# Lessons from FTC v. Rambus

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The U.S. Federal Trade Commission ("FTC") and the courts have recently considered whether members of private voluntary standard-setting organizations ("SSOs") may conceal their intellectual property ("IP") rights while participating in a voluntary standards-setting process. At issue was the conduct of Rambus, Inc. ("Rambus"), a developer of dynamic random access memory ("DRAM") technologies.<sup>2</sup> During the early and mid-1990s, JEDEC, an SSO, was working to create new DRAM standards.<sup>3</sup> According to the FTC, Rambus failed to disclose its IP holdings to JEDEC and continued to acquire and fail to disclose additional key technologies despite JEDEC policies calling for such disclosures.<sup>4</sup> This led JEDEC to believe

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- At the time, JEDEC stood for the Joint Electron Devices Engineering Council. Its name was subsequently changed to the JEDEC Solid State Technology Association. See, e.g., Press Release, Fed. Trade Comm'n, FTC Issues Complaint Against Rambus, Inc., (June 19, 2002), available at <a href="http://www.ftc.gov/opa/2002/06/rambus.shtm">http://www.ftc.gov/opa/2002/06/rambus.shtm</a>.
- "The record shows that although EIA/JEDEC policies are not a model of clarity, a duty of good faith underlies the standard-setting process under those policies. . . . [Moreover], JEDEC's Manual of Organization and Procedure . . . expressly obligated the subcommittee chairperson to remind members to inform the meeting of any patents or applications 'that might be involved in the work' being undertaken." Opinion at 52, In re Rambus, Inc., No. 9302 (F.T.C. Aug. 2, 2006), available at <a href="http://www.ftc.gov/os/adjpro/d9302/060802commissionopinion.pdf">http://www.ftc.gov/os/adjpro/d9302/060802commissionopinion.pdf</a>. The Commission's

Rambus is a "pure play" technology development and licensing firm. It licenses its technologies to chipmakers but does not itself market or manufacture DRAMs, or products that employ DRAMs.

that these technologies were in the public domain. The FTC concluded that: (1) the failure of Rambus to disclose its holdings contributed materially to JEDEC's decision to include the Rambus technologies in its DRAM standard; (2) Rambus revealed its IP holdings only after the standard was adopted and users were "locked in" to that standard; and (3) this, in turn, allowed Rambus to charge supracompetitive royalty rates for the use of these technologies.<sup>5</sup>

The FTC held that absent Rambus's pattern of concealment, Rambus would have been forced by competition from alternative technologies to negotiate "reasonable" license fees with potential users of its technologies or, alternatively, that JEDEC would have chosen different technologies for its DRAM standard.<sup>6</sup> On this basis, the FTC held that Rambus's failure to disclose was anticompetitive and violated the antitrust laws,<sup>7</sup> and entered an Order imposing, among other things, caps on the royalty rates that Rambus could charge licensees for the technologies at issue over specified periods of time.<sup>8</sup>

Opinion went on to describe Rambus's own understanding of the JEDEC policies. <u>Id.</u> at 53-54.

- In response to the Commission's allegations, Rambus contended that it was not obligated under either JEDEC rules or antitrust standards to disclose pending patent applications or intentions to seek patents in the future, that its failure to disclose was justified by its need to protect trade secrets, that it was no longer a member of JEDEC when the standards were adopted, that JEDEC's members were aware of Rambus's patent holdings when the DDR2 SDRAM standard was adopted, and that the Rambus technologies would have been included in the JEDEC standards even if Rambus had disclosed its patent interests. See Brief for Respondent in Opposition, F.T.C. v. Rambus Inc., (Jan. 23, 2009) (No. 08-694) 2009 WL 191772.
- The alternatives referred to by the Commission were technologies that could have been included in the new JEDEC standard instead of Rambus's technologies. The royalty rates that Rambus could have charged may also have been limited by the continued availability of one or more previous-generation DRAM standards.
- In particular, the Commission held that "Rambus's acts of deception constituted exclusionary conduct under Section 2 of the Sherman Act, and that Rambus unlawfully monopolized the markets for four technologies incorporated into the JEDEC standards in violation of Section 5 of the FTC Act." <u>Id.</u> at 3, 118-19.
- See Final Order, In re Rambus Inc., No. 9302, 2007 WL 431522 (F.T.C. Feb. 2, 2007). For three years following the issuance of the FTC's Order, Rambus's royalty rates would have been capped not to exceed certain positive rates specified by the Commission. Thereafter, the royalty rates would have been capped at zero until the last of the relevant Rambus patents expired. Id. at 2-5. The FTC's remedies were limited to those Rambus technologies that were included in JEDEC's SDRAM and DDR SDRAM standards. See Remedy

The FTC's decision and Order were reversed by the Court of Appeals for the D.C. Circuit, which held, among other things, that Rambus's non-disclosure could not be judged to be anticompetitive, even if its effect was to allow Rambus to charge higher license fees, because the FTC had failed to prove that JEDEC would have chosen alternatives to the Rambus technologies even if it had known in advance that the technologies were proprietary to Rambus.<sup>9</sup>

In what follows, we consider a number of key lessons from the outcome of the *Rambus* case. These relate to the basic nature of the D.C. Circuit's decision in *Rambus*, its evident conflict with the Third Circuit's decision in the *Qualcomm* case, and economic concerns arising from the D.C. Circuit's decision. We conclude by considering a number of possible policy changes that could avoid some of the types of behavior that the FTC condemned in Rambus.<sup>10</sup>

#### 1. The D.C. Circuit's Decision

The D.C. Circuit set aside the FTC's Order in Rambus for two main reasons. First, it concluded that because JEDEC's disclosure rules were unclear, the Commission had "taken an

Statement of Commissioner Pamela Jones Harbour Concurring in Part and Dissenting in Part at 3 (Feb. 5, 2007), In re Rambus, Inc., No. 9302, <u>available at http://www.ftc.gov/os/adjpro/d9302/070205harbourstmnt.pdf</u>. The FTC appears to have been unable to conclude that chipmakers were "locked in" to Rambus's technologies by the benefits of maintaining backward compatibility with earlier SDRAM and DDR SDRAM memory designs when JEDEC was adopting its DDR2 standard. As Commissioner Harbour noted, "the Commission held that '[t]he record does not support a finding that lock-in conferred durable monopoly power over DDR2 SDRAM..." <u>Id.</u> at 4.

- None of these difficult questions can be treated comprehensively in this brief article. Readers interested in a more complete treatment of these and related issues should see, e.g., Stanley M. Besen & Robert J. Levinson, *Standards, Intellectual Property Disclosure, and Patent Royalties after* Rambus, 10 N.C. J. L. & TECH. 233, 233-82 (2009).

aggressive interpretation of rather weak evidence"<sup>11</sup> in finding that Rambus had a duty to disclose its patent holdings.<sup>12</sup> Standing alone, this precedent is likely to reduce future uncertainty by ensuring that all parties recognize that SSO disclosure rules must be clearly articulated if they are to be relied upon.<sup>13</sup> Indeed, we understand that even before the FTC's decision in *Rambus*, some SSOs had begun to re-evaluate their IP disclosure rules.<sup>14</sup>

The second of the D.C. Circuit's key conclusions is more troubling. Imagine that an SSO participant (such as Rambus) fails to disclose its IP holdings; that the SSO, which, consequently, is uninformed about the participant's IP rights, adopts that participant's technology as part of its standard; and that as a result, the industry becomes "locked in" to the standard (and so to the patents at issue), allowing the technology sponsor to charge higher royalty rates than would have prevailed otherwise. The D.C. Circuit seems to have decided that such a failure to disclose is not an antitrust violation unless the SSO (or a government enforcement agency) can prove that the participant's technology would *not* have been included in a standard in the "but-for" world where the participant had instead disclosed its IP rights. <sup>15</sup> Put

<sup>11</sup> Rambus Inc. v. F.T.C., 522 F.3d 456, 469 (D.C. Cir. 2008).

The D.C. Circuit cited as precedent the finding by the Court of Appeals for the Federal Circuit in Rambus Inc. v. Infineon Technologies, that one would expect that disclosure expectations ostensibly requiring competitors to share information that they would otherwise vigorously protect as trade secrets would provide "clear guidance" and "define clearly what, when, how, and to whom the members [of an SSO] must disclose." Id. at 468 (quoting Rambus Inc. v. Infineon Techs., 318 F.3d 1081, 1102 (Fed. Cir. 2003)).

We note that JEDEC might have been warier about Rambus's intentions when, on June 17, 1996, Rambus withdrew from JEDEC. At the time, Rambus stated that the terms on which it would license its technologies "may not be consistent with the terms set by standards bodies, including JEDEC." <u>Id.</u> at 460. From this, it might have been reasonable for JEDEC to infer that Rambus had proprietary technologies that it did not intend to license on "reasonable" terms.

Nicolas L. Tsilas notes that SSOs "have been revisiting fundamental questions about how to establish an optimal patent disclosure policy. . . ." Nicolas L. Tsilas, *Toward Greater Clarity and Consistency in Patent Disclosure Policies in a Post*-Rambus *World*, 17 HARV. J. L. TECH. 475, 476 (2004). (Tsilas refers to SSOs as standards development organizations.)

Rambus, 522 F.3d at 467 ("[I]f JEDEC, in the world that would have existed but for Rambus's deception, would have standardized the very same technologies, Rambus's alleged deception cannot be said to have had an effect on competition in violation of the antitrust laws; JEDEC's loss of an opportunity to seek favorable licensing terms is not as such an antitrust harm."). Although we disagree with this conclusion, we agree with the court's holding that "if Rambus's more complete disclosure would have caused JEDEC to adopt a

another way, the D.C. Circuit found that Rambus's failure to disclose its IP holdings was not anticompetitive even if its effect was to allow Rambus to impose higher license fees than it could have obtained if it had disclosed and its technologies were forced to compete with alternatives for inclusion in the JEDEC standard.

This aspect of the D.C. Circuit's decision (which survived the FTC's appeal when the Supreme Court declined to grant certiorari<sup>16</sup>) appears to be inconsistent with the Third Circuit's opinon in the *Qualcomm* case.<sup>17</sup> There, the Court found that deception and nondisclosure of IP rights can anticompetitively distort the standards setting process, even if the IP at issue would have been included in the standard if its ownership had been disclosed<sup>18</sup>: "Deception in a consensus-driven private standard-setting environment harms the competitive process by obscuring the costs of including proprietary technology in a standard and increasing the likelihood that patent rights will confer monopoly power on the patent holder. . . . Deceptive FRAND [fair, reasonable, and non-discriminatory] commitments, no less than deceptive nondisclosure of IPRs, may result in such harm." <sup>19</sup>

Qualcomm had allegedly reneged on a commitment to license its technology on FRAND terms after European and U.S. SSOs had incorporated its technologies into their 3G telephony standard.<sup>20</sup> Unlike the D.C. Circuit's *Rambus* decision, the Third Circuit's determination in *Qualcomm* focused on the harm to competition that is created when deception obscures the true costs of including a technology in a standard. Such an analysis need not – and evidently did not – require that the plaintiff demonstrate that other technologies *would* have been chosen *but for* the deceptive conduct. In this light, it is particularly noteworthy that the Third Circuit equated the

different (open, non-proprietary) standard, then its failure to disclose harmed competition and would support a monopolization claim." <u>Id.</u> at 463.

- After the D.C. Circuit issued its decision, the FTC petitioned the court for a rehearing, which was denied. Reuters.com, U.S. Trade Commission Loses Bid for Rambus Appeal, Aug. 27, 2008, <a href="http://www.reuters.com/article/idUSN2748830020080827">http://www.reuters.com/article/idUSN2748830020080827</a> (last visited May 27, 2010). The FTC's subsequent petition to the U.S. Supreme Court to review the D.C. Circuit's judgment was also denied. F.T.C. v. Rambus Inc., 129 S. Ct. 1318 (2009).
- 17 Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 314 (3d Cir. 2007).
- The FTC petition to the U.S. Supreme Court identified this conflict as one reason that the decision of the D.C. Circuit should be reviewed. Reply Brief for the Petitioner, at 27-30, F.T.C. v. Rambus Inc., (Feb. 4, 2009) (No. 08-694) 2009 WL 301926, at \*\*12-14.
- 19 Qualcomm, 501 F.3d at 314. The Third Circuit favorably cited the FTC's Rambus Opinion in its decision. Id. at 311-13.
- 20 <u>Id.</u> at 303. Qualcomm had made its FRAND commitment to the European Telecommunications Standards Institute, an SSO. <u>Id.</u> at 304-05.

effects of deceptive non-disclosure of patents to the effects of deceptive commitments regarding licensing terms. This suggests that it would have condemned behavior like Rambus's in the same way that it condemned Qualcomm's behavior. Finally, the Third Circuit identified the potential antitrust harm as the creation of market power for the patent holder, evidently meaning that the patent holder could charge higher prices than it could absent its deception. This harm would obviously exist even if the deceptive behavior at issue did not affect the choice of technologies that were incorporated into the standard if the conduct increased the license fee that the patent holder could charge.

#### 2. <u>Possible Effects of the D.C. Circuit's Decision</u>

Notwithstanding the evident conflict between the D.C. and Third Circuits, we fear that the *Rambus* decision will have adverse consequences, not only for the licensees of patented technologies, but also for ultimate consumers who may experience higher prices for the products that they purchase as well as slower rates of innovation. An SSO participant that knowingly fails to disclose its holdings, even when its obligation to do so is clear, can always claim that its technology *might* have been chosen even if its patent holdings had been disclosed, and an SSO (or an antitrust enforcement agency) is unlikely ever to be able to prove the contrary. By requiring plaintiffs to prove the unprovable, the D.C. Circuit's *Rambus* precedent invites technology owners strategically to withhold information about their IP holdings from SSOs because they now face significantly reduced risks of antitrust liability by doing so.

As a consequence, SSOs may increasingly find themselves in the position of making key technology choices without knowing the ownership status of the technologies that they are considering. When an SSO unknowingly standardizes on a proprietary technology, it affords the IP owner the opportunity to raise royalties to supracompetitive levels once the technology is incorporated into the standard and the standard has become entrenched. This can have several undesirable economic effects. First, it may reduce the attractiveness of the SSO process to licensees, leading to their reduced participation in SSOs and consequent reductions in the social benefits of standardization. Second, SSOs may be encouraged to avoid the effects of future lock-in by continuing to use older technologies that are more likely to be in the public domain, leading to standards that do not reflect the current state of the art and to the technological retardation of downstream products.<sup>22</sup> Finally, the higher royalty payments made possible by ex ante non-disclosure can cause downstream producers' marginal costs (which include royalty payments) to be higher than otherwise, causing them to charge higher prices to consumers.

Like the D.C. Circuit, the Third Circuit would likely also inquire about whether an SSO's policies required technology sponsors to disclose their patent holdings.

Alternatively, SSOs may become more prone to adopt current open-source technologies that are less desirable than their proprietary alternatives because these technologies are free of hold-up risks.

Each of these outcomes would reduce consumer welfare, and so would be at odds with the goals of the antitrust laws.

## 3. <u>Possible Policy Responses</u>

- a. SSOs may try to mitigate these effects by changing their internal policies and procedures. They may expend resources to determine whether the technologies they are considering are encumbered by IP rights, something that they have been reluctant to do in the past. This may lead to slower adoption of new technologies into standards as SSOs attempt to take account of the increased risks of inadvertently adopting technologies for which patent holdings have not been disclosed.
- b. Alternatively, SSOs could continue to rely only on member disclosures, as called for by their internal rules, but increase the specificity of these rules to increase compliance. Although SSOs or government enforcers are still likely to face considerable burdens in demonstrating that they would have chosen a different technology if sponsors had disclosed their holdings, and thus are far less likely to prevail in antitrust cases, clearer rules may make it easier for SSOs to prevail in actions for breach of contract.
- c. Still another possibility is for SSOs *not* to require disclosures of members' IP holdings, but instead to require members to commit to charge RAND or FRAND royalties<sup>23</sup> if their technologies are included in the standard.<sup>24</sup> Although this may avoid the issue of disclosure altogether, it may require SSOs to more clearly define the meaning of such commitments. As noted below, one benchmark for a FRAND or RAND royalty would be the rate that would emerge from a competitive ex ante auction in which the SSO had complete information regarding the ownership of each patent that might be included in its standard.
- d. Finally, the courts may choose to impose FRAND or RAND-like ceilings on the royalties that may be charged by sponsors that fail to disclose their IP holdings in the presence of clear requirements to do so, perhaps under a breach of contract theory. This raises issues with respect to the meaning of FRAND/RAND, to whether penalties should apply to both present and future generations of a technology, and whether penalties should be augmented to reflect the fact they are not certain to be imposed.

Note that such a policy would apply only to members, which may create incentives for technology sponsors *not* to participate in the activities of the SSO. However, this incentive may be weakened if participation substantially increases the probability that a sponsor's technology will be included in a standard.

In the United States, the term RAND [reasonable and non-discriminatory] is used in place of FRAND.

### 4. Ex Ante Disclosure and the Competitive Process

There are clear benefits to the competitive process when IP owners disclose their holdings to an SSO, but that is not the end of the story. There is still the issue of how to take this information into account. One possibility is for SSO members whose IP is being considered for inclusion in a standard to be required to commit to negotiating royalty rates with the other members of the SSO prior to adoption.

Solutions that require IP holders to either commit to specified royalty rates (or at least to specified classes of rates, e.g., FRAND rates) or commit to the binding results of ex ante negotiations appear to be consistent with recent guidance from the federal competition authorities. The FTC's Opinion in *Rambus* endorsed the desirability of determining license fees before lock-in has occurred. In addition, two business review letters issued by the Antitrust Division of the U.S. Department of Justice ("DOJ") have recognized that SSOs can take proposed license fees into account during the standard-setting process.<sup>25</sup>

Notwithstanding the desirability of taking prospective license fees into account *before* a standard is adopted, many SSOs and their members are concerned about incurring antitrust liability if they bargain collectively with technology sponsors over fees. In particular, SSOs are concerned that they will be accused of exerting *monopsony* power in their dealings with sponsors, and hence they avoid any discussions of license fees in their deliberations. The agency pronouncements described above envisioned the possibility that *individual* users will negotiate license fees before they agree to include a technology in a standard. However, some agency guidance has also left open the possibility that, under certain circumstances, users might negotiate license fees *collectively*;<sup>26</sup>,<sup>27</sup> The DOJ Business Review Letter involving the VITA

See Letter from Thomas O. Barnett, Assistant Attorney General for Antitrust, U.S. Dep't of Robert Skitol, (Oct. available Justice, A. 30, 2006), http://www.justice.gov/atr/public/busreview/219380.htm ("VITA Business Letter)"; Letter from Thomas O. Barnett, Assistant Attorney General for Antitrust, U.S. Justice, to Michael 2007), available at Dep't of Α. Lindsay (Apr. 30, http://www.justice.gov/atr/public/busreview/222978.htm.

Opinion at 36, In re Rambus, Inc., No. 9302 (Aug. 2, 2006), <u>available at http://www.ftc.gov/os/adjpro/d9302/060802commissionopinion.pdf</u>.

When SSO members jointly negotiate with technology sponsors, they effectively are forcing sponsors that offer substitute technologies to compete with one another for inclusion in the standard. When viewed in this light, the *Addamax* case might also be viewed as also supporting the principle that SSO members should be free to negotiate IP royalties collectively. See Addamax Corp. v. Open Software Found., Inc. 152 F.3d 48 (1st Cir. 1998). *Addamax* has been seen by some as endorsing the use by SSOs of ex ante competitions among sponsors to limit patent license fees. See, e.g., Robert A. Skitol, *Concerted Buying Power*:

standards body made clear that collective negotiations by SSO members would not be viewed as a per se violation.<sup>28</sup> Instead, the Letter indicated that "if the proposed policy did allow such negotiations and discussions, the [Antitrust] Division likely would evaluate any antitrust concerns about them under the rule of reason because such actions could be procompetitive."<sup>29</sup> Indeed, competitive ex ante negotiations between an SSO and its potential technology sponsors can give rise to royalties that have been considered to be FRAND (or RAND) by some economists.<sup>30</sup>

A discussion of when collective royalty negotiations by SSO members might be procompetitive was offered in a speech delivered by past FTC Chairman Deborah Majoras. According to Chairman Majoras, while "some SSOs and their participants have hesitated to allow unilateral announcements of royalty rates by, let alone ex ante joint royalty discussions

Its Potential for Addressing the Patent Holdup Problem in Standard Setting, 72 ANTITRUST L. J. 727, 736 (2005).

In Addamax, the Open Software Foundation ("OSF"), a non-profit joint research and development venture among computer manufacturers, was charged with a number of per se violations of the antitrust laws because it and its members had chosen to include a competing computer software security system in the product that it was developing, apparently in part because the system had a lower price than that demanded by Addamax for its own software security system. The Court of Appeals for the First Circuit noted: "Where the venture is producing a new product . . . there is patently a potential for a productive contribution to the economy, and conduct that is strictly ancillary to this [sic] productive efforts (e.g., the joint venture's decision as to the price at which it will purchase inputs) is evaluated under the rule of reason." Id. at 52. Thus, the court explicitly ruled only that OSF's behavior was not per se illegal. Moreover, OSF was a research and development joint venture, not an SSO. Id. at 50. However, it should be noted that the court did not find that no antitrust violation had occurred but only upheld the district court's finding that "antitrust violations, even if they were assumed to have occurred, were not a material cause of Addamax's failure in the line of business at issue." Id. at 49 (emphasis added).

- VITA is an SSO "comprised of developers, vendors, and users of real-time modular embedded computing systems originally based on the VMEbus computer architecture." Letter from Thomas O. Barnett, Assistant Attorney General for Antitrust, U.S. Dep't of Justice, to Robert A. Skitol, Esq. (Oct. 30, 2006), available at <a href="http://www.justice.gov/atr/public/busreview/219380.htm">http://www.justice.gov/atr/public/busreview/219380.htm</a>.
- <sup>29</sup> <u>Id.</u>
- See, e.g., Besen & Levinson, supra note 10, at 243; see also Joseph Farrell et al., Standard Setting, Patents and Hold-Up, 74 ANTITRUST L. J. 603, 637 (2007) (noting that that "courts should interpret the fair and reasonable prong of FRAND [as RAND is referred to in Europe] as the royalties that would have been voluntarily negotiated before users became committed to using the patented technology").

with, firms that own the technology being considered for incorporation into the standard, settling instead for rules that demand RAND terms for members[,]"<sup>31</sup> collective discussions of licensing might, nevertheless, be procompetitive. "If joint ex ante discussions succeed in staving off hold up, we can generally expect lower royalty rates to lead to lower marginal costs for the standardized product and lower consumer prices. By mitigating hold up, joint ex ante royalty discussions might also make possible the more timely and efficient development of standards."<sup>32</sup> Chairman Majoras went on to explain that, in cases in which collective rate-setting is challenged, the FTC would determine "whether an uncoordinated series of bilateral negotiations between patentees and individual would-be licensees would be equally capable of mitigating hold up. . . ."<sup>33</sup> Such an approach is consistent with the DOJ's guidance in its VITA Business Review Letter, as it suggests a rule of reason approach to the issue.

Because none of these pronouncements offer assurances that collective royalty negotiations by SSO members would pass antitrust muster, SSOs may need to find a workable alternative that avoids antitrust risks while leading to the same results. As noted by Chairman Majoras, one approach already applied by some SSOs is to require that all members undertake and abide by FRAND or RAND commitments. However, such commitments may suffer from ambiguity as to the meaning of "fair and reasonable" royalties, and so may result in actual royalties that differ from those that would result from ex ante negotiations.

One approach that might avoid antitrust concerns while still preserving the benefits of taking license fees into account before a standard is selected is to employ a procedure proposed

33 <u>Id.</u> at 10. By endorsing collective license fee negotiations, Chairman Majoras's remarks appear to go somewhat beyond the policy incorporated in the Standards Development Organization Advancement Act of 2004, Pub. L. No. 108-237, 118 Stat. 661 (2004). Although that legislation clarifies that the behavior of standard-setting organizations will be judged under the rule of reason, it does not explicitly address the issue of collective license fee negotiations. Indeed, the Act's legislative history notes only that "[i]t further encourages discussion among intellectual property rights owners and other interested standards participants regarding the terms under which relevant intellectual property rights would be made available for use in conjunction with the standard or proposed standard." 150 Cong. Rec. H3657 (June 2, 2004).

Deborah Platt Majoras, Chairman, Fed. Trade Comm'n, Recognizing the Procompetitive Potential of Royalty Discussions in Standard Setting, Remarks at the Standardization and the Law: Developing the Golden Mean for Global Trade conference (Sept. 23, 2005), available at <a href="http://www.ftc.gov/speeches/majoras/050923stanford.pdf">http://www.ftc.gov/speeches/majoras/050923stanford.pdf</a>.

<sup>&</sup>lt;sup>32</sup> I<u>d.</u> at 8.

by Swanson and Baumol.<sup>34</sup> Their approach would be "to adopt the 'sealed-bid' or 'Dutch' auction model and accord all candidates the opportunity to submit (simultaneously) 'best and final' responses to the SSO's RFP. . . . We assume that such an auction-like process would involve no collective royalty negotiations with any given putative licensor after its 'bid' has been submitted to the SSO (though we would not deem it to violate this assumption if, in appropriate circumstances, bidding were to be reopened on a general basis)."<sup>35</sup>

Under this approach, the SSO would solicit license fee "bids" and collectively determine what the standard would be and, thus, the license fee that would be paid. Although the license fee would be not be *negotiated* collectively, it would be *determined* by the members of the SSO through their collective choice of which "bid" to accept.<sup>36</sup> It can be shown that such auctions would, under a number of simplifying assumptions, give rise to royalty rates for the "winning" technologies (that is, those that are incorporated into the standard) that are no higher than the cost advantage they afford in the production of the downstream products relative to the best alternative technology.<sup>37</sup> This approach has the added benefit of generating what some economists have suggested are FRAND royalty rates.

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The FTC's loss in Rambus teaches that, in the D.C. Circuit at least, one cannot assume that deceptive conduct that permits the exercise of market power will be deemed to violate the antitrust laws if (1) the deception in question takes the form of a failure to disclose one's IP rights to other SSO members, and (2) the effect of the deception is to allow the deceiver to charge supracompetitive royalties once the makers of products become locked in to the standard. The burden for proving that such conduct is anticompetitive and illegal appears virtually insurmountable in that it seems to require proving that the technology sponsor's IP

<sup>&</sup>lt;sup>34</sup> Daniel G. Swanson & William J. Baumol, Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power, 73 ANTITRUST L. J. 1 (2005).

<sup>&</sup>lt;sup>35</sup> Id. at 17.

It is not clear whether Chairman Majoras's approach is more permissive with regard to collective negotiations than that suggested by Swanson and Baumol, especially since they do not suggest what the "appropriate circumstances" under which bidding could be reopened are. One might view an institution that allows bidding to be reopened when prior bids are deemed insufficient by SSO members to be similar to one that permits ongoing negotiations between the SSO on the one hand and individual IP holders on the other.

<sup>&</sup>lt;sup>37</sup> See, e.g., Swanson & Baumol, <u>supra</u> note 33, at 18-19. We discuss the mechanics of an auction process that generates the same results, and consider the effects on royalties of relaxing key limiting assumptions of their basic auction model in Besen & Levinson, <u>supra</u> note 10.

would not have been licensed in a counterfactual world in which it had disclosed its relevant IP holdings before a standard was adopted.

SSOs will need to adapt their practices if conduct similar to Rambus's challenged behavior is to be avoided in the future. A starting point for avoiding patent hold-up would be to create conditions under which SSOs can make their technology choices on the basis of complete information as to whether the technologies they are considering are indeed proprietary. This may or may not be achievable by imposing more stringent rules requiring disclosures by SSO members. Moreover, even if full disclosure can be achieved, SSOs may need to adopt mechanisms that give rise to outcomes equivalent to those that would arise had the SSO engaged in direct negotiations with technology providers. Statements by the U.S. competition authorities suggest that it might, depending on the circumstances, be possible for this to be achieved directly, by means of collective negotiations by SSO members on the one hand and technology sponsors on the other. The same results might also be accomplished using other means, such as an ex ante auction mechanism of the type described in this paper.

