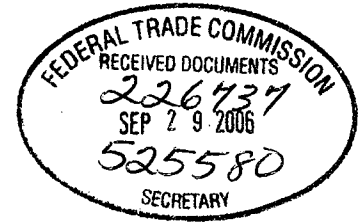


ORIGINAL



UNITED STATES OF AMERICA
BEFORE FEDERAL TRADE COMMISSION

Docket No. 9302

REVISED PUBLIC VERSION

In the Matter of

RAMBUS INCORPORATED

BRIEF OF COUNSEL SUPPORTING THE COMPLAINT
ON THE ISSUE OF REMEDY

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UNITED STATES OF AMERICA
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a corporation.

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BRIEF OF COUNSEL SUPPORTING THE COMPLAINT
ON THE ISSUE OF REMEDY

INTRODUCTION

The proper disposition of antitrust cases is obviously of great public importance, and their remedial phase, more often than not, is crucial. For the suit has been a futile exercise if the Government proves a violation but fails to secure a remedy adequate to redress it.

E.I. DuPont de Nemours & Co. v. United States, 366 U.S. 316, 323 (1961).

The Commission, having found that Rambus unlawfully acquired monopoly power by deceiving JEDEC, must now restore competition to the conditions that would have prevailed absent Rambus's anticompetitive conduct.

Specifically, the Commission should enjoin Rambus from enforcing its pre-1996 patents with respect to JEDEC-compliant products. This remedy is not only called for by antitrust law, the Commission's Decision, and other record evidence; it is also supported by patent law,

economics, policy concerns, and principles of administrability.

This remedy – far from being extreme – merely restores, six years later, the competitive conditions that should have prevailed. Had it not engaged in deception, Rambus likely would have received no, or at most minimal, royalties from companies practicing the JEDEC standards. This remedy is not punitive: it would permit Rambus not only to enforce all its patents against any non-JEDEC-compliant products and its post-1996 patents against all products (including JEDEC-compliant products), but also to keep the unlawfully acquired monopoly profits it collected during the past six years.

Should the Commission wish to consider alternative remedies, Complaint Counsel set forth other possible methods to determine an *ex ante* royalty rate. As we discuss below, the evidence suggests a maximum reasonable royalty rate of 0.25% for SDRAM, DDR SDRAM and DDR2 SDRAM memory chips.¹ We believe such methods are inferior, however, to enjoining enforcement of Rambus's patents.

I. The Appropriate Remedy Is An Order Enjoining Enforcement of Relevant Patents Against JEDEC-Compliant Products

The remedy question rests on a fundamental conundrum: the appropriate remedy depends on what competitive conditions would have existed absent Rambus's unlawful conduct. Yet Rambus's unlawful conduct prevents us from knowing what competitive conditions would have existed. Thus, any uncertainties in resolving this question must be construed against Rambus

¹ Although the Commission did not find a violation with respect to DDR2, the Commission still has the authority to order relief with respect to DDR2 to restore competition and prevent further harm, as explained *supra* 16-18.

(see *infra* 9-11).

Contemporaneous documents, testimony of most relevant fact witnesses, and the “natural experiment” involving the loop-back clock proposal (all cited favorably in the Commission’s Decision) and other record evidence establish that the most likely competitive result would have been a series of JEDEC standards containing technologies free of Rambus patents. To replicate this competitive world, the appropriate remedy is an order enjoining Rambus from enforcing its patents against devices complying with JEDEC standards and products incorporating such devices.

A. The Remedy Must Fully Restore Competitive Conditions That Would Have Prevailed Absent Rambus’s Deception

The principal objective in framing antitrust relief is to restore competition. *See, e.g., Ford Motor Co. v. United States*, 405 U.S. 562, 573 (1972); *International Salt Co. v. United States*, 332 U.S. 392, 401 (1947) (relief should “pry open to competition a market that has been closed by defendants’ illegal restraints”). Relief should, “so far as practicable, cure the ill effects of the illegal conduct, and assure the public freedom from its continuance.” *United States v. U.S. Gypsum Co.*, 340 U.S. 76, 88 (1950). A Commission order should recreate market conditions that would have existed “but for the unlawful conduct.” *Ekco Prods. Co.*, 65 F.T.C. 1163, 1216 (1964), *aff’d sub nom. Ekco Prods. Co. v. FTC*, 347 F.2d 745 (7th Cir. 1965).

The Commission has broad discretion to deprive Rambus of any “fruits” of its wrongdoing, *United States v. United Shoe Mach. Corp.*, 391 U.S. 244, 250 (1968), and Rambus “should, so far as practicable, be denied future benefits from their forbidden conduct.” *Gypsum*, 340 U.S. at 89; *FTC v. National Lead*, 352 U.S. 419, 430 (1957) (Commission must assure that a

violator will “relinquish the fruits of his violation.”). The Commission’s ultimate objective must be to protect the public from the continuing effects of Rambus’s unlawful conduct. *See, e.g., Hoffman-La Roche Ltd. v. Empagran S.A.*, 542 U.S. 155, 170 (2004) (“[a] government plaintiff, unlike a private plaintiff, must seek to obtain the relief necessary to protect the public from further anticompetitive conduct and to redress anticompetitive harm.”).

To restore competitive conditions, protect the public and deprive Rambus of the future “fruits” of its unlawful conduct, the Commission must determine what competitive conditions likely would have prevailed absent Rambus’s deception. *Massachusetts v. Microsoft Corp.*, 373 F.3d 1199, 1232 (D.C. Cir. 2004) (“the fruits of a violation must be identified before they may be denied”). The Commission’s Decision goes a long way towards answering this question. Resolving the remaining issues will clarify the need for an order enjoining enforcement of Rambus’s relevant patents.

B. The Commission’s Decision Demonstrates That The Likely Competitive Result Would Have Been A Series Of Standards Free Of Rambus’s Patents

1. JEDEC Likely Would Have Avoided Rambus Patents By Selecting Alternatives

Evidence cited in the Commission’s Decision establishes that, had Rambus not deceived JEDEC members, they would have selected alternative technologies for the SDRAM and DDR SDRAM standards rather than pay Rambus royalties.² The Commission found that patents, and Rambus patents in particular, significantly influenced JEDEC’s selection of technologies. The Commission found, for example, that “JEDEC members – DRAM manufacturers and customers – were highly sensitive to costs, and that keeping costs down was a major concern within

² DDR2 is treated separately in Section II.E.

Policy considerations further support enjoining enforcement of a patent as a remedy for abuse of standard-setting. The Commission has already explained that standard-setting “potentially yields significant efficiencies,” and requires assurances that “other participants will not exploit the process by acting deceptively,” but that deceptive conduct “may cause considerable harm to competition” if it reduces the efficiencies gained through standard-setting. Decision 25-26, 33. To fully restore competitive conditions, the Commission’s relief must be sufficiently comprehensive to restore confidence in the standard-setting process.

The relief will do so without creating any significant disincentives to procompetitive conduct. The remedy merely replicates the “but for” world, so will not create any cognizable disincentives to innovate. The Commission has acknowledged that deception does not have any efficiency-enhancing attributes (*Unocal*); thus, the remedy will not deter socially beneficial conduct. Finally, patent law already condemns far less egregious conduct, and IP holders in the SSO context must already consider the risk that deception will render their patents unenforceable.

Notably, the major standard-setting umbrella organization stated:

ANSI agrees with the Dell consent agreement [prohibiting enforcement] to the extent it applies to situations when a participant in the standards development process intentionally and deliberately fails to disclose that his or her organization holds a patent relating to the standard in question in an attempt to gain an unfair competitive advantage.

Testimony of Amy Marasco before the FTC (December 1, 1995). If, contrary to *Dell* and *Unocal*, Rambus is permitted to continue to collect royalties, future companies may take their chances on non-disclosure, expecting to retain all monopoly profits gained during litigation and still benefit later from favorable inferences when a “reasonable” royalty is set (even after its own

conduct created the uncertainties that made inferences necessary).

D. Principles of Administrability Favor An Order Enjoining Enforcement of Rambus's Royalties

A non-zero royalty would be difficult to administer. A royalty requires not only setting the royalty rate, but also defining the parameters of the products against which it can be assessed. Administering a rate for controllers integrated into other products (such as microprocessors) will be exceedingly complex and on-going. Although a stand-alone memory controller might cost at most a few dollars, integrated products often cost tens or even hundreds of dollars, yet only a small portion of the value may be attributable to controller functions. Nonetheless, Rambus has demanded royalties based on the selling price of the entire product. The Commission could not administer an effective cap on Rambus's royalty rates unless it also set a method to determine the portion of the value of such integrated products (some not yet developed) against which the royalty rate would apply. Because many such integrated controllers do not have a market price, such determination would be highly regulatory.

The problem is worse with respect to users. Rambus has begun asserting that OEMs are liable for infringement of Rambus's patents, even if they purchase both DRAMs and controllers from licensed manufacturers. The Commission could not effectively cap Rambus's royalties unless it determined how to apply that cap to computers, handheld devices, telephones and automobiles.

With any royalty, "ongoing supervision may be necessary to regulate the price and nonprice terms of the resulting licenses." III Areeda & Hovenkamp, Antitrust Law ¶ 653b, at 99-100 (2002). For example, compensation for patents may be extracted through cross-license or

grant-back requirements. The Commission would have to ensure that not just the royalties, but the value of the total compensation, did not exceed the cap. The Commission might also become entwined in any future disputes between Rambus and prospective licensees.

E. The Remedy Should Include DDR2 SDRAM and Future JEDEC Standards

The Commission's remedy should include products that conform to JEDEC's DDR2 SDRAM standard and follow-on standards. Although the Commission found that the evidence failed (albeit narrowly) to support a finding of liability regarding DDR2, the Commission is obligated to fully correct for the effects of Rambus's unlawful conduct regarding SDRAM and DDR SDRAM.

The Commission has the authority to order relief broader than the specific violation if reasonably necessary to restore competition and prevent further harm. *See, e.g., United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 148 (1948) ("uproot all parts of an illegal scheme – the valid as well as the invalid – in order to rid the trade or commerce of all taint"); *United States v. Bausch & Lomb*, 321 U.S. 707, 724 (1944) ("equity has power to eradicate the evils of a condemned scheme by prohibition of the use of admittedly valid parts of an invalid whole."); *New York v. Microsoft*, 224 F. Supp. 2d at 148 (citing "the need to 'undo the various effects of the act'"). Commission orders are not limited to either the specific products or the specific practices involved in the violation. *FTC v. Ruberoid Co.*, 343 U.S. 470, 473 (1952) ("the Commission is not limited to prohibiting the illegal practice in the precise form in which it is found to have existed in the past."); *see also FTC v. Cement Inst.*, 333 U.S. 683, 726 (1948).

Thus, although the Commission did not find a violation with respect to DDR2, it still has the authority to order relief with respect to DDR2 because it bears a "reasonable relation to the

unlawful practices found to exist.” *Toys “R” Us v. FTC*, 221 F.3d 928, 940 (7th Cir. 2000) (quoting *Jacob Siegel Co. v. FTC*, 327 U.S. 608, 612-13 (1946)); *Hosp. Corp. of Am. v. FTC*, 807 F.2d 1381, 1393 (7th Cir. 1986) (Posner, J.) (“Commission has a broad discretion, akin to that of a court of equity, in deciding what relief is necessary to cure a violation of law and to ensure against its repetition”).¹³

Addressing JEDEC’s later DRAM standards is necessary to restore competitive conditions. Had Rambus not deceived JEDEC, JEDEC most likely would have adopted non-Rambus technologies in its SDRAM and DDR SDRAM standards. *See supra* 4-11. Because DDR SDRAM served as the base for the DDR2 SDRAM standard, these non-Rambus technologies would have been carried over into the DDR2 and subsequent standards. With the possible exception of any new Rambus technology added to the DDR2 or DDR3 SDRAM standards, industry members would not have owed Rambus royalties for any technologies in any JEDEC standards.

Alternatively, under competitive conditions, JEDEC members would have had the opportunity to negotiate *ex ante* license agreements. JEDEC members most likely would have insisted on license protection for the duration of Rambus’s patents. Thus, JEDEC members that negotiated license agreements, and most likely all others as well, would have had the benefits of competitive royalty rates not just for SDRAM and DDR SDRAM, but for all later standards for the life of Rambus’s patents.

Even if the Commission were not to include all later generations of JEDEC SDRAM

¹³ While *HCA* arose under Section 7 of the Clayton Act, the court relied on two Section 5 cases – *Jacob Siegel* and *Herzfeld v. FTC*, 140 F.2d 207 (2d Cir. 1944) – in concluding that the Commission’s broad remedial powers are akin to those of a court of equity.

b) Cap On Maximum Royalties Based On RDRAM License Rates

Rambus's RDRAM license agreements, unlike the SDRAM licenses, do not reflect lock-in. Nevertheless, extrapolating an *ex ante* SDRAM royalty rate from RDRAM license agreements requires multiple assumptions and adjustments: (1) RDRAM rates (1%-2%, Decision 115 fn 624) reflected the belief that RDRAM would be a niche product, and must be adjusted downward for a commodity product like SDRAM;¹⁷ (2) RDRAM rates are for full technology transfer agreements (*see generally* Tr. 8672-8735 (Hampel)), and must be adjusted downward for a bare-bones license; and (3) RDRAM rates, which covered the full range of Rambus technologies, would have to be adjusted downward to adjust for the much smaller set of technologies contained in SDRAMs.¹⁸ This approach indicates that the appropriate royalty rate on JEDEC-compliant DRAMs would be in the range of 0.1%.¹⁹

be refined, but the result would be of similar magnitude.)

¹⁷ Intel regarded a royalty less than 0.5% as appropriate for commodity RDRAM. CX0952; CX0961.

¹⁸ RDRAMs include Rambus's multiplexed bus, packetized operations, loop-back clock, and many other technologies not found in JEDEC-compliant DRAMs. JEDEC-compliant DRAMs use only a small and relatively unimportant subset of Rambus technologies. The Commission could reasonably allocate 80% of the royalty to technologies not found in the JEDEC standards.

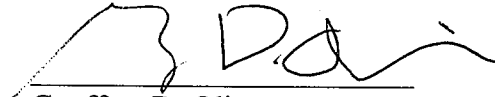
For example, an admittedly rough allocation compares the number of pages in Rambus's initial patent application describing technologies used in SDRAMs and DDR SDRAMs to the number of pages describing technologies unique to RDRAM. At most 9 (or 14.5%) of the 62 pages describe technologies in SDRAMs and DDR SDRAMs.

¹⁹ Thus, taking the highest RDRAM royalty rate (2.0%), adjusting downward to create (a) a high-volume commodity DRAM rate, (b) a bare-bones license agreement, and (c) a license for a small subset of technologies only, yields:

$$2.0\% \times .5 \times .5 \times .2 = 0.1\%.$$

for purposes making appropriate patent disclosures to SSO's; and Sections VIII-XII are standard order provisions.

Respectfully submitted,



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