IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Nos. 07-1086, 07-1124

RAMBUS INC.,

Petitioner,

v.

FEDERAL TRADE COMMISSION,

Respondent,

PETITION OF RESPONDENT FEDERAL TRADE COMMISSION FOR REHEARING *EN BANC*

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MISCELLANEOUS

GLOSSARY

CX	Complaint Counsel Trial Exhibit
DRAM	Dynamic Random Access Memory
FRAND	Fair, Reasonable, and Nondiscriminatory (Licensing Terms)
FTC L. Op.	Opinion of the Federal Trade Commission on Liability, FTC Docket No. 9302 (August 2, 2006)
FTC R. Op.	Opinion of the Federal Trade Commission on Remedy, FTC Docket No. 9302 (February 5, 2007)
JEDEC:	Joint Electron Device Engineering Council (currently known as the JEDEC Solid State Technology Association)
Rambus Br.	Opening Brief for Petitioner Rambus Inc.
RAND	Reasonable and Nondiscriminatory (Licensing Terms)
RDRAM:	Rambus DRAM
SSO	Standard-Setting Organization

REQUIRED STATEMENT PURSUANT TO FED. R. APP. P. 35(B)

Respondent, the Federal Trade Commission ("FTC" or "Commission"), respectfully seeks rehearing *en banc* of the panel decision of April 22, 2008, setting aside the Commission's final order to cease and desist and, in support thereof, states as follows:

A. The panel decision conflicts with the following decisions of the United States Supreme Court or of this Court, and consideration by the full Court is therefore necessary to secure and maintain uniformity of the Court's decisions:

1. The panel decision is inconsistent with the causation standard for monopolization articulated by this Court's *en banc* decision in *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001).

2. The panel decision improperly extends the Supreme Court's holding in *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128 (1998), to protect a firm's use of deception to achieve monopoly power.

B. The proceeding involves an issue of exceptional importance, in that the panel's failure to recognize the competitive harm that anticompetitive deception causes in the context of industry standard-setting organizations constitutes a significant error that has grave implications for beneficial industry standard-setting.

STATEMENT OF THE CASE

Industry standard-setting can provide a beneficial means for industry participants to select the best and the most cost-effective technologies, ensure interoperability between complementary components, and produce better and cheaper products that enhance consumer welfare. But the market power that standardization may entail can also make standard setting organizations ("SSOs") enticing targets for abuse, as the Supreme Court has recognized.[1] This case involves a scheme by

[1] *See Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 500 (1988); *American Soc'y of Mech. Engineers v. Hydrolevel Corp.*, 456 U.S. 556, 571 (1982).

one SSO member to obtain monopoly power by deceptively circumventing rules that were intended to prevent such an outcome. The case has broad implications for the ability of antitrust law to protect against "hold-up" by patent owners who acquire market power by engaging in deception or other exclusionary conduct in the standard-setting process.[2]

Respondent Rambus, after joining an SSO known as the Joint Electron Device Engineering Council ("JEDEC"), participated in proceedings in which JEDEC members debated which technologies to select for proposed industry standards for a widely-used type of computer memory. From the outset, Rambus worked deliberately to subvert JEDEC's standard-setting work. Rambus concealed its patent interests in technologies JEDEC was considering and – using information that it gained in standard-setting proceedings – filed amendments to its pending patent applications. Ultimately, JEDEC – not knowing about Rambus's patent interests – incorporated Rambus technologies into standards that were implemented by nearly all of the computer memory market.

After instituting administrative proceedings and reviewing a voluminous record, the FTC found that, but for Rambus's deception, *either* (1) JEDEC would have selected alternative technologies, *or* (2) JEDEC – before adopting the standards – would have required Rambus to agree to license its patents to users of the standards on "reasonable and non-discriminatory" ("RAND") terms, as mandated by JEDEC rules. FTC Opinion on Liability ("FTC L. Op.") 74, available at http://www.ftc.gov/os/adjpro/d9302/060802commissionopinion.pdf; *see also* FTC Opinion on Remedy ("FTC R. Op.") 12, *available at* http://www.ftc.gov/os/adjpro/d9302/070205opinion.pdf.

[2] Several entities that stand to be directly and adversely affected by the panel's ruling have indicated that they intend to seek leave to participate as *amici* in support of this Petition. While the Commission recognizes the Court's reluctance to entertain *amicus* submissions at this stage (*see* D.C. Cir. Rule 35(f)), such *amicus* submissions would likely assist the Court in evaluating the impact of the panel's ruling on affected third parties.

The Commission concluded that Rambus's deceptive conduct was "exclusionary" and that it "contributed significantly" to Rambus's acquisition of durable monopoly power in the relevant markets. FTC L. Op. 5, 29, 68, 80-81, 118 (citing, *inter alia*, *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (*en banc*)).

On April 22, 2008, a panel of this Court set aside the Commission's order, holding that the Commission had not sustained its allegations of monopolization. In doing so, the panel assumed that Rambus's conduct was deceptive, but then abrogated the causation standard that this Court established in *Microsoft* and improperly extended the Supreme Court's decision in *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128 (1998), to immunize deceptive conduct that contributes significantly to the creation of monopoly power. The importance of theses core issues of antitrust law, and the grave ramifications of the panel ruling for beneficial industry standard setting, warrant reconsideration by the *en banc* Court.

Statement of Facts

Rambus develops computer memory technologies, secures intellectual property rights over them, and licenses the technologies to manufacturers. Slip. op. 3. In 1990, Rambus filed a patent application describing a faster architecture for dynamic random access memory ("DRAM"). Among the many patents that relate back to the 1990 application are several that Rambus has claimed cover the technologies on which the present case has focused. FTC L. Op. 7.

In 1992, Rambus joined JEDEC, and immediately commenced a deliberate course to subvert JEDEC's goals.[3] Rambus misled JEDEC into believing that it had no patent interests in tech-

[3] Starting in 1990, Rambus tried to market its proprietary RDRAM technology to manufacturers of DRAM chips and DRAM-compatible microprocessors. Manufacturers rejected RDRAM – and instead turned to JEDEC – "at least in part because [they] were reluctant to pay royalties and licensing fees to Rambus." FTC L. Op. 8.

nologies that JEDEC was debating for inclusion in the standards, and that it was not seeking such patents. Additionally, it used information it obtained by attending standard-setting meetings in to implement a scheme continually to amend pending patent applications, so that its patents ultimately would cover technologies that JEDEC was debating for inclusion in industry-wide standards. FTC L. Op. 66-68. Rambus devised and implemented this scheme, knowing – in the words of its representative to JEDEC – that "[t]he job of JEDEC is to create standards which steer clear of patents which must be used to be in compliance with the standard whenever possible." FTC L. Op. 53-54 (quoting CX 903 at 2).

Not knowing about Rambus's ongoing efforts to patent those technologies, JEDEC could not weigh Rambus's patent interests in deciding which of several alternative technologies to select for the standards. FTC L. Op. 98. Ultimately, JEDEC standardized technologies over which Rambus was able to assert patent rights – a result that JEDEC rules prohibited without written RAND assurances from the patent holder. But, having been misled about Rambus's patent position, JEDEC unwittingly included such technologies without securing the required RAND commitment. FTC L. Op. 66-67.

Rambus waited to reveal its patent interests until after the standards had been implemented by a large segment of the industry. Rambus then engaged in a classic "hold-up" of the industry. Knowing that JEDEC's members were "locked-in" by the cost and delay of switching to alternative technologies, Rambus began making demands for supracompetitive royalties from firms practicing the standard. FTC L. Op. 4-5.

<u>The FTC's Administrative Proceedings</u>

A key question for the Commission was "whether Rambus's course of deceptive conduct contributed significantly to Rambus's acquisition of monopoly power * * * ." FTC L. Op. at 68;

see also id. at 73, 81. To resolve that issue, the Commission applied a two-step analysis. First, it addressed the link between Rambus's conduct and JEDEC's standard-setting decisions and concluded that Rambus specifically intended to influence JEDEC's assessment of its patented technologies; that JEDEC members were acutely sensitive to the total cost of any technology; that alternative technologies were available to JEDEC; and that JEDEC members gave the alternatives "serious, searching consideration" and chose the Rambus technologies "only after prolonged debate." FTC L. Op. 74-79. For these reasons, the Commission found that Rambus's deceptive conduct significantly contributed to JEDEC's adoption of Rambus's technologies, FTC L. Op. 118, and therefore that, but for Rambus's deceptive conduct, *either* (1) JEDEC would have selected alternative technologies, *or* (2) it would have required prior RAND assurances and an opportunity for licensing negotiations *ex ante*, as required by JEDEC's rules. FTC L. Op. 74. Second, the Commission considered the link between JEDEC's standards and Rambus's monopoly power and concluded that the drive to market-wide uniformity and longstanding dominance of JEDEC-compliant DRAMs made it "likely" that the market would coalesce around JEDEC's standardized choice. FTC L. Op. 77-79.

The Panel Decision

As framed by the panel, the "critical question [was] whether Rambus had engaged in exclusionary conduct, and thereby acquired its monopoly power in the relevant markets unlawfully." Slip op. at 12.[4] To answer that question, the panel applied two antitrust principles that it traced to *Microsoft*. First, to be condemned as exclusionary, the challenged conduct must have "anticompeti-

[4] The Commission found – and Rambus did not dispute – that Rambus has monopoly power in relevant antitrust markets, slip op. at 12, leaving only the question whether the monopoly resulted from "willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident." *Microsoft*, 253 F.3d at 50 (citing *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966)).

tive effect" – *i.e.*, it must harm the "competitive process," and thereby harm consumers. *Id.* Second, an antitrust plaintiff, including the Government, must prove the anticompetitive effect. *Id.* The panel further stated that "an antitrust plaintiff must establish that the standard-setting organization would not have adopted the standard in question but for the misrepresentation or omission."[5]

The panel assumed that the first possible outcome of the alleged deception – *i.e.*, but for Rambus's course of deceptive conduct, JEDEC would have selected alternative technologies – was "indeed anticompetitive." *Id.* at 13. However, the panel held that the second possible outcome – *i.e.*, that Rambus would have avoided a RAND commitment – did not support a finding of unlawful monopolization as a matter of law. Slip op. at 13. The panel acknowledged that using deception to avoid a RAND commitment may lead to higher prices, but added the caveat that "an otherwise lawful monopolist's use of deception simply to obtain higher prices normally has no particular tendency to exclude rivals and thus to diminish competition." Slip op. at 15. The panel cited the Supreme Court's decision in *NYNEX Corp. v. Discon, Inc.*, *supra*, for the proposition that allegations that an otherwise lawful monopolist charges higher prices as a result of fraudulent conduct are not sufficient to sustain a claim of competitive harm. Slip op. at 16-17.

Focusing on the Commission's inability to rule out the second possible outcome of the alleged misconduct – *i.e.*, avoidance of a RAND commitment – the panel held that the Commission had not sustained its burden of demonstrating harm to the competitive process.[6] Rather than

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[5] *Id.* at 18 (quoting II Herbert Hovenkamp *et al.*, *IP & Antitrust* § 35.5 at 35-45 (Supp. 2008)); *see id. at 19.* The cited treatise reference applies to a different factual setting than that presented here. *See* FTC L. Op. at 81 n.431.

[6] Slip. op. at 13. Specifically, the panel emphasized that, in the Commission's Remedy Opinion, a majority of the Commissioners concluded that there was insufficient evidence that JEDEC would have standardized other technologies had it known the full scope of Rambus's intellectual property. *Id.*; *see* FTC R. Op. at 12. That portion of the Remedy Opinion was, however,

evaluate whether Rambus's conduct appeared reasonably capable of contributing to monopoly power, the panel held that the Commission was required to demonstrate that JEDEC would have selected alternative technologies "but for" Rambus's deception. Slip op. at 18-19.

Given the panel's disposition of the legal issues that Rambus raised, it did not reach the question whether the Commission's factual findings as to deception were supported by substantial evidence.[7] *See* 15 U.S.C. § 45(c) ("The findings of the Commission as to the facts, if supported by evidence, shall be conclusive.").

ARGUMENT

I. The Panel Decision Conflicts With *Microsoft*'s Holding on Causation in Section 2 Cases

The proper standard of causation is set forth by this Court in its landmark *Microsoft* decision. In *Microsoft*, the Court held that to sustain a claim of unlawful monopolization, the government must demonstrate that the challenged conduct "reasonably appears capable of making a significant contribution to * * * monopoly power." *Microsoft*, 253 F.3d at 79. In *Microsoft*, the government showed that Microsoft had impaired the ability of the developers of browsers and other "middleware" to gain ground in their own markets, and that this misconduct protected Microsoft from poten-

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related to the majority's acceptance of Rambus's argument that a higher standard of proof of causation would be necessary to support a remedy such as royalty-free licensing. *Id.* at 10-11. The fact that a majority of the Commission was willing to give Rambus the benefit of the doubt on this remedial point – thus limiting Rambus to fair and reasonable royalties instead of ordering royalty-free licensing, as Commissioners Harbour and Rosch would have preferred – has no bearing on the Commission's liability decision.

[7] While the panel raised concerns about some of the Commission's factual findings relating to deception, it did not similarly call into question the Commission's findings about the deliberateness of Rambus's conduct or JEDEC's commitment to avoiding patented technologies without securing prior RAND commitments. In finding that Rambus had deceived JEDEC, the Commission evaluated the entire record – including internal Rambus documents that describe what its employees thought Rambus was doing.

tial competition in operating systems, in which it maintained a monopoly. The government, however, was unable to rule out entirely the possibility that Microsoft would have been able to maintain its monopoly position even absent this misconduct. *Id.* Microsoft contended that the government had not established a causal link between harm to middleware manufacturers and Microsoft's continued monopoly in operating systems, and that the absence of such a link was fatal to the government's case. This Court unequivocally rejected that proposition, holding that there is no requirement of "direct proof that a defendant's continued monopoly power [be] precisely attributable to its anticompetitive conduct." *Id.* The Court recognized that important policy considerations dictate this result. Requiring such "but for" proof in an equitable enforcement action would impose on the government a nearly insurmountable burden of reconstructing the hypothetical "but for" marketplace – a burden that "would only encourage monopolists to take more and earlier anticompetitive action." *Id.* Instead, the Court held, "the defendant is made to suffer the uncertain consequences of its own undesirable conduct." *Id.*

The panel imposed just such a burden on the Commission in the present case. The panel decision does not apply, or even address, the proper standard of causation, as established in *Microsoft*.[8] To the extent that the panel decision addresses *Microsoft* at all, it is to state the general proposition that "it is the antitrust plaintiff – including the Government as plaintiff – that bears the burden of proving the anticompetitive effect of the monopolist's conduct." Slip op. at 12; *see id.*

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[8] Rambus argued that *Microsoft* is distinguishable because it dealt with monopoly maintenance rather than monopoly acquisition. *See* Rambus Br. at 60. The panel, however, did not address this argument, and this Court in *Microsoft* gave no hint that different standards of proof apply to exclusionary conduct in Section 2 "monopoly maintenance" cases than in other Section 2 cases. Similarly, the treatise from which this Court drew its causation standard in *Microsoft* makes no such distinction. *See* III Philip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶¶ 650a, 651c, 651f (rev. ed. 1996).

at 18-19. The panel decision concludes that the Commission did not sustain this burden, and then – without applying or even addressing *Microsoft*'s "reasonably capable" causation standard – adopts a line of reasoning that implicitly rejects it. According to the panel, the Commission did not sustain its burden because it did not close all doors on the possibility that JEDEC might have adopted Rambus technologies. Slip op. at 18-19.[9]

Contrary to the panel's reasoning, this Court's discussion of "anticompetitive effects" in *Microsoft*, 253 F.3d at 58-59, gives no hint that such a requirement can be used to eviscerate the *en banc* Court's careful holding regarding causation in that same case. Rather, that portion of the *Microsoft* discussion focused on the need to establish that the claimed exclusionary conduct is aimed at "the competitive *process*" and not just "one or more *competitors*." *Id.* at 58 (emphasis in original). In the present case, JEDEC's standard-setting process was the means through which technologies competed, *ex ante*, for adoption by the market.[10] Rambus distorted that process, hiding an important element of the cost of its technologies (*i.e.*, patent royalties), and thereby preventing JEDEC from properly weighing the respective costs and benefits of competing technologies.

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[9] In other words, the panel ignored the two questions that the Court deemed critical in *Microsoft*: (1) whether "as a general matter" the exclusion of alternative technologies by deception is the type of conduct that reasonably appears capable of contributing significantly to the creation of defendant's monopoly power; and (2) whether alternative technologies "reasonably constituted" threats at the time Rambus engaged in the anticompetitive conduct at issue. *Microsoft*, 253 F.3d at 79.

[10] Such competition "for" a market, rather than within a market, is a vital means of enhancing welfare in markets that tend toward a "natural" monopoly, and the Supreme Court has held that conduct that impairs such competition can support a claim of unlawful monopolization. *See, e.g., Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973); *see also Omega Satellite Products Co. v. City of Indianapolis*, 694 F.2d 119, 127 (7th Cir. 1982); *Fishman v. Wirtz*, 807 F.2d 520, 535 (7th Cir. 1986); *Greenville Publishing Co., Inc. v. Daily Reflector, Inc.*, 496 F.2d 391, 397 (4th Cir. 1974).

The panel's effective overruling of *Microsoft*'s causation standard will impede efforts to use Section 2 to address the unlawful acquisition of monopoly power. As the Supreme Court explained in *Standard Oil Co. of California v. United States* ("*Socal*"), 337 U.S. 293, 309-310 (1949), "to demand that bare inference be supported by evidence as to what would have happened but for the adoption of the practice that was in fact adopted * * * would be a standard of proof, if not virtually impossible to meet, at least most ill-suited for ascertainment by courts."[11]

II. The Panel Decision Improperly Extends *Discon* to Protect Deception That Facilitates Acquisition of Monopoly Power

Even if the panel were correct in insisting, contrary to *Microsoft*'s causation analysis, that the Commission establish a "but for" causal link between Rambus's conduct and harmful competitive effects in the market, it erred in failing to recognize that the Commission indeed had shown such a link. The panel erred in assessing the consequences of Rambus's deception, particularly in treating Rambus's avoidance of *ex ante* efforts to restrain its ability to exercise monopoly power, such as exacting RAND commitments, as a mere ploy by an already lawful monopolist to secure high prices. Slip op. at 15-19. The panel's dismissal of the harm to JEDEC members as a mere "loss of an opportunity to seek favorable licensing terms" – and its consequent reliance on the analysis in *NYNEX Corp. v. Discon, Inc.* – reflects its failure to appreciate the fundamental differences between actions taken by a monopolist to exercise monopoly power already obtained, and actions that are central to its obtaining such power.

[11] Although the discussion in *Socal* arose in the context of Section 3 of the Clayton Act, 15 U.S.C. § 14, the analysis is equally applicable to monopolization. *See* III Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 651f at 83 (2d ed. 2002) ("[B]ecause monopoly will almost certainly be grounded in part in factors other than a particular exclusionary act, no government seriously concerned about the evil of monopoly would condition its intervention solely on a clear and genuine chain of causation from an exclusionary act to the presence of monopoly.").

Discon addressed allegations that a provider of regulated telephone services – which *previously* and *lawfully* had obtained a monopoly for those services – created the appearance that its costs had increased in order to pass such "higher costs" on to its customers in the form of higher regulated rates. 525 U.S. at 131-32; *see* slip op. at 15. The Court reasoned that, when a lawful monopolist uses deception to attain higher prices, consumer injury flows "not so much from a less competitive market" as from "the exercise of monopoly power." Thus, even a generous reading of *Discon*'s reasoning extends only to deception that is used to exploit preexisting, lawfully obtained monopoly power.[12]

That reasoning has no bearing in this case, in which Rambus used deception as a means of *securing* monopoly power. The panel considered Rambus a "lawful monopolist," although Rambus obtained monopoly power through unlawful means. The panel was simply wrong in concluding that Rambus's deception did not harm competition from alternative technologies in the relevant markets. *See* slip. op. at 18. Prior to adoption of a standard, technologies compete on both quality and price for incorporation into the standard. FTC L. Op. 74-75. Adoption of a standard to be used by all industry participants necessarily excludes competing technologies. But the JEDEC procedures that Rambus flouted impose conditions specifically aimed at constraining any exercise of monopoly power that might otherwise result from adoption of a standard. Had JEDEC known of Rambus's patent interests, its rules would have required a RAND commitment from Rambus, and would have required JEDEC to adopt other technologies if Rambus had declined to make the RAND

[12] The actual holding of the Supreme Court in *Discon* was limited to rejection of a *per se* theory under Section 1 of the Sherman Act, leaving open other antitrust theories under Sections 1 or 2. *See* 525 U.S. at 139-40. On remand, the district court relied on the Supreme Court's analysis in concluding that such an increase in price did not constitute an adverse "effect on competition" that could support a violation of Section 2. 86 F. Supp. 2d 154, 163-64 (W.D.N.Y. 2000).

commitment. FTC L. Op. 97 & n.541, 81-98. Furthermore, had Rambus not deceived JEDEC, it would have been subject to prior negotiations with JEDEC members, who would have been able to make an assessment of the potential costs of incorporating a patented technology into the standard.

Absent Rambus's deception, the competition to become part of the standard would have limited the price Rambus could have charged for its technologies and subjected it to the opportunity for *ex ante* negotiations. Rambus's avoidance of these constraints was not the *ex post* exercise of market power by a lawful monopolist; it was the mechanism by which Rambus secured its monopoly. Accordingly, the higher prices that flowed to Rambus from avoiding these constraints warrant treatment as anticompetitive effects of its exclusionary conduct,[13] and the panel's conclusion that the Commission failed to show anticompetitive effects is incorrect, even under its flawed reading of *Microsoft*.

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[13] *See* II *IP & Antitrust* § 35.5 at 35-46 to 35-47 (Supp. 2008) ("If an antitrust plaintiff can show that the patent owner would have licensed the patent at a competitive rate had it been forced to disclose the patent before the organization acted but charged a higher rate because of the nondisclosure, we think that overcharge can properly constitute competitive harm attributable to the nondisclosure."); *see also id.* at 35-47 n.22.5 ("Assuming the facts the FTC found were correct [in *Rambus*], we think it is well-supported as a matter of law."). Moreover, an *ex ante* RAND commitment prevents the effective *ex post* exercise of monopoly power, the essence of which is "the power to control prices." *United States v. E.I. DuPont de Nemours & Co.*, 351 U.S. 377, 391 (1956).

The panel acknowledged that antitrust scholars maintain that "if nondisclosure to an SSO enables a participant to obtain higher royalties than would otherwise have been attainable, the 'overcharge can properly constitute competitive harm attributable to the nondisclosure,' as the overcharge 'will distort competition in the downstream market.'" Slip. op. at 18 (quoting 2 IP & Antitrust § 35.5 at 35-47). But the panel rejected these views, falling back on *Discon* ("The contention that price-raising deception has downstream effects is surely correct, but that consequence was equally surely true in [*Discon*] * * * and equally obvious to the Court"), and again failed to recognize the difference between exclusionary conduct that occurs *before* the acquisition of monopoly power and contributes to that power, and the exploitation of monopoly power that occurs *after* the lawful attainment of such power.

III. The Panel Failed to Appreciate the Competitive Harm That Results When Competitors Engage in Deception During the Standard-Setting Process

The panel's misunderstanding of the competitive harm that flows from deceptive abuse of the standard-setting process has implications that extend far beyond the computer memory industry. As the Commission observed, "[s]tandard setting occurs in many industries," and can benefit consumers by, among other things, ensuring the compatibility of products that are produced by different firms, making products more useful to consumers, and stimulating output. FTC L. Op. at 13. Standard-setting plays a particularly crucial role for information technology products – such as computers and cellular phones – that are made of complementary components that must work well together. JEDEC's practices and policies regarding patent interests serve vital consumer welfare interests, both by ensuring that industry standards are based on full information about the benefits and costs (including potential patent royalties) of competing technologies, and by ensuring that in no event will a patent holder have the unfettered right to exclude competitors or extract supracompetitive royalties. The panel's incorrect application of basic antitrust principles endangers these benefits.

As this Court noted in *Microsoft* – but the panel failed to recognize – in the "network" industries in which these products are sold, "[o]nce a product or standard achieves wide acceptance, it becomes more or less entrenched. Competition in such industries is 'for the field' rather than 'within the field.'" 253 F.3d at 50 (citing Harold Demsetz, "Why Regulate Utilities?," 11 J.L. & Econ. 55, 57 & n.7 (1968) (emphasis omitted)). The panel decision ignores this fundamental dynamic. It focuses instead on how it imagines the market *after* industry participants were locked in to the JEDEC standards, imagining that "alternative technologies" somehow would arise to compete with the standardized technologies *after* the standards were implemented. Slip op. at 18.

Indeed, the panel suggests that excessive royalty demands by Rambus once the industry was locked in would *promote* this form of imaginary after-the-fact competition, by enticing new competitors to take on the industry standard. *See* slip op. at 19. This reasoning ignores the "lock-in" that industry standards often create, and the pivotal role that *ex ante* consideration of patent interests, in the course of the competitive process of selecting the industry standard, plays in avoiding patent hold-up.

As the Third Circuit noted recently in *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 314 (3d Cir. 2007), antitrust has an important role in protecting consumers from precisely this type of competitive harm. Describing the Commission's decision as a "landmark," it explained that "[d]eception 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." Based on its understanding of the corruptive impact of deception in industry standard-setting, the *Broadcom* court concluded that allegations that an SSO participant made a false RAND commitment state a claim under Section 2 of the Sherman Act.[14] *Id.* at 315. The panel decision fails to provide such protections. Indeed, the effect of the panel decision is to protect a corrupt SSO participant as a "lawful monopolist" so long as there is *some* possibility that the SSO would have selected the

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[14] The panel's treatment of the protections provided by a RAND commitment raises a needless conflict with the Third Circuit's treatment of the same issue in *Broadcom*. In that case, the Circuit held that an antitrust plaintiff states "actionable anticompetitive conduct with allegations that [the defendant] deceived relevant [SSOs] into adopting the * * * standard by committing to license its * * * technology on FRAND terms and, later, after lock-in occurred, demanding non-FRAND royalties." 501 F.3d at 313. As explained in *Broadcom*, a false RAND commitment distorts SSO members' analysis of the relative costs and benefits of standardizing alternatives in the competitive period that precedes adoption of a standard. *Id.* This is an injury of competitive significance that the panel failed to acknowledge. *See* slip op. at 18.

relevant technology in the absence of deception. In setting the bar so unrealistically high, the panel decision undermines the ability of antitrust to protect consumers from the long-lasting consequences of deception in industry standard-setting. This is a significant error that warrants rehearing *en banc.*

CONCLUSION

For the foregoing reasons, the petition for rehearing *en banc* should be granted.

Respectfully Submitted,

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June 6, 2008

Addendum A

Certificate as to Parties and Amici

CERTIFICATE AS TO PARTIES AND AMICI

Pursuant to Fed. R. App. P. 35(c) and Circuit Rule 28(a)(1), Respondent Federal Trade Commission submits the following information as to the identity of the parties and amici:

(A) Parties

Rambus Inc. ("Rambus") is the petitioner. The Federal Trade Commission, an agency of the United States, is the respondent.

(B) Amici

The following entities, States, Commonwealths, and Territories filed amicus briefs before this Court in support of the Federal Trade Commission: JEDEC Solid State Technology Association; Samsung Electronics Co.; the States of Alaska, Arizona, Arkansas, Colorado, Florida, Hawaii, Idaho, Ohio, Illinois, Iowa, Kansas, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, Nevada, New Jersey, New Mexico, New York, Oklahoma, Oregon, South Dakota, Utah, Vermont, Washington, West Virginia, the Commonwealths of Massachusetts and Puerto Rico, the District of Columbia, and the American Samoa Government.

The following individual filed an amicus brief before this Court in support of Rambus Inc.: S.M. Oliva.

The following entities filed amicus briefs in the Federal Trade Commission administrative adjudicative proceedings: American Antitrust Institute, Inc.; Broadcom Corp.; Citizens for Voluntary Trade; Economics Professors and Scholars; Freescale Semiconductor, Inc.; Gesmer Updegrove LLP and Andrew Updegrove; Hynix Semiconductor, Inc.; Infineon Technologies AG; JEDEC Solid State Technology Association; Micron Technology, Inc.; nVidia Corp.; and Samsung Electronics Corp.

Addendum B

Panel Decision

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued February 14, 2008 Decided April 22, 2008

No. 07-1086

RAMBUS INCORPORATED,
PETITIONER

v.

FEDERAL TRADE COMMISSION,
RESPONDENT

Consolidated with
07-1124

On Petitions for Review of Final Orders of the
Federal Trade Commission

A. Douglas Melamed argued the cause for petitioner. With him on the briefs were *Paul R.Q. Wolfson*, *Sambhav N. Sankar*, *Andrew J. Ewalt*, and *Pratik A. Shah*.

S. M. Oliva, appearing pro se, was on the brief for *amicus curiae* S. M. Oliva in support of petitioner.

John F. Daly, Deputy General Counsel for Litigation, Federal Trade Commission, argued the cause for respondent. With him on the briefs were *John D. Graubert*, Principal

Deputy General Counsel, *William E. Cohen*, Deputy General Counsel for Policy Studies, and *Leslie R. Melman*, *Imad D. Abyad*, *Richard B. Dagen*, and *Patrick J. Roach*, Attorneys.

Alan J. Weinschel, *Daniel I. Prywes*, and *Daniel T. O'Connor* were on the brief of *amici curiae* JEDEC Solid State Technology Association, et al. in support of respondent and affirmance. *Amber H. Rovner* and *Carmen E. Bremer* entered appearances.

Jennifer L. Pratt, Assistant Attorney General, Attorney General's Office of the State of Ohio, was on the brief for *amici curiae* State of Ohio, et al. in support of respondent. With her on the brief were *Marc Dann*, Attorney General, *Talis J. Colberg*, Attorney General, Attorney General's Office of the State of Alaska, *Terry Goddard*, Attorney General, Attorney General's Office of the State of Arizona, *Dustin McDaniel*, Attorney General, Attorney General's Office of the State of Arkansas, *John W. Suthers*, Attorney General, Attorney General's Office of the State of Colorado, *Linda Singer*, Attorney General, Attorney General's Office of the District of Columbia, *Bill McCollum*, Attorney General, Attorney General's Office of the State of Florida, *Mark Bennett*, Attorney General, Attorney General's Office of the State of Hawaii, *Lawrence G. Wasden*, Attorney General, Attorney General's Office of the State of Idaho, *Lisa Madigan*, Attorney General, Attorney General's Office of the State of Illinois, *Thomas J. Miller*, Attorney General, Attorney General's Office of the State of Iowa, *Paul J. Morrison*, Attorney General, Attorney General's Office of the State of Kansas, *Charles C. Foti, Jr.*, Attorney General, Attorney General's Office of the State of Louisiana, *G. Steven Rowe*, Attorney General, Attorney General's Office of the State of Maine, *Douglas F. Gansler*, Attorney General, Attorney General's Office of the State of Maryland, *Martha Coakley*, Attorney General, Attorney General's Office of the

Commonwealth of Massachusetts, *Michael A. Cox*, Attorney General, Attorney General's Office of the State of Michigan, *Lori Swanson*, Attorney General, Attorney General's Office of the State of Minnesota, *Jeremiah W. (Jay) Nixon*, Attorney General, Attorney General's Office of the State of Missouri, *Catherine Cortez Masto*, Attorney General, Attorney General's Office of the State of Nevada, *Anne Milgram*, Attorney General, Attorney General's Office of the State of New Jersey, *Gary King*, Attorney General, Attorney General's Office of the State of New Mexico, *Andrew M. Cuomo*, Attorney General, Attorney General's Office of the State of New York, *W.A. Drew Edmondson*, Attorney General, Attorney General's Office of the State of Oklahoma, *Hardy Myers*, Attorney General, Attorney General's Office of the State of Oregon, *Roberto J. Sánchez Ramos*, Attorney General, Attorney General's Office of the Commonwealth of Puerto Rico, *Lawrence E. Long*, Attorney General, Attorney General's Office of the State of South Dakota, *Mark L. Shurtleff*, Attorney General, Attorney General's Office of the State of Utah, *William H. Sorrell*, Attorney General, Attorney General's Office of the State of Vermont, *Robert M. McKenna*, Attorney General, Attorney General's Office of the State of Washington, *Darrell V. McGraw, Jr.*, Attorney General, Attorney General's Office of the State of West Virginia, and *Arthur Ripley, Jr.*, Attorney General, Attorney General's Office of the American Samoa Government. *Bennett Rushkoff*, Assistant Attorney General, Attorney General's Office of the District of Columbia, entered an appearance.

Before: HENDERSON and RANDOLPH, *Circuit Judges*, and WILLIAMS, *Senior Circuit Judge*.

Opinion for the Court filed by *Senior Circuit Judge* WILLIAMS.

WILLIAMS, *Senior Circuit Judge*: Rambus Inc. develops computer memory technologies, secures intellectual property rights over them, and then licenses them to manufacturers in exchange for royalty payments. In 1990, Rambus's founders filed a patent application claiming the invention of a faster architecture for dynamic random access memory ("DRAM"). In recent years, Rambus has asserted that patents issued to protect its invention cover four technologies that a private standard-setting organization ("SSO") included in DRAM industry standards.

Before an SSO adopts a standard, there is often vigorous competition among different technologies for incorporation into that standard. After standardization, however, the dynamic typically shifts, as industry members begin adhering to the standard and the standardized features start to dominate. In this case, 90% of DRAM production is compliant with the standards at issue, and therefore the technologies adopted in those standards—including those over which Rambus claims patent rights—enjoy a similar level of dominance over their alternatives.

After lengthy proceedings, the Federal Trade Commission determined that Rambus, while participating in the standard-setting process, deceptively failed to disclose to the SSO the patent interests it held in four technologies that were standardized. Those interests ranged from issued patents, to pending patent applications, to plans to amend those patent applications to add new claims; Rambus's patent rights in all these interests are said to be sufficiently connected to the invention described in Rambus's original 1990 application that its rights would relate back to its date. Commission Br. at 46-47; Transcript of Oral Argument at 35-36; see also 35 U.S.C. §§ 120, 132. Finding this conduct monopolistic and in violation of § 2 of the Sherman Act, 15 U.S.C. § 2, the Commission went on to hold that Rambus had engaged in an unfair method of competition and unfair or deceptive acts or practices prohibited by § 5(a) of the Federal Trade Commission Act ("FTC Act"), *id.* § 45(a).

Rambus petitions for review. We grant the petition, holding that the Commission failed to sustain its allegation of monopolization. Its factual conclusion was that Rambus's alleged deception enabled it *either* to acquire a monopoly through the standardization of its patented technologies rather than possible alternatives, *or* to avoid limits on its patent licensing fees that the SSO would have imposed as part of its normal process of standardizing patented technologies. But the latter—deceit merely enabling a monopolist to charge higher prices than it otherwise could have charged—would not in itself constitute monopolization. We also address whether there is substantial evidence that Rambus engaged in deceptive conduct at all, and express our serious concerns about the sufficiency of the evidence on two particular points.

* * *

During the early 1990s, the computer hardware industry faced a "memory bottleneck": the development of faster memory lagged behind the development of faster central processing units, and this risked limiting future gains in overall computer performance. To address this problem, Michael Farmwald and Mark Horowitz began collaborating during the late 1980s and invented a higher-performance DRAM architecture. Together, they founded Rambus in March 1990 and filed Patent Application No. 07/510,898 ("the '898 application") on April 18, 1990.

As originally filed, the '898 application included a 62-page written description of Farmwald and Horowitz's invention, 150 claims, and 15 technical drawings. Under the direction of the Patent Office, acting pursuant to 35 U.S.C. § 121, Rambus effectively split the application into several (the original one and 10 "divisionals"). Thereafter, Rambus amended some of these applications and filed additional continuation and divisional applications.

While Rambus was developing a patent portfolio based on its founders' inventions, the computer memory industry was at work standardizing DRAM technologies. The locus of those efforts was the Joint Electron Device Engineering Council ("JEDEC")—then an "activity" of what is now called the Electronics Industries Alliance ("EIA") and, since 2000, a trade association affiliated with EIA and known as the JEDEC Solid State Technology Association. Any company involved in the solid state products industry could join JEDEC by submitting an application and paying annual dues, and members could receive JEDEC mailings, participate in JEDEC committees, and vote on pending matters.

One JEDEC committee, JC 42.3, developed standards for computer memory products. Rambus attended its first JC 42.3 meeting as a guest in December 1991 and began formally participating when it joined JEDEC in February 1992. At the time, JC 42.3 was at work on what became JEDEC's synchronous DRAM ("SDRAM") standard. The committee voted to approve the completed standard in March 1993, and JEDEC's governing body gave its final approval on May 24, 1993. The SDRAM standard includes two of the four technologies over which Rambus asserts patent rights—programmable CAS latency and programmable burst length.

Despite SDRAM's standardization, its manufacture increased very slowly and asynchronous DRAM continued to dominate the computer memory market, so JC 42.3 began to consider a number of possible responses—among them specifications it could include in a next-generation SDRAM standard. As part of that process, JC 42.3 members received a survey ballot in October 1995 soliciting their opinions on features of an advanced SDRAM—which ultimately emerged as the double data rate ("DDR") SDRAM standard. Among the features voted on were the other two technologies at issue here: on-chip phase lock and delay lock loops ("on-chip PLL/DLL") and dual-edge clocking. The Committee tallied and discussed the survey results at its December 1995 meeting, which was Rambus's last as a JEDEC member. Rambus formally withdrew from JEDEC by letter dated June 17, 1996, saying (among other things) that the terms on which it proposed to license its proprietary technology "may not be consistent with the terms set by standards bodies, including JEDEC." Complaint Counsel's Exhibit ("CX") 887.

JC 42.3's work continued after Rambus's departure. In March 1998 the committee adopted the DDR SDRAM standard, and the JEDEC Board of Directors approved it in 1999. This standard retained SDRAM features including programmable CAS latency and programmable burst length, and it added on-chip PLL/DLL and dual-edge clocking; DDR SDRAM, therefore, included all four of the technologies at issue here.

Starting in 1999, Rambus informed major DRAM and chipset manufacturers that it held patent rights over technologies included in JEDEC's SDRAM and DDR SDRAM standards, and that the continued manufacture, sale, or use of products compliant with those standards infringed its rights. It invited the manufacturers to resolve the alleged infringement through licensing negotiations. A number of manufacturers agreed to licenses, see Opinion of the Commission ("Liability Op."), *In re Rambus*, Docket No. 9302, at 48 n.262 (July 31, 2006) (discussing cases); others did not, and litigation ensued, see *id.* at 17-21.

On June 18, 2002, the Federal Trade Commission filed a complaint under § 5(b) of the FTC Act, 15 U.S.C. § 45(b), charging that Rambus engaged in unfair methods of competition and unfair or deceptive acts or practices in violation of the Act, see *id.* § 45(a). Specifically, the Commission alleged that Rambus breached JEDEC policies requiring it to disclose patent interests related to standardization efforts and that the disclosures it did make were misleading. By this deceptive conduct, it said, Rambus unlawfully monopolized four technology markets in which its patented technologies compete with alternative innovations to address technical issues relating to DRAM design—markets for latency, burst length, data acceleration, and clock synchronization technologies. Compl. at 1-2, 28-29 (June 18, 2002); see also Liability Op. at 5.

Proceedings began before an administrative law judge, who in due course dismissed the Complaint in its entirety. Initial Decision ("ALJ Op.") at 334 (Feb. 23, 2004). He concluded that Rambus did not impermissibly withhold material information about its intellectual property, *id.* at 260-86, and that, in any event, there was insufficient evidence that, if Rambus had disclosed all the information allegedly required of it, JEDEC would have standardized an alternative technology, *id.* at 310-23.

Complaint Counsel appealed the ALJ's Initial Decision to the Commission, which reopened the record to receive additional evidence and did its own plenary review. See Liability Op. at 17, 21. On July 31, 2006 the Commission vacated the ALJ's decision and set aside his findings of fact and conclusions of law. *Id.* at 21. The Commission found that while JEDEC's patent disclosure policies were "not a model of clarity," *id.* at 52, members expected one another to disclose patents and patent applications that were relevant to technologies being considered for standardization, *plus* (though the Commission was far less clear on these latter items) planned amendments to pending applications or "anything they're working on that they potentially wanted to protect with patents down the road," *id.* at 56; see generally *id.* at 51-59, 66. Based on this interpretation of JEDEC's disclosure requirements, the Commission held that Rambus willfully and intentionally engaged in misrepresentations, omissions, and other practices that misled JEDEC members about intellectual property information "highly material" to the standard-setting process. *Id.* at 68; see also *id.* at 37-48 (outlining Rambus's "Chronology of Concealment").

The Commission focused entirely on the allegation of monopolization. See *id.* at 27 n.124. In particular, the Commission held that the evidence and inferences from Rambus's purpose demonstrated that "but for Rambus's deceptive course of conduct, JEDEC either would have excluded Rambus's patented technologies from the JEDEC DRAM standards, or would have demanded RAND assurances [*i.e.*, assurances of "reasonable and non-discriminatory" license fees], with an opportunity for *ex ante* licensing negotiations." *Id.* at 74; see also *id.* at 77, 118-19. Rejecting Rambus's argument that factors other than JEDEC's standards allowed Rambus's technologies to dominate their respective markets, *id.* at 79-96, the Commission concluded that Rambus's deception of JEDEC "significantly contributed to its acquisition of monopoly power," *id.* at 118.

After additional briefing by the parties, see *id.* at 119-20, the Commission rendered a separate remedial opinion and final order. Opinion of the Commission on Remedy ("Remedy Op.") (Feb. 2, 2007); Final Order (Feb. 2, 2007). It held that it had the authority in principle to order compulsory licensing, but that remedies beyond injunctions against future anticompetitive conduct would require stronger proof that they were necessary to restore competitive conditions.

Remedy Op. at 2-11. Applying that more demanding burden to Complaint Counsel's claims for relief, the Commission refused to compel Rambus to license its relevant patents royalty-free because there was insufficient evidence that "absent Rambus's deception" JEDEC would have standardized non-proprietary technologies instead of Rambus's; thus, Complaint Counsel had failed to show that such a remedy was "necessary to restore competition that would have existed in the 'but for' world." *Id.* at 12; see also *id.* at 13, 16. Instead, the Commission decided to compel licensing at "reasonable royalty rates," which it calculated based on what it believed would have resulted from negotiations between Rambus and manufacturers before JEDEC committed to the standards. *Id.* at 16-25. The Commission's order limits Rambus's royalties for three years to 0.25% for JEDEC-compliant SDRAM and 0.5% for JEDEC-compliant DDR SDRAM (with double those royalties for certain JEDEC-compliant, non-DRAM products); after those three years, it forbids any royalty collection. Final Order at 2-4; Remedy Op. at 22-23.

Rambus moved for reconsideration, and the Commission denied the motion in relevant part on April 27, 2007. Rambus timely petitioned for our review of both the Commission's Final Order and its Denial of Reconsideration, see 15 U.S.C. § 45(c), and we consolidated those petitions.

Rambus challenges the Commission's determination that it engaged in unlawful monopolization—and thereby violated § 5 of the FTC Act—on a variety of grounds, of which two are most prominent. First, it argues that the Commission erred in finding that it violated any JEDEC patent disclosure rules and thus that it breached any antitrust duty to provide information to its rivals. Second, it asserts that even if its nondisclosure contravened JEDEC's policies, the Commission found the consequences of such nondisclosure only in the alternative: that it prevented JEDEC *either* from adopting a non-proprietary standard, *or* from extracting a RAND commitment from Rambus when standardizing its technology. As the latter would not involve an antitrust violation, says Rambus, there is an insufficient basis for liability.

We find the second of these arguments to be persuasive, and conclude that the Commission failed to demonstrate that Rambus's conduct was exclusionary under settled principles of antitrust law. Given that conclusion, we need not dwell very long on the substantiality of the evidence, which we address only to express our serious concerns about the breadth the Commission ascribed to JEDEC's disclosure policies and their relation to what Rambus did or did not disclose.

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In this case under § 5 of the FTC Act, the Commission expressly limited its theory of liability to Rambus's unlawful monopolization of four markets in violation of § 2 of the Sherman Act, 15 U.S.C. § 2. See Liability Op. at 27 n.124; see also *FTC v. Cement Inst.*, 333 U.S. 683, 694 (1948) (§ 5 reaches all conduct that violates § 2 of the Sherman Act). Therefore, we apply principles of antitrust law developed under the Sherman Act, and we review the Commission's construction and application of the antitrust laws *de novo*. *FTC v. Indiana Fed'n of Dentists*, 476 U.S. 447, 454 (1986); *Polygram Holding, Inc. v. FTC*, 416 F.3d 29, 33 (D.C. Cir. 2005).

It is settled law that the mere existence of a monopoly does not violate the Sherman Act. See *Verizon Commc'ns, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004); *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001) (en banc) (*per curiam*). In addition to "the possession of monopoly power in the relevant market," the offense of monopolization requires "'the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historical accident.'" *Trinko*, 540 U.S. at 407 (quoting *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966)); *Microsoft*, 253 F.3d at 50 (same). In this case, Rambus does not dispute the nature of the relevant markets or that its patent rights in the four relevant technologies give it monopoly power in each of those markets. See Liability Op. at 72-73. The critical question is whether Rambus engaged in exclusionary conduct, and thereby acquired its monopoly power in the relevant markets unlawfully.

To answer that question, we adhere to two antitrust principles that guided us in *Microsoft*. First, "to be condemned as exclusionary, a monopolist's act must have 'anticompetitive effect.' That is, it must harm the competitive *process* and thereby harm consumers. In contrast, harm to one or more *competitors* will not suffice." *Microsoft*, 253 F.3d at 58; see also *Trinko*, 540 U.S. at 407; *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 224 (1993); *Covad Commc'ns. Co. v. Bell Atlantic Corp.*, 398 F.3d 666, 672 (D.C. Cir. 2005). Second, it is the antitrust plaintiff—including the Government as plaintiff—that bears the burden of proving the anticompetitive effect of the monopolist's conduct. *Microsoft*, 253 F.3d at 58-59.

The Commission held that Rambus engaged in exclusionary conduct consisting of misrepresentations, omissions, and other practices that deceived JEDEC about the nature and scope of its patent interests while the organization standardized technologies covered by those interests. Liability Op. at 28, 68. Had Rambus fully disclosed its intellectual property, "JEDEC either would have excluded Rambus's patented technologies from the JEDEC DRAM standards, or would have demanded RAND assurances, with an opportunity for *ex ante* licensing negotiations." Liability Op. at 74. But the Commission did not determine that one or the other of these two possible outcomes was the more likely. See Transcript of Oral Argument at 43 (Commission's counsel confirming that the Commission was unable to decide which of the two possible outcomes would have occurred had Rambus disclosed). The Commission's conclusion that Rambus's conduct was exclusionary depends, therefore, on a syllogism: Rambus avoided one of two outcomes by not disclosing its patent interests; the avoidance of either of those outcomes was anticompetitive; therefore Rambus's nondisclosure was anticompetitive.

We assume without deciding that avoidance of the first of these possible outcomes was indeed anticompetitive; that is, that if Rambus's more complete disclosure would have caused JEDEC to adopt a different (open, non-proprietary) standard, then its failure to disclose harmed competition and would support a monopolization claim. But while we can assume that Rambus's nondisclosure made the adoption of its technologies somewhat more likely than broad disclosure would have, the Commission made clear in its remedial opinion that there was insufficient evidence that JEDEC would have standardized other technologies had it known the full scope of Rambus's intellectual property. See Remedy Op. 12. Therefore, for the Commission's syllogism to survive—and for the Commission to have carried its burden of proving that Rambus's conduct had an anticompetitive effect—we must also be convinced that if Rambus's conduct merely enabled it to avoid the other possible outcome, namely JEDEC's obtaining assurances from Rambus of RAND licensing terms, such conduct, alone, could be said to harm competition. Cf. *Avins v. White*, 627 F.2d 637, 646 (3d Cir. 1980) ("Where . . . a general verdict may rest on either of two claims—one supported by the evidence and the other not—a judgment thereon must be reversed." (quoting *Allbergo v. Reading Co.*, 372 F.2d 83, 86 (3d Cir. 1966))). We are not convinced.

Deceptive conduct—like any other kind—must have an anticompetitive effect in order to form the basis of a monopolization claim. "Even an act of pure malice by one business competitor against another does not, without more, state a claim under the federal antitrust laws," without proof of "a dangerous probability that [the defendant] would monopolize a particular market." *Brooke Group*, 509 U.S. at 225. Even if deception raises the price secured by a seller, but does so without harming competition, it is beyond the antitrust laws' reach. Cases that recognize deception as exclusionary hinge, therefore, on whether the conduct impaired rivals in a manner tending to bring about or protect a defendant's monopoly power. In *Microsoft*, for example, we found Microsoft engaged in anticompetitive conduct when it tricked independent software developers into believing that its software development tools could be used to design cross-platform Java applications when, in fact, they produced Windows-specific ones. The deceit had caused "developers who were opting for portability over performance . . . unwittingly [to write] Java applications that [ran] only on Windows." 253 F.3d at 76. The focus of our antitrust scrutiny, therefore, was properly placed on the resulting harms to competition rather than the deception itself.

Another case of deception with an anticompetitive dimension is *Conwood Co. v. U.S. Tobacco Co.*, 290 F.3d 768 (6th Cir. 2001), where the Sixth Circuit found that U.S. Tobacco's dominance of the moist snuff market caused retailers to rely on it as a "category manager" that would provide trusted guidance on the sales strategy and in-store display for all moist snuff products, *id.* at 773-78. Under those circumstances, the court held that its misrepresentations to retailers about the sales strength of its products versus its competitors' strength reduced competition in the monopolized market by increasing the display space devoted to U.S. Tobacco's products and decreasing that allotted to competing products. *Id.* at 783, 785-88, 790-91; see also *LePage's Inc. v. 3M*, 324 F.3d 141, 153 (3d Cir. 2003) (calling *Conwood* "a good illustration of the type of exclusionary conduct that will support a § 2 violation").

But an otherwise lawful monopolist's use of deception simply to obtain higher prices normally has no particular tendency to exclude rivals and thus to diminish competition. Consider, for example, *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128 (1998), in which the Court addressed the antitrust implications of allegations that NYNEX's subsidiary, New York Telephone Company, a lawful monopoly provider of local telephone services, charged its customers higher prices as result of fraudulent conduct in the market for the service of removing outdated telephone switching equipment (called "removal services"). Discon had alleged that New York Telephone (through its corporate affiliate, Materiel Enterprises) switched its purchases of removal services from Discon to a higher-priced independent firm (AT&T Technologies). Materiel Enterprises would pass the higher fees on to New York Telephone, which in turn passed them on to customers through higher rates approved by regulators. *Id.* at 131-32. The nub of the deception, Discon alleged, was that AT&T Technologies would provide Materiel Enterprises with a special rebate at year's end, which it would then share with NYNEX. *Id.* By thus hoodwinking the regulators, the scam raised prices for consumers; Discon, which refused to play the rebate game, was driven out of business.[1] Discon alleged that

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[1] The scheme alleged by Discon is a spin on a familiar problem of cost-based price regulation—its tendency to dilute a

this arrangement was anticompetitive and constituted both an agreement in restraint of trade in violation of § 1 of the Sherman Act and a conspiracy to monopolize the market for removal services in violation of § 2. *Id.* at 132.

As to Discon's § 1 claim, the Court held that where a single buyer favors one supplier over another for an improper reason, the plaintiff must "allege and prove harm, not just to a single competitor, but to the competitive process." *Id.* at 135; see generally *id.* at 133-37. Nor, as Justice Breyer wrote for a unanimous Court, would harm to the consumers in the form of higher prices change the matter: "We concede Discon's claim that the [defendants'] behavior hurt consumers by raising telephone service rates. But that consumer injury naturally flowed not so much from a less competitive market for removal services, as from the exercise of market power that is *lawfully* in the hands of a monopolist, namely, New York Telephone, combined with a deception worked upon the regulatory agency that prevented the agency from controlling

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monopolist's incentive to seek the best price for inputs. Even where it cannot channel above-market prices to itself (either by corporate affiliation or, as here, by rebates and affiliation), regulation will have been holding the monopolist's selling prices below profit-maximizing rates, and it can therefore raise them without loss of net revenue. Where, as here, the input charges are being flowed back to the regulated monopolist (or its affiliate), payment of above-market prices even provides a profit opportunity, as it more than recovers the artificial hike in input prices (via increased final prices and flowback of the input prices). See IIIA Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law: An Analysis of Antitrust Principles and Their Application ¶ 787b, at 295-301 (2d ed. 2002); see also *Assoc. Gas Dist. v. FERC*, 824 F.2d 981, 995 (D.C. Cir. 1987); cf. *Nat'l Rural Telecom Ass'n v. FCC*, 988 F.2d 174, 178 (D.C. Cir. 1993).

New York Telephone's exercise of its monopoly power." *Id.* at 136.

Because Discon based its § 2 claim on the very same allegations of fraud, the Court vacated the appellate court's decision to uphold that claim because "[u]nless those agreements harmed the competitive process, they did not amount to a conspiracy to monopolize." *Id.* at 139; see also *Forsyth v. Humana, Inc.*, 114 F.3d 1467, 1477-78 (9th Cir. 1997) (rejecting a claim that an insurance company's alleged kickback scheme caused antitrust injury to group health insurance customers where the evidence showed the scheme caused higher copayments and premium payments, but did "not explain how the scheme reduced competition in the relevant market"), *aff'd on other grounds*, 525 U.S. 299 (1999); *Schuylkill Energy Res., Inc. v. Penn. Power & Light Co.*, 113 F.3d 405, 414 (3d Cir. 1997) (finding conduct did not violate antitrust laws where absent that conduct consumers would still receive the same product and the same amount of competition).

While the Commission's brief doesn't mention *NYNEX*, much less try to distinguish it, it does cite *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297 (3d Cir. 2007), which in turn had cited the Commission's own "landmark" decision in the case under review here, *id.* at 311. There the court held that a patent holder's intentionally false promise to a standard-setting organization that it would license its technology on RAND terms, "coupled with [the organization's] reliance on that promise when including the technology in a standard," was anticompetitive conduct, on the ground that it increased "the likelihood that patent rights will confer monopoly power on the patent holder." *Id.* at 314; accord *id.* at 315-16. To the extent that the ruling (which simply reversed a grant of dismissal) rested on the argument that deceit lured the SSO away from non-proprietary technology, see *id.*, it cannot help the Commission in view of its inability to find that Rambus's behavior caused JEDEC's choice; to the extent that it may have rested on a supposition that there is a cognizable violation of the Sherman Act when a lawful monopolist's deceit has the effect of raising prices (without an effect on competitive structure), it conflicts with *NYNEX*.

Here, the Commission expressly left open the likelihood that JEDEC would have standardized Rambus's technologies *even if Rambus had disclosed* its intellectual property. Under this hypothesis, JEDEC lost only an opportunity to secure a RAND commitment from Rambus. But loss of such a commitment is not a harm to competition from alternative technologies in the relevant markets. See 2 Hovenkamp et al., IP & Antitrust § 35.5 at 35-45 (Supp. 2008) [hereinafter "IP & Antitrust"] ("[A]n antitrust plaintiff must establish that the standard-setting organization would not have adopted the standard in question but for the misrepresentation or omission."). Indeed, had JEDEC limited Rambus to reasonable royalties and required it to provide licenses on a nondiscriminatory basis, we would expect *less* competition from alternative technologies, not more; high prices and constrained output tend to attract competitors, not to repel them.

Scholars in the field have urged that if nondisclosure to an SSO enables a participant to obtain higher royalties than would otherwise have been attainable, the "overcharge can properly constitute competitive harm attributable to the nondisclosure," as the overcharge "will distort competition in the downstream market." 2 IP & Antitrust § 35.5 at 35-47. The contention that price-raising deception has downstream effects is surely correct, but that consequence was equally surely true in *NYNEX* (though perhaps on a smaller scale) and equally obvious to the Court. The Commission makes the related contention that because the ability to profitably restrict output and set supracompetitive prices is the *sine qua non* of monopoly power, any conduct that permits a monopolist to avoid constraints on the exercise of that power must be anticompetitive. But again, as in *NYNEX*, an otherwise lawful monopolist's end-run around price constraints, even when deceptive or fraudulent, does not alone present a harm to competition in the monopolized market.

Thus, if 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. Yet the Commission did not reject this as being a possible—perhaps even the more probable—effect of Rambus's conduct. We hold, therefore, that the Commission failed to demonstrate that Rambus's conduct was exclusionary, and thus to establish its claim that Rambus unlawfully monopolized the relevant markets.

* * *

Our conclusion that the Commission failed to demonstrate that Rambus inflicted any harm on competition requires vacatur of the Commission's orders. But the original complaint also included a count charging Rambus with other unfair methods of competition in violation of § 5(a) of the FTC Act, 15 U.S.C. § 45(a). See Compl. at 32 ¶ 124. While the Commission dropped this aspect of its case and focused on a theory of liability premised on unlawful monopolization, see Liability Op. at 27 n.124, at least one Commissioner suggested that a "stand-alone" § 5 action would have had a "broader province" than a Sherman Act case. See Concurring Opinion of Commissioner Jon Leibowitz at 18, 21, Docket No. 9302 (Jul. 31, 2006). Because of the chance of further proceedings on remand, we express briefly our serious concerns about strength of the evidence relied on to support some of the Commission's crucial findings regarding the scope of JEDEC's patent disclosure policies and Rambus's alleged violation of those policies.

In noting our concerns, we recognize, of course, that the Commission's findings are conclusive so long as they are supported by substantial evidence. See 15 U.S.C. § 45(c); see also *Polygram Holding*, 416 F.3d at 33. The Commission's findings are murky on both the relevant margins: what JEDEC's disclosure policies were, and what, within those mandates, Rambus failed to disclose.

First, the Commission evidently could find that Rambus violated JEDEC's disclosure policies only by relying quite significantly on participants' having been obliged to disclose their work in progress on *potential* amendments to pending applications, as that work became pertinent. The Commission's counsel confirmed as much at oral argument. Transcript of Oral Argument at 37-38. Indeed, the parties stipulated that as of Rambus's last JEDEC meeting it held no patents that were essential to the manufacture or use of devices complying with any JEDEC standard, and that when JEDEC issued the SDRAM standard Rambus had no pending patent claims that would necessarily have been infringed by a device compliant with that standard. Parties' First Set of Stipulations ¶¶ 9-10.

The case *appears* (and we emphasize *appears*, as the Commission's opinion leaves us uncertain of its real view) to turn on the idea that JEDEC participants were obliged to disclose not merely relevant patents and patent applications, but also their work in progress on amendments to pending applications that included new patent claims. We do not see in the record any formal finding that the policies were so broad, but the Commission's opinion points to testimony of witnesses that might be the basis of such a finding. Five former JC 42.3 participants testified (in some cases ambiguously) that they understood JEDEC's written policies, requiring the disclosure of *pending* applications, to also include a duty to disclose work in progress on *unfiled* amendments to those applications, and JEDEC's general counsel testified that he believed a firm was required to disclose *plans* to amend if supported by the firm's current interpretation of an extant application. See Liability Op. at 56 & nn.303-05. JEDEC participants did not have unanimous recollections on this point, however, and the Commission noted that another JC 42.3 member testified that there was no duty to disclose work on future filings. *Id.* at 56 n.305.

Reading these statements as interpretations of JEDEC's written policies seems to significantly stretch the policies' language. The most disclosure-friendly of those policies is JEDEC Manual No. 21-I, published in October 1993, which refers to "the obligation of all participants to inform the meeting of any knowledge they may have of any patents, or pending patents, that might be involved in the work they are undertaking." CX 208 at 19; see also *id.* at 19 n.** ("For the purpose of this policy, the word 'patented' also includes items and processes for which a patent has been applied and may be pending."), 27 (referring to "technical information covered by [a] patent or pending patent").[2] This language speaks

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[2] Rambus notes that Manual 21-I was only adopted *after* JEDEC approved the SDRAM standard; the Manual came in October 1993 after JC 42.3 approved the SDRAM standard in March 1993 and JEDEC's governing body adopted it that May. But we will assume *arguendo* that the Commission could reasonably find that this new policy language merely formalized a preexisting understanding.

fairly clearly of disclosure obligations related to patents and pending patent applications, but says nothing of unfiled work in progress on potential amendments to patent applications. We don't see how a few strands of trial testimony would persuade the Commission to read this language more broadly, especially as at least two of the five participants cited merely stated that disclosure obligations reached anything in the patent "process"—which leaves open the question of when that "process" can be said to begin. See Joint Appendix 1908-09 (testimony of Desi Rhoden); *id.* at 2038 (testimony of Brett Williams).

Alternatively, to the extent the Commission reads this testimony not to broaden the interpretation of Manual 21-I, but rather to provide evidence of disclosure expectations that extended beyond those incorporated into written policies, a different problem may arise. As the Federal Circuit has said, JEDEC's patent disclosure policies suffered from "a staggering lack of defining details." *Rambus Inc. v. Infineon Technologies AG*, 318 F.3d 1081, 1102 (Fed. Cir. 2003); see also Liability Op. at 52 (stating that the record shows that JEDEC's patent policies "are not a model of clarity"). Even assuming that any evidence of unwritten disclosure expectations would survive a possible narrowing effect based upon the written directive of Manual 21-I, the vagueness of any such expectations would nonetheless remain an obstacle. 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 must disclose." *Infineon*, 318 F.3d at 1102. This need for clarity seems especially acute where disclosure of those trade secrets itself implicates antitrust concerns; JEDEC involved, after all, collaboration by *competitors*. Cf. *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 500 (1988) (stating that because

SSO members have incentives to restrain competition, such organizations "have traditionally been objects of antitrust scrutiny"); *Am Soc'y of Mech. Eng'rs v. Hydrolevel Corp.*, 456 U.S. 556, 571 (1982) (noting that SSOs are "rife with opportunities for anticompetitive activity"). In any event, the more vague and muddled a particular expectation of disclosure, the more difficult it should be for the Commission to ascribe competitive harm to its breach. See 2 IP & Antitrust § 35.5 at 35-51 ("[A]lthough antitrust can serve as a useful check on abuses of the standard-setting process, it cannot substitute for a general enforcement regime for disclosure rules.").

The Commission's conclusion that Rambus engaged in deceptive conduct affecting the inclusion of on-chip PLL/DLL and dual-edge clocking in the DDR SDRAM standard, which JEDEC adopted more than two years after Rambus's last JC 42.3 meeting, presents an additional, independent concern. To support this conclusion, the Commission looked to a technical presentation made to JC 42.3 in September 1994, and the survey balloting of that committee in October 1995 on whether to proceed with the consideration of particular features (including the two Rambus technologies ultimately adopted), finding that Rambus deliberately failed to disclose patent interests in any of the named technologies. Liability Op. 42-44. This finding is evidently the basis, so far as DDR SDRAM is concerned, of its conclusion that Rambus breached a duty to disclose. *Id.* at 66-68.

Once again, the Commission has taken an aggressive interpretation of rather weak evidence. For example, the October 1995 survey ballot gauged participant interest in a range of technologies and did not ask those surveyed about their intellectual property (as did the more formal ballots on proposed standards). See CX 260. The Commission nonetheless believes that every member of JC 42.3—

membership that included most of the DRAM industry—was duty-bound to disclose *any* potential patents they were working on that related to *any* of the questions posed by the survey. The record shows, however, that the only company that made a disclosure at the next meeting was the one that formally presented the survey results. See Liability Op. at 44-45; ALJ Op. at 58 ¶ 401 (citing Joint Exhibit 28, at 6). For reasons similar to those that make vague but broad disclosure obligations among competitors unlikely, it seems to us unlikely that JEDEC participants placed themselves under such a sweeping and early duty to disclose, triggered by the mere chance that a technology might someday (in this case, more than two years later) be formally proposed for standardization.

* * *

We set aside the Commission's orders and remand for further proceedings consistent with this opinion.

So ordered.

CERTIFICATE OF SERVICE

I hereby certify that on this 6th day of June 2008, I caused a true and correct copy of the foregoing Petition of Respondent Federal Trade Commission for Rehearing *En Banc* to be served by first-class mail, postage prepaid, on each of the following:

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