

Defending Against Patent Infringement Suits In Standard-Setting Organizations: *Rambus Inc. v. Infineon Technologies AG*

Peter David G. Sabido

Author's Note: The author is an intellectual property attorney at the Portland, Oregon office of Kolisch Hartwell, P.C. The author thanks Professor Joseph Scott Miller of the Northwestern School of Law of Lewis and Clark College, for recommending the topic and providing suggestions for this Article. Finally, the author dedicates this Article to his brother, Robert, his sister-in-law, Jennifer, and his nephew and godson, Robert, Jr.

Introduction

“Do not think that you can build [cyberspace], as though it were a public construction project. You cannot. It is an act of nature and it grows itself through our collective actions.”¹ One can only wonder whether John Barlow's “collective actions” included the various standard-setting organizations that have made the growth of cyberspace possible.² Two examples of those organizations are the Internet Engineering Task Force (IETF)³ and the World Wide Web Consortium (W3C).⁴

The IETF has been responsible for developing all the standard technology that makes the Internet work.⁵ Those standards include the Transmission Control Protocol/Internet Protocol (TCP/IP); routing, management, and transport; security; quality of service; and next generation

¹ John Perry Barlow, *Cyberspace Declaration of Independence*, in RAYMOND S.R. KU ET AL., *CYBERSPACE LAW: CASES AND MATERIALS* 18, 18 (2002) (addressing governments' roles in the regulation of cyberspace).

² *Id.*; see David J. Teece & Edward F. Sherry, *Standards Setting and Antitrust*, 87 MINN. L. REV. 1913, 1914–18 (2003) (discussing the different types of standards that standard-setting organizations may develop).

³ INTERNET ENGINEERING TASK FORCE, OVERVIEW OF THE IETF, at <http://www.ietf.org/overview.html> (last visited Mar. 1, 2004).

⁴ WORLD WIDE WEB CONSORTIUM, ABOUT THE WORLD WIDE WEB CONSORTIUM (W3C), at <http://www.w3c.org/Consortium> (last updated Feb. 4, 2004) [hereinafter ABOUT W3C].

⁵ Scott Bradner, *The Internet Engineering Task Force*, in OPEN SOURCES: VOICES OF THE OPEN SOURCE REVOLUTION 47, 47 (Chris DiBona et al. eds., 1999). The IETF works “under the auspices of the Internet Society.” *Id.* at 48.

protocols.⁶ Despite the voluntary nature of IETF standards, many of those standards have succeeded where government mandated standards have failed.⁷ The IETF is open to any individual who wishes to participate.⁸ The IETF membership includes an “international community of network designers, operators, vendors, and researchers.”⁹

The W3C has developed “common protocols that promote [the web’s] evolution and ensure[s] its interoperability.”¹⁰ The W3C is open to any organization that signs its membership agreement.¹¹ The W3C membership includes “vendors of technology products and services, content providers, corporate users, research laboratories, standards bodies, and governments.”¹²

The IETF, W3C, and other standard-setting organizations have significantly contributed to cyberspace growth. What if, however, a member in one of those organizations decides to forego the greater good to reap financial rewards from its patented technology? Suppose, for example, a standard-setting organization adopts its member’s patented technology as its standard. Several companies adopt that standard and manufacture products incorporating the patented technology. Subsequently, the patent owner withdraws from the standard-setting organization and sues the other companies for patent infringement.¹³ How can the alleged

⁶ *Id.* at 47.

⁷ *Id.*

⁸ *Id.*

⁹ OVERVIEW OF THE IETF, *supra* note 3, at <http://www.ietf.org/overview.html>. For additional information on the IETF, see INTERNET ENGINEERING TASK FORCE, THE TAO OF IETF: A NOVICE’S GUIDE TO THE INTERNET ENGINEERING TASK FORCE (Aug. 2001), *available at* <http://www.ietf.org/tao.html>.

¹⁰ ABOUT W3C, *supra* note 4, at <http://www.w3c.org/Consortium>.

¹¹ *Id.*

¹² *Id.*

¹³ A patent provides the patent owner the exclusive right to make, use, sell, offer to sell, or import the patented invention. *See* 35 U.S.C. § 271(a) (2000). Thus, a party infringes the patent if it engages in any of those activities

infringers defend themselves? How can standard-setting organizations avoid this potential problem?

This Article reviews how the above hypothetical played out in *Rambus Inc. v. Infineon Technologies AG* [hereinafter *Rambus II*].¹⁴ Part I reviews *Rambus II*. Part II discusses the fraud defense raised in *Rambus II*. Part III reviews other potential defenses against patent infringement in the context of standard-setting organizations. Finally, this Article concludes with what standard-setting organizations can do to avoid similar problems.

I. *Rambus Inc. v. Infineon Technologies AG*

In *Rambus II*, the United States Court of Appeals for the Federal Circuit held that Infineon, the alleged infringer, failed to provide substantial evidence to support the jury's fraud verdict against Rambus, the patent owner.¹⁵

A. The Dispute

Rambus was a designer and licensor of computer memory systems technology.¹⁶ In April 1990, Rambus filed a patent application, U.S. Patent Application Serial No. 07/510,898 ('898 application), which covered technology known as Rambus dynamic random access memory (RDRAM).¹⁷ After that filing, Rambus filed a Patent Cooperation Treaty application (WIPO application)¹⁸ and several divisional and continuation applications¹⁹ based on the '898

without the patent owner's authorization. *See id.* The Patent Act provides various infringement remedies for the patent owner, including injunctions, damages, and attorney fees. *See id.* §§ 281–285.

¹⁴ 318 F.3d 1081 (Fed. Cir.) [hereinafter *Rambus II*], *cert. denied*, 124 S. Ct. 227 (2003).

¹⁵ *Id.* at 1106.

¹⁶ *Id.* at 1084.

¹⁷ *Id.*

¹⁸ A Patent Cooperation Treaty application allows the applicant to file in any national patent office designated in that treaty. ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, *PATENT LAW AND POLICY: CASES AND MATERIALS* 536 (3d ed. 2002). The World Intellectual Property Organization (WIPO) acts as the publisher of international

application.²⁰ The United States Patent and Trademark Office (USPTO) issued at least thirty-one patents based on those applications.²¹

Rambus joined the Joint Electron Devices Engineering Council (JEDEC) of the Electronic Industries Association in February 1992.²² JEDEC is a standard-setting organization that develops standards for semiconductor technologies, including random access memory (RAM).²³ JEDEC also has open meetings that non-members may attend by invitation, and makes its minutes and standards available to members and nonmembers.²⁴ Finally, JEDEC has a written patent policy that encourages “the adoption of standards free of patented items or processes.”²⁵ That policy, at least by 1993, required its members to “disclose patents and patent applications ‘related to’ [its] standardization work.”²⁶ That policy also required a patent owner

application and central coordinating body under the Patent Cooperation Treaty. U.S. DEP’T OF COMMERCE, UNITED STATES PATENT & TRADEMARK OFFICE, MANUAL OF PATENT EXAMINING PROCEDURE § 1801 (8th ed., rev. 1 Feb. 2003) [hereinafter MPEP].

¹⁹ A divisional application is a later filed application for a distinct invention that is “carved out” of a pending application. MPEP, *supra* note 18, § 201.06. A continuation application is a subsequent application for the same invention. *Id.* § 201.07.

²⁰ *Rambus II*, 318 F.3d at 1084–85.

²¹ *Id.* at 1084.

²² *Id.* at 1085. Since 1991, JEDEC and the Electronic Industries Association have changed their names to the JEDEC Solid State Technology Association and Electronic Industries Alliance, respectively. *Id.* at 1085 n.1.

²³ *Id.* RAM is “a common component in computers, printers, and other electronic devices.” *Id.* For additional information on JEDEC, see JEDEC, JEDEC MANUAL OF ORGANIZATION AND PROCEDURE (July 2002), available at <http://www.jedec.org/Home/manuals/jm21L.pdf> (last visited Apr. 4, 2004) [hereinafter JEDEC MANUAL OF ORGANIZATION AND PROCEDURE].

²⁴ *Rambus II*, 318 F.3d at 1085.

²⁵ *Id.*

²⁶ *Id.* JEDEC has since revised its patent policy. See JEDEC, JEDEC PATENT POLICY (June 20, 2003), available at http://www.jedec.org/Home/manuals/JEDEC_Patent_Policy_Stmt.pdf [hereinafter JEDEC PATENT POLICY]. Those revisions are discussed *infra* Part IV.

to provide a license under reasonable terms to others if its patent covered the implemented standard.²⁷

JEDEC adopted a synchronous dynamic random access memory (SDRAM) standard in early 1993, during Rambus's membership.²⁸ None of Rambus's patents and patent applications covered the SDRAM standard.²⁹ Rambus, however, disclosed its first issued RDRAM patent, U.S. Patent No. 5,243,703 ('703 patent), to JEDEC in September 1993.³⁰ That patent was a divisional patent of the '898 application and had a specification that was "substantially identical" to the '898 application.³¹ At the time of the disclosure, another JEDEC member disclosed Rambus's WIPO application.³² Rambus did not disclose any of its patent applications to JEDEC.³³ Rambus withdrew from JEDEC in June 1996.³⁴

After Rambus's withdrawal, JEDEC began work on the standard for the successor to SDRAM, the double data rate-SDRAM (DDR-SDRAM).³⁵ JEDEC adopted and published the

²⁷ *Rambus II*, 318 F.3d at 1097.

²⁸ *Id.* at 1085. ("SDRAM increases the speed at which a central processing unit (CPU) can read or write memory by synchronizing itself with the CPU's clock speed.")

²⁹ *See id.* at 1104.

³⁰ *Id.* at 1085.

³¹ *Id.* A patent's specification provides a written description and best mode for carrying out the invention, and the "manner and process of making and using" that invention. *MERGES*, *supra* note 18, at 25 (quoting 35 U.S.C. § 112 (2000)). A patent's claims "define[] the patentee's [legal] rights." *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996)).

³² *Rambus II*, 318 F.3d at 1085.

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

DDR-SDRAM standard in 2000; that standard incorporated technologies generally discussed before Rambus's withdrawal.³⁶

Rambus filed additional divisional and continuation applications after it left JEDEC.³⁷ The USPTO issued several patents from those applications, including four patents that were at issue in Rambus's suit against Infineon.³⁸ Those four patents' written descriptions are substantially identical to the '703 patent and the '898 application.³⁹

Rambus sued Infineon for patent infringement in the U.S. District Court for the Eastern District of Virginia in late 2000.⁴⁰ Infineon, a computer memory systems manufacturer and a JEDEC member, counterclaimed for fraud under Virginia state law.⁴¹ Infineon alleged that Rambus committed fraud when it failed to disclose its patents and patent applications related to JEDEC's SDRAM and DDR-SDRAM standards.⁴²

B. The District Court

The district court, after interpreting the patent claims, granted a noninfringement judgment as a matter of law (JMOL) in favor of Infineon.⁴³ The court then submitted Infineon's counterclaims to the jury.⁴⁴ The jury found that Rambus committed actual fraud during

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.* The patents at issue were U.S. Patent Nos. 5,954,804 ('804 patent), 5,953,263 ('263 patent), 6,034,918 ('918 patent), and 6,032,214 ('214 patent). *Id.* at 1085–86.

³⁹ *Id.* at 1086.

⁴⁰ *Id.* This article does not discuss Rambus's patent infringement claim.

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

JEDEC’s SDRAM and DDR-SDRAM standardization efforts.⁴⁵ “Rambus moved for JMOL of no fraud on both the SDRAM and DDR-SDRAM verdicts” or, alternatively, for a new trial.⁴⁶ The district court denied JMOL on the SDRAM verdict.⁴⁷ The district court, however, granted JMOL on the DDR-SDRAM verdict because Rambus had withdrawn from JEDEC before work officially began on the DDR-SDRAM standard.⁴⁸ The court also denied Rambus’s request for new trial on the SDRAM verdict, but conditionally granted a new trial on the DDR-SDRAM verdict if the Federal Circuit reversed the grant of JMOL.⁴⁹

In denying the JMOL on the SDRAM verdict, the district court found clear and convincing evidence permitting the jury to find that Rambus committed actual fraud.⁵⁰ The court noted that the JEDEC members always had a duty to disclose their pending patent applications based on the JEDEC policy.⁵¹ The district court also found that the duty arose in this case “because several of Rambus’ [sic] pending patents related to JEDEC’s SDRAM standard-setting

⁴⁵ *Id.* The jury also found that Rambus committed constructive fraud. *Rambus, Inc. v. Infineon Techs. AG*, 164 F. Supp. 2d 743, 749 (E.D. Va. 2001) [hereinafter *Rambus I*], *aff’d in part, rev’d in part and remanded, Rambus II*, 318 F.3d 1081 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003). The district court ruled, however, that Infineon could not premise its constructive fraud claim on a fraudulent omission of material fact under Virginia law. *Id.* at 750. Therefore, the district court granted JMOL on the constructive fraud verdict in favor of Rambus. *Id.*

⁴⁶ *Rambus II*, 318 F.3d at 1086.

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.* The district court issued an injunction against Rambus. *Id.* In a separate opinion the district court awarded Infineon attorney’s fees. *Rambus, Inc. v. Infineon Techs. A.G.*, 155 F. Supp. 2d 668, 691–92 (E.D. Va. 2001), *vacated, Rambus II*, 318 F.3d 1081 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

⁵⁰ *Rambus I*, 164 F. Supp. 2d at 751.

To support a claim of actual fraud, the plaintiff must prove: (1) a false representation or an omission (when there is a duty to disclose); (2) of a material fact; (3) made intentionally and knowingly; (4) with the intent to mislead; (5) reasonable reliance by the party misled; and (6) resulting damage to the party misled.

Id. at 750.

⁵¹ *Id.* at 752.

effort[s].”⁵² Finally, the court held that Rambus breached that duty when it failed to disclose its pending patent applications related to JEDEC’s SDRAM standard.⁵³

In granting the JMOL on the DDR-SDRAM verdict, the district court held that Infineon failed to prove by clear and convincing evidence that Rambus committed actual fraud.⁵⁴ The court reasoned that Rambus’s duty to disclose its patent applications never arose because it left JEDEC before the process of setting the DDR-SDRAM standard began.⁵⁵

C. The Federal Circuit

The Federal Circuit, in reversing the district court, held that Infineon failed to provide substantial evidence to support the jury’s SDRAM fraud verdict against Rambus.⁵⁶ The Federal Circuit also affirmed the grant of JMOL on the DDR-SDRAM fraud verdict.⁵⁷

In arriving at its SDRAM holding, the Federal Circuit construed the JEDEC patent policy as creating a duty to disclose only when a JEDEC member has “claims in patents or applications that reasonably might be necessary to practice” JEDEC’s adopted standard.⁵⁸ Thus, the court

⁵² *Id.* at 754.

⁵³ *Id.* at 755. The district court also found ample evidence that: (1) Rambus intentionally and knowingly breached its duty with an intent to mislead; (2) Infineon reasonably relied on Rambus’s omissions; and, because of that reliance, (3) Infineon incurred damages. *Id.* at 757–63.

⁵⁴ *Id.* at 765–67.

⁵⁵ *Id.* at 766.

⁵⁶ *Rambus II*, 318 F.3d 1081, 1106 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

⁵⁷ *Id.* Additionally, the Federal Circuit held that the district court erred in its claim construction and vacated the grant of JMOL of noninfringement and remanded for the court’s consideration under a revised claim construction. *Id.* Moreover, the Federal Circuit vacated and remanded the attorney fees award and reversed the fee award under Virginia common law. *Id.* at 1107. Finally, the Federal Circuit ruled moot the injunction and new trial issues based on its holdings. *Id.*

⁵⁸ *Id.* at 1100.

held that Rambus did not have a duty to disclose its patents and patent applications because none of its claimed technology covered the SDRAM standard.⁵⁹

In arriving at its DDR-SDRAM holding, the Federal Circuit found that the JEDEC disclosure duty arises only when work formally begins on a proposed standard.⁶⁰ Thus, the court held that Rambus did not have a duty to disclose patent and patent applications because it withdrew from JEDEC before work formally began on the DDR-SDRAM standard.⁶¹

II. Fraud Defense

Infineon counterclaimed for fraud in response to Rambus's patent infringement suit.⁶² This section discusses the viability of fraud as a defense against patent infringement suits in the context of standard-setting organizations.

A. Actual v. Constructive Fraud

Fraud is either actual or constructive.⁶³ Actual fraud requires an intentional deception,⁶⁴ such as when a realtor, who with full knowledge of a property's past termite problems, states to prospective buyers that the property never had any termite problems. By contrast, constructive fraud does not involve intentional deception; the court implies fraud based "on a breach of duty by one in a confidential or fiduciary relationship to another that induces justifiable reliance by

⁵⁹ *Id.* at 1104–05.

⁶⁰ *Id.* at 1102.

⁶¹ *Id.* at 1105.

⁶² *Id.* at 1086.

⁶³ 37 AM. JUR. 2D *Fraud and Deceit* § 8, at 37 (2001).

⁶⁴ *Id.*

the other to his or her prejudice,”⁶⁵ such as when a trustee, without checking the trust, informs a beneficiary that there are sufficient funds in the trust.

An alleged infringer typically will not have a viable constructive fraud defense because that infringer usually does not have a confidential or fiduciary relationship with the patent owner. The patent owner and alleged infringer are usually competitors and conduct business in arms-length transactions. Those transactions do not give rise to a confidential or fiduciary relationship.⁶⁶ For example, the Federal Circuit stated that there was no fiduciary relationship between Rambus and Infineon even though they were both JEDEC members.⁶⁷ Thus, the remainder of this section focuses on the actual fraud defense.

B. Actual Fraud

A party typically must establish the following to raise an actual fraud action: (1) a false representation (2) of a material fact, (3) made with knowledge of that material fact (4) with the intent to induce reliance (5) where the other party takes action in justifiable reliance and (6) results in damages.⁶⁸

1. False Representation

A party makes a false representation either by (1) a false affirmative statement, or (2) concealment.⁶⁹ That party may make the false representation orally, by conduct, or by “arts or

⁶⁵ *Id.* § 9, at 39. Constructive fraud sometimes is called “legal fraud.” *Id.* §9, at 38.

⁶⁶ *See id.* § 34. In *Rambus I*, the district court ruled that it should not have submitted Infineon’s constructive fraud claim to the jury because Infineon could not premise that claim on fraudulent omission. *Rambus I*, 164 F. Supp. 2d 743, 750 (E.D. Va. 2001), *aff’d in part, rev’d in part and remanded, Rambus II*, 318 F.3d 1081 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003). Thus, that court granted JMOL on the constructive fraud verdict in favor of Rambus. *Id.*

⁶⁷ *Rambus II*, 318 F.3d at 1096 n.7.

⁶⁸ 37 AM. JUR. 2D *Fraud and Deceit* § 23 (2001). Some jurisdictions vary in their materiality and intent to deceive requirements. *See id.*

⁶⁹ *Id.* § 57, at 88.

artifices calculated to deceive.”⁷⁰ Most false representations in the standard-setting context probably will involve concealment, assuming most company representatives prefer not to go on record with false affirmative statements.

A party may conceal by either “silence where there is a duty to speak, or by half-truths calculated to mislead.”⁷¹ A court determines whether there was a duty to speak based on the circumstances of each case.⁷² Those circumstances may include: “(1) the relationship of the parties; (2) the relative knowledge of the parties; (3) the value of the particular fact; (4) the plaintiff’s opportunity to ascertain the fact; (5) the customs of the trade; and (6) other relevant circumstances.”⁷³ In the standard-setting organization context, a court probably will focus on the legal obligations of members, as defined in that organization’s bylaws.⁷⁴ That court may, however, consider other circumstances.⁷⁵ The scope of the duty to speak is very pivotal in the context of standard-setting organizations, as seen in *Rambus II*.⁷⁶

2. Of a Material Fact

A concealed fact is material if the defrauded party would have “acted differently” if he was aware of that fact.⁷⁷ A standard-setting organization typically will require the patent owner to agree to a reasonable license, or design around that patented technology, when its patent may

⁷⁰ *Id.* § 57, at 89.

⁷¹ 37 AM. JUR. 2D *Fraud and Deceit* § 39 (2001) (footnote omitted).

⁷² *Id.* § 204, at 233.

⁷³ *Id.*

⁷⁴ *See, e.g., Rambus II*, 318 F.3d at 1096–1102.

⁷⁵ *See, e.g., id.* at 1097–1100 (broadening the scope of the disclosure duty based on testimonial evidence).

⁷⁶ *See id.* at 1096–1102.

⁷⁷ 37 AM. JUR. 2D *Fraud and Deceit* § 236, at 262 (2001).

cover that organization's standard.⁷⁸ Thus, materiality exists when that patent owner decides to conceal its patent because the standard-setting organization might have acted differently and sought a license from that patent owner or designed around that patent. Therefore, the defrauded party easily could prove that the false representation involved a material fact.

3. Made With Knowledge of Material Fact

The defrauded party must prove that the alleged defrauder had actual "knowledge of the material fact" concealed.⁷⁹ Courts have held that mere constructive knowledge is not enough in a fraudulent concealment action.⁸⁰ Thus, the defrauded party's ability to prove this element probably will depend on whether the company representative actually knew that the company's patent covered the standard.

4. Intent to Induce Reliance

The defrauded party must prove that the alleged defrauder intentionally concealed material facts to induce reliance by other parties.⁸¹ A court typically will infer intent from the "totality of the circumstances."⁸²

In the standard-setting organization context, the defrauded party will have to prove that the alleged defrauder (1) understood the disclosure duty, and (2) intentionally concealed to induce reliance in breach of that duty.⁸³ The defrauded party's success in proving intent may

⁷⁸ See, e.g., *Rambus II*, 318 F.3d at 1096–97. The JEDEC patent policy prohibited the use of a patented item or process unless all information was known and a reasonable license was available. *Id.* at 1097.

⁷⁹ 37 AM. JUR. 2D *Fraud and Deceit* § 201, at 228 (2001).

⁸⁰ See *id.*, § 201, at 229.

⁸¹ See *id.* Some states merely require proof of breach of a disclosure duty instead of intent to deceive. *Id.*

⁸² *Id.*

⁸³ See *Rambus I*, 164 F. Supp. 2d 743, 756 (E.D. Va. 2001), *aff'd in part, rev'd in part and remanded*, *Rambus II*, 318 F.3d 1081 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

depend on the alleged defrauder's documentation. For example, the district court in *Rambus I* inferred the requisite intent based on the alleged defrauder's internal emails and notes that showed "intent to deliberately remain silent about the company's patents and patent applications."⁸⁴

5. Justifiable Reliance

The defrauded party must prove justifiable reliance on the alleged defrauder's false representations.⁸⁵ A court will presume justifiable reliance when there is an alleged breach of duty to disclose or when the alleged defrauder "effectively controls all the information."⁸⁶ Standard-setting organizations typically impose a disclosure duty on their members.⁸⁷ Thus, the defrauded member should have the benefit of a presumption of justifiable reliance based on the breach of that disclosure duty.

The defrauded member also can prove justifiable reliance when the standard-setting organization includes pending patent applications in its disclosure duty. Patent owners effectively control all the information on patent applications because those applications typically are open for public review, if at all, only after eighteen months from their earliest filing dates.⁸⁸ Thus, the defrauded member should have the benefit of a presumption of justifiable reliance based on the defrauder's effective control. Therefore, the defrauded member should easily be able to prove justifiable reliance.

⁸⁴ *Id.* at 756.

⁸⁵ 37 AM. JUR. 2D *Fraud and Deceit* § 477, at 464 (2001).

⁸⁶ *Id.*, § 477, at 465.

⁸⁷ *See, e.g., Rambus II*, 318 F.3d at 1096–1102.

⁸⁸ *See* 35 U.S.C. § 122 (2000). For situations where patent applications are not open for public review, see MPEP, *supra* note 18, § 901.03.

6. Damages

The defrauded party must prove (1) “pecuniary injury or an economic loss,”⁸⁹ and (2) that the misrepresentation proximately caused that loss.⁹⁰ Damages generally do not include “attorney fees or other expenses of the litigation.”⁹¹ A court may, however, include those expenses in the damages if the defrauder committed the fraud “maliciously or wantonly or oppressively.”⁹²

Members of standard-setting organizations typically make substantial investments in bringing products into the market that are compliant with the organization’s standards. The defrauded member’s ability to prove damages depends on whether the patent owner was successful in its patent infringement suit.

If the court finds patent infringement, then the defrauded member can probably prove damages. Those damages may include the costs of obtaining a license from the patent owner or designing around the patented technology.⁹³ In contrast, if the court does not find patent infringement, then the defrauded member probably cannot prove damages, unless the court allows that member to include attorney’s fees and litigation expenses.⁹⁴

C. Viability of the Fraud Defense

⁸⁹ 37 AM. JUR. 2D *Fraud and Deceit* §§ 275–76 (2001).

⁹⁰ *Id.* §§ 280–81.

⁹¹ *Rambus I*, 164 F. Supp. 2d 743, 759 (E.D. Va. 2001) (quoting RESTATEMENT (SECOND) OF TORTS § 914(1) (1979)), *aff’d in part, rev’d in part and remanded, Rambus II*, 318 F.3d 1081 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

⁹² *Id.* at 763 (allowing attorney’s fees as part of the recovery under the defrauded party’s actual fraud claim).

⁹³ The defrauded party must have incurred those costs by the time that party raises the fraud defense. 37 AM. JUR. 2D *Fraud and Deceit* § 273 (2001).

⁹⁴ *See, e.g., Rambus I*, 164 F. Supp. 2d at 761–64 (allowing attorney’s fees as part of the recovery under the defrauded party’s actual fraud claim).

Successfully raising a fraud defense requires the defrauded party to prove many elements related to the defrauder's conduct. The viability of that defense will depend on the defrauded party's ability to show breach of a disclosure duty, actual knowledge by the company's representative, intent to induce reliance, and resulting damages. The potential for recovering actual and punitive damages against the defrauder is, however, a strong incentive to raise the defense.⁹⁵ For example, the jury in *Rambus I* awarded \$3.5 million in punitive damages to the injured party.⁹⁶

III. Other Defenses

The Federal Circuit, in *Rambus II*, held that the district court erred in its claim construction and vacated the grant of JMOL of noninfringement and remanded for the court's consideration under a revised claim construction.⁹⁷ On remand, the district court must now determine if Infineon infringed Rambus's patent under that claim construction. Infineon probably will raise several defenses against Rambus on remand.⁹⁸ This section discusses the viability of other defenses against patent infringement in the context of standard-setting organizations.

A. Equitable Estoppel

⁹⁵ Michael G. Cowie & Joseph P. Lavelle, *Patents Covering Industry Standards: The Risks to Enforceability Due to Conduct Before Standard-Setting Organizations*, 30 AIPLA Q.J. 95, 129 (2002).

⁹⁶ *Rambus I*, 164 F. Supp. 2d at 763.

⁹⁷ *Rambus II*, 318 F.3d 1081, 1106 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

⁹⁸ This section does not discuss defenses under state unfair competition laws and the Racketeer Influenced and Corrupt Organizations (RICO) Act. For an overview on those defenses, see Cowie & Lavelle, *supra* note 95, at 126–30.

Equitable estoppel is an equitable defense that may completely bar a patent owner's infringement claim.⁹⁹ Courts typically have accepted that defense in standard-setting organization cases.¹⁰⁰ Equitable estoppel requires the alleged infringer to prove the following three elements: (1) the patent owner misled the "alleged infringer to reasonably infer that the patent owner [did] not intend to enforce its patent against the alleged infringer"; (2) the alleged infringer relied on the patent owner's misleading conduct; and (3) as a result of the reliance, material prejudice would result if the court allowed the patent owner to proceed with its claim.¹⁰¹ The court has the discretion to accept or deny the equitable estoppel defense, even when the alleged infringer proves all the required elements.¹⁰²

Infinion probably cannot prove the required elements of equitable estoppel because it is unlikely to prove that Rambus engaged in misleading conduct. Misleading conduct may include "silence where the patent owner was obligated to speak."¹⁰³ That conduct should include a patent owner who remained silent and violated its disclosure duty to a standard-setting organization.¹⁰⁴ In *Rambus II*, however, the Federal Circuit narrowly construed the JEDEC patent policy as creating a duty to disclose only when a JEDEC member has "claims in patents or applications that reasonably might be necessary to practice" JEDEC's adopted standard.¹⁰⁵ Thus,

⁹⁹ JOHN SKENYON ET AL., PATENT DAMAGES LAW & PRACTICE § 1:28, at 1-43 (2003) (citing 35 U.S.C. § 282 (2000)).

¹⁰⁰ Cowie & Lavelle, *supra* note 95, at 103.

¹⁰¹ SKENYON ET AL., *supra* note 99, § 1:28.

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ See Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CAL. L. REV. 1889, 1918-19 (2002).

¹⁰⁵ *Rambus II*, 318 F.3d 1081, 1100 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

the court held that Rambus did not have a duty to disclose its patents and patent applications because none of its claimed technology covered the SDRAM standard.¹⁰⁶ Therefore, Infineon is unlikely to prove that Rambus engaged in misleading conduct.

Infineon also will have challenges in proving reliance and material prejudice. The alleged infringer must prove that it “had a relationship or communication with the [patent owner] that lull[ed] the infringer into a sense of security”¹⁰⁷ leading to “a change in the [infringer’s] economic position.”¹⁰⁸ Infineon already proved that it “designed its products to comply with the JEDEC standard and built manufacturing lines in Germany and the United States to make those products.”¹⁰⁹ Infineon probably would, however, need to prove that JEDEC would have adopted another standard if Rambus disclosed its pending patent.¹¹⁰ Thus, Infineon’s proof of the required elements of equitable estoppel is unlikely.

B. Laches

Laches is an equitable defense that prevents the patent owner from recovering pre-filing damages.¹¹¹ That defense requires the alleged infringer to prove that (1) “[t]he patentee’s delay in bringing suit was unreasonable and inexcusable,” and (2) “[t]he alleged infringer suffered material prejudice attributable to the delay.”¹¹² A court will presume laches where the patent

¹⁰⁶ *Id.* at 1104–05.

¹⁰⁷ SKENYON ET AL., *supra* note 99, §§ 1:28, at 1-44, 5:40, at 5-56.

¹⁰⁸ *Id.* § 5:35, at 5-44.

¹⁰⁹ *Rambus I*, 164 F. Supp. 2d 743, 762 (E.D. Va. 2001), *aff’d in part, rev’d in part and remanded, Rambus II*, 318 F.3d 1081 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

¹¹⁰ *See Cowie & Lavelle, supra* note 95, at 109.

¹¹¹ *See generally* SKENYON ET AL., *supra* note 99, §§ 5:21, 5:36 (discussing laches in the context of patent suits and the case of *A.C. Aukerman Co. v. R.L. Chaides Construction Co.*, 960 F.2d 1020 (Fed. Cir. 1992)).

¹¹² *Id.* § 5:21, at 5-30 (quoting *Aukerman*, 960 F.2d at 1028).

owner did not sue for “more than six years after the date the patentee knew or should have known of the alleged infringer’s activity.”¹¹³ The court has the discretion to accept or deny the laches defense, even when the alleged infringer proves all the required elements.¹¹⁴

Infineon probably cannot prove the required elements of laches. JEDEC adopted its SDRAM standard in early 1993.¹¹⁵ Presumably after that adoption, Infineon “designed its products to comply with the JEDEC standard and built manufacturing lines in Germany and the United States to make those products.”¹¹⁶ Rambus then sued Infineon in late 2000.¹¹⁷ Assuming Infineon took several years to bring its products to market, it is unlikely to prove that Rambus’s delay was unreasonable and inexcusable.¹¹⁸

Even if Infineon is successful in raising a laches defense, that defense will only preclude Rambus from seeking pre-filing damages and will not prevent Rambus from seeking post-filing damages and injunctive relief.

C. Contractual Counterclaims

The alleged infringer may bring breach of contract counterclaims against the patent owner who breached its disclosure duty to a standard-setting organization.¹¹⁹ That infringer may bring those counterclaims where (1) a binding agreement is created by the standard-setting

¹¹³ *Id.* (quoting *Aukerman*, 960 F.2d at 1028).

¹¹⁴ *Id.* § 5:21, at 5-31.

¹¹⁵ *Rambus II*, 318 F.3d 1081, 1085 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

¹¹⁶ *Rambus I*, 164 F. Supp. 2d 743, 762 (E.D. Va. 2001), *aff’d in part, rev’d in part and remanded*, *Rambus II*, 318 F.3d 1081 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

¹¹⁷ *Rambus II*, 318 F.3d at 1086.

¹¹⁸ *See Cowie & Lavelle*, *supra* note 95, at 113–14 (noting the difficulty of proving unreasonable and inexcusable delay).

¹¹⁹ *See id.* at 143–46; Lemley, *supra* note 104, at 1914–18.

organization bylaws, (2) the patent owner violated one of those bylaws, and (3) the infringer is a third-party beneficiary of those bylaws.¹²⁰

Infineon probably will not succeed in any contractual counterclaim against Rambus. Infineon originally filed counterclaims against Rambus for breach of contract.¹²¹ The district court, however, granted JMOL in favor of Rambus on those counterclaims.¹²² Infineon can raise those counterclaims again on remand. The Federal Circuit, however, narrowly defined the JEDEC disclosure duty and found that Rambus did not violate that duty.¹²³ Thus, on remand the district court probably will not rule favorably on a breach of contract counterclaim against Rambus.

D. Antitrust Counterclaims

The alleged infringer may use the following three antitrust theories against the patent owner: (1) attempt to monopolize; (2) monopolization; and (3) agreement in restraint of trade.¹²⁴ First, an attempt to monopolize claim requires “(1) a specific intent to monopolize; (2) anticompetitive conduct in furtherance of that intent; . . . (3) a dangerous probability of successful monopolization;”¹²⁵ and (4) “antitrust injury.”¹²⁶ Second, a monopolization claim

¹²⁰ See Lemley, *supra* note 104, at 1914–15. Alleged infringers also may rely on a promissory estoppel theory, which may particularly benefit those infringers that are not members of the standard-setting organization but relied on the patent owner’s promise to disclose its patents. *Id.* at 1915–16.

¹²¹ *Rambus I*, 164 F. Supp. 2d at 746.

¹²² *Id.* at 747.

¹²³ *Rambus II*, 318 F.3d 1081, 1104–05 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

¹²⁴ Cowie & Lavelle, *supra* note 95, at 118–20. For more information on antitrust in the context of standard-setting organizations, see generally Joseph Kattan, *Antitrust Implications: Disclosures and Commitments to Standard-Setting Organizations*, ANTITRUST, Summer 2002, at 22; Lemley, *supra* note 104; Janice M. Mueller, *Patenting Industry Standards*, 34 J. MARSHALL L. REV. 897 (2001); Robert P. Taylor, *Standard Setting: A Growing Morass*, in INTELLECTUAL PROPERTY ANTITRUST 2002, at 545 (PLI Intellectual Prop. Course, Handbook Series No. G-708, 2002); Teece, *supra* note 2.

¹²⁵ Lemley, *supra* note 104, at 1928.

requires (1) “monopoly power”; (2) “anticompetitive conduct”; and (3) “antitrust injury.”¹²⁷ Finally, an agreement in restraint of trade claim requires proof that the patent owner conspired with other standard-setting organization members “to undermine the standard-setting process.”¹²⁸

Infineon’s ability to successfully counterclaim under antitrust law is uncertain. Infineon filed counterclaims for attempt to monopolize and monopolization against Rambus.¹²⁹ The district court granted JMOL in favor of Rambus on Infineon’s attempt to monopolize counterclaim.¹³⁰ The district court found that Infineon failed to prove the relevant geographic market that Rambus was attempting to monopolize.¹³¹ As to the monopolization counterclaim, Infineon agreed that the district court’s noninfringement ruling mooted that counterclaim.¹³² Infineon can and should raise both counterclaims again on remand to the district court, particularly in light of the Federal Trade Commission’s (FTC) complaint filed against Rambus for “violating federal antitrust laws by deliberately engaging in a pattern of anticompetitive acts and practices that served to deceive an industry-wide standard-setting organization, resulting in adverse effects on competition and consumers” on June 19, 2002.¹³³ The FTC may have

¹²⁶ Cowie & Lavelle, *supra* note 95, at 118.

¹²⁷ *Id.* at 119.

¹²⁸ *Id.* at 120.

¹²⁹ *Rambus I*, 164 F. Supp. 2d 743, 746 (E.D. Va. 2001), *aff’d in part, rev’d in part and remanded*, *Rambus II*, 318 F.3d 1081 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

¹³⁰ *Id.* at 747.

¹³¹ *Id.* at 746; *see also* Rambus Inc., FTC File No. 0110017, Docket No. 9302 (June 18, 2002), *available at* <http://www.ftc.gov/os/2002/06/rambuscmp.htm>.

¹³² *Id.* at 746–47.

¹³³ *See* Press Release, Federal Trade Commission, FTC Issues Complaint Against Rambus, Inc. (June 19, 2002), *available at* <http://www.ftc.gov/opa/2002/06/rambus.htm>. An administrative law judge, however, subsequently dismissed that complaint on February 17, 2004. *See* REUTERS, JUDGE RULES THROWS OUT RAMBUS ANTITRUST CASE *at* <http://www.reuters.com> (last visited Feb. 17, 2004).

evidence to support Infineon’s counterclaims, including the relevant geographic market that Infineon failed to prove to the district court in *Rambus I*.¹³⁴

E. Patent Misuse

Patent misuse is another equitable defense that prevents the patent owner from using his patent in a manner “contrary to public policy.”¹³⁵ Patent misuse occurs when (1) the patent owner’s conduct “impermissibly broaden[s] the patent . . . so as to extend the patent [owner’s] statutory rights,” and (2) that conduct has an “anticompetitive effect” under antitrust law’s rule of reason.¹³⁶ Patent misuse may prohibit more conduct than federal antitrust laws.¹³⁷

Courts typically have rejected the patent misuse defense in the standard-setting organization cases because the patent owners had merely concealed patents, as opposed to using those patents in a broad and anticompetitive manner.¹³⁸ As discussed above, however, Infineon may prove that Rambus has used its patent in a broad and anticompetitive manner. Thus, Infineon can and probably should raise the patent misuse defense.

F. Summary

The alleged infringer typically will more easily prove equitable estoppel and breach of contract in the context of standard-setting organizations. For the *Rambus II* remand, however, those defenses and counterclaims are unlikely to succeed because of the Federal Circuit’s narrow

¹³⁴ See *Rambus Inc.*, FTC File No. 0110017, available at <http://www.ftc.gov/os/2002/06/rambuscmp.htm>.

¹³⁵ Taylor, *supra* note 124, at 556.

¹³⁶ *Id.*

¹³⁷ See 6 DONALD S. CHISUM, CHISUM ON PATENTS § 19.04[2] (2003). Courts typically balance the patent owner’s interest with the likely impact of patent extension on the competition. See *id.* (“Antitrust analysis involves a balancing of patent interests and the impact or likely impact of a practice on competition.”).

¹³⁸ Cowie & Lavelle, *supra* note 95, at 115. For an argument why courts should use patent misuse in the context of standard-setting organizations, see Mueller, *supra* note 124, at 935–45.

construction of JEDEC's disclosure duty. Therefore, Infineon needs to pursue patent misuse defenses or antitrust counterclaims against Rambus.

IV. Lessons Learned

Standard-setting organizations, such as the IETF and W3C, can learn from *Rambus II*. The main message is that standard-setting organizations must explicitly and clearly define their disclosure duty, and vigilantly enforce that duty. Only an explicitly and clearly defined disclosure duty that is vigilantly enforced will deter the would-be patent concealer and, if that concealer decides to sue the organization's members for patent infringement, allow those members to assert a variety of defenses, such as equitable estoppel, fraud, and breach of contract.

A. Defining the Disclosure Duty

Standard-setting organizations can explicitly and clearly define their disclosure duty by taking one or more of the steps discussed below.

1. Have One Document Define the Disclosure Duty

In *Rambus II*, the Federal Circuit looked at three manuals that each contained different parts of the patent disclosure policy.¹³⁹ The court then selected Appendix E of the JEP 21-I manual as the disclosure duty based on the testimony on the record,¹⁴⁰ even though there was substantial testimonial evidence that both Appendix E and Section 9.3.1 of the JEP 21-I manual defined the disclosure duty.¹⁴¹

A standard-setting organization easily can avoid that situation by having one central document that contains the patent disclosure duty. That central document also will avoid the

¹³⁹ *Rambus II*, 318 F.3d 1081, 1096 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

¹⁴⁰ *Id.* at 1098.

¹⁴¹ *Id.* at 1113 (Prost, J., dissenting).

need to update several documents when the organization makes changes to its disclosure duty. For example, the W3C appears to have its W3C Patent Policy as its central document to “govern[] the handling of patents in the process of producing Web standards.”¹⁴² Similarly, the IETF appears to have Section 10 of The Internet Standards Process define its intellectual property rights rules.¹⁴³

2. Define Which Documents Contain the Disclosure Duty

The standard-setting organization also can provide a roadmap to the documents that contain the disclosure duty, instead of having one central document define that duty. For example, JEDEC appears to have taken that approach with its current patent policy which states that “[t]he JEDEC Patent Policy can be found in the following sections of JEDEC Manual 21L: the ‘Notice’ page, Sections 5.1, 8, 8.2 and 8.3, and Annexes A and B.”¹⁴⁴

3. Define Who Has the Disclosure Duty

In *Rambus II*, the Federal Circuit ruled that the JEDEC policy statements, while advising “JEDEC as a whole to avoid standards ‘calling for the use of a patent’” and “obligat[ing] the chairperson to remind members to inform” meetings of any relevant patents or applications, did not impose any “direct duty on members” requiring them to disclose information.¹⁴⁵ A standard-setting organization can easily avoid that problem by stating who has the duty to disclose. For

¹⁴² W3C, W3C PATENT POLICY (May 20, 2003), available at <http://www.w3.org/Consortium/Patent-Policy-20030520.html> [hereinafter W3C PATENT POLICY].

¹⁴³ See IETF, THE INTERNET STANDARDS PROCESS § 10, available at <http://www.ietf.org/IESG/Section10.txt> (last visited Mar. 1, 2004) [hereinafter THE INTERNET STANDARDS PROCESS].

¹⁴⁴ Almost a year passed, however, between the time the JEDEC Manual was last updated (July 2002) and the time the JEDEC Patent Policy was updated to reflect this change (June 20, 2003). This reinforces this author’s recommendation of keeping the disclosure duty in one central document. JEDEC MANUAL OF ORGANIZATION AND PROCEDURE, *supra* note 23, available at <http://www.jedec.org/Home/manuals/jm21L.pdf>.

¹⁴⁵ *Rambus II*, 318 F.3d at 1098.

example, JEDEC’s current patent policy states that JEDEC requires “[a]ll participants in JEDEC formulating committees” to comply with its Patent Policy.¹⁴⁶ Additionally, the Patent Policy also states that the disclosure duty “extends to the patent owner and any other participant on the formulating committee.”¹⁴⁷ Similarly, the IETF considers each contributor to have agreed to the terms and conditions of its patent policy, whether the contributor made the actual submission or not.¹⁴⁸

4. Define What the Member Must Disclose

In *Rambus II*, the JEDEC patent policy did not expressly include pending patent applications, nor did that policy include patents “related to” the standardization work.¹⁴⁹ The Federal Circuit extended the scope of that policy based on the parties’ arguments.¹⁵⁰ The court, however, accepted Rambus’s narrow construction of “related to” as only covering patents that “read on or cover[ed] the standard.”¹⁵¹ In so doing, the Federal Circuit ignored the evolutionary nature of standard-setting.

A standard-setting organization can avoid those problems by expressly and clearly defining what types of patents and patent applications its disclosure duty covers. If possible, the organization can define potentially ambiguous words, such as “related to,” and provide working

¹⁴⁶ JEDEC PATENT POLICY, *supra* note 26, available at http://www.jedec.org/Home/manuals/JEDEC_Patent_Policy_Stmt.pdf.

¹⁴⁷ *Id.*

¹⁴⁸ THE INTERNET STANDARDS PROCESS, *supra* note 143, § 10.3.1, available at <http://www.ietf.org/IESG/Section10.txt>. The W3C Patent Policy requires each participant in a Working Group to comply with the disclosure duty. W3C PATENT POLICY, *supra* note 142, § 3.1, available at <http://www.w3.org/Consortium/Patent-Policy-20030520.html>. That policy broadly defines “participant” as “W3C Members, W3C Team members, invited experts, and members of the public.” *Id.*

¹⁴⁹ *Rambus II*, 318 F.3d at 1096–98.

¹⁵⁰ *Id.* at 1098.

¹⁵¹ *Id.* at 1099.

examples.¹⁵² For example, the W3C Patent Policy requires disclosure of patents and patent applications, which the patentee “believes contains Essential Claim(s).”¹⁵³ That policy then defines what “Essential Claims” cover.¹⁵⁴

Additionally, a standard-setting organization should define whether its disclosure duty requires members to perform searches of their patents and patent applications.¹⁵⁵ For example, the European Telecommunications Standards Institute (ETSI) Intellectual Property Rights Policy expressly indicates that members are not obligated to conduct patent searches.¹⁵⁶

5. Define When the Member Must Disclose

In *Rambus II*, the parties argued over when the work of a committee triggered the JEDEC disclosure duty.¹⁵⁷ Those parties argued whether that duty was triggered (1) during formal balloting, (2) when work formally began, or (3) some time before.¹⁵⁸ Standard-setting organizations can avoid that problem by defining when a member must disclose its patents and patent applications. If possible, that organization should tie the trigger to a particular step or steps in the committees’ work. The standard-setting organization can require disclosure in a committee as often as every meeting based on that committee’s work the meeting before, or can

¹⁵² JEDEC’s current Patent Policy states that members must disclose “patents and patent applications that are or may be relevant to the work of the formulating committee.” JEDEC PATENT POLICY, *supra* note 26, available at http://www.jedec.org/Home/manuals/JEDEC_Patent_Policy_Stmt.pdf.

¹⁵³ W3C PATENT POLICY, *supra* note 142, § 6.1, available at <http://www.w3.org/Consortium/Patent-Policy-20030520.html>.

¹⁵⁴ *Id.* § 8.

¹⁵⁵ For a discussion on the pros and cons of requiring standard-setting organization members to perform patent and patent application searches, see Teece, *supra* note 2, at 1945–48.

¹⁵⁶ ETSI, ETSI IPR POLICY § 4.2 (Nov. 22, 2000), available at http://www.etsi.org/legal/documents/ETSI_IPRPolicy.pdf [hereinafter ETSI IPR POLICY].

¹⁵⁷ *Rambus II*, 318 F.3d 1081, 1101–02 (Fed. Cir.), *cert. denied*, 124 S. Ct. 227 (2003).

¹⁵⁸ *Id.*

trigger the disclosure duty only when formal balloting starts.¹⁵⁹ For example, the W3C imposes an “ongoing obligation that begins with the Call for Participation”¹⁶⁰ and “terminates when the Recommendation is published or when the Working Group terminates.”¹⁶¹

6. Define How and To Whom the Member Must Disclose

A standard-setting organization also should define how, or in what manner, its members must comply with their disclosure duty, and to whom those members must disclose. That definition should avoid potential problems where the patent owner improperly disclosed its patents and patent applications. For example, the W3C Patent Policy requires the member to submit disclosure statements that must include the patent number and the “Working Group and/or Recommendation to which it applies.”¹⁶²

B. Enforcing the Disclosure Duty

A court may expand or contract a standard-setting organization’s disclosure duty based on how that organization enforces the disclosure duty.¹⁶³ Thus, having defined an express and clear disclosure duty, a standard-setting organization also should enforce that duty. Only vigilant enforcement will prevent a court from modifying the disclosure duty based on how the organization has enforced or how its members have followed that duty.

¹⁵⁹ JEDEC’s current Patent Policy requires “early disclosure,” which may not be specific enough to provide guidance to its members. See JEDEC PATENT POLICY, *supra* note 26, available at http://www.jedec.org/Home/manuals/JEDEC_Patent_Policy_Stmt.pdf.

¹⁶⁰ W3C PATENT POLICY, *supra* note 142, §6.8, available at <http://www.w3.org/Consortium/Patent-Policy-20030520.html>.

¹⁶¹ *Id.* § 6.9.

¹⁶² *Id.* § 6.4. JEDEC’s current Patent Policy does not, however, specify how its members can comply nor to whom they must disclose. See JEDEC PATENT POLICY, *supra* note 26, available at http://www.jedec.org/Home/manuals/JEDEC_Patent_Policy_Stmt.pdf.

¹⁶³ See, e.g., *Rambus II*, 318 F.3d at 1098 (treating the language in Appendix E as the disclosure duty based on members’ testimony).

A standard-setting organization can vigilantly enforce its disclosure duty by (1) providing procedures; (2) establishing ownership; (3) maintaining records; (4) auditing; and (5) providing sanctions when appropriate.

1. Providing Procedures

Standard-setting organizations should provide procedures on their patent disclosure and licensing process. Those procedures may include (1) reminding members of their disclosure duty, (2) obtaining license agreements from members who disclosed patents, (3) dealing with members who have failed to disclose patents or have refused to provide license agreements, (4) recording disclosed patents and license agreements in a database, and (5) ensuring that the organization is following the patent disclosure and licensing process. For example, the W3C Patent Policy provides guidance on dealing with members who refuse to license but continue to participate in the standards development process.¹⁶⁴

2. Establishing Ownership

A standard-setting organization should assign an owner, or group of owners, to ensure that the organization complies with its disclosure duty. Preferably, that organization should assign owners for each step in its patent disclosure and licensing process. For example, JEDEC requires the “chairperson of any JEDEC committee” to remind members of their disclosure duty at each meeting.¹⁶⁵ Similarly, the W3C Patent Policy requires the launching of a Patent

¹⁶⁴ W3C PATENT POLICY, *supra* note 142, § 4.1, available at <http://www.w3.org/Consortium/Patent-Policy-20030520.html>.

¹⁶⁵ JEDEC MANUAL OF ORGANIZATION AND PROCEDURE, *supra* note 23, § 8.3, available at <http://www.jedec.org/Home/manuals/jm21L.pdf>. The procedure provides a disclosure duty view-graph that the chairperson may show to satisfy the requirement. *Id.*

Advisory Group (PAG) to resolve conflicts where patents are essential to a standard but the member owning those patents refuses to meet the W3C licensing requirements.¹⁶⁶

3. Maintaining Records

Standard-setting organizations should maintain a repository of its members' disclosures. That repository can provide evidence that the organization has vigilantly enforced its disclosure policy and prevent a court from narrowing the scope of that policy. For example, the IETF maintains a website of intellectual property rights notices, which include links to disclosure notices provided by its members.¹⁶⁷ Similarly, the Institute of Electrical and Electronics Engineers (IEEE) maintains a report of "standards-related" patents on its website.¹⁶⁸

4. Auditing

A standard-setting organization should routinely perform audits of its patent disclosure and licensing process. Those audits should confirm that its working groups and committees are following the patent disclosure and licensing process and may identify opportunities to improve that process. For example, the American National Standards Institute (ANSI) requires regular audits at least once every five years.¹⁶⁹ Those audits include reviewing the "practices, actions,

¹⁶⁶ See W3C PATENT POLICY, *supra* note 142, § 7, available at <http://www.w3.org/Consortium/Patent-Policy-20030520.html>. The policy also specifies the composition of the PAG and the procedures it must follow. *See id.* §§ 7.3, 7.4.

¹⁶⁷ IETF, IETF PAGE OF INTELLECTUAL PROPERTY RIGHTS NOTICES, at <http://www.ietf.org/ipr.html> (last visited Mar. 1, 2004).

¹⁶⁸ IEEE, IEEE-SA RECORDS OF IEEE STANDARDS-RELATED PATENTS, at <http://standards.ieee.org/db/patents/index.html> (last visited Mar. 1, 2004).

¹⁶⁹ ANSI, AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) AUDIT PROGRAM 2, available at <http://public.ansi.org/ansionline/Documents/Standards%20Activities/American%20National%20Standards/Audit%20Program/AUDPAPER.DOC> (last modified May 28, 2003).

records and reports . . . to comply with ANSI criteria, rules, procedures and requirements,” including its patent policy.¹⁷⁰

5. Providing Sanctions

A standard-setting organization, to discourage non-compliance, may provide sanctions for violating its patent policy. For example, ETSI considers violation of its Intellectual Property Rights Policy a “breach . . . of [a member’s] obligations to ETSI.”¹⁷¹ If the ETSI General Assembly considers that breach substantial, it can then expel the offending member.¹⁷²

Conclusion

In sum, a clear, explicit, and vigilantly enforced patent disclosure policy should deter a standard-setting organization member from foregoing the greater good associated with standard-setting to reap financial rewards from its patented technology, or, at the very least, should allow other members of that organization to assert defenses under equitable estoppel, fraud, and breach of contract.

¹⁷⁰ *Id.* at 3.

¹⁷¹ ETSI IPR POLICY, *supra* note 156, § 14, available at http://www.etsi.org/legal/documents/ETSI_IPRPolicy.pdf.

¹⁷² ETSI, ETSI DIRECTIVES, RULES OF PROCEDURE OF THE EUROPEAN TELECOMMUNICATIONS STANDARDS INSTITUTE art. 1, § 1.4.2 (Nov. 26, 2003), available at <http://portal.etsi.org/Directives/home.asp>. For a discussion on providing sanctions for noncompliance, see Teece, *supra* note 2, at 1973–74.