidity, the court held that Microsoft had sought JMOL of invalidity based only on SEMI-S[4]. A25. Concerning that product, the court noted

that "the inventors testified that the S4 system that was sold prior to the critical date never implemented the invention" and that Rhyne's testimony showed that without SEMI-S^4's source code, it could not be shown to practice the invention. A26-27. The court also observed that the testimony of Microsoft's expert (Gray) "failed to approach the specificity or detail that was applied by the parties to the infringing WORD products or the other prior art." A27-28. Thus, concluded the court, "there was legally sufficient evidence for the jury to find that S4 did not anticipate the '449 patent." A28.

4. The District Court's Injunction and Award of Enhanced Damages

As noted previously, the jury, which had been instructed based on *In re Seagate Technology, LLC*, 497 F.3d 1360 (Fed. Cir. 2007), found that Microsoft's infringement was willful. A2382-84;A236. It follows, therefore, that the jury determined that Microsoft acted recklessly, a finding consistent with the weakness of Microsoft's defenses and the evidence concerning Microsoft's knowledge of i4i's patent, its product, and Microsoft's conduct in misleading i4i into thinking it was a "Microsoft Partner." *See supra* at 21.

When ruling on enhanced damages, the court considered the nine factors from *Read Corp. v. Portec, Inc.*, 970 F.2d 816 (Fed. Cir. 1992), discussing the evidence showing that Microsoft knew of the patent but performed no investigation and acted despite knowing it would push i4i out of the market. A44-45. Against

this, the court balanced the fact that i4i had not argued that Microsoft copied the patent and i4i had taken a long time to file suit against Microsoft.

Finally, the court considered the conduct of Microsoft's trial counsel. A46-47. Notwithstanding that the court instructed counsel during voir dire not to argue that the assertion of patents by nonpracticing entities is improper (A625-27) and the parties' agreement to refrain from such argument (A7001), counsel violated those instructions and tried to tap into public anger over the recent banking bailout by calling i4i "bankers" and suggesting they had no right to assert their patent against Microsoft. A722(42:6-8);A712(32:1-16);A2505-06(90:13-91:5). Considering all the factors, the court granted i4i's motion for appropriate enhancement, increasing the jury's award by twenty percent—$40,000,000. A47-48.

The court then turned to i4i's motion for a permanent injunction. After noting that i4i did *not* request that Microsoft disable the custom-XML functionality in the Word products that had already been sold, the Court considered the four factors set forth in *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 394 (2006), including irreparable harm, sufficiency of monetary damages, balance of hardships, and public interest. A51-57. The Court cited, among other things, the two Microsoft documents that "recogniz[ed] that the addition of custom XML into its WORD product would not only directly compete with i4i's products, but render

them obsolete" (A53), and concluded that "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" (A52-57). The court determined that the balance of hardships also favors i4i because "the evidence clearly indicates that while custom XML is a small fraction of Microsoft's business [1 or 2%], it is central to i4i's." A55-56. Finally, the court noted that i4i had agreed that Microsoft could continue to support customers who had purchased infringing Word before the injunction and thus concluded that i4i's proposed injunction would have little effect, if any, on the public interest. A56-57.

IV. SUMMARY OF ARGUMENT

Microsoft's appeal labors to turn the jury's factual findings into legal issues, all the time ignoring that it waived several arguments.

Microsoft's infringement appeal presents but a single issue of claim construction (obviously a legal issue) packaged in two different ways: its proposal that "independent manipulation" be read into the claims based on one possible use discussed in the specification; and its effort to require "separate files," which are not even *mentioned* in the specification much less described as an essential feature of the invention.

After preserving just one invalidity argument in its pre-verdict JMOL motion, Microsoft challenges a host of jury findings regarding validity.

Specifically, at the close of evidence, Microsoft asked the court to grant JMOL of invalidity under the on-sale bar based on a sale of SEMI-S[4] that occurred before the claimed invention was even conceived. Microsoft did not seek invalidity based on obviousness in light of that product, and it did not mention any other prior art. After the jury rejected Microsoft's invalidity argument, however, Microsoft argued that the court should overturn the verdict based on other references. Although obviousness is ultimately a legal determination, Microsoft's waiver means that the factual underpinnings of the issue must be resolved in i4i's favor. And here, that leaves Microsoft with no legitimate basis to argue that the court reached an incorrect legal conclusion. Moreover, irrespective of Microsoft's waiver, i4i presented substantial evidence to contradict each of Microsoft's positions, thus providing this Court with an additional reason to affirm the denial of JMOL on obviousness.

Microsoft further challenges the jury instructions on contributory infringement and makes only weak objections to i4i's proof regarding Microsoft's intent. The court, however, instructed the jury consistently with this Court's case law, and any inconsistency with the statute amounts to nothing more than harmless error. Indeed, the lack of prejudice to Microsoft is clear given the court's holding that Microsoft did not timely argue that the sale of software cannot ever contributorily infringe and thus waived the issue.

i4i presented voluminous documentary evidence and testimony regarding Microsoft's history of working with i4i as a "Microsoft Partner," including internal e-mail discussing how Microsoft's development team had seen i4i's patented product and thought it "looks great" for then-existing versions of Word but later versions of Word would "make it obsolete." Microsoft now tries to avoid this evidence by citing case law relevant to willfulness instead of indirect infringement, and arguing that despite its knowledge of the patent number and claimed functionality, as well as its dealings with i4i regarding the patented product, it had no duty to look into the patent. Microsoft's argument fails utterly.

Microsoft's damages arguments should also be rejected. First, the survey criticized by Microsoft carries every indicia of reliability. It was designed, conducted, and analyzed using accepted methodology by an expert in statistics and applied mathematics and a well-known survey company. Contrary to Microsoft's complaints, the survey included proper screening questions to identify the person who knew what software had been installed and used by others in the business. Nor did the survey encourage guessing, as respondents could answer "don't know" to any question. Finally, that only 46 of 988 businesses responded was not problematic because Wecker conservatively assumed that all of the non-respondents did not infringe.

Wagner's expert testimony on the reasonable royalty was also properly admitted. Given Microsoft's business practice of incorporating additional features (like i4i's invention) into Word without increasing the price (which it does to entice customers to buy a new version), the court properly admitted Wagner's testimony that he turned to other accepted methods for determining the value of XML technology. Specifically, Wagner looked at the market at the time of the hypothetical negotiation and selected a benchmark that was the cheapest of those identified by Microsoft and, in fact, Microsoft itself used. Moreover, contrary to Microsoft's assertion, Wagner considered the *Georgia Pacific* factors, analyzing them at length. Finally, while Microsoft criticizes Wagner's reliance on the 25% rule, this Court has recognized that the rule is widely accepted.

Microsoft also challenges the district court's enhancement of damages, which relied on the jury's finding of willful infringement and Microsoft's litigation misconduct. But the jury found willfulness after being accurately instructed on the law, its verdict was supported by substantial evidence, and the court acted well within its discretion in enhancing damages by only 20 percent.

Microsoft also asserts that because it destroyed the general market for i4i's product—leaving i4i to sell to only a specialized set of customers and making it no longer a Microsoft "competitor"—the court abused its discretion in finding that i4i was entitled to an injunction because it was irreparably harmed. Microsoft seems

to think that only companies operating on a scale similar to the infringer should be entitled to injunctive relief, but that is not the law. i4i was irreparably harmed when Microsoft usurped the market from one of its "Partners," and the harm continues for the simple reason that i4i can no longer compete.

Moreover, the equities tip in i4i's favor. Here, i4i began selling products covered by the '449 patent *before* Microsoft's infringement, and the accused functionality in Word can be removed without any impact on the overall product. In short, the injunction is both proper and necessary to protect i4i's rights.

V. ARGUMENT

A. Standard of Review

i4i agrees with Microsoft's stated standards of review except as noted here and below. While the Fifth Circuit reviews timely challenges to jury instructions for abuse of discretion, challenges raised after the jury's consideration are reviewed only for plain error, an "exceedingly deferential" standard. *Dahlen v. Gulf Crews, Inc*., 281 F.3d 487, 494 (5th Cir. 2002) (citation omitted). Federal Circuit law applies to questions regarding jury instructions on issues of patent law, and errors will not change the result unless they had prejudicial effect. *Sulzer Textil A.G. v. Picanol N.V.*, 358 F.3d 1356, 1364 (Fed. Cir. 2004).

In its principal brief, Microsoft has not challenged any of the district court's holdings regarding waiver, thus waiving its ability to challenge those holdings on

appeal. *SmithKline Beecham Corp. v. Apotex Corp*., 439 F.3d 1312, 1319 (Fed. Cir. 2006).

B. Because the District Court Correctly Construed the Claims, the Infringement Verdict Must Stand

Microsoft only challenges infringement under its own erroneous construction. Microsoft argues that the district court read "distinct" out of the claims by not construing them to include two additional requirements: (1) "independent manipulation" of the metacode map and mapped content (MSBr.23,27-29); and (2) that the metacode map and mapped content be stored in "separate files" (MSBr.23,26-27). As shown below, however, the court followed the patent's teachings and did not read "distinct" out of the claims.[2]

1. Microsoft's Attempt to Require Independent Manipulation Directly Contradicts the Patent's Teachings

Microsoft urges the Court to read "independent manipulation" into the claims. MSBr.27-29. Microsoft's argument, however, contradicts an important aspect of the invention. The '449 patent's specification instructs that changes to one aspect of a document—the mapped content or metacode map—must result in changes in the other aspect to keep the two parts synchronized. *See supra* at 15.

[2] Microsoft's argument that all storage is distinct (MSBr.23) ignores that the court's construction provides both that the metacode map is a "data structure" (A116), which is a distinct entity, and that the document parts are each stored in their own "portion of memory" (*id.*), which also preserves the notion of "distinct" in the claims.

Microsoft's construction, which prohibits synchronization of the document's two parts (MSBr.22-23,27-28), flies in the face of the patent's teaching. It must, therefore, be rejected. *See SanDisk Corp. v. Memorex Prods., Inc.*, 415 F.3d 1278, 1285 (Fed. Cir. 2005) (stating that a construction that excludes a preferred embodiment "must be wrong").

Microsoft's reliance on the patent's teaching about preventing certain users from modifying a document's content (*see supra* at 15) is flawed. That teaching is *consistent* with synchronization because the restriction is based on a *user's* ability to edit content, not how the *system* ensures consistency between the two document parts. As the patent describes, synchronization is done by the "processing system," while content-restriction is directed at certain "individuals." *See supra at* 15;A252(7:12-14). The district court thus correctly recognized that restricting a user's access is just one way of using a decomposed document (A72), and provides no reason for the Court to adopt Microsoft's construction. At most, restricting a user's access represents an alternative embodiment, and Microsoft's construction would improperly limit the invention to one example in the specification. *See Brookhill-Wilk 1, LLC, v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1301 (Fed. Cir. 2003).

2. There Is No Basis for Limiting the Claims to "Separate Files"

By creating and distinctly storing the metacode map and mapped content, the invention allows a user to interact with one or the other as desired. *See supra* at 15. And the district court's construction requires storing each in "a portion of memory." A116. In testifying regarding infringement, moreover, Rhyne focused on the separate and distinct nature of these portions of memory. *See supra* at 28. Accordingly, the district court's construction did not omit the "distinct" aspect of storage. MSBr.22-27.

In fact, in pushing its "separate files" requirement, Microsoft disregards the specification. The patent states that a document can be edited by the invention "irrespective of its mode of storage" and never describes the need (or even desirability) of storing the metacode map and mapped content in separate files. *See supra* at 14. Moreover, the patent describes the document parts as "structures," not files. A250(4:9,21).

Microsoft points to Figure 2 (MSBr.25), but the use of separate boxes to illustrate the metacode map and mapped content does not indicate that the boxes show separate files. And even if the figure could be interpreted this way, the figures merely illustrate "preferred embodiments," not the *only* embodiments, of the invention. A252(8:10-13). *See Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1306-07 (Fed. Cir. 2003).

Nor does the prosecution history show reliance on a particular mode of storage. MSBr.26. Microsoft quotes a passage describing "separate entit[ies]" and "storing the map and the content of the documents separately," but that is completely consistent with i4i's position. Separate *storage* does not mean separate *files* and Microsoft makes no attempt to show otherwise. Instead, Microsoft merely assumes that "storage" and "entity" *must* mean "file." MSBr.26-27 ("'separate entity' (that is, separate file)").

Microsoft's reliance on i4i's distinguishing of Kugimiya during prosecution gets it no further. i4i distinguished Kugimiya on the basis that it does not "provide" the decomposed document to the user. *See supra* at 17. This in no way suggested separate files.

Microsoft's final prosecution-history argument, regarding Mizuta, is similarly flawed. Just as the district court recognized (A100-01), the applicant's statements noted only that Mizuta's "meta-information" was not at all similar to the invention's metacodes. *See supra* at 16. A remark that Mizuta stores "*all* document information" in one file (*id.*) did not define "metacode map distinct storage means" because nothing stored in the document file could qualify as metacodes and no document information was stored anywhere else.

In fact, just a few sentences after its "single file" remark, i4i reiterated that the meaning of "document" in the invention was "irrespective of its mode of

storage." *Id.* Therefore, i4i's comments about Mizuta were not a "clear and unmistakable" disclaimer of systems that do not store metacodes and content in separate files. *See Omega Eng'g*, 334 F.3d 1314, 1325-26 (Fed. Cir. 2003).

3. The Correct Construction Requires Affirmance, But Even Under Microsoft's Construction, Disputed Issues of Fact Would Remain

Because Microsoft's proposed constructions contradict the '449 patent's express teachings, this Court should affirm the verdict of infringement. Even if the Court were to agree with Microsoft on the construction, however, it should remand to allow resolution of disputed facts, including, at a minimum, infringement under the doctrine of equivalents. *See Exxon Chem. Patents, Inc. v. Lubrizol Corp.,* 137 F.3d 1475, 1478-79 (Fed. Cir. 1998).

C. The District Court Properly Refused to Overturn the Jury's Findings that the Patent Is Not Invalid

By failing to discuss its waiver of certain post-verdict challenges, Microsoft's arguments regarding the prior art should be viewed with skepticism. But regardless of its waiver, Microsoft merely points to the evidence it presented rather than addressing all the evidence before the jury. The full record shows that there is more than substantial evidence to support the verdict and Microsoft raises nothing more than a credibility challenge.

1. Microsoft Waived Its Challenge to Issues of Fact Relating to Prior Art Other Than Anticipation by SEMI-S[4]

The district court correctly observed that when Microsoft moved for JMOL at the close of evidence, it sought only "invalidity based on the SEMI S4 product." A25. As Microsoft then explained, "We believe the evidence presented establishes conclusively that it was sold more than a year before and that it embodied the patented invention." *Id*. In arguing only the on-sale bar of section 102(b), Microsoft waived its ability to challenge the factual findings regarding any other theory of invalidity, including obviousness. *See Duro-Last, Inc. v. Custom Seal, Inc.*, 321 F.3d 1098, 1107-08 (Fed. Cir. 2003). Microsoft is thus foreclosed from challenging the factual issues underlying nonobviousness here: (1) the scope and content of the prior art Microsoft asserted at trial; (2) the differences between the prior art and the claims; (3) the lack of a reason for a skilled practitioner to combine the teachings of that art; and (4) secondary considerations of nonobviousness, including a nexus to the claims. *See KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 406, 415 (2007).

Given the posture of the case, therefore, the following facts may not be challenged on appeal:

(1) the "Rita" software that was analyzed by Microsoft's expert (Gray) at trial was not the same as the Rita software that was on sale more than a year before the '449 patent was filed (*see supra* at 31);

(2) both Rita and DeRose lacked the "metacode map," "mapped content," and "address of use" limitations (*see supra* at 32);[3]

(3) Kugimiya does not teach the "providing" limitations (*see supra* at 17);

(4) there is no reason to combine the teachings of Kugimiya with either Rita or DeRose (*see supra* at 33); and

(5) numerous secondary considerations support the nonobviousness of the invention (*see supra* at 33).

Since the jury must be presumed to have decided all these critical factual determinations against Microsoft, there can be no question that the decision below concerning validity should be affirmed. Moreover, Microsoft would have no chance of success even if it had preserved its challenges below because substantial evidence here supports the verdict. *See Group One, Ltd. v. Hallmark Cards, Inc.*, 407 F.3d 1297, 1304 (Fed. Cir. 2005).

[3] Microsoft tries to paint i4i as being inconsistent because, like Rita and DeRose, i4i's products use a tree structure. MSBr.37. But Microsoft neglects the fact that i4i's products also use an "offset map," which meets the metacode map limitation. A2314-18;A2317(69:1-2(tree structure), 3-13(offset map)). When questioned by Microsoft's counsel, Rhyne explained that i4i's product is a "three-layer product" that uses a tree structure in only one of its layers. A2320.

2. Substantial Evidence Supports the Jury's Determination That SEMI-S^4 Did Not Invalidate the Claims

Both inventors (Vulpe and Owens) testified that SEMI-S^4 did not practice the invention of the '449 patent, which they conceived *after* installing that product. *See supra* at 10. Documentary evidence showed how and when Vulpe communicated the conception of the invention underlying the '449 patent to his patent attorney (A7788-91), and how and when Owens sent a draft patent application to the attorney (A7775-87). That evidence corroborated the inventors' testimony regarding their conception. Moreover, Rhyne discussed how source code was critical to credibly evaluating infringement. *See supra* at 30. In short, the jury was entitled to reject Microsoft's evidence and rely instead on the inventors' testimony and corroborating documents, and expert testimony, to find that SEMI-S^4 did not practice the limitations of the asserted claims.

In asserting otherwise, Microsoft makes several contentions that purportedly "establish a *prima facie* case that the SEMI S^4 System as sold did embody the '449 Patent. MSBr.40. Microsoft is wrong.

First, the pages Microsoft cites (MSBr.40) from the SEMI-S^4's User Guide (A3472-74) do not show that it "allowed the metacodes to be manipulated separately from the content. Instead, they discuss the software at a high level and only "decomposing the document into sections and subsections," which Owens

explained did not involve separating metacodes from content for editing (A825-26). Other pages (A3572-73 and A3578-82) show the "Document Outline View" of the "Editor Screen." The Document Outline View allowed navigation among tags but there is no indication that it allowed editing the tags or that SEMI-S[4] created a metacode map with addresses of use. A3583;A823. As Rhyne explained, the source code is needed to make that determination—the user's guide is insufficient. *See supra* page 30;A1958-59(Microsoft's Little agreeing that source code is necessary to determine infringement).

Microsoft also points to a 1994 letter to potential investors in which Vulpe stated that "[t]he basis for the patent and the preliminary work on the vali[d]ation precedes" i4i, which was founded in 1993. MSBr.40-41. But as Vulpe candidly admitted, he "exaggerated" the early development of the invention in discussions with potential investors in order to avoid any misunderstandings about who owned the patent rights. A1695-700. As it turned out, though, there was never an ownership dispute: Vulpe and Owens voluntarily and without extra compensation assigned their rights to i4i. A1700. The jury saw the letter, heard Vulpe's explanation, and obviously believed him. This is a classic issue of credibility, which the jury resolved in i4i's favor.

Microsoft makes much of Vulpe's representations to IRAP concerning the inventors' ongoing work to reduce the invention to practice (MSBr.41), but Vulpe

explained that this did not involve any work on SEMI-S^4. A1753-54; *see supra* at 12. Instead, in describing "Infrastructure's S^4 product," Vulpe was referring to Owens's rewriting of the SEMI-S^4 source code for sale as a commercial product and to incorporate the invention's functionality. *See supra* at 12. There is nothing inconsistent in Vulpe's testimony that i4i never modified the SEMI-S^4 architecture after it was installed in early 1993 (MSBr.41), since nothing showed that the invention was actually part of SEMI-S^4 *at any time*.

Finally, Microsoft cites the testimony of Scott Young, a former i4i employee who claimed he heard Vulpe say that SEMI-S^4 incorporated the '449 patent. MSBr.41-42. Young was not technically trained (A2305(57:16-22)), currently works for a "gold certified partner" of Microsoft (A1986), admitted to never having seen SEMI-S^4's source code (A1982;A2300), and had sued i4i in the past (A1987). The jury could have decided that Young misheard Vulpe or did not understand what he said, or it could have rejected Young's entire testimony as lacking credibility. But whatever the jury decided, its decision cannot be overturned just because Microsoft likes what Young said.

Microsoft further asserts that an inventor's testimony regarding dates *always* requires corroboration if it would rebut invalidity. MSBr.43-44. This assertion is wholly unsupported. First, i4i did not rebut invalidity through inventors' assertions alone, but also offered documentary evidence (including the patent filing and

multiple disclosures of the invention) as well as expert testimony. *See supra* at 10. Moreover, this Court has never required corroboration *in all instances*, and there is no reason to do so here, where the "corroboration" that Microsoft demands is to confirm that the inventors did *not* do something (i.e., conceive their invention at an *earlier* date than they say).

The cases cited by Microsoft are not to the contrary. First, corroboration arises when *challenging the validity of a patent*, because of the presumption of validity. *Price v. Symsek*, 988 F.2d 1187, 1194 (Fed. Cir. 1993). Further, the relevance of record keeping in evaluating an experimental purpose, *U.S. Environmental Products, Inc. v. Westall*, 911 F.2d 713, 718 (Fed. Cir. 1990), has no bearing on the question here—whether SEMI-S^4 practiced the claims. Moreover, because Microsoft lacked sufficient evidence to prove SEMI-S^4 practiced the claims (*see supra* at 30), there was no *prima facie* case for i4i to rebut.

In sum, substantial evidence supports the jury's finding that Microsoft failed to carry its burden of proving invalidity. The issues regarding SEMI-S^4 were credibility and factual determinations for the jury.

3. The District Court Did Not Abuse its Discretion by Preventing Microsoft from Arguing to the Jury that the PTO's Grant of a Reexamination Supported Invalidity

Microsoft's last-ditch assertion that the Court should grant a new trial based on the district court's exclusion of evidence regarding the ongoing reexamination of the '449 patent is meritless. *See* MSBr.46. As this Court recently held in *Callaway Golf Co. v. Acushnet Co*., No. 2009-1076, 2009 WL 2481986, at *9 (Fed. Cir. Aug. 14, 2009), "[t]he nonfinal re-examination determinations were of little relevance to the jury's independent deliberations on the factual issues underlying the question of obviousness. In contrast, the risk of jury confusion if evidence of the non-final PTO proceedings were introduced was high."

4. Microsoft Provides No Reason to Overturn the Clear and Convincing Standard for Invalidity

Microsoft implicitly admits that it presents an argument here that conflicts with this Court's precedent. MSBr.45. Microsoft asks the Court to hold that an accused infringer need only prove invalidity by a preponderance of the evidence when asserting prior art not presented to the examiner. *Id.* Such a holding would contravene the clear language of 35 U.S.C. § 282 and this Court's binding case law. *See, e.g.*, *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1375 (Fed. Cir. 1986) (when considering prior art not before the examiner "the

presumption remains intact and on the challenger throughout the litigation, and the clear and convincing standard does not change").

D. The Jury's Finding of Indirect Infringement Relied on Proper Instruction from the District Court and Sound Evidentiary Support

The record evidence firmly established both forms of indirect infringement and, contrary to Microsoft's arguments (MSBr.47-48), the jury instructions properly recited the law of contributory infringement. Because the court properly instructed the jury, or at most committed harmless error, Microsoft's arguments only address whether the jury had sufficient evidence regarding the nature of the goods Microsoft sold or its level of intent. Accordingly, this Court should affirm the infringement verdict even if it determines that the jury reasonably concluded that Microsoft *either* induced *or* contributorily infringed. *See Walther v. Lone Star Gas Co.*, 952 F.2d 119, 126 (5th Cir. 1992); *Northpoint Tech., Ltd. v. MDS Am., Inc.*, 413 F.3d 1301, 1311-12 (Fed. Cir. 2005).

1. Microsoft Misapplies this Court's Cases to Argue that Sellers of Software Will Always Avoid Contributory Infringement

Microsoft attacks the jury instructions on contributory infringement, which stated that Microsoft could be held liable if it sold a "component for use in

practicing the patented method." MSBr.47-48.[4] Admittedly, the instructions used "component" instead of "material or apparatus" as provided in section 271(c), but even if this technicality can rise to the level of error, it is harmless.

There is no meaningful difference between the *bare words* "component" and "material or apparatus" in the context of section 271(c). Indeed, this Court used "component" as essentially synonymous with section 271(c)'s "material or apparatus" in the context of a method claim in *Ricoh Co. v. Quanta Computer, Inc.*, 550 F.3d 1325, 1340 (Fed. Cir. 2008) (finding section 271(c) liability because "Quanta's optical disc drives contain hardware or *software components* that have no substantial noninfringing use other than to practice Ricoh's *claimed methods*") (emphasis added). Similarly, Rhyne testified that Microsoft sold a "component or apparatus for use in practicing the patented method." A1211-12.

Contrary to Microsoft's argument (MSBr.47-48), *Cardiac Pacemakers, Inc. v. St. Jude Med. Inc.*, No. 2007-1296, 2009 WL 2516346 (Fed. Cir. Aug. 19, 2009), did not compel anything different. Rather, the Court discussed section 271(c) to "illustrate[] the contrasting treatment that Section 271 gives to tangible inventions and method inventions." *Id*. at *13. Because section 271(f) only concerns a "component," the Court used section 271(c) to show that "a material or

[4] The court did not, as Microsoft's heading "III.A" asserts, instruct the jury that liability arose from selling "a 'component' of i4i's claimed methods." MSBr.47.

apparatus *for use in practicing* a patented process is not a component *of* that process," therefore confirming that the "components" of a method are "the steps that comprise the method . . . but the steps are not the physical components *used in the performance of* the method." *Id.* (emphasis added). *Cardiac Pacemakers* did not focus on the difference between a "component" and a "material or apparatus" so much as it focused on the difference between the language "*for use in* practicing a patented *process*" and "*of* a patented *product*." The instruction here, therefore, did not violate *Cardiac Pacemakers* because, while it refers to a component, it does not refer to a component "of" the invention, but rather a component "for use in practicing" the invention.

And Microsoft does not deny that the parties tied their respective infringement theories to what Microsoft actually sold (software) and how computers running that software operated, as opposed to semantics concerning whether software is more properly called a "component" or a "material or apparatus." Thus, Microsoft cannot show that the result could possibly have been different if the district court had quoted the statute verbatim and told the jury it could find for i4i if Microsoft sold "a material or apparatus for use in practicing a patented process." *See Sulzer Textil*, 358 F.3d at 1364.

Microsoft's actual—and much more radical—argument is that, as a maker of software, it's categorically immune from section 271(c) liability because intangible

software "indisputably" cannot qualify as a "material or apparatus." MSBr.48. Microsoft cites no authority for this proposition and, in fact, it should be rejected. The idea that "material or apparatus" does not include intangible things is contradicted by the plain meaning of "material." Merriam-Webster's Online Dictionary includes numerous definitions of abstract or intangible "material." *See* http://www.merriam-webster.com/dictionary/material (including as "material": "(1) : something (as data) that may be worked into a more finished form . . . (2) : something used for or made the object of study").

In any event, the district court correctly held that Microsoft did not properly preserve its argument that software is somehow exempt from section 271(c). A17. While Microsoft objected to the jury instructions on a technical departure from the statute, it did *not* argue that section 271(c) covers only tangible items (i.e., not software). A17;A5692. Therefore, this Court need not decide here whether the sale of software can give rise to contributory infringement liability.

2. The Question of Substantial Noninfringing Uses Considers Word's Custom-XML Functionality, Not All of Word

Microsoft's argument that the issue of substantial noninfringing uses requires consideration of the entirety of the Word software (rather than the infringing custom-XML portion) conflicts with *Ricoh*. There, the Court flatly

rejected the proposition that embedding an infringing product in another product with noninfringing uses can avoid infringement. 550 F.3d at 1337.

The issue here is no different. In selling Word, Microsoft sells the custom-XML portion, which evidence showed is separable. *See supra* at 28. If this Court were to accept Microsoft's position, companies would be able to escape liability simply by distributing infringing software as part of an omnibus collection of functionality.

Microsoft misreads *Hodosh v. Block Drug Co.*, 833 F.2d 1575 (Fed. Cir. 1987), as always requiring evaluation of the possible noninfringing uses of the product as a whole. MSBr.49-50. There, the infringer attempted to escape liability by pointing at one noninfringing component in the product sold. 833 F.2d at 1578. *Hodosh* fully comports with *Ricoh*—the purpose of section 271(c) was to enable enforcement of patents when practical realities would make it difficult otherwise. *Id*. In *Ricoh*, while the factual situation was essentially the opposite—the infringer sold a product containing an infringing portion—the Court reached the same conclusion for the same reason—any other result would contravene Congress's intent. 550 F.3d at 1337. The statute, therefore, "applies not only to the bare sale of an infringing component, but also to the sale of that component as part of a product or device." *Id*.

3. Substantial Evidence Supports the Jury's Finding that the Accused Functionality of Word Does Not Have Substantial Noninfringing Uses

Microsoft also contends that the district court erred in refusing to overturn the jury's verdict that Word's custom-XML functionality lacks any substantial noninfringing use (MSBr.51), but it never addresses the evidence supporting the verdict. Rhyne testified at length why the three allegedly noninfringing uses offered by Microsoft were occasional, inefficient, uneconomical, impractical, and/or hypothetical. *See supra* at 28; *Hoffmann-La Roche, Inc. v. Promega Corp.*, 33 U.S.P.Q.2d 1641, 1648 (N.D. Cal. 1994). The "substantial" noninfringing uses Microsoft proposed involve (1) no content, (2) never reopening a document, or (3) saving XML documents in a format (the ".doc" or ".dot" format) that cannot be shared across applications, none of which constitutes a substantial noninfringing use. *See supra* at 28.

Despite Microsoft's "cherry-picking" argument (MSBr.51-52), Wecker's survey is not to the contrary. Wagner explained why the numbers from Wecker's survey do not amount to "substantial" use regardless of whether the act infringed. A1501. In sum, the jury was entitled to find there were no substantial noninfringing uses for Word's custom-XML functionality.

4. i4i Presented Evidence of Microsoft's Intent Sufficient to Support the Requisite Level for Contributory and Induced Infringement

Microsoft glosses over the evidence that it argues is insufficient to show it knew of the '449 patent and also that it infringed. MSBr.52-53. Indeed, in its superficial summary, Microsoft ignored the indisputable fact, noted by the district court, 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." A14-15(citing A945-47(79:20-81:22);A945(79:5-9);A948(82:4-11);A1004-06(138:9-140:22);A7240;A1666-69(5:16-8:1);A1016-17(8:7-9:22); A7243-44;A7279-88;A7241;A7276-78;A1200-02(16:5-18:18);A7302-03). All this evidence relates to Microsoft's intent to contribute to or induce the infringement of others. *See supra* at 19-25.

Additionally, in arguing that its knowledge of i4i's patent triggered no duty to investigate possible infringement (MSBr.54), Microsoft wrongly relies on *Voda*, which was a willfulness case (536 F.3d at 1327-29), and ignores *Broadcom*, where this Court expressly refused to apply willfulness law in the inducement context (543 F.3d at 699). Indeed, the *Broadcom* Court upheld the jury's inducement verdict based on evidence that was of precisely the same type that i4i provided in this case—"a failure to investigate, a failure to explore design around approaches, a failure to take remedial steps—and, of course, a failure to seek legal advice." *Id.*

at 700. After working with i4i as a "Partner" to supply the government a solution comprising Word and i4i's patented products—during which time Microsoft learned of the '449 patent and that it covered i4i's products—Microsoft without doubt had the requisite knowledge of the patent and its contents. *See supra* at 21.

E. The Court Should Affirm the Damages Award[5]

1. Standard of Review

Microsoft did not move for JMOL on damages (A2254-56), filing *only* a motion for new trial and alternative motion for remittitur (A7978-79). This Court reviews the denial of a new trial on damages for abuse of discretion. *Micro Chem., Inc. v. Lextron, Inc.,* 317 F.3d 1387, 1394 (Fed. Cir. 2003).

On appeal, Microsoft does not address the district court's extensive opinion on damages or explain how the court abused its discretion. Instead, Microsoft rehashes the same two arguments it presented in its new trial motion: that the Wecker survey should not have been admitted and that Wagner's *Georgia-Pacific* analysis should have been excluded. MSBr.55-66. As explained below, the district court did not abuse its discretion in either regard.

[5] The amicus brief of the Washington Legal Foundation ("WLF") advances broad, generalized arguments in support of Microsoft on the issues of damages, willfulness, and the injunction, but adds nothing meaningful to Microsoft's arguments.

2. The Wecker Survey Was Properly Admitted

Citing *Scott Fetzer Co. v. House of Vacuums Inc.*, 381 F.3d 477, 487-88 (5th Cir. 2004), Microsoft identifies six reasons why the Wecker survey allegedly should not fall within a hearsay exception. MSBr.55. But the survey was not admitted as a hearsay exception. As the district court recognized (A35), Federal Rule of Evidence 703 governed admissibility because Wecker's and Wagner's opinions both relied upon the survey results. *See, e.g.*, Federal Judicial Center Reference Manual on Scientific Evidence (2d ed. 2000) at 233; *Soden v. Freightliner Corp.*, 714 F.2d 498, 502-03 (5th Cir. 1983). Under Rule 703, surveys are admissible if "reliable and . . . compiled in accordance with accepted survey methods." *C.A. May Marine Supply Co. v. Brunswick Corp.*, 649 F.2d 1049, 1054 (5th Cir. 1981). The district court did not abuse its discretion in finding that the survey met this standard.

Indeed, Microsoft's six criticisms of the survey all lack merit. The first—that the survey inadequately screened respondents (MSBr.56)—rests on inaccurate and cropped quotes from the screening questions. Those questions identified IT or computer administrators whose job it was to know what software had been installed and used by others within their businesses. A1549-52;A1581-82;A7962-75. The third screening question required respondents to confirm they were the right person to speak with. A4246. The district court did not abuse its discretion

in concluding that the screening questions filtered the survey to persons most likely to know about the amount and type of use of Word and XML. A37. In addition, respondents always had the option to answer "don't know" to any question, further guarding against conjecture. A4244-58;A1552.

Microsoft's second point—that the survey is legally flawed because it asked about another coworker's use of Word and XML (MSBr.56-57)—should also be rejected. The district court found that "[t]he 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." A37; *see supra* at 34. The case Microsoft cites (MSBr.57)—*United States v. Carlock*, 806 F.2d 535, 552 (5th Cir. 1986)—does not deal with surveys.

Contrary to Microsoft's third assertion (MSBr.57-58), seeking data going back five years does not encourage guessing. First, 88% of the units estimated to infringe did so at least once in 2008. A4243. Further, because exact answers would be impossible and unnecessary, telling respondents that "your best estimate is fine" is reasonable, especially where they are also given the option of answering "don't know." *See Ferguson Beauregard/Logic Controls, Div. of Dover Res., Inc. v. Mega Sys*., 350 F.3d 1327, 1345 (Fed. Cir. 2003) ("Determining the amount of damages to award . . . is not an exact science, and the methodology of assessing

and computing damages is committed to the sound discretion of a district court." (citation omitted)).

This Court should also reject Microsoft's fourth argument—that the questions were "too confusing or difficult" because some of the respondents gave internally inconsistent answers (MSBr.58). Microsoft fails to show even one question that is inherently confusing. Wecker testified that it is important to interpret confusion or inconsistency in survey answers. A1556-61;A8047;A8051-93;A8095-104. He also testified that the total amount of the inconsistencies affected his estimate by only a little over 16%, and that the vast majority of that (about 15%) was the result of one answer—a respondent answering 3% of 4 units when it was clear that the individual must have meant 3 units out of 4. A1556-59;A1561;A38.

Finally, Microsoft's fifth and sixth arguments—that the survey of 988 respondents had an "incredibly low" response rate of 46—are also meritless. MSBr.59. A 50% response rate or higher is necessary only if a survey is used to infer the behavior of non-respondents (*see* A8046), so perhaps an allegedly low response rate would be an available criticism if Wecker had assumed, on a *pro rata* basis, that the 942 non-respondents would have behaved similarly to the 46 respondents—which would have resulted in an infringement rate of 41.3%. Here, however, Wecker counted all of the non-respondents as noninfringing and only the

19 positive respondents as infringing—resulting in an infringement rate of just 1.9%. *See supra* at 35. This was the most conservative approach possible, and Microsoft has no room to complain.

3. Wagner's *Georgia-Pacific* Analysis Was Properly Admitted

Microsoft next argues that Wagner's entire reasonable-royalty analysis should have been excluded under *Daubert v. Merrell Dow Pharmaceuticals, Inc*., 509 U.S. 579 (1993). MSBr.55. But under *Daubert*, expert testimony that can assist the trier of fact should be admitted where "the reasoning or methodology underlying the testimony is scientifically valid and . . . that reasoning or methodology properly can be applied to the fact at issue." *Id*. at 592-93. "Vigorous cross examination, presentation of contrary evidence, and careful instruction on the burden of proof"—not exclusion—are the "traditional and appropriate means" of attacking expert testimony. *Id.* at 596.

The district court did not abuse its discretion in finding Wagner's testimony admissible. As the court found, Wagner's methodology—including using the *Georgia-Pacific* factors, selecting a third-party benchmark given Microsoft's business strategy of adding valuable features to Word without raising its price, and relying on the 25% rule of thumb—was reliable and relevant to determining a reasonable royalty. A39-41.

Microsoft first complains that i4i's royalty rate of $98 per unit "exceeds the entire price of certain editions of Word." MSBr.60. Notably, Microsoft cites no evidence to support the suggestion that the infringing units used by businesses—the only units involved in the royalty calculation—sold for less than $98. A1385-86. To the contrary, the evidence showed that all of these units cost more than that, most costing $229. A8049.

Further, Microsoft ignores that the royalty equates to a mere $2 per unit for all sales of Word that include custom-XML. *See supra* at 37. Of course, Microsoft only owes damages on units used in an infringing manner, but a reasonable licensor and licensee would certainly consider the impact of a royalty on total product sales. *See supra* at 24. In any event, the royalty rate does not in itself show that the court abused its discretion in admitting Wagner's testimony. *See, e.g.*, *Monsanto Co. v. McFarling*, 488 F.3d 973, 980-81 (Fed. Cir. 2007) (affirming a royalty rate higher than the cost of the product where evidence supported the verdict).

Microsoft next argues that Wagner did not analyze the *Georgia-Pacific* factors. MSBr.60-61. This is simply untrue. A1381-82;A1397-1408;A40-41. That Wagner started his analysis by selecting the XMetal benchmark does not undermine his consideration of those factors. Indeed, as the district court found, the very use of a benchmark relates to the *Georgia-Pacific* factors, including any

evidence probative of the value of the use of the invention and the benefits to its users. A40.

Although Microsoft admits that it may be proper to use a benchmark (MSBr.62), it asserts that "Wagner erroneously used as his starting point a high-end XML editor" (SBr.61), questioning Wagner's choice of XMetal (MSBr.62). As the district court concluded, however, given that the methodology employed by Wagner was appropriate, "the question of whether Xmetal was the 'best'" benchmark was "properly submitted to the jury." A40. Indeed, the jury considered all of Microsoft's specific criticisms—including that XMetal had additional functionalities and the $50 price difference between two versions of Office. A2175-78;A1468;A1470-75. Moreover, Wagner's explanation for why he chose XMetal was reasonable. *See supra* at 36.

Microsoft also complains that "Wagner should not have applied the so-called '25% Rule.'" MSBr.64. As the district court noted, however, Microsoft both cross-examined Wagner on the application of the rule and presented contrary evidence. A40. Moreover, courts have found the 25% rule of thumb to be a well-established approach for calculating damages. *Bose Corp. v. JBL, Inc*., 112 F. Supp. 2d 138, 167 (D. Mass. 2000), aff'd, 274 F.3d 1354 (Fed. Cir. 2001); *Uniloc USA, Inc. v. Microsoft Corp*., C.A. No. 03440S., 2009 WL 691204, at *1 (D.R.I.

Mar. 16, 2009) (denying *Daubert* motion attacking expert's reliance on 25% rule). Accordingly, Wagner's testimony on the 25% rule was properly admitted.

4. Microsoft Fails to Show Why the Royalty Is Excessive

Microsoft also argues that the jury verdict is excessive and warrants a new trial or remittitur. MSBr.66. But because Microsoft did not file a JMOL on this issue, the sufficiency of the evidence is not at issue, and Microsoft does not claim any abuses of discretion other than those alleged above. Thus, for the same reasons discussed above, the district court did not abuse its discretion in denying Microsoft's motion.

F. The District Court Had Solid Grounds on Which to Enhance the Jury's Award of Damages

1. The District Court Properly Refused to Overturn the Jury's Willfulness Finding in Light of i4i's Evidence

The district court correctly concluded that substantial evidence supported the jury's verdict of willful infringement under the two-prong test of *In re Seagate Techs., LLC*, 497 F.3d 1360 (Fed. Cir. 2007). A20-24. The jury was properly instructed on the *Seagate* test, which presents issues of fact for the jury to resolve. *Cohesive Techs., Inc. v. Waters Corp*., 543 F3.d 1351, 1374 (Fed. Cir. 2008).

As discussed above (*see supra* at 21, 64), substantial evidence supports the jury's finding that Microsoft not only had knowledge of the patent, but also had knowledge that its actions would infringe the patent, satisfying the subjective prong of *Seagate*.

Likewise, the district court did not err in denying JMOL in regard to the objective prong of *Seagate*, as substantial evidence supports the jury's findings on that issue. As the court recognized, the jury's "wholesale" rejection of Microsoft's case supports the conclusion that Microsoft had no strong defenses. A20. Review of Microsoft's arguments on appeal shows the hollowness of its case. Microsoft challenges infringement based only on an allegedly erroneous claim construction and the construction Microsoft urges contradicts both the specification and this Court's precedent. On invalidity, Microsoft does not even appeal several of its allegedly meritorious positions from trial (MSBr.69), and the issues it does raise fare no better. SEMI-S[4] preceded the invention here and Microsoft presented wholly inadequate evidence that it practiced the invention. Rita and DeRose merely worked with SGML documents; they did not separate the document parts—the heart of i4i's invention. Kugimiya, besides being considered by the PTO and rejected by the jury, also lacks limitations claimed by the '449 patent. In sum, Microsoft has not raised a serious challenge to i4i's claim of patent infringement.

Microsoft nonetheless argues that, in considering the objective prong, the district court made three errors of law. MSBr.70-72. Microsoft is wrong.

First, aside from the fact that the district court was correct in its observation that the objective prong focuses on "the facts and circumstances surrounding an accused infringer at the time that it acts" (A21), Microsoft mischaracterizes the

court's opinion as finding Microsoft's invalidity and noninfringement defenses irrelevant (MSBr.70). The court actually held that the *number* of defenses Microsoft raised was irrelevant (A21) and questioned whether any of the defenses would have been apparent prior to the infringing activity (A22). None of the cases cited by Microsoft (MSBr.70-71) conflicts with the court's denial of JMOL. Indeed, the discussion of willfulness in *Black & Decker, Inc. v. Robert Bosch Tool Corp*., 260 F.App'x 284, 291 (Fed. Cir. 2008), was nonprecedential dicta, and *Cohesive Technologies, Inc. v. Waters Corp.*, 543 F.3d 1351 (Fed. Cir. 2008), affirmed a finding of no willful infringement based on a dispositive claim-construction defense. Here, even if Microsoft's claim construction were reasonable, it would not avoid infringement. *See supra* at 50.

Microsoft's second argument—that the "district court did not independently analyze the strength of Microsoft's defenses"—makes no sense. *See* MSBr.71-72. In actuality, the court analyzed Microsoft's defenses; indeed, its well-reasoned 65-page opinion discusses those defenses at length. A7-19;A24-34;A60-68. That the opinion does not repeat that analysis in the willfulness discussion does not undermine its denial of JMOL. In any event, the court properly focused on whether substantial evidence supported the jury verdict and correctly concluded that it did.

Microsoft also cites *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1337 (Fed. Cir. 2009), arguing that the jury's verdict alone cannot support willfulness. MSBr.71-72. But here, the district court did not rely on the jury verdict alone. Moreover, in *DePuy*, this Court held that the record "indisputably show[ed] that the question of equivalence was a close one, particularly insofar as equivalence 'requires an intensely factual inquiry.'" 567 F.3d at 1337 (citation omitted). Here, nothing indicates that the factual questions were close. And in *DePuy*, the district court had previously granted, and this Court affirmed, summary judgment of no literal infringement (*DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1016 (Fed. Cir. 2006)), a factor clearly relevant to the finding of no willful infringement in that case.

Finally, Microsoft accuses the district court of requiring an affirmative duty of care. MSBr.72. But the court did no such thing. Instead, it merely explained why the objective analysis should not focus on what a reasonable person would have thought at the time of trial. A20-21. The court correctly recognized that *Seagate*'s objective prong requires the consideration of relevant facts as of the time of infringement, not just some later time. A20-21; *see* 497 F.3d at 1371.

2. The District Court Relied on Entirely Proper Grounds to Enhance Damages

Microsoft also challenges the district court's enhancement of damages. The standards of *enhancement*, however, are distinct from the law of *willfulness*. As

discussed above, while *Seagate* undoubtedly means that putative infringers are not required to obtain legal advice in order to avoid a willfulness finding, it did not overturn all standards of good faith. *Read v. Portec*, which set forth factors used in determining whether and how much to enhance damages—including whether the infringer "investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed" (970 F.2d at 827)—remains good law. The district court did not err by considering how Microsoft acted despite its knowledge of i4i's patent.

Microsoft is also wrong in arguing that the district court erred in considering its financial condition as a factor in deciding to enhance damages. MSBr.73. While Microsoft asserts that this factor was "relevant, if at all, only to 'the extent of enhancement,' not to whether to enhance damages" (*id.*), it has no support for its position. Indeed, the case Microsoft cites (*Read*) expressly states that "the above factors," including the infringer's financial condition, "taken together assist the trial court . . . in determining *whether* to exercise its discretion to award enhanced damages." 970 F.2d at 828 (emphasis added); *accord Jurgens*, 80 F.3d at 1571.[6]

[6] While Microsoft also asserts that *Honda Motor Co. v. Oberg*, 512 U.S. 415 (1994), "prohibits punishing a defendant based on its wealth" (MSBr.73), the Oregon law the Court overturned in *Honda* prohibited courts from reviewing the amounts of punitive awards (which, of course, juries decide) except were supported by no evidence. 512 U.S. at 431-32. Enhanced damages for patent infringement are, of course, awarded by judges.

And Microsoft misreads the law when it discusses its trial counsel's litigation misconduct and asserts that "[t]his court has been absolutely clear that 'attorney . . . misconduct during litigation' is 'not sufficient for an increased damages award under section 284." MSBr.73. Microsoft has distorted the Court's holding by omitting the words "*by themselves*." What this Court actually held in *Jurgens* (which Microsoft clearly intended to cite, rather than *Read*) was that acts of litigation misconduct (whether by attorney or client) are not "*by themselves*" "sufficient for an increased damages award under section 284." *Jurgens*, 80 F.3d at 1570.[7] But i4i has never asserted that litigation misconduct *by itself* would support enhanced damages, but only that it is a factor, and the district court correctly recited the law on this point (*see Jurgens*, 80 F.3d at 1570-71; *Read* 970 F.2d at 828), stating that Microsoft's counsel's misconduct could "be considered in determining whether to award enhanced damages and how much to award." A42.

Concerning the substance of Microsoft's misconduct, its assertion that Microsoft's counsel was "obligated" to show that one of two plaintiffs had no business other than litigation makes no sense. MSBr.74. As Microsoft knew, i4i practiced the patented invention. *See supra* at 21. The court warned Microsoft's counsel during voir dire not to argue to the jury that i4i LP misused its patent by

[7] This Court has previously frowned upon similar omissions from an opinion that distorted the meaning of the Court's language. *See, e.g.*, *Precision Specialty Metals, Inc, v. United States*, 315 F.3d 1346, 1355 (Fed. Cir. 2003).

asserting it without practicing the invention itself. A625-27. However, counsel referred to the case as a "banker" case both during his opening statement (A722) and during closing argument (A2505-06). All this despite *agreeing* before trial to refrain from such arguments. *See* A7000-01.

The district court weighed each of the applicable *Read* factors and concluded that they favored enhancement, albeit far less than the law permits. A43-48. The court was well-positioned to evaluate the relevant factors and did not abuse its discretion. *See Amsted Indus., Inc. v. Buckeye Steel Castings Co.*, 24 F.3d 178, 184 (Fed. Cir. 1994).

G. The District Court Did Not Abuse Its Discretion in Granting an Injunction

In its brief, Microsoft attempts to create hard-line rules requiring certain types of evidence for entry of an injunction. But "the decision whether to grant or deny injunctive relief" is not rigid, but rather "rests within the equitable discretion of the district courts." *eBay*, 547 U.S. at 391. Here, the district court properly evaluated the *eBay* factors, concluding that all four "weigh in favor of injunctive relief." A51-57. None of Microsoft's arguments shows otherwise.

Microsoft first argues that the court relied on "i4i's conclusory statements regarding generic harm" to find i4i was irreparably harmed by Microsoft's infringement. MSBr.75. But the court's analysis was grounded in evidence, relying on both testimony (A1677;A891;A1399-401;A1476) and documents

(A7304;A7367;A7302-03) to support its conclusions that (1) i4i competes with Microsoft in the custom-XML market, (2) Microsoft's infringement rendered i4i's products largely obsolete in the market, and (3) i4i has been irreparably injured by Microsoft's continuing infringement (A52). Moreover, the court relied on Microsoft's own documents, which accurately predicted the harm to i4i, stating: "[I]f we do the work properly, there won't be a need for their [i4i's] product" (A7367;A44); and "[W]e saw [i4i's product] some time ago and met its creators. Word 11 will make it obsolete" (A7302-03;A1200-02).

Microsoft nonetheless asserts that i4i had to show quantitative evidence regarding the parties' market share. MSBr.76. But Microsoft cites no case mandating such evidence in all situations. In any event, i4i provided evidence of specific sales lost to Microsoft. A1676-77. Moreover, i4i submitted unchallenged testimony that Microsoft became a direct competitor in the area of custom-XML functionality, rendered i4i's products obsolete in "80% of the market," and relegated i4i to a niche market of the pharmaceutical industry, leaving it no hope of reentering the general market for custom-XML authoring software while Microsoft occupies the space. *See supra* at 24. When purchasers already have the infringing product (due to Word's 90% share of the word-processing market), they are understandably reluctant to purchase additional software with overlapping functionality. *See supra* at 24;A1765-66;A7091-97;A7099.

Microsoft also argues that, because i4i's financial condition improved around the time Word included the infringing custom-XML feature, i4i was not harmed. *See* MSBr.76. But as i4i showed, its licensing revenues did not increase; it had lost money due to investing in product development, and it reduced its losses around the time Microsoft began to infringe by cutting expenses. *See supra* at 24. Thus, this fact does not weigh against irreparable harm.

Continuing, Microsoft argues that i4i had to show that customers purchased Word rather than i4i's products because of the infringing functionality. MSBr.76. Under the circumstances, however, i4i's inability to present such evidence did not mean that i4i was not damaged by Microsoft's sale of Word. As the district court found, once customers have Microsoft's XML features in Word, they are reluctant to purchase i4i's products. *See supra* at 24. In other words, as i4i has shown, customers may have purchased Word for other reasons, but they refuse to purchase i4i's XML technology because they already have it in Word. Thus, contrary to Microsoft's suggestion (MSBr.76), i4i did "connect its purported harm to Microsoft's infringing product."

Citing *Roper Corp. v. Litton Systems, Inc.*, 757 F.2d 1266 (Fed. Cir. 1985), Microsoft next argues that i4i's loss of brand recognition requires specific evidence. MSBr.76-77. But *Roper* is inapposite. There, neither the patentee nor the accused infringer was practicing the patent and the Court had no reason to

believe that infringement would start in the future. *Roper*, 757 F.3d at 1273. Here, the district court had ample evidence on which to conclude that Microsoft's continued presence in the market forecloses i4i from maintaining or growing its brand and that Microsoft's activities contributed to i4i's loss of brand recognition. *See supra* at 24.

Microsoft also argues that, "whatever losses i4i might have proved, they all occurred in the past" because "i4i's current product is an add-on or plug-in to Word." MSBr.76-77. That i4i has been forced to offer an add-on or plug-in to remain competitive in light of Microsoft's infringement, however, does not mean that it is not continually harmed by that infringement. *See supra* at 21, 24. As the district court properly found:

> [T]here 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. . . . Simply because i4i adapted to a market where Microsoft fills 80% of the market space does not mean that i4i has not suffered an irreparable injury.

A53-54.[8]

Microsoft similarly argues that i4i's product strategist, Thomas, testified that "i4i is not currently in competition with Microsoft" and thus an injunction is not

[8] Microsoft relies on this particular sentence (written in past tense) to support its position that any harm was in the past. But the district court's contrary intent is quite clear from the surrounding text and, moreover, the district court expressly found that i4i is "injured by Microsoft's *continuing* infringement." A52 (emphasis added).

appropriate. But Thomas was asked about the "pharmaceutical space," where i4i's product A4L does not directly compete with Microsoft. *See supra* at 24. Notably, i4i's general product—the platform on which A4L is built—does directly compete with Microsoft. *See supra* at 24.

Turning to the second *eBay* factor, Microsoft argues that the district court abused its discretion by placing the burden on Microsoft, not i4i. But the court did no such thing. While the court noted that "Microsoft has not presented any evidence on alternative methods for compensating i4i" in its discussion of the third eBay factor (balancing the hardships) (A56)—it did not, as Microsoft asserts, improperly require Microsoft to demonstrate the adequacy of monetary relief (MSBr.78).

In discussing the third factor (balance of equities), Microsoft persists in arguing that i4i does not compete against Word and complains that Microsoft would lose its significant investments. MSBr.78-79. Microsoft's argument wholly ignores that, by continuing to infringe the patent, Microsoft has caused i4i to lose its significant investments in the patented technology without any hope of regaining those investments. Moreover, as explained above, Microsoft's argument is irrelevant because i4i directly competes against the enjoined portion of Word. *See* A56.

Finally, Microsoft's reliance on Justice Kennedy's concurrence in *eBay*—and particularly his statement that "[w]hen the patented invention is but a small component of the product the companies seek to produce and the threat of an injunction is employed simply for undue leverage in negotiations, legal damages may well be sufficient"—is misplaced. Justice Kennedy's comments were in the context of firms that use patents "primarily for obtaining licensing fees" (547 U.S. at 396-97 (Kennedy, J., concurring)), which i4i indisputably does not. Moreover, the injunction here does not prevent Microsoft from producing and selling the noninfringing portions of Word, only the separable infringing portion. A3-4. Finally, while Microsoft has never asserted that it cannot comply with the injunction, only that it would be difficult or expensive (MSBr.78), that is the cost of infringing.

Addressing the final factor, public interest, Microsoft argues that "in conflict with well-established precedent, the district court focused its public-interest inquiry exclusively on public health and welfare considerations" (MSBr.79;A56-57), but fails to raise anything beyond repeating its well-worn positions on invalidity and the nascent reexamination. The simple fact is that Microsoft has never shown any public interest in its ongoing infringement and cannot. Courts have looked to health and safety as markers of compelling public interest and the case law does not suggest any error in the district court's analysis here.

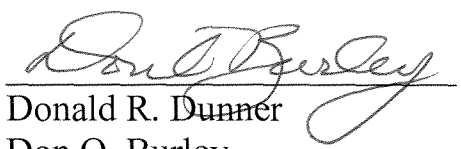
In sum, the district court weighed each of the *eBay* factors and correctly concluded that i4i should be granted the narrow injunction it sought.

VI. CONCLUSION

For the reasons stated above, i4i respectfully asks the Court to affirm all aspects of the district court's judgment. If the Court modifies the district court's claim construction in a way that would affect the jury's verdict, the Court should remand for a new trial.

Dated: September 8, 2009

Respectfully submitted,



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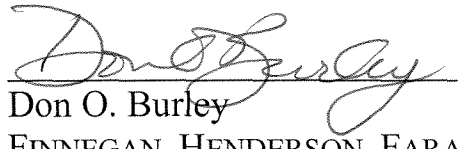
CERTIFICATE OF COMPLIANCE

I certify that the foregoing BRIEF FOR i4i LIMITED PARTNERSHIP and INFRASTRUCTURES FOR INFORMATION INC. contains 17,989 words as measured by the word processing software used to prepare this brief.

Dated: September 8, 2009

Respectfully submitted,



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I hereby certify that on this 8th day of September 2009, two (2) true and correct copies of the foregoing BRIEF FOR i4i LIMITED PARTNERSHIP and INFRASTRUCTURES FOR INFORMATION INC. were served by e-mail and overnight courier to:

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