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#### PUBLIC

## UNITED STATES FEDERAL TRADE COMMISSION

Docket No. 9302



In the Matter of

RAMBUS INC.,

A CORPORATION

## RESPONDING BRIEF OF AMICUS CURIAE AMERICAN ANTITRUST INSTITUTE, INC. ON ISSUES OF REMEDY IN SUPPORT OF NEITHER PARTY

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#### Interest of Amicus Curiae

The American Antitrust Institute ("AAI") is an independent, not-for-profit organization dedicated to economic research, the study of the antitrust laws, and public education. The directors of the AAI, Jonathan Cuneo, Esq., Albert H. Foer, Esq., and Professor Robert Lande of the University of Baltimore Law School, authorized this filing. The Advisory Board of the AAI consists of more than 90 prominent lawyers, law professors, economists and business leaders (the members of the Advisory Board and other information about the AAI may be found on its web site: www.antitrustinstitute.org). The members of the Advisory Board serve in a consultative capacity and their individual views may differ from the positions taken by the AAI. The AAI's mission is to increase the role of competition and sustain the vitality of the antitrust laws.

The AAI files this brief to bring to the Commission's attention matters that have not been briefed by the parties or other *amici* and to clarify and elaborate on the AAI's recommendation concerning remedies in its initial *amicus* brief in this matter filed on May 12, 2004. As in its initial brief, the AAI has no particular special insight into the underlying facts of this case and advocates a legal framework based on antitrust and economic principles without supporting a particular outcome for or against any party.

#### Summary of the Argument

The AAI argues herein that the Commission should be guided by two principles in fashioning a remedy. The first is that the purposes of an "open standard" are inherently inconsistent with a patent policy that encourages and rewards invention with *de jure* rights to exclusivity. By placing control over the practice of an invention in the hands of a patentee, patent policy seeks to suppress un-remunerated imitation. By contrast, open standards, particularly those related to interfaces in computer and information technology, are intended to encourage wide scale imitation in order to promote compatibility and interoperability of implementations of the standard by different manufacturers.

Second, even when a standard contains patented technology, the demand for the economic benefit of the patented invention (and its substitutes) is separate and distinct from the demand for the economic benefit of the standard itself.

These principles suggest that the magnitude of a reasonable royalty, if any, should be calibrated to the degree of openness preferred *ex ante* by the SSO participants. Moreover, the *ex ante* competitive conditions in the market for Rambus' technology (and its substitutes) will differ from the *ex ante* competitive conditions in the market for the standard. To the greatest extent possible, an appropriate remedy should restore competition in the market injured by the offending conduct, *i.e.*, the market for the standard. Finally, Rambus bears the burden of demonstrating that the royalties it claims are related to commercial demand for its patented technology and not to the demand for JEDEC-compliant devices.

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# I. An Appropriate Remedy Calibrates the Scope of Rambus' Prospective Patent Rights, If Any, to the *Ex*-Ante Intended Openness of the Standard

### A. The Ideal of a Fully Open Standard is Inconsistent With Patent Law and Policy

"Openness" with respect a standard is an important quality that summarizes the policies, purposes, and expectations of those engaged in standard setting activities. Standard setting organizations (SSOs) differ in the degree of openness toward which they strive. SSOs occupy different positions on a continuum depending on their policies and expectations with respect to a bundle of parameters.<sup>1</sup> In general, the greater emphasis placed by an SSO on developing open standards the stronger the preferences of its participants for standards that bear little or no licensing requirements or royalties. An idealized, fully open standard that lies at one end of the continuum strives to achieve universal, costless adoption.

As a result, patent law, which constrains unauthorized imitation and rewards a patentee with proprietary rights to exclude, clashes with the aspirations of an open standard. The purposes of an open standard, to redirect and focus innovation and competition away from the standardized function or quality and toward competing implementations of the

<sup>&</sup>lt;sup>1</sup>See, *e.g.*, Bruce Perens, "Open Standards, Principles and Practice" available at <<u>http://perens.com/OpenStandards/Definition.html></u>, last visited 9/23/2006 (listing the six "principles behind the standard, and the practice of offering and operating the standard, [which] make the standard Open:" 1) The standard is available for all to read and implement, 2) creates fair, competitive markets for implementations, 3) it is free for all to implement, with no royalty or fee, 4) one implementer is not favored over another, 5) implementations may be extended or offered in subset form, and 6) there is no prohibition on non-predatory extensions). *See also* Ken Krechmer, "The Meaning of Open Standards," paper presented at Standards and Standardization, Hawaii International Conference on System Sciences, January 2005, available at <<u>http://www.esrtds.com/openstds.html></u>, last visited 9/23/2006 (identifying ten basic rights of creators, implementers, and users that, when supported, yield an open standard: 1) Open meetings, 2) Consensus and Non-domination, 3) Due process, 4) Open intellectual property rights available to all implementers, 5) Worldwide consistency, 6) Open change processes, 7) Open documentation, 8) Open interfaces, 9) Open uses and certifications, and 10) On-going support until user interest ceases.)

standard, therefore, may be undermined by the incentives to innovate created by patent policy. Similarly, intellectual property policies function properly when market participants are willing to pay increased prices to stimulate technological innovation. However, when open standards are called for, participants are not willing and should not be required to pay higher prices to stimulate such unnecessary incentives.

Accordingly, the nature of "competition" for an open standard will differ materially from competition among patented technologies outside of the standards context. Because implementers of open standards have strong preferences to avoid licensing and royalties, they are often willing to eschew proprietary technology to promote openness even if doing so sacrifices technical superiority. This has important consequences for any hypothetical *ex ante* negotiation between an SSO's members and one or more patentees proposing the adoption of a patented standard. In particular, a remedy barring patent enforcement or ordering compulsory royalty-free or low-royalty licensing that may chill innovative activity outside of the standards context is unlikely to be objectionable where the goal of the remedy is to establish the openness of a standard or rectify a hijacked deliberative process intended to lead to an open standard.

Evidence cited in the Commission's Opinion suggests that JEDEC's overriding mission was to create open standards to the greatest extent practicable. For instance, the Commission found that JEDEC members "were highly sensitive to costs" and "keeping costs down was a major concern within JEDEC." Decision, at 74. One witness testified that "customers are willing to leave performance on the table in exchange for having lower cost systems" (Decision at 75, note 406), and a series of witnesses testified that knowledge of

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Rambus' patents would have been decisive in causing them to reject the Rambus specification on that basis alone. Decision at 75, note 407. Some implementers pursue a policy of embracing only open standards in certain circumstances and actively oppose the use of any royalty-bearing elements in standard specifications.<sup>2</sup>

Similarly, JEDEC itself claims to have a "strong aversion to including royalty-bearing patents in JEDEC standards." JEDEC Br. on Remedies at 5. Citing a series of policy statements that reach back more than twenty years, JEDEC claims that its "goal is to promulgate open standards that can be used widely by the industry ..." *Id.* at 4. JEDEC permits patented technology to enter its standards but only with "great care." *Id.* at 5. As a result, if the Commission concludes that JEDEC and its participants as an SSO placed a high value on openness, they would not, in any conceivable hypothetical *ex ante* negotiation, have chosen the Rambus specification absent a concomitant and enforceable license-free, royalty-free or low-royalty commitment from the patentee.

## B. Restoring Competition in a Market for a Standard is Not Equivalent to Restoring Competition in a Market for Patented Technology

As a result of the foregoing, approximating a hypothetical *ex ante* negotiation aimed at restoring competition lost as a result of Rambus' failure to disclose its relevant patents must consider the *ex ante* intentions of JEDEC with respect to openness. Conflating the market for an open standard with the market for technology that can serve as a standard should be avoided. Thus, because the *ex ante* auction model of reasonable and

<sup>&</sup>lt;sup>2</sup>See, *e.g.*, Decision at 75 ("...Sun [Microsystems] as a company would have strongly opposed the use of royalty-bearing elements in an interface patent–in an interface specification").

nondiscriminatory (RAND) licensing commitments by Swanson and Baumol, for example, implicitly assumes that standard setting participants choose among competing patented technologies on a cost-performance maximizing basis (in which royalties are merely one component of costs), their model does not provide a suitable framework for hypothesizing about the *ex ante* outcomes in selecting an open standard.<sup>3</sup>

SSO participants under the impression that they were engaged in selecting an open standard free of encumbrance by proprietary rights should not be required to obtain *any* license if the standard ultimately selected is not open because of misleading or deceptive conduct by a rightholder. A remedy, therefore, that saddles such participants with even a royalty-free compulsory license would not restore the market for the open standard to what it would have been but for the unlawful conduct.

## C. Some Forms of Patent Licensing Are Consistent With a Less-than-Fully Open Standard

A fully open standard may not be achievable, either because any technology that complies with a chosen standard will be proprietary or because any reasonable alternative specification for a standard will implicate some patented technology. In such cases an SSO may choose to adopt a "less-than-fully open" standard. Where patent rights cannot be avoided and the SSO does not outright prohibit patented specifications (*e.g.*, JEDEC, JEDEC Br. at 5), the standards body usually strives for openness by requiring patentees to make some form of *ex ante* pre-commitment to openness.

Different SSOs pursue different IP-neutralizing strategies in such circumstances,

<sup>&</sup>lt;sup>3</sup>Daniel G. Swanson and William J. Baumol, "Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power," 73 Antitrust L. J. 1 (2005).

depending on the strength of their preferences for openness.<sup>4</sup> A patentee could be required to disclaim its rights to enforcement, make a commitment to a royalty-free license, or agree to license on RAND terms as a condition to the inclusion of the patented technology in the standard.

When a RAND commitment is given by a patentee for the purpose of satisfying an SSO's goal of openness, the "reasonableness" requirement takes on a quality that does not occur when RAND commitments are offered outside of the standard-setting context. Specifically, if the purpose of the RAND commitment is to further the open availability of the standard, a royalty rate that is not consistent with such openness cannot be "reasonable." In other words, in the context of open standards royalty rates can only be RAND if they are low enough that the openness of the standard is not thereby impaired.

Calibrating the reasonableness of a royalty under a RAND commitment according to the degree of openness intended *ex ante* by the implementers is not free from ambiguity. Nonetheless, doing so does provides a rough upper bound under which a royalty rate for a patented standard must reside for the standard to remain open. Thus, assuming that the purpose of the standard setting activities at issue was to develop a standard with a high degree of openness, were the Commission to determine that a particular proposed royalty rate would materially adversely affect the breadth or variety of implementers of the standard, such a proposed rate would be too high.

<sup>&</sup>lt;sup>4</sup>See generally, Jonathan Band, "Competing Definitions of 'Openness' on the NII," *Standards Policy for Information Infrastructure*, B. Kahin and J. Abbate, eds., The MIT Press, Cambridge, Ma. (1995).

# II. An Appropriate Remedy Will Not Reward Rambus for Demand for the Standard

The second principle that should guide the Commission in fashioning a remedy in this matter is that Rambus' patents do not entitle it to a reward for commercial demand attributable to the economic benefits of the standard, as opposed to the economic benefits of its patented inventions.<sup>5</sup> According to Professor Patterson, this insight has two important implications:

The first implication is that the patented invention should be treated as only one contributor to the economic value of the standard. The second implication is that the other contributions of a standard—like interoperability—should be given independent legal significance.<sup>6</sup>

Disentangling commercial demand attributable to the patent from the demand attributable to the standard may not always be easy. Consideration of the polar cases can aid the analysis. At one extreme, technology is so unique and essential that no standard would exist but for the existence of the patented innovation. In that case, the patented technology would have become the *de facto* standard anyway, irrespective of adoption by an SSO and little or no demand should be attributed to the standard. At the other extreme, a multitude of alternative specifications are available to serve as a standard, in which case incorporating patented technology is unlikely to be necessary and would serve no useful purpose. If patented technology nonetheless found its way into such a standard, all the demand still would be due solely to the benefits of the standard because separate demand for the patent

<sup>&</sup>lt;sup>5</sup>The following discussion draws heavily from Mark R. Patterson, "Inventions, Industry Standards, and Intellectual Property," 17 BerkeleyTech.L.J., 1043 (2002).

<sup>&</sup>lt;sup>6</sup>Id. at 1045.

would not exist.<sup>7</sup>

In between these polar cases, patented technology may make some contribution to the standard, either by enabling an SSO to adopt a standard that is superior to a proposed alternative or by enabling implementers to comply more easily or cheaply with a standard already adopted.

The foregoing suggests that in order to avoid rewarding Rambus for the commercial demand attributable to the standard rather than its inventions, Rambus should bear the burden of justifying any claimed royalty rate with sufficient evidence to allow the Commission to conclude that the relevant patents materially contribute to the commercial demand for compliance with the standard. Thus, Rambus should be entitled to enforce a royalty-bearing license if and only if the Commission finds by clear and convincing evidence that but for the incorporation of Rambus' technology into the JEDEC standards there would have been materially less demand for JEDEC-compliant devices.

<sup>&</sup>lt;sup>7</sup>This is the case when interfaces that make no inventive contribution are nonetheless patented. See, *e.g.*, *In re Dell Computer Corp.* 121 F.T.C. 616 (1996).

### Conclusion

Based on the foregoing arguments, the American Antitrust Institute, Inc. respectfully requests that the Commission to order a remedy in this case consistent with the principles advocated herein.

Respectfully submitted,

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Dated: September 29, 2006

# CERTIFICATE OF SERVICE

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I HEREBY CERTIFY that on September 29, 2006, I caused true and correct copies of the Responding Brief of Amicus Curiae American Antitrust Institute, Inc. on Issues of Remedy in Support of Neither Party to be served as described below.

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