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. Wolfson*, *Sambhav N. Sanikar*, *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*

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

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

willfully and intentionally engaged in misrepresentations, omissions, and other practices that misled JEDEC members about intellectual prop

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.

* * *

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 require

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

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

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 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),

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 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

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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).

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.*

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

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 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

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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.

that “process” can be said to begin. See Joint Appendix 1908-

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

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.