

IN THE
Supreme Court of the United States

eBAY, INC. and HALF.COM., INC.,

Petitioners,

v.

MERCEXCHANGE, L.L.C.,

Respondent.

ON WRIT OF CERTIORARI TO THE
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

**BRIEF OF AMICUS CURIAE NOKIA CORPORATION
IN SUPPORT OF PETITIONERS**

MICHAEL P. KENNY

Counsel Of Record

MATTHEW D. RICHARDSON

WILLIAM R. HUBBARD

ALSTON & BIRD, LLP

1201 West Peachtree Street

(404) 881-7000

CARL BELDING

Chief Legal Officer

RON A. ANTUSH

Global Director of Intellectual

Property Rights Legal

Department

NOKIA CORPORATION

Counsel for Amicus Curiae

Nokia Corporation



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I. THE INTEREST OF AMICUS CURIAE NOKIA CORPORATION

Nokia Corporation (“Nokia”) is one of the largest manufacturers of wireless telecommunications equipment in the world.¹ In North America alone, Nokia sold more than 141 million mobile phones in 2004.² Nokia employs approximately 55,000 people worldwide, more than 20,000 of whom work in research and development. As a result of this substantial commitment to technological progress, Nokia owns more than 4,000 U.S. patents.

Nokia has recently been involved in numerous patent lawsuits, as both a plaintiff and defendant. Nokia is thus both a significant patent owner that might seek an injunction to protect its patent rights, and a manufacturer in an industry in which patent owners routinely issue threats of injunctions for patent infringement.

Nokia’s interest in this case is to advocate for patent laws that protect patent rights as a means for promoting the constitutional goal of developing technology for public benefit, not the judicially created expansion of patent rights as the goal itself. Nokia therefore supports the Petitioners’

1. No counsel for any of the parties authored any portion of this brief. No entity other than amicus curiae Nokia Corporation monetarily contributed to this brief. *See* Sup. Ct. R. 37.6. The Petitioner and the Respondent consented to the filing of this amicus curiae brief through their respective filings with the Court of December 21, 2005, and December 15, 2005.

2. Nokia is a Finish corporation. Investors in the United States own approximately 46% of the publicly traded shares of Nokia’s stock.

request for reversal of the Federal Circuit's interpretation and application of § 283 of the Patent Act.

By ignoring the goal of public benefit, the decision below threatens to thwart the innovative and pro-competitive work of standard-setting organizations ("standards organizations"). In the telecommunications industry, standards organizations devise and implement interoperability standards that facilitate the efficient development of technologically sophisticated and interrelated products. For example, every day, hundreds of millions of people communicate over standards-based mobile phones and wireless networks – all of which interoperate seamlessly even though they involve products made by different manufacturers. A consumer can place a call from a Nokia mobile phone that is received by a Motorola-equipped cell tower, passed through a land-based telephone network to an Ericsson-equipped cell tower, and transmitted to a Samsung mobile phone. This interoperability, made possible only because of standardization and also prevalent in other high-tech industries, promotes competition, increases consumer choice, improves service quality, and reduces prices.

The development of technologically sophisticated products requires substantial capital investment in research, product design, and manufacturing facilities. To encourage many competing industry players to accept interoperability standards, standards organizations recommend standards in which manufacturers can safely invest – secure in the knowledge that any proprietary rights relevant to the standard are free or can be licensed on a fair, reasonable, and non-discriminatory ("FRAND") basis. Standards organizations therefore often require patent owners participating in standards setting to disclose any patents related to a proposed

standard prior to adoption of that proposal. If a patentee declares that its patent covers a proposed standard, the standards organization can consider alternate technology or request that the patent owner agree to forgo exercising full rights of exclusivity by providing either free or FRAND licenses. By balancing the competing interests of patent holders and standards-dependent industries, standards organizations can confer substantial benefits on the public, while still respecting the interests of patent owners. Indeed, the work of standards organizations typically furthers the constitutional goal of patent law – promoting the “useful Arts.” That work is now in real and serious jeopardy.

II. SUMMARY OF THE ARGUMENT

The constitutional goal of patent law is to promote the “useful Arts” for public benefit. U.S. CONST. Art. I, § 8, cl. 8. Congress has, accordingly, granted certain rights to patent owners. To promote the constitutional goal of providing *public* benefit, however, Congress has limited the rights of patent owners. Even in a case of patent infringement, for example, Congress has provided that a patent holder may obtain an injunction only “in accordance with principles of equity,” 35 U.S.C. § 283. Although Congress might have required courts to issue injunctions upon a finding of patent infringement, it did not impose such stifling rigidity. Instead, Congress has expressly *required* district courts to apply traditional principles of equity to the individual circumstances of each patent infringement case.

In *MercExchange, L.L.C. v. eBay, Inc.*, 401 F.3d 1323 (Fed. Cir. 2005), the Federal Circuit departed from the plain statutory language and therefore traditional equity jurisprudence by holding that a court *must* grant injunctive

relief after a finding of patent infringement, unless the injunction would adversely affect public health. In so holding, the Federal Circuit ignored the fundamental goal of patent law – promoting the “useful Arts” for the benefit of the public – and elevated the means of obtaining that goal – rewards to patent owners – above the goal itself.

The Federal Circuit’s decision could particularly encumber the technologically sophisticated industries that fuel the national economy’s growth. In these industries, interoperability standards – which allow a manufacturer’s products to compete with or complement a competitor’s products – promote the progress of the “useful Arts.” Traditional principles of equity, including considerations of public interests and the balance of hardships, should weigh heavily when considering the issuance of an injunction that could undermine the development, implementation, or use of interoperability standards, particularly when a plaintiff in a patent infringement lawsuit participated in the standardization process.³

The implementation of interoperability standards in technologically sophisticated industries promotes the “useful Arts.” But an automatic injunction in favor of a patent owner could undermine that constitutional goal by forcing

3. A patent owner’s own wrongful conduct should also serve to bar equitable relief. *See, e.g., ABF Freight Sys., Inc. v. N.L.R.B.*, 510 U.S. 317, 329-30 (1994) (“The ‘unclean hands’ doctrine ‘closes the door of a court of equity to one tainted with inequitableness or bad faith relative to the matter in which he seeks relief, however improper may have been the behavior of the defendant.’” (citation omitted)); *Koster v. (Am.) Lumbermens Mut. Cas. Co.*, 330 U.S. 518, 522 (1947) (“[I]n all . . . petitions for equitable relief, he who seeks equity must do equity.”).

manufacturers of useful standards-compliant products to choose between the lesser of two evils – shutting down or paying exorbitant royalties. Either result would likely thwart effective competition, and thus diminish choice and impose greater costs on consumers.

The Federal Circuit's automatic injunction rule also threatens to undermine the cooperation between patent owners and standards organizations that is vital for the adoption of efficiency-enhancing interoperability standards. Critical to standard setting is the development of standards free from threat of shutdown by an injunction-wielding patent owner. In a world of automatic injunctions, however, a strategically opportunistic patentee could manipulate the standard-setting process to obtain such an industry-crippling injunction. For example, a patent owner could encourage the adoption of a proposed standard by agreeing to license its patents on FRAND terms to manufacturers that eventually implement the proposed standard. Then, after the standard is adopted, the unscrupulous patent owner could attempt to renege on its promise and sue the manufacturers implementing the standard for patent infringement. Under *eBay*, despite the patent owner's manipulation of the standard-setting process and contrary promises, he or she could seek and obtain an injunction to prohibit manufacturers from using the standard. Just the threat of such a crippling injunction would potentially allow the patentee to extort exorbitant royalties from manufacturers. In contrast, if traditional principles of equity apply, a reviewing court would have the sound discretion to deny this request for an injunction and instead award relief better suited to the facts of each case.

Furthermore, the Federal Circuit's reliance in *eBay* on property law to reward patent holders with sweeping injunctive protection is misplaced because property owners historically have enjoyed no special exception from the application of traditional principles of equity. Property law, like other areas of the law, has instead long recognized that injunctions should not be awarded automatically but, rather, should be assessed based on the traditional factors of equity. Because the Federal Circuit's *eBay* decision conflicts with the goal of patent law and lacks support in property law, it should be reversed.

III. ARGUMENT

A. The Decision Below Thwarts Congress's Efforts To Attain the Constitutional Goals of Patent Law.

The constitutional goal of patent law is the social-utilitarian promotion of technological innovation for public benefit – “To promote the Progress of . . . useful Arts.” U.S. CONST. Art. I, § 8, cl. 8. Ironically, the path to encourage innovation and public enjoyment of innovation required by the U.S. Constitution is to limit public access to inventions by granting inventors certain exclusive rights to their technology. *Id.* These exclusive rights allow patent owners to capture some of the value of their inventions and thereby provide the incentives necessary to support innovation. See *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 150-51 (1989); *Diamond v. Chakrabarty*, 447 U.S. 303, 307 (1980); *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 511 (1917).

Those exclusive rights are nevertheless merely instrumental means of achieving substantive public benefits.

See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., 535 U.S. 722, 730-31 (2002); *Bonito Boats, Inc.*, 489 U.S. at 150-51; *Motion Picture Patents Co.*, 243 U.S. at 510-11. Patent law therefore carefully calibrates the rights granted to patent owners to maximize the benefits to the public. A fundamental tension in this calibration exists between affording protections to patent owners and simultaneously allowing others to use the patented technology to otherwise promote the “useful Arts.” Thus, “the federal patent laws have embodied a careful balance between the need to promote innovation and the recognition that imitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy.” *Bonito Boats, Inc.*, 489 U.S. at 146; *see also* Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting*, 1 INNOVATION POL’Y & THE ECON. 119, 120 (Adam B. Jaffe, et al. eds., 2001) (“With cumulative innovation and multiple blocking patents, strong patent rights can have the perverse effect of stifling, not encouraging, innovation.”).⁴

In striking this balance, the patent laws consequently place distinct limitations on the scope of patent owners’ exclusive rights. For example, upon a finding of willful infringement, patent owners may receive damages “up to three times the amount found or assessed.” *See* 35 U.S.C.

4. *See also* Fed. Trade Comm’n, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION & PATENT LAW & POLICY 1 (2003), *available at* <http://www.ftc.gov/os/2003/10/innovationrpt.pdf> (“Competition and patents stand out among the federal policies that influence innovation. Both competition and patent policy can foster innovation, but each requires a proper balance with the other to do so. Errors or systematic biases in how one policy’s rules are interpreted and applied can harm the other policy’s effectiveness.”).

§ 284. Given that a patent owner possesses the exclusive right to use the patented technology, it is significant that Congress nonetheless chose to cap willful infringement damages. By allowing greater damages – for example up to 10 times the amount found or assessed – Congress could have provided the patent owner with greater protection from infringement, by erecting more severe deterrents against infringement, but Congress has implicitly determined that such expanded benefit for the patent owner would ultimately restrict innovation.

Similarly, § 283 of the Patent Act recognizes the need for limitations on the rights of patentees and accordingly provides that district courts “may” – not shall – grant injunctions once infringement is found, and then only “in accordance with principles of equity.” 35 U.S.C. § 283. As Congress appreciated when it enacted § 283, these traditional principles of equity require district courts to evaluate the specific facts of a case, paying particular attention to the potential public consequences of issuing an injunction to a private party and the balance of hardships between the patent owner and the infringer. *See Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (1982) (“The essence of equity jurisdiction has been the power of the Chancellor to do equity and to mould each decree to the necessities of the particular case. Flexibility rather than rigidity has distinguished it’ In exercising their sound discretion, courts of equity should pay particular regard for the public consequences in employing the extraordinary remedy of injunction.” (citation omitted)).⁵ Although automatic

5. Traditionally, in determining whether to award an injunction in accordance with the principles of equity, courts weigh the two factors noted above as well as (1) whether the patent owner would

(Cont’d)

injunctions would provide even greater rewards to patent owners, Congress has implicitly determined that the *public* interest of promoting “the Progress of . . . useful Arts” would be better served if experienced district court judges determine whether to grant injunctive relief by weighing these factual, equitable considerations.

The Federal Circuit’s decision thus departs from the plain text of § 283. By assuming away the social-utilitarian purpose of constitutional patent law and granting patent owners expansive equitable rights, the Federal Circuit undermined the careful calibration that Congress struck in granting more appropriately measured rights to patent owners. But as this Court has recognized, this calibration is for Congress to decide, not the Federal Circuit. *See Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984)

(Cont’d)

suffer irreparable injury, and (2) whether legal remedies provide adequate relief. *Weinberger*, 456 U.S. at 312. The Petitioner in its Petition for Certiorari and many of the amici curiae who filed briefs in support of that Petition have adequately argued that 35 U.S.C. § 283 empowers and requires courts to consider all four factors when making equitable determinations regarding injunctions in patent infringement cases. *See* Pet. for Writ of Cert., 2005 WL 1801263, at *11; Amicus Curiae Br. of Am. Online, Inc., 2005 WL 2381069, at *7; Amicus Curiae Br. of 35 Intellectual Property Professors, 2005 WL 2381070, at *2. Nokia incorporates those arguments by reference, but does not repeat them here to avoid burdening the Court. *See* Sup. Ct. R. 37.1. Because equitable remedies must be fundamentally fair, *see* DAN B. DOBBS, *DOBBS LAW OF REMEDIES*, § 2.1(3) (2d ed. 1993), courts may also consider the wrongful conduct of the plaintiff in determining whether to grant equitable relief. *See Koster v. (Am.) Lumbermens Mut. Cas. Co.*, 330 U.S. 518, 522 (1947) (“[I]n all . . . petitions for equitable relief, he who seeks equity must do equity.”).

("[I]t is Congress that has been assigned the task of defining the scope of [rights] that should be granted to authors or to inventors in order to give the public appropriate access to their work product."); *see also Eldred v. Ashcroft*, 537 U.S. 186, 212 (2003) (holding that, in the context of determining whether extension of the copyright term is constitutional, "[w]e have also stressed, however, that it is generally for Congress, not the courts, to decide how best to pursue the Copyright Clause's objectives"). Accordingly, the Federal Circuit's decision should be reversed: district courts should be allowed to exercise both the discretion Congress granted them to weigh the traditional equitable factors and the ability to refuse to grant injunctive relief for patent infringement where appropriate.⁶

B. The Decision Below Threatens To Retard the Progress of the "Useful Arts" by Undermining Interoperability Standards that Are Vital to Technologically Sophisticated Industries.

1. Interoperability standards are vital to technologically advanced industries.

Interoperability standards are vital to the enormous wealth-creating potential of many technologically advanced industries. *See generally* William J. Baumol, *THE FREE-MARKET INNOVATION MACHINE: ANALYZING THE GROWTH*

6. *Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U.S. 405 (1908), is consistent with Congress's mandate that courts "may" grant injunctions once infringement is found, but only "in accordance with principles of equity," 35 U.S.C. § 283. *Continental Paper Bag* held that a district court – on the particular facts of that case – *could* award injunctive relief to a patent owner, 210 U.S. at 430. The Court did not address whether there are circumstances in which a court must or could not award injunctive relief.

MIRACLE OF CAPITALISM (2002) (noting the central importance of innovation and technology-sharing among firms for economic growth). But with numerous patents potentially covering such products, technologically advanced industries often face a “patent thicket” – a morass of overlapping patents owned by many different parties – that presents a severe obstacle to the development, production, and delivery of new products to the consuming public. *See* Shapiro, *supra*, at 119, 120 (“In several key industries, including semiconductors, biotechnology, computer software, and the Internet, our patent system is creating a *patent thicket*: an overlapping set of patent rights requiring that those seeking to commercialize new technology obtain license from multiple patentees.”). Interoperability standards can cut a clear path through that thicket – while still respecting the rights of patent owners. *Id.* at 128.

For example, standards may be developed that use only technology found in the public domain. To develop such standards, a standards organization may require that members⁷ declare any patents related to a proposed standard. The standards organization would then strive to adopt a standard that avoids patented technology. *See, e.g., Rambus Inc. v. Infineon Tech AG*, 318 F.3d 1081, 1086 (Fed. Cir. 2003).

Most frequently, however, patented technology offers benefits unavailable in the public domain. Nevertheless, an interoperability standard incorporating such patented technology may be able to remedy the problems caused by a patent thicket. To do so, many standards organizations require all members to

7. Standards organizations are typically comprised of industry participants that also own substantial patent portfolios. Nokia is a member of 50 standards organizations that service various aspects of the wireless telecommunications industry. *See* Nokia.com, Nokia’s Memberships, <http://www.nokia.com/nokia/0,8764,33306,00.html> (last visited Jan. 25, 2006).

declare patents related to a proposed standard and also to agree in return to surrender some rights to exclusivity by agreeing to license those patents on free or FRAND terms if the standard is ultimately adopted.⁸ FRAND licenses typically benefit everyone: the patent owner receives a steady stream of reasonable royalties from the *entire* industry using the standard, and consumers reap the benefit of a competitive playing field that would otherwise be severely constrained and decidedly tilted in favor of certain patentees who could hold an industry hostage by demanding crippling royalties.

The danger of a patent thicket obstructing the development of technologically sophisticated products is very

8. One commentator has stated that the following domestic and international standards organizations have policies promoting the development of interoperability standards either unburdened by patent rights or only subject to FRAND licensing: World Wide Web Consortium, Institute of Electrical and Electronics Engineers, The Internet Engineering Task Force, RosettaNet, International Telecommunications Union, International Organization for Standardization, American National Standards Institute, National Institute of Standards and Technology, European Telecommunications Standards Institute, ATM Forum, CEN/CENELEC, Parlay Group, Open Mobile Alliance, Distributed Management Task Force, Mobile Wireless Internet Forum, Open Services Gateway Initiative, Open Group, Frame Relay Forum, ECMA, J Consortium, JEDEC Solid State Technology Association, Oasis, Public Key Infrastructure Forum, Software Defined Radio Forum, PCI Industrial Computer Manufacturers Group, The Salutation Consortium, Standards Council of Canada, Society of Cable Telecommunications Engineers, Alliance for Telecommunications Industry Solutions, Global Platform, and the Telecommunications Industry Association. See Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 Cal. L. Rev. 1889, 1904 (2002).

real. Shapiro, *supra*, at 122-28. In recent years, the number of patent applications filed with the United States Patent and Trademark Office (“USPTO”) and the number of patents issued by the USPTO have skyrocketed. In 1985, the USPTO received a total of 125,931 patent applications. See Table 2: Patent Applications Filed, http://www.uspto.gov/web/offices/com/annual/2005/060402_table2.html (last visited Jan. 21, 2006). By the end of 2005, that number had more than tripled to 409,532. *Id.* Similarly, in 1985, the USPTO issued approximately 77,400 patents; in 2005, the USPTO issued 157,900 patents.⁹

Interoperability is especially vital to technological fields where a product’s value is dependent upon its capacity to complement a competitor’s products. CARL SHAPIRO & HAL R. VARIAN, *INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY* 173-226 (1999). Such “network markets” generally involve products “whose entire value lies in facilitating interactions between a consumer and others who own the product.” Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV.

9. This growth has been particularly dramatic in high technology fields. For example, many technologically advanced products, including computers, modems, mobile phones, digital music players, and DVD players, contain some sort of microprocessor. In the past three years, approximately 33,000 patents were granted containing patent claims describing “processors” or “microprocessors.” Likewise, in the same time period, close to 9,000 patents were issued containing patent claims describing “wireless” applications. See also Fed. Trade Comm’n, *TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION & PATENT LAW & POLICY* 31 (2003), available at <http://www.ftc.gov/os/2003/10/innovationrpt.pdf> (noting that the “growth of the knowledge-based economy presents several challenges to the patent system . . . [including] the sheer number of patents sought and received”).

479, 488 (1998). For example, the markets for mobile telephones, computer modems, and various Internet applications are all network markets. SHAPIRO & VARIAN, *supra*, at 264-70. Many of the network benefits inure to consumers – the more people who use mobile phones, computer modems, and the Internet, the more useful that technology becomes to consumers.¹⁰ *Id.* at 175-84; see Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CAL. L. REV. 1889, 1896 (2002).

In network markets, the need for standardization is particularly acute. SHAPIRO & VARIAN, *supra*, at 229. For example, every mobile phone is based on some mobile phone standard. The most successful of these standards – the Global System for Mobile communications (“GSM”) standard – is the basis for mobile phones used by almost one out of every 4 people on the planet – a total of 1.6 billion people. See GSM World - The Website of the GSM Association, at <http://www.gsmworld.com/index.shtml> (last visited Jan. 21, 2006).

This and other interoperability standards provide many useful benefits to society. In addition to supporting the very existence of some technologically advanced markets, interoperability standards enable greater competition among manufacturers. SHAPIRO & VARIAN, *supra*, at 231-33; see U.S. Dep’t of Justice & Fed. Trade Comm’n, ANTITRUST GUIDELINES FOR COLLABORATING AMONG COMPETITORS 1 (2000), *available*

10. Of course, under the right circumstances, a single entity could operate a network market, obviating the need for interoperability standards. AT&T, for example, once operated the only long-distance telephone network in the United States. *United States v. Am. Tel. & Tel. Co.*, 552 F. Supp. 131 (D.D.C. 1982). Such a single-entity network, however, would likely have monopoly power that it may assert to the detriment of consumers. See *id.*

at <http://www.ftc.gov/os/2000/04/ftcdojguidelines.pdf>. For example, because mobile phones made by Nokia, Motorola, and Samsung can operate in the same wireless telecommunications networks, these manufacturers compete in the same mobile telephone market. Likewise, digital computer memory made by Infineon Technologies AG competes with memory made by Samsung Electronics. Such robust competition produces better products and lower costs for consumers. Interoperability also reduces production costs for technologically sophisticated products. Interoperability expands the markets for these products – whether mobile phones, digital memory, or any other technologically sophisticated product – providing greater economies of scale, which ultimately reduce the costs paid by consumers. By conferring these many benefits, interoperability standards promote the “useful Arts.”

2. The decision below prevents district courts from considering the serious harm that an injunction might cause to interoperability standards and to the public interests these standards promote.

In technologically sophisticated industries, the path through the patent thicket cut by an interoperability standard may be exceedingly narrow. Despite the best efforts of standards organizations and manufacturers to forge a clear path through the patent thicket – a path that supports the industry and simultaneously respects the rights of patent owners – obstacles remain: products may still infringe a patent by complying with a standard. Shapiro, *supra*, at 120-21. Given the enormous number of patents related to technologically sophisticated products, this uncertainty is an unavoidable by-product of advanced technology and a

proliferation of patents. After an interoperability standard is established, however, the switching costs of changing standards are frequently prohibitive. *See Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 473 (1992) (noting that sunk costs may prevent switching from one product to another); DANIEL G. SWANSON, EVALUATING MARKET POWER IN TECHNOLOGY MARKETS WHEN STANDARDS ARE SELECTED IN WHICH PRIVATE PARTIES OWN INTELLECTUAL PROPERTY RIGHTS 5 (2002), *available at* <http://www.ftc.gov/opp/intellect/020418danielswanson.pdf>; *see also* SHAPIRO & VARIAN, *supra*, at 103-34 (discussing the “lock in” that occurs from selecting one economic option). Accordingly, the Federal Circuit’s automatic injunction rule could have the unintended consequence of enabling a patent owner whose patent covers a standard to seek exorbitant royalties, stymie competition, and ultimately harm public interests promoted by interoperability standards. *See* U.S. Dep’t of Justice & Fed. Trade Comm’n, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY 2.3 (1995), *available at* <http://www.usdoj.gov/atr/public/guidelines/0558.htm> (noting harm to consumers if technology license holders are allowed to “anticompetitively foreclose access to competing technologies”).

Frequently, standards take years to develop. Development of the GSM standard, for example, began in 1982, but GSM-compliant products were not available until approximately 1991. Despite the diligent efforts of manufacturers and standards organizations to avoid infringing patents, there can be a substantial time lag before manufacturers discover that some patent is essential to an

interoperability standard. For example, a patent covering a standard may not issue until after the standard is adopted. *Reiffin v. Microsoft Corp.*, 104 F. Supp. 2d 48, 49 n.3 (D.D.C. 2000) (“Patents that remain ‘submerged’ during a long *ex parte* examination process and then ‘surface’ upon the grant of the patent have been labeled ‘submarine patents.’ A holder of a ‘submarine patent’ may be able to demand high royalties from non-patent holders who invested and used the technology not knowing that a patent would later be granted.” (internal quotation marks and citation omitted)). By the time an infringement is discovered, it would be enormously expensive for the standards-based industry to change the standard to avoid infringing the patent. And even after changing the standard, manufacturers would face substantial additional costs and delays necessary to redesign their products and retool their production facilities.

These market realities, combined with an automatic injunction rule for patent infringement, create the acute potential for patent owners to “hold up” industries based on interoperability standards for exorbitant royalties, or even to paralyze those industries altogether. *See, e.g., Rambus*, 318 F.3d at 1086 (involving infringement claim by patent owner who had been a member of a standard-setting organization for the computer memory industry); *InterDigital Tech. Corp. v. OKI Am., Inc.*, 845 F. Supp. 276, 281 (E.D. Pa. 1994) (involving claim by patent holder that multiple manufacturers infringed patents by complying with wireless telecommunications standards).¹¹ Indeed, an injunction could force upon manufacturers a Hobson’s Choice of either (1) losing the substantial investments they have made in good faith to develop their products and production facilities or

11. Ultimately, there was no finding of patent infringement in the cited cases.

(2) paying excessive royalties. Shapiro, *supra*, at 125 (describing the hold-up problem). When standards enjoy widespread use, as they do in the wireless telecommunications industry, an industry shutdown would harm hundreds of millions of consumers, a result that would be precisely contrary to the constitutional, social-utilitarian goal of promoting the “useful Arts.”

In fact, the mere threat of injunction-backed exorbitant royalties may undermine effective competition and raise costs for consumers.¹² Such threats may limit the adoption of an interoperability standard and thereby reduce the public benefits of the standard. *In re Dell Computer Corp.*, 121 F.T.C. 616, 618 (1996) (alleging, in a complaint filed by the Federal Trade Commission, that, because of the patent owner’s claim that its patent covered a standard – where the patent owner had been a member of the standards organization that developed the standard – “[w]illingness to participate in industry standard-setting efforts have been chilled”). Threats by patent owners that their patents are essential for standards may also force manufacturers to incur legal fees to demonstrate that those threats lack merit. *See, e.g., Motorola, Inc. v. InterDigital Tech. Corp.*, 121 F.3d 1461, 1465 (Fed. Cir. 1997) (involving suit for declaratory injunction of non-infringement after patent owner claimed in *OKI Am., Inc.*, 845 F. Supp. at 281, that its patented technology was essential to wireless telecommunications standards); *Ericsson, Inc. v. InterDigital Commc’ns Corp.*,

12. Moreover, excessive royalties do not effectively promote innovation. As noted above, the amount of such royalties is determined by the substantial resources already invested into the development and implementation of standards – not the intellectual value of the patented invention. *See Motion Picture Patents Co.*, 243 U.S. at 511.

No. 3:93-CV-1809-M, 2004 WL 1636924, at *1 (N.D. Tex. June 3, 2004) (same); *see also Nokia Corp. v. InterDigital Commc'ns Corp.*, No. Civ.A. 05-16-JJF, 2005 WL 3525696, at *1 (D. Del. Dec. 21, 2005) (involving Lanham Act claim regarding patent owners claims of essentiality). The specter of excessive royalties, moreover, may actually discourage research and innovation in matters closely related to the patented technology. *See Shapiro, supra*, at 126 (noting that with patent thickets, “some companies [may] avoid the mine field altogether, i.e., refrain from introducing products for fear of hold-up”); *see also Bonito Boats, Inc.*, 489 U.S. at 151 (noting the importance of “competition in the exploitation of unpatented designs and innovations”). Thus, the Federal Circuit’s judicially created reward of expansive injunctive relief to patent owners undermines – if not directly opposes – the patent law’s ultimate goal of promoting innovation for the public benefit.

In contrast, a court applying traditional equitable considerations to the facts of a case would have the discretion to refuse to grant an injunction that harms the public and undermines the basic goal of patent law.¹³ *See Weinberger*, 456 U.S. at 312 (noting that “courts of equity should pay particular regard for the public consequences in employing the extraordinary remedy of injunction”); *Yakus v. United States*, 321 U.S. 414, 440 (1944). To prevent such a counterproductive result, Congress has empowered courts to deny requests for injunctive relief for reasons other than harm to public health. 35 U.S.C. § 283. Although patents

13. As noted, equitable determinations involve multiple factors, including the impact on public interests, but no single factor is dispositive. *See, e.g., Sanborn Mfg. Co. v. Campbell Hausfeld/Scott Fetzer Co.*, 997 F.2d 484, 485-86 (8th Cir. 1993).

that are ultimately determined to be essential to standards should receive appropriate legal protection, if an injunction would harm public interests and would threaten to impair the progress of the “useful Arts” – or if other equitable considerations also disfavor injunctive relief – a court must retain the discretion to deny a request for an injunction even after a finding of patent infringement.¹⁴

3. The decision below prevents district courts from considering the balance of hardships between patent owners and manufacturers and thus discourages cooperation that is vital to standards organizations.

The Federal Circuit’s failure to recognize the importance of the balance of hardships threatens to restrict efficiency-enhancing cooperation between patent owners and manufacturers that is vital to innovation. This pro-competitive cooperation will be especially threatened if a patent owner who abuses the standard-setting process, for example, by attempting to abandon his promise to license on FRAND terms, is able to obtain an automatic injunction to the detriment of manufacturers that implement the standard and consumers who depend on the products.

14. Indeed, even if a patent does not cover a standard, a court considering a request for an injunction should consider the equities, including public policy implications, before awarding such relief. An injunction might harm many millions of consumers and thereby inhibit the progress of the “useful Arts,” even if it is not part of a standard. For example, if a patent covered some aspect of Nokia’s network infrastructure equipment, wireless network operators potentially could be enjoined from operating their networks, and hundreds of millions of consumers could be affected. Pursuant to § 283, district courts considering a request for an injunction should have discretion to weigh, *inter alia*, the public harm against the private benefit of the injunction.

Because of the problems that may arise when a patent covers a standard (noted above), standards organizations strive to develop standards free from threats of injunctions from patent owners. Consequently, standards organizations frequently require patent owners participating in the standard-setting process to declare whether any of their patents cover a proposed standard. After a patent owner declares a patent, the standards organization may choose another technology to avoid the patented technology. Alternatively, the standards organization may ask the patent owner to agree to provide free or FRAND licenses to those patents to manufacturers using the standard.¹⁵ Shapiro, *supra*, at 138. In the wireless telecommunications industry, standards organizations typically require a patent owner to commit to license a patent on FRAND terms when the patent owner declares that patent to be essential to a given standard.

In the hopes of obtaining enormous royalties, however, some strategically minded patent owners may remain silent despite the standards organization's request for patent declarations. Similarly, patent owners may declare their patents to the standards organization, promise to provide free or FRAND licenses, and then attempt to renege on those promises. Once the standard is adopted by the industry, the patent owner – armed with an injunction issued pursuant to the Federal Circuit's *eBay* decision – could hijack the standard by suing the manufacturers implementing the standard for patent infringement. *See, e.g., Wang Labs., Inc. v. Mitsubishi Elecs. Am., Inc.*, No. CV 92 4698JGD, 1993 WL 645936, at *4-*5 (C.D. Cal. Dec. 17, 1993); *Dell Computer Corp.*, 121 F.T.C. 616 (1996). Such an

15. *See* footnote 8 *supra* (listing standards organizations employing these policies).

infringement suit would almost be guaranteed to succeed because the patented technology was made part of the standard.

Under the Federal Circuit's *eBay* decision, such a patent owner who succeeds on the merits of his claim would automatically receive injunctive relief, thereby forcing the manufacturer either (1) to accede to the patent owner's demands for exorbitant royalties; or (2) to face the risk of being forced to cease operations while litigating the impact of the patent owner's strategic refusal to declare its patents, *see, e.g., Rambus Inc.*, 318 F.3d at 1086 (involving patent infringement claim by patent owner who had been a member of a standards organization who had not declared the patent to the organization during the standard-setting process); *Dell Computer Corp.*, 121 F.T.C. 616 (1996) (similar, in the context of an investigation by the Federal Trade Commission), or its reneging on its promise to provide free or FRAND licenses, *see, e.g., Broadcom Corp. v. Qualcomm, Inc.*, No. 05-3350 (D.N.J. filed July 1, 2005) (currently pending case involving claim that patent owner who participated in standard setting violated antitrust laws by refusing to fulfill FRAND commitments).¹⁶ These additional costs would seriously undermine the considerable public benefits flowing from the work of standards organizations.

A court evaluating the traditional equitable factors, however, should be able to refuse to issue an injunction in these situations because the balance of hardships would not favor the patent owner – who induced the infringement –

16. The infringement action of a patent owner that participates in standard setting or commits to FRAND licensing in connection therewith should also be barred by other legal doctrines, including but not limited to implied license, promissory estoppel, and equitable estoppel.

over the infringing manufacturer. *ABF Freight Sys.*, 510 U.S. at 329-30 (describing the “unclean hands” doctrine). Had the patent owner either (1) responded to the standards organization’s request for a declaration of patents related to the proposed standard or (2) not represented that it would provide and honor free or FRAND licenses, the standard perhaps would not have been adopted, and the infringer probably would not have used the patented technology. Indeed, the patent owner may have been a member of the standards organization and *advocated* for the adoption of the proposed standard.¹⁷ See, e.g., *Rambus Inc.*, 318 F.3d at 1086; *Dell Computer Corp.*, 121 F.T.C. at 616. Furthermore, the patent owner who promises to provide free or FRAND licenses has in fact contracted away any right to an injunction. The patent owner will have received valuable consideration in exchange for its FRAND commitment – a steady stream of FRAND royalties from the entire industry using the standard. Under these circumstances, the balance of hardships would tilt decidedly against the patent owner, and, consequently, a district court should refuse injunctive relief in the exercise of its statutory discretion to do so.

C. Property Law Has Long Recognized that Injunctive Relief May Be Denied when an Injunction Would Harm the Public Interest and the Balance of Hardships Does not Favor the Property Owner.

Although promotion of the “useful Arts” favors the denial of injunctive relief in many patent infringement cases, the Federal Circuit held that injunctions should automatically be awarded because, according to the Federal Circuit, property law generally requires injunctive protection for

17. See footnote 16, *supra*.

property rights, unless the denial of a request for an injunction is necessary to protect public health. *eBay*, 401 F.3d at 1338. This rationale is untenable: property law and its scholars have long recognized that requests for injunctive relief should be denied when equity requires, particularly when the impact on public interests and the balance of hardships weigh heavily against issuance of an injunction.¹⁸

For example, in *Boomer v. Atlantic Cement, Co.*, 26 N.Y.2d 219 (1970), the New York Court of Appeals denied a request for an injunction on equitable grounds. In *Boomer*, Atlantic Cement Co. operated a cement factory. *Id.* at 222. The plaintiffs – owners of land near the factory – alleged that dirt, smoke, and vibration emanating from the factory was a nuisance to their property rights. *Id.* The New York court found that Atlantic Cement had indeed created a nuisance, *id.*, and noted that injunctive relief was generally available upon such a finding, *id.* at 223-24.

The court, however, *refused* to enjoin the operation of the cement factory, as requested by the plaintiffs. The court noted that the total damage to the plaintiffs was small, approximately \$185,000, compared to the harm to Atlantic Cement if forced to shut down, approximately \$45,000,000; the balance of hardships favored Atlantic Cement. *Id.* at 225 & n.*. The court also noted that the public interest in the operation of the plant favored denying the request for injunctive relief. *Id.* at 227.

18. Moreover, the property nature of patents, established by 35 U.S.C. § 261, is explicitly “[s]ubject to the provisions of [Title 35],” including 35 U.S.C. § 283, which grants courts the discretion to deny requests for injunctions on the basis of equity.

Effectively, the court in *Boomer* refused to allow the plaintiffs – owners of infringed property – to seek exorbitant damages from and thereby inflict disproportionate harm on Atlantic Cement. If the court had granted an injunction, the local property owners would be able to hold up Atlantic Cement, seeking payment commensurate with the substantial cost of Atlantic Cement relocating its operation. See John Cirace, *A Synthesis of Law & Economics*, 44 S.W.L.J. 1139, 1168-77 (1990) (citing *Boomer* and Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1106-10 (1972)). Instead, the court determined the extent that the property values were reduced by the nuisance and effectively awarded damages in that amount.

The patent “hold up” problems in the context of technologically sophisticated industries are similar to those in *Boomer*. As described earlier, because of the substantial investment manufacturers must make in developing products and interoperability standards, a patent owner may be able to hold up manufacturers for royalties that far exceed the harm to the patent owner from the infringement or the intellectual value of the patent. As in *Boomer*, courts must be free to weigh equitable considerations to determine whether a patent infringement suit presents a “hold up” situation in which injunctive relief is inappropriate.

IV. Conclusion

Thus, “[t]o promote the Progress of the . . . useful Arts,” district courts must have the discretion to deny injunctive relief, in appropriate circumstances, on the basis of equity. Accordingly, Nokia respectfully submits that this Court should reverse the Federal Circuit’s decision in *eBay*.

Respectfully submitted,

MICHAEL P. KENNY
Counsel Of Record
MATTHEW D. RICHARDSON
WILLIAM R. HUBBARD
ALSTON & BIRD, LLP
1201 West Peachtree Street
(404) 881-7000

CARL BELDING
Chief Legal Officer
RON A. ANTUSH
*Director of Global Intellectual
Property Rights Legal
Department*
NOKIA CORPORATION

*Counsel for Amicus Curiae
Nokia Corporation*