PUBLIC

UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION

In the Matter of **RAMBUS INC.,** **a corporation.**	**Docket No. 9302**

POST-TRIAL REPLY BRIEF OF RESPONDENT RAMBUS INC.

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that such relief is appropriate because *some* of the value of Rambus's patents is due to the fact that *some* of its patented inventions are included in JEDEC standards and that Rambus is *responsible* for JEDEC including its inventions, rather than other technologies.

It is extraordinary that Complaint Counsel seek: (1) to compel Rambus to forfeit the value of its valid, lawfully obtained patents; and (2) to legitimize the continued infringement of those patents.[2] Even more extraordinary is that Complaint Counsel blame Rambus for the fact that JEDEC chose Rambus's inventions over all competing technologies when, at the same time, Complaint Counsel concede that if Rambus had not joined JEDEC, its inventions *still* would have been selected. In other words, Complaint Counsel concede that Rambus's inventions were, in JEDEC's eyes, preferable to the other technologies. They also concede that Rambus did not influence JEDEC's selection of its inventions through any *affirmative* conduct. Yet, they contend that if Rambus had disclosed its *beliefs* about its *potential* intellectual property to JEDEC, JEDEC would have chosen instead to use an inferior technology in the hope that that alternative was not patented.

Complaint Counsel seek this draconian relief in order, they say, to enforce what they allege is JEDEC's patent disclosure policy – a policy they say required the disclosure of patents, patent applications and intentions to file or amend patent applications that in any way related to matters discussed at JEDEC. As shown below, JEDEC's patent disclosure policy was not the policy that Complaint Counsel allege. The JEDEC patent policy encouraged, but did not require, the disclosure of certain patents (those that were essential to the manufacture or use of a JEDEC-

[2] Less than four years ago, Complaint Counsel told the full Commission that its authority to strip a patentee of the right to enforce its valid patents was, at best, "unsettled." Complaint Counsel's Motion To Dismiss The Complaint, *In the Matter of VISX, Inc.*, Dkt. No. 9286 (filed December 1, 1999) (available at www.ftc.gov/os/adjpro/d286/index.htm), at 7 n.5

compliant device), but not patent applications. Rambus fully complied with this policy, as the record evidence demonstrates. Anticipating that their case would be undermined by Rambus's compliance with JEDEC's rules, Complaint Counsel argue, as a fallback, that even if JEDEC's rules did not require the disclosure of patent applications, the underlying purposes of JEDEC would best be served by disclosure of applications that in any way related to discussions at

[3] This section responds principally to CCB at § II.C.

[4] *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 U.S. 172 (1965).

[5] Initial Decision, *In the Matter of VISX, Inc.*, Dkt. No. 9286 (filed May 27, 1999) (available at www.ftc.gov/os/1999/06/visxid.pdf) ("*VISX* Initial Decision"). The *VISX* Initial Decision should be given full force and effect. Although Complaint Counsel in moving to dismiss the complaint asked that the Initial Decision not be adopted by the Commission, the Commission declined to grant this request, leaving the Initial Decision in effect by virtue of their

violated Section 5 through fraud or "inequitable conduct" in its dealings with the Patent and Trademark Office. (CCB at 28-29).[7] Although Complaint Counsel contend that Judge Levin made no "express" ruling on the burden issue because Complaint Counsel in *VISX* had "conceded that a clear and convincing standard applied," *id.*, they do not explain what could have motivated their brethren in *VISX* to accept a heightened burden of proof, *other than* their recognition that (1) the case law required it and (2) to argue otherwise would be an invitation to error.

Complaint Counsel's principal argument against the application of the heightened standard in this case is that they assert no *Walker Process* claims and do not allege fraud or inequitable conduct before the PTO. (CCB at 26). They represent that the "policy-related concerns" that led the court to apply a heightened burden in *Walker Process* are not present here.

Complaint Counsel are wrong. Here, as in *Walker Process* and its progeny, the plaintiff alleges that the patentee's failure to disclose material information resulted in its obtaining monopoly power in a market – here, the DRAM market – that it otherwise would not

[7] In their Pretrial Brief, Complaint Counsel told Your Honor that Judge Levin had applied the preponderance burden of proof to the inequitable conduct allegations. *See* Complaint Counsel Pretrial Brief at 136 & n.100. While they offer no explanation for their prior position, they do now concede that Judge Levin applied the higher standard to both claims. (CCB at 29).

heightened burden of proof in this case.[8]

Complaint Counsel nevertheless contend that the real reason why the heightened burden is required in *Walker Process* cases is that those cases involve "the complex patent procurement process" and substantial damage awards. (CCB at 26). The second point is readily dealt with: Complaint Counsel announced in their opening statement that the remedy they propose would bar Rambus from obtaining more than one billion dollars in royalties from licensing its valid patents. (Opening, Tr. 29). While technically not seeking "damages," Complaint Counsel acknowledge that "we obviously are talking about very large sums of money." (*Id*).

But more important than the size of that sum is its source. Its source is the inventions that sprang from the creative genius of two men, as acknowledged by the PTO, which awarded these men a legal monopoly for a limited period of time. One who holds a valid patent has a constitutional and statutory right to be paid royalties for the use of his invention by others. The courts have recognized this right to be a fundamental part of the bargain between the Government and the inventor. When the inventor discloses his invention to the Government, he agrees that after the patent term expires, his invention can be used by everyone for free. To induce inventors to agree to this donation, the Government awards the inventor the right during the patent term to be paid royalties for others' use of the invention. The Government also

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[8] Complaint Counsel cite numerous cases for the proposition that the preponderance standard typically governs in FTC enforcement actions. None of these cases, however, involves the intersection of patent rights and alleged fraud or bad faith (or to use Complaint Counsel's label "deception") in an antitrust case attempting to strip the patent holder of its enforcement rights. *See, e.g., In the Matter of Western Crab Ass'n*, 66 F.T.C. 45, 55 (1964) (monopolization case charging trade organization with engaging in threats of reprisals, intimidation and physical violence in order to destroy competition in the crabs and crabs products market); *FTC v. Abbott Lab.*, 853 F. Supp. 526, 533 (D. D.C. 1994) (collusive bidding case); *Price Waterhouse v. Hopkins*, 490 U.S. 228 (1989) (Title VII case). It is precisely the tension between the patent and antitrust laws – a tension absent in the cases Complaint Counsel cite – that leads the courts to apply a heightened standard of proof.

provides the inventor, in exchange for the inventor's donation, the right of access to the courts when an infringer will not pay royalties. *See generally CVD, Inc. v. Raytheon Co.*, 769 F.2d 842, 849 (1st Cir. 1985).

The courts have acknowledged that antitrust suits against patentees that seek to strip away this fundamental "benefit of the bargain" between the Government and the inventor threaten the system of incentives that underlie the patent system. As a result, the "courts have protected the federal interests in patent law enforcement and the free access to the courts by requiring, in addition to the other necessary elements of an antitrust claim, 'clear and convincing evidence' of fraud in asserting or pursuing patent infringement claims." *Id*. As noted above, Complaint Counsel's claims do indeed seek to strip Rambus of its rights to recover for the use of its inventions and to seek judicial relief against infringers. There is thus simply no legitimate basis for distinguishing the claims asserted here from those asserted in *Walker Process*, *Handgards* and *VISX*.

Complaint Counsel point to the fact that an individual plaintiff asserting an equitable estoppel defense to an infringement suit need only satisfy a preponderance burden. (CCB at 28). The argument is specious. Complaint Counsel have repeatedly argued that they do *not* have to prove all of the elements of equitable estoppel. Under their approach, the remedy they propose would bar Rambus's assertion of patent rights against all practitioners of the JEDEC DRAM standards, *regardless* of whether they knew about Rambus's patent rights all along and *regardless* of whether they detrimentally relied on Rambus's alleged failure to disclose. Thus, the remedy proposed here extends far beyond the limited non-enforcement of patents ordered where an estoppel defense is successfully asserted by an individual infringer.

For all of these reasons, and for the reasons set out in the RIB, Complaint Counsel must

prove certain essential elements of their claims, including "materiality, intent and 'but for'" causation, by clear and convincing evidence, which means "evidence 'which proves in the mind of the trier of fact an unbinding conviction that the truth of [the] factual contentions [is] highly probable."' Complaint Counsel's Post Hearing Brief, *In the Matter of VISX, Inc.*, Dkt. No. 9286 (filed April 7, 1999), p. 9 n.26 (citations omitted).

B. Complaint Counsel Have Not Demonstrated That They Are Entitled To The Adverse Inferences They Seek[9]

1. Rambus Has Rebutted The Adverse Presumptions Established By This Court's Order Of February 26, 2003 To The Extent They Bear On Any Issues Now In Dispute

Complaint Counsel do not argue that the Court should give any weight to the rebuttable adverse presumptions set forth in Judge Timony's February 26, 2003 Order Granting Complaint Counsel's Motion for Collateral Estoppel. (CCB at 31-33). This is appropriate because, to the extent any of those presumptions are pertinent to the issues that this Court must decide, they have been fully rebutted by the evidence presented at trial.

a. Complaint Counsel Have Not Shown That A Single Pertinent Document Was Not Produced.

First, Complaint Counsel never identified an issue with respect to which Rambus's document production was not full and complete. To the contrary, Complaint Counsel told the Court in their opening statement that "we have an unusual degree of visibility into the precise nature of Rambus's conduct, as well as the underlying motivation for what Rambus did." (Opening, Tr. 15). In other words, consistent with the instructions Joel Karp gave to Rambus employees, the record demonstrates that all pertinent and relevant materials were retained by Rambus and, if relevant to the issues raised in this litigation, produced. (*See* RRFF 1718-58).

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[9] This section responds principally to CCB at § II.D.

[10] Mr. Crisp also testified that he made every attempt to "try to keep the documents that I'd been advised that I should keep." (Crisp, Tr. 3427). He explained that most of the documents he needed to retain were in the form of computer files and that he "gave a great deal of thought to what I needed to keep that was on my computer." (*Id.*,

from my work product files that were old, and in some cases I had questions about the retention policy, I asked Mr. Karp, and documents were not removed if there was any reason to save them." (Diepenbrock, Tr. 6236). Mr. Karp also testified to his careful efforts at document retention, explaining that before he left Rambus he went through all of his computer files carefully and made hard copies of everything that was relevant. (CX2114 at 174 (Karp Dep.); CX2102 at 378 (Karp Dep.)).

b. Rambus Has Produced Evidence Sufficient To Put The Presumed Facts Into Genuine Dispute And Has Thus Rebutted The Adverse Presumptions

Second, in order to rebut the adverse presumptions, Rambus was required only to produce evidence that would be sufficient to support a finding contrary to the presumed fact. In other words, the presumption shifted the *burden of going forward* to Rambus, but ultimately left the *burden of proof* to be borne by Complaint Counsel.

Under Rule 301 of the Federal Rules of Evidence, "a presumption imposes on the party against whom it is directed the burden of going forward with evidence to rebut or meet the presumption, but does not shift to such party the burden of proof in the sense of the risk of non-persuasion, which remains throughout the trial upon the party on whom it was originally cast." [11] *See* 21 WRIGHT AND GRAHAM, FED. PRAC.& PROC. § 5122 at 572 (all that is needed to rebut facts inferred or presumed from one's document destruction is evidence "sufficient to support a finding of non-existence of the presumed fact."); *In the Matter of Novartis Corp.*, 1999 FTC LEXIS 63 at *26 (1999) (the Commission observed that, to rebut a presumption of materiality,

[11] The actual weight of a spoliation adverse inference is even less than that of a presumption, so Rule 301 overstates the burden that is imposed by the adverse inferences described by Judge Timony. 21 WRIGHT AND GRAHAM, FED. PRAC.& PROC. § 5124 (noting that the "so-called 'presumption' against spoliators" is actually a "mere inference" that allows, but does not require, the finder of fact to infer one fact from another.).

has been fully rebutted.[13]

(2) Rambus Has Rebutted The Second Adverse Presumption: That Rambus Did Not Disclose The Existence Of Certain Patents To JEDEC

Rambus also rebutted Judge Timony's second rebuttable adverse presumption, namely, that "Rambus never disclosed to other JEDEC participants the existence of these patents." The inference is ambiguous because it does not describe which patents were allegedly not disclosed. If "these patents" refer to the patents referenced in the first presumption, Rambus has shown that they *do not exist.* Rambus has also established that it did disclose *all* of its issued patents to JEDEC when it formalized its withdrawal, with the exception of the '327 patent, which had just issued, had been inadvertently omitted from the letter, was not required to be disclosed, and was soon known to numerous JEDEC members in any event. (RRFF 328-56, 1111-14; RPF 561, 592-94, 698; RX 712 at 1; RX 734 at 2; CX 888 at 2).

This second adverse inference also is rebutted by the evidence establishing that JEDEC members were well aware of Rambus's PCT application (CX 1454), which was the functional equivalent of its '898 application (CX 1481), and of the potential scope of claims that might issue from it. (RPF 516-20, 530-33). As Mitsubishi's internal documents demonstrate, the PCT application described inventions that JEDEC later adopted as part of its SDRAM and DDR SDRAM standards. (RPF 659-706). Samsung, IBM, Siemens, Micron, Hewlett-Packard, Apple, Cray and others such as Dr. Betty Prince and Dr. David Gustavson were each well aware of the

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[13] A portion of this inference also is that Rambus "should have known" that it had patent claims or claims in patent applications that covered "developing JEDEC standards." Rambus has established that what someone "should have known" is not relevant; the only knowledge that matters with respect to any JEDEC disclosure is the actual knowledge, not of the company, but of the JEDEC representative. (RRFF 333). (*See also* Rhoden, Tr. 624 (disclosure obligation "triggered by the actual knowledge of the people that were involved"); Kelly, Tr. 1970 (any obligation applied only to "participants with actual knowledge")).

potential scope of the patent claims that might result from the '898 application. (RPF 520, 522-29, 532-34, 558-59, 774-84).

Rambus also has proven that any additional statements it might have made about the scope of the patent claims it *hoped* to obtain in the future would *not* have materially changed the mindset of JEDEC members and most certainly would *not* have had any influence on JEDEC's resulting conduct. (RPF 530-95). For example, although Micron was told in 1997 (before DDR was standardized) that Rambus believed it could obtain "patent coverage" over "DDR for any memory," (RX 920 at 1), Micron discounted this statement entirely and felt no need to raise it at JEDEC or to take any internal action in response. (RPF 573-86). Hewlett-Packard's Hans Wiggers, a member of the JEDEC Council, similarly testified that if Rambus had said at a JEDEC meeting that it had invented the use of dual edge clocking in a memory device, Wiggers "would have said that that was not something that [it] could have patented because it was a known technology. . . ." (Wiggers, Tr. 10588).

(3) Rambus Has Rebutted The Third Adverse Presumption: That Rambus Knew That Its Failure To Disclose These Patents Could Equitably Estop It

Rambus also has rebutted the third inference set forth in Judge Timony's Order, that "Rambus knew that its failure to disclose the existence of these patents to the JEDEC participants could serve to equitably estop Rambus from enforcing its patents as to other JEDEC participants." As noted previously, if "these patents" refer to the patents referenced in the first presumption, Rambus has shown that they *do not exist.*

Rambus has, as well, proven that it was advised by Mr. Vincent that equitable estoppel was a legal doctrine that could be applied if it *misled* JEDEC members into believing that it was not going to enforce its intellectual property (RRFF 422, 821) and that Rambus followed his

advice. Mr. Crisp did not mislead JEDEC members about Rambus's intentions to enforce its intellectual property. He openly refused to comment about Rambus's intellectual property position at both the May 1992 and September 1995 JEDEC meetings, and at the latter meeting, he explicitly warned JEDEC that Rambus's "presence or silence at committee meetings does not . . . make any statement regarding potential infringement of Rambus intellectual property." (JX 27 at 26; RPF 464-558; RRFF 760). So, although Rambus was aware of the legal principle of equitable estoppel, the evidence establishes that Rambus did not act in a manner that could have triggered that doctrine.

only after Hitachi refused to take a license and then later, after Micron even refused to negotiate, that it became apparent that litigation would be necessary to enforce Rambus's patents. (*Id.*).

(5) The Three Remaining Adverse Presum

[14] Because these last three presumptions do not bear on any issue that this Court must now decide, they are not addressed in any detail in this Reply Brief, although they are discussed in somewhat greater detail in Rambus's Responses to Complaint Counsel's Proposed Findings. (*See* RRFF 1718-58).

be relevant to any litigation that was foreseeable. (RRFF 1718-58). Rambus employees were told to "LOOK FOR THINGS TO KEEP" and "LOOK FOR REASONS TO KEEP IT," (CX 1264 at 4, 7), not, as Complaint Counsel suggest, to "look for reasons to throw it away." And, as noted earlier, there is no group of documents that Rambus has not produced that would be pertinent to the issues in this litigation.

2. Complaint Counsel Are Not Entitled To Any Inference As A Result Of The Fact That Testimony From Messrs. Davidow, Tate And Mooring Was Presented By Deposition Rather Than In Person

Complaint Counsel contend that their burden to prove the essential elements of their claims should be eased because Rambus chose not to call William Davidow, Geoff Tate and David Mooring to testify live during its case-in-chief. (CCB at 34-36). The case law does not permit such an inference in the circumstances presented here.

Complaint Counsel and Rambus *each* listed Messrs. Davidow, Tate and Mooring as trial witnesses. During their case-in-chief, Complaint Counsel *chose* to present prior recorded testimony from each of these gentlemen, rather than to call them live. Rambus did the same. Complaint Counsel contend that as a result of their and Rambus's decisions to rely upon the deposition testimony of these witnesses, Complaint Counsel are entitled to a "missing witness" inference. They ask this Court in essence to infer that these gentlemen, if they had been called to testify live, would have testified differently than they already had testified, or on different subjects, and that their testimony would have been unfavorable to Rambus.

Complaint Counsel's argument is fundamentally flawed, both factually and legally. Complaint Counsel rely upon several cases for the proposition that, where a witness is "peculiarly available" to, and biased toward, one party, and the witness has "superior knowledge" of "key facts," an adverse inference is appropriately drawn if that party does not call the witness,

even if

Id. *See also Wilson v. Merrell Dow Pharmaceuticals, Inc.*, 893 F.2d 1149, 1151 (10th Cir. 1990) (affirming trial court's refusal to adopt missing witness inference where the plaintiff "did not even attempt to subpoena" the witness in question); *United States v. Busic*, 587 F.2d 577, 586-7 (3d Cir. 1978), *rev'd on other grounds*, 446 U.S. 398 (1980) ("we hold that where neither the government nor the defendant calls a witness who is available to both, the 'missing witness' instruction does not properly lie").

The arguments against the imposition of adverse inferences are even stronger here than in *Grynberg*, *Wilson*, and *Busic*, for in this case, Complaint Counsel *did* take the witnesses' depositions and *did* offer into evidence their deposition testimony.[15] They are not, therefore, "missing" witnesses at all. *See Bogosian*, 323 F.3d at 68 n.10. Moreover, the only topics that Complaint Counsel identify as ones they would have asked about had the witnesses testified live (CCB at 37) were fully explored in deposition, and much of this testimony was designated and now is part of the trial record.

While Complaint Counsel apparently regret their decision not to call these witnesses to testify live, that tactical choice provides no basis for the imposition of adverse inferences against Rambus. *Grynberg*, 2000 WL 280780 at *13. *See also Burgess v. United States*, 440 F.2d 226, 239 (D.C. Cir. 1970) (Robb, J., concurring) ("Having deliberately rejected an opportunity to produce a witness, a [party] should not be permitted to complain that the witness is missing.").

[15] The Court has been presented with a total of 1045 pages of prior testimony from these three witnesses. This page count is obtained by counting the number of transcript pages from which testimony by these three witnesses was designated in The Parties' Designated Deposition Testimony (Second Corrected Version, filed August 25, 2003).

III. COMPLAINT COUNSEL HAVE FAILED TO CARRY THEIR BURDEN

[16] This section responds principally to CCB at § III.A.1, but to some extent it also responds to arguments made at § III.A.3.

be patent-free. In 2002, for example, EIA General Counsel and JEDEC President John Kelly drafted an "Overview of the JEDEC Patent Policy," in which he stated that "Open standards by definition are free of *restrictive* intellectual property (or 'IP') rights." (CX 449 at 2) (emphasis added). At trial, Mr. Kelly was asked what he meant by "restrictive intellectual property rights":

> Q. And you say, 'Open standards by definition are free of restrictive intellectual property or IP rights,' correct?
>
> A. Yes, sir.
>
> Q. And by 'restricted' you mean that there's no objection to having features [in] standards that are protected by valid patents as long as they're available to all comers on reasonable and non-discriminatory terms?
>
> A. Yes, sir.

(Kelly, Tr. 2072).

Many other trial exhibits confirm that "open standards" may, and often do, include patented features or technologies. As the EIA's January 1996 letter to the FTC puts it, "the important issue is the license availability on reasonable, non-discriminatory terms." (RX 669 at 4). The EIA Legal Guides, which governed JEDEC proceedings, (Kelly, Tr. 1829-30; CX 204 at 6), provide that a "basic objective" is that "[s]tandards are proposed or adopted by EIA without regard to whether their proposal or adoption may in any way involve patents on articles, materials or processes" (CX 204 at 4; *see also* RPF 51).

Not only did JEDEC permit the use of patented technology in its "open standards," JEDEC and EIA also recognized that if they were to try to avoid patented technology, consumers would suffer. In its January 1996 letter to the FTC, the EIA – on behalf of all of its standard activities, specifically including JEDEC – stated that "[a]llowing patented technology in standards is procompetitive:":

> By allowing standards based on patents, American consumers are assured of standards that reflect the latest innovation and high technology the great technical minds of this country can deliver.

> there is a positive and pro-competitive benefit to incorporating intellectual property in standards. As ANSI stated in its December 1, 1995 testimony (p. 10), "When proprietary technology is incorporated into a standard, it is available to all competing companies. This spurs the rate of technology's implementation and enhances U.S. competitiveness."

> • • •

> Standards in these high-tech industries must be based on the leading edge technologies. Consumers will not buy second-best products based only on publicly available information. They demand and deserve the best technology these industries can offer.

(RX 669 at 3, 4).

Thus, EIA and JEDEC recognized, in an official comment letter to the FTC, that there are important, procompetitive benefits to incorporating patented technology in standards. The witness seek to avoid including patented technology in its standards, as discussed in the following section, if JEDEC had sought to avoid including patented technology in its standards, as Complaint Counsel allege it did, JEDEC would be acting contrary to antitrust law.

2. It Would Be Unlawful for JEDEC to Avoid Including Patented Technology in its Standards

protection of competition as a means of promoting economic efficiency"). JEDEC's commitment to open standards, *as construed by Complaint Counsel*, would disserve this fundamental antitrust objective and, if implemented, likely would violate the antitrust laws.

Notwithstanding the evidence summarized above, Complaint Counsel allege that JEDEC's fundamental policy was to avoid the inclusion of patented technologies into standards wherever possible (CCB at 20) and to "strive[] to create" standards that were unencumbered by private patent rights (CCB at 39) and that "steer[ed] clear of patents" (CCB at 40). Such a policy would predictably result in the selection of inferior technologies and inferior standards where, as here, the patented technologies are superior to the alternatives. Inferior technologies mean reduced efficiency, reduced total economic welfare, reduced consumer welfare as well. (RX 669 at 2, 3; RX 2011 at 2-5); *see also* David Teece and Edward Sherry, *Standard Setting and Antitrust*, 87 MINN. L. R1.00000 0.00000 0.00000 1.00000 0.0000 cm 0.00 0.00 rgBT145.8000 3g.3.Mc

As above, Complaint Counsel allege that

[17] Complaint Counsel used this law review article, CX 1902, when cross-examining Professor Teece (Teece, Tr. 10480 *et seq.*).

[18] Or, as their economic expert put it, JEDEC rules put a "penalty" on patented technologies. (McAfee, Tr. 7337, 7582-83).

[19] Prepared remarks of Timothy J. Muris, Chairman, *Competition and Intellectual*

[20] The conflict between the antitrust laws and the alleged JEDEC policy to avoid patented technology has another implication for this case. The evidence as to whether JEDEC had such a policy is in dispute. The Court's analysis of that disputed evidence should be informed by the fact that the policy alleged by Complaint Counsel would undermine the objectives of the antitrust

for an antitrust case.

The alleged disclosure policy undermines the purposes of the antitrust laws for an additional and independent reason as well. The evidence shows overwhelmingly that disclosure of intellectual property interests to JEDEC does not result in rejection of the patented technology or in *ex ante* bargaining. (RPF 1206, 1213, 1220-41). Disclosure of more than issued patents has, instead, two different effects. First, such disclosure entails the surrender of the member's legitimate trade secret interest in non-public information about its intellectual property interests. (*See* RPF 1494). Second, disclosure triggers, under some circumstances, a RAND commitment by the owner of the intellectual property interests. (*See* CCB at 47-48). In other words, disclosure has both (1) the undesirable and anticompetitive effect of taking away trade secret protection and (2) sometimes, on Complaint Counsel's theory, the arguably desirable effect of triggering a RAND commitment.

Even assuming that a RAND commitment is a legitimate, procompetitive result, the disclosure rule under these circumstances is anticompetitive because a RAND commitment could be obtained without any disclosure requirement at all. JEDEC could, instead, simply require all members to agree that if they obtain patents covering technologies that are included in JEDEC standards, they will license those patents on RAND terms.[22] This alternative would achieve all the benefits obtained by a disclosure obligation, without the anticompetitive costs of required surrender of legitimate trade secrets.

Should it matter that there is an obviously less restrictive alternative to the disclosure requirement alleged by Complaint Counsel? It should. The court should construe JEDEC's

[22] Indeed, this is what JEDEC Council member Hans Wiggers understood the rule to be. (Wiggers, Tr. 10591). (*See also* RX-2011).

patent policy, if it can, so that it comports with the law, and it has been clear since Justice Taft's landmark opinion in the *Addyston Pipe* case more than one hundred years ago that agreements among competitors, such as those establishing the rules and policies of standard setting organizations, will be deemed to violate the antitrust laws if their purportedly legitimate purposes can be served by means that impinge less upon other antitrust objectives. *United States v. Addyston Pipe & Steel Co.*, 85 F. 271, 282-83 (6th Cir. 1898), *modified and aff'd*, 175 U.S. 211 (1899). *See also, e.g., Law v. NCAA*, 134 F.3d 1010, 1019 (10th Cir. 1998); *Sullivan v. NFL*, 34 F.3d 1091, 1103 (1st Cir. 1994) (restraint is not reasonable for antitrust purposes "if a reasonable, less restrictive alternative . . . exists that would provide the same benefits").

C. The Contemporaneous Evidence Overwhelmingly Supports The Conclusion That JEDEC Policy Did Not Require Rambus To Disclose Its Intellectual Property[23]

1. Complaint Counsel's Description Of JEDEC's Patent Disclosure Policy Is Not Supported By The Weight Of The Evidence

Complaint Counsel have put forth a description of what they allege JEDEC's patent policy to have been during the time Rambus was a JEDEC member. They have said that JEDEC's patent policy consisted of the following elements:

- A mandatory duty to disclose
- issued patents and patent applications
- whether your own or those of a third party that any JEDEC participant was aware of
- that "might be involved" in standards "under development,"
-

[23] This section responds principally to CCB at § III.A.2.

- with the disclosure consisting of more than just the patent number – at least sufficient information as to put the committee on notice as to the nature of the relationship between the proposed standard and the patent or patent application.

(CCB at 42-46).

Complaint Counsel's case depends upon proving that their version of the patent policy is correct. If they are wrong about *any one* of the elements (with the possible exception of the third and sixth elements, which do not appear to be implicated here),[24] then Rambus's conduct was in compliance with JEDEC's policy. For example, if the duty to disclose was not mandatory, but simply voluntary, then Rambus had no obligation to disclose. If the duty to disclose applied only to patents, rather than patent applications, Rambus was in compliance because it had no patents that were required to be disclosed. If only essential patents were required to be disclosed, rather than those that might somehow "be involved," then Rambus again was in compliance because it did not have patents or, for that matter, patent applications that were essential to any of the standards JEDEC was developing while Rambus was a member. Finally, if the disclosure was not expected until the time of balloting, then Rambus again was fully in compliance, particularly with respect to any patents alleged to apply to the DDR standard, which was not balloted until long after Rambus withdrew from JEDEC.

Although Complaint Counsel bear the burden of proving the existence of *all* of the above-listed elements of JEDEC's patent policy, the weight of the evidence in fact shows that *none* of them exist.

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[24] Because the third and sixth elements do not appear to be in issue, they are not discussed at any length in this brief, although they are addressed more fully in Rambus's Responses to Complaint Counsel's Findings. (RRFF 288-95, 331-32; RPF 542-43, 574-86 (others with knowledge of Rambus patents did not disclose them); Rhoden, Tr. 1304-05 (sufficient to state one "might have IP"); Kelley, Tr. 2700 (sufficient to provide only patent number)).

2. Disclosures Were Encouraged, Not Required

There is overwhelming evidence from contemporaneous documents that JEDEC and its members understood that the disclosure of intellectual property interests was *encouraged* and *voluntary*, not required or mandatory. (RPF 128-203). As just one example, the EIA, on behalf of JEDEC and all of its other standards activities, told the FTC in a January 22, 1996 letter that it "*encourage[s]* the early, *voluntary* disclosure of patents that relate to the standards in work." (RX 669 at 3) (emphasis added). The other written evidence on this point is both uniform and voluminous. (*See* RX 742 at 1 (statement in JEDEC Secretary's 7/10/96 memorandum to JEDEC Council members that the EIA "encourage[s] early voluntary disclosure of any known essential patents"); RX 740 at 1 (statement in 7/10/96 letter by FTC Secretary Donald Clark that the EIA "encourage[s] the early, voluntary disclosure of patents, but do[es] not require a certification by participating companies regarding potentially conflicting patent interests"); CX 3 at 6 (statement in JC 42.1 minutes from September 1989 that question regarding patents had been added to ballot form "for information only and was not going to be checked to see who said what"); RX 1585 at 1 (statement in JEDEC Secretary's 2/11/00 e-mail that "[d]isclosure of patents is a very big issue for Committee members and cannot be required of members at meetings"); JX 18 at 8 (statement in 12/93 JC 42.3 minutes that "IBM noted that in the future they will not come to the committee with a list of applicable patents on standards proposals. It is up to the user of the standard to discover which patents apply"); CX 205A at 11 (statement in JEDEC manual 21-H, in effect when the SDRAM standard was approved, that "JEDEC standards are adopted without regard to whether or not their adoption may involve patents [on] articles, materials or processes"); CX 204 at 4 (same language in EIA Legal Guides, which governed JEDEC standards-setting activities)).

3. Patent Applications Were Not Required To Be Disclosed

In support of their contention that JEDEC imposed a mandatory disclosure obligation relating to patent applications, Complaint Counsel rely almost entirely on JEDEC Manual 21-I. (CCB at 42).[25] Complaint Counsel have failed, however, to meet their threshold burden of proving that the 21-I manual ever became effective. It is undisputed that to be effective, 21-I needed the "final stamp of approval" of the EIA's Engineering Department Executive Council, known as "EDEC." (Kelly, Tr. 2105). There is no evidence in the record that such approval was ever obtained. Indeed, substantial evidence confirms that Manual 21-I was *not* approved and that, even if it had been approved, it was *not* understood to impose on JEDEC members a mandatory obligation to disclose patent applications in addition to patents. (RPF 232-381).

For example, the minutes of the February 2000 meeting of the JEDEC Board of Directors state unequivocally that disclosure of patent applications is "not required under JEDEC bylaws." (RX 1570 at 13). A few days after the meeting, JEDEC Secretary Ken McGhee explained to the members of JEDEC 42.4 that the disclosure of patent applications went "one step beyond" the policy and that even disclosure of *patents* could not be required: "Disclosure of patents is a very big issue for Committee members and cannot be required of members at meetings." (RX 1582 at 1). These clear and unambiguous official statements of policy *cannot* be reconciled with Complaint Counsel's contention that JEDEC had a mandatory policy requiring the disclosure of patents or patent applications.[26] Complaint Counsel called several past members of JEDEC's

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[25] As the great weight of the evidence demonstrates, disclosures were encouraged, not required. (RPF 128-98, 214-18; RRFF 324, 330).

[26] Complaint Counsel have not argued that there was a mandatory disclosure obligation while Rambus was a member of JEDEC, but that the requirement was eliminated prior to February 2000; and they have proffered *no* evidence that JEDEC relaxed its disclosure policy after Rambus left JEDEC. (RPF 236).

Board of Directors to testify during the course of this trial, including Mr. John Kelly, currently JEDEC's President, and Mr. Desi Rhoden, currently JEDEC's Chairman, but none of these witnesses explained or even addressed these critical documents, even though their significance had been emphasized by Rambus in its Opening Statement. (Opening, Tr. 186-87). Plainly, then, JEDEC did not require the disclosure of patent applications.

There is more than just contemporaneous written evidence that conflicts with Complaint Counsel's after-the-fact construction of the patent policy; actual conduct of JEDEC participants also contradicts that construction. For example, there is a long list of instances in which named inventors were present during a JEDEC meeting while proposals relating to their applications were being discussed, but did not disclose those applications. (*See* RPF 243-47) (SyncLink Consortium members did not disclose); 248-51 (Fujitsu did not disclose); 252-54 (IBM did not disclose); 255-58 (Micron did not disclose its Burst EDO patents and other patents); 259-60 (Mitsubishi did not disclose); 261-64 (Samsung did not disclose); 265-69 (Texas Instruments did not disclose); 270-72 (Toshiba did not disclose).

Moreover, there is no evidence that any JEDEC member objected when Gordon Kelley of IBM and Hans Wiggers of Hewlett-Packard announced at JEDEC meetings that they would *not* be disclosing patent applications from their companies. (RPF 239-41; JX 15 at 6; RX 420 at 2; JX 18 at 8; Wiggers, Tr. 10592-94).[27] It is inconceivable that their statements would have provoked no conflict or controversy if, as Complaint Counsel allege, JEDEC policy made disclosure of patent applications mandatory.

[27] Consistent with Mr. Kelley's statements that IBM would not disclose patents or applications, the Patent Tracking Lists show that no IBM patents or applications were added to those lists between the fall of 1993 and the fall of 1995, despite the enormous number of patents issued to IBM in that time period. (RPF 196).

[28] It is well settled that "oral testimony in conflict with contemporaneous documentary evidence deserves little weight." *Beddingfield v. Sec'y of HHS*, 50 Fed. Cl. 520, 523 (Fed. Cl. 2001). *Accord,*

proposition they cite nothing more than after-the-fact testimony. But that testimony, taken as a whole, does not support their contention, and that contention is contradicted by the contemporaneous record. (RPF 274-85; RRFF 335, 337-38).

Assuming that JEDEC members were expected or obligated to disclose *some* intellectual property interests at JEDEC meetings while Rambus was a member, the weight of the evidence shows that that obligation extended only to patents that were "essential" to a standard, *i.e.*, those patents that were necessary for the manufacture or use of a product that complied with the standard:

- EIA Manual EP-3-F refers only to standards that "*call for the use* of patented items." (CX 203A at 11) (emphasis added).
- EIA Manual EP-7-A refers only to standards "that *call for the exclusive use* of a patented item or process." (JX 54 at 9) (emphasis added).
- The EIA's January 1996 letter to the FTC states that the EIA "follows the ANSI intellectual property rights (IPR) policy as it relates to *essential* patents." (RX 669 at 2) (emphasis added).
- JEDEC Secretary Ken McGhee's July 10, 1996 memorandum to JEDEC Council members and alternates states that the EIA encourages disclosure of "known *essential* patents." (RX 742 at 1) (emphasis added).
- JEDEC's policy manual JEP 21-I – even if it had been approved by EDEC – refers *only* to standards that "*require the use* of patented items." (CX 208 at 19) (emphasis added).
- When writing on behalf of the EIA in August 1995 to an EIA member called Echelon, EIA General Counsel John Kelly explained that the "ANSI and EIA patent policy . . . requires an SDO to secure a commitment to license a patented item or process from a patent holder when a standard refers to a patented technology *or, as a practical matter, conformance to a standard requires use of the patented technology*." ((RX 2299 at 2) (emphasis added); *u36x00 Tw 0.0000 0*

to patents “related to the work at JEDEC in the sense that it described features that were *necessary to meet the stand*

because they asked the committee chair to "resolve patent status prior to (choose one)," followed by a list of events, almost all of which relate to balloting. (*See, e.g.*, JX 20 at 15-18; JX 21 at 14-18; JX 22 at 12-17).

Moreover, the evidence of actual JEDEC behavior reveals that JEDEC members conducted themselves as though disclosure was not expected until the time of balloting. (*See* RPF 1224-37). If disclosures were required earlier, Complaint Counsel would have offered testimony and documentary evidence, such as JEDEC minutes, reflecting members being admonished for not disclosing sooner, but they did not.

6. The Fact That JEDEC Took Steps To Disseminate Its Rules Does Not Change Their Content[29]

Complaint Counsel spend seven pages of their Opening Brief trying to establish that JEDEC undertook extensive measures to inform members of its patent disclosure rules. (CCB at 48-54). To some extent this is correct. But, as shown above, the rules that JEDEC explained to its members encouraged, but did not require, the disclosure of patents that were essential to practicing a JEDEC standard and that were actually known to the JEDEC representative. (*See* §§ II.B.2, II.B.3, II.B.4, *supra*). Most JEDEC members understood JEDEC's disclosure policy to be different from what Complaint Counsel allege it to be, and JEDEC's leadership and staff created written descriptions of the disclosure policy that are directly at odds with Complaint Counsel's version.[30] Thus, what Complaint Counsel's argument in fact demonstrates is that, *if* JEDEC's disclosure policy were as Complaint Counsel allege it to be, JEDEC was completely

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[29] This section responds primarily to CCB at § III.A.2.b.

[30] *See, e.g.*, (RPF 233-381; Kelley, Tr. 2700, 2706-07; Kellogg, Tr. 5310-11; Landgraf, Tr. 1693-95; McGrath, Tr. 9273-74; CX 3136 at 117 (Meyer, *Infineon* Trial Tr.); CX 2057 at 211 (Meyer Dep.); Rhoden, Tr. 1304-05; Wiggers, Tr. 10592-94; CX 203A at 11; CX 208 at 19; CX 3136, JX 15 at 6; JX 18 at 8; JX 20 at 15-18; JX 21 at 14-18; JX 22 at 12-17; JX 54 at 9; RX 229 at 2; RX 420 at 1; RX 669; RX 742 at 1; RX 1570 at 13; RX 1582 at 1).

unsuccessful in disseminating it to the members.

D. Even Accepting Complaint Counsel's Interpretation Of After-The-Fact Testimony, The Evidence Relied On By Complaint Counsel Is So Contradictory And Describes A Patent Policy That Is So Indefinite That, As A Matter Of Law And Policy, It Cannot Support Complaint Counsel's Claims[31]

In the Initial Brief, we set forth the legal principles that require that any duty which would give rise to an antitrust violation be clearly and unambiguously stated. (RIB at 43-49). Under any interpretation of the evidence, Complaint Counsel cannot establish that their interpretation of JEDEC's patent policy meets this standard. Even if weight is given to the after-the-fact testimony upon which Complaint Counsel rely, contrary to the *Gypsum* rule, the repeated instances in which contemporaneous evidence conflicts with that after-the-fact testimony leave the question of what was JEDEC's patent policy at best unsettled.[32] It thus cannot be the basis upon which any antitrust violation is founded.

E. Complaint Counsel's Fallback Position – That Rambus Did Not Act In Good Faith Even If It Complied With JEDEC's Patent Policy – Is Legally And Factually Flawed[33]

Fundamental to Complaint Counsel's contention that Rambus failed to act in good faith, even if it complied with JEDEC's patent policy, is an understanding of what good faith required. Complaint Counsel make this argument by assuming that Rambus complied with JEDEC's patent policy, and then arguing from this premise that Rambus should have done more in order to comply with a duty to act in "good faith." This argument is correct insofar as it assumes Rambus

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[31] This section responds principally to CCB at §§ III.A and III.C.

[32] There also are numerous instances of conflict among the after-the-fact testimony of various of Complaint Counsel's witnesses. (*Compare, e.g.,* Kelly, Tr. 1886-87 ("patent" means or included "patent application") *with* Kelley, Tr. 2676-79 ("patent" means "patent," not "patent application" and EIA rules did *not* require disclosure of patent applications)).

[33] This section responds principally to CCB at §§ III.A and III.C.

complied with JEDEC's patent policy, but otherwise is deficient, both factually and legally.[34]

1. Complaint Counsel Misstate JEDEC's Purpose

In two respects, Complaint Counsel misstate the scope of any "good faith" duty imposed upon JEDEC members. First, Complaint Counsel ignore well-settled principles of interpretation and construction when they argue that the alleged "good faith" obligation requires disclosure of patents that are not required to be disclosed by JEDEC patent policy. It is well-settled that specific rules and provisions will win out over general statements of duty or obligation. (*E.g., lex specialis derogat generali*.) Put differently, it is hard to imagine that JEDEC wanted to require disclosure of patent applications because such disclosure was fundamental to its purposes, yet when it developed specific rules regarding disclosure it failed to mention patent applications, expecting instead that JEDEC members would understand that disclosure of patent applications was required as part of an inchoate duty of "good faith."

Second, the duty of "good faith" [illegible]

[34] Rambus has argued unsuccessfully, but renews that argument here in order that it be preserved, that the Commission did *not* authorize Complaint Counsel to pursue this "breach of the duty of good faith" theory of liability. Trial Brief of Respondent Rambus Inc. at 19-23 (filed April 22, 2003).

[35] Indeed, in this same document, but on the preceding page, EIA did specifically discuss patents, there stating that "standards are proposed or adopted by EIA without regard to whether their proposal or adoption may in any way involve patents on articles, materials, or processes."

EIA Legal Guides are read in their entirety, it becomes plain that the good faith standard is simply an introduction to more specific principles that follow (CX 204 at 5, Section C), such as the express prohibition on using standardization programs to directly "or indirectly result in effectuation of a price fixing arrangement, facilitating price uniformity or stabilization, restricting competition, giving a competitive advantage to any manufacturer, excluding competitors from the market, limiting or otherwise curtailing production, or reducing product variations . . . ." (*Id.*). Thus, JEDEC's commitment to good faith should be understood to mean that patented technologies may not be excluded from standards, that members may not be prohibited from presenting their technology,[36] and that DRAM manufacturers are not permitted to agree to boycott a particular product in preference to their own design, be it SDRAM, SLDRAM or DDR.

2. In Any Event, Breach Of A Duty Of "Good Faith" Cannot Support An Antitrust Claim

Complaint Counsel's "good faith" theory is flawed for an even more fundamental reason: It does not provide a proper basis for an antitrust claim. First, the theory rests on the premise "that JEDEC fundamentally strived" to create standards that avoided "private patent rights" and "steer[ed] clear of patents" (CCB at 39, 40), and the allegation that JEDEC members were expected to act in "good faith" to further that policy. As explained above, however, such a policy would not be in the public interest and would disserve the purposes of the antitrust laws. *See* § III.B, *supra*. Therefore, neither that policy nor breach of the alleged duty to act in furtherance of that policy can be the basis for an antitrust case.

Second, even if a policy to avoid patented technologies could be a basis for an antitrust

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(CX 204 at 4).

[36] Nevertheless, Gordon Kelley unilaterally barred Rambus from presenting its technology for standardization in May 1992. (RX 279 at 7-8).

claim, no such claim can be based on the alleged duty of "good faith." According to Complaint Counsel, JEDEC participants were required "to act in good faith" and to "abide by the letter and the spirit of the patent policy." (CCB at 54-55. *See also, id.* at 21 ("subvert the spirit and purpose of JEDEC's . . . process")). This alleged duty is far too nebulous and uncertain to provide the basis for antitrust liability.

The antitrust laws were "designed to . . . preserv[e] free and unfettered competition as the rule of trade." They "rest[] on the premise that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources," *Northern P. R. Co. v. United States,* 356 U.S. 1, 4 (1958), and reflect the "national policy that the norm for commercial activity must be robust competition." *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 272 (2d Cir. 1979). The Supreme Court has thus made clear that the antitrust laws do not condemn conduct simply because it is "thought to be offensive to proper standards of business morality." *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128, 137 (1998) (*quoting* 3 P. AREEDA & H. HOVENKAMP,

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focused on "good faith" and the "spirit" of an entity's policies. In order to achieve the core antitrust objective of encouraging aggressive, robust competition, antitrust law imposes liability only where the standards are clear and precise; otherwise, firms facing uncertain antitrust liability would pull their competitive punches, and the antitrust laws would wind up encouraging only timid competition. *See generally Barry Wright Corp. v. ITT Ginnell Corp.*, 724 F. 2d 227, 237 (1st Cir. 1983) (Breyer, J.) ("There is also general agreement that the antitrust courts' major task is to set rules and precedents . . . . precise enough to avoid discouraging desirable price-cutting activity"); *Ball Memorial Hosp. v. Nat. Hosp. Ins., Inc.*, 784 F.2d 1325, 1338 (7th Cir. 1986) (noting that "competition is a ruthless process" and that "to deter aggressive conduct is to deter ***competition*"));**

> agreement not to manufacture, distribute, or purchase certain types of products. Accordingly, private standard-setting associations have traditionally been objects of antitrust scrutiny.

Id. (footnote and citations omitted); *see also American Soc'y of Mechanical Eng'rs v. Hydrolevel Corp.*, 456 U.S. 556, 571 (1982) ("Furthermore, a standard-setting organization like ASME can be rife with opportunities for anticompetitive activity.") *Radiant Burners, Inc. v. Peoples Gas Light & Coke Co.*, 364 U.S. 656 (1961).

Antitrust policies require that such collaborations be undertaken only on clear and precise terms in order that they not, deliberately or inadvertently, chill the vigor of competition among their members. As the Supreme Court noted in *Allied Tube*, "Product standardization might impair competition in several ways. . . . [It] might deprive some consumers of a desired product, eliminate quality competition, exclude rival producers, or facilitate oligopolistic pricing by easing rivals' ability to monitor each other's prices." 486 U.S. at 505 n.5 (*citing* 7 P. AREEDA & H. HOVENKAMP, ANTITRUST LAW ¶ 1503 at 373 (1986)).

For their contrary argument, Complaint Counsel rely entirely on the Second Circuit's decision in *Indian Head, Inc. v. Allied Tube & Conduit Corp.*, 817 F.2d 938 (2d Cir. 1987), *aff'd*, 486 U.S. 492 (1988).[37] The defendant in that case conspired with other steel companies to take control of the standard setting organization in order to exclude the plaintiff's competing plastic products from standards set by the organization, in violation of Section 1 of the Sherman Act. *Id.* at 497. The conduct was plainly the kind of unlawful activity that has traditionally concerned antitrust courts about standard setting bodies – agreements among some or all members acting in

[37] (CCB at 21). Complaint Counsel also cite the consent order and administrative complaint *In re Dell Computer Corp.*, 121 F.T.C. 616 (1996). But that matter involved violation of a clear and explicit rule. It did not involve, and Complaint Counsel do not cite it for, any duty of "good faith."

cartel-like fashion to exclude rival technologies. The defendant, however, argued that the conduct was nevertheless lawful because it did not violate the organization's rules. The court rejected the defense, saying, in language quoted by Complaint Counsel, that it would not "permit a defendant to use its literal compliance with a standard setting organization rules as a shield . . . from antitrust liability." (CCB at 21, *quoting Indian Head*, 817 F.2d at 941).

Complaint Counsel would read the quoted language to mean that any conduct that confounds an alleged purpose of a standard setting organization can violate the antitrust laws and that compliance with the organization's rules is irrelevant. But *Indian Head* plainly means no such thing. It means only that conduct that is *otherwise* a violation of the antitrust laws is not immunized from liability simply because it does not violate the organization's rules. In *Indian Head*, defendant's conspiracy was such illegal conduct. The nebulous breach of good faith alleged by Complaint Counsel here is not.

3. Rambus Acted In Good Faith

In any event, Rambus acted in good faith in its dealings with JEDEC. (RRFF 806, 809, 812, 814, 822). First, it complied with the governing rules. (RPF 318-463). Second, it did not encourage or push JEDEC to adopt any particular feature or technology. (RPF 451, 453). Third, when asked on two occasions if he would care to comment about Rambus's intellectual property rights, Rambus's representative, Mr. Crisp, declined to do so. (*See* RPF 491-515; 544-548). He did not lie and say Rambus had no such rights; he did not lie and say that it would not assert whatever rights it had. Instead, openly and publicly he declined to comment, and all present understood that Mr. Crisp had declined to comment. (*Id.*). As Gordon Kelley described it, Mr. Crisp's "no comment" was "unusual" and "surprising" and constituted "notification to the committee that there should be a concern" about intellectual property issues. (Kelley, Tr. 2579).

Rambus also sought legal advice and conducted itself in accordance with that advice.[38] First, it was advised to keep its patent applications confidential, and it did so. (RPF 456-58; CX 1951 at 2; CX 1945 at 2; Crisp, Tr. 3496). As Mr. Crisp explained in a contemporaneous written document, based on advice from Mr. Vincent (Crisp, Tr. 3473), Rambus "decided that we really could not be expected to talk about potential infringement for patents that had not issued both from the perspective of not knowing what would wind up being acceptable to the examiner, and from the perspective of not disclosing our trade secrets any earlier than we are forced to." (CX 837at 2).

Second, Rambus was advised not to promote a standard and not to mislead JEDEC into thinking that it would not enforce its patent rights. (RPF 448-50; Crisp, Tr. 3470-71; *see also* CX3125 at 310-15 (Vincent Dep.)). Rambus acted in complete conformity with this advice. (RPF 451-53). To the extent its subjective intent is relevant, it also believed its conduct was proper. As Mr. Crisp explained in a contemporaneous internal e-mail, he understood that Rambus should not "intentionally propose something as a standard and quietly have a patent in our back pocket. . . ." (CX 711 at 188). And, when he wrote this e-mail in December 1995, he was "unaware of us doing any of this or of any plans to do this." (*Id.*).

Rambus acted in good faith.

IV. COMPLAINT COUNSEL HAVE FAILED TO ESTABLISH THAT RAMBUS VIOLATED OR SUBVERTED JEDEC'S RULES, POLICIES OR UNDERLYING PURPOSES

Complaint Counsel construct their argument in large part, not on what happened in fact,

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[38] Seeking legal advice is relevant to prove good faith, and also to prove the absence of anticompetitive motive or intent. *In re Wyoming Tight Sands Antitrust Cases*, 1990 U.S. Dist. LEXIS 13576 at *14-15 (D. Kan. 1990); *see also United States v. Eisenstein*, 731 F.2d 1540, 1543 (11th Cir. 1984); *United States v. Piepgrass*, 425 F.2d 194, 198 (9th Cir. 1970).

[39] This section responds primarily to CCB at §§ III.B and III.C.1, although it also responds to arguments that Complaint Counsel repeat throughout § III.

property to be disclosed if it was not essential, that is, if it did not necessarily "read on" a product manufactured in accordance with the JEDEC standard.

> Q. Okay. And that's what's important, as you understand it, whether it reads [on]?
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> A. My belief is you have to disclose intellectual property that reads on the standard. Sometimes we disclose intellectual property that doesn't and one would question why. It adds confusion.

(Kellogg, Tr. 5311).

Mr. Kellogg's understanding that disclosure of patents that do not "read on" JEDEC-compliant devices would simply add confusion is sound. JEDEC desired to produce standards that could be implemented by all companies in the market. Thus, it sought to develop standards either that were not covered by patents (as Complaint Counsel contend) or with respect to which essential patents could be licensed on RAND terms (as Rambus contends). Regardless of which statement is correct, JEDEC's purpose would not be advanced, but instead would be frustrated, by disclosure of patents that do not in fact "read on" the standard. Such overbroad disclosure would increase the time JEDEC would need to spend reviewing such patents and would impose a variety of other costs on its standard-setting process. (RX 2011 at 2-3)

Consistent with the record evidence and JEDEC's purpose, only patents that were "essential" to a standard were expected or required to be disclosed to JEDEC.

2. JEDEC's Requirement Of Patent Disclosure Was Limited To The Actual Knowledge Of The JEDEC Representative, And Thus We Consider Richard Crisp's "State Of Mind" Only For The Purpose Of Determining Whether He Had Actual Knowledge Of Any Rambus Patents That Read On Any JEDEC Standard

Complaint Counsel point to several documents written by Rambus employees who were not JEDEC representatives in an effort to support their contention, albeit an irrelevant contention,

[40] In fact, as summarized below, § IV.B, *infra*, these applications did *not* contain claims that necessarily would be infringed by

knowledge of Rambus's JEDEC representative, Mr. Crisp. (RPF 228-95; RRFF 339). Mr. Crisp's state of mind could therefore be relevant, if at all, only to the extent Mr. Crisp's actual knowledge could be inferred from his "state of mind." As Rambus has repeatedly noted (RPF 417-31), Complaint Counsel have failed to show that Mr. Crisp had any such actual knowledge, and evidence of Mr. Crisp's state of mind does not remedy this deficiency. Mr. Crisp did not believe that Rambus had claims in patents or patent applications that it was required to disclose and, as shown in the discussion that follows, his belief was correct. (RPF 427).

B. While It Was A JEDEC Member, Rambus Did Not Have Any Patent Claims, Or Any Claims In Patent Applications, That "Read On" JEDEC Standards[41]

1. The Federal Circuit's *Infineon* Decision Is Binding On This Court With Respect To the Interpretation And Scope Of Claims In Rambus's Patents And Applications

Complaint Counsel argue that the Federal Circuit's *Infineon* opinion should have no preclusive or even persuasive effect in this case. (CCB at 77-83). The arguments Complaint Counsel advance reflect in many respects their refusal to acknowledge the principles of *stare decisis.* For instance, Complaint Counsel fail to address the principle laid down by the United

[41] This section responds primarily to CCB at § III.C.

> such desirable uniformity that Congress created the Court of Appeals for the Federal Circuit as an exclusive appellate court for patent cases . . . . [T]reating interpretive issues as purely legal will promote (though it will not guarantee) intrajurisdictional certainty through the application of *stare decisis* on those questions not yet subject to interjurisdictional uniformity under the authority of a single appeals court.

Accord Key Pharms. v. Hercon Labs. Corp., 161 F.3d 709, 716 (Fed. Cir. 1998) (Federal Circuit decisions on claim construction have "national *stare decisis* effect"); *Wang Lab. v. Oki Elec. Indus. Co.*, 15 F. Supp. 2d 166, 175 (D. Mass. 1998). Thus, this Court is bound, as a matter of *stare decisis*, by the claim construction performed already by the Federal Circuit. *Rambus Inc. v. Infineon Technologies AG*, 318 F.3d 1081, 1103 (Fed. Cir. 2003).

Complaint Counsel also argue that this Court should find *no* persuasive value in the decision of Judge Payne and the opinion of all three Federal Circuit judges that Rambus had no obligation to make any disclosure with respect to the DDR standard because development of that standard did not commence until after Rambus had left JEDEC. We do not contend that this Court is bound by the decision of these four judges, but rather that this Court should find their analysis and reasoning persuasive. Although the *Infineon* trial was conducted in a shorter period of time, the same factual issues and much of the same evidence that was presented here was also presented there. Desi Rhoden, for instance, testified in both cases. Thus, Judge Payne and the Federal Circuit were able to consider essentially the same evidence that this Court has to consider regarding when work on the DDR standard actually commenced and the views of those four judges should be considered with deference.

2. The Record Evidence In This Case Proves That Rambus, While A JEDEC Member, Did Not Have Claims In Patents Or Applications That "Read On" JEDEC Standards

Rambus fully anticipated, and rebutted, Complaint Counsel's arguments that Rambus had

[42] This section responds primarily to CCB at §§ III.C and III.G.

[43] For example, at the May 1992 JEDEC meeting, Mr. Howard Sussman stated that he had reviewed the PCT application and that, in his opinion, many of those claims were barred by prior art. (RPF 519-22; CX 673 at 1; RX 290 at 3). In September 1993, the PCT application was described at a JEDEC meeting as a "collection of prior art," and thus not likely to issue. (RPF 531-32). Hans Wiggers captured JEDEC's views when he testified at trial that if Richard Crisp had claimed at a JEDEC meeting that Rambus had invented dual-edge clocking he would have responded that Rambus could not patent it "because it was a known technology, so I could not see that as a proprietary technique." (Wiggers, Tr. 10588). Micron was obviously of the same view; after being told by Intel that Rambus claimed to have patents covering all uses of DDR in memory devices, Micron took no ac

the correct and controlling standard for exclusionary conduct; nor could they, given the fact that the Department of Justice and the Federal Trade Commission have repeatedly endorsed that definition of anticompetitive exclusionary conduct over the past several years, including in briefs filed in the Supreme Court in the pending *Verizon v. Trinko* case.[47] But Complaint Counsel make no effort to apply this controlling test to the facts of this case. To the contrary, they completely ignore the substantial evidence that, in not disclosing information about its pending patent applications and its possible future applications, Rambus was engaging in the same type of legitimate conduct that businesses routinely engage in, namely, protecting trade secrets in order to guard against a misappropriation of its inventions and thus to preserve for itself the rewards for those inventions to which it is legally entitled. (*See* RIB at 101-155; RPF 1435-41). *See generally*, *Berkey Photo*, 603 F.2d at 281-82.

Instead, Complaint Counsel make or suggest three arguments. None of them can withstand analysis.

(1) Complaint Counsel suggest that Rambus's conduct can be considered exclusionary if

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purpose other than its adverse effects on competitors.'" *Concord Boat Corp. v. Brunswick Corp.*, 207 F.3d 1039, 1062 (8th Cir. 2000), *cert. denied*, 531 U.S. 979 (2000); *High Technology Careers v. San Jose Mercury News*, 996 F.2d 987, 990 (9th Cir. 1993) ("if there is a valid business justification for [defendants'] conduct, there is no antitrust liability"); *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 36 F.3d 1147, 1183 (1st Cir. 1994) (a defendant may rebut evidence of exclusionary conduct "by establishing a valid business justification for its conduct."); *Trace X Chemical, Inc. v. Canadian Industries Ltd.*, 738 F.2d 261, 266 (8th Cir. 1984).

[47] *See* Brief for the United States and the Federal Trade Commission as Amicus Curiae on Petition for a Writ of Certiorari, *Verizon Communications, Inc. v. Trinko*, No. 02-682, at 13 (December 2002), http://www.usdoj.gov/atr/cases/F200300/200358.htm (conduct is exclusionary only when it "would not make economic sense unless it tended to reduce or eliminate competition"); *see also* Brief for the United States and the Federal Trade Commission as Amicus Curiae Supporting Petitioner, *Verizon Communications, Inc. v. Trinko*, No. 02-682, at 13 (May 27, 2003) http://www.usdoj/gov/atr/cases/F201000/201048.htm (urging application of test in refusal to deal case).

[48] ABA Section of Antitrust Law, Antitrust Law Developments at 247-49 (5th ed. 2002).

[49] *See, e.g.*, *Goldwasser v. Ameritech Corp.*, 222 F.3d 390, 400-01 (7th Cir. 2000) (plaintiff must state freestanding "antitrust claim" and cannot base antitrust claim on violation of 1996 Telecommunications Act); *Olympia Equipment,* 797 F.2d at 376 (exclusionary conduct cannot be determined by liability "in tort or contract law, under theories of promissory estoppel or implied contract . . . or by analogy to the common law tort" rules); *Conoco, Inc.*

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H. HOVENKAMP, ANTITRUST LAW ¶ 651d, at 79 (1996). And, the Supreme Court has repeatedly declared that the antitrust laws are not to be used to condemn conduct that constitutes "'competitive practices'" but that is also "thought to be offensive to proper standards of business morality.'" *See NYNEX Corp.*, 525 U.S. 128, 137 (1998) (*quoting* 3 P. AREEDA & H. HOVENKAMP, ANTITRUST LAW ¶ 651d, at 78 (1996)).

(2) Although Complaint Counsel make no explicit effort to apply the antitrust definition of exclusionary conduct to the facts at hand, they nod in that direction with the assertion that Rambus's failure to disclose more than it did about its intellectual property jeopardized the enforceability of its patents and that it was "irrational" for Rambus to take that risk "absent the expectation of long-term benefits through the exclusion of competition." (CCB 89-90, 92-93). There are three problems with this argument.

First, Complaint Counsel completely ignore the substantial, legitimate benefits to Rambus from maintaining the confidentiality of its pending and possible future patent applications. (*See* RIB 101-105). Because Complaint Counsel have ignored the benefits to Rambus from guarding its trade secrets, including avoiding interference with pending patent applications, they have no basis in the record evidence to conclude that Rambus's conduct was on balance irrational or unprofitable absent exclusion of rivals and a resulting increase in Rambus's market power. *See, e.g., In re Indep. Serv. Org. Antitrust Litig.*, 203 F.3d 1322, 1327 (Fed. Cir. 2000), *cert. denied*, 531 U.S. 1143 (2001) ("a monopolist's 'desire to exclude others from its [protected] work is a presumptively valid business justification for any immediate harm'"); *Trace X Chemical, Inc.*, 738 F.2d at 266 ("The exercise of business judgment cannot be found to be anti-competitive").

Second, Complaint Counsel greatly exaggerate the risk Rambus perceived it faced from

protecting its trade secrets as it did. Complaint Counsel note that Rambus was advised by counsel that misleading conduct could jeopardize its ability to enforce its patents. (CCB at 92-93). But Complaint Counsel ignore the fact that counsel advised Rambus that it could avoid those risks by following a specified course of conduct, and that Rambus followed that course. (RPF 448-63). The record thus does not support the contention that Rambus understood that its conduct was irrational *but for* improper exclusion of rivals; to the contrary

would, on Complaint Counsel's own theory, have revealed its failure to disclose them earlier[50] and would thus have made it impossible for Rambus to enforce its patents. Plainly, if Rambus had understood the legal risks as alleged by Complaint Counsel, it would have been irrational for Rambus to keep silent in anticipation of "longer-term benefits."

(3) Complaint Counsel suggest, only vaguely in their brief and more directly in their Proposed Findings, a different definition of exclusionary conduct – one that would condemn any conduct that excludes an equally or more efficient alternative. (CCFF ¶ 2986, 2987, 3002). In an apparent effort to find support for this alternative, Complaint Counsel cite the ABA handbook for the proposition that attempts "'to exclude rivals on some basis other than efficiency' can fairly be 'characterize[d] . . . as predatory," (CCB at 89 (*citing Antitrust Law Developments* at 250 (quoting *Aspen Skiing*, 472 U.S. at 605))). But the cited language supports, not an alternative legal test, but the basic test of exclusionary conduct described above. It is only when a firm engages in conduct that is unprofitable or does not make business sense *but for* exclusion of rivals that it is deemed to be competing "on some basis other than efficiency."

Moreover, Complaint Counsel's alternative suggestion is unsound as a matter of antitrust economics. As Dr. Rapp explained, exclusionary conduct cannot be defined by its consequences, but only by its attributes when the defendant engaged in the conduct. (Rapp, Tr. at 9928 ("The way that antitrust economics goes about analyzing predation or exclusion is by means of assessing the conduct" rather than "the outcome")). Otherwise, clearly procompetitive conduct could be deemed to be unlawful. For example, enforcement of intellectual property rights, which is unquestionably procompetitive, can exclude more efficient producers *ex post* (*see id.* at 9930 (explaining that exercising intellectual property rights to exclude a competitor in the market is

[50] On the first page of each patent is its priority date and its date of issue.

procompetitive, not exclusionary)); a free-riding rival, for example, that could simply copy an innovator's invention without doing any R&D itself might well be a more efficient producer, but enforcement of the innovator's intellectual property is nevertheless welcomed by the antitrust laws, in part because antitrust objectives are furthered by the incentives for investment that intellectual property rights create.[51]

In short, both the cases and sound antitrust economics require that Complaint Counsel prove that Rambus's conduct in safeguarding its trade secrets did not make business sense other than as a means to exclude rivals and gain additional market power. Complaint Counsel have failed to do this, as Rambus has previously shown. (*E.g.*, § V.A, *supra*

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[51] *See In re Indep. Serv. Org. Antitrust Litig.*, 203 F.3d at 1325 ("'the antitrust laws do not negate the patentee's right to exclude others from patent property'") (quoting *Intergraph Corp. v. Intel Corp.*, 195 F.3d 1346, 1362 (Fed. Cir. 1999)); *Data Gen. Corp.*, 36 F.3d at 1186 (observing that "exposing patent activity to wider antitrust scrutiny would weaken the incentives underlying the patent system, thereby depriving consumers of beneficial products"); *Neumann v. Reinforced Earth Co.*, 786 F.2d 424, 427 (D.C. Cir. 1986) (patent laws give holders the right to exclude rivals from the market for reasons of economic efficiency); *Berkey Photo,* 603 F.2d at 281-82 ("It is the possibility of success in the marketplace, attributable to superior performance, that provides the incentives on which the proper functioning of our competitive economy rests.").

[52] This section responds primarily to CCB at § III.E.

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(1986) (conduct that is "clearly threatening to competition or clearly exclusionary"). *See Tops Mkts., Inc. v. Quality Mkts., Inc.*, 142 F.3d 90, 101 (2d Cir. 1998) (a fact finder could infer intent from conduct that "was not motivated by a valid business justification"); *Thurman Industries, Inc. v. Pay 'N Pak Stores, Inc.*, 875 F.2d 1369, 1378 (9th Cir. 1989) (refusing to infer intent from conduct that was not a per se antitrust violation).

Complaint Counsel's proof that Rambus had the requisite intent thus falls short for two reasons. First, the conduct Complaint Counsel rely on – Rambus's failure to disclose its trade secrets – is not exclusionary and is thus not a sufficient predicate for a finding or inference of anticompetitive intent. (*See* § V.A, *supra*). Second, even if the conduct could be deemed to be exclusionary, Complaint Counsel have not shown that Rambus understood that protecting its trade secrets was not a legitimate justification for its silence. *See, e.g.*, *Aspen Skiing*, 472 U.S. at 602 (requiring "an intent which goes beyond the mere intent to do the act"). Complaint Counsel have, in other words, failed to prove that Rambus made a deliberate and knowing decision to engage in exclusionary conduct.

C. Rambus's Efforts To Obtain Patent Coverage For The Fundamental Farmwald/Horowitz Inventions Were Appropriate And Are Entitled To Full Legal Protection[53]

Complaint Counsel now contend that Rambus engaged in wrongful conduct by "intentionally [taking] specific action to obtain patents with claims covering SDRAMs, including SDRAMs that complied with the SDRAM and DDR SDRAM standards being developed by JEDEC." (CCB 91-92; CCFF 809-10). This position represents a complete about-face. In their Opening, Complaint Counsel explained their claims as follows:

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[53] This section responds primarily to CCB at §§ III.D and III.E, although it also responds to implicit arguments that permeate § III.

> [L]et me be very clear about something. It is *not* complaint counsel's contention that the act of amending one's patent applications to cover a competitive product is in itself a wrongful act, nor do we claim that Rambus' use of information obtained from attending JEDEC meetings amounts to misappropriation or somehow renders Rambus' patents invalid.

(Opening Statement, Tr. 49-50) (emphasis ac.'ujoAFdg0, Tr. 4

Sportswear, Inc., 964 F.2d 186, 188 (2d Cir. 1992) ("To sustain a § 2 claim, the plaintiff must prove not only that the defendant had the power to monopolize, but also that it willfully acquired or maintained its power, thereby causing unreasonable 'exclusionary,' or 'anticompetitive' effects." (internal citations omitted)); 3 P. AREEDA & H. HOVENKAMP, ANTITRUST LAW, ¶ 650c, at 69 (1996) ("plaintiff has the burden of pleading, introducing evidence, and presumably proving by a preponderance of the evidence that reprehensible behavior has contributed significantly to the achievement or maintenance of the monopoly"). Complaint Counsel have not met that burden.

A. Complaint Counsel Must Prove An Actual Causal Link Between Rambus's Supposedly Unlawful Conduct And Any Alleged Antitrust Injury[54]

Complaint Counsel concede that "there must be a causal link between the conduct at issue and the acquisition of monopoly power." (CCB at 107 (*citing* T. Muris, *The FTC And The Law Of Monopolization*, 67 ANTITRUST L.J. 693, 694 (2000))). Evidently concerned, however, about the facts, Complaint Counsel argue that they do not really have to prove a causal link; instead, they say, the Court can infer causation from the allegedly anticompetitive conduct itself. (CCB at 107-08). In effect, Complaint Counsel argue that there is no separate causation element to the offenses they have alleged. For this extraordinary proposition, Complaint Counsel rely on the statement by the Court of Appeals in the *Microsoft* case that "courts will infer 'causation'" from conduct that "'reasonably appear[s] capable of making a significant contribution to . . . monopoly power.'" (CCB at 107 (quoting *United States v. Microsoft Corp.*, 253 F.3d 34, 79 (D.C. Cir. 2001) (quoting 3 P. AREEDA & H.

[54] This section responds primarily to arguments advanced in or underlying CCB at §§ III.F, III.G and III.H.

neither the *Microsoft* case nor the Areeda & Hovenkamp treatise on which it relied supports Complaint Counsel here.

In the *Microsoft* case, the government proved the first basic element of causation: that Microsoft had engaged in a widespread pattern of anticompetitive and exclusionary conduct that had the purpose and effect of denying rival Netscape access to the most effective means of distribution and thus made it impossible for Netscape to compete effectively against Microsoft. *See Microsoft,* 253 F.3d at 58, 64-67, 78; *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30, 39 (D.D.C. 2000), *aff'd in relevant part*, 253 F.3d 34 (D.C. Cir. 2001). The government argued, and the court found, that, but for that conduct, Netscape might have flourished as an internet browser in competition with Microsoft's Internet Explorer browser and that a successful Netscape browser might have served as a middleware platform that would have stimulated entry into the desktop operating system market and thus eroded Microsoft's monopoly there. *Microsoft,* 253 F.3d at 79; 87 F. Supp. 2d at 38-39. The court also found that Microsoft's success in crippling Netscape by its exclusionary conduct made it impossible for the court to determine directly whether these other, subsequent events would have come to pass, *Microsoft*, 253 F.3d at 79. Under those circumstances, the court said, it would infer that Microsoft's exclusionary conduct had the required effect on competition, solely for purposes of liability (as opposed to remedy). *Id.* at 78-79.

This case is very different, for two reasons. In the first place, while the government proved that Microsoft's conduct had the alleged effect on Netscape, Complaint Counsel here want to infer – because they cannot prove – even that first step of causation (*i.e.*, that JEDEC would have adopted a different standard). (CCB at 108).

Second, the subsequent events alleged by the government in the *Microsoft* case – the

development of Netscape into a middleware platform and the resulting new entry into the operating system market – had no historical precedents, and Microsoft's conduct made it impossible for the court to know whether that unprecedented chain of events would have ensued if Microsoft had not excluded Netscape from the effective means of distribution. Here, by contrast, there is substantial experience with the events alleged by Complaint Counsel, and the evidence provides a sufficient basis for the court to conclude that Complaint Counsel have failed to prove the required "causal link" between the conduct they challenge and whatever market power Rambus has. The evidence shows, for example, that patent interests have been disclosed to JEDEC on several occasions and yet never caused JEDEC to adopt a different standard. (*See* RPF 1224, 1239). The evidence also shows that there were no viable alternatives to Rambus's technologies (*see* RPF 794-1140); that DRAM standards succeed, even if not selected by JEDEC, and fail, even if chosen by JEDEC – that, in other words, the success of standards depends on their merit, not JEDEC's imprimatur (*see* RPF 1514-23); and that nothing prevents the DRAM industry from switching to different standards if there were viable alternatives to Rambus's technology (*see* RPF 1259-1360). All of these facts are knowable in light of the record in this case, but Complaint Counsel would like the Court to ignore the evidence and to relieve them of their burden to prove causation. Nothing in the ***Microsoft*** case supports that.

The Areeda & Hovenkamp treatise on which the *Microsoft* court relied makes clear that causation cannot be inferred under circumstances like those here. "[B]efore [an inference] can properly be used against the defendant, it must at least appear plausible" that the challenged conduct "could have had, or would probably have, a *significant relationship* to the defendant's monopoly

conduct. *See also United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966) (requiring proof that defendant acquired monopoly power through anticompetitive conduct rather than a superior product). It is, therefore, not enough to link inference upon inference, as Complaint Counsel urge. (CCB at 108). Complaint Counsel must at the very least prove a likely causal connection. That takes Complaint Counsel back to the evidence, which does not support their claim. (*See* RIB at 130-132).

Complaint Counsel's reliance on inference is especially inappropriate in light of the kind of remedy Complaint Counsel seek. As Areeda and Hovenkamp explain, "[t]he causal connection between conduct and power can be relatively modest when the only remedy sought is an injunction against continuation of that conduct." 3 P. AREEDA & H. HOVENKAMP, ANTITRUST LAW, ¶ 650a(2)(A) at 67 (2002). By contrast, relief that goes beyond an order to refrain from specified conduct and that targets the monopoly itself, such as divestiture or in this case forfeiture of intellectual property rights, "raise[s] more serious questions and require[s] a clearer

B. Rambus's Conduct Did Not Alter JEDEC's Standardization Processes[55]

Complaint Counsel concede that JEDEC chose Rambus's technologies over competing technologies. They concede that if Rambus had never joined JEDEC its technologies still would have been chosen. And they concede that Rambus took no affirmative steps to cause its technologies to be chosen. Rather, they contend that Rambus's silence – its failure to disclose patent applications – led JEDEC astray, and that if JEDEC had only known of Rambus's potential patents it would have selected an inferior technology, but hopefully one that was not patented. However, not long after Rambus's technologies had been selected, and well before they began to be widely used, Rambus initiated patent infringement litigation, and JEDEC members could no longer deny knowledge of Rambus's intellectual property. Yet, JEDEC continued to include Rambus's inventions in its standards and, when it developed new standards, it included even more of Rambus's inventions. (RPF 1353-54). In an effort to explain why JEDEC even today continues to incorporate Rambus's inventions in its standards, Complaint Counsel assert that JEDEC is "locked-in" and that it can no longer make use of the alternative technologies that Complaint Counsel allege it otherwise would have employed had it only known sooner of Rambus's patent applications.

The parties have diametrical interpretations of the evidence Complaint Counsel allege proves lock-in. Complaint Counsel contend that switching to alternative technologies would require an enormous expenditure of resources and create insurmountable coordination difficulties. They point to evidence that a "revision design" involves high out-of-pocket costs,

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[55] This section responds primarily to CCB at § III.G.

losses of millions of chips in inventory, and "massive" opportunity costs. (CCB at 102-03). Complaint Counsel also contend, citing the testimony of Andreas Bechtelscheim, that producers of complementary product would have to spend "billions" if there were a switch, and they point to the length of time required and difficulty JEDEC has faced in developing new standards. (CCB at 103, 105). In contradistinction, Rambus asserts that the evidence shows that switching costs are not prohibitive and that coordination difficulties would not prevent the incorporation of alternatives. Rambus relies on evidence showing that multiple DRAM standards with substantial market shares coexist in the market (showing that no economic or technical phenomena forces a single design), DRAM manufacturers routinely redesign DRAM products, the DRAM industry routinely coordinates switching to new standards (*e.g.*, PC66 to PC100 to PC133), and switching costs, as experts explained, are not prohibitively high. (RPF 1259-1360).

Although Complaint Counsel characterize switching technologies as a massively disruptive "stop the presses" process, that has the whole industry grinding to a halt and discarding years of work, effort, and products, the truth is that switching to alternatives for the two features in SDRAM and the four features in DDR at issue here could be done almost seamlessly during one of the many natural transition periods that the DRAM industry goes through almost every year.

DRAM technology is complex, but understanding the "lock-in" issue is not. DRAMs consist of the memory array (or "core") and the peripheral control circuitry. Changes in the memory array are difficult, time consuming, and expensive; changes to the peripheral control circuitry are far more simple, quick, and inexpensive. As Gordon Kelley of IBM explained, the majority of DRAM design work involves the array, but the issues decided at JEDEC – including issues regarding Rambus's technologies – involve the peripheral circuitry:

We could begin the DRAM before JEDEC information became finalized because most of the DRAM is not the control features that are decided at JEDEC. Most of the DRAM is the memory array, and all of that is going to be the same regardless of what thest of the DRAM is not the contr

the flavors might change, it's still a DRAM.

(RX 836 at 3) (emphasis added). Beca

[56] DRAM manufacturers are constantly redesigning their products, introducing new designs, and retiring old ones. (*See* RPF Section X.A.3; CX 2466 at 5-9 (showing that in 2002, Infineon was introducing 15 new SDRAM products and retiring 12 and was introducing 17 new DDR products and retiring 2)).

will impose massive costs on complementary product manufacturers is belied by actual practice. The relatively minor changes to replace the Rambus technologies in the peripheral control circuitry with alternatives are comparable to the frequent transitions from one sub-generation of a standard to the next (*i.e.*, from PC66 to PC100 to PC133), each of which also required changes and coordination with complementary products producers. (RPF 1308-32). There is no evidence that these types of transitions required the huge inventory losses,[57] extraordinary opportunity costs,[58] "billions" of dollars in transition costs by makers of complementary components,[59] staunch resistance to change, or insurmountable coordination difficulties that Complaint Counsel posit.

Finally, Complaint Counsel assert that it would be too difficult and take too long for JEDEC to agree to change the standard. (CCB 105). Yet, it is JEDEC that moved from EDO to SDRAM to DDR. And, when JEDEC has not moved quickly enough, Intel and others have stepped in to manage the transition, facilitating rapid transitions from PC66 to PC100 to PC133 and from DDR200 to DDR266 to DDR333 to DDR400. (RRFF 2563-64). Further, if Rambus's

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[57] The evidence of inventory losses relied upon by Complaint Counsel during a revision design involve DRAM that could not be used because it was defective. (Shirley, Tr. 4168). There is no reason that DRAM manufacturers could not continue to sell their old SDRAM and DDR products during a transition to a revised standard; this is what they do all the time.

[58] The opportunity costs posited by Complaint Counsel (those required for a revision design) overstate the costs because any switch to alternatives could be incorporated into a routine redesign. The incremental opportunity costs were captured in Rambus's calculations. (Rapp, Tr. 10156).

[59] The only evidence relied on by Complaint Counsel for this proposition is testimony concerning what Cisco would have to spend to redesign every single memory board that it currently produces – a "worst case" scenario in which the production of all SDRAM stopped instantaneously. (RRFF 2505). But the evidence shows that the DRAM industry has historically moved from standard to standard without having such a drastic disruption. There is no reason to believe that there is something about the Rambus technologies that would require such a departure from historical practices.

unnecessary. (*See* CCB at 116-119).

This argument is factually untenable. Complaint Counsel have failed to prove: that the industry would have eschewed Rambus's technologies if Rambus had made the additional disclosures; that Rambus's royalties are unreasonable, discriminatory or higher than they would have been if Rambus had made the disclosures; or that Rambus's conduct caused the industry to incur work-around costs. (RPF 1376, 1397-98, 1412, 1415, 1422).

Moreover, even if Complaint Counsel had proven all that, they would still have failed to prove that Rambus's conduct injured competition within the meaning of the antitrust laws. The antitrust laws are intended to promote "the welfare of the public." *Valley Drug Co. v. Geneva Pharms.*, ___ F.3d ____, 2003 U.S. App. LEXIS 19069, at *38-39 (11th Cir. Sept. 15, 2003) (quoting H. Hovenkamp, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, ¶ 1780a (1999)); *Olympia Equipment*, 797 F.2d at 375 ("the emphasis of antitrust policy [has] shifted from the protection of competition as a process of rivalry to the protection of competition as a means of promoting economic efficiency"). The evidence shows that Rambus's technologies were superior to the alternatives in cost/performance terms and, thus, that their inclusion in the JEDEC standard and their use by the industry enhanced "the welfare of the public" and promoted "economic efficiency." (RPF 1138. *See also* RPF 1219, 1532, 1616). Complaint Counsel, therefore, cannot complain that the inclusion of Rambus's technologies in the JEDEC standard injured competition.

Because Rambus's technologies are superior to the alternatives, welfare is obviously furthered by their inclusion in the JEDEC standard. This is unquestionably so if, as Dr. Rapp testified without contradiction, Rambus's technologies are both equal to or superior to the non-infringing alternatives in performance and less costly than those alternatives, even taking into

[61] The cumulative cost of acceptable technological alternatives was a critical part of wha

than injury to individual firms. *See, e.g., Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962).

Accordingly, even if Complaint Counsel had shown that JEDEC and the industry would have chosen different standards had Rambus made additional disclosures, Complaint Counsel would not have proven the requisite injury to competition. To prove that Rambus's failure to make the disclosures injured competition, Complaint Counsel had to show that Rambus's conduct excluded superior technologies. Complaint Counsel have failed to prove that.

VII. NO PART OF THE REMEDY COMPLAINT COUNSEL SEEK IS SUPPORTED LEGALLY OR BY THE EVIDENCE[62]

Complaint Counsel's proposed remedy would preclude Rambus from (1) pursuing any legal action in which it claims that any person or entity is infringing, or has infringed, Rambus's patents through the manufacture, sale or use of any JEDEC-compliant product; (2) pursuing any legal action in which it claims that any person or entity is infringing, or has infringed, Rambus's foreign patents through the manufacture, sale or use of any JEDEC-compliant product; and (3) collecting "fees, royalties or other payments" for the "manufacture, sale or use of any JEDEC-compliant product pursuant to any existing License Agreement." (CCFF, Proposed Order ¶¶ II-VI). As the Eleventh Circuit recently recognized, however, the "exclusionary rights" provided by patents are "granted to allow the patentee to exploit whatever degree of market power it might gain thereby as an incentive to induce investment in innovation and the public disclosure of inventions." *Valley Drug Co.*, 2003 U.S. App. LEXIS 19069 at *28-29. Because of the "complementary objectives" of the "antitrust law's free competition requirement and the patent regime's incentive system," it is important to carefully consider the risks of "undermin[ing] the

[62] This section responds primarily to CCB at § IV.

foreign sovereigns.

A. The Proposed Order Is Contrary To Established Law Barring Compulsory Royalty-Free Licensing As An Antitrust Remedy

In *VISX*, Complaint Counsel candidly recognized that there is no authority for depriving a patentee like Rambus of the benefits of its valid patent rights even when doing so might somehow be thought to remedy an antitrust violation:

> The Commission's ability to order that a presumptively valid patent not be enforced is unsettled. We are unaware of an antitrust court that has ordered that an antitrust defendant not enforce a valid patent. *See, e.g., Hartford-Empire v. United States*, 323 U.S. 386, 415 (1945) (reversing a decree that required patents not shown to be invalid to be licensed on a royalty-free basis, observing that "it is difficult to say that, however much in the past such defendant has abused the rights thereby conferred, it must dedicate them to the public."). A close analogy is cases decided under the essential facilities doctrine. Where a monopolist owner

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[63] Because a compulsory royalty-free license would substantially diminish the value of Rambus's patent rights and deprive Rambus of the ability to pursue existing rights of action, the proposed order also would effect an impermissible taking without just compensation in violation of the Fifth Amendment. Under the Fifth Amendment, the government may not deprive Rambus of these rights without paying just compensation. *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1002-03 (1984) (recognizing that taking of intellectual property in trade secrets was subject to the Takings Clause); *Philip Morris, Inc. v. Reilly*, 312 F.3d 24, 32-37 (1st Cir. 2002) (holding that statute requiring uncompensated disclosure of trade secrets was an unconstitutional taking).

[64] *In re Dell Computer Corp.*, 121 F.T.C. 616 (1996), the other case cited by Complaint Counsel as involving compulsory royalty-free licensing, involved a consent judg00 TD

Complaint Counsel neglect to mention, however, that the Commission actually ordered compulsory licensing at a 2.5% royalty rate and specifically rejected Complaint Counsel's request for compulsory royalty-free licensing. *Id.*

Complaint Counsel also neglect to mention that the only authority the Commission in *American Cyanamid* cited to support its assertion that royalty-free licensing is an appropriate remedy was a student note, Note, *Improperly Procured Patents*: *FTC Jurisdiction and Remedial*

remedy, the facts in this case would not support the imposition of such a remedy. Complaint Counsel have not pointed to any evidence that could satisfy the factors *American Cyanamid* and *General Electric* identified as relevant to any consideration of compulsory royalty-free licensing. Complaint Counsel cannot, for example, claim that "any royalty" for Rambus's patents would eliminate competition; Hitachi, Samsung, Elpida NEC, Oki, Mitsubishi, Matsushita, and Toshiba have licensed Rambus's technologies and are able to compete vigorously in the DRAM market unaffected by their royalty obligation to Rambus. (CCFF 1999-2013). Nor are the DRAM manufacturers who would be the principal beneficiaries of Complaint Counsel's proposed compulsory royalty-free licensing regime "small firms" who are "unequipped to engage in litigation" concerning Rambus's patents. To the contrary, Micron, Infineon and Hynix, the firms that comprise the unlicensed (and therefore infringing) segment of the DRAM manufacturing industry, have shown that they are fully capable of pursuing litigation against Rambus. At the most, then, the case law cited by Complaint Counsel indicates that compulsory licensing at reasonable and non-discriminatory royalty rates could be a permissible remedy[65] if a violation were found in this case.[66]

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[65] This conclusion is reinforced by the fact that the Commission is precluded from effecting a forfeiture. *FTC v. Ruberoid*, 343 U.S. 470, 473 (1952) ("Orders of the Federal Trade Commission are not intended to impose criminal punishment or exact compensatory damages for past acts, but to prevent illegal practices in the future."). Punitive forfeiture is a permissible antitrust remedy only in actions brought by the Antitrust Division of the Department of Justice in a federal district court where the defendant is afforded its Seventh Amendment right to a jury trial. 15 U.S.C. §§ 4, 6; *Addyston Pipe & Steel Co.*, 85 F. at 301-02.

[66] Complaint Counsel's reliance on divestiture cases like *Ford Motor Co. v. U.S.*, 405 U.S. 562, 573 (1972) and *Ekco Products Co.*, 65 F.T.C. 1163, 1216 (1964), *aff'd sub nom., Ekco Products Co. v. FTC*, 347 F.2d 745 (7th Cir. 1965), likewise confirms that reasonable royalty licensing would be far more appropriate than compulsory royalty-free licensing. In a divestiture case, the firm found to have lessened competition is not forced to forfeit a portion of its business, but instead is permitted *to sell* the pertinent asset or assets at a market rate. Because of the "logistical difficulty" and inefficiency associated with the dissolution of unitary firms, the

remedy of divestiture generally is reserved for cases "where asset or stock acquisitions violate the antitrust laws."

1999).

Second, the proposed remedy would apply to all of Rambus's patents with a priority date prior to June 17, 1996. Complaint Counsel contend that this is necessary because "Rambus may be in the position to monopolize, based on its conduct while a JEDEC member, by means of asserting patents relating to *other* technologies used in JEDEC-compliant SDRAMs and DDR SDRAMs." (CCB at 128). But this reasoning unduly expands the proposed remedy beyond that necessary to restore competition – it would apply to patents for which there is no evidence that Rambus violated any duty to disclose, no evidence that JEDEC relied on such nondisclosure, no evidence that there were acceptable alternatives for the technology, no evidence that DRAM industry members are locked in to using the technology, no evidence that Rambus has gained or threatens to gain monopoly power in a relevant market in which the technology competes, and no evidence of any harm to competition in that market. The proposed remedy would deprive Rambus of its patent rights covering these technologies with no showing of wrongdoing and no proof of the elements necessary for a monopolization claim to lie.

As the ALJ recognized in the *VISX* Initial Decision, "unless a patent is procured by fraud or inequitable conduct, 'such that the market position had been gained illegally, the patent right to exclude does not constitute monopoly power prohibited by the Sherman Act.'" *VISX* Initial Decision at 145 (citing *C.R. Bard, Inc. v. M3 Sys., Inc*

1987)). Complaint Counsel subsequently moved to dismiss the *VISX* complaint, concluding that relief based on a newly reissued VISX patent "would go beyond what is needed to recreate the situation that would have existed if there had been no violation." Complaint Counsel's Motion to Dismiss at 7, *In re VISX, Inc.*, Dkt. No. 9286 (filed Dec. 1, 1999).

Here, however, Complaint Counsel seek the opposite. Instead of recognizing that Rambus has a legitimate right to enforce its valid patents absent a showing of anticompetitive conduct conferring monopoly power with regard to those specific pa

[69] Relying on the consent decree in *Dell Computer*, Complaint Counsel suggest that the proposed remedy in this case is akin to the patent law doctrine of equitable estoppel, under which a patentee may be barred from enforcing an otherwise valid patent against a particular patentee. However, as Commissioner Azcuenega noted in dissenting from the consent decree in that case, equitable estoppel under the patent laws requires an individualized showing of "(1) a misleading

communication by way of words, conduct or silence by a knowledgeable patentee; (2) reliance by another party on the communication; and (3) material prejudice to the other party if the patent holder is allowed to proceed." 121 F.T.C. 616, 633 (*citing A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1041-43 (Fed. Cir. 1992)). The proposed remedy in this case does not require any of those individualized showings to avoid liability for infringing Rambus's patents through the manufacture, use or sale of JEDEC-compliant products, but instead would permit any manufacturer to free ride on Rambus's patented in

distinct legal rights which should be controlled by the country granting the right. *Western Electric Co. v. Milgo Elec. Corp.*, 450 F. Supp. 835, 838 (S.D. Fla. 1978) (citing *Boesch v. Graff*, 133 U.S. 697 (1890)); *see also Medtronic, Inc. v. Catalyst Research Corp.*, 518 F. Supp. 946, 955 (D. Minn. 1981) ("[f]oreign patents, despite covering precisely the same product as an American patent, present separate and independent rights"). It is also well established that an antitrust violation with respect to one patent does not allow a court to enjoin the enforceme

Rambus did play by the rules, objectively and subjectively. Many financially interested witnesses would like to rewrite the rules after the fact – or "morph" them as the Federal Circuit might say – and then cry, "Gotcha." But the evidence does not support them.

The concerted efforts of interested parties, and particularly interested infringers, to present after-the-fact testimony intended to indict Rambus does not withstand scrutiny. The contemporaneous documents (*e.g.*, Desi Rhoden's DDR chronology, JEDEC's February 2000 minutes confirming that patent applications need not be disclosed) and the contemporaneous conduct of these same parties (*e.g.*, IBM's and Hewlett-Packard's announcements they would not disclose applications, Rhoden's failure to disclose his SyncLink patent applications, Terry Lee's failure to disclose Micron's BEDO patents and applications) undermine their new-found versions of reality.

Equally important is the now well-established fact that JEDEC and its members were well aware of Rambus's intellectual property and the potential scope of the patent claims Rambus might someday obtain. They studied Rambus's intellectual property, assessed its strength, and knowingly took the risk that their designs – developed to compete with Rambus – might some time in the future infringe Rambus's patents. They incorrectly thought that Rambus would not obtain valid patents of any breadth and now seek to avoid the consequences of theirs

For these and the many other reasons Rambus has previously provided, the Complaint should be dismissed with prejudice.

DATED: September 29, 2003

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PUBLIC

UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION

In the matter of **RAMBUS INC.,** **a corporation.**	**Docket No. 9302**

CERTIFICATE OF SERVICE

I, James M. Berry, hereby certify that on September 29, 2003, I caused a true and correct

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CERTIFICATION

I, James M. Berry, hereby certify that the electronic copy of *Post-Trial Reply Brief of Respondent Rambus Inc.* accompanying this certification is a true and correct copy of the paper original and that a paper copy with an original signature is being filed with the Secretary of the Commission on September 29, 2003 by other means.

DATED: September 29, 2003

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James M. Berry