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TOWARD GREATER CLARITY AND CONSISTENCY IN PATENT DISCLOSURE POLICIES IN A POST-RAMBUS WORLD

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I. INTRODUCTION

The United States Court of Appeals for the Federal Circuit's recent decision in the *Rambus, Inc. v. Infineon Technologies AG* litigation has sparked a flurry of activity, as well as considerable consternation, in standards development organizations ("SDOs").¹ The court unabashedly criticized the SDO at issue, the Joint Electron Device Engineering Council ('JEDEC"), for a "staggering lack of defining details" in its patent policy and failure to define clearly "what, when, how, and to whom the members must disclose [patent information]."² This criticism has led numerous SDOs of all shapes and sizes to re-examine and revise their patent policies. In particular, SDOs have been revisiting fundamental questions about how to establish an optimal patent disclosure policy that satisfies mission-critical

^{1.} Rambus, Inc. v. Infineon Techs. AG ("Rambus II"), 318 F.3d 1081 (Fed. Cir. 2003), cert. denied, 124 S. Ct. 227 (2003). An "SDO" is a domestic or international organization that usually forms committees to develop consensus standards. See Kathleen M.H. Wallman, The Role of Government in Telecommunications Standard-Setting, 8 COMMLAW CONSPECTUS 235, 235-36, 239 (2000). A standard contains technical requirements and recommended practices for performance of any device, apparatus, system, or phenomenon associated with a specific field. See id. at 237. Standards development in the United States is conducted largely by well-established private not-for-profit organizations. See id. at 238. Much of the standards activity in the United States is done under the supervision of the American National Standards Institute ("ANSI"), a private non-profit organization that administers and coordinates the U.S. voluntary standardization and conformity assessment See ANSI, ABOUT ANSI OVERVIEW, at http://www.ansi.org/ system. about_ansi/overview/overview.aspx?menuid=1 (last visited Mar. 16, 2004). In this Article, the term "SDO" covers all of these established as well as less-formal standards-setting groups. However, the patent disclosure principles and provisions discussed here are likely most relevant to the more formal, established SDOs. The smaller consortia and special interest groups ("SIGs") typically focus on only one or a few standards, and members typically agree up front to license any patent claims covering the resulting standard(s). This makes patent disclosure requirements less critical for these groups. See, e.g., BLUETOOTH, PATENT & COPYRIGHT LICENSE AGREEMENT, at https://www.bluetooth.org/ docman2/ViewProperties.php?group_id=6&document_content_id=101 (last visited Apr. 5, 2004).

^{2.} Rambus II, 318 F.3d at 1102.

but sometimes competing goals. Those goals include encouraging participation in and contributions to the SDO as well as facilitating the efficient adoption and widespread implementation of technical standards. Goals also may include deterring "gaming" of the process to the greatest extent possible. Bad actors may attempt to use unfairly information learned from the SDO, or they may assert patents they failed to disclose to the SDO against implementers of the very standard they helped shape.

There are several questions that are currently on the minds of most SDOs and SDO member companies. Should an SDO's patent policy require or merely strongly encourage disclosure? Should disclosure be triggered based on an "objective" standard (i.e., the reasonable person) or on a "subjective" standard (i.e., the personal and actual knowledge of the member company's representative(s) in the SDO)? Should there be some hybrid of these standards? What are the appropriate minimum contents of patent disclosures? Should the minimum disclosure requirement be different for published patents and applications compared to unpublished applications? What is the optimal point in time at which the disclosure must (or should) be made (e.g., as soon as reasonably possible after the relevant patent information becomes known, prior to final adoption of the standard, or by the end of a specified review period)? What disclosure obligations should be imposed on SDO members who withdraw from the SDO or from an SDO working group while a standard is being developed? What should be the consequences under the policy, if any, for failure to disclose? Should a default licensing obligation be applied to a member's necessary claims (whether contributed by such member or by some other party) if the member fails to disclose such claims to the SDO by a certain date?³

These questions and their proposed answers form the substance of this Article. The *Rambus II* decision has significantly changed the SDO landscape in general and the approach to patent policies in particular. Most importantly, SDOs must add greater clarity to their patent disclosure policies. Additionally, SDOs must re-examine each of the above questions in light of not only *Rambus II* but also recent developments in the business environment. In this new business climate, products increasingly implement technical standards, which play an even greater role in interoperability in many industries. Also, the number of patents that are applied for and issued has dramatically

^{3.} A "necessary claim" is a claim necessarily infringed by implementation of a standard developed by a working group in which the patent-holding member or its representative actually participated. A member's necessary claims can cover either the member's (or its affiliates') own contributions to the standard or the contributions submitted by another member or party. Necessary claims in this latter category are referred to as "non-contributed necessary claims," and they receive different disclosure and licensing obligations in the sample provisions in the Appendix.

increased, and companies increasingly look to their intellectual property portfolios as a potential bargaining tool for standards participation or as a source of new or expanded revenue.⁴

There is no one-size-fits-all approach for an SDO Intellectual Property Rights ("IPR") policy. Also, the significant diversity among SDOs prevents any attempt to divine and establish uniform patent disclosure rules for all SDOs. However, there are certain core patent disclosure provisions that SDOs should more consistently adopt to achieve the optimal balance of the competing objectives identified above.⁵ This Article discusses the following core patent disclosure provisions, different parts of which often exist in individual SDO IPR policies but are rarely combined to provide a coherent, optimal approach.⁶

 <u>Disclosure Obligation</u>. SDO members should be required, as opposed to merely encouraged, to disclose certain information regarding their own patent rights.

The unprecedented technological growth of the last couple of decades, accompanied by the global reach of the Internet, has made standardization increasingly important Partly as a result of these opportunities and partly as a consequence of expanded interpret ation of patent laws, patents covering Internet technology, especially electronic commerce, have emerged as one of the faster growing areas of patent law.

Id. (footnotes omitted); see also Mark A. Lemley, Intellectual Property Rights and Standard-Setting Organizations, 90 CAL. L. REV. 1889 (2002); 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 (2002); Janice M. Mueller, Patenting Industry Standards, 34 J. MARSHALL L. REV. 897 (2001); Mark R. Patterson, Inventions, Industry Standards, and Intellectual Property, 17 BERKELEY TECH. L.J. 1043 (2002); Michael J. Schallop, The IPR Paradox: Leveraging Intellectual Property Rights to Encourage Interoperability in the Network Computing Age, 28 AIPLA Q.J. 195 (2000); Carl Shapiro, Navigating the Patent Thicket: Cross Licensing, Patent Pools, and Standard Setting, in 1 INNOVATION POLICY AND THE ECONOMY 119 (Adam Jaffe et al. eds., 2001).

5. In this Article, the term "patent disclosure policy" is used to refer to a distinct subsection of an SDO's IPR policy that describes the responsibilities of SDO members to divulge certain specified information regarding issued patents or patent applications that may contain necessary patent claims covering a given draft or adopted standard. The term also refers to the consequences that can flow from the breach of those responsibilities. Other important aspects of an SDO's IPR policy that are not addressed in this Article are the patent license provision and associated key definitions (such as "Necessary Claims" and "Compliant Portions"), withdrawal and survivability provisions, copyright provisions, trademark provisions, provisions on treatment of contributed material as confidential or non-confidential, and various miscellaneous provisions (such as governing law, disclaimers, limitations of liability, provisions regarding how to update the policy, et cetera).

6. As explained below, it is important that a member's disclosure and licensing obligation be focused on the SDO working group(s) in which the member (or its representatives) act ually participate, rather than all of the SDO's activities.

^{4.} For additional background and insight into the intersection of SDOs and IP rights, see, for example, James C. De Vellis, *Patenting Industry Standards: Balancing the Rights of Patent Holders with the Need for Industry-Wide Standards*, 31 AIPLA Q.J. 301, 304 (2003). De Vellis wrote:

- 2. Personal Knowledge Disclosure Standard. SDO members should be required to disclose any patent or patent application that the member's individual representative personally and actually knows about and which he or she believes contains patent claims that would necessarily be infringed by implementation of the required portions of the final standard ("necessary claims"). No patent search is required, and the collective or aggregate knowledge of the individual representative's member organization (or of its affiliates or employees) is not imputed to the representative. However, a member is prohibited from intentionally isolating its SDO representative(s) from potentially relevant patent information within the member organization to avoid this disclosure obligation.⁷
- 3. <u>Timing of Disclosure</u>. Disclosure with regard to the member's own patent rights (whether based on the member's own contributions to the standard or the contributions of other parties) must occur as soon as reasonably possible after the member's individual representative becomes aware of the relevant patents or patent applications based on the knowledge standard set out in Item 2, above. In all cases, disclosure must occur prior to the member's withdrawal from the SDO or from the individual technical working group.
- Minimum Contents of Disclosure. For issued patents and 4. published patent applications containing necessary claims, disclosure must include: (1) the name of the patent rights holder/applicant, (2) contact information for license applic ation (if the patent rights holder is either required or willing to license), (3) the patent number or application number, and (4) the draft standard to which the disclosure relates. For unpublished patent applications, the disclosure must include: (1) the name of the patent rights holder/applicant, (2) contact information for license application (if the patent rights holder is either required or willing to license), (3) the fact that an application exists containing the asserted necessary claims (but not the number or contents of the application), and (4) the draft standard to which the disclosure relates. Moreover, if a member is unwilling to license any of its noncontributed necessary claims contained in unpublished applications on at least reasonable and nondiscriminatory ("RAND") terms and conditions, the member must also identify the portions of the draft standard on which the asserted

^{7.} Although at times this Article uses the shorthand phrase "disclose necessary claims," technically the patent claims themselves are not disclosed. Rather, the patents and patent applications containing such necessary claims are disclosed, even though the necessary claims are what the patent rights holder actually licenses in the end.

non-contributed necessary claims of such unpublished patent application read.

- 5. Review Period. During this specified sixty-day period, all SDO members that participated in the relevant working group must review the draft standard. A member must disclose any non-contributed necessary claims contained in patents or patent applications not previously disclosed under Item 1, above, if the claims cover the draft standard and if the member is unwilling to license them to all implementers on compensation-free and otherwise RAND terms and conditions. If a member does not wish to license these claims on at least RAND terms and conditions to all implementers of the standard, it must withdraw prior to the end of the review period in order to avoid this RAND licensing commitment. Any of the member's non-contributed necessary claims that are not disclosed prior to the end of the review period will be subject to the same default RAND licensing commitment to all implementers that applies to a member's contributed necessary claims.
- 6. <u>Possible Optional Limited Disclosure Exemption for Royalty-free Licensing Commitment</u>. It is an acceptable option for an SDO to allow a member to be exempt from the obligation to disclose necessary claims as long as the member commits to license them to all implementers on a compensationfree basis and under other reasonable terms and conditions.

Section II of this Article summarizes and analyzes the *Rambus* civil litigation, including the lower court and Federal Circuit decisions in the *Infineon* lawsuit as well as the recently dismissed FTC antitrust action against Rambus. Section III elaborates on the post-*Rambus* core patent disclosure policy provisions summarized above. Finally, the sample model provisions laid out in the Appendix attempt to breathe life into these core provisions in specific language that has already been included (in various forms) in certain SDO policies. This Appendix should be useful to other SDOs and their members as they consider possible revisions to the key disclosure provisions of their patent policies.⁸

^{8.} The Supreme Court recently denied certiorari in the *Rambus* civil litigation. *See* Infineon Techs. v. Rambus, Inc., 124 S. Ct. 227 (2003). This preserves Rambus's victory at the Federal Circuit level and set s the path for a new trial. The FTC filed an antitrust action against Rambus before an FTC administrative law judge ("ALJ") under Section 5 of the FTC Act. *See* Complaint, *In re* Rambus, Inc. (F.T.C. June 18, 2002) (No. 9302), *at* http://www.ftc.gov/os/adjpro/d9302/020618admincmp.pdf. The complaint, which is a broader inquiry than the common-law fraud complaint at the heart of the *Rambus* civil litigation regarding Rambus's potential abuse of the standards-setting process through deliberate concealment of patents. Although an ALJ recently issued an Initial Decision dismissing the FTC's complaint, the

II. THE RAMBUS PROCEEDINGS

A. The Rambus Civil Litigation

1. Background

Rambus, Inc. develops and patents memory technologies used in semiconductor memory devices, such as computer memory.⁹ Rambus does not manufacture any memory devices itself but relies instead on licensing its patent portfolio for revenue.¹⁰ Patent applications on Rambus technology go back to April 1990, when Rambus filed its first patent application, U.S. Patent Application Serial No. 07/510,898 (the "898 Application"), with claims directed to a computer memory technology known as dynamic random access memory ("DRAM").¹¹ In the course of prosecuting the '898 Application (since abandoned) over the next several years, Rambus filed numerous divisional¹² and continuation¹³ applications, at least thirty-one of which have issued as patents.¹⁴ Many of these patents claimed aspects of a memory tech-

10. See *id*.; Rob Landley, *Driving the RAM-bus*, THE MOTLEY FOOL, *at* http://www.fool.com/duelingfools/2000/duelingfools00082304.htm ("Rambus will ALWAYS be more expensive than the alternative because of the licensing fees Rambus charges actual silicon manufacturers") (last visited Mar. 16, 2004).

11. See Rambus II, 318 F.3d at 1084.

12. See 35 U.S.C. § 121 (2004) ("If two or more independent and distinct inventions are claimed in one application, the Director may require the application to be restricted to one of the inventions."). In response, the inventor elects to prosecute one of the two or more distinct inventions in the original application, and the unelected inventions are abandoned and become part of the public domain unless the inventor files divisional applications directed to the unelected inventions. The divisional applications are copies of the original application and are generally accompanied by a preliminary amendment that cancels the claims directed to the inventions in the original and any other divisional applications so that only the claims of the distinct invention remain for examination.

13. A patent application can be a parent to one or more later-filed applications, known as "continuation" applications. These applications generally claim inventions outside the scope of the claims remaining in the parent (for instance, disclosed but unclaimed inventions). These continuation applications have the same disclosure as the earlier filed parent application, and they claim the benefit of the filing date of the earlier applications. *See* 35 U.S.C. § 120 (2004). This means that later-filed continuation applications are considered to have been filed on the date that the earlier filed parent application was filed for purposes of examining patentability.

14. See Rambus, 318 F.3d at 1084.

FTC Complaint Counsel has already filed a notice of appeal to the full Commission. *See* In the Matter of Rambus, Inc., 2004 FTC LEXIS 17 (F.T.C. Feb. 23, 2004); Notice of Appeal, *In re* Rambus, Inc. (F.T.C. Mar. 1, 2004) (No. 9302), *at* http://www.ftc.gov/os/adjpro/d9302/040301noticeofappeal.pdf. It is possible that these pending proceedings could lead to changes in the *Rambus* litigation to date and/or in the potential liability faced by Rambus. However, any such changes should not affect the substance of this Article; rather, the core patent disclosure provisions discussed in Section III and the sample model language presented in the Appendix are designed to, and should, continue to be relevant and appropriate for consideration and use by SDOs regardless of the substantive outcomes of these pending proceedings.

^{9.} See Rambus II, 318 F.3d 1081, 1084 (Fed. Cir. 2003).

nology known as Rambus DRAM ("RDRAM").¹⁵ Rambus also filed an international PCT patent application under the Patent Cooperation Treaty (the "WIPO Application") in April 1991, claiming priority to the '898 Application.¹⁶

In February 1992, Rambus officially joined JEDEC, ¹⁷ an SDO associated with the Electronic Industries Association ("EIA") that develops standards for semiconductor technologies, including standards for RAM. ¹⁸ JEDEC required its members to license their patents on RAND terms if patented technology was included in a standard.¹⁹

Rambus disclosed to a JEDEC committee its first-issued RDRAM patent, U.S. Patent No. 5,243,703 (the "703 Patent"), a divisional of the '898 Application, shortly after it issued in September 1993.²⁰ JEDEC adopted and published a standard for synchronous dynamic random access memory ("SDRAM") after Rambus became a member but before Rambus disclosed the '703 Patent.²¹ As a divisional, the written description of the '703 Patent was substantially identical to that of the '898 Application.²² Around the same time, another JEDEC member disclosed Rambus's WIPO application to the organization.²³

Rambus withdrew from JEDEC in June 1996.²⁴ After leaving JEDEC, Rambus continued to file divisional and continuation patent applications based on the '898 Application.²⁵ In December 1996, JEDEC began work on a standard for double data rate-SDRAM ("DDR-SDRAM"), the successor to SDRAM technology.²⁶ JEDEC adopted and published the DDR-SDRAM standard in 2000.²⁷

In late 2000, Rambus sued Infineon Technologies AG, a German manufacturer of semiconductor memory devices (including SDRAM and DDR-SDRAM technology) and a member of JEDEC, for infringing patents allegedly covering Rambus's basic DRAM technology.²⁸ Infineon counterclaimed that Rambus committed fraud by seeking to patent the technology being standardized at JEDEC while participating as a member and not disclosing its patents to JEDEC so that it

^{15.} See id.

^{16.} See id. at 1084-85.

^{17.} See JEDEC, ABOUT JEDEC, at http://www.jedec.org/Home/about_jedec.cfm (last visited Mar. 16, 2004).

^{18.} See 318 F.3d at 1085.

^{19.} See id. at 1098.

^{20.} See id. at 1085.

^{21.} See id.

^{22.} See id.

^{23.} See id. at 1099.

^{24.} See id.

^{25.} See id.

^{26.} See id.

^{27.} See id.

^{28.} See id. at 1086.

could later bring the infringement suits against implementers of the standard.²⁹

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2. District Court Decision

The jury in federal district court found in Infineon's favor on nearly all counts, finding actual and constructive fraud for Rambus's JEDEC participation for both the SDRAM and DDR-SDRAM standards.³⁰ Following the trial, the judge denied in large part Rambus's petition to set aside the verdict through a judgment as a matter of law ("JMOL").³¹ The judge upheld the jury's findings that Infineon did not infringe the Rambus patents and that Rambus had committed fraud during the SDRAM (but not the DDR-SDRAM) standardization process.³² Specifically, the court noted that to support a claim of actual fraud, the plaintiff must prove the following elements: "(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]....³³

^{29.} See id. Moreover, Rambus, in cases nearly identical to its suit against Infineon, sued both Micron Technology and Hynix (formerly Hyundai) for patent infringement and was, in turn, countersued for fraud. See Complaint for Declaratory Judgment of Non-Infringement, Invalidity and Unenforceability; Breach of Contract; Breach of Contract by Third Party Beneficiary; and Breach of Contract - Promissory Estoppel, Hyundai Elecs. v. Rambus, Inc. (N.D. Cal. Aug. 29, 2000) (No. 00-CV-20905), at http://www.rambusite.com/ HyundaiVsRambus/Docket01.htm; Complaint, Micron Tech. v. Rambus, Inc. (D. Del. Aug. 28, 2000) (No. 00-CV-792), at http://www.rambusite.com/MicronVsRambus/ Docket01.htm. These cases have been held in abeyance pending the outcome of the Infineon suit. See, e.g., Order: the Status Quo Will Be Maintained in This Action Until a Decision is Rendered by the Federal Circuit in the Infineon Matter, Micron Tech. v. Rambus, Inc. (D. Del. June 28, 2002) (No. 00-CV-792), at http://www.rambusite.com/ MicronVsRambus/Docket.htm. However, Rambus's suit with Infineon is widely viewed as the one that will make or break Rambus's claims. See Juan Carlos Perez, Rambus-Infineon Case Prepares for New Trial, COMPUTERWEEKLY.COM, Oct. 7, 2003, at http://www.computerweekly.com/Article125473.htm. Other companies, including Hitachi, Samsung, and Toshiba, among others, have agreed to license the Rambus technology that is the subject of the above lawsuits. See Brian Lund, Rambus Captures Samsung, THE MOTLEY FOOL, Nov. 1, 2000, at http://www.fool.com/news/2000/rmbs001101.htm.

Recently, the European Patent Office announced it would revoke one of Rambus's patents, EP 0525 068, but a written ruling clarifying the decision was not available by publication date. *See* Tony Smith, *Europe to Revoke Rambus Memory Patent*, THE REGISTER, Feb. 18, 2004, *at* http://www.theregister.co.uk/2004/02/18/europe_to_revoke_rambus_memory1.

^{30.} See Rambus, Inc. v. Infineon Techs. AG ("Rambus I'), 164 F. Supp. 2d 743, 748 (E.D. Va. 2001), rev'd in part, vacated in part, aff'd in part, remanded by 318 F.3d 1081 (Fed. Cir. 2003), cert. denied, 124 S. Ct. 227 (2003).

^{31.} See id. at 775.

^{32.} See id. at 751.

^{33.} *Id.* at 750 (citing ITT Hartford Group v. Virginia Fin. Assoc., Inc., 520 S.E.2d 355, 361 (Va. 1999)). The district court contended that there is a sixth element of fraud, that of "resulting damage to the party misled." *Id.* This element was extensively litigated, and the lower court ultimately upheld legal fees as well as a punitive damage verdict of \$3.5 mil-

The court determined that the disclosure policy *as practiced* by JEDEC mandated that JEDEC members disclose patents and patent applications related to the work of JEDEC, regardless of what the published JEDEC patent manuals might have said.³⁴ Given this duty, the court found that Rambus misrepresented the patents that it did have and omitted others from disclosure.³⁵ These acts and omissions were material because the patents were related to the SDRAM standard, so the court concluded that the patents should have been disclosed.³⁶ The court then stated that Rambus clearly knew of its disclosure obligations and knowingly abrogated them.³⁷ Moreover, the court identified intent to mislead from evidence showing Rambus's plan to bring patent infringement suits arising from JEDEC.³⁸ Finally, the court found that Infineon had proven reliance because Rambus made no disclosures when Infineon and other JEDEC members raised specific patent issues with Rambus.³⁹

[T]he testimony of those witnesses respecting the policy and practice at JEDEC was corroborated by the evidence from JEDEC's meeting minutes documenting that members of JEDEC actually disclosed pending patents prior to 1993.... Furthermore, Infineon demonstrated that Rambus dficials themselves understood that it was JEDEC's practice to require disclosure of pending patent applications.

Id.; see also id. at 753 n.3. Here, the court stated:

JEDEC policy requires disclosure of all patents and patent applications which "related" to the work of JEDEC. The basis of the broader scope of the policy is quite clear because the patent holder or applicant is in the best position to determine the scope of its intellectual property claim and, therefore, its application to JEDEC's work. Here, Rambus clearly knew that it was in the process of expanding the claims based on the '898 patent to cover the SDRAM technology.

Id.

35. See id. at 754-56.

36. *See id*. at 753 n.3. The district court's decision relied on the fact that Rambus violated the JEDEC patent disclosure policy, rather than articulating an independent duty to disclose.

37. *See id*. at 756 ("Infineon, for example, proved that Rambus' president, David Mooring, and its JEDEC representatives, Garrett and Crisp, knew of the disclosure obligation. Rambus' executives discussed these duties with the lawyers who were prosecuting the company's patent applications. Rambus' conduct, viewed in light of that knowledge, underscores the proof of scienter.").

38. See *id*. ("Rambus... sought to patent the technology being discussed at JEDEC so that it could later bring patent infringement suits. Furthermore, e-mails written by [Rambus JEDEC representative] Richard Crisp show that, rather than informing JEDEC about its issued and pending patents, Rambus intentionally decided to keep these secret."). The court also found that Rambus had made affirmatively misleading statements designed to persuade JEDEC members that it had no relevant patent applications, when in fact it did.

39. See id. at 757–58. The court stated:

Infine on offered proof from which the jury could have found that the course of conduct between the parties reveals not that Infine *knew* of the patents, but rather that it had concerns about Rambus' patent rights. Infine on also proved that Rambus intentionally misled In-

lion, which it reduced to \$350,000. However, the extent of the damages is not relevant to whether there was in fact fraud committed by Rambus. *See id*. at 750, 758–65.

^{34.} See id. at 751–52. The court stated:

Thus, the court denied Rambus JMOL for the SDRAM actual fraud verdict because it found that Rambus had clearly committed fraud in its dealings with JEDEC, but the court granted Rambus JMOL for the DDR-SDRAM constructive fraud verdict.⁴⁰ The court's decision was cross-appealed to the Federal Circuit.⁴¹

3. Federal Circuit Decision

On appeal, the Federal Circuit upheld the district court's grant of JMOL to set aside the DDR-SDRAM fraud verdict but reversed the district court's denial of JMOL to set aside the SDRAM fraud verdict. The Federal Circuit also ruled that the lower court erred in its interpretation of the Rambus patent claims. Specifically, it disagreed with the court's construction of certain critical terms in the patents. As a result, it vacated the lower court's decision and remanded the case for the district court to reconsider infringement in light of its revised claim construction.

Additionally — and importantly for all SDOs and their members — the court vacated the fraud holding because it found that substantial evidence did *not* support the jury finding that Rambus breached the relevant patent disclosure duty during its participation in the JEDEC standards committee.

a. Rambus Had a Duty to Disclose

The Federal Circuit found that the written JEDEC patent policy was extremely vague and did not expressly require members to disclose patent information. In fact, the court strongly criticized JEDEC for failing to set forth clear policies. It criticized the "staggering lack of defining details" in the JEDEC patent policy and stated that "a policy that does not define clearly what, when, how, and to whom the members must disclose does not provide a firm basis for the discosure duty necessary for a fraud verdict."⁴² The court added, "Just as lack of compliance with a well-defined patent policy would chill participation in open standard-setting bodies, after-the-fact morphing of a vague, loosely defined policy to capture actions not within the actual scope of that policy likewise would chill participation in open standard-setting bodies, because the JEDEC members

Id.

41. See Rambus II, 318 F.3d 1081, 1086 (Fed. Cir. 2003).

fineon when it and other JEDEC members raised those concerns with Rambus, thus inducing Infineon to believe that Rambus did not have any SDRAM patents or applications.

^{40.} See id. at 750-51, 758.

^{42.} Id. at 1102.

^{43.} Id. at 1102 n.10.

testified that they treated the ambiguous language in the written policy as imposing a disclosure duty, the court found as a matter of fact that such a duty existed. Therefore, Rambus had a duty to disclose patent information while it was a member.⁴⁴

b. The Scope of Rambus's Duty to Disclose

In analyzing the scope of Rambus's duty to disclose, the Federal Circuit initially focused on the language of the JEDEC patent policy that encouraged disclosure of information "covered by" patents or pending patents. The court concluded that this language indicated that JEDEC identified the duty to disclose "based on the scope of claimed inventions that would cover any standard and cause those who use the standard to infringe."⁴⁵

The Federal Circuit then turned to the well-established understanding of JEDEC members that disclosure was required for patents and patent applications related to the standardization work of a JEDEC committee. Based largely on JEDEC members' testimony, the court found that whether a patent or application is related to the standard depends on the actual patent claims of the patent or applic ation, rather than on the description of the patent or application.⁴⁶

Combining its findings about the "covered by" language of the written policy and about the group's understanding of patents and applications related to a JEDEC standard, the Federal Circuit concluded that a JEDEC member was required to disclose a patent or application only when a claim "reasonably might be necessary to practice a standard."⁴⁷ The court stated that this would not require a formal infringement analysis. Rather, the duty operates "when a reasonable competitor would not expect to practice the standard without a license under the undisclosed claims. Stated another way, there must be some reasonable expectation that a license is needed to implement the standard."⁴⁸

^{44.} See *id*. at 1098. Importantly, the court analyzed the issue of whether a disclosure duty existed as a question of fact for the jury because the district court had analyzed it this way and because neither party challenged this analysis on appeal. *See id*. at 1087. However, the court also noted that the law in related areas "strongly suggests that this issue may well be a legal question with factual underpinnings [for the court to decide]." *Id*. at 1087 n.3.

^{45.} Id. at 1098.

^{46.} See id. at 1099.

^{47.} Id. at 1100.

^{48.} *Id.* at 1101. By contrast, the dissent, citing a JEDEC manual, interpreted the duty of disclosure mandated by the patent policy as requiring disclosure not only of patents and pending applications containing essential patent claims (as the majority had found) but also of relevant patents and pending applications, i.e., those that "might be involved in the work of the committee" during the development of the standard. *Id.* at 1115 (Prost, J., dissenting). The dissent also argued that "[t]he majority's comparison of pending claims to the final standard does not take into account the possibility that, during the course of its work, the

Finally, the Federal Circuit concluded that the record failed to show that the JEDEC patent policy applied the above disclosure obligation to a participating member's future plans or intentions. Therefore, while disclosure was required for "certain patents or pending patents," it was not required for "a member's intentions to file or amend patent applications."⁴⁹

c. When Rambus's Duty to Disclose Arose

The Federal Circuit found that the JEDEC written patent policy did not state *when* a committee member's duty to disclose arose. Based on its review of the testimony, however, the court held that "[t]he most a reasonable jury could conclude is that the disclosure duty is triggered when work formally begins on a proposed standard."⁵⁰ Moreover, the court held that the disclosure inquiry was not only *claim*-specific (as noted above), but also *standard*-specific (i.e., the disclosure duty applicable to one standard is not triggered by discussion of proposals aimed at a different standard).⁵¹

d. No Breach of Rambus's Duty to Disclose

Despite the fact that Rambus had a duty to disclose "reasonably necessary" patent claims, the Federal Circuit held that the evidence did not support a finding that any of the issued or pending Rambus patent claims fell within this disclosure duty. The court based its holding on the fact that no Rambus patent claim would be necessary to practice the standard in the case of the SDRAM standard and the fact that Rambus had withdrawn from JEDEC before formal consideration of the standard had begun in the case of the DDR-SDRAM standard.

Two key factors led to these conclusions. First, the Federal Circuit majority found that Infineon, not Rambus, failed to meet its burden of proof that there were reasonably necessary claims. Specifically, Infineon had to "present clear and convincing evidence that there is a reasonable expectation that the standard cannot be practiced without a license under the undisclosed claims."⁵² Second, the court held that the duty to disclose at issue was based on an "objective standard" (i.e.,

committee considers, debates, rejects and amends various proposals as the standard evolves." *Id.* at 1111 (Prost., J., dissenting).

^{49.} Id. at 1102.

^{50.} Id.

^{51.} See id. at 1101-02.

^{52.} *Id.* at 1102–03. By contrast, the dissent argued that Rambus bore the burden of showing that it "did not actually have any pending claims that read on the standard" as a defense to rebut Infineon's fraud case. *Id.* at 1117 (Prost, J., dissenting). To this the majority responded: "Whether Rambus had claims that reasonably might read on the standard, however, goes to the question of whether Rambus breached its disclosure duty. It is not a defense for Rambus to prove, but an element of Infineon's fraud case." *Id.* at 1105 n.11.

whether in fact a patent claim "reasonably might be necessary to practice a standard").⁵³ Therefore, Rambus's JEDEC representatives' personal and subjective beliefs about whether Rambus's patent claims would likely be infringed by the SDRAM standard were irrelevant to Rambus's duty to disclose.⁵⁴

Under this objective standard, the court found particularly relevant Rambus's statements in its briefs that it "did not have a single undisclosed patent claim, issued or pending, that any JEDEC member would have been required to license (even arguably) to practice the JEDEC standards at issue."⁵⁵ The court also found that substantial evidence did not exist to support a finding that the Rambus patent applications at issue had claims that "read on" the SDRAM standard or that "reasonably would be needed to practice the SDRAM standard."⁵⁶ The court noted, "Rambus's actions might constitute fraud under a different patent policy; however, they do not constitute fraud under this policy."⁵⁷ The court reversed the fraud verdict against Rambus and vacated the award of attorneys' fees to Infineon.⁵⁸

e. The Dissent

Although the majority in the Federal Circuit rejected the lower court's finding of fraud,⁵⁹ Judge Prost would have supported the jury's finding in part because the lower court placed the burden on Rambus to show that it "did not actually have any pending claims that read on the [JEDEC] standard.⁶⁰ His dissent asserted that Rambus had a duty to disclose known IPR and found that Rambus breached that duty through omission and misstatement.⁶¹ It also pointed out numerous statements in the record that, in his view, showed Rambus knew it had patents relating to the developing SDRAM standard.⁶²

^{53.} Id. at 1100.

^{54.} *See id*. at 1104 ("The JEDEC policy, though vague, does not create a duty premised on subjective beliefs.... A member's subjective belief... that it had pending claims covering the standard does not substitute for the proof required by the objective patent policy.").

^{55.} Id.

^{56.} Id.

^{57.} *Id*. at 1105.

^{58.} See id. at 1106–07.

^{59.} See id. at 1084.

^{60.} See *id.* at 1117 (Prost, J., dissenting). As noted, the majority placed the burden on Infineon to prove affirmatively as an element of its fraud case that Rambus had patents pending on the JEDEC standard. See *id.* at 1104 ("Infineon bore the burden of proving the existence of a disclosure duty and a breach of that duty by clear and convincing evidence. Infineon did not meet that burden.").

^{61.} See *id.* at 1117 n.5 (Prost, J., dissenting) ("Rambus's beliefs about the scope of its duty are also relevant to what that duty actually is, just as the testimony cited in this dissent and in the majority opinion — where witnesses explain what they believe the duty to mean — is evidence of what the duty actually is.").

^{62.} See id. at 1115 (Prost, J., dissenting). The dissent noted:

Judge Prost also cited approvingly the lower court's finding of fraud, noting six separate occasions where Rambus had pending claims related to the SDRAM standard but did not disclose those claims.⁶³ The dissent concluded that because Rambus believed that it did in fact have pending claims covering the SDRAM standards, an act of fraud had occurred.⁶⁴

4. Current Status

Infineon and Rambus filed cross appeals of the Federal Circuit's decision to an en banc panel of the Federal Circuit but were denied.⁶⁵ Infineon then petitioned for certiorari with the Supreme Court, but this petition was also denied.⁶⁶ The Supreme Court's refusal to hear the case thus upholds the Federal Circuit's ruling in favor of Rambus and sends this case back to federal district court in Virginia for a new trial at which Rambus will be able to retry its patent infringement claims against Infineon in light of the Federal Circuit's more favorable revised claim construction.⁶⁷

B. The FTC's Action Against Rambus

The view that Rambus committed fraud in its JEDEC dealings — which, as noted above, the *Rambus I* court adopted⁶⁸ but the *Rambus II* court rejected⁶⁹ — prompted the FTC to file an independent admin-

The jury heard repeated admissions from Rambus that it had pending claims that not only related to the developing SDRAM standard, but even covered particular features of the standard. For example, Rambus's business plan stated that "Sync DRAMs infringe claims in Rambus's filed patents and other claims that Rambus will file in updates later in 1992."

Id. (Prost, J., dissenting) (footnote omitted).

^{63.} *See id*. at 1117 (Prost, J., dissenting) (citing Rambus, Inc. v. Infineon Techs. AG, 164 F. Supp. 2d 743, 752–53 (E.D. Va. 2001)).

^{64.} See id. at 1117 n.5 (Prost, J., dissenting).

^{65.} See Rambus, Inc. v. Infineon Techs. AG, No. 01-1449, 2003 U.S. App. LEXIS 8845, at *1 (Fed. Cir. Apr. 4, 2003).

^{66.} See Infineon Techs. AG v. Rambus, Inc., 124 S. Ct. 227 (2003).

^{67.} Infineon's allegations against Rambus will not be retried, however, because the lower court's fraud verdict against Rambus was reversed by the Federal Circuit, which was essentially sustained by the Supreme Court's refusal to hear the case. *See Supreme Court Rejects Infin eon Appeal in Rambus Fight*, SLLCON VALLEY.COM, Oct. 6, 2003 (noting that "[u]se of the technologies covered by Rambus patent claims has developed into a \$15 billion industry" and that Rambus could collect as much as \$45 million annually in royalties from Infineon alone and up to \$420 million annually if the licensing fees were applied industry-wide), *at* http://www.siliconvalley.com/mld/siliconvalley/business/industries/ semiconductors/6946568.htm.

^{68.} See Rambus I, 164 F. Supp. 2d 743, 756 (E.D. Va. 2001).

^{69.} See Rambus II, 318 F.3d at 1107–18.

istrative complaint against Rambus.⁷⁰ Between the cross-appeal of the district court's ruling against Rambus and the Federal Circuit's decision, the FTC filed a Section 5 antitrust action against Rambus before an FTC administrative law judge ("ALJ").⁷¹ The FTC's complaint recited many of the same facts as the *Rambus* civil litigation cases regarding Rambus's potential abuse of the standards-setting process through deliberate concealment of patents and alleged three separate Section 5 violations:

- 1. Through deceptive acts and practices, Rambus obtained monopoly power over the DRAM market and four separate DRAM technology submarkets (latency, burst length, clock synchronization, and data acceleration);
- 2. Rambus acted with specific intent to monopolize those markets; and
- 3. Rambus sought to exercise unreasonable restraint of trade in those markets.⁷²

The FTC complaint was a much broader attack than the common law fraud complaint at the heart of the *Rambus* civil litigation.⁷³ By its

73. There are many factual issues that were determined by both the lower and Federal Circuit courts in the Rambus case that could be the subject of a collateral estoppel motion by either party in the FTC proceeding. However, the FTC does not believe that there are substantial issues of factual overlap between the court cases and the FTC action. *See* Roy Mark, *FTC Likely to Ignore Rambus Court Victory*, INTERNETNEWSCOM, Jan. 30, 2003, *at* http://www.internetnews.com/bus-news/article.php/1576851. The article stated:

M. Sean Royall, deputy director of the FTC's Bureau of Competition, and lead trial counsel said, "Our trial team is reviewing the Federal Circuit's decision to determine what if any bearing it may have on the Commission's federal antitrust suit against Rambus. However, given the significant differences in the factual and legal issues raised by the FTC's antitrust claims and Infineon's fraud claims, we do not expect that this ruling will have a substantial impact on our case going forward."

^{70.} See generally Complaint, In re Rambus, Inc. (F.T.C. June 18, 2002) (No. 9302), at http://www.ftc.gov/os/adjpro/d9302/020618admincmp.pdf.

^{71.} See *id*. Section 5 of the FTC Act prohibits "unfair methods of competition" and "unfair or deceptive acts or practices." 15 U.S.C. \$45(a)(1) (2000). The FTC Act's broad enforcement provision empowers the Commission to determine the meaning of "unfair." In addition, activities considered illegal under the Sherman Act also are generally unlawful under Section 5 of the FTC Act. *See* 15 U.S.C.S. \$45 (2003) (discussing the Sherman and Clayton Acts). Furthermore, Section 5 of the FTC Act empowers the FTC to take action against "incipient" unfair practices; that is, conduct which does not yet amount to — but is likely to lead to — a vioktion of the other antitrust statutes. *See id*.

^{72.} See Complaint ¶ 122–24, In re Rambus, Inc. (F.T.C. June 18, 2002) (No. 9302), at http://www.ftc.gov/os/adjpro/d9302/020618admincmp.pdf.

Id. Because this is a Part 3 administrative proceeding, even if the Commission rules against Rambus, private parties cannot use that decision for preclusive effect in their own proceedings against Rambus. *See* Alden F. Abbott & Theodore A. Gebhard, *Standard-Setting Disclosure Policies: Evaluating Antitrust Concerns in Light of Rambus*, 16 ANTITRUST 29, 34 (2002).

own admission, the FTC's goal was more ambitious than simply punishing Rambus for fraud on behalf of its alleged victims. Instead, the FTC wanted to protect standard-setting processes across the technology industry from bad faith participants: "The conduct at issue here has done substantial harm to important technology markets, and threatens to undermine participation in industry standard-setting ætivities more generally. . . . If you are going to take part in a standards process, be mindful to abide by the ground rules and to participate in good faith."⁷⁴

In February 2003, the ALJ granted an FTC motion to estop collaterally Rambus from re-litigating whether it had destroyed evidence and imposed penalties based upon a conclusion that Rambus had, in fact, destroyed documents relevant to the case.⁷⁵ Then, on April 15, 2003, the ALJ denied Rambus's motion for summary judgment in the FTC's antitrust proceeding.⁷⁶ In denying Rambus's summary judgment motion, the ALJ detailed his perceived scope and responsibility in this case:

> [T]he question the court must address is far broader than that which [Rambus] suggests. Whether [Rambus] engaged in a pattern of deceptive, exclusionary conduct by subverting an open standards process; whether [Rambus] utilized such conduct to capture a monopoly in technology-related markets; and whether the challenged conduct violates well-

^{74.} Press Release, FTC, FTC Issues Complaint Against Rambus, Inc.: Deception of Standard-Setting Organization Violated Federal Law (June 19, 2002) (quoting Joseph J. Simons, Director of the FTC Bureau of Competition), *at* http://www.ftc.gov/opa/2002/06/rambus.htm.

^{75.} See Order Granting Complaint Counsel's Motion for Collateral Estoppel at 1, *In re* Rambus, Inc. (F.T.C. Feb. 26, 2003) (No. 9302), *at* http://www.ftc.gov/os/adjpro/d9302/030226aljordgrantcolestop.pdf. Although the Federal Circuit vacated much of the district court's ruling against Rambus, Rambus declined to contest a separate district court finding that it had destroyed material evidence. *See* Rambus, Inc. v. Infineon Techs. AG, 155 F. Supp. 2d 668, 682 (E.D. Va. 2001) ("[T]he record in this case shows that Rambus implemented a 'document retention policy,' in part, for the purpose of getting rid of documents that might be harmful in litigation.").

^{76.} See Order Denying Respondent's Motion for Summary Judgment at 1, *In re* Rambus, Inc. (F.T.C. Apr. 14, 2003) (No. 9302), *at* http://www.ftc.gov/os/adjpro/d9302/030415 aljorddenyrammosumdec.pdf. Rambus had claimed:

⁽¹⁾ that JEDEC patent disclosure policy lacks sufficient clarity to serve as the basis for antitrust liability; (2) that JEDEC members did not rely on any message supposedly conveyed by [Rambus's] "silence" in adopting the SDRAM and DDR SDRAM standards; and (3) that [Rambus] did not breach any JEDEC disclosure duty with regard to DDR SDRAM because this standard was established after [Rambus] dropped out of JEDEC in June 1996.

established principles of antitrust law are material questions of fact to be resolved at trial.⁷⁷

On February 24, 2004, the ALJ issued his Initial Decision, ruling in favor of Rambus and dismissing the complaint.⁷⁸

Specifically, the ALJ found that the FTC failed to sustain its burden of proof for all three of the violations alleged in the complaint.⁷⁹ The ALJ based this conclusion on the following key findings:

> (1) [T]he EIA/JEDEC patent policy encouraged the early, voluntary disclosure of essential patents and Respondent did not violate this policy; (2) the case law upon which Complaint Counsel rely to impose antitrust liability is clearly distinguishable on the facts of this case; (3) Respondent's conduct did not amount to deception and did not violate any "extrinsic duties," such as a duty of good faith to disclose relevant patent information; (4) Respondent did not have any undisclosed patents or patent applications during the time that it was a JEDEC member that it was obligated to disclose; (5) amendments to broaden Respondent's patent applications while a member of JEDEC were not improper, either as a matter of law or fact; (6) by having a legitimate business justification for its actions, Respondent did not engage in exclusionary conduct; (7) Respondent did not intentionally mislead JEDEC by knowingly violating a JEDEC disclosure rule; (8) there is no causal link between JEDEC standardization and Respondent's acquisition of monopoly power; (9) members of JEDEC did not rely on any alleged omission or misrepresentation by Respondent and, if they had, such reliance would not have been reasonable; (10) the challenged conduct did not result in anticompetitive effects, as Complaint Counsel did not demonstrate that there were viable alternatives to Respondent's superior technologies; (11) the challenged conduct did not result in anticompetitive effects as the challenged conduct did not result in higher prices to consumers; and (12) JEDEC is not

^{77.} Id. at 12.

^{78.} See In the Matter of Rambus, Inc., 2004 FTC LEXIS 17, at *691 (F.T.C. Feb. 23, 2004).

^{79.} See id. at *29.

locked in to using Respondent's technologies in its current standardization efforts.⁸⁰

It is also worth nothing that the ALJ — unlike the Federal Circuit — found that Rambus did not have a duty to disclose under the JEDEC patent policy. Instead, the ALJ found that this policy was limited to encouraging early voluntary disclosure of any known patents.⁸¹

On March 1, 2004, the FTC counsel filed its motion for an appeal to the full Commission.⁸² Review of the ALJ's initial decision is subject to *de novo* review.⁸³ If the FTC ultimately prevails against Rambus, it may impose remedies similar to those in *In re Dell Computer Corp.*⁸⁴ However, should the full Commission find antitrust violations by Rambus in the current proceeding, it is likely that Rambus will appeal to the circuit court, if necessary, because Rambus relies so heavily on the patents at issue.⁸⁵

^{80.} Id. at *28–29.

^{81.} See *id*. at *289. The Federal Circuit had found that JEDEC's written patent policy did not impose a duty to disclose but concluded that this duty did exist based on member test imony. See Rambus, Inc. v. Infineon Techs. AG, 318 F.3d 1081, 1098 (Fed. Cir. 2003). By contrast, the ALJ found that the conduct of the other JEDEC members actually supported lack of a duty to disclose and that member testimony citing a duty to disclose was inconsistent or biased. See 2004 FTC LEXIS 17, at *218, 220–49.

^{82.} See Notice of Appeal, In re Rambus, Inc. (F.T.C. Mar. 1, 2004) (No. 9302), at http://www.ftc.gov/os/adjpro/d9302/040301noticeofappeal.pdf.

^{83.} See 16 C.F.R. §3.54(a) (2004) ("Upon appeal from or review of an initial decision, the Commission will . . . exercise all the powers which it could have exercised if it had made the initial decision."); Press Release, FTC, Administrative Law Judge Dismisses FTC Complaint Against Rambus (Feb. 17, 2004), *at* http://www.ftc.gov/opa/2004/02/ rambusdecision.htm ("The Judge's initial decision is subject to review by the full Commission, either on its own motion or at the request of either party").

^{84.} See 121 F.T.C. 616, 618–23 (1996). The FTC ordered that Dell could no longer assert causes of action based on the patent that was incorporated into the Video Electronics Standards Association ("VESA") standard, and ordered that for ten years Dell may not assert any causes of action against any industry standards body for incorporating a Dell patent into an open standard if Dell intentionally failed to disclose such a patent when Dell participated in the standard's creation. See id.

^{85.} See Krysten Crawford, Chipping Away: Rambus Beat Back Its Rivals, But Now It Faces an Even Tougher Opponent— The Federal Trade Commission, CORP. COUNS, June 1, 2003, at 82, available at http://www.law.com/jsp/cc/pubarticleCC.jsp?id= 1051121831965. The article stated:

The company has hired elite law firms, including Los Angeles's Munger, Tolles & Olson and Washington, D.C.'s Wilmer, Cutler & Pickering, to make its case. Rambus officials estimate that legal fees will run as high as \$22 million this year — as much as one-third of the company's operating budget. That brings to \$60 million the total it has spent on legal fees since 2001 alone. "Rambus has a lot at stake, which is why [it's] going to fight this to the bitter end," predicts Amy Marasco, general counsel of the American National Standards Inst itute, a nonprofit industry group.

C. Key Implications of the Rambus Decisions

One may believe that Rambus's actions were fraudulent or anticompetitive or that Rambus has been falsely accused by a cadre of its competitors looking to slow its progress and/or avoid paying licensing royalties. In either case, one thing is unmistakably clear: the Rambus case highlights the critical importance of SDOs' establishing clear IPR policies that provide guidance on what, when, how, and to whom SDO members must disclose patent information. The case also points out that SDOs must educate their participating members so the members understand their obligations under these policies. As the differences between the district court's, Federal Circuit's, and ALJ's decisions illustrate, the unclear use of key words in an organization's IPR policy can make the difference between millions of dollars in liability from a successful fraud or antitrust claim and no liability at all because of the lack of a clear duty to disclose. Moreover, the clarity of an IPR policy's language may make the difference between a controversy-free standards specification that has an increased probability of widespread adoption and a final specification burdened by potential patent infringement claims and undetermined royalties.

In particular, SDOs should revisit fundamental questions about how to establish an optimal patent disclosure policy that will avoid the criticism that befell JEDEC in the Federal Circuit, promote broad participation in the SDO, minimize any attempts to game the system, and ensure widespread adoption of the SDO's standards.⁸⁶ The following two sections are designed to assist SDOs and their members in this important undertaking.

III. CORE ELEMENTS OF AN SDO'S PATENT DISCLOSURE POLICY POST-RAMBUS

A. Overview

1. Toward Greater Clarity and Consistency in SDO Patent Disclosure Policies

SDOs come in all shapes and sizes and with various goals and objectives.⁸⁷ For example, they may develop a single standard⁸⁸ or mul-

^{86.} Some SDOs have already undertaken or even completed this review and update. *See, e.g.*, ADVANCED AUTHORING FORMAT ASS'N, INC., INTELLECTUAL PROPERTY POLICY OF THE ADVANCED AUTHORING FORMAT ASSOCIATION, INC. (Jan. 19, 2004), *at* http://www.aafassociation.org/html/policies/IP_PolicyFinal.pdf.

^{87.} *See, e.g.*, ANSI, ORGANIZATIONAL MEMBERS, *at* http://public.ansi.org/ansionline/ Documents/Membership/Membership%20Rosters/Organizational%20Members.doc (last visited Mar. 16, 2004).

tiple standards;⁸⁹ may focus on hardware,⁹⁰ software,⁹¹ or businessprocess standards;⁹² and may sell the standards they develop as part of their funding mechanisms⁹³ or provide them freely to the world.⁹⁴ SDOs may focus regionally,⁹⁵ nationally,⁹⁶ or globally⁹⁷ and may have companies,⁹⁸ individuals,⁹⁹ or countries¹⁰⁰ as members. Some treat all contributed and working-group materials as confidential,¹⁰¹ but most expressly state that no confidential treatment will be *a* corded.¹⁰² Other differences, such as when the SDO developed its IPR policy, whether an attorney or non-attorney drafted the policy, and whether SDO members are largely intellectual property holders or implementers also contribute to the variability. A one-size-fits-all IPR policy simply cannot be applied to all SDOs.¹⁰³

See, e.g., ADVANCED AUTHORING FORMATASS'N, INC., AAF ASSOCIATION FAQ, at http://www.aafassociation.org/html/policies/IP_PolicyFinal.pdf (last visited Mar. 16, 2004).
See, e.g., INST. OF ELEC. AND ELECS. ENG'RS, INC., PRODUCTS AND PROJECTS

STATUS REPORT, *at* http://standards.ieee.org/db/status/status.txt (last visited Mar. 16, 2004). 90. *See, e.g.*, TELECOMM. INDUS ASS'N, TIA STANDARDS— MAIN MENU, *at* http://www.tiaonline.org/standards (last visited Mar. 16, 2004).

^{91.} See, e.g., WORLD WIDE WEB CONSORTIUM, W3C ACTIVITIES, at http://www.w3.org/Consortium/Activities (last visited Mar. 17, 2004).

^{92.} See, e.g., ROSETTANET, STANDARDS, at http://www.rosettanet.org/RosettaNet/ Rooms/DisplayPages/LayoutInitial?container=com.webridge.entity.Entity[OID[5F6606C8 AD2BD411841F00C04F689339]] (last visited Mar. 17, 2004).

^{93.} See, e.g., INT'L ORG. FOR STANDARDIZATION, ISO STORE, at http://www.iso.org/iso/ en/prods-services/ISOstore/store.html (last visited Mar. 16, 2004).

^{94.} See, e.g., CHEM. IND. DATA EXCH., CHEM ESTANDARDS, at http://www.cidx.org/ Standard/Standard.asp?Level=2&SecondLevelURL1=/Standard/Standard.asp (last visited Mar. 16, 2004).

^{95.} See, e.g., SAN DIEGO COUNTY REG'L STANDARDS COMM., MISSION STATEMENT, at http://www.regional-stds.com (last visited Mar. 16, 2004).

^{96.} See, e.g., AM. INST. OF STEEL CONSTR., INC., OUR MISSION, at http://www.aisc.org/ Content/NavigationMenu/About_AISC/Mission/Mission.htm (last visited Mar. 16, 2004).

^{97.} See, e.g., INT'L TELECOMM. UNION, ITU OVERVIEW — PURPOSES, at http://www.itu.int/aboutitu/overview/purposes.html (last visited Mar. 16, 2004).

^{98.} See, e.g., SOC'Y OF MOTION PICTURE AND TELEVISION ENG'RS, MEMBERSHIP, at http://www.smpte.org/membership (last visited Mar. 16, 2004).

^{99.} See, e.g., INTERNET ENG'G TASK FORCE, OVERVIEW OF THE IETF, at http://www.ietf.org/overview.html (last visited Mar. 16, 2004).

^{100.} See, e.g., UNITED NATIONS CTR. FOR TRADE FACILITATION & ELEC. BUS,, INTRODUCTION, *at* http://www.unece.org/cefact/knowlg/knowlg.htm (last visited Mar. 16, 2004).

^{101.} See, e.g., DIGITAL HOME WORKING GROUP, BYLAWS 27, (Dec. 5, 2003), at http://www.dhwg.org/company_dbase_thankyou/DHWG_Bylaws_05_Dec_03.pdf.

^{102.} See, e.g., ORG. FOR THE ADVANCEMENT OF STRUCTURED INFO. STANDARDS, OASIS POLICY ON INTELLECTUAL PROPERTY RIGHTS, *at* http://www.oasis-open.org/who/ intellectualproperty.php (last visited Mar. 16, 2004).

^{103.} See Standards-Setting Practices: Competition, Innovation and Consumer Welfare: Hearing Before the Fed. Trade Comm'n and Dep't of Justice, 1 (Apr. 18, 2002) [hereinafter ANSI FTC Testimony] (testimony of Amy A. Marasco, Vice President and General Coursel, American National Standards Institute ("ANSI")), at http://www.ftc.gov/opp/ intellect/020418marasco.pdf (describing the U.S. system as "distributed, diversified and extremely complex" but praising it as "the most effective and efficient in the world"). See also Lemley, supra note 4, at 1904, 1906. Lemley wrote:

Moreover, even within the patent provisions of an IPR policy, certain differences may be warranted. Examples include variations in the specific definition of "necessary claims," the actual patent license provision, the scope of a reciprocity option or requirement, the effect of withdrawal on patent licenses granted or committed to, and the SDO's policy for normatively referencing other SDOs' standards. The American National Standards Institute ("ANSI") has aptly noted the vital importance of allowing each SDO the flexibility to design its overall IPR policy — and even its patent policy — in ways that are uniquely suited to achieving the goals of the particular SDO:

Almost all standards-setting organizations have a policy or procedural requirement that addresses the inclusion of patented material in standards. These policies reflect the nature of the standards under development, the interplay between patents and the relevant industry sector, the objectives of the standards-setting body, and the consensus of the partic i-pants. Accordingly, such policies vary widely in response to these differing needs and objectives.¹⁰⁴

Although SDOs' overall IPR policies — and even their patent policies — may vary based on the factors mentioned above (as well as others), SDOs generally can increase consistency in certain core components of such policies. One core component, focused on below, is the SDO's patent disclosure policy. Whether an SDO is large or small,

What is most striking about the data is the significant variation in policies among the different SSOs. Of the forty-three SSOs I studied, thirty-six had written policies governing the ownership of IP rights, four had no policy at all, two had statements on their web site about IP rights but no official policy, and one had a policy that was still in development. Most SSOs without any policy were small, industryspecific groups; all of the large SSOs I studied had well-developed policies in this area. Further, from 1999 to 2002 more organizations developed policies, reflecting the increased salience of the issue. These rules tended to be set in the bylaws of the SSOs, although the organizational diversity of SSOs meant that arrangements in any given case may have been more or less formal. ... Even those SSOs that permitted members to own IP rights that cover a standard generally imposed some conditions on the use of that IP. The most common condition was that IP rights be licensed on "reasonable and nondiscriminatory terms"; twenty-nine of the thirty-six SSOs with policies required members to license their patent rights on such terms. As noted above, another six SSOs required assignment or royalty-free licensing. Three SSOs had a looser standard, requesting that members agree to license their patents on reasonable and nondiscriminatory terms, but not requiring that they do so.

Id. (footnotes omitted). Lemley uses SSO, which stands for "standards-setting organization," as an alternative to "SDO." *See id.* at 1892.

^{104.} ANSI FTC Testimony, supra note 103, at 2.

single-standard or multi-standard, or hardware-focused or software-focused, the patent disclosure principles and specific language presented below are designed to be uniformly applic able and useful.¹⁰⁵

2. Achieving a Balance Among the Competing Interests Involved

The best and most effective IPR policies are the ones that appropriately balance the interests of the various entities involved in or impacted by the SDO's work. Key interested parties include the SDO, members of the SDO that hold essential patents, other SDO members and participants, non-members who hold essential patents, implementers of the SDO's standards, and consumers that will be the end-users of a product that supports or implements the standard. The interests of these parties often differ. For example, the holder of an essential patent may want to charge royalties to recoup its investment in developing the patented technology, but he SDO and implementers may insist on no royalties to promote broader adoption and dissemination of the standard. Similarly, working groups may want to receive nformation on all possible infringing technologies, even those not yet public, while the companies pursuing those technologies may be reluctant to disclose trade secrets or the contents of pending patent applications to their competitors prematurely.

SDOs that err too far toward promoting one group's interests at the expense of others risk undermining the potential success and widespread adoption of the standards they are trying to develop. For example, an SDO may appear ideal to implementers and consumers if it mandates that all members conduct periodic searches for essential patents or other intellectual property or if it precludes any patented technology from being incorporated into one of its standards. However, these onerous membership obligations and "anti-intellectual

^{105.} The sample model disclosure provisions proposed herein will not necessarily suit every SDO. In fact, given the wide diversity of SDOs discussed above, the uniqueness of certain SDOs may warrant changes to, or a customized version of, the sample model patent disclosure provisions set out in the Appendix. Moreover, proposed sample model language for consideration by SDOs should not be mistaken as an endorsement of what ANSI has called "delineated, generalized, one-size-fits-all guidelines from the FTC or DOJ." Rather, the author concurs with ANSI that government-imposed guidelines in this area could have significant adverse effects on the standards-setting efforts of SDOs. ANSI, INCLUSION OF IPR IN STANDARDS 15 (2003) [hereinafter ANSI Ottawa Statement] (ANSI contribution to the conference in Ottawa, Canada on IPR issues (Apr. 28 to May 1, 2003)), *at* http://www.tsacc.ca/content/documents/gsc/GSC-8-110.rtf. The Statement asserted:

[[]Delineated, generalized, one-size-fits-all guidelines] do not appear to be needed or warranted; in fact, they may very well be counterproductive. Such guidelines could stifle competition and the standardization of technological advances. Different approaches by different groups with different participants and different objectives provide the necessary flexibility to maximize the overall results for the U.S. community as a whole.

property" provisions would likely discourage organizations or individuals possessing potentially essential technology or the expertise to develop such technology from joining such an SDO. These rules would require the participating organization to allocate an unjustifiable amount of resources to ensure compliance. They also would be unrealistic from an intellectual property perspective because the maturity of the intellectual property system and the inventive progress in the sciences almost guarantee that technical standards will implicate patents.

Such an outcome helps neither implementers nor consumers because patent rights holders possessing essential technology that covers an SDO's standards might refuse to join the SDO. The patent rights holders would be exempt from the SDO's patent disclosure and **I**censing policies and would be able to enforce their intellectual property by refusing to license or by charging unreasonable royalties to implementers of the SDO's standards.¹⁰⁶ Alternatively, these essential technology holders may opt to develop a competing standard or form a competing standards organization, thereby further threatening the efficacy of the SDO and its standards. As Lemley has described it:

> The fundamental right granted to IP owners is the right to exclude others; forcing them to give up that right restricts the value they can get from their IP. Further, while some variants on the compulsorylicensing rule permit the IP owner to set the royalty rate, so long as it isn't discriminatory, others restrict the royalty that can be charged or require IP owners to forgo a royalty altogether. Such rules may reduce the incentive to develop potential new standards or the incentive to participate in cooperative standard setting rather than "going it alone" in a de-facto standards competition. Both the Antitrust Division of the U.S. Department of Justice ("DOJ") and the FTC have taken the position in individual cases that an

^{106.} See De Vellis, supra note 4, at 342. De Vellis wrote:

A simplistic view of the standardization conflict — one that views the choice among patent policies as a choice between favoring patent holders and serving the public — overlooks the fact that all sides will suffer if the standardization process fails to attract the best, most innovative technologies. If a standard-setting organization adopts an inferior standard because someone owns a patent on a superior technology and refuses to make it available on [royalty free] terms, the standard-setting organization runs a real risk that the chosen standard will not be widely adopted. . . . The inferior standard will thus compete with the patented technology, dividing the market, reducing the market's network effects, and working against the very reasons standard-setting organizations were created.

[SDO] rule that prohibits members from owning IP rights in a standard may violate the antitrust laws. And at least one court has found that an antitrust claim alleging that an [SDO] conspired to demand a low "reasonable" royalty rate survived a motion to dismiss.¹⁰⁷

Therefore, any solution will have to respect the property rights of patent rights holders.

The appropriate approach strikes a balance among the various interests involved, encouraging organizations and individuals of all shapes and sizes (including potential essential patent rights holders) to join and contribute to the SDO's standardization efforts. As a result, the standards the SDO adopts will be broadly embraced and disseminated in a wide range of implementations.¹⁰⁸ Indeed, encouraging

[T]he majority of standard-setting organizations differ from the W3C and believe that the best way to accomplish this goal [of widespread adoption of the standard] is to incorporate an option for RAND licensing into their patent policies. ... RAND licenses do the best job, ultimately, of lessening the barriers that threaten the existence of widespread industry standards.

^{107.} Lemley, *supra* note 4, at 1944 (footnotes omitted); *see also* In the Matter of Rambus, Inc., 2004 FTC LEXIS 17, at *560 (F.T.C. Feb. 23, 2004) ("Refusing to include patented technology in industry standards may subject standard setting organizations to antitrust claims and denies consumers superior products."). It is important to note that these and other problems associated with mandatory royalty-free ("RF") patent policies are what led the World Wide Web Consortium ("W3C") — which for a long time was focused on establishing a completely mandatory RF policy — to allow for a RAND exception in its patent policy. *See* W3C, W3CPATENT POLICY § 7 (Daniel J. Weitzner ed., Feb. 5, 2004), *at* http://www.w3.org/Consortium/Patent-Policy-20040205.html This also persuaded the Internet Engineering Task Force ("IETF") to refrain from codifying such a mandatory RF approach into its IPR policy. *See also* De Vellis, *supra* note 4, at 308 ("Since the patentee may have invested considerable amounts of time, money, and energy developing the technology behind a standard, he or she may be unwilling to part with his or her intellectual property rights without direct compensation."). De Vellis also wrote:

Id. at 337 (citation omitted); *see also* Complaint Counsel's Post -Hearing Brief at 47, *In re* Rambus, Inc. (F.T.C. filed Sept. 5, 2003) (No. 9302) ("RAND licensing helps to ensure open standards."), *at* http://www.ftc.gov/os/adjpro/d9302/030909ccposthearingbrief.pdf. 108. *See ANSI FTC Testimony, supra* note 103, at 2, 4. The testimony stated:

The ANSI Patent Policy, which applies to the development of all American National Standards, was derived with the objective of finding a balance among intellectual property rights, competing interests in implementing a given standard, the standards-setting milieu, and the avoidance of unnecessary rigidity that may inhibit U.S. compet itiveness both nationally and in increasingly global markets. . . . At ANSI, it was recognized that it is necessary to balance the rights of the patent rights holder, the interests of competing manufacturers seeking to implement the standard, the consensus of the technical experts from different stakeholder groups on the desired content of the standard, the concerns and resources of the SDO, the impact on consumer welfare, and the need to avoid unnecessary strictures that would discourage participation or disadvantage U.S. interests in non-U.S.-based standards organizations.

broad industry participation in the SDO's standardization efforts significantly decreases the likelihood of potential adverse intellectual property issues. It also significantly increases the probability that the standard will be available on at least RAND terms,¹⁰⁹ which will encourage widespread adoption.¹¹⁰

The sample model patent disclosure provisions set out in the Appendix attempt to achieve such a balance. They are of narrow scope because they apply only with respect to a member's actual participation in particular SDO working groups. They do not impose a patent search obligation and are limited to necessary patent claims, not all claims "relevant" or "related to" the standard. Also, the ongoing disclosure obligation is based on the knowledge of the member's individual representative rather than on the collective knowledge of the member company.

At the same time, all members have a patent licensing obligation for necessary claims contained in their own contributions. However, this is a RAND, not a compensation-free, obligation. Similarly, a member's failure to disclose any of its necessary claims that were contributed by other parties will result in a requirement either to license the non-contributed necessary claims to all implementers on at least RAND terms or to disclose them and withdraw from the SDO if a mutually agreeable solution cannot be reached.¹¹¹ One mutually

Id. (citations omitted).

Id.

^{109.} See Lemley, supra note 4, at 1913-14. Lemley wrote:

One of the most common requirements imposed on IP owners is an obligation to license IP rights on reasonable and nondiscriminatory terms. But virtually no SSO policies specify what that phrase means, leaving courts to decide what terms are "reasonable." There are presumably easier ways of determining whether a license is "nondiscriminatory," at least in circumstances in which the IP owner has already licensed to others. But even here questions will arise. . . . But it is a well-established principle of contract law that the parties need not specify a price in order to create a binding agreement. In the absence of a price, courts will supply a reasonable and customary price term. While there is more than just price missing from SSO IP rules - they do not specify the duration of the license, for example - those terms too may be filled in by operation of law. Application of these contract principles to SSO IP rules suggests that an unspecified "reasonable" royalty term does not leave unbridled discretion with the IP owner to set the terms. Rather, courts will determine what royalty is reasonable based on industry custom - here, the treatment of patents of similar scope in related industries.

^{110.} Stated another way, it is much harder for an SDO working group to design around a blocking patent when it does not know of its existence because the holder of the patent/application is not a member of the SDO. Similarly, an uninformed working group cannot decide to include in its standard only technology that is available on at least RAND terms. Widespread participation eases both of these concerns.

^{111.} Certain (typically smaller and more narrowly-focused) SDOs may impose a default compensation-free licensing obligation on their members instead of the default RAND obligation discussed in this article. *See, e.g.*, ADVANCED AUTHORING FORMATASS'N, INC.,

agreeable solution may be the SDO's removal of those portions of the standard that the disclosing company is not willing to license to all implementers on at least RAND terms. In any case, the member will not have to forgo the right to enforce the non-contributed necessary claims or to charge a reasonable royalty fee.¹¹² Each of the above provisions is designed to encourage organizations with potentially rekvant technology and the corresponding expertise to participate in and contribute to the SDO. At the same time, the provisions ensure that, to the greatest extent possible, the standards the SDO eventually adopts will be free of any blocking technology that the patent rights holder refuses to license to implementers.

B. Specific Patent Disclosure Issues

1. Obligation vs. Encouragement to Disclose

As noted, the Federal Circuit found that Rambus had a duty to disclose patents/patent applications containing necessary claims despite the ambiguous language in the JEDEC patent policy. Nonetheless, Rambus's attempt to justify its allegedly anticompetitive actions, based in large part on its asserted lack of a duty to disclose under the JEDEC patent policy, has caused SDOs to reassess whether to impose such a duty on members or to make an existing duty even more explicit.¹¹³

Not everyone agrees that imposing such a duty is justified. Some prefer a strong encouragement to disclose over an obligation. Notably, ANSI, in its guidelines for developing a patent policy, clearly calls only for the encouragement of patent disclosure by its accredited SDOs: "Generally, it is desirable to encourage disclosure of as much information as possible concerning the patent, including the identity of the patent rights holder, the patent's number, and information regarding precisely how it may relate to the standard being developed."¹¹⁴ Similarly, the disclosure policy of the Consumer Electronics

supra note 86, § 3. Although the sample model patent disclosure provisions set out in the Appendix may still provide helpful guidance to this type of SDO, certain disclosure obligations would be less critical because a compensation-free license already is a requirement. The sample patent disclosure provisions become more useful for an SDO of this type if it allows a RAND exception, where a royalty-bearing technical contribution becomes part of a draft standard under special circumstances. *See, e.g.*, W3C, *supra* note 107, §§ 4, 7.

^{112.} See ANSI Ottawa Statement, *supra* note 105, at 7 ("The problem becomes exacerbated if the 'punishment' for an unintentional failure to disclose an essential patent is to preclude the patent owner from asserting its intellectual property rights against implementers of the standard.").

^{113.} See, e.g., Rambus I, 164 F. Supp. 2d 743, 751–54 (E.D. Va. 2001) (describing Rambus's claim that it had no duty to disclose patent applications).

^{114.} ANSI, GUIDELINES FOR IMPLEMENTATION OF THE ANSI PATENT POLICY 5-6 (1997), *at* http://public.ansi.org/ansionline/Documents/Standards%20Activities/American%20National%20Standards/Procedures,%20Guides,%20Activities/American%20National%20Standards/Procedures,%20Guides,%20Activities/American%20National%20Standards/Procedures,%20Activities/American%20National%20Standards/Procedures,%20Activities/American%20Activities/American%20National%20Standards/Procedures,%20Activities/American%20National%20Standards/Procedures,%20Activities/American%20Activities/American%20National%20Standards/Procedures,%20Activities/American%20Activities/American%20National%20Standards/Procedures,%20Activities/American%20

Association ("CEA") states that "reasonable efforts shall be made to encourage the identification of relevant patents at the earliest point in standards development."¹¹⁵

Supporters of the encouragement approach often put forth three main arguments. First, they argue that one should not attempt to fix what is not broken. They point to a lack of litigation emanating under an "encouragement to disclose" standard and argue that a mandatory disclosure approach would invite the possibility of more costly litigation because more SDO members and participants could be targeted for allegedly breaching this duty.¹¹⁶ Second, some parties claim that a mandatory disclosure approach would discourage participation in SDOs because it could become very difficult, costly, and time-consuming to abide by a disclosure obligation. Greater due diligence and even company-wide patent searches would become necessary to ensure compliance.¹¹⁷ Third, some parties claim that other mechanisms besides mandatory disclosure exist to avert gaming of the system.¹¹⁸

None of these arguments withstands analysis. First, although little litigation has occurred under encouragement-type policies, until re-

The originator of a proposal for a document shall draw the attention of the committee to any patent rights of which the originator is aware and considers to cover any item of the proposal. Any party involved in the preparation of a document shall draw the attention of the committee to any patent rights of which it becomes aware during any stage in the development of the document.

Each MEMBER shall use its reasonable endeavours to timely inform ETSI of ESSENTIAL IPRs it becomes aware of. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.

Id.

^{115.} CEA, TECHNOLOGY & STANDARDS PROCEDURES MANUAL § 7.2.5.1 (adopted Sept. 10, 2002), *at* http://www.ce.org/standards/pdf/ep23.pdf; *see also* INST. OF ELEC. AND ELECS. ENG'RS, INC., UNDERSTANDING PATENT ISSUES DURING IEEE STANDARDS DEVELOPMENT (encouraging early disclosure of necessary claims), *at* http://standards.ieee.org/board/pat/guide.html (last visited Mar. 17, 2004); INT'L TELECOMM. UNION, GUIDELINES FOR IMPLEMENTATION OF ITU-T PATENT POLICY 2 (2002), *at* http://www.itu.int/itudoc/itu-t/patents/policy/guide.pdf ("The guidelines encourage the early disclosure and identification of patents that may relate to Recommendations under development."). By contrast, many prominent SDOs require patent disclosure. *See*, *e.g.*, INT'L ORG. FOR STANDARDIZATION, CONSOLIDATED PROCEDURES FOR THE TECHNICAL WORK OF ISO § 2.14 (2003), *at* http://www.tc67.addr.com/docs/ISO_Dir_1.pdf. This directive stated:

Id.; *see also* W3C, *supra* note 107, §6.1, *at* http://www.w3.org/Consortium/Patent-Policy-20030520.html; INTERNET ENG'G TASK FORCE, INTELLECTUAL PROPERTY RIGHTS IN IETF TECHNOLOGY § 6.1 (Feb. 2004), *at* http://www.ietf.org/rfc/rfc3668.txt; EUROPEAN TELECOMM. STANDARDS INST., ETSI INTELLECTUAL PROPERTY RIGHTS POLICY, § 4.1 (2000), *at* http://www.etsi.org/legal/documents/ETSI_IPRPolicy.pdf. This policy stated:

^{116.} *See, e.g.*, ANSI Ottawa Statement, *supra* note 105, at 13 (noting that, since 1980, the FTC has publicly concluded only two investigations relating to patents and SDOs).

^{117.} See id. at 5–7.

^{118.} See, e.g., id. at 12.

cently very little litigation of SDO patent disclosure issues had arisen generally, even in SDOs with mandatory disclosure policies. Moreover, in *Rambus I* and *II*, the encouragement-type approach in the patent policy itself actually has spawned costly litigation. Although the court found a duty to disclose, it based its finding not on the JEDEC IPR policy but on direct testimony regarding the actual expectations and understandings of JEDEC members. Moreover, the low level of litigation under encouragement-type policies may actually understate real lurking issues because harmed parties may not pursue legitimate fraud or antitrust actions out of a concern that they will not be able to point to a definitive disclosure obligation in the policy.¹¹⁹

Second, the argument that mandatory disclosure policies will reduce membership or increase the cost of participation in an SDO wrongfully assumes that complying with a disclosure obligation entails patent searches and other expensive due diligence. As explained in the next section, this Article's standard for an ongoing disclosure focuses on the knowledge of the individual representative rather than the collective or aggregate knowledge of the member organization.¹²⁰ This standard also does not require any patent searches to uncover unknown necessary claims.¹²¹ Such an ongoing disclosure obligation can actually broaden participation and enhance standards-setting effi-

^{119.} See infra note 126 for more discussion on duty to disclose as a prerequisite for maintaining a fraud or equitable estoppel claim.

^{120.} By contrast, in the landmark case *In re* Dell Computer Corp., Dell's liability was rooted not in the disclosure duty itself but in two other holdings. First, the collective knowledge of the entire Dell organization was imputed to the Dell representative who test ified in the SDO at issue. *See* 121 F.T.C. 616, 624 n.1 (1996) ("Dell's voting representative made his certification on behalf of the corporation."). Second, the representative's failure to disclose was not inadvertent. *See id.* at 625–26. The dissent disagreed, contending that the majority should not have imputed Dell's corporate knowledge to the representative and that the VESA patent policy "appears for all practical purposes to be like the ANSI policy," which encouraged but did not require patent disclosure. *Id.* at 630 n.6, 637–38 n.19 (Azcuenaga, Commissioner, dissenting).

The model patent provisions in the Appendix address the shortcomings in the *Dell* majority's reasoning by making clear that the ongoing disclosure obligation involves only the actual (and not constructive) knowledge of the member's representative and declining to impute corporate knowledge of patent information to the representative.

^{121.} Many parties have raised legitimate concerns about patent searches in the SDO context. See, e.g., ANSI FTC Testimony, supra note 103, at 9–10. The testimony warned:

Companies that have invested billions in research and development in order to develop a patent portfolio will likely choose not to participate in a standards-setting activity if they are obligated to undertake an enormous patent portfolio search and be burdened in connection with each such activity or risk losing their intellectual property rights. This in turn would deprive standards-setting activities and ultimately consumers of both (a) the possibility of standardizing cutting-edge technology that could then become accessible to competing manufacturers and (b) the participation in the standards-setting activity of individuals with valuable technical expertise.

Id. Because these concerns are valid, the disclosure standard and provisions discussed herein do not impose such a search obligation on SDO members.

ciency instead of discouraging SDO participation and increasing costs because all participants will have the same understanding of their own obligations and the obligations of others. Also, patent rights will be disclosed earlier in the process, allowing technical working groups to avoid the costs and delays caused by either nondisclosure of patent rights or very late disclosure, which may nullify all the standard development work done to that point. In fact, voluntary disclosure policies may actually discourage membership and increase the costs of participation because members will be concerned about the possibility of gaming by other, less scrupulous members and will take additional precautions.

The *Rambus* decisions, especially the ALJ decision, make clear that unless SDOs impose an unambiguous obligation to disclose relevant patent information as part of their patent policies, they are inviting questionable and potentially anticompetitive behavior. Certain members may seek to take advantage of the lack of a disclosure obligation by concealing their necessary claims until very late in the standards-development process or until after standard adoption.¹²² Again, recall that Rambus cited the JEDEC patent policy's lack of a disclosure obligation as a key defense to, and a purported justification for, its behavior.¹²³ Rambus continued to cite this as its key defense in the FTC's complaint proceeding: "JEDEC's patent disclosure policy was not the policy that Complaint Counsel allege. The JEDEC patent policy encouraged, but did not require, the disclosure of certain patents (those that were essential to the manufacture or use of a JEDECcompliant device), but not patent applications. Rambus fully complied with this policy...."¹²⁴ Rambus eventually prevailed in the ALJ's Initial Decision.

^{122.} In the sample model disclosure provisions in the Appendix, members and their representatives have no obligation to disclose potentially relevant third-party patent rights, although this is encouraged. The rationale for this is that parties should be required only to disclose patents and patent applications containing their own necessary claims.

^{123.} See Crawford, supra note 85, at 82 (citing Rambus attorney John Danforth for the proposition that "JEDEC's unclear and unenforced patent disclosure rules . . . were the problem, not Rambus").

^{124.} Post-Trial Reply Brief of Respondent Rambus, Inc. at 2–3, 27, *In re* Rambus, Inc. (F.T.C. Sept. 29, 2003) (No. 9302), *at* http://www.ftc.gov/os/adjpro/d9302/030929rptrb.pdf. Note also that Rambus cited the ANSI patent policy's "encouragement" to disclose standard as further support for its defense; the FTC responded by trying to distinguish the ANSI and JEDEC policies. *See* Complaint Counsel's Response to Respondent's Post-Trial Brief at 14–15, *In re* Rambus, Inc. (F.T.C. Oct. 1, 2003) (No. 9302), *at* http://www.ftc.gov/os/adjpro/d9302/031001ccresponsetoreplybrief.pdf. The FTC also **a**-gued that JEDEC's rules and procedures, while relevant, were not dispositive, and that even if Rambus could prove literal compliance with the JEDEC patent policy, Rambus should still be found liable based on independent evidence of Rambus's subversive, bad faith conduct. *See, e.g.*, Complaint Counsel's Post-Hearing Brief at 20, 80, *In re* Rambus, Inc. (F.T.C. Sept. 5, 2003) (No. 9302), *at* http://www.ftc.gov/os/adjpro/d9302/030909ccposthearingbrief.pdf. However, the ALJ rejected this claim. It is important to note that the Federal Circuit suggested that imposing a duty to disclose on Rambus independent

Third, the alternative mechanisms to mandatory disclosure, such as the threat of litigation, potential regulatory scrutiny, and the possibility of withdrawal of a standard that has been subjected to a patent claim, may not prevent parties from hiding their necessary claims.¹²⁵ All of these mechanisms have potential shortcomings, especially if not paired with a duty to disclose.

For example, as Lemley points out in his recent analysis of IPR issues facing SDOs, certain important avenues of possible litigation and regulatory action against bad actors in the SDO context are very difficult or precluded unless the plaintiff can argue that a clear duty to disclose was breached.¹²⁶ The ALJ decision confirms this analysis,

Id. The Federal Circuit's decision does not require SDOs to adopt a mandatory disclosure policy. The decision only admonishes SDOs to make their patent policies clear. At the same time, however, SDOs should adopt a mandatory disclosure approach for the reasons discussed in this Article. Although it is true that the Rambus decision does not compel this approach, it is equally true that had JEDEC's patent policy contained a clear duty to disclosure obligation as its central defense to the various fraud and antitrust claims brought against **i**. *See id.* at 1102 (noting that a policy that does not provide a firm basis for the disclosure duty necessary for a fraud verdict").

125. See ANSI Ottawa Statement, supra note 105, at 17. The Statement noted:

The risks are that (1) the approval of the standard is subject to withdrawal, often rendering the company's innovation relatively useless; (2) competitors can and usually do avail themselves of their legal rights in court if they believe they are being unfairly disadvantaged, and various legal claims, such as equitable estoppel, laches, patent misuse, fraud, and unfair competition may be available to prevent a patent holder from enforcing a patent covering an industry standard due to the patent holder's improper conduct in a standards-setting context; and (3) in the case of deliberate misconduct, the FTC or DOJ can intervene.

Id.

126. See Lemley, supra note 4, at 1918 (noting that equitable estoppel doctrine may penalize "action, inaction, or silence where there was an obligation to speak"); *id.* at 1936 ("Most notably a fraud theory premised on nondisclosure must necessarily be based on some duty to the plaintiff..."). See also De Vellis, supra note 4, at 333. De Vellis stated: Since "[s]ilence alone is not sufficient affirmative conduct to give rise

to estoppel," it is imperative that standard-setting organizations impose on their members a duty to disclose both patents and pending

of a specific requirement in the JEDEC patent policy was suspect. *See Rambus II*, 318 F.3d 1081, 1096 n.7 (Fed. Cir. 2003). The court said:

In the present appeal, the parties do not argue that Rambus's duty was based on a fiduciary or confidential relationship with Infineon. Even absent waiver of such an argument, a disclosure duty based on a fiduciary relationship seems unlikely. Rambus and Infineon are compet itors. There is no basis for finding that Rambus and Infineon shared a fiduciary relationship solely by virtue of their JEDEC membership. Indeed, the implications of holding that mere membership forms a fiduciary duty among all JEDEC members could be substantial and raise serious antitrust concerns. Here, the parties argued the existence of a duty based on only Rambus's act of joining JEDEC with awareness of the EIA/JEDEC policy. There is no other proper basis for finding the existence of a disclosure duty.

which even the FTC's own expert conceded.¹²⁷ In other words, unless the SDO establishes a clear disclosure obligation instead of a mere encouragement to disclose, fraud actions, claims of equitable estoppel, antitrust actions, and FTC Section 5 actions against the alleged bad actor may fail despite exhausting many company or government litigation resources. The *Rambus* litigation shows the difficulty of demonstrating a duty to disclose without a clear statement setting out this duty in the SDO's patent policies. A party acting in bad faith during a standards-setting process may very well view *Rambus II* as providing a safe harbor for nondisclosure in the absence of clear and consistent disclosure requirements.¹²⁸

127. See In the Matter of Rambus, Inc., 2004 F.T.C. LEXIS 17, at *554 (F.T.C. Feb. 23, 2004) ("As set forth below, any such obligation or duty must be clear and unambiguous to form the basis for antitrust liability or liability under Section 5 of the FTC Act."); *id.* at *556 ('In addition, the patent-related equitable estoppel case law upon which Complaint Counsel rely holds that 'silence alone will not create an estoppel unless there was a clear duty to speak, or somehow the patentee's continued silence reinforces the defendant's inference from the plaintiff's known acquiescence that the defendant will be unmolested."' (citations omitted)); *id.* at *557 ("JEDEC merely encouraged the disclosure of intellectual property and any duties Respondent may have had toward other JEDEC members were so unclear an ambiguous that they cannot form the basis for finding liability in this case."); *id.* at *353 ("Professor McAfee explained that Rambus's concealing of information about its patent applications would, in his opinion, be exclusionary only if it violated a rule or process.").

128. The recent dismissal of an FTC complaint against Unocal for failure to disclose patents further underscores this conclusion. In its complaint, announced on March 4, 2003, FTC staff alleged that Union Oil Company of California ("Unocal") committed fraud and violated Section 5 of the FTC Act in connection with regulatory proceedings before the California Air Resources Board ("CARB") regarding the development of reformulated gasoline ("RFG"). See Complaint, In re Union Oil Co. of Cal. (F.T.C. Sept. 29, 2003) (No. 9305), at http://www.ftc.gov/os/2003/03/unocalcmp.htm. The complaint stated that during the RFG rulemaking process, Unocal made materially false and misleading statements to CARB and other regulatory participants regarding its emissions research results. See id. The ALJ dismissed the FTC's complaint in an initial decision. See Initial Decision at 1-2, In re Union Oil Co. of Cal. (F.T.C. Nov. 25, 2003) (No. 9305), at http://www.ftc.gov/ os/adjpro/d9305/031125aljsinitialdecision.pdf. In issuing his decision, the ALJ stated that Unocal's conduct constituted "petitioning" of a governmental authority and was therefore entitled to antitrust immunity under the Noerr-Pennington doctrine. Id. at 31. To the extent the complaint contained allegations with respect to Unocal's conduct toward the Auto/Oil Air Quality Improvement Research Program and the Western States Petroleum Association, the ALJ ruled that resolution of those issues would require an "in depth analysis of substantial issues of patent law" that he believed were not within the FTC's jurisdiction. Id. at 56. The ALJ accordingly dismissed the complaint in its entirety and terminated the ongoing hearing. See id. at 70.

The ALJ's conclusion that "in depth analysis of substantial issues of patent law" were beyond the FTC's jurisdiction further calls into question arguments that a disclosure obligation is unnecessary in the SDO context because regulatory agencies can pursue bad actors under their broad enforcement powers. *See id.* at 56. In short, an SDO's imposition of a clear patent disclosure obligation on its members maximizes the ability of the courts and the regulators to pursue and punish bad actors under fraud and other legal theories. *See also* Stanley M. Gorinson et al., *Federal Antitrust Enforcers Focus on Intellectual Property Abuses*, INTELL PROP. TODAY, Aug. 2003, at 38.

patent applications. The standard-setting organization's prior notice of this duty creates an obligation to speak, which can give rise to estoppel when the member instead responds with silence.

Id. (citations omitted).

Finally, although an SDO's threat of standard withdrawal may be superficially appealing, it may not be all that effective as a practical matter. For example, if certain businesses have already incorporated the standard technology into their designed and deployed products, it likely will make little difference to them that the SDO has formally withdrawn the standard. To maintain such products in the marketplace, parties will still have to obtain a license from the bad actor for use of its necessary patent claims. If anything, the withdrawal of the standard may actually compound the harm to these innocent implementers by reducing the breadth and number of products that will interoperate with their previously developed and deployed products. Moreover, the alternative, abandoning all the time and investment that went into designing and producing such legacy products and starting from scratch, is equally unappealing.

One of Rambus's own economic experts, Professor David Teece, recently co-wrote an article on standard-setting in which he offers three reasons why firms that have committed to and invested in a standard will not want to switch:

> First, the industry may have made investments in implementing the (patented) standard. Products may have been designed to meet the standard, and factories geared up to produce the patented standardized products. While from an economic standpoint those costs are often "sunk costs" (not recoverable), manufacturers clearly do not want to incur the additional costs associated with switching to another alternative.

> Second, the need or desire for compatibility (especially backwards compatibility with the existing **in**stalled product base) may make it costly to switch to a different standard.

> Third, and similarly, there is often a significant coordination problem in getting all interested parties to switch to an alternative. For example, computer manufacturers may already have designed their motherboards and computers to work with existing standardized chips, and switching to a different chip design would require changes, not only to the chips themselves, but also to the motherboards and computers. The difficulties associated with coordinating

the necessary changes may make it impracticable to switch away from the patented standard.¹²⁹

In short, while the potential drawbacks to an SDO's imposing a duty to disclose do not appear to be all that problematic, the potential benefits are palpable.

It is simple enough to subject all SDO members to a patent disclosure obligation. The more difficult part is determining what must be disclosed and when that obligation is triggered. For example, should all patents or patent applications related to a proposed standard be disclosed or only patents or applications containing necessary claims? Whose knowledge forms the basis for the disclosure — the individual representative in the working group or the entire member organization? Are patent searches required to uncover unknown relevant patents? Is a member required to disclose its necessary claims with respect to all of the SDO's standards or only for those standards developed by working groups in which the member participated? The following sections deal with these more complex issues.

2. Disclosure of "Necessary Claims"

It is clearly preferable for the disclosure requirement to cover "necessary claims" and not all patents related to the standard. A disclosure obligation that has a broader scope than necessary claims will significantly increase the costs associated with disclosure (for both the members and the SDO) with little, if any, benefit. Members will have to spend more time and money completing and submitting disclosures and, undoubtedly, the associated licensing declarations. Furthermore, the working groups would be inundated with more intellectual property-related statements, many of which would be meaningless and inapplicable. It is hard to see the benefit of such costly additional disclosures. In the end, the only disclosures that matter are the ones relating to necessary claims because typically only necessary claims are subject to licensing for purposes of implementing the standard.¹³⁰

3. Knowledge Standard Triggering Disclosure Obligation

However, what knowledge standard triggers the duty to disclose necessary claims? The *Rambus II* majority found that the duty to disclose at issue was based on an "objective standard," i.e., whether in

^{129.} David J. Teece & Edward F. Sherry, *Standard Setting and Antitrust*, 87 MINN. L. REV. 1913, 1937 (2003).

^{130.} See Rambus II, 318 F.3d 1081, 1101 (Fed. Cir. 2003) (explaining that requiring disclosure of patent claims beyond those reasonably necessary to practice the standard would "render the JEDEC disclosure duty unbounded").

fact a patent claim "reasonably might be necessary to practice the standard."¹³¹ Therefore, Rambus's JEDEC representatives' personal and subjective beliefs about whether the SDRAM standard likely infringed Rambus's patent claims *were irrelevant* to Rambus's duty to disclose.¹³² Rather, the majority cited Rambus's claim that it did not have an issued or pending undisclosed patent claim that any JEDEC member would have had to license to practice the standard.¹³³ The court also made an independent assessment that substantial evidence did not exist to support a finding that the Rambus patent applications at issue had claims that "read on" the SDRAM standard or that "reasonably would be needed to practice the SDRAM standard."¹³⁴ In essence, the court held that there was no duty to disclose during Rambus's SDO participation because years later Rambus disclaimed the right to a license for any undisclosed patent claim and a court confirmed that there were no necessary claims.

Under the majority's articulation of such a purely objective standard, it is difficult to see when an SDO member's duty to disclose would ever be triggered. The dissent understandably criticized this key aspect of the majority opinion.¹³⁵ It concluded:

> [T]he majority's restatement of the JEDEC policy might prove impossibly complex. The majority's application of its rule arguably requires a *Markman* claim construction, application of the doctrine of equivalents, a *Festo* analysis, and perhaps even a *Johnson & Johnston* analysis before anyone can say for sure whether a claim reads on a standard. As a result, an action for fraud will become more a federal patent case than a case arising under state law.¹³⁶

In defense of its position, the majority pointed out an opposite, significant problem that could arise if a purely subjective belief standard applied: "[T]he standard would exempt a member from disclosure if it

^{131.} Id. at 1100. The court stated:

The JEDEC policy, though vague, does not create a duty premised on subjective beliefs. JEDEC's disclosure duty erects an objective standard.... A member's subjective beliefs, hopes, and desires are irelevant. Hence, Rambus's mistaken belief that it had pending claims covering the standard does not substitute for the proof required by the objective patent policy.

Id. at 1104.

^{132.} See id.

^{133.} See id.

^{134.} *Id*.

^{135.} *See id*. at 1117 n.16 (Prost, J., dissenting) ("Rambus's statements that it believed it had pending claims covering the SDRAM standard is evidence that Rambus did in fact have claims covering the SDRAM standard").

^{136.} Id. at 1118 (Prost, J., dissenting).

truly, but unreasonably, believes its claims do not cover the standard." 137

In actuality, the optimal knowledge standard for the ongoing disclosure obligation lies somewhere in the middle. Under this rule, a member's disclosure obligation is based on the personal and actual knowledge of its representative who participates in the SDO working group that is developing the draft standard. Thus, when a member's representative becomes aware of patents or patent applications that he or she believes contain necessary claims, the member must disclose the patent or patent application containing the necessary claims.¹³⁸

Although it is possible to stop here — and in fact many existing SDO policies do — a purely subjective knowledge standard does have the shortcoming noted by the *Rambus II* majority.¹³⁹ This concern would be most pronounced if an SDO member created an artificial barrier around its SDO representative to keep him or her blissfully ignorant of the member's necessary claims and thereby avoided triggering any disclosure obligation. To address this concern, the SDO's patent disclosure provisions should expressly prohibit a member from intentionally isolating or shielding its representative from its patent information to avoid its disclosure obligation. This important caveat to the personal knowledge standard is spelled out in the Internet Engineering Task Force's ('IETF'') recently revised IPR policy, which imposes a disclosure obligation based on the "reasonable and personal knowledge" of all IETF participants:

Id. (citation omitted).

^{137.} Id. at 1104.

^{138.} See *supra* note 3 for the definition of a necessary claim. It is important that this disclosure obligation and any associated licensing obligation be tied to the particular working groups of the SDO in which the member actually participated. This will encourage more members to join and participate in the SDO's standards activities because they will be able to comply with the SDO's disclosure and licensing obligations without expending an enormous amount of resources or incurring a significant risk of non-compliance for unrelated standards. It also satisfies the key objective of the SDO, which is to require early disclosure of potentially essential technology by those parties that likely have the greatest knowledge of the technology, i.e., those members of the workin g group developing the standard. *See also infra* note 154 (regarding the equally important narrowing of the review period participation requirement to those members who actually participated in the working group that developed the standard under review).

^{139.} See Rambus II, 318 F.3d at 1104. In this regard, note that one of the arguments Rambus has put forth for its lack of a duty to disclose is that its representative in JEDEC, Richard Crisp, did not have personal knowledge about Rambus's necessary patent claims. See, e.g., Post-Trial Reply Brief of Respondent Rambus Inc. at 46, *In re* Rambus, Inc. (F.T.C. Sept. 29, 2003) (No. 9302), *at* http://www.ftc.gov/os/adjpro/d9302/030929rptrb.pdf. Rambus wrote:

As Rambus has repeatedly noted, Complaint Counsel have failed to show that Mr. Crisp had any such actual knowledge, and evidence of Mr. Crisp's state of mind does not remedy this deficiency. Mr. Crisp did not believe that Rambus had claims in patents or patent applications that it was required to disclose and . . . his belief was correct.

"Reasonably and personally known": means something an individual knows personally or, because of the job the individual holds, would reasonably be expected to know. *This wording is used to indicate that an organization cannot purposely keep an individual in the dark about patents or patent applications just to avoid the disclosure requirement.* But this requirement should not be interpreted as requiring the IETF Contributor or participant (or his or her represented organization, if any) to perform a patent search to find applicable IPR.¹⁴⁰

The sample patent disclosure provisions set out in the Appendix include language similar to the italicized language in the above quote. This qualification of the actual and personal knowledge standard is not perfect, but it provides a balanced approach that should help mitigate the *Rambus II* majority's concern about a purely subjective knowledge standard.

At the same time, it is important to make clear, as the sample model disclosure provisions in the Appendix do, that no collective or aggregate knowledge of the member or its employees regarding patent information will be imputed to its representative. Also, there is no obligation on any representative or member to perform a patent search or other search of intellectual property portfolios to comply with the disclosure obligation.

If disclosure were based on the collective knowledge of the member companies, patent searches could become a de facto requirement. As a practical matter, many companies would find such an affirmative duty to identify all potentially applicable patents virtually impossible to fulfill. As ANSI has observed:

> Many U.S. participants, at any given moment, have literally hundreds of employees participating in as many standards development activities and in excess of 10,000 patents in their intellectual property portfolio. Patent searches are expensive, time-consuming and not dispositive. They also require a potentially

^{140.} IETF, *supra* note 115, §1(1); *see also* OASIS, POLICY ON INTELLECTUAL PROPERTY RIGHTS § 3.1, *at* http://www.oasis-open.org/who/intellectualproperty.php (last visited Feb. 23, 2004). OASIS's policy stated:

The contributor represents that he has disclosed the existence of any proprietary or intellectual property rights in the contribution that are reasonably and personally known to the contributor. The contributor does not represent that he personally knows of all potentially pertinent proprietary and intellectual property rights owned or claimed by the organization he represents (if any) or third parties.

complex legal analysis in addition to a technical one. Often the implication of a specific patent in connection with a particular standard is not easy to determine or evaluate. This problem is exacerbated by the fact that the standard under development usually is evolving and its technical specifications are subject to change up until the final consensus ballot.¹⁴¹

By focusing on what the members' individual representatives know (with the caveat that members cannot isolate or shield their representatives), expressly disavowing the imputation of collective corporate knowledge to a representative, and rejecting a patent search obligation, the proposed standard minimizes the costs and burdens of a disclosure obligation while maximizing early disclosure of important patent information. Therefore, it also answers the concern discussed in the previous section that parties will be discouraged from participating in the SDO.¹⁴²

The individual representative focus of this knowledge standard makes it difficult for SDO members to object to the disclosure obligation. Such an objection would be tantamount to saying that even though an individual representative is aware of potential necessary claims owned or controlled by its member, the individual could conceal this important information indefinitely. Indeed, under an "encouragement-type" patent policy, such an informed individual could theoretically participate in the technical working group's entire standard development effort until the very end, helping to steer the focus of the effort while concealing necessary claims. The representative could then withdraw at the last minute, thereby cutting off any licensing obligation that might otherwise have accrued. If anything should cause SDOs and their members concern, this potential loophole is among the most glaring.

4. The Timing of Disclosure

The timing of disclosure is critical to efficient standards development. As ANSI has aptly stated:

^{141.} ANSI Ottawa Statement, supra note 105, at 8-9 (cit ation omitted).

^{142.} The ongoing patent disclosure obligation triggered by the knowledge standard discussed above thus has the primary goal of informing the working group as early as possible that potential patent issues may exist so that technical work-arounds (where practical) may be considered. At the very least, such early disclosure will inform the working group that there may be licensing issues and fees associated with certain technologies. In contrast, the review period disclosure obligation discussed below, which is not limited to the personal knowledge standard of the member's representatives, has the primary purpose of allowing limited exclusions from the default RAND licensing obligation for a member's non-contributed necessary claims.

Experience has indicated that early disclosure of patents is likely to enhance the efficiency of the process used to finalize and approve standards. Early disclosure permits notice of the patent to the standards developer and ANSI in a timely manner, provides participants the greatest opportunity to evaluate the propriety of standardizing the patented technology, and allows patent holders and prospective licensees ample time to negotiate the terms and conditions of licenses outside the standards development process itself.¹⁴³

For this reason, the disclosure obligation should be an ongoing obligation that applies to all working group members throughout the standards development process. However, various patent policies differ on the precise timing of when the actual disclosure statement must be submitted to the SDO. Some require disclosure when any member makes a technical contribution to the standard, but others require disclosure when a draft standard is first published.¹⁴⁴ The most straightforward requirement, which also appears to work best with the knowledge standard discussed above, mandates submission of disclosure statements as soon as a member's individual representative becomes aware of patents or patent applications that he or she believes contain necessary claims covering the draft standard under consideration.¹⁴⁵

Finally, the timing provision should also address withdrawal. Most SDO patent policies allow members and representatives to withdraw from particular working groups or from the SDO as a whole. They typically provide that withdrawing members can avoid patent licensing obligations for their non-contributed necessary claims. However, a problem arises for the working group if a representative knows about his or her member's (or its affiliates') non-contributed necessary claims, but the member fails to disclose them before withdrawal. The final standard may still include the technology that would infringe on the withdrawing member's patent claims, but the member may believe that its withdrawal cut off not only its licensing obliga-

^{143.} See ANSI, supra note 114, § III(A).

^{144.} The recent revisions to the IETF patent policy, for example, take this approach. *See* IETF, *supra* note 115, § 6.2.

^{145.} Note that although the disclosure obligation and the timing of disclosure is based on the knowledge of the individual representative, it is often the case that the actual disclosure statement to the SDO is submitted by someone in the member organization other than the individual representative in the working group (e.g., an attorney in the member organization's licensing division). This is purely an administrative decision and does not change the fact that the trigger for submission is tied to the knowledge of the individual SDO representative.

tion but also its obligation to disclose known necessary claims. To avoid this potential controversy, the SDO's patent policy should make clear that a member must disclose prior to withdrawal any necessary claims (including non-contributed necessary claims) personally known to its representative.¹⁴⁶

However, once the review period for a final draft standard commences, a withdrawing member should be subject to a heightened knowledge standard that goes beyond the personal knowledge of the member's representatives. This heightened standard requires discbsure of all of the non-contributed necessary claims that the member does not wish to license to all implementers on a compensation-free basis with otherwise RAND terms and conditions, not just those claims that are personally known. This feature of the patent disclosure policy is discussed below.

5. Minimum Contents of Disclosure

Precisely what a member must include in its disclosure statement to the SDO is also subject to debate. For example, should the disclosure be limited to issued patents, or should patent applications (both published and unpublished) be covered as well? If the latter is included, should the same minimum contents be disclosed, such as patent, publication, or application number, or should a different minimum standard apply?

Disclosure of patent applications — particularly unpublished applications — is an especially difficult and sensitive issue. This is because at odds with the SDO's desire to know about all technology that potentially would be infringed by a proposed standard are two very legitimate competing concerns. First, the patent claims within a patent application can change throughout the patent process, so the claims in the issued patent may look quite different from the ones initially set out in the original application. Second, the patent applicant under the United States system wants to safeguard the confidential nature of unpublished patent applications at least until they are first published.¹⁴⁷

The former concern suggests that any minimum contents disclosure policy should require disclosure only of the patent application,

^{146.} In the case of withdrawal from the SDO, the members' disclosure should only be required for those standards being developed by working groups in which the members' individual representatives actually participated.

^{147.} In most countries, patent applications are published eighteen months after they are filed, but in the United States, publication prior to the patent's issuing can be avoided as long as the applicant does not also file or plan to file related applications outside the United States. *See* 35 U.S.C. § 122(b)(2)(B) (2004). Therefore, if the application is not published and a patent never issues, the applicant will not have to disclose his or her invention to the public.

not of the patent claims themselves. It also may mean that under the "as soon as reasonably possible" timing requirement discussed above, an SDO member may not reasonably be able to disclose a patent application because the claims contained in the application do not yet overlap the working group's draft technical standard.¹⁴⁸

The latter concern strongly suggests, if not demands, that a different minimum contents standard should apply to unpublished patent applications. Otherwise, disclosure of an application number or contents for an unpublished patent application could compromise the patent applicant's valid interest in maintaining confidentiality. For these reasons, the sample model disclosure policy set out in the Appendix requires the following minimum contents in patent disclosures:

- <u>Issued patents and published patent applications</u>. Disclosure statements must include, at a minimum (1) the name of the patent rights holder/applicant, (2) contact information for license application (if the patent rights holder is either required or willing to license), (3) the patent number or application number, and (4) the draft standard to which the disclosure relates. The disclosure need not include any specific patent claims or other contents of the issued or published patent application.
- <u>Unpublished patent applications</u>. Disclosure statements must include, at a minimum (1) the name of the patent rights holder/applicant, (2) contact information for license applic ation (if the patent rights holder is either required or willing to license), (3) the fact that an application exists containing the asserted necessary claims, and (4) the draft standard to which the disclosure relates. The disclosure need not include any identifying information (e.g., application number, patent claims, other contents, or relevant portion of the standard).¹⁴⁹

^{148.} The converse is also true. Sometimes a draft standard will not overlap with an existing patent or patent application until the draft standard is further along in its life cycle. In any event, as noted, it is the point at which the member's individual representative personally knows of the patent or patent application and believes that the member's necessary claims overlap the standard that the member's duty to disclose would arise. *See also* In the Matter of Rambus, Inc., 2004 FTC LEXIS 17, at *356 (F.T.C. Feb. 23, 2004) ("As an economic matter it is disputed whether the optimal time for disclosure of information regarding patent interests is as early in the standardization process as possible Depending on the costs and benefits, later disclosure may be optimal." (citations omitted)).

^{149.} The SDO or the working group chair can also request that the member update its disclosure if circumstances warrant (e.g., if the member previously disclosed an unpublished patent application, and the SDO, nearing finalization of the standard, would like to know if the application has been published or the patent issued). *See* W3C, *supra* note 107, §§ 6.5–6.6; IETF, *supra* note 115, § 6.4 (discriminating between the minimum contents of disclosure for unpublished patent applications and issued patents/published patent applications).

The working group faces a difficult situation if the member discloses the existence of an unpublished application but then declares its intention not to license the necessary claims contained in the applic ation.¹⁵⁰ Because the SDO will be without the information necessary to locate and review the respective patent rights, it will not be able to determine whether a workaround is possible. To address this scenario, the sample model disclosure policy adds another requirement for unpublished patent applications. If a member is unwilling to license its non-contributed necessary claims on at least RAND terms and conditions, the member must also identify the portions of the draft standard on which the asserted non-contributed necessary claims of the unpublished patent application read.¹⁵¹ Although this additional requirement will continue to safeguard the confidentiality of the unpublished patent claims, it will hopefully also afford the working group sufficient additional information to allow it to determine what aspects of the draft standard need to be modified to avoid possible infringement.¹⁵²

6. Review Period

As a draft standard nears the end of its life cycle and is about to be voted on for final adoption, it possibly will contain technology that

Id.

^{150.} In the sample model patent disclosure policy, this would be possible only for a member's non-contributed necessary claims because all of the necessary claims contributed by the member or its affiliate would be subject to the RAND licensing obligation of the policy. *See supra* note 3 for the definition of a non-contributed necessary claim.

^{151.} See W3C, supra note 107, §§ 6.5-6.6. W3C's policy stated:

In the case of laid-open or published applications, the Member's good faith disclosure obligation extends to unpublished amended and/or added claims that have been allowed by relevant legal authorities and that the Member believes to be Essential Claims. To satisfy the disclosure obligation for such claims, the Member shall either: 1) disclose such claims, or 2) identify those portions of the W3C specification likely to be covered by such claims.

^{152.} The SDO should require that along with the disclosure statement (or as soon as reasonable possible thereafter), the patent rights holder must submit a "licensing declaration" by which the patent rights holder indicates under what broad terms it will license its necessary claims to implementers of the SDO's standard. Possibilities include: (1) no license required for implementers of the standard; (2) on a compensation-free basis and under other RAND terms and conditions; (3) under RAND terms and conditions, including a reasonable royalty/fee; and (4) no license will be made available. The sample model disclosure provisions in the Appendix contain provisions regarding licensing declaration. This paragraph discusses what happens when a party chooses option No. 4.

The SDO should also establish some mechanism for storing and making publicly available all patent disclosures and licensing declarations relating to its standards, such as through a web-based search engine. This will allow all parties, including potential implementers, to determine easily which patents cover each SDO standard and which licenses may be required to implement certain standards. *See, e.g.*, INT'L TELECOMM. UNION, *supra* note 115 (containing links to patent databases), *at* http://www.itu.int/ITU-T/dbase/patent/ index.html (last updat ed Jan. 13, 2004).

would necessarily infringe the patent claims of three key types of entities:

1. An SDO member (member A) that contributed its patented technology to the draft standard.

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- 2. An SDO member (member B) that did not make a contribution but whose patented technology is nonetheless included in the draft standard because another member (member C), whether unwittingly or knowingly, contributed the patented technology of member B to the standard.
- 3. Individuals/entities that are not members of the SDO and that have not participated in the standard development effort ("non-members") but whose patented technology was contributed to the standard by an SDO member.

Regarding category 1, the SDO's patent policy will typically require licensing on at least RAND terms of any of member A's necessary claims, as illustrated in the sample provisions in the Appendix. Regarding category 3, there is little the SDO can do to require these individuals/entities to disclose or to license their necessary claims to implementers of the SDO's final standard. Typically, however, since implementation licenses will generally include a provision requiring a reciprocal patent license grant, this scenario is not an additional bar to widespread adoption of the standard as long as the non-members are also implementers of the standard. Nevertheless, SDOs need some additional mechanism to afford member B (in category 2) an opportunity to determine whether or not it will license its "non-contributed necessary claims" to implementers. The "review period" provides just such a mechanism.

The review period is an attempt to balance competing interests. The member Bs of the world desire a reasonable opportunity to avoid a default obligation to license their non-contributed necessary claims. On the other hand, the SDO and potential implementers want to ensure that any patented technology included in the SDO's standards will be licensed on at least RAND terms to the greatest extent possible.

During this specified period of at least sixty days, all members that participated in the development of the standard must review the final draft standard.¹⁵³ Pursuant to the ongoing disclosure obligation discussed above, they must also disclose any of their non-contributed necessary claims that they are unwilling to license to all implementers

^{153.} A period of this minimal length is required to afford companies, particularly those with extensive patent portfolios, sufficient time to perform the internal due diligence to assess whether the draft standard contains material that the company did not itself contribute but that non etheless reads on the company's necessary claims.

on a compensation-free basis under RAND terms and conditions. If a member discloses a non-contributed necessary claim that it does not wish to license on at least RAND terms and conditions to all implementers of the standard, the member must withdraw prior to the end of the review period in order to avoid this RAND licensing commitment. Any of the member's non-contributed necessary claims that are not disclosed prior to the end of the review period will be subject to the default RAND licensing commitment.

It is important to note, however, that the review period's higher disclosure obligation will implicate patents that are beyond the "personal knowledge of the member's representative" threshold. Rather, it requires disclosure of all of the member's non-contributed necessary claims that cover the standard under review unless the member is willing to license on compensation-free and otherwise RAND terms (in accordance with the optional disclosure exemption discussed below).

This higher disclosure standard is justifiable with respect to the review period because the only antities required to participate in the review period (and thus potentially become subject to the default licensing obligation for non-contributed necessary claims) are those members that participated in the working group and therefore had a significant ability to affect the scope and direction of the standard.¹⁵⁴ Second, the review period occurs at the end of the standard development effort, so the member's IPR due diligence should be less onerous because the standard is, in SDO parlance, "fully baked," purporting to be a complete description of a working solution.

^{154.} In multi-standard SDOs, it will be especially important to make the limited scope of this participation requirement well known. Otherwise, parties may be strongly discouraged from joining a multi-standard SDO out of a concern that they would have to commit enormous funds and resources to participate in every review period to avoid a default licensing obligation for all of the SDO's standards. Although other members beyond the working group members may elect to participate in the review period, they should recognize that their participation in the review period will subject them to a RAND licensing obligation for any of their non-contributed necessary claims covered by the standard. By contrast, if members that did not participate in the working group refrain from participating in the review period, no such default licensing obligation would arise under the policy for their non-contributed necessary claims.

One possible exception to the above is worth noting. In some SDOs, a governing group, often comprised of select SDO member organizations, is responsible for approving a standard for adoption even though some of the governing organizations did not actually participate in the standard development effort. Although these organizations would be subject to the ongoing disclosure obligation discussed in Section III.B.1 for any necessary claims personally known to such organizations' individual representatives, they would not be obligated to participate in the review period or to disclose their necessary claims under the elevated disclosure standard that applies during that period. This Article and the specific provisions in the Appendix below take no position on whether subjecting such organizations to the higher disclosure standard is warranted to ensure no conflict of interest, but SDOs should consider on a case-by-case basis whether it is appropriate to apply the review period provisions to such organizations if the SDO utilizes a governing group.

7. Possible Optional Exemption from Patent Disclosure Obligations for SDO Members Committing to Royalty-Free License

The disclosure obligations discussed above are predicated on the notion that it is important for the SDO's working group to know about potentially essential patented technology as soon as possible so that it can determine whether to continue as is or whether it should instead develop a work-around to avoid infringing the essential patent. This knowledge is particularly important when the patent rights holder has refused to commit to license its necessary claims or has failed to make a RAND licensing commitment, meaning that implementers may have to pay royalties or other fees.

However, if the patent rights holder is willing to grant compensation-free and otherwise RAND licenses for its necessary claims to all implementers of the standard, it becomes less important for the patent rights holder to disclose its necessary claims. In this case, the working group and the SDO do not need to be as concerned that a license will not be granted at all or that a royalty or other fee imposed by the patent rights holder could negatively impact the broad adoption and dissemination of the standard. Therefore, the model provisions in the Appendix contain an optional exemption from the ongoing disclosure obligation. The SDO may offer this exemption for any necessary claim that the member commits to license to all implementers of the standard on a compensation-free and otherwise RAND basis.¹⁵⁵ Similarly, the disclosure obligation in the review period would apply only for those non-contributed necessary claims that the member is unwilling to license to all implementers on compensation-free and otherwise RAND terms and conditions.

8. Enhancing the Enforceability of an SDO's IPR Policy by Making Assent to the Policy a Condition of Membership and/or Partic ipation

All of the foregoing provisions and the sample model language set out below will have legal significance only if the SDO undertakes measures to ensure that they are enforceable against its members. Because IPR policies are agreements by members of the SDO to abide by certain rules regarding intellectual property ownership, their enforceability is initially a question of contract law. Ideally, SDOs

^{155.} Certain SDO patent policies already contain such an exemption. *See, e.g.*, W3C, *supra* note 107, §6.2. The working group and the SDO may prefer timely disclosures of all necessary claims — even those for which no fee will be charged — because the goal of the model disclosure provisions is to achieve a balance of the various interests involved. However, a limited disclosure exemption is a better approach because the patent rights holder receives a benefit (the cost savings associated with avoiding an ongoing disclosure obligation) in exchange for a sacrifice (giving up the right to charge implementers a fee for use of its essential technology).

would require members to sign a contract committing them to comply with the IPR policy.¹⁵⁶ For example, an SDO could include in its membership application a prominent sentence (perhaps highlighted in bold and/or distinctive typeface) stating the following:

All members of [SDO] are required to review and comply with [SDO's] <u>Intellectual Property Rights</u> ("IPR") Policy, its <u>Bylaws</u>, and all other [SDO] policies and to ensure that their representatives do so as well. By signing this Membership Application, the signatory indicates that it has read and agrees that the member, its affiliates, and its representatives shall be bound by the [SDO]'s <u>IPR Policy</u>, <u>Bylaws</u>, and all other established [SDO] policies as they existed on the date of member's execution of this Membership Application.¹⁵⁷ [Insert hyperlinks to the actual IPR Policy, Bylaws, and any other listed policies for all underlined terms.]

Beyond this formal agreement, it is also a good idea for the SDO to publicize periodically to all of its members (as well as to nonmembers that may eventually join or participate in the SDO) the fact that they are bound by the SDO's IPR policy and to inform them how they can obtain a copy of this policy. For example, many SDOs have the chairs of their technical working groups perform this periodic notice/reminder function.¹⁵⁸ All of these efforts simply make it more likely that the terms of the SDO's IPR policy will be held to be enforceable against a member or participant should a dispute ever arise.

Of course, there are some SDOs that do not have a formal membership application process and do not otherwise require their partic ipants to execute any agreement in order to participate. The IETF is a good example of this type of SDO.¹⁵⁹ Although ensuring the enforceability of the SDO's IPR policy in this type of organization is certainly achievable, it is more difficult. It is even more critical in these organizations that all current and future participants, including invited

^{156.} See Lemley, supra note 4, at 1910.

^{157.} If the SDO has other established policies, such as a trademark or logo use policy not included in its IPR policy, it should list these policies (and provide a hyperlink to them).

^{158.} See, e.g., ADVANCED AUTHORING FORMAT ASS'N, INC., *supra* note 86, § 4.1 ("All chairpersons of AAFA Groups shall remind participants of this ongoing disclosure duty at the beginning of each AAFA Group meeting and shall provide a copy of this Policy to any requesting party."). The sample model language in the Appendix includes a reference to such periodic reminders by working group chairs

^{159.} See IETF, PARTICIPATING IN THE EFFORTS OF THE IETF, at http://www.ietf.org/ join.html ("To become a participant in the IETF, one merely becomes active in one or more working groups by asking to be added to the WG's mailing list.") (last visited Mar. 16, 2004).

experts, are afforded adequate notice of the SDO's IPR policy and are informed of the fact that their participation in the SDO constitutes their assent to the terms of this policy. It is for these reasons, for example, that the IETF has developed its "Note Well" statement, which is prominently displayed on IETF public ations.¹⁶⁰

IV. CONCLUSION

The *Rambus* litigation, particularly the Federal Circuit's decision and the ALJ's recent decision, makes clear that SDOs need to reexamine their patent policies, particularly focusing on their key patent disclosure provisions. SDOs must ensure that all members have a clear sense of their obligations and responsibilities to the SDO and to other members. Also, courts and regulators should be able, if called upon, to understand and apply the SDO's patent disclosure provisions to determine whether any improper, fraudulent, or anticompetitive behavior has occurred and should be penalized.

This Article has identified certain core elements that an SDO's patent disclosure policy should address. The sample policy provisions attempt to balance encouragement of participation in and contributions to the SDO with promotion of widespread adoption and dissemination of an SDO's standards. Hopefully, more SDOs will begin to incorporate similar provisions into their overall IPR policies. This will create more accessible rules of engagement for SDO participants, deter efforts to game the system, facilitate a more open and fair standards development process, and maximize the ability of injured parties, the courts, and federal agencies to prosecute successfully SDO participants who breach their clear patent disclosure obligations.

^{160.} See IETF, NOTE WELL STATEMENT, at http://www.ietf.org/ipr.html (last visited Feb. 16, 2004); IETF, IETF IPR CHARTER (Dec. 15, 2003) ("The IETF IPR policy, as embedded, in RFC 2026 section 10, has proven fairly successful. At the same time, a perceived lack of textual clarity on some issues have [sic] made necessary the publication of clarifications such as the 'note well' statement issued in every registration package"), at http://www.ietf.org/html.charters/ipr-charter.html

APPENDIX

SAMPLE MODEL LANGUAGE FOR AN SDO'S PATENT DISCLOSURE POLICY¹⁶¹

Note: All capitalized terms should be defined terms in the SDO's Policy.

Section 1

1.1 Patent Disclosure Obligation.

1.1.1 <u>Ongoing Duty to Disclose</u>. All Members that Partic ipate in a particular Working Group or Standard development process shall have an ongoing obligation to disclose certain patent rights held by themselves or their Affiliates. Specifically, if, based on the knowledge standard specified in Section 1.2, the individual representing a Member ("Representative") knows of a qualifying patent or patent application,

^{161.} The provisions below are not intended to comprise the entirety of an SDO's patent policy. For example, key definitions like "Affiliate," "Contribution," "Member," "Necessary Claims," "Specification," "Standard," etc., are not covered. Other important items not included are the general patent license provisions, disclaimer provisions, withdrawal and survival provisions, provisions regarding the confidential or non-confidential treatment of SDO materials/discussions, and limitation of liability provisions. Rather, the intent is to cover the core elements of the patent disclosure policy and certain other provisions that are integrally related to it (such as the patent licensing declaration provisions). This approach highlights the focus on the patent disclosure provisions but also acknowledges that key definitions and other non-disclosure-related provisions could very well differ among SDOs. By contrast, patent disclosure provisions can be made more consistent across various SDOs. Therefore, these provisions do not address, for example, whether both oral and written stat ements should be treated as "Contributions," whether certain elements should be excluded from the definition of "Necessary Claims" based on the nature of the standards being developed, or whether only certain types of Members are eligible to make a Contribution. For helpful models of these definitions and other provisions not covered here, see, for example, WI-FI ALLIANCE, WI-FI ALLIANCE INTELLECTUAL PROPERTY RIGHTS POLICY, at http://www.weca.net/OpenSection/pdf/Wi-Fi_IPR.pdf (last visited Feb. 16, 2004); AD-VANCED AUTHORING FORMAT ASS'N, INC., supra note 86.

As noted previously, the key disclosure and licensing obligations of an SDO's patent policy should be narrowly tailored to the specific working groups in which a member actually "participates." Accordingly, the term "Participate" should likely be defined by, and used throughout, the SDO's policy to highlight this focus. One possible definition, which is modeled after the Wi-Fi policy definition, states: "Participates' ... with respect to a Working Group, shall mean that a Member: (1) joins or joined the Working Group as a participant, (2) makes a Contribution to the Working Group, or (3) attends or attended three or more meetings of the Working Group, whether in person or by telephone." *See id*. Art. 1(f) (this subsection permits attendance as a passive monitor for up to two meetings). Of course, if the SDO is developing only a *single* standard, then the SDO's policy could make clear that all Members will be deemed to participate in all standards efforts for purposes of applying the disclosure and licensing obligations of the policy.

the Member or the Representative must disclose the patent or patent application, in writing, to [Fill in relevant SDO Contact]. To reiterate: although the ongoing disclosure obligation under this Section 1.1 applies directly to all Members, this obligation is triggered based on the knowledge of the Member's Representative(s), as specified in Section 1.2. All chairpersons of [Fill in SDO Name] Working Groups shall remind participants of this disclosure obligation at the beginning of each Working Group meeting and shall provide a copy of this Policy to any requesting party.

- 1.1.2 [Possible Optional] Disclosure Exemption. The disclosure obligation in Section 1.1.1 is deemed satisfied and no disclosure is necessary if the holder of the claim commits to license the claim on a compensation-free and otherwise Reasonable and Nondiscriminatory ("RAND") basis to all Standard implementers.
- 1.2 <u>Knowledge Standard Triggering Ongoing Disclosure Obliga-</u> tion; No Patent Searches Required.
 - 1.2.1 Actual and Personal Knowledge of the Member's Representative. The Member's ongoing disclosure obligation under Section 1.1 is triggered when the Member's Representative actually and personally knows about a patent or patent application that he or she believes contains Necessary Claims covering a draft Standard and that is owned or controlled by the Representative, the Member he or she represents, or an Affiliate. No collective or aggregate knowledge of the Member, its Affiliates, or employees on whose behalf the Representative is acting will be imputed to such Representative. However, a Member is prohibited from intentionally isolating a Representative from potentially relevant patent information within the Member or Affiliate organization to avoid the disclosure obligation set forth in Section 1.1.
 - 1.2.2 <u>No Patent Searches Required</u>. Nothing in this Section or in this Policy imposes any duty or obligation on any Representative or Member to perform a patent search or other search of intellectual property portfolios or

any analysis of the relationship between the draft Standard in question and the patents or patent applications that the Member or its Affiliates may hold.

- 1.3 <u>Minimum Contents of Disclosure</u>. The following minimum contents are required for any disclosure made pursuant to Section 1.1 or Section 1.7:
 - 1.3.1 <u>Issued Patents and Published Patent Applications</u>. With respect to issued patents and published patent applications that are subject to the Section 1.1 or Section 1.7 disclosure obligation, the Member must disclose at a minimum: (1) the name of the patent rights holder/applicant, (2) contact information for license application (if the patent rights holder is either required or willing to license), (3) the patent number or application number, and (4) the draft Standard to which the disclosure relates. The disclosure need not contain or describe any specific patent claims or other contents of the issued or published patent application.
 - Unpublished Patent Applications. With respect to un-1.3.2 published patent applications that are subject to the Section 1.1 or Section 1.7 disclosure obligation, the Member must disclose at a minimum: (1) the name of the patent rights holder/applicant, (2) contact information for license application (if the patent rights holder is either required or willing to license), (3) the fact that an application exists containing the asserted Necessary Claims, and (4) the draft Standard to which the disclosure relates. The disclosure need not contain or describe any other identifying information about the unpublished patent application (e.g., application number, patent claims, relevant portion of the draft Standard, etc.). However, if the patent rights holder is unwilling to license a Non-Contributed Necessary Claim contained in an unpublished patent application to all implementers of the Standard on at least RAND terms and conditions,¹⁶² then the Member's disclosure statement must also identify the portions of the draft Standard on which the asserted Non-Contributed Necessary Claim reads.

^{162.} As noted above, the "no license" option will be available to a member only with respect to non-contributed necessary claims because the SDO's policy will require members to license all of their contributed necessary claims on at least RAND terms and conditions.

Updating Disclosures for Patent Applications. If a dis-1.3.3 closure was made on the basis of a patent application (either published or unpublished), then the [Fill in appropriate SDO contact] or Working Group chairperson may inquire at any time thereafter whether any of the following has occurred: the publication of a previously unpublished patent application, the abandonment of the patent application, or the issuance of a patent. If the Member's response to such an inquiry is that the patent application has been published or the patent has issued, then the Member must submit a new disclosure that includes the application number or patent number. If the Member's response to such an inquiry is that the patent application was abandoned, then the Member must explicitly withdraw any earlier disclosures based on the abandoned application.

> Nothing herein precludes broader disclosure of unpublished patent applications on a voluntary basis or pursuant to a non-disclosure agreement.

- 1.3.4 <u>Disclosures in Writing</u>. Disclosure statements must be in writing and must be sent to [Fill in appropriate SDO contact, mailing list, instructions for filling out SDO's patent disclosure and licensing declaration template/web form (if any), etc.].
- 1.4 <u>Timing of Disclosure</u>. The disclosure obligation set out in Section 1.1 is an ongoing obligation that begins when the Member first Participates in a [Fill in SDO Name] Working Group or Standard development effort.¹⁶³ The disclosure of patents or patent applications under Section 1.1 must be made as soon as reasonably possible after the Member's Representative becomes aware of them based on the knowledge standard in Section 1.2. In all events, the disclosure must occur prior to the Member's withdrawal from [Fill in SDO Name] or from a particular Working Group developing the draft Standard at issue.
- 1.5 Licensing Declarations.
 - 1.5.1 <u>Selection of Licensing Option</u>. At the same time as or within a week after a disclosure of Necessary Claims

^{163.} As noted, in smaller SDOs, the SDO may not have separate working groups. In such cases, the policy should make clear that the member's ongoing disclosure obligation begins upon the SDO's acceptance of the member's application for membership in the SDO.

is made, the Member (or patent rights holder) shall also submit to [Fill in appropriate SDO contact] a written statement selecting one of the following licensing options for the disclosed Necessary Claims. If submission within a week is not feasible, the Member must make its decision as soon as possible thereafter but in all events prior to the end of the review period.

- 1.5.1.1 <u>No License Required for Implementers</u>. The Member (and its Affiliates) will not require parties to sign any license for such Necessary Claims to make, have made, use, import, offer to sell, sell, lease, and otherwise distribute or dispose of compliant implementations of the Standard covered by the disclosed Necessary Claims; or
- 1.5.1.2 Compensation-Free, Reasonable and Nondiscriminatory License to All Implementers. The Member is willing, upon request, to grant and to cause its Affiliates to grant, pursuant to Section [Insert relevant patent license section of this Policy], a license for the disclosed Necessary Claims to all persons to make, have made, use, import, offer to sell, sell, lease, and otherwise distribute or dispose of compliant implementations of the Standard covered by such Necessary Claims without a requirement for monetary compensation (i.e., no royalty or other fee) and under other RAND terms and conditions: or
- 1.5.1.3 Reasonable and Nondiscriminatory License to All Implementers with Possible Royalty/Fee. The Member is willing, upon request, to grant and to cause its Affiliates to grant, pursuant to Section [Insert relevant patent license section of this Policy], a license for the disclosed Necessary Claims to all persons to make, have made, use, import, offer to sell, sell, lease, and otherwise distribute or dispose of compliant implementations of the Standard covered by the disclosed Necessary Claims under RAND

terms and conditions, which may include a reasonable royalty/fee; or

- 1.5.1.4 Unwilling to Commit to Any of the Above Provisions. The Member is unwilling to commit to the assurances in any of the provisions of Section 1.5.1.1, 1.5.1.2, or 1.5.1.3 for the disclosed Necessary Claims. This "no license" option is not available to a Member for any Necessary Claims that cover the Member's own (or its Affiliates') Contribution(s). It is available to a Member only for its (or its Affiliates') Necessary Claims that cover the Contribution(s) of another party or material otherwise included in the standard ("Non-Contributed Necessary Claims"). However, this option shall not be available for any Non-Contributed Necessary Claim unless the Member complies with both the heightened disclosure standard/obligation and the withdrawal requirement of Section 1.7.
- 1.5.2 Irrevocability of Licensing Declaration. Any declaration that selects the licensing option/commitment under Section 1.5.1.1, 1.5.1.2, or 1.5.1.3 is irrevocable. However, a Member that initially selected the option in Section 1.5.1.3 may later change its selection to the option in either Section 1.5.1.1 or Section 1.5.1.2 In addition, a Member that initially selected the option in Section 1.5.1.4 (if available) may later change its selection to the option to the option in any of Sections 1.5.1.1, 1.5.1.2, or 1.5.1.3.

x. <u>Member Avoidance of Licensing Obligations Due to Substantial</u>

Change in Technical Scope of Standard. Each Working Group must

^{164.} Notwithstanding this irrevocability provision, an SDO should also consider including a provision that allows a member to avoid its licensing obligations under the policy in those cases where the technical scope of a particular draft standard substantially changes from what was initially defined in the working group's charter. Such a provision will protect members from having to license their necessary claims for the implementation of a standard that looks very different from the standard that the member in itially thought it would have to support through the license of its necessary claims. Such a provision would also be helpful to the SDO because it would encourage greater participation in its working groups and would impose added discipline on the working groups to ensure that they remain faithful to the scope of the standard that they set out to develop, hopefully expediting the development process. A sample of a provision that the SDO might consider using for this purpose is set out below:

- 1.5.3 Continued Effect of Licensing Declaration Upon <u>Transfer of Underlying Patent</u>. Members shall not transfer patents containing Necessary Claims to circumvent the obligations of this Policy. It is expected that any declaration that selects the licensing option/commitment under Section 1.5.1.1, 1.5.1.2, or 1.5.1.3 will continue to be effective even if the underlying patents/patent applications containing the disclosed Necessary Claims are subsequently transferred to a different patent rights holder.
- 1.6 <u>Third-Party Patents</u>. Members have no obligation to disclose potentially relevant third-party patent rights, although such disclosure is encouraged. If any potentially relevant third-party patent rights of a Member or non-Member are disclosed, the relevant chairperson of the Working Group (or other person that is designated by [Fill in appropriate SDO entity, such as Board of Directors]) will attempt to have the third party confirm whether it has Necessary Claims and, if so, provide a licensing declaration under Section 1.5.1 for the Necessary Claims.
- 1.7 <u>Review Period; Disclosure of and Licensing Declaration for</u> <u>Certain Non-Contributed Necessary Claims</u>. After a Working Group has completed its work on a draft Standard but before the draft Standard is voted on and approved as a final Standard by [Fill in SDO name], Members shall review the draft Standard for any Necessary Claims. The [Fill in appropriate SDO entity, such as Board of Directors] will specify a starting date and an amount of time not less than sixty (60) calendar days during which the review must be completed. The review period shall be prominently announced on the [Fill in SDO name] website, and all Members (including those outside the Working Group that developed the draft Standard under review) shall be

at the outset of its work carefully define in a written charter the technical scope of its work and its expected output. If the final output of a particular Working Group differs substantially in technical scope from one documented at the time the Working Group commenced, then a Member (including a Member that has previously submitted its own Contribution to the Working Group) will have no obligations under Section [Insert relevant licensing obligation sections of this Policy] in connection with the Standard, provided that the Member withdraws promptly from the Working Group after first noticing the substantial change (and in all events prior to the end of the review period described in Section 1.7 for the draft Standard) and cites the substantial change in technical scope in its withdrawal notice. Disputes over how substantial the change in technical scope actually was will be resolved, if necessary, by the courts.

informed in writing (such as by e-mail) about the commencement of the review period. During the review period, all Members that Participated in the Working Group that developed the particular draft Standard under review (as well as other Members that voluntarily choose to take part in the review) shall:

- (1) Review the draft Standard;
- (2) Disclose, consistent with Section 1.3, any Non-Contributed Necessary Claim (not previously disclosed under Section 1.1) that covers the draft Standard and that the Member is not willing to deal with all implementers under the provisions of Sections 1.5.1.1 or 1.5.1.2; and
- (3) Submit a licensing declaration, pursuant to Section 1.5, for any Non-Contributed Necessary Claim disclosed under the previous paragraph. A Member that selects the "no license" option under Section 1.5.1.4 for any disclosed Non-Contributed Necessary Claim must withdraw from the Working Group or from [Fill in SDO name] prior to the end of the review period. However, a Member still must license Necessary Claims that cover its own (or its Affiliates') Contributions to all implementers on at least RAND terms and conditions as specified under Section 1.5.1.3.

If the Member declares its intention not to license certain of its Non-Contributed Necessary Claims pursuant to Section 1.5.1.4, the Working Group that developed the draft Standard will confer with [Fill in appropriate SDO entity] and determine how to proceed, such as by revising the draft Standard to work around the potentially blocking patent claims that the patent rights holder has declined to license to all implementers. The Working Group may need to take similar action if a party (such as a non-Member) alleged to have Necessary Claims refuses to indicate its commitment to license all implementers of the Standard under at least the provisions of Section 1.5.1.3. If, after the review period ends, a draft Standard is substantially modified, a subsequent review period shall be conducted under the terms of this section before the revised draft Standard is approved and published as a final Standard.

^{165.} An SDO may not want to require disclosure of non-contributed necessary claims here, as in the optional disclosure exemption of Section 1.1.2.

- 1.8 Default Licensing Commitment for Non-Contributed Necessary Claims Not Disclosed Prior to the End of the Review Period. Although there is no obligation on a Member to search its intellectual property portfolios, the RAND licensing provisions of Section 1.5.1.3 shall apply if a Member (including any Member that voluntarily took part in the review period) does not properly declare under Section 1.5.1.4 its intention not to license one or more of its (or its Affiliates') Non-Contributed Necessary Claims to the extent that the claims cover the Standard that [Fill in SDO name] ultimately approves and publishes ("Default Licensing Commitment"). This Default Licensing Commitment applies to all of a Member's (and its Affiliates') Non-Contributed Necessary Claims that cover the Standard ultimately resulting from the draft Standard for which the Member did not properly disclose and submit a "no license" declaration under Section 1.5.1.4. The Default Licensing Commitment applies even if the Member's Representative lacks Section 1.2.1 actual and personal knowledge.
- 1.9 <u>Termination of Disclosure Obligations</u>. The disclosure oblig ations specified under Section 1.1 and Section 1.7 terminate when:
 - (1) The Working Group that developed the draft Standard terminates, or [Fill in SDO name] ceases to exist; or
 - (2) Subject to Section 1.4, the Member withdraws from the Working Group that developed the draft Standard or from [Fill in SDO name] pursuant to [Insert relevant withdrawal section of this Policy].
- 1.10 <u>Disclosure Requests</u>. Disclosure requests will be included in a prominent place on each draft and final Standard. The follow-ing language (or its equivalent) will be used for such requests:

"The [Fill in SDO name] invites any interested party to bring to its attention any patents, patent applications, copyrights, or other proprietary rights that may cover technology that may be necessary to implement this standard. Please address the information to [Fill in appropriate SDO contact]."

Separate requests may be issued by [Fill in SDO name] or by the Working Group chair to any party suspected of having knowledge of Necessary Claims.

1.11 <u>Notice on Standards</u>. All draft and final Standards shall include the following notice or its equivalent:

"NOTE: The user's attention is called to the possibility that implementation and compliance with this standard may require the use of an invention covered by patent rights. By public ation of this standard, [Fill in SDO name] takes no position regarding the existence, validity, or scope of any patent, patent claim, or other intellectual property right that might be claimed to pertain to the implementation, practice, or other use of this document or the technology described in this document. [Fill in SDO name] also takes no position on the extent to which any license under these rights might or might not be available. Nor does [Fill in SDO name] represent that it has made any independent effort to identify any such rights. Copies of patent disclosures made to [Fill in SDO name] and any assurances of licenses to be made available to implementers of this standard can be obtained from [Fill in appropriate SDO contact, website, etc.]."

1.12 <u>Disclosure Obligation of Invited Experts</u>. Invited experts or members of the public who Participate in a technical Working Group but are not formal Members of [Fill in SDO name] must comply with the disclosure obligations of this Policy.