

The War Over Information Technology Patents: How *Microsoft v. i4i* is Reforming the Mobile Entertainment Industry

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Part I. Introduction

Rarely a day goes by without a story about a new patent infringement lawsuit in the mobile entertainment sector. Today, claims over technology patents are filed haphazardly, and often with no intention of protecting innovation.¹ At the core of the problem “may be the simple fact that too many technology patents have been granted over the years, making it impossible for patent holders” to defend their patent rights.² If a company successfully defends a patent in court, odds are new claims will be made that other patents are being infringed upon. With hundreds of thousands of information technology patents alive and in play today, this cycle can continue on in perpetuity.³

In the ever changing world of information technology and mobile entertainment,⁴ the only constant is the guarantee that new innovation will bring new infringement claims. For instance today, “Apple and Motorola are fighting each other over numerous patents in both

¹ See, James Kendrick, *Mobile patent litigation: A game with too many playing cards*, (Sept. 08, 2011), <http://www.zdnet.com/blog/mobile-news/mobile-patent-litigation-a-game-with-too-many-playing-cards/4291>

² *Id.*

³ See *id.*

⁴ The definition of ‘mobile entertainment’ used in the paper is created as the convergence of both the technology and entertainment industries.

federal district courts and the International Trade Commission, and Microsoft, HTC, Nokia and other companies involved in the smartphone market are parties in multiple patent infringement suits.”⁵ Google is also deeply entrenched in infringement litigation, and its Android partners are also entering the courts at an alarming rate.⁶

However, there was a time when patents did not seem to matter as much to large mobile entertainment companies. To the extent that technology companies needed legal protection for their software, “they relied on less costly mechanisms such as copyright or trade secret law.”⁷ A report issued by the Federal Trade Commission (FTC) in 2003, indicated that patents were not needed in the information technology sector to protect innovation, as opposed to other industries such as pharmaceuticals.⁸ The FTC cited various empirical studies that established that certain companies often innovate to exploit first-mover and learning-curve advantages rather than rely on the availability of patent protection.⁹ This was specifically true in the information technology sector. In the 2003 FTC report, Mr. Robert Barr, then Vice President and World Patent Counsel for Cisco Systems, Inc., stated that “Cisco, founded in 1984, had filed only one patent application in its first ten years, but by 1994 the company had grown to over one billion dollars in annual revenue.”¹⁰ Mr. Barr attributed this growth to competition, and open non-proprietary technology; patents had very little to do with this innovation.¹¹ In fact, many panelists who

⁵ Catriona M. Collins, *A Perspective on the Patent Wars over Mobile Technology*, 1 (March, 25 2011), http://www.lexis.com/research/retrieve?_m=76fb56892f22182e76a47170ff727a87&csvc=toc2doc&cform=&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLbVzS-zSkAW&_md5=

⁶ *See id.*

⁷ *Id.* at 2.

⁸ *Id.*

⁹ Federal Trade Commission 2003 Report, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy*, 80 (Oct. 2003), available at <http://www.ftc.gov/os/2003/10/innovationrpt.pdf>

¹⁰ *Id.* at 141.

¹¹ *Id.*

attended the 2003 FTC hearings observed that innovation is driven in all markets by competition, and patents are not a positive force in stimulating economic growth.¹²

So the questions arise: Why have patents become so important in the information technology and mobile entertainment sectors today? What can be attributed to the significant rise in infringement claims over mobile entertainment patents? The United States Supreme Court's recent decision of *Microsoft Corp. v. i4i Limited Partnership* (*Microsoft v. i4i*) may provide a partial answer to both questions.¹³ In *Microsoft v. i4i*, the Supreme Court held that a party who challenges the validity of a patent must prove invalidity by clear and convincing evidence.¹⁴ By codifying a heightened burden of proving a patent invalid, the Supreme Court's decision will continue to increase the number of unsubstantiated patents and make it harder for them to be overturned, augment the value of patent portfolios, give rise to more infringement litigation, and intensify the rate of merger and acquisitions in the information technology industry.

This article will examine why a heightened standard of proof required to invalidate patents will have a major impact on the mobile entertainment industry. *Part II* of this article will explain the *Microsoft v. i4i* decision and clarify the important precedent surrounding this litigation. *Part III* of this article will examine the amicus briefs filed before the Supreme Court in the *Microsoft v. i4i*, and focus on the policy arguments that the Supreme Court purposely neglected to address in its decision. In *Part IV* of this article, I will establish that (i) a heightened standard of proof does in fact impact case outcomes and (ii) will increase the number of

¹² *Id.* Cisco did eventually start to focus on building a patent portfolio, but did so primarily for defensive purposes, and to have something to offer in cross-licensing negotiations.

¹³ 131 S.Ct. at 2238.

¹⁴ *Id.* at 2249.

unsubstantiated patents and the unlikelihood that they will be overturned. In section (iii) I will argue that the *Microsoft v. i4i* decision will have a significant and lasting effect on the mobile entertainment sector, specifically by inflating the value of technology patents, heightening the frequency of infringement litigation in the technology sector, and increasing mergers and acquisitions within the mobile entertainment industry. Finally, in *Part V* of this article, I will summarize the state of the mobile entertainment industry today, and discuss the transformation that is likely to occur within this industry post *Microsoft v. i4i*.

Part II. Microsoft Corporation v. i4i Limited Partnership

i4i began a software consulting company in the late 1980s, which developed and maintained customized software.¹⁵ i4i actively created, marketed, and sold the software it developed.¹⁶ In June 1994, i4i applied for “a patent concerning a method for processing and storing information about the structure of electronic documents (the “449 patent”).”¹⁷ i4i developed several software products that practiced this invention, one of which was an “add-on” software for Microsoft Word, which expanded Word’s capability to work with documents containing custom XML.¹⁸

XML is one of many markup languages.¹⁹ Markup languages tell the computer how text should be processed by inserting “tags” around the text, and tags give the computer information about the text.²⁰ For example, “some tags might tell the computer how to display text, such as

¹⁵ *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 839 (Fed. Cir. 2010).

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

what words should appear in **bold** or *italics*.”²¹ Each tag consists of a delimiter and tag name, and the delimiter sets the tag apart from the content.²² Thus, “a tag indicating an address might appear as <address>717 Madison Pl. NW</address> where “address is the tag’s name and “<” and “>” are the delimiters.”²³ Custom XML allows users to create and define their own tags.²⁴ i4i refers to these tags as “metacode” and as “an individual instruction which controls the interpretation of the content of the data.”²⁵

i4i’s ‘449’ patent claimed “an improved method for editing documents containing markup languages like XML.”²⁶ i4i claimed that the improvement was created by installing a ‘metacode map,’ which stores a document’s content and metacodes separately.²⁷ Separate storage of a document’s structure and content was an improvement over prior technology because it allowed users to work solely on a document’s content or its structure.²⁸

Since 2003, versions of Microsoft Word have had XML editing capabilities.²⁹ In 2007, i4i filed an action against Microsoft alleging that Microsoft infringed the ‘449 patent’ by “making, using, selling, offering to sell, and/or importing Word products capable of processing or editing custom XML.”³⁰ In addition to denying infringement, Microsoft counterclaimed and sought a declaration that i4i’s patent was invalid and unenforceable. Specifically, Microsoft contended that the 1952 Patent Act’s on-sale bar of 35 U.S.C. §102(b) “rendered the patent

²¹ *Id.* at 840.

²² *Id.*

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

invalid, pointing to i4i's prior sale of a software program known as S4."³¹ The parties agreed that more than one year prior to the filing of the i4i patent application, i4i had sold S4 in the United States, however, the parties presented opposing arguments as to whether that software embodied the invention claimed in i4i's patent.³² Because the software's source code had been destroyed years before the commencement of this litigation, the factual dispute turned largely on trial testimony.³³ Relying on the undisputed fact that S4 software was never presented to the PTO examiner, Microsoft objected to i4i's proposed instruction that it was required to prove its invalidity defense by clear and convincing evidence.³⁴ Instead "if an instruction on the 'clear and convincing' burden were to be given, Microsoft requested" a lower preponderance of the evidence standard.³⁵

Rejecting the standard of proof that Microsoft advocated, the District Court instructed the jury that "Microsoft has the burden of proving invalidity by clear and convincing evidence."³⁶ The jury found "that Microsoft willfully infringed the i4i patent and failed to prove invalidity due to the on-sale bar or otherwise."³⁷ The Court of Appeals for the Federal Circuit affirmed.³⁸ The Supreme Court of the United States granted certiorari to decide two intertwined issues: (1) what standard of proof is required to overturn a patent on an invalidity defense; and (2) in the alternative and more narrowly, what standard of proof is required to overturn a patent on an

³¹ Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. at 2243.

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ Petition for Writ of Certiorari, 195 Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238 (2011) (No. 10 – 290).

³⁷ Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. at 2243.

³⁸ *Id.*

invalidity defense in the circumstance that an invalidity defense rests on evidence that was never considered by the PTO in the examination process.³⁹

Pursuant to its authority under U.S. Const., Art. I, § 8, cl. 8, Congress has charged the United States Patent and Trademark Office (PTO) with the task of examining patent applications,⁴⁰ and issuing patents if "it appears that the applicant is entitled to a patent under the law."⁴¹ Congress has set forth the prerequisites for issuance of a patent, which the PTO must evaluate in the examination process. To receive patent protection a claimed invention must, among other things, fall within one of the express categories of patentable subject matter,⁴² be novel,⁴³ and non-obvious.⁴⁴ Most relevant here, the on-sale bar of § 102(b) precludes patent protection for any "invention" that was "on sale in this country" more than one year prior to the filing of a patent application.⁴⁵ In evaluating whether these and other statutory conditions have been met, PTO examiners must make various factual determinations, for instance, the state of the prior art in the field and the nature of the advancement embodied in the invention.⁴⁶

Once issued, a patent grants certain exclusive rights to its holder, including the exclusive right to use the invention during the patent's duration. To enforce that right, a patentee can bring a civil action for infringement if another person "without authority makes, uses, offers to sell, or sells any patented invention, within the United States."⁴⁷ Among other defenses under § 282 of

³⁹ *Id.*

⁴⁰ 35 U.S.C. § 2(a)(1) (1952).

⁴¹ 35 U.S.C. § 131 (1952).

⁴² 35 U.S.C. § 101 (1952).

⁴³ 35 U.S.C. § 102 (1952).

⁴⁴ 35 U.S.C. § 103 (1952).

⁴⁵ *See generally* Pfaff v. Wells Electronics, Inc., 525 U.S. 55, 67-68 (1998).

⁴⁶ *See* Dickinson v. Zurko, 527 U.S. 150, 153 (1999).

⁴⁷ 35 U.S.C. §§ 271(a), 281 (1952).

the Patent Act of 1952, an alleged infringer may assert the invalidity of the patent by attempting to prove that the patent never should have issued in the first place.⁴⁸

The leading Supreme Court decision on this issue prior to the enactment of § 282 was *RCA v. Radio Engineering Labs.*⁴⁹ In *RCA*, respondent had defended an infringement claim by alleging that the patent was invalid because a second party, rather than the named inventor, was the true first inventor of the claimed invention.⁵⁰ The allegation of earlier inventorship had already been addressed by the PTO in an interference proceeding and in a federal court action between related parties and was resolved each time in favor of the named inventor or his assignees.⁵¹ The question for the Court was the standard of proof that the respondent needed to meet to establish the patent's invalidity.⁵² The Court stated the rule that "a patent issued after a hearing of all the rival claimants, is presumed to be valid until the presumption has been overcome by convincing evidence of error," but observed that the force of that presumption had been expressed a variety of different ways by courts.⁵³ Reviewing those decisions, the Court concluded:

"Through all the verbal variances, however, there runs this common core of thought and truth, that one otherwise an infringer who assails the validity of a patent fair upon its face bears a heavy burden of persuasion, and fails unless his evidence has more than a dubious preponderance. . . . If that is true where the assailant connects himself in some way with the title of the true inventor, it is so *a fortiori* where he is a stranger to the invention,

⁴⁸ See 35 U.S.C. §§ 282(2), (3) (1952).

⁴⁹ 293 U.S. 1 (1933).

⁵⁰ *Id.*

⁵¹ *Id.* at 3.

⁵² *Id.* at 2.

⁵³ *Id.*

without claim of title of his own. If it is true where the assailant launches his attack with evidence different, at least in form, from any theretofore produced in opposition to the patent, it is so a bit more clearly where the evidence is even verbally the same."⁵⁴ In other words, the presumption of validity was "not to be overthrown except by *clear and cogent evidence*."⁵⁵

Under the Federal Circuit's reading of § 282, a defendant seeking to overcome this presumption must persuade the factfinder of its invalidity defense by clear and convincing evidence.⁵⁶ Judge Rich, a principal drafter of the 1952 Act, articulated this view for the court in *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*⁵⁷ In this leading Federal Circuit case on the issue, *American Hoist* relied on *RCA* to hold that one challenging the validity of a patent has the burden of showing invalidity by "clear evidence" and, further, that the burden of showing invalidity by clear evidence never changes.⁵⁸ The court noted, however, the historical inconsistent and contradictory case law respecting the presumption of validity and said of the 1952 enactment of § 282 that it "was a codification of sorts, replacing the morass of case law with one simple statutory declaration."⁵⁹

The court further held that in asserting an invalidity defense, an alleged infringer must contend with the first paragraph of § 282, which provides that "[a] patent shall be presumed valid" and "[t]he burden of establishing invalidity . . . rest[s] on the party asserting such invalidity."⁶⁰ The Federal Circuit also held that under § 282, "the burden of persuasion is and

⁵⁴ *Id.* at 8.

⁵⁵ *Id.* at 2 (emphasis added).

⁵⁶ *American Hoist & Derrick Co. v. Sowa & Sons, Inc.* 725 F.2d 1350, 1360 (CA. Fed. 1984).

⁵⁷ *Id.*

⁵⁸ *Id.* at 1359.

⁵⁹ *Id.*

⁶⁰ *Id.*

remains always on the party asserting invalidity, whether the most pertinent prior art was or was not considered by the examiner."⁶¹ It acknowledged that where the challenger produces prior art or other evidence that had not been considered by the PTO, there is no reason to defer to the PTO on the validity issue, but in the court's view, the fact that the PTO did not consider the evidence went to the weight of the evidence, not the challenger's burden of proof.⁶²

Furthermore, the Federal Circuit held that § 282 codified "the existing presumption of validity of patents,"⁶³ what, until that point, had been a common-law presumption based on "the basic proposition that a government agency such as the [PTO] was presumed to do its job."⁶⁴ Relying on this Court's pre-1952 precedent as to the "force of the presumption,"⁶⁵ Judge Rich concluded:

"[Section] 282 creates a presumption that a patent is valid and imposes the burden of proving invalidity on the attacker. That burden is constant and never changes and is to convince the court of invalidity by clear evidence."⁶⁶

However, in 2007, the Supreme Court of the United States, in deciding *KSR International v. Teleflex (KSR)*, weighed in on the issue of whether an invalidity defense relying on prior art not considered during prosecution should require only a preponderance of the evidence standard.⁶⁷ In *KSR*, the court thought it appropriate to note that "the rationale underlying the presumption that the PTO, in its expertise, believes the claim is patentable seems much diminished where an invalidity defense rests on evidence that the PTO never had an opportunity

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.* at 1360.

⁶⁷ *KSR International Co., v. Teleflex Inc.*, 550 U.S. 398, 427 (2007).

to consider.”⁶⁸ This Supreme Court dicta added to the speculation of what burden of proof was required as to an invalidity defense relying on prior art not considered by the PTO during its initial examination.

Adding to this recent trend of uncertainty, the Federal Trade Commission’s 2011 report entitled *The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition*, the FTC emphasized the importance of innovation, which is at the core of Microsoft’s policy argument in the *Microsoft v. i4i* suit.⁶⁹ In the report, The FTC voiced their support for reducing the evidentiary standard required to rebut the presumption of validity.⁷⁰ Specifically, the FTC noted that:

“[i]nnovation benefits consumers through the development of new products, processes and services that improve lives and address unmet needs. It is key to meeting society’s greatest challenges in areas as diverse as energy production, communications and health care, and it is essential to sustained economic growth and global competitiveness. The goal of the patent system is to promote innovation in the face of that expense and risk.”⁷¹

The FTC report examined the role of technology markets and patent markets in innovation today, and determined that those roles have evolved in recent years in ways that heighten the importance of patent notice and remedies to competition among technologies.⁷² The report further discussed how collaboration and technology transfer have become increasingly

⁶⁸ *Id.*

⁶⁹ Federal Trade Commission 2011 Report, *The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition*, 52 (March 2011), available at <http://www.ftc.gov/os/2011/03/110307patentreport.pdf>

⁷⁰ *Id.*

⁷¹ *Id.* at 7.

⁷² *Id.* at 8.

important pathways to innovation with significant benefits for consumers.⁷³ Patents play an important role in supporting these technology markets, and undermining that role would harm innovation.⁷⁴

When *Microsoft v. i4i* landed in front of the Supreme Court later in 2011, the Court re-addressed the question of what standard of proof was required to overturn a patent on invalidity grounds. Microsoft argued that a defendant in an infringement action need only persuade the jury of an invalidity defense by a preponderance of the evidence.⁷⁵ In the alternative, Microsoft insisted that a preponderance standard must apply at least when an invalidity defense rests on evidence that was never considered by the PTO in the examination process.⁷⁶ Microsoft relied primarily on two intertwined arguments: § 282 does not require clear and convincing evidence, and the clear and convincing evidence standard is not warranted where the prior art the challenger relies on was not considered by the PTO.⁷⁷ With respect to § 282 itself, Microsoft argued that preponderance of the evidence is the "default rule" for civil litigation and, thus, applies to validity issues in the absence of a specific direction from Congress to the contrary.⁷⁸ With respect to decisional law preceding the 1952 Act, Microsoft argued (i) that the Court only required a heightened evidentiary standard where a party sought to prove prior inventorship and where the relevant evidence had already been considered in an *inter partes* proceeding before the PTO and (ii) a majority of courts of appeal held that the presumption of validity was weakened or destroyed where the pertinent evidence had not been considered by the PTO.⁷⁹ In all events,

⁷³ *Id.*

⁷⁴ *Id.* at 9.

⁷⁵ See generally Brief for Petitioner at 8 *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238 (2011) (No. 10 – 290).

⁷⁶ *Id.*

⁷⁷ *Id.* at 9.

⁷⁸ *Id.* at 14.

⁷⁹ *Id.* at 19-20.

Microsoft observed, the decisional law before 1952 was inconsistent and even contradictory.⁸⁰ Microsoft rejected the notion that a heightened standard for proof is warranted by principles of agency deference because such deference is not warranted where the PTO did not consider the evidence of invalidity at issue in a subsequent litigation.⁸¹

Conversely, i4i, argued that Federal Circuit precedent has consistently applied the clear and convincing standard to validity issues.⁸² It argued that the 1952 Act was intended to codify the clear and convincing standard first articulated in *RCA*, and added that the Court has never approved standards of proof that vary depending on the specific evidence presented.⁸³ i4i attempted to buttress its position with the policy argument that lowering the standard of proof for showing invalidity would create uncertainty and discourage inventorship.⁸⁴

On June 9, 2011, the Supreme Court affirmed the Federal Circuit's decision in favor of i4i, and held that one challenging the validity of the patent must establish the factual predicate for showing invalidity with clear and convincing evidence.⁸⁵ The Court's rationale was that where Congress has prescribed a governing standard of proof, its choice controls unless the choice violates the Constitution.⁸⁶ Relying heavily on *RCA*, the Court described the common law respecting the standard of proof for showing invalidity, specifically stating a patent is presumed valid and the presumption of validity is not to be overthrown except by "clear and cogent" evidence.⁸⁷ By stating that a patent is "presumed valid," the court maintained that

⁸⁰ *Id.* at 19.

⁸¹ *Id.* at 19-20.

⁸² Brief for Petitioner at 3 *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238 (2011) (No. 10 – 290).

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Microsoft Corp. v. i4i ltd. P'ship*, 131 S. Ct. 2238, 2240 (2011).

⁸⁶ *Id.* at 2246.

⁸⁷ *Id.*

Congress used a term with a settled meaning in the common law.⁸⁸ The Court concluded, that the language Congress selected revealed its intent to impose a clear and convincing standard of proof.⁸⁹

On the narrower second question, addressing what standard of proof was applicable where evidence before the factfinder had not been before the PTO during the examination process, the Court held that the clear and convincing standard was also applicable.⁹⁰ The Court reached this conclusion after finding nothing in its pre-1952 case law or anything in § 282 itself that would suggest that there was a fluctuating standard of proof for invalidity, or that Congress intended to adopt or create one.⁹¹ In view of its construction of § 282, therefore, the clear convincing standard applied without exception.⁹²

Part III. How the Battle Lines Were Drawn: The Amicus Briefs and Policy Arguments

A. The Policy Arguments

In its decision, the Supreme Court noted that it was in no position to judge the "comparative force" of the policy arguments in favor and against a heightened standard of proof for showing invalidity.⁹³ Yet, the policy implications are what make this decision so impactful. They provided the driving forces behind the widespread attention this case received from many

⁸⁸ *Id.*

⁸⁹ *Id.* at 2241.

⁹⁰ *Id.* at 2240.

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Id.* at 2252.

large companies in the information technology and earth science industries, and for the support these companies showed in form of amicus briefs.

Although companies on either side of the debate own roughly the same number of patents,⁹⁴ the divisions appeared to be clearly defined in terms of industry support. For Microsoft, many of pioneers and leaders in the information technology and mobile entertainment industries advocated overturning the Federal Circuit's decision.⁹⁵ On the other hand, many earth science and pharmaceutical companies backed i4i in supporting a heightened standard of proving invalidity.⁹⁶ To summarize, Microsoft and its supporters, view the legal battle with i4i as one related to the stifling of innovation, while i4i and its supporters view it as a presumption of validity concerning patents and patent rights.⁹⁷

Both Microsoft and i4i, as well as their amici, presented opposing views as to the wisdom behind the clear and convincing evidence standard. Although the casual observer might conclude that patents are of critical importance to information technology and mobile entertainment companies, paradoxically, "information technology companies as a whole are lobbying the Supreme Court to reform patent law in such a way as to limit the strength of patents."⁹⁸ Accordingly, the long-pending patent reform legislation, resuscitated recently by the Senate, is

⁹⁴ See Audra Dial & Betsy Neal, *Proving Patent Damages is Getting Harder, But Establishing Patent Invalidity May be Getting Easier- How i4i, L.P. v. Microsoft Corp. May Change the Landscape of Patent Litigation*, 12 N.C. J.L. & Tech. 119 (June 2011) (searching and observing United States patents held by both sides.)

⁹⁵ See generally, 2010 U.S. Briefs 290 (U.S. Feb. 2, 2011).

⁹⁶ *Id.*

⁹⁷ *Id.*, see also Audra Dial & Betsy Neal, *Proving Patent Damages is Getting Harder, But Establishing Patent Invalidity May be Getting Easier- How i4i, L.P. v. Microsoft Corp. May Change the Landscape of Patent Litigation*, 12 N.C. J.L. & Tech. 119 (June 2011).

⁹⁸ Catriona M. Collins, *A Perspective on the Patent Wars over Mobile Technology*, 1 (March, 25 2011), available at http://www.lexis.com/research/retrieve?_m=76fb56892f22182e76a47170ff727a87&csvc=toc2doc&cform=&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLbVzS-zSkAW&_md5=

largely driven by lobbying from the technology sector, (although these changes were never incorporated in various patent proposals, or the recent patent reform act).

Microsoft and its amici included parties such as Apple, HTC, CTIA, SAP, Facebook, GM, Comcast, Cisco, eBay, Yahoo, Google, DEL, Verizon, Intel, Netflix, etc.⁹⁹ Microsoft and its supporters advocate the lower “preponderance of the evidence” standard of proof for patent invalidity, and contend that a heightened standard dampens innovation by unduly insulating bad patents from invalidity challenges.¹⁰⁰ They point to the high invalidation rate as evidence that the PTO grants patent protection to too many undeserving inventions.¹⁰¹

Google and HTC, for example, complain that the “clear and convincing standard undermines the Patent’s Act’s aim of promoting innovation” and that “the questionable patent benefits from the high standard of proving patent invalidity, which encourages abusive patents suits, discourages true innovation and raises costs without any attendant value to the consumer.”¹⁰² Apple and Intel, who filed a joint amicus brief, took a more nuanced approach, advocating that the lower standard of proof should apply only the evaluation of invalidity based on prior art that was not considered by the PTO during the examination of the patent application.¹⁰³

For their part, i4i and its amici, including the United States, Bayer, 3M, Johnson & Johnson, Procter and Gamble, Eli Lilly, etc., contend that the heightened standard of proof properly limits the circumstances in which a jury overturns the considerate judgment of an expert

⁹⁹ See generally, 2010 U.S. Briefs 290 (U.S. Feb. 2, 2011).

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² Brief of Google, INC. as Amici Curiae Supporting Reversal, 7-8 Microsoft Corp. v. i4i Ltd. P’ship, 131 S. Ct. 2238 (2011) (No. 10-290).

¹⁰³ Brief of Apple INC. and INTEL Corp. as Amici Curiae Supporting Reversal, 3 Microsoft Corp. v. i4i Ltd. P’ship, 131 S. Ct. 2238 (2011) (No. 10-290).

agency.¹⁰⁴ They claim that the heightened standard of proof is an essential component of the patent bargain, and the incentives for inventors to disclose their innovations to the public in exchange for patent protection.¹⁰⁵ *i4i*, and its amici, in a letter to the Department of Justice stated, "[w]e are greatly concerned that a reversal of the lower court's decision in this case could seriously weaken the presumption of validity that attaches to millions of patents in force in the United States today, thereby undermining long-standing investment-backed reliance interests that are critical for domestic job creation and economic growth, and for U.S. technological leadership internationally."¹⁰⁶

Advocates on both sides of the debate clearly articulated their arguments in the amicus briefs they presented to the United States Supreme Court. However, perhaps less clear, is why the information technology and pharmaceutical industries aligned themselves around the *Microsoft v. i4i* debate so dividedly and with so much fervor. The comparison of industry norms and the analysis of Federal Court dockets from the past decade helps uncover this apparent anomaly.

B. Industry Norms and the Increased Litigation Initiated by Non-Practicing Entities

The division between these two sectors is stimulated partially by differences in industry norms. As opposed to pharmaceutical companies, information technology companies do not generally rely on a single patent to protect their products.¹⁰⁷ In the information technology sector, individual patents may have limited value, but when combined as part of a larger

¹⁰⁴ Brief for Respondent, *8-9 Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238 (2011) (No. 10-290).

¹⁰⁵ *Id.* at 17-18.

¹⁰⁶ Letter to the Department of Justice. (January 13, 2011), *available at* <http://www.bio.org/node/211>

¹⁰⁷ *See id.*, referring to the FTC hearing that took place on May 4, 2009, where Apple's Chief Patent Counsel, Chip Lutton, pointed out that unlike life science companies, information technology companies do not generally rely on a single patent to protect their products. FTC 2009 hearing is available at <http://www.ftc.gov/bc/workshops/ipmarketplace/may4/090504transcript.pdf>

portfolio, the value of a patent may be significantly enhanced.¹⁰⁸ Furthermore, in a fast-moving industry like information technology, where technology ages rapidly, it is also important for a company to be able to acquire patents that are co-extensive with the company's current products because the issuance of the company's own patents on its current products could be several years away.¹⁰⁹ In the pharmaceutical industry, single-patents are frequently relied upon in isolation to protect innovation, and co-extensive patents are not regularly incorporated into business strategies because the industry is not as rapidly evolving.¹¹⁰

Another significant difference between the two industries can be attributed to the emerging and amplified role non-practicing entities play in the information technology and mobile entertainment sectors. As opposed to the pharmaceutical companies, information technology companies have recently become increasingly concerned with infringement claims initiated by non-practicing entities or patent trolls.¹¹¹ Within the mobile entertainment industry, non-practicing entities acquire patents for the express purpose of licensing the patents or asserting them against potential infringers with deep pockets. Non-practicing entities “frequently use the uncertainties of civil litigation as a primary bargaining chip” against companies like Apple, Google, and Microsoft.¹¹²

The recent influx of infringement litigation initiated by non-practicing entities has caused mobile entertainment companies to unbundle their patents in order to stave off litigation.

¹⁰⁸ Stephen H. Lieberman, *Technology Bundling Update*, SPAWAR Systems Center San Diego (Sept. 2008) available at <http://www.zyn.com/flcmc/meeting/presentations/Lieberman.pdf>

¹⁰⁹ Catriona M. Collins, *A Perspective on the Patent Wars over Mobile Technology*, 3 (March, 25 2011), available at http://www.lexis.com/research/retrieve?_m=76fb56892f22182e76a47170ff727a87&csvc=toc2doc&cform=&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLbVzS-zSkAW&_md5=; see also FTC 2009 hearing, available at <http://www.ftc.gov/bc.workshops.ipmarketplace/may4/090504transcript.pdf>

¹¹⁰ *See id.*

¹¹¹ *Id.*

¹¹² Brief of Apple Inc. and Intel Corp. as Amici Curiae Supporting Reversal, 3 Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238 (2011) (No. 10-290).

Historically, information technology companies commonly bundled and cross-licensed patents in order to protect innovation.¹¹³ However, recently patents are more frequently unbundled in the mobile entertainment industry due to an increased presence of non-practicing entities, and the threat of infringement litigation that they represent.¹¹⁴ These non-practicing entities are leading “the way to the unbundling of patent from the underlying research, development and manufacturing activities to which they had traditionally been tethered.”¹¹⁵ Because of this, patents today have become “standalone properties to be monetized by sale, licensing or litigation, rather than tools for protecting innovations incorporated in products being sold by the patent owner.”¹¹⁶ In the mobile entertainment industry, lowering the standard of proving a patent’s invalidity means being able to successfully challenge a non-practicing entity’s infringement action with greater ease or negotiating more affordable cross-licensing agreements. With a lower preponderance of the evidence standard, mobile entertainment companies could save significantly on infringement litigation, settlements, and licensing overhead costs.

C. Patent Litigation Trends

The alignment of parties in the *Microsoft v. i4i* suit can also be explained by patent litigation trends.¹¹⁷ By reviewing federal court dockets from the past decade, research indicates a significant difference in patent litigation experience between the two sides.¹¹⁸ Specifically, research calculating the number of times that members of each side appeared as a plaintiff or

¹¹³ Catriona M. Collins, *A Perspective on the Patent Wars over Mobile Technology*, 2 (March, 25 2011), available at http://www.lexis.com/research/retrieve?_m=76fb56892f22182e76a47170ff727a87&csvc=toc2doc&cform=&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLbVzS-zSkAW&_md5=

¹¹⁴ *See id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ Audra Dial & Betsy Neal, *Proving Patent Damages is Getting Harder, But Establishing Patent Invalidity May be Getting Easier- How i4i, L.P. v. Microsoft Corp. May Change the Landscape of Patent Litigation*, 12 N.C. J.L. & Tech. 150 (June 2011).

¹¹⁸ *Id.* at 149-150.

defendant in patent cases establishes an alarming disparity.¹¹⁹ In general, “those opposed to lowering the evidentiary standard (the i4i supporters) were more than twice as likely to have been plaintiff’s than as defendants” in patent litigation disputes.¹²⁰ In a sharp contrast, those in favor of the change (the Microsoft supporters) were about “six times as likely to have been defendants.”¹²¹ Since 2000, the i4i supporters “have been plaintiffs in approximately 70 percent of the patent cases” in which they participated.¹²² At the same time, the Microsoft supporters were defendants “in over 85 percent of the total number of patent cases” in which they had participated.¹²³ Explained another way, the companies seeking to lower the standard for proving invalidity were themselves the plaintiffs faced with defending validity of their patents “in less than 15 percent of all cases in which they were involved.”¹²⁴

Because i4i and its supporters have a strong tendency to defend patents by filing infringement actions, a higher standard of proving invalidity benefits the protection of their patents and ensures litigation outcomes to tilt in their favor. Alternatively, Microsoft and its supporters, generally as defendants in infringement claims, find a lower standard of proving invalidity advantageous because a lower standard lessens the likelihood of potential adverse infringement claim verdicts, strengthens their settlement position, and lowers potential patent licensing costs. Therefore, purely for reasons of monetary gain and self interest, both sides are deeply vested in advocating the requisite standard of proof that proffers their economic position. By requiring a clear and convincing standard to challenge a patent’s invalidity, mobile

¹¹⁹ *See id.*

¹²⁰ *Id.* at 150.

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.*

entertainment companies will likely be forced to alter current business practices to better adapt to the changing conditions in the information technology industry.

Part IV: How the Microsoft v. i4i Decision is Reshaping the Mobile Entertainment Industry

At first, it is tempting to conclude from the *Microsoft v. i4i* decision that nothing has changed. After all, the Federal Circuit, for the most part, has adhered to the clear and convincing standard for showing invalidity since the court's inception. However, with the recent increase in infringement litigation, mergers and acquisitions, and overall number of patents sought in the mobile entertainment industry, this conclusion seems to ignore empirical evidence pointing to the contrary. Perhaps a better conclusion to take away from the *Microsoft v. i4i* decision is that key players in the mobile entertainment industry acknowledge the necessity to adapt and refine business practices in a way that recognizes a patent's new and augmented role in the mobile entertainment industry. Specifically, the Supreme Court's codification of the clear and convincing requirement for proving a patent invalid will continue to increase the number of unsubstantiated patents and the unlikelihood that they will be overturned, and will be the reason why the value of patent portfolios will continue to increase, why infringement litigation is on the rise, and why the rate of merger and acquisitions in the mobile entertainment industry will surely intensify.

A. The Codification of a Heightened Standard Will Affect Case Outcomes

The Supreme Court's codification of a clear and convincing standard in *Microsoft v. i4i* will alter the outcomes of patent infringement claims in the mobile entertainment industry. A

positive correlation can be made between this heightened clear and convincing standard required to prove a patent's invalidity, and its determinative effects on case outcomes.¹²⁵ Empirical studies overwhelmingly suggest that the practical impact of the clear and convincing standard codified in the *Microsoft v. i4i* decision will make it harder to overturn a patent on invalidity grounds.¹²⁶

After the Federal Circuit adopted the requirement for a clear and convincing evidence standard for all challenges to patent validity in 1984, empirical evidence established a distinct increase in the proportion of cases in which patents survived challenges to their validity.¹²⁷ The most comprehensive of the relevant studies, published in 2006, analyzed a set of 4,792 patent cases for the period from 1953 to 2002.¹²⁸ This study concluded that the data showed significant differences in case outcomes after the adoption of the Federal Circuit's clear and convincing standard. Specifically, "district courts have been roughly half as likely to issue a decision of invalidity, and the appeals court has been nearly three times more likely to not affirm a decision of invalidity."¹²⁹ Evidence establishes that the change in the legal standard was likely a substantial contributing factor to the marked change in case outcomes.¹³⁰

Other studies have reached consistent results. A study of 300 district and appellate patent validity decisions from 1989 to 1996 determined that patents survived validity challenges in 54% of cases, and compared this to studies of pre-Federal Circuit decisions that had found an average

¹²⁵ See Brief of CTIA (Cellular Telecommunications & Internet Association), 3 *Microsoft Corp. v. i4i*, 131 S. Ct. 2238 (2011) (No. 10-290).

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ See Matthew D. Henry & John L. Turner, *The Court of Appeals for the Federal Circuit's Impact on Patent Litigation*, 35 *J. Legal Stud.* 85, 95-96 (2006).

¹²⁹ *Id.* at 90.

¹³⁰ *Id.*

survival rate of about 35%.¹³¹ A study of 1,307 Federal Circuit decisions from 1982 to 1994 similarly found that the Federal Circuit ultimately determined that between 58% and 64% of challenged patents were held not to be invalid, depending on the statutory provision under which they had been challenged.¹³²

The measurable shift in case outcomes coincided with the Federal Circuit's adoption of the clear and convincing standard for challenges to validity. The heightened evidentiary standard imposed by the Federal Circuit is likely one of the most important factors that caused the shift in outcomes in validity cases.¹³³ A comprehensive 2006 study performed by Professors Henry and Turner, from the University of Georgia, Terry College of Business, found that "the timing, synchronicity, and intuitive consistency" of the changes in case outcomes provided "strong evidence that the [Federal Circuit's] stronger presumption of validity has had a significant impact" on the way cases are decided.¹³⁴ Other scholars have reached similar conclusions.¹³⁵

Empirical evidence proves that Supreme Court's codification of a clear and convincing standard in *Microsoft v. i4i* will continue to alter case outcomes in the information technology industry. The empirical studies overwhelmingly suggest that the practical impact of the clear and convincing standard codified in the *Microsoft v. i4i* decision will make it harder to overturn a patent on invalidity grounds. The attention that the *Microsoft v. i4i* decision attracted from the

¹³¹ See John R. Allison & Mark A. Lemley, *Empirical Evidence on the Validity of Litigated Patents*, 26 AIPLA Q.J. 185, 205-06 (1998).

¹³² See Donald R. Dunner et al., *A Statistical Look at the Federal Circuit's Patent Decisions: 1982-1994*, 5 Fed. Cir. B.J. 151, 154-55 (1995) (58% of patents challenged under 35 U.S.C. § 102 or § 103 held not to be invalid; 64% of those challenged under § 112).

¹³³ *Id.*

¹³⁴ Matthew D. Henry & John L. Turner, *The Court of Appeals for the Federal Circuit's Impact on Patent Litigation*, 35 J. Legal Stud. 85, 90 (2006).

¹³⁵ See, e.g., Doug Lichtman & Mark A. Lemley, *Rethinking Patent Law's Presumption of Validity*, 60 Stan. L. Rev. 45, 69-70 (2007) (identifying "the stronger presumption of validity" applied by the Federal Circuit as "one of the most plausible" causes of the post-Federal Circuit shift).

information technology and pharmaceutical sectors, suggests that these industries also understood this empirical research, and fully comprehended the significance that this decision will have in determining case outcomes in the future.

B. A Heightened Standard will Increase the Number of Unsubstantiated Patents and the Unlikelihood that they Will Be Overturned

By increasing the evidentiary standard to challenge the invalidity of patents, the importance in the role of the PTO's initial examination is significantly amplified. From a practical perspective, the clear and convincing standard seems to unrealistically inflate the time and consideration that each patent application receives at the PTO. Yet, with the sheer number of patent applications increasing exponentially in the past twenty years, the number of examiners has not kept pace.¹³⁶ Many examiners are overworked, and "have only . . . [between] 8 to 25 hours to read and understand each application, search for prior art, evaluate patentability, communicate with the applicant, work out necessary revisions, and reach and write up conclusions."¹³⁷ This amounts to less than one week, or even as little as one day, of time spent evaluating each application before a patent is issued or denied.¹³⁸ The codification of a heightened standard will only contribute to the overload placed on patent examiners. Companies are likely to realize the increased value that a patent holds in the information technology sector today and file more applications, which will further inundate examiners and convolute the examination process.

¹³⁶ Audra Dial & Betsy Neal, *Proving Patent Damages is Getting Harder, But Establishing Patent Invalidity May be Getting Easier- How i4i, L.P. v. Microsoft Corp. May Change the Landscape of Patent Litigation*, 12 N.C. J.L. & Tech. 150 (June 2011).

¹³⁷ *Id.*; see also Federal Trade Commission 2003 Report, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy*, 80 (Oct. 2003), available at <http://www.ftc.gov/os/2003/10/innovationrpt.pdf>

¹³⁸ *Id.*

The rules governing the examination process also seem to tilt in favor of issuance: “[t]he examiner bears the initial burden, on review of the prior art..., of presenting a prima facie case of unpatentability.”¹³⁹ Evaluating whether the application discloses an idea that is not novel or is obvious (and therefore unpatentable)¹⁴⁰ relies on either the applicant disclosing relevant prior art for consideration or the examiner’s personal research and findings. However, the applicant is hardly an unbiased participant in his disclosures, and the lack of time examiners have to review each application, coupled with the burdens imposed on them, can result in the issuance of patents of questionable validity.¹⁴¹ Under these circumstances, the current system seems to distort the perpetuating issuance of patents that should not be issued without an effective judicial check,¹⁴² and shifts the risk of PTO error to parties not involved in the examination process and likely not in control of the most relevant information regarding validity.¹⁴³ The codification of the clear and convincing standard in the *Microsoft v. i4i* decision will only exacerbate this problem and add to the unlikelihood that unsubstantiated patents will be overturned.

C. A Heightened Standard will Increase the Value of a Patent in the Mobile Entertainment Industry

As perhaps best exemplified by Google’s recent acquisition of Motorola, the value of technology patents today have steadily increased. Specifically in the information technology and mobile entertainment sectors, the strength of a company’s patent portfolio weighs heavily on analyzing a company’s market value and competitive edge in the technologies sector. For example, Google’s \$12.5 billion acquisition of Motorola Mobility is really all about the

¹³⁹ See Brief for Google, 10 Microsoft Corp. v. i4i, 131 S. Ct. 2238 (2011) (No. 10-290).

¹⁴⁰ 35 U.S.C §§ 102(a), (b) (2006).

¹⁴¹ See Petition for Writ of Certiorari at 10, Microsoft Corp. v. i4i Ltd. P’ship, 131 S. Ct. 647 (2010).

¹⁴² See Brief for Google, 10 Microsoft Corp. v. i4i Ltd. P’ship, 131 S. Ct. 2238 (2011) (No. 10-290).

¹⁴³ See Brief for Acushnet, 17 Microsoft Corp. v. i4i Ltd. P’ship, 131 S. Ct. 2238 (2011) (No. 10-290).

patents.¹⁴⁴ Google likely paid next to nothing for Motorola Mobility's handset and TV set-top box operations, but with Motorola Mobility's large patent portfolio, including 17,000 patents and 7,500 more applications in progress, this portfolio should strengthen Google's position in the mobile entertainment industry, and in its lawsuits related to Android.¹⁴⁵ However, perhaps initially mystifying is the fact that only 18 of the 17,000 patents may actually be useful to Google.¹⁴⁶

This apparent anomaly can be explained by the recent tendency to unbundle patents within the industry. Today, patents have value outside of their protection over innovation. Google's acquisition demonstrates that patents today are standalone properties to be monetized by sale, licensing or litigation, rather than tools exclusively used for protecting innovations incorporated in products being sold by the patent owner.¹⁴⁷ The codification of a heightened evidentiary standard in *Microsoft v. i4i* will continue to increase mergers and acquisitions within the mobile entertainment industry.

The increased difficulty of successfully invalidating a patent, post *Microsoft v. i4i*, has been partially responsible for the enormous increase in the number of patents sought, has led to more accusations of infringement, has influenced the resolution of patent disputes, and has strengthened the settlement position of parties claiming infringement. The heightened evidentiary standard affects parties' estimates of litigation risks and therefore allows patent

¹⁴⁴ *Patent Wars Cheat Sheet*, (Aug. 22, 2011) available at <http://liliputing.com/2011/08/patent-wars-cheat-sheet.html>.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

holders to extract more settlement value from those they accuse of infringement.¹⁴⁸ Accordingly, the heightened evidentiary standard has influenced the settlement of patent disputes where the validity of the patent is part of the dispute, by creating a "profound impact on . . . negotiations and settlements" because "patent-holders [become] more eager to assert their rights, and accused infringers more inclined to pay up and settle rather than fight it out in court."¹⁴⁹

In addition, by increasing the chances that a patent will be upheld after a litigated validity challenge, and by increasing the value of patents in negotiations, the clear and convincing evidence standard also increases the incentive that parties have to seek more patents. In absolute terms, "[t]he number of U.S. patents issued to both U.S. and foreign entities nearly tripled from 66,290 in 1980 to 184,172 in 2001."¹⁵⁰ The rapid increase in patents issued each year in the 1980s and 1990s is likely caused at least in part by the litigation advantages that the Federal Circuit has conveyed on patent holders.¹⁵¹

The result of making invalidity more difficult to prove is generally that patent cases become more costly to settle. Specifically, the increased costs have been a particular problem for companies in the information technology and mobile entertainment industries, which operate in an industry where a new product can fit colorably within the scope of hundreds or thousands of

¹⁴⁸ Audra Dial & Betsy Neal, *Proving Patent Damages is Getting Harder, But Establishing Patent Invalidation May be Getting Easier- How i4i, L.P. v. Microsoft Corp. May Change the Landscape of Patent Litigation*, 12 N.C. J.L. & Tech. 143 (June 2011).

¹⁴⁹ ADAM B. JAFFE & JOSH LERNER, *Innovation and its Discontents: How Our Broken Patent System is Endangering Innovation and Progress, and What to Do About It* 107 (2007 ed.). (stating that, although this effect cannot be observed in tabulated statistics, conversations with business people and their attorneys confirm that it occurs.)

¹⁵⁰ Committee on Intellectual Property Rights in the Knowledge-Based Economy, National Research Council, *A Patent System for the 21st Century* 28 (Stephen A. Merrill et al. eds., 2004).

¹⁵¹ See Bronwyn H. Hall, *Exploring the Patent Explosion*, 30 J. Tech. Transfer 35, 41 (2005) (concluding that the creation of the Federal Circuit, and the resulting increased likelihood that patents would be "upheld in litigation," served to "provide an impetus for the increase in growth rate" in patent applications and patent grants); JAFFE & LERNER at 185 (identifying the "enhanced value of patent protection since the creation of the" Federal Circuit as likely contributing to the increase in patent applications).

patents.¹⁵² Although industry participants can often ameliorate the problem by cross-licensing each others' patents in batches,¹⁵³ this cannot solve the problem of suits that are threatened or brought by patent owners who are not themselves industry participants, non-practicing entities, who are an "important phenomenon in the modern patent system."¹⁵⁴ As an example, Verizon Wireless is, actively defending 23 cases alleging patent infringement.¹⁵⁵ Of those 23 cases, 20 are brought by non-practicing entities. While Verizon Wireless is firmly convinced that it has meritorious defenses in these suits, the clear and convincing evidence standard and its effect on juries weigh heavily on the mind of any defendant that is estimating its likelihood of success at trial.¹⁵⁶ The results are more settlements, higher settlement payments, and a higher cost paid by consumers for innovative products and services.¹⁵⁷

In summary, companies like Google, spending 12.5 billion for 17,000 patents, and 7,500 applications in progress, might be a preview of what is to be expected post *Microsoft v. i4i*. Google may be ahead of the curve in evaluating the true value of what a patent is worth in the information technology industry today, and Google's acquisition of Motorola may be in fact based on a logical evaluation of the current marketplace conditions. Even if the patents themselves are of little technological value to a company like Google, owning the rights to the patents increase positional future cross-licensing negotiations, and can stave off litigation by

¹⁵² See Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 Tex. L. Rev. 1991, 2025-28 (2007).

¹⁵³ See *id.*

¹⁵⁴ John R. Allison et al., *Extreme Value or Trolls on Top? The Characteristics of the Most-Litigated Patents*, 158 U. Pa. L. Rev. 1, 32 (2009) (finding that actions brought by non-practicing entities "represent over 80% of the suits filed involving the most-litigated patents"; see also Brief of CTIA (stating that Non-practicing entities led the way to the unbundling of patents from the underlying research, development and manufacturing activities to which they had traditionally been tethered. Patents became standalone properties to be monetized by sale, licensing or litigation, rather than tools for protecting innovations incorporated in products being sold by the patent owner.)

¹⁵⁵ Brief of CTIA (Cellular Telecommunications & Internet Association), 3 *Microsoft Corp. v. i4i*, 131 S. Ct. 2238 (2011) (No. 10-290).

¹⁵⁶ *Id.*

¹⁵⁷ See *id.*

using the patents as bargaining chips against competitors. For companies who generally find themselves on the defendant's side of an infringement claim, acquiring more patents will be required to stay competitive within the new emerging mobile entertainment marketplace.

Part V. Conclusion

The recent *Microsoft v. i4i* decision makes sense based on precedent but not on policy. Specifically, this decision will create a significant and lasting effect on the mobile entertainment sector by amplifying the number of unsubstantiated patents, inflating the value of technology patents, increasing the frequency of litigation over infringement claims in the technology sector, and increasing mergers and acquisitions within the technologies industry. The detrimental effects will also be felt on a consumer level, where the consumer of mobile entertainment will be forced to pay higher costs for innovative products and services.

For the mobile entertainment industry, the *Microsoft v. i4i* decision will undoubtedly lead to a reevaluation of the strength of a company's patent portfolio, and emphasize the importance of owning and acquiring new patents in order to stay competitive within the information technology marketplace. With the codification of a clear and convincing standard required to challenge a patent's invalidity, the evaluation of litigation risks and settlement costs for potential defendants will increase substantially. The simple solution may be to obtain more patents, either by filing more applications, or by acquiring them from other companies. Companies like Google seem to realize the new elevated role that patents play in the mobile entertainment industry. For companies that fail to adhere to this new wave of thinking, the results could be catastrophic.