PUBLIC

UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION

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

TRIAL BRIEF OF RESPONDENT RAMBUS INC.

TABLE OF CONTENTS

Page

TABLE OF CONTENTS
(continued)

Page

TABLE OF CONTENTS
(continued)

Page

I. Introduction and Summary of Argument

Complaint Counsel's theory of antitrust liability in this case is unprecedented and unsupportable. In essence, Complaint Counsel contend that Rambus has monopolized or attempted to monopolize certain markets for technologies related to dynamic random access memory ("DRAM") by failing to warn a standard-setting organization ("JEDEC") that it was incorporating into industry standards inventions conceived by Rambus's founders and over which Rambus might, sometime in the future, acquire patents. Complaint Counsel ask Your Honor to find that as a result of this alleged misconduct, Rambus should be stripped of its statutory right to license or enforce its valid U.S. and foreign patents.

The evidence that will be put before Your Honor at this hearing will not support Complaint Counsel's allegations. For example, the fact that Rambus's founders believed they had conceived the inventions in question was public information; the inventions were described in detail in publicly available patent documents that were discussed at JEDEC and that were closely scrutinized by engineers and lawyers employed by JEDEC members. Complaint Counsel do not contend otherwise. What is it, then, that Complaint Counsel say Rambus kept secret from JEDEC while it was attending JEDEC meetings? Complaint Counsel *cannot* contend that Rambus failed to disclose the existence of issued patents that covered devices built to JEDEC standards; Rambus had no such patents. Complaint Counsel similarly *cannot* contend that Rambus failed to disclose the existence of pending patent *applications* that, if issued, would have covered JEDEC-compliant devices; Rambus had no such applications. Instead, Complaint Counsel contend that Rambus had a duty to tell JEDEC members that its executives and engineers at times hoped for, wondered about, and thought justified the filing or amendment of patent applications that broadly claimed the use of Rambus's inventions in many memory devices, including devices being discussed by JEDEC for possible standardization.

This extraordinarily expansive duty – a duty to disclose a *desire* to obtain intellectual property rights – is not found anywhere in writing other than in the Complaint in this action. It does not appear in the manuals made available to Rambus and to other JEDEC members. It does not appear in the presentations shown at JEDEC meetings about JEDEC's patent policies. It does not appear in any of the more than 1,500,000 pages of evidence gathered in this case and in the related private cases. Complaint Counsel's description of the JEDEC disclosure duty is, in short, itself an invention. Not patentable, perhaps, but nevertheless an invention, and one that represents what the Court of Appeals for the Federal Circuit has described as an "after-the-fact morphing of a vague, loosely defined policy…" designed "to capture actions not within the actual scope of the policy. . . ." *Rambus Inc. v. Infineon Techs. AG*, 318 F.3d 1081, 1102 n.10 (Fed. Cir. 2003) ("*Infineon*").

Complaint Counsel's theory of antitrust liability is as inventive as their description of the JEDEC disclosure duty. According to Complaint Counsel, if Rambus had described its desires to JEDEC, JEDEC would have incorporated alternative technologies that avoided Rambus's patents. According to Complaint Counsel, it is now too late for the industry to avoid Rambus's patents, for JEDEC members and the DRAM industry are allegedly "locked in" to the use of Rambus's patented inventions in their current and future memory devices. This, Complaint Counsel contend, amounts to monopolization.

Complaint Counsel's theory of liability is both legally unsound and premised on a spate of unsupported factual assumptions. Among the many insurmountable hurdles that Complaint Counsel face are the following:

First, to sustain a monopolization claim, Complaint Counsel must prove that Rambus engaged in "exclusionary conduct," which is defined by the case law (and the Federal

Trade Commission) as conduct that makes no economic sense but for the elimination of competition and, therefore, has no legitimate business justification. Complaint Counsel assert that Rambus engaged in anticompetitive conduct by failing to disclose information about its *potential* patent portfolio. Patent law, however, recognizes that there are legitimate business reasons for inventors like Rambus to maintain the confidentiality of information regarding their patent applications and pending patent claims. Such information is, by statute, kept strictly confidential by the Patent Office. *See* 35 U.S.C. § 122. *See generally Eagle Comtronics, Inc. v. Arrow Communication Laboratories, Inc.*, 305 F.3d 1303, 1314 (Fed. Cir. 2002) ("Patent applications are preserved in secrecy . . . for a reason. The integrity of the patent system is maintained in part by inventors' understanding that their patent applications will remain secret until either the patents issue or the applications are otherwise published by the PTO."). Rambus's alleged refusal to disclose information about its intellectual property aspirations thus had a legitimate business purpose and cannot be the basis for a monopolization claim.

Nor can Complaint Counsel premise their monopolization claims on the assertion that Rambus somehow incorporated ideas gained at JEDEC into its patents. Patent law makes clear that inventors may only claim inventions that were adequately disclosed and described in an original patent application. Patent law also gives inventors the right to file amendments to an original application, including new claims, so long as the inventions claimed *were* adequately disclosed in the original application. All of the Rambus patents at issue here are based on an original application filed *before* Rambus joined JEDEC. The Patent Office has determined that all of the inventions claimed by those patents are, in fact, adequately described in Rambus's original application. Complaint Counsel do not (and could not) contend that their sister agency's determination in this regard was in error. In sum, and to respond directly to an issue raised in

Your Honor's summary decision ruling, patent law allows inventors to amend their patent applications to protect against the use of their inventions in the marketplace. There is nothing unexpected, illegitimate or exclusionary in this practice. Accordingly, Rambus's exercise of rights allowed it by United States patent law cannot be considered exclusionary conduct under the antitrust laws.

Second, even assuming that a failure to disclose its trade secrets could be exclusionary under the antitrust laws, Complaint Counsel must prove that Rambus in fact had a clear and unambiguous duty to disclose that information. After an extensive review and analysis of evidence regarding the JEDEC patent policy, the Federal Circuit held in *Infineon* that, during the time Rambus was a JEDEC member, there was a "staggering lack of defining details" in JEDEC's patent policy. *Infineon*, 318 F.2d at 1102. The evidence at trial will confirm that the Federal Circuit's description was apt. In similar circumstances, the Federal Circuit has held that a failure to comply with an unclear and ambiguous disclosure duty *cannot*, as a matter of law, justify a finding of fraud or inequitable conduct. *See OddzOn Products, Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1404 (Fed. Cir. 1997) (holding that because of the "ambiguous nature of the statute and the unclear development of the case law" with respect to whether certain references constituted prior art, "we hold as a matter of law that OddzOn could not have acted with deceptive intent when it failed to disclose this information to the PTO.").

Third, because a monopolization claim must be based on intentional and willful conduct, Complaint Counsel must prove that Rambus intentionally breached a duty to disclose. The evidence at trial, however, will show that Rambus sought to understand and comply with the JEDEC rules, and Complaint Counsel will present no evidence that Rambus's executives and engineers believed that they had breached any JEDEC duty.

Fourth, even if Rambus intentionally breached a duty to disclose, Complaint Counsel must prove that Rambus's conduct caused competitive harm. To do this, Complaint Counsel must prove each link in an exceedingly long causal chain. They must first prove that JEDEC members reasonably relied on Rambus's conduct. The overwhelming evidence will show, however, that JEDEC members were concerned about Rambus's potential patents and that these concerns were elevated (not diminished) by Rambus's conduct at JEDEC. The evidence will therefore show that JEDEC members did not rely on Rambus's alleged failure to disclose and that any reliance would have been unreasonable.

Fifth, Complaint Counsel must prove that JEDEC had *available* to it acceptable *noninfringing* alternative technologies at the time that Rambus supposedly should have disclosed its patent interests. The evidence will, however, show that Rambus's inventions were superior to any available noninfringing alternatives in terms of performance and/or cost (even accounting for Rambus's royalties). Any alternative was therefore unacceptable.

Sixth, Complaint Counsel must prove that if Rambus had complied with the purported rules, JEDEC would have in fact *adopted* standards using the purported alternatives. The evidence will show, however, that JEDEC would have likely continued to incorporate the Rambus inventions because its members believed that Rambus could not obtain valid patents covering those inventions. Indeed, the JEDEC representatives who will testify at trial *still* believe that Rambus's patents are invalid.

Seventh, Complaint Counsel must prove that the market would have accepted an alternative standard. The evidence will show, however, that JEDEC approval of a standard does not guarantee marketplace success, nor is it necessary for market success. In fact, the evidence will show that in the absence of concerted action by DRAM manufacturers to boycott the

Rambus Direct DRAM (“DRDRAM”), the non-JEDEC standard DRDRAM would be the dominant memory device today.

Eighth, Complaint Counsel must prove that the failure of JEDEC and the market to adopt an alternative standard constitutes injury to competition within the meaning of the antitrust laws. The evidence will show, however, that there were no alternative technologies that would have improved consumer welfare.

Ninth, even if Complaint Counsel prove that there were available and acceptable noninfringing alternatives, Complaint Counsel must prove that the DRAM industry was locked-in to using Rambus’s inventions. The evidence will show, however, that the DRAM industry was not locked in but continues to use Rambus’s inventions because they are superior in terms of price and cost and because the DRAM manufacturers continue to believe that Rambus’s patents are invalid.

In short, the evidence at trial will demonstrate that Complaint Counsel cannot prove any of the essential elements of liability under Complaint Counsel’s theory of the case, and that the Complaint should be dismissed.

II. Background

In the late 1980’s, it became apparent to some observers of the semiconductor market that the development of computer memory products – dynamic random access memory (“DRAM”) – was not keeping pace with the development of computer microprocessors – central processing units (“CPUs”). Specifically, while the speed at which CPUs could process information increased exponentially during the 1980s, the speed at which DRAMs could be accessed showed only modest improvement.[1] As these trends continued, the performance of computer systems began to be limited not by the speed of available CPU technology but by the speed of available DRAM technology. As CPU speeds were projected to increase dramatically over time, this trend would create a "memory bottleneck."

A. The Farmwald and Horowitz Inventions

In 1989, two distinguished electrical engineers, Dr. Michael Farmwald and Dr. Mark Horowitz solved the memory bottleneck. While previous improvements had focused on improving discrete aspects of the memory chip, Farmwald and Horowitz sought a system level solution. The result of their efforts was a host of independent inventions that, when used together, provided a revolutionary memory subsystem. A partial list of these inventions would include:

- using a relatively small number of bussed signal lines to transmit information between the DRAM and the CPU or memory controller without the need for separate device select lines specific to each DRAM;
- sending information from the CPU or memory controller to the DRAM in the form of information "packets";
- programming the delay between the time that the DRAM receives a request until data is output in response to the request (the "latency" of the DRAM) with a value stored in an "access-time register";
- using relatively small voltage signals to transmit information between the DRAM and the CPU or memory controller;
- using a novel package for the DRAMs with the pins all on one side, allowing for vertical stacking of the memory chips;
- synchronizing the timing of multiple DRAMs by generating an internal clock for each DRAM that is set to the midpoint between an "early" and a "late" clock signal;

[1] The performance of computers is often measured by the speed of the CPU. For example, the Pentium 4 CPU, which is currently available for personal computers, can operate at speeds exceeding 3 GHz (that is 3 billion cycles per second).

- allowing for variable amounts of data (“block size” or “burst length”) to be output in response to a request;
- transferring data on both the rising edge and the falling edge of the clock;
- performing fine timing adjustments using a delay locked loop or DLL (that is, a feedback circuit using delay elements to synchronize two signals) on the DRAM.

Each of these separate inventions would improve the performance of DRAMs; together these technologies would take DRAM performance to levels unheard of in the industry. While contemporary DRAM devices were transferring data at a top speed of 33 MHz, the combination of the Farmwald-Horowitz inventions promised memory operating speeds over 500 MHz.

In April 1990, Farmwald and Horowitz filed a detailed U.S. patent application describing these inventions (the ’898 application). A counterpart international application was subsequently filed pursuant to the Patent Cooperation Treaty (the PCT application),[2] which, under the terms of that treaty, automatically became public in October 1991. These original applications disclosed a cornucopia of patentable inventions, including the inventions described above. The applications are the basis for dozens of issued patents. Though filed in 1990 and 1991, these applications continue to this day to be the source of newly-issued patents, as is both expected and encouraged under the patent laws.

B. The Rambus Business Model

Also in 1990, Farmwald and Horowitz formed Rambus as a vehicle to develop and market their inventions. They decided that Rambus would not manufacture DRAMs itself; a fabrication plant (“fab”) for DRAMs costs over a billion dollars. Instead, Rambus would develop the fundamental Farmwald-Horowitz inventions (disclosed in the ’898 and PCT applications) into a comprehensive memory system design – Rambus DRAM (“RDRAM”).

---

[2] The PCT application is sometimes referred to as the WIPO (World Intellectual Property Organization) application.

Rambus would then make the RDRAM technology available for license by manufacturers industry-wide, together with a whole system of testing, design, and implementation services. This business model was therefore dependent upon patent protection.

Throughout 1990 and 1991, Farmwald and Horowitz met with representatives of the major DRAM manufacturers and many others in the semiconductor industry to introduce them to Rambus's technology and to persuade them to license that technology. Under nondisclosure agreements ("NDA's"), Farmwald, Horowitz, and other Rambus employees made detailed presentations to each company's management and high-level engineers, discussing the uses of Rambus's new technology, the reasons why Rambus's technology would eventually become necessary, and technical details for implementation of the technology.[3] Farmwald and Horowitz also disclosed the fact that they had filed a patent application covering the new technology. Indeed, because they were being asked to pay fees to license the technology, companies sought assurances that an application had been filed, and some (such as Toshiba, Fujitsu, and Intel) requested and were given a copy of the application.

C. Rambus's Participation In JEDEC

After it disclosed its technology under confidentiality agreements to members of the DRAM industry, Rambus joined one of the standard-setting organizations for semiconductor devices, JEDEC, which was (until 1998) a part of the Electronic Industries Association ("EIA") and formally and "rigidly" governed by EIA policies. The particular JEDEC committee most involved in this case is the "JC-42.3" subcommittee, which has responsibility within JEDEC for computer memory devices. The members of JC-42.3 included such computer memory

[3] The evidence will show that Rambus made these detailed disclosures to numerous companies in the industry, including Sun Microsystems, Hewlett-Packard, Siemens, Mitsubishi, Toshiba, Micron, Intel, Motorola, NEC, Hitachi, Texas Instruments and IBM.

manufacturers and users as Siemens (now Infineon), Micron, NEC, Samsung, Toshiba, IBM, Texas Instruments, Hewlett-Packard, and many others.

Rambus attended its first JEDEC meeting in December 1991 at the invitation of one of its business partners, Toshiba. Rambus joined JEDEC to gain visibility in the industry, and it hoped to persuade JEDEC to adopt RDRAM as an industry standard. During its tenure as a JEDEC member, however, Rambus never proposed or advocated the adoption of any standard or technology; it made no presentations; and, although there were hundreds of ballots, Rambus voted at only one meeting, when it voted *against* four ballots. Rambus attended its last JEDEC meeting in December 1995 and, having been sent a bill for 1996 dues, sent a letter confirming its withdrawal in June 1996.

During the time Rambus was a JEDEC member, JEDEC promulgated a standard for synchronous dynamic random access memory ("SDRAM"). After Rambus withdrew, JEDEC began formal standardization of a new DRAM, called double-data rate SDRAM ("DDR SDRAM"). JEDEC's DDR SDRAM standard was approved in 1999, over 3 years after Rambus left JEDEC. Although JEDEC's SDRAM standard was published in 1993, the DRAM industry did not start mass production of SDRAM standard-compliant products until the 1996-97 timeframe. The industry did not start mass production of DDR SDRAM standard-compliant products until 2000.

While Rambus was still a member, in September 1993, it disclosed to JEDEC its first issued U.S. patent – the '703 patent. As the Federal Circuit recognized, the '703 patent was a "divisional" of the '898 application, which meant that the "written description of the '703 patent" – the portion of the patent that describes the inventions – "is substantially identical to that of the '898 application." *Infineon,* 308 F.3d at 1085. The evidence will show that the '703 patent revealed, on its face, that Rambus had nine other divisional applications and one continuation application pending that shared the same written description as the ’703 patent. The evidence will also show that at a prior meeting, in May 1992, JEDEC members had discussed Rambus’s PCT application, which was also substantially identical to the ’898 application, and that a longtime JEDEC representative, Howard Sussman, expressed the view that the application was barred by prior art and would not issue.

Although each of the inventions claimed in the patents at issue here can be found in the ’898 application, Rambus did not, while a JEDEC member have any undisclosed *claims* in patent applications that, if issued, would have needed to be licensed to make JEDEC-compliant memory devices. It was not until long after Rambus withdrew from JEDEC and hired new patent counsel that Rambus filed claims that would, if they issued, need to be licensed to make JEDEC-compliant SDRAM and DDR products. The first of these patents issued in 1999. *Id.* at 1086.

D. The RDRAM Boycott

While the semiconductor industry was attempting to refine the SDRAM standard at JEDEC, Rambus sought to have its memory technology, “Direct RDRAM” or “DRDRAM,” adopted by the industry. In 1996, Intel became dissatisfied with the progress of JEDEC standardization and concerned that DRAM performance was not keeping pace with the existing and projected performance requirements of Intel’s microprocessors. Intel’s solution to the problem was DRDRAM, and it publicly announced that it had selected DRDRAM as its “next generation” memory technology. DRDRAM was then the most current generation of Rambus’s RDRAM technology, and it incorporated many of the features described in the ’898 application, as well as additional features subsequently developed by Rambus engineers. Industry observers quickly realized that Intel’s backing would lead to DRDRAM being the dominant form of PC main memory going into the next decade, i.e., it would become the *de facto* industry standard. This meant that DRAM manufacturers – whose ultimate principal customer was Intel – would have to manufacture DRDRAMs.

Intel's choice of DRDRAM threatened the DRAM manufacturers' control over the pace of innovation of, and therefore the pricing of, DRAM. To combat Intel's plans, the DRAM manufacturers sought alternatives to DRDRAM, which ultimately led to a competition between DRDRAM, DDR SDRAM, and a technology referred to as "SyncLink" or "SLDRAM." As the evidence at trial will demonstrate, this competition revolved around far more than the merits of the competing designs. Since neither Intel nor Rambus manufactured DRDRAM, neither could control its price, which was driven by the volume of DRDRAM that the DRAM manufacturers chose to produce. As Complaint Counsel's own economics expert, Dr. McAfee, puts it, the fate of the Rambus DRDRAM "lay in the hands of the DRAM manufacturers":

> Intel . . . required that commercial quantities of RDRAM . . . be widely available by its targeted introduction dates, which meant that much of Rambus's fate lay in the hands of the manufacturers responsible for successfully implementing cost-effective fabrication of the products in sufficient volume to meet demand.

Appendix to Expert Report of R. Preston McAfee (previously filed with Your Honor), p. 134. *See also id*., p. 145 (noting that the failure by the DRAM manufacturers "to ramp up capacity had the potential to devastate Rambus commercially")

The evidence at trial will show that the DRAM manufacturers acted in concert to restrict the output of DRDRAM in order to keep its price high, in a successful effort to drive the industry to adopt DDR SDRAM in its place. Complaint Counsel have argued that evidence of concerted action to block DRDRAM's successful introduction is irrelevant if offered to show the "unclean hands" of the DRAM manufacturers who would be the principal beneficiaries of the remedy sought in this matter. The evidence is not offered for that purpose, however, and it is likely to be probative on several disputed issues. As an example, Rambus will prevent evidence that DRAM manufacturers were on notice of Rambus' possible intellectual property claims and proceeded nevertheless, for various reasons, to include the affected technologies in JEDEC standards. Complaint Counsel will argue that this evidence should be discounted because it would not make business sense for the manufacturers to have proceeded if they knew of the intellectual property risks. Complaint Counsel will also argue (and must, in fact, prove) that if the manufacturers had been aware of these risks, they could have and would have adopted alternative technologies. In response to this argument, it is clearly relevant to show that the DRAM manufacturers were sufficiently concerned about the possibility that DRDRAM would become the *de facto* industry standard that they were also willing to take the risks associated with concerted action, in violation of the antitrust laws, in order to prevent DRDRAM's introduction. If the manufacturers were willing to assume *those* risks, it is logical to assume that they were also willing to assume the risk that Rambus might some day obtain patents covering various technologies or features considered for incorporation in the DDR SDRAM standard, especially when they also believed that any such patents would be invalid, and especially when they also believed that the technologies in question were necessary in order to claim performance equivalent to that of the DRDRAM. For these and other reasons, the evidence of collusion is relevant because the evidence will in many ways tend "to make the existence of [a] fact . . . more or less probable than it would be without the evidence." Fed. R. Evid. 401.

E. Private Litigation Stemming From Rambus's Participation in JEDEC

The Rambus patents involved here began to issue in 1999. In 2000 and 2001, Rambus licensed its patents to various DRAM manufacturers to make SDRAMs and DDR SDRAMs (among other products). A few manufacturers refused to license Rambus's patents, however, leading to litigation. In one such suit, Infineon defended its decision to infringe

Rambus's patents by arguing that Rambus had committed fraud by failing to disclose to JEDEC certain patent applications that allegedly related to the SDRAM and DDR standards. After the jury agreed with Infineon's arguments, the trial judge entered judgment notwithstanding the verdict as to that portion of the fraud claim based on the inclusion of Rambus's inventions in the DDR SDRAM standard. On appeal, the Federal Circuit held that Rambus had not committed fraud with respect to *any* JEDEC standard and that it did not breach any duty to disclose any patent or patent applications to JEDEC. *Infineon*, 318 F.3d at 1084.

To determine whether Rambus breached any duty to disclose, the Federal Circuit first "ascertain[ed] what duty Rambus owed JEDEC." *Id.* at 1096. Reviewing the evidence, the Federal Circuit found that JEDEC's written policies did "not impose any direct duty on members." *Id.* at 1098. It nevertheless treated the policies as imposing a duty because JEDEC members did so. *Id.* Examining all of the evidence, including the testimony of JEDEC representatives and officers – the same evidence that will be presented at this trial – the Federal Circuit was shocked by the "staggering lack of defining details in the EIA/JEDEC patent policy." *Id.* at 1102. Carefully discerning the evidence, however, the Federal Circuit concluded that whatever disclosure duty existed, it "hinges on whether the issued or pending claims are needed to practice the standard" and that disclosure of a patent or patent application was required, if at all, only if "a license under its claims reasonably might be required to practice the standard." *Id.*

After a lengthy review of Rambus's patent portfolio, including its patent application history, the Federal Circuit held that Rambus did not have any patents or patent applications that fell within the JEDEC disclosure duty with respect to the SDRAM standard. *Id.* at 1104. Accordingly, the court held that no reasonable jury could find that Rambus had breached a duty to disclose and committed fraud. *Id.* at 1105. With respect to the DDR standard, the Federal Circuit unanimously affirmed the trial court's entry of judgment on the ground that, because formal standard setting for the DDR standard began after Rambus left JEDEC, no duty to disclose with regard to the DDR standard was triggered while Rambus was a JEDEC member.[4] *Id.*

III. Complaint Counsel's Theory

Premising its case on precisely the same conduct reviewed by the Federal Circuit, Complaint Counsel allege that Rambus's conduct at JEDEC violated Section 5 of the FTC Act. 15 U.S.C. § 45(a)(1). The Act encompasses "practices that violate the Sherman Act and the other antitrust laws." *FTC v. Indiana Federation of Dentists*, 476 U.S. 447, 454 (1986). The first two of Complaint Counsel's three claims, therefore, "are based on principles emanating from Section 2 of the Sherman Act – *i.e.*, the monopolization and attempted monopolization claims." Complaint Counsel's Memorandum in Opposition to Respondent Rambus Inc.'s Motion for Summary Decision, filed Mar. 25, 2003 (Summary Decision Opp.), p. 33. Complaint Counsel's final claim alleges that Rambus has engaged in "unfair methods of competition," which Complaint Counsel "advances . . . as one entailing proof falling somewhere in between that which would be required to establish, on the one hand monopolization, or on the other, attempted monopolization, under Section 2 of the Sherman Act." *Id.* at 35. By this, Complaint Counsel mean that the "unfair methods of competition" claim requires proof of anticompetitive effects "more than the threatened effect that might suffice for attempted monopolization." *Id.* at 36. Accordingly, to prevail in this case, Complaint Counsel must prove all of the elements of a monopolization claim or an attempted monopolization claim.

---

[4] It is worth emphasizing that all four judges who have considered the issue have held that Rambus did not breach any duty of disclosure with respect to the DDR SDRAM standard.

A. The Elements of Complaint Counsel's Claims

To prove monopolization, a plaintiff "must show that 1) the defendant possessed monopoly power in the relevant market and 2) the defendant willfully acquired or maintained this monopoly power by anticompetitive conduct as opposed to gaining that power as a result 'of a superior product, business acumen, or historical accident.'" *Concord Boat Corp. v. Brunswick Corp.*, 207 F.3d 1039, 1060 (8th Cir. 2000) (quoting *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966)). For an attempted monopolization claim, a plaintiff must prove "(1) that the defendant has engaged in predatory or anticompetitive conduct with (2) a specific intent to monopolize and (3) a dangerous probability of achieving monopoly power." *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993).

Under either theory, therefore, Complaint Counsel must prove, at a minimum, that Rambus (a) engaged in anticompetitive conduct and (b) that this conduct, as opposed to the superiority of its patented technology, led to the acquisition of or dangerous probability of gaining monopoly power, i.e., the ability to raise prices by restricting output. *See, e.g.*, *PepsiCo, Inc. v. Coca-Cola Co.*, 315 F.3d 101, 107 (2d Cir. 2002) ("The core element of a monopolization claim is market power, which is defined as 'the ability to raise price by restricting output.'"). This means that Complaint Counsel must prove that Rambus engaged in anticompetitive conduct that caused or threatens to cause anticompetitive harm. *See, e.g.*, *Dickson v. Microsoft Corp.*, 309 F.3d 193, 211 (4th Cir. 2002) ("The offense of monopolization requires a showing of 'anticompetitive effect.'"); *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001) ("to be condemned as exclusionary, a monopolist's act must have an 'anticompetitive effect' . . . . "the plaintiff, on whom the burden of proof of course rests must demonstrate that the monopolist's conduct indeed has the requisite anticompetitive effect" (internal citations omitted)); *Taylor Pub. Co. v. Jostens, Inc.*, 216 F.3d 465, 474 (5th Cir. 2000) (in attempted monopolization case court looks at threatened effects "in light of the state of the market"). In other words, Complaint Counsel must prove not only that Rambus's conduct was "anticompetitive" (a term with a particular meaning defined below), but that the conduct caused or threatens to cause some increase in price, restriction in output, or diminishment of quality in some relevant market. *See, e.g., Big Bear Lodging Ass'n v. Snow Summit, Inc.*, 182 F.3d 1096, 1104 (9th Cir. 1999) ("Monopolization claims can only be evaluated with reference to properly defined geographic and product markets."); *Town of Concord, Mass. v. Boston Edison Co.*, 915 F.2d 17, 22 (1st Cir. 1990) (monopolization only occurs where conduct "obstruct[ed] the achievement of competition's basic goals – lower prices, better products, and more efficient production methods").

B. Complaint Counsel's Allegations

In support of these monopolization claims, the Commission filed a lengthy Complaint, which alleges that Rambus violated certain purported "commonly known" JEDEC rules by failing to disclose to JEDEC's members that it had filed, or might in the future file, patent applications that "might be involved in" JEDEC's standard-setting work. Complaint, ¶¶ 21,24,47-55,70-80. Several years *after* Rambus left JEDEC, it obtained patents that read on products that are compliant with the SDRAM standard and/or with the DDR SDRAM standard, which was proposed and voted on after Rambus left JEDEC. *Id.*, ¶¶ 82, 91. In addition, the Complaint alleges that JEDEC members were entirely unaware of the possibility that Rambus might obtain patents on technologies being incorporated in the JEDEC standards for SDRAM (which incorporated Rambus's programmable latency and variable burst length inventions) and DDR SDRAM (which incorporated Rambus's programmable latency, variable burst length, dual-edge clocking, and on-chip DLL inventions). *Id.*, ¶ 2. According to the Complaint, if JEDEC members had been aware of this possibility, they would have incorporated alternative technologies into the relevant standards. *Id.*, ¶¶ 62,65,69. Finally, the Complaint alleges that DRAM manufacturers are now "locked-in" to producing JEDEC-compliant DRAM products and that Rambus is thus able to demand excessive royalties from DRAM manufacturers. *Id.*, ¶ 93. Thus, the Complaint alleges that Rambus has monopolized or attempted to monopolize five carefully drawn technology markets – a market for latency technology, a market for burst length technology, a market for data acceleration technology, a market for clock synchronization technology, and a cluster market consisting of all four technology markets. *Id.*, ¶¶ 110-24.

In November 2002, Judge Timony summarized the Complaint in the following way:

> *The Complaint's core allegation is that, through omissions, Rambus intentionally misled the members of JEDEC with regard to the possible scope of Rambus's pending or future patent applications, in violation of the purported JEDEC patent disclosure policy*. Complaint at ¶¶ 2, 47-55, 70-80. According to the Complaint, had Rambus made the allegedly necessary disclosures, JEDEC could have adopted alternative technologies and avoided Rambus's patented technologies. Complaint at ¶¶ 62, 65, 69. These allegations raise three fundamental issues: (1) *whether the JEDEC disclosure duty is as broad and comprehensive as alleged in the Complaint*; (2) *whether Rambus actually violated any such duty to disclose imposed by JEDEC rules*; and (3) whether the alleged failure to disclose was material and caused the competitive injury alleged in the Complaint.

See Opinion Supporting Order Denying Motion by Mitsubishi to Quash or Narrow Subpoena, filed November 18, 2002, at 4 (emphasis added). Thus, the central allegation in the Complaint is that Rambus violated JEDEC's disclosure rules.

Similarly, Chairman Muris represented to Congress that the Complaint against Rambus alleged a violation of JEDEC's rules:

> In a complaint filed in June, the Commission has charged that Rambus, Inc., a participant in an electronics industry standards-setting organization, *failed to disclose – in violation of the organization's rules – that it had a patent and several pending*

patent applications on technologies that eventually were adopted as part of the industry standard.

Prepared Statement of the Federal Trade Commission Before the Committee on the Judiciary Subcommittee on Antitrust, Competition, and Business and Consumer Rights United States Senate, Concerning an Overview of Federal Trade Commission Antitrust Activities, 2002 FTC Lexis 53 at *29-30 (September 19, 2002) (emphasis added).

C. Complaint Counsel's Change in Theory

Apparently in response to the Federal Circuit's decision in the *Infineon* case, Complaint Counsel have now asserted that they need not demonstrate that Rambus violated a JEDEC disclosure duty in order to prevail. They now argue that it would be sufficient to warrant the imposition of antitrust liability to show that Rambus engaged in "unethical" or "deceptive" conduct. *See* Summary Decision Opp., p. 12.

This is a fundamental change from the core allegations of the Complaint. Well aware of the ramifications of such a change, Complaint Counsel claim that there has been no change at all, pointing to two boilerplate, catch-all recitations appearing in the Complaint. *See* Summary Decision Opp., p. 9 ("As stated in the opening sentences of the Commission's Complaint, '[t]hrough this action, the Commission challenges a pattern of anticompetitive acts and practices' by Rambus, including Rambus's concealment of patent-related information 'in violation of JEDEC's own operating rules and procedures,' as well as 'other bad-faith, deceptive conduct.'"). Even a cursory review of the balance of the 34-page Complaint reveals, however, that the only conduct before JEDEC that is actually alleged is that Rambus made "Limited and Misleading Disclosures to JEDEC" resulting in "Violations of the JEDEC Disclosure Duty." *See* Complaint, ¶¶ 70-78, 79-80. Given the absence of any specific allegations describing Rambus's "other bad-faith, deceptive conduct," a few generic phrases in the introduction to a 34-page Complaint did not disclose Complaint Counsel's new "duty-free" theory of the case.

1. Complaint Counsel Cannot Advance a New Theory of Liability

"As is well known, the Commission itself originates and issues complaints and it has not delegated this authority to its staff. . . . [T]he Commission itself ma[kes] the original determination that it [i]s possessed of sufficient evidence to form reason to believe that the law ha[s] been violated." *In the Matter of Grand Caillou Packing Co.*, 65 F.T.C. 799, 1964 FTC Lexis 111, *27-28 (1964).[5]

The Commission has repeatedly refused to impose liability on a theory not explicitly pleaded in the complaint. In *In the Matter of Beatrice Foods Co.*, 101 F.T.C. 733, 1983 FTC Lexis 76 (1983), for example, the Commission reviewed the decision of an ALJ in an action brought under § 7 of the Clayton Act to prevent the acquisition of one orange juice manufacturer by another. As characterized by the Commission, the complaint alleged "that the acquisition eliminated actual competition between [the two parties to the acquisition] and between competitors generally, and that it might foster other mergers between competitors, causing a further loss of competition in the processing, distribution and sale of ready-to-serve orange juice." 1983 FTC Lexis 76, *136. The Commission concluded the ALJ had erred in holding that the acquisition violated the antitrust laws because, among other things, the theory upon which the ALJ relied – at the urging of complaint counsel – involved the loss of potential

---

[5] *See also In the Matter of Kaiser Aluminum & Chemical Corp.*, 1977 FTC Lexis 121, *4 (1977) ("[T]he Commission reserves to itself the discretionary determination of when there is reason to believe the law has been violated and when the public interest requires the institution of a proceeding, as well the authority to frame the charges."); *In re Standard Camera Corp.*, 63 F.T.C. 1238, 1963 FTC Lexis 69, *60 (1963) (where complaint counsel's proposed amendment "alleges substantially different acts or practices on the part of the respondent, or where it requires different determinations with respect to the belief that a violation has occurred and that the public interest is jeopardized," only the Commission may amend the complaint).

competition, while the complaint alleged that the proposed acquisition would result in the loss of actual competition. *Id.* at *137.

The Commission recognized that "the more plausible theory of violation in this proceeding is that the merger had the probable effect of eliminating [the acquiring company] as a special potential expander and deconcentrator in the national . . . market." *Id.* at *206-07. It also recognized that "a respectable argument can be made in support of the proposition that an implied potential competition count was pled in the case," and that "there is no clear line between actual and potential competition theories." *Id.* at *207-08 (quotations omitted). Despite all of that, the Commission concluded that a finding of an antitrust violation could not be premised on a potential competition theory because "[t]he complaint here not only does not specifically allege any effect on potential competition, it clearly speaks in terms of an effect on 'actual competition.'" *Id.* at *209. The Commission therefore ordered the complaint dismissed, rejecting the "strained interpretation . . . of the . . . allegations in the complaint" that the ALJ had adopted at complaint counsel's urging. *Id.*

Similarly, in *In the Matter of Champion Home Builders Co.*, 99 F.T.C. 397, 1982 FTC Lexis 52 (1982), the complaint alleged that the respondent had failed to disclose material facts to purchasers of its furnaces. 1982 FTC Lexis 52 at *1. Complaint counsel subsequently argued that respondent had also failed to disclose certain safety hazards, contending that the complaint had only "enumerated . . . examples, not an exhaustive list," of misrepresentations. *Id.* at *3. The Commission reasoned that "an allegation of the existence of an undisclosed safety hazard is significantly different than an allegation of an undisclosed product 'defect,'" and concluded that the proposed amendments therefore altered the "underlying theory" of the original complaint. *Id.* at *4. The Commission ultimately denied Complaint Counsel's motion to amend. *Id.* at *7. *See also In re Standard Camera Corp.*, 63 F.T.C. 1238 1963 FTC Lexis 69, *61-63 (1963) (where complaint counsel abandoned theory of complaint that respondent misled camera purchasers into believing that its cameras were manufactured in the U.S. once the hearing examiner observed that the cameras were obviously of foreign origin, holding that the hearing examiner erred in allowing the case to proceed, in the absence of an amendment to the complaint by the Commission, on a replacement theory that purchasers were misled into believing that the cameras were manufactured outside the Soviet bloc).

The Courts of Appeal have also vacated Commission orders that were based on theories not detailed in the initial complaint. For instance, in *Rodale Press, Inc. v. FTC*, 407 F.2d 1252 (D.C. Cir. 1968), the Commission had ordered the petitioners to cease and desist making certain representations in advertisements promoting health publications. The theory of the complaint had been that the advertising contained false promises of benefits. On appeal to the Commission, the agency found against the petitioners on a different theory, that the advertising misrepresented the contents of the books. *Id.* at 1255-56. The D.C. Circuit vacated the Commission's order and remanded the case for further proceedings, noting that "it is well settled that an agency may not change theories in midstream without giving respondents reasonable notice of the change." *Id. at 1255* (citing 5 U.S.C. § 554(b)). The Court of Appeals reasoned that "[b]y substituting an issue as to the books' content for the one framed by the pleadings, effectiveness of the books' ideas and suggestions, the Commission has deprived petitioners of both notice and hearing on the substituted issue." *Id.* at 1257.

These decisions show that Complaint Counsel cannot stretch the Commission's Complaint to fit the theory of liability that Complaint Counsel now believe has some prospect of success, one not relying on the now disproved allegation that Rambus breached its duties as a JEDEC member.

2. In Any Event, Complaint Counsel's New Theory Fails as a Matter of Law

The Complaint charges Rambus with monopolization and attempted monopolization. Complaint, ¶¶ 122-123. Complaint Counsel concede that they must prove that Rambus engaged in anticompetitive conduct to make out either of these two offenses. *See* Summary Decision Opp., p. 34. With respect to its burden of proving anticompetitive conduct, Complaint Counsel contends that "assuming that the most that could be shown is that Rambus subverted JEDEC's 'open standards' process through unethical and deceptive acts, . . . such proof alone would be sufficient grounds for imposing liability against Rambus under Section 5 of the FTC Act [and] under the Sherman Act as well," and further argues that "Rambus' 'literal compliance' with JEDEC rules does not preclude the imposition of antitrust liability." Summary Decision Opp., p. 12. (*citing Indian Head, Inc. v. Allied Tube & Conduit Corp.*, 817 F.2d 938, 941 (2d Cir. 1987), *aff'd*, 486 U.S. 492 (1988)).

a. Antitrust Liability in This Case Cannot Be Premised on Anything Less Than a Willful Breach of a Duty to Disclose

Because of the relative novelty of imposing antitrust liability for nondisclosure in private standard-setting, there is virtually no case law elucidating precisely what constitutes anticompetitive conduct in that context. One line of cases involving the imposition of antitrust liability for nondisclosure springs from the Supreme Court's decision in *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 U.S. 172 (1965). In *Walker Process*, the Court held that the procurement of a patent by fraud on the Patent Office is anticompetitive conduct that may be the basis of an action under Section 2 of the Sherman Act, provided that the other elements of a Sherman Act claim are present. *Id.* at 177.

Because of the onerous nature of antitrust liability, the federal courts have held that a showing of nothing less than "common law fraud [is] needed to support a *Walker Process* []claim," conduct that "could alone form the basis of an actionable wrong." *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 1069 (Fed. Cir. 1998) (quotations omitted); *see also C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1364 (Fed. Cir. 1998) (stating that the Court clarified in *Walker Process* that "'knowing and willful' fraud must be shown, and is predicate to potential antitrust violation").

Complaint Counsel has never been able to point specifically to an affirmative misrepresentation of material fact – that is, a knowingly false statement uttered by Rambus. *See, e.g.*, Summary Decision Opp., p. 9 n.2 (failing to cite any allegedly false statements allegedly uttered by Rambus). The anticompetitive conduct alleged here are instead acts of fraud by nondisclosure. Thus, while Complaint Counsel repeatedly use pejorative terms like "bad faith" and "deceptive," it is clear that the conduct Complaint Counsel allege was required of Rambus depended on the rules and policies of JEDEC. Complaint Counsel's claim would not have been brought had Rambus's conduct occurred in the context of a different standard setting organization that had no patent rules or policies of the type they attribute to JEDEC. Contrary to Complaint Counsel's contention, then, Rambus's "literal compliance" with its JEDEC disclosure obligations *does* preclude a finding that Rambus defrauded JEDEC members, and accordingly *does* preclude the imposition of antitrust liability in this case. *See generally Nobelpharma AB*, 141 F.3d at 1069 (noting that conduct before the PTO falling short of common law fraud does not warrant the imposition of antitrust liability).

b. **Complaint Counsel's Sole Authority Exposes the New Theory's Fatal Flaws**

Complaint Counsel's reliance on *Indian Head* is misplaced. Contrary to Complaint Counsel's implication, *see* Summary Decision Opp., pp. 12, 38, *Indian Head* does not stand for the proposition that "subverting" the proceedings of a standard-setting organization is anticompetitive conduct warranting the imposition of antitrust liability.

In *Indian Head*, the defendant "packed the annual meeting [of the private standard-setting organization] with newly registered members, whom it subsidized, for the sole purpose of achieving an anticompetitive result – the exclusion of [a competing product] from the marketplace." 817 F.2d at 947. On appeal, defendant argued that the conspiracy to suppress competition that it had initiated – conduct that would plainly have been in violation of the antitrust laws if undertaken outside the private standard-setting context – should not subject it to antitrust liability because the conspiracy was entered into in the private standard-setting context. *Id.* at 946. The court rejected defendant's argument, holding, *inter alia*, that an unlawful conspiracy is not immune from antitrust liability simply because the conduct occurs in the private standard-setting context, even if the rules of the organization do not prohibit such conduct. *Id.* ("[W]e refuse to permit a defendant to use its literal compliance with a standard-setting organization's rules as a shield to protect such conduct from antitrust liability."); *see also* *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 509 (1988) ("The antitrust validity of these efforts is not established, without more, by petitioner's literal compliance with the rules. . .").

In *Indian Head*, then, the court rejected the notion that conduct otherwise unlawful under the antitrust laws is somehow lawful when undertaken in the private standard-setting context, reasoning that conduct in that context is not exempt from generally applicable antitrust principles. Here, Complaint Counsel asks this court to do the opposite of what the defendant in *Indian Head* asked the court there to do: Complaint Counsel wants the Commission to impose antitrust liability on Rambus for alleged conduct that would otherwise be insufficient to ground antitrust liability, simply because the alleged conduct took place in the private standard-setting context.

Complaint Counsel must therefore prove that Rambus breached a JEDEC imposed duty to disclose, and that that failure to disclose misled JEDEC members. Moreover, as the next section demonstrates, they must do so by clear and convincing evidence.

D. Given The Theory of The Case, Complaint Counsel Must Prove Each Essential Element By Clear and Convincing Evidence.

The courts have long recognized an inherent tension between the patent and antitrust laws. Pursuant to Article 1 of the Constitution, a patent confers a legal monopoly for a limited period of time. In return for a patent, the patentee must fully disclose the patented invention or process, and after the expiration of the statutory period, the patentee loses all exclusive rights to the invention. *See generally Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 480-81 (1974). As the Federal Circuit has explained, this system "serves a very positive function in our system of competition, *i.e.*, 'the encouragement of investment based risk,'" which in turn "'encourages innovation and its fruits: new jobs and new industries, new consumer goods and trade benefits.'" *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 876 (Fed. Cir. 1985) (citation omitted).

Precisely because a patent constitutes a monopoly (albeit a lawful one), a patentee who attempts to enforce its patent is often faced with threats of antitrust liability. Most commonly, the defendant accuses the patentee of obtaining market power improperly by withholding material information from the patent office in the course of obtaining the patent.

Such claims are called "*Walker Process*" claims, after the Supreme Court's decision in *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 U.S. 172 (1964), which allowed the fraudulent procurement of a patent to form the basis for an antitrust claim under certain circumstances.

The courts have consistently required parties asserting *Walker Process* claims to prove the elements of fraud with "clear and convincing" evidence. *See, e.g., Loctite Corp.*, 781 F.2d at 876-7. They have done so not simply because many, if not most, states require clear and convincing evidence of common law fraud. *See generally* 9 WIGMORE, EVIDENCE (Chadbourn rev. 1981), ¶ 2498 at p. 424. Instead, the courts have required the heightened burden of proof for substantial public policy reasons, in recognition of the statutory basis of a patent's monopoly status and to "prevent frustration of patent law by the long reach of antitrust law." *Handgards Inc. v. Ethicon, Inc.*, 601 F.2d 986, 996 (9th Cir. 1979) (discussing *Walker Process* and holding that the "clear and convincing" standard that had been applied in such cases would also apply to antitrust claims based upon the bad faith enforcement of a patent); *see also Zenith Electronics Corp. v. Exzec, Inc.*, 182 F.3d 1340, 1352 (Fed. Cir. 1999) (observing that a "suitable accommodation" between the patent and antitrust laws "has been achieved by erecting certain barriers to antitrust suits against a patentee attempting to enforce its patent").

As Complaint Counsel will be quick to point out, this is not a private antitrust suit brought in federal court, and the Administrative Procedure Act has been held to require that an administrative agency need satisfy only a preponderance of the evidence burden in most agency proceedings. *See Steadman v. S.E.C.*, 450 U.S. 91, 95 (1981). The Federal Trade Commission, however, has acknowledged the tension between the interests served by the patent and antitrust laws and has expressly adopted the "clear and convincing" standard of proof in Section 5 cases based on the allegedly fraudulent procurement of a patent. As early as the 1960's, in the *American Cyanamid* cases, the Commission observed that "[w]here fraud in the procurement of a patent has been alleged in infringement suits and cancellation proceedings, the courts have stated that it must be established by clear and convincing evidence that the false and misleading statement was made (or information was withheld) deliberately and with intent to deceive. Also, of course, the information that is misrepresented or withheld must be material." *In the Matter of American Cyanamid Co.*, 63 F.T.C. 1747, 1963 FTC Lexis 77 at *224-5. Upon remand from the Sixth Circuit, the Commission again employed the "clear and convincing" standard in finding that American Cyanamid and Pfizer had committed fraud upon the patent office. *See In the Matter of American Cyanamid Co.*, 72 F.T.C. 623, 1967 FTC Lexis 43 at *138-*145.

More recently, in *In the Matter of VISX, Incorporated*, Docket No. 9286, the Commission alleged that VISX, Inc. had fraudulently procured a patent covering certain surgical procedures. The Commission argued, as an alternative, that VISX had engaged in "inequitable conduct" before the Patent Office that justified an order barring further enforcement of the patent. In a lengthy Initial Decision, Judge Levin held that:

> (1) an antitrust claim based upon the allegedly fraudulent procurement of a patent requires, in part, that the Commission present "[c]lear and convincing evidence of an intent to deceive the examiner and reliance must be adduced"; and
>
> (2) to establish inequitable conduct, "clear and convincing evidence must demonstrate both the materiality of the reference . . . and a deceptive intent in withholding the reference. . . ."

Initial Decision, *In the Matter of VISX, Inc.*, Dkt. No. 9286 (filed May 27, 1999) (available at www.ftc.gov/os/adjpro/d286/index.htm) ("VISX Initial Decision"), pp. 111, 139-140. Complaint Counsel had conceded the correctness of this approach, noting in their Post-Hearing Brief that to find either fraud or inequitable conduct, "[m]ateriality, intent and 'but for' all must be proved by clear and convincing evidence, evidence 'which proves in the mind of the trier of fact an abiding conviction that the truth of [the] factual contentions [is] highly probable.'" Complaint Counsel's Post-Hearing Brief, *In the Matter of VISX, Incorporated.*, Dkt No. 9286, (filed April 7, 1999), p. 9 n.26 (citations omitted) (available in Commission file).

After reviewing the evidence, Judge Levin dismissed the fraud and inequitable conduct claims. As he explained:

> The patent grant allows the patentee to exclude competition in the use of the patented invention, and the absence of clear and convincing evidence of concealment or omission of the prior art with intent to deceive necessarily strips complaint charges of monopolization, attempted monopolization, and unfair competition of all foundation and support. Absent fraud or inequitable conduct, the other elements of the violations alleged in the complaint are not material under Rule 3.51(c)(1). Since Complaint Counsel have failed to adduce clear and convincing evidence that prior art was either withheld or omitted with intent to deceive the PTO, a Section 5 violation cannot, as a matter of law, be sustained against VISX on *Walker Process* or *American Cyanamid* grounds. Accordingly, Count 3 of the complaint must be dismissed.

VISX Initial Decision, p. 145.[6]

Complaint Counsel will argue that they have not asserted a *Walker Process* claim, and that *American Cyanamid* and *In Re VISX* are not applicable here. There are, however, substantial similarities between the claims asserted in *American Cyanamid* and *VISX* and the claims asserted in the Complaint, and all of the policy considerations that led the Commission and Judge Levin to require "clear and convincing" evidence in those cases apply with equal force here. For example, the alleged wrongdoing in each case was the failure on the part of the patentee to make certain disclosures in the face of a purported duty to disclose. In each case, the

[6] The Commission subsequently granted Complaint Counsel's motion to dismiss an appeal from Judge Levin's Initial Decision. *See* Order Reopening The Record and Dismissing The Complaint, *In The Matter of VISX, Inc.*, Dkt. No. 9286 (filed February 9, 2001) (available at www.ftc.gov/os/caselist/d286.htm).

Commission alleged that as a result of its non-disclosure, the patentee had unfairly acquired market power that it would not have otherwise held. And in each case, the remedy sought was (and is here) an order barring the respondent from exercising its right of free access to the courts to enforce its patents. Since the right to petition the courts is based not just in the patent laws but also springs from the Constitution, it may not lightly be taken away by a court or agency. *See generally CVD, Inc. v. Raytheon Co.*, 769 F.2d 842, 849-50 (1st Cir. 1985) ("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.")

A heightened burden of proof is appropriate here not just because of the nature of the remedy sought. In addition, there are strong public policy considerations arising from what Complaint Counsel concede is the social importance of standard-setting organizations in today's high-tech economy. The risks associated with participation in standards-setting must not be so great that innovators are deterred from participating by fear that a mistake in judgment, or an "after-the-fact morphing of a vague, loosely defined policy," could lead to forfeiture of valuable intellectual property. *Infineon*, 318 F.3d at 1102 n. 10.

The clear and convincing burden of proof is also appropriate here because of the nature of the claims asserted and the evidence offered to support those claims. As a three-judge panel in a Nuclear Regulatory Commission proceeding explained in 1992, an agency finding of dishonesty or fraud can result in "severe reputational injury," which supports the utilization of a higher standard of proof. *See Inquiry Into Three Mile Island Unit 2 Leak Rate Data Falsification*, 1992 19XX WL 910, *14 (N.R.C.). In addition, where an agency's examination of events comes well after the events transpired, and the resolution of important issues "depends on strained and faded memories, it would be unfair to find a person guilty of dishonest or fraudulent conduct on a mere preponderance of the evidence." *Id.*

In sum, given the conflicting statutory interests involved, given the nature of the claims alleged and the evidence offered to support and rebut them, and given the fundamental nature of the rights that would be lost were the remedy sought ever implemented, it is not just appropriate, but necessary that Complaint Counsel bear the burden of showing the essential elements of fraud by clear and convincing evidence.

IV. Complaint Counsel Must Prove That Rambus Engaged In "Exclusionary Conduct"

To support its monopolization claims, Complaint Counsel must prove that Rambus engaged in anticompetitive conduct, which is commonly termed "exclusionary conduct." Here, Complaint Counsel allege that Rambus engaged in exclusionary conduct by fraudulently misleading JEDEC. Importantly, exclusionary conduct does not include all conduct that might violate a common-law duty, such as a breach of contract or certain failures to disclose information. This being the case, even assuming that JEDEC imposed a duty on Rambus, a breach of that duty is not automatically exclusionary conduct under the antitrust laws. In this case, such a breach would not be exclusionary.

A. Exclusionary Conduct Means Conduct That Has No Legitimate Business Justification

As the Commission recently argued to the Supreme Court, to prevail in a monopolization or attempted monopolization claim, a plaintiff "must at a minimum include some showing of 'exclusionary' or 'predatory' conduct, *i.e.*, [that defendant's conduct] would not make economic sense unless it tended to reduce or eliminate competition." 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) ("FTC *Trinko*

Br.").[7] In other words, a defendant may incur antitrust liability only when its conduct does "not make economic sense *except* as an effort to diminish competition," *id.* at 9 (emphasis in original); *see also Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 609-11 (1985) (antitrust violation where defendant failed to offer "any efficiency justification whatever" for its pattern of conduct, and where it was instead "willing to sacrifice short-run benefits and consumer goodwill in exchange for a perceived long-run impact on its smaller rival").[8] Indeed, a complaint "does not implicate an *antitrust* duty" if it fails "to allege that [defendant's conduct] was predatory or exclusionary." FTC *Trinko* Br. at 13 (emphasis in original).

Accordingly, it is well established that "[a] monopolist may nevertheless rebut [allegations of exclusionary conduct in a monopolization claim] by establishing a valid business justification for its conduct." *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 36 F.3d 1147, 1183 (1st Cir. 1994). "If there is a valid business justification for [defendants'] conduct, there is no antitrust liability," *High Tech. Careers v. San Jose Mercury News*, 996 F.2d 987, 990 (9th

[7] *See also* FTC *Trinko* Br. at 9 (criticizing a theory of antitrust liability "uncabined by any requirement that the challenged conduct be exclusionary or predatory – i.e., that the [conduct] not make economic sense *except* as an effort to diminish competition" – because such a theory "unduly expands" antitrust law) (emphasis in original); *id.* at 17 (no liability if antitrust theory "does not require the monopolist's conduct to be 'exclusionary' or 'predatory' within the meaning of section 2 jurisprudence"); *id.* at 10 ("Conduct is 'exclusionary' or 'predatory' in antitrust jurisprudence if the conduct would not make economic sense for the defendant but for the elimination or softening of competition.") (citing *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 588-89 (1986)); *id.* at 13 ("predatory or exclusionary" means "that [it] would not make business sense unless it tended to limit or soften competition").

[8] *See, e.g.*, *Neumann v. Reinforced Earth Co.*, 786 F.2d 424, 427 (D.C. Cir. 1986) ("predation involves aggression against . . . rivals through the use of business practices that would not be considered profit maximizing except for the expectation that (1) actual rivals will be driven from the market, or the entry of potential rivals blocked or delayed, so that the predator will gain or retain a market share sufficient to command monopoly profits, or (2) rivals will be chastened sufficiently to abandon competitive behavior the predator finds threatening to its realization of monopoly profits."); Brief for the United States and the Federal Communications Commission as Amici Curiae, *Covad Communications Co. v. BellSouth Corp.*, at 25 (Dec. 17, 2001) ("[C]onduct is not deemed exclusionary for purposes of Section 2 of the Sherman Act unless it lacks a valid business purpose; i.e., [i] it makes no business sense [ii] apart from its tendency to exclude and thereby create or maintain market power.").

Cir. 1993); *see also Stearns Airport Equipment Co., Inc. v. FMC Corp.*, 170 F.3d 518, 522 (5th Cir. 1999) ("The key factor courts have analyzed in order to determine whether challenged conduct is [exclusionary] is the proffered business justification for the act. If the conduct has no rational business purpose other than its adverse effects on competitors, an inference that it is exclusionary is supported."); *Trace X Chemical, Inc. v. Canadian Industries, Ltd.*, 738 F.2d 261, 266 (8th Cir.1984) ("Acts which are ordinary business practices typical of those used in a competitive market do not constitute anti-competitive conduct violative of Section 2.").

Valid business justifications – or, in the Supreme Court's words, "normal business purpose[s]"[9] – include any reason that makes economic sense, including enhancing efficiency,[10] reducing costs,[11] protecting intellectual property,[12] and even "merely trying to make more money."[13] *See also* Complaint Counsel's Appeal Brief, *In The Matter Of Schering-Plough Corporation*, FTC Dkt No. 9297 (August 9, 2002) (citing *Data Gen.*, 36 F.3d at 1183, for the proposition that a business justification is "valid if it relates directly or indirectly to the enhancement of consumer welfare"). A business justification will rebut an allegation of anticompetitive conduct even if "one reason for [defendant's conduct] was to disadvantage the

---

9 *Aspen Skiing*, 472 U.S. at 608-10 (conduct that tends to exclude competitors may survive antitrust scrutiny if the exclusion is the product of a "normal business purpose").

10 *See, e.g., Bell v. Dow Chem. Co.*, 847 F.2d 1179, 1185 (5th Cir. 1988) ("If the justifications are supported by legitimate business concerns (such as cost savings, shortage of supplies, more efficient production), then the district court may decide as a matter of law….").

11 *See, e.g., Ocean State Physicians Health Plan, Inc. v. Blue Cross & Blue Shield*, 883 F.2d 1101, 1111 n.11 (1st Cir. 1989) (whether or not defendant "actually passed along its savings to subscribers, ... achieving lower costs is a legitimate business justification under the antitrust laws").

12 *See, e.g., In re Indep. Serv. Orgs. Antitrust Litig.*, 203 F.3d 1322, 1329 (Fed. Cir. 2000) (excluding others from use of copyrighted work is a presumptively valid business justification for any immediate harm to consumers).

13 *Drinkwine v. Federated Publ'ns, Inc.*, 780 F.2d 735, 740 (9th Cir. 1985) ("Even that motive is consistent with competition").

competition" *Universal Analytics, Inc. v. MacNeal-Schwendler Corp.*, 914 F.2d 1256, 1259 (9th Cir. 1990).

B. That Rambus's Conduct Might Have Violated Some Common-Law or Other Non-Antitrust Duty Does Not Make It Exclusionary

This case is unusual in that under Complaint Counsel's theory, Rambus's conduct was predatory or exclusionary not because it violated rules derived directly from principles of antitrust, but rather because it violated the "rules," "policies," "purposes," and "understandings" of JEDEC. It has long been clear, however, that whether conduct is "exclusionary" cannot be determined simply by reference to non-antitrust duties or standards. As Judge Posner put it, 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. *Olympia Equip. Leasing Co. v. W. Union Tel. Co.*, 797 F.2d 370, 376 (7th Cir. 1986). Accordingly, antitrust law does not simply adopt non-antitrust rules or duties – whether they are derived from private agreement or from principles of tort law, or even from other, non-antitrust statutes.

The courts have repeatedly made clear that a violation of a non-antitrust rule, statute, or ethic – even those that promote social welfare – is not itself exclusionary conduct. As the Fifth Circuit put it, "Antitrust law is rife with . . . examples of what competitors find to be disreputable business practices that do not qualify as predatory behavior." *Taylor Publishing Co. v. Jostens, Inc.*, 216 F.3d 465, 476 (5th Cir. 2000). To prove monopolization, therefore, a plaintiff must demonstrate that the conduct is exclusionary within the meaning of the antitrust laws. *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 its antitrust claim simply on violations of the 1996 Telecommunications Act, even though that Act was intended to promote "the development of competitive local markets"); *Trinko v. Bell Atlantic Corp.*, 305 F.3d 89, 109 (2d Cir. 2002) (plaintiff must state antitrust action "on its own terms"); *see also Bucher v. Shumway*, 452 F. Supp. 1288, 1291 (S.D.N.Y. 1978) (no antitrust liability for violation of laws preventing "deception or overreaching" in the securities markets). As the Commission explained in its recent Supreme Court brief, "standards used in [non-antitrust] remedial and regulatory regimes" may not properly be converted "into free-standing bases for" antitrust liability. FTC *Trinko* Br. at 18.

The refusal of the antitrust laws simply to equate a violation of non-antitrust rules with exclusionary conduct applies with special force where the non-antitrust rules arise from a private contract or understanding, such as JEDEC's rules or policies. Private agreements in general are intended to achieve the private goals of the parties to the agreement and do not necessarily further antitrust goals. Accordingly, antitrust law, "framed to preserve normal competitive forces," does not "police the performance of private contracts." *Madison Fund, Inc. v. Charter Co.*, 406 F. Supp. 749, 751 (S.D.N.Y. 1975). As a result, "a claimed breach of contract by unreasonable conduct, standing alone, should not give rise to antitrust liability," *City of Vernon v. Southern Cal. Edison*, 955 F.2d 1361, 1368 (9th Cir. 1992) (emphasis added). Rather, antitrust liability rests on the separate inquiry as to whether a defendant acted "anticompetitively and without a legitimate business reason."[14] *Id.*

[14] Some private agreements are antithetical to antitrust objectives. Antitrust policy embraces a single "goal": "promot[ing] efficiency in the economic sense." RICHARD A. POSNER, ANTITRUST LAW (2d ed. 2001) (discussing the current "consensus view" among economists, jurists and policymakers); *see also 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"). Private agreements do not necessarily further this goal. Suppose, for example, that all the competitors in a particular market agree to fix prices; that one of them surreptitiously breaches the anticompetitive price fixing agreement by cutting prices; and that, as a result, the breacher captures the lion's share of the market, drives the others out of the market, and gains a monopoly position. The breach of the price fixing agreement would obviously not be deemed to be exclusionary conduct, even

In sum, to prevail here, as in any monopolization claim, Complaint Counsel must demonstrate that "absent a tendency to reduce competition," Rambus's actions would have been "economically inexplicable." FTC *Trinko* Br. 18. Regardless of whether the conduct is deemed to violate a non-antitrust rule, Rambus, in turn, may rebut the evidence as to this element of the claim against it by showing that its conduct made "economic sense" for it, apart from any tendency it may have had to reduce competition.

C. Rambus's Decision To Maintain The Confidentiality of Its Patent Applications Was Not Exclusionary Conduct; There Are Legitimate and Procompetitive Reasons to Keep Patent Applications Secret

Rambus's not disclosing information about its patent applications was not "exclusionary" under the antitrust laws; Rambus had legitimate business justifications for keeping its patent applications confidential. During the period when Rambus was a member of JEDEC, patent applications were kept strictly confidential by the Patent Office prior to patent issuance to allow applicants to maintain their inventions as trade secrets until such time as patent protection was obtained.[15] As the evidence at trial will show, Rambus was counseled not to disclose its patent applications, except under non-disclosure agreements, in order to maintain that

---

though it enabled the breacher to gain monopoly power, because the agreement was itself inconsistent with antitrust objectives. *Cf. Brookside Ambulance Serv., Inc. v. Walker Ambulance Serv., Inc.*, 39 F.3d 1181, 1994 WL 592941 1994-2 Trade Cases, P 70,785, at *3 (6th Cir. Oct. 26, 1994) (per curiam) (table) (even if it violated existing protocol, defendant ambulance company's practice of "run-jumping" was "not anticompetitive" for antitrust purposes because the practice maximized defendant's ability to receive calls and promoted efficient use of its ambulance fleet; a firm, "regardless of its market power," may promote efficiency). Thus, noncompliance with a private agreement that is inconsistent with antitrust objectives cannot properly be the basis of antitrust liability.

[15] Effective in 2000, U.S. patent law was amended to more closely conform to international patent laws. Because international patent laws generally require that patent applications be published 18 months after filing, as amended, U.S. patent law now also provides that patent applications be published 18 months after filing unless the inventor certifies that the disclosed invention is not the subject of a foreign patent application that would be published. 35 U.S.C. § 122. Patent applications remain strictly confidential for the initial 18 months after filing; during this period, the applicant will get a sense of the strength of his claims from the Patent Office and can decide whether to allow the publication of the application or withdraw the application and rely on trade secret protection.

trade secret protection. Indeed, patent attorneys routinely counsel their client to keep information regarding pending patent applications confidential, and companies, especially companies in the high-tech semiconductor industry, routinely institute policies to ensure the confidentiality of such information. There are numerous legitimate business reasons for patent applicants to follow this advice.

United States patent law “embodies a carefully crafted bargain”: the patentee discloses his invention, thereby giving up trade secret protection; in return the patentee obtains the right to exclude others from making or using his invention for a limited period of time. *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 150 (1989). Before that bargain is consummated by the issuance of a patent, patent applications are maintained in strictest confidence by the Patent Office. Courts have recognized the important values served by this policy. *See, e.g., Iron & Sears v. Dann*, 606 F.2d 1215, 1220-21 (D.C. Cir. 1979) (denying access through the Freedom of Information Act to patent applications to prevent competitive harm); *Lee Pharmaceuticals v. Kreps*, 577 F.2d 610, 616 (9th Cir. 1978) (same).

As Rambus’s experts will demonstrate at trial, patent applicants are well-advised to maintain the trade secret status of their applications – including information about pending claims after publication of the written description – for as long as United States patent law allows:

First, a competitor who learns of an applicant’s invention may try to build on it to obtain patents for improvements to the invention, improvements that the applicant may have been able to develop himself if the invention had remained confidential.

Second, disclosure of an application or pending claims could reveal the applicant’s competitive strategy, disclosing to competitors, for example, what products the applicant may be developing or research the applicant may be pursuing. Indeed, in cases interpreting antitrust law, courts have recognized that even a monopolist is not required to warn its competitors about its future innovations because they could then take steps to reduce the innovation's commercial value. *See Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 281-82 (2d Cir. 1979) ("a firm may normally keep its innovations secret from its rivals as long as it wishes . . . . [E]nforced predisclosure would cause undesirable consequences beyond merely encouraging the sluggishness the Sherman Act was designed to prevent").

Third, knowledge on the part of competitors of an applicant's pending patent claims could jeopardize the applicant's ability to obtain patent coverage in a timely manner. For instance, armed with otherwise confidential information about the patent application, a competitor could amend one of its pending patent applications to provoke an "interference" proceeding – that is, a proceeding that challenges whether the applicant was actually the first to invent the claimed subject matter rather than the competitor. *See* 35 U.S.C. § 135; 3-10 CHISUM ON PATENTS § 10.09[2][b] (2003) (noting that a competing patent applicant "will rarely be in a position to [seek such an interference] because pending applications are held by the PTO in confidence"). Even if the applicant is ultimately successful, such an interference is both time-consuming and costly.

In light of these and other potential dangers from early disclosure, competent patent attorneys strongly advise their clients not to disclose patent applications before disclosure is required. Even if some limited disclosure becomes necessary for business reasons – for example, in connection with technology licensing negotiations – clients are advised to limit the disclosure to the extent possible (for example, by disclosing the written description but not the actual claims being pursued) and to ensure that a non-disclosure agreement is in place. The evidence will show that Rambus received this advice and followed it.

Given these legitimate business justifications for keeping information about its patent applications confidential, Rambus's nondisclosure of this information was not exclusionary conduct.[16] Accordingly, Complaint Counsel's case fails at the outset.

D. Rambus's Decision To Amend Its Patent Applications Was Not Exclusionary Conduct; The Patent Laws Gave Rambus the Right to Claim Every Invention Described in the Original Farmwald-Horowitz Patent Application

Complaint Counsel cannot circumvent these problems by now arguing that Rambus took ideas for some of its patents from discussions at JC-42.3 and that such conduct is anticompetitive. The patent laws dictate that Rambus's patents could only be based on the

---

[16] Complaint Counsel cannot avoid the implications of this evidence by arguing that the JEDEC rules required only limited disclosure of information regarding pending patent applications. Complaint Counsel have contended that the JEDEC rules only required the disclosure of summary information – such as the existence of a pending application that somehow bears on a technology being considered for standardization. The disclosure of such information, however, likely raises the risks discussed above.

Moreover, if, as Complaint Counsel contend, JEDEC would use such a disclosure to avoid the incorporation of the technology, disclosure of such minimal information could only be used by JEDEC to boycott superior technology merely because it may be patented. This type of minimalist disclosure cannot give JEDEC sufficient information to design around the pending claims; to avoid the pending claims, JEDEC must abandon the technology altogether. The information disclosed would *not* contribute to preventing the incorporation of inferior technologies in standards; those technologies would be excluded from the standards on the merits, even without disclosure of pending patent interests. Therefore, on Complaint Counsel's theory, disclosure of information about pending patent applications can only result in the avoidance or boycott of *superior* technologies, like Rambus's, that would otherwise be incorporated into standards.

Further, this limited disclosure would result in the avoidance or boycott of superior technologies even though they would *not* be patented. Without more detailed information about the pending claims, JEDEC could not evaluate whether the pending patent claims (if issued) would cover the proposed technologies, the likelihood that the pending claims would issue as written, or whether prior art prevents patentability. Complaint Counsel's construction of JEDEC's rules would therefore hold JEDEC's technology decisions captive to unverifiable assertions that might be mistaken, the subject of overly optimistic claim interpretation, or, worse, the subject of gaming. This problem would be compounded by Complaint Counsel's assertion that the rules required broad disclosure of patent applications that merely "might involve" the technology. Under these rules, the limited disclosure would lead JEDEC to abandon entire areas of superior technologies even though a member's pending claims, even if issued without narrowing, would not cover the technologies.

“ideas” described in the original Farmwald-Horowitz patent application (the ’898 application). Rambus could not have “taken” ideas from JEDEC to be incorporated into its patent applications.[17] The patent laws also make it clear that Rambus was well within its rights to seek claims for the inventions disclosed in the ’898 application that it saw being considered for use by JEDEC members. The courts have repeatedly held that there is nothing improper with such “standard practice.”

Because Complaint Counsel’s vague charges of “unethical” conduct appear to conflict with these fundamental principles of patent law and patent practice, it is worth describing these principles in more detail. Patent law has developed an intricate system that allows an inventor to claim each of the inventions that is properly disclosed in a patent application as well as the full scope of each individual invention. To comprehend this system, it is important to first understand the two parts of a patent and the interaction between the two:

> The patent document which grants the patentee a right to exclude others and hence bestows on the owner the power to license, consists of two primary parts: (1) a written description of the invention, which may and here does include drawings, called the “specification,” enabling those skilled in the art to practice the invention, and (2) claims which define or delimit the scope of the legal protection which the government grant gives the patent owner, the patent “monopoly.”

General Foods Corp. v. Studiengesellschaft Kohle mbH, 972 F.2d 1272, 1274 (Fed. Cir. 1992). At the most basic level, these two parts are intertwined because each patent claim must be “supported” by the written description. To obtain a patent claim, therefore, the inventor must adequately set forth in the written description (1) the invention, (2) the manner and process of

[17] Moreover, as Complaint Counsel have acknowledged, they do not and cannot second-guess the PTO’s determination that Rambus’s patents properly claim priority to the original ‘898 application.

making and using the invention, and (3) the best mode contemplated by the inventor of carrying out the invention. 35 U.S.C. § 112; *see also* 3-7 CHISUM ON PATENTS § 7.01 (2003).

The patent system recognizes, however, that an inventor might not fully claim all inventions nor the full scope of the individual inventions in an initial application. Rather than force inventors – at great cost to inventors and at great added burden to the Patent Office – to claim everything possible in an original application, the patent system has several mechanisms that allow an inventor to go back to an original application to refine the patent claims. Important policies underlie this scheme. First, the patent laws seek to encourage early disclosure of inventions, allowing further innovation based on the disclosed inventions. Requiring inventors to claim everything possible in an original application upon pain of losing rights to an invention would go against this policy; inventors would delay filing an application until sure that each possible claim has been meticulously drafted. Second, it is well recognized that reducing an invention to particular claims is a difficult task and that oftentimes the commercial value of a particular potential claim is not apparent at first. The patent laws therefore allow the inventor sufficient flexibility to claim the full scope of the disclosed inventions as the importance of particular aspects of an invention become apparent. The scope of these mechanisms, however, is limited by the patent rules governing the interaction between the two parts of a patent – the written description and the claims.

1. Patent Applicants May Continue to Claim Inventions Described In An Original Application Through Amendments, Continuations, and Divisionals

To allow the inventor to claim the full scope of the inventions disclosed in the application, patent law allows the inventor to amend its claims, to file continuation applications,[18] or to file divisional applications.[19] Critically, to maintain the same priority date as the original application, any amendment, continuation application, or divisional application must be supported by the disclosure in the original application. 35 U.S.C. §§ 112, 120, 121, 132. This means that the first requirement of patentability, that the inventor adequately describe the invention (known as the "written description" requirement), is crucial. To be adequate, a written description must "convey with reasonable clarity to those skilled in the art that, as of the filing date sought, [the inventor] was in possession of the invention." *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991). The written description requirement, therefore, limits the inventor to those inventions disclosed in the original application: "The purpose of the written description requirement is to prevent an applicant from later asserting that he invented that which he did not; the applicant for a patent is therefore required to 'recount his invention in such detail that his future claims can be determined to be encompassed within his original creation.'" *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1330 (Fed. Cir. 2003) (quoting *Vas-Cath*, 935 F.2d at 1561).

---

18 A continuation application is a second application containing the same disclosure as the original application. *See* 4-12 CHISUM ON PATENTS §13.03[2] (2003).

19 Divisional applications effectively divide the original application into several applications. Where a patent application contains "independent" and "distinct" inventions, i.e., "inventions that do not form a single inventive concept," 37 C.F.R. § 1.141(a), the patent examiner "may require the application to be restricted to one of the inventions." 35 U.S.C. § 121. In response, the applicant may elect to pursue one of these inventions in the original application and file "divisional" applications to obtain claims covering the other inventions, and the divisional application retains the priority date of the original application. *Id.*; *see also* 4-12 CHISUM ON PATENTS § 12.04 (2003).

This means that, to maintain the same priority date as the original application, neither an amendment to a continuation application, nor a divisional application, may add any "new matter." 35 U.S.C. § 132 ("No amendment shall introduce new matter into the disclosure of the invention."); 35 U.S.C. § 120 (giving benefit of original application filing date under certain circumstances); *Applied Materials, Inc. v. Advanced Semiconductor Materials America, Inc.*, 98 F.3d 1563, 1579 (Fed. Cir. 1996) (Mayer, J., concurring) ("By definition, a continuation adds no new matter and is akin to an amendment of a pending application."); 35 U.S.C. § 121 (according original priority date to divisional application only if the divisional conforms to section 120). "New matter" is something that describes a different invention or adds to or changes the nature of the disclosed inventions. *See, e.g., Regents Of University Of New Mexico v. Knight*, 321 F.3d 1111, 1121 (Fed. Cir. 2003).

These requirements – that any amendment, continuation application, or divisional be supported by the original disclosure without any "new matter" – ensure that the inventor is limited to claiming only those inventions disclosed in the original application:

> The written description requirement and its corollary, the new matter prohibition of 35 U.S.C. § 132, both serve to ensure that the patent applicant was in full possession of the claimed subject matter on the application filing date. When the applicant adds a claim or otherwise amends his specification after the original filing date . . . the new claims or other added material must find support in the original specification.

TurboCare Div. of Demag Delaval Turbomachinery Corp. v. General Elec. Co., 264 F.3d 1111, 1117 (Fed. Cir. 2001).

Thus, while the '898 application continues to be the progenitor of numerous patents, the Patent Office has determined that each and every claim contained in these new patents is supported by the original written description filed by Farmwald and Horowitz in 1990. Or, to say it another way, each and every invention and the full scope of each invention claimed by Rambus was disclosed in the written description of the ’898 application (and therefore the PCT application that became public in 1991).

2. It is Fully Legitimate For a Patent Applicant To Amend Its Pending Claims to Cover Competitor’s Products

The right of an inventor to claim all of the inventions properly described in the written description of his application is not cut off because some other person begins to use the inventions before the inventor has filed a specific claim over those inventions. In other words, because the inventor has staked out his inventions in the written description of his application, the fact that someone uses one of the inventions in a competing product after the application has been filed but before the inventor claims that specific invention does not override the inventor’s entitlement to claim the invention. In fact, the Federal Circuit has explicitly held that there is nothing improper in amending a patent application to cover a competing product:

> It should be made clear at the outset of the present discussion that there is nothing improper, illegal or inequitable in filing a patent application for the purpose of obtaining a right to exclude a known competitor’s product from the market; nor is it in any manner improper to amend or insert claims intended to cover a competitor’s product the applicant’s attorney has learned about during the prosecution of a patent application.

Kingsdown Medical Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 874 (Fed. Cir. 1988). Further, the Federal Circuit has rejected the notion that amending a pending patent application to cover a competing product is somehow acting in “bad faith.” *Multiform Dessicants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1482 (Fed. Cir. 1998). Similarly, the courts have held that broadening pending patent claims to cover a competitor’s product does not indicate any intent to deceive. *See Emerson Elec., Co. v. Spartan Tool, LLC*, 223 F. Supp. 2d 856, 921 (N.D. Ohio 2002). In fact, amending a pending patent application to cover “a product containing a variant of the inventor's brainstorm" is "standard practice and has been for a long time." MERGES, MENELL & LEMLEY, INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 225 (2d ed. 2000)

These principles apply in the DRAM industry as they do in any other. For example, in *Instruments Inc. v. U.S. Intern. Trade Comm'n*, 871 F.2d 1054 (Fed. Cir. 1989), the patentee, Texas Instruments, amended its pending patent claims to cover a DRAM device sold by a company called MOSTEK. *Id.* at 1064-65. Specifically, Texas Instruments broadened its pending claims by deleting certain claim limitations. *Id.* at 1065. Rejecting the trial judge's implicit finding that there was something wrong with this conduct, the Federal Circuit held that the broadening of the claims to cover the competing DRAM was proper, that the patent was not invalid, and that the DRAM products of the intervenor, Samsung Company, Ltd., infringed Texas Instrument's patent. *Id.*

This is not to say that patent applicants can, at will, "morph" their pending patent claims to cover competitors' products. The patent laws ensure that the inventor can only claim inventions that were disclosed in the original written description: "While it is legitimate to amend claims or add claims to a patent application purposefully to encompass devices or processes of others, there must be support for such amendments or additions in the originally filed application." *PIN/NIP, Inc. v. Platte Chemical Co.*, 304 F.3d 1235, 1247 (Fed. Cir. 2002). In other words, patent law restricts the inventor to claiming only inventions that were disclosed in the original application, thereby preventing any sort of untoward "abuse" of the patent process. *See Vas-Cath*, 935 F.2d at 1561 ("Adequate description of the invention guards against the inventor's overreaching by insisting that he recount his invention in such detail that his future claims can be determined to be encompassed within his original creation.").

3. Under These Principles, It Was Entirely Legitimate For Rambus To Seek Claims Covering Technologies Promoted By Other JEDEC Members That Were Originally Disclosed in the ’898 Application

The implication of these patent-law principles is that it was entirely legitimate for Rambus to seek patent claims for inventions originally disclosed in the ’898 application that were being used by JEDEC members. Moreover, these principles demonstrate that it was *impossible* for Rambus to “take” ideas learned at JEDEC and incorporate those ideas into its patent applications as has been suggested by some JEDEC members. The written description requirement and the “no new matter” rule prevent such a possibility. Under these principles, Rambus could not add ideas taken from JEDEC into its patent application – this would be to add new matter. Rather, Rambus could only claim “ideas” (i.e., inventions) that were properly disclosed in the original ’898 application, i.e., “within [Farmwald’s and Horowitz’s] original creation.” *Vas-Cath*, 935 F.2d at 1561.

The opposite transaction, however – JEDEC members “borrowing” ideas from Rambus’s patent application – was in fact possible. While patent law prevented Rambus from taking ideas from JEDEC and claiming them as its own, nothing prevented JEDEC members from taking pieces of Rambus’s disclosed inventions and incorporating those inventions into the SDRAM and DDR standards.[20] Patent law only prevents the unlicensed use of inventions after a patent issues; prior to that time, patent law does not prohibit the use of inventions disclosed in an application for which claims have not issued. Of course, the JEDEC members proceeded at the risk (known to them) that the patent office would issue claims covering the borrowed inventions.

[20] Prior to the issuance of the ’703 patent and the publication of the PCT application, certain JEDEC members may have “borrowed” Rambus’s ideas in violation of non-disclosure agreements, but proving such a breach is notoriously difficult. After the issuance of these documents, of course, JEDEC members could “borrow” ideas from the publicly available written description.

Patent law did, however, allow Rambus to seek claims for the all of the inventions disclosed in the ’898 application. That JEDEC members were “borrowing” some of those inventions for use in JEDEC standards was of no moment: the Patent Act gave Rambus the right to seek patent protection over those inventions regardless of the JEDEC members’ activities. As the Federal Circuit has repeatedly held, there is nothing wrong, unethical, deceptive, or “bad faith” about an inventor seeking patent protection for inventions that were being used by others, so long as those inventions were in the original application. In sum, Rambus’s decisions to amend its patent applications cannot be exclusionary conduct.[21]

E. Assuming That A Breach of a JEDEC Disclosure Duty May Be The Basis for Antitrust Liability, Complaint Counsel Must Prove That There Was A Clear and Unambiguous Duty To Disclose

Assuming that a breach of a duty to disclose patent applications could be exclusionary conduct despite Rambus’s legitimate business justification for not disclosing its trade secrets to its competitors, Complaint Counsel’s case critically hinges on proving that there in fact existed a clear and unambiguous duty to disclose Rambus’s allegedly “hidden” patent and patent applications. As the Federal Circuit explained:

> When direct competitors participate in an open standards committee, their work necessitates a written patent policy with clear guidance on the committee’s intellectual property position. A policy that does not define clearly what, when, how, and to whom

[21] Rambus’s patent litigation efforts and its prelitigation demands for royalties are also immune from antitrust liability. *See Professional Real Estate Investors, Inc. v. Columbia Pictures Indus., Inc.*, 508 U.S. 49, 60-61 (1993) (holding that nonsham litigation is immune from antitrust liability); *Primetime 24 Joint Venture v. NBC, Inc.*, 219 F.3d 92, 100 (2d Cir. 2000) (holding that prelitigation demands are immune from antitrust liability); *McGuire Oil Co. v. Mapco,* 958 F.2d 1552, 1560 (11th Cir. 1992) (same). The Federal Circuit has also stated that in “the absence of any indication of illegal tying, fraud in the Patent and Trademark Office, or sham litigation, the patent holder may enforce the statutory right to exclude others [from making, using, or selling the claimed invention] free from liability under the antitrust laws.” *In re Independent Service Organization Antitrust Litig.*, 203 F.3d 1322, 1327 (Fed. Cir. 2000). The issue of whether this statement is consistent with an antitrust theory premised on misleading a standard-setting body has not been decided. *See Intel Corp. v. Via Techs., Inc.*, 2001 WL 777085 at *6 (N.D. Cal. 2001).

> the members must disclose does not provide a firm basis for the disclosure duty necessary for a fraud verdict.

Infineon, 318 F.3d at 1102. This same logic applies to Complaint Counsel's antitrust claim, which is based on an alleged violation of JEDEC's patent policy; it would be nonsensical to impose antitrust liability where there is no firm basis to condemn the very same conduct under the very same theory framed in common law terms – if anything, the imposing weight of the antitrust laws is aimed at a narrower set of conduct than common law. *See, e.g., Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 225 (1993) ("Even an act of pure malice by one business competitor against another does not, without more, state a claim under the federal antitrust laws . . ."). Indeed, the patent-related equitable estoppel case law upon which Complaint Counsel rely notes that "silence alone will not create an estoppel unless there was a *clear duty to speak*, or somehow the patentee's continued silence reinforces the defendant's inference from the plaintiff's *known acquiescence* that the defendant will be unmolested." *A.C. Aukerman Co. v. R.L. Chaides Const. Co.*, 960 F.2d 1020, 1043-44 (Fed. Cir. 1992) (emphasis added) (internal citations omitted); s*ee also OddzOn Products, Inc.*, 122 F.3d at 1404 (holding that where the duty to disclose particular references to the Patent Office was "ambiguous" and "unclear," patentee could not, as a matter of law, have acted "with deceptive intent" when it failed to disclose references).

Since antitrust law regulates competitive behavior, it is a fundamental precept that antitrust law requires a clear demarcation between condemned conduct and conduct that – while perhaps implicating other laws – is not the basis for antitrust liability. *See, e.g., Town of Concord v. Boston Edison Co.*, 915 F.2d 17, 22 (1st Cir. 1990) (Breyer, J.). Because of this concern, courts have been "careful to avoid constructions of § 2 which might chill competition, rather than foster it." *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447-48, 458 (1993). It is

9

well understood that ambiguous rules are likely to result in a chilling effect on otherwise procompetitive conduct. *See, e.g., International Distribution Centers, Inc. v. Walsh Trucking Co., Inc.*, 812 F.2d 786, 796 n.8 (2d Cir. 1987) ("A major concern underlying antitrust jurisprudence lies in the fear of mistakenly attaching antitrust liability to conduct that in reality is the competitive activity the Sherman Act seeks to protect."); *USM Corp. v. SPS Techs., Inc.*, 694 F.2d 505, 512 (7th Cir. 1982) (patent misuse claims should be tested by conventional antitrust principles given that the "law is not rich in alternative concepts of monopolistic abuse; and it is rather late in the day to try to develop one without in the process subjecting the rights of patent holders to debilitating uncertainty"). As the Federal Circuit recognized, an ambiguous patent disclosure duty would "chill participation in open standard-setting bodies." 318 F.3d at 1102. As such, antitrust liability premised on such a policy, like other ambiguous rules, would "have a chilling effect on beneficial, procompetitive market interaction." *Westman Comm'n Co. v. Hobart Int'l, Inc.*, 796 F.2d 1216, 1220 (10th Cir. 1986).

Absent a clearly defined duty to disclose, therefore, Complaint Counsel's antitrust case folds. Complaint Counsel cannot save its case through evidence of members' "expectations." As the Federal Circuit noted, members' expectations cannot be the basis for liability because absent a clear patent disclosure policy, "members form vaguely defined expectations as to what they believe the policy requires – whether the policy in fact so requires." *Infineon*, 318 F.3d at 1102. Thus, JEDEC members' expectations of what others should disclose cannot be the formulation of the disclosure rule, especially since testimony about "expectations" is subject to "after-the-fact morphing of a vague, loosely defined policy to capture actions not within the actual scope of that policy." *Id.* at 1102 n.10. What is more, absent a clear and unambiguous duty to disclose, Complaint Counsel's case cannot be salvaged by vague notions that Rambus's conduct was somehow "unethical" or undertaken in "bad faith." As the Supreme Court has made clear, it is not the purpose of the antitrust laws to regulate such issues; *other* laws "provide remedies for various 'competitive practices 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, ANTITRUST LAW ¶ 651d, p. 78 (1996)).

Complaint Counsel, therefore, must prove that the patent policy clearly and unambiguously reached Rambus's undisclosed intellectual property interests. On this point, JEDEC's written policies are unavailing. After meticulously combing through these written policies, the Federal Circuit concluded that "there is a staggering lack of defining details in the EIA/JEDEC patent policy." 318 F.3d at 1102. Assuming that a lack of a clear *written* policy does not doom Complaint Counsel's case, Complaint Counsel are forced to cobble together JEDEC's supposed patent policy with tidbits of the written policy, assorted actions taken within JEDEC, and the hand-picked testimony of JEDEC members. This evidence, however, will not begin to meet Complaint Counsel's burden.

First, Complaint Counsel must establish that the patent disclosure policy clearly required disclosure beyond issued patents to patent applications or to intentions to file patent applications (the disclosure of which raise serious competitive risks).[22] Undermining Complaint Counsel's case, the evidence at trial will show that the patent policy merely *encouraged*, but did not require, the disclosure of patent applications and had nothing to do with *intentions* to file

[22] Complaint Counsel have asserted that Rambus had one issued patent that should have been disclosed – the '327 patent. That patent, however, had no possible relationship with the SDRAM standard, and Complaint Counsel can only argue that it "relates to" the DDR standard. The formal standard setting process for DDR, however, began after Rambus had withdrawn from JEDEC. As explained below, Complaint Counsel would therefore have to prove that a duty to disclose with regard to the DDR standard arose prior to Rambus's departure. Furthermore, the '327 patent, the only claims of the '327 patent that arguably "relate to" DDR SDRAM are implementation specific, as Complaint Counsel's expert Prof. Jacob admits. Such implementation specific patents, which are not required to practice the standard, were not required to be disclosed.

patent applications. A policy of encouragement, rather than requirement, is fully consistent with JEDEC members' legitimate business reasons for keeping patent applications confidential.

Second, Complaint Counsel must prove that the patent policy was so broad as to require the disclosure of patent applications that, even if they issued as patents, were not required to be licensed in order to practice the standard. In other words, Complaint Counsel must prove that the duty to disclose encompassed "situations where an application describes (but does not claim) technologies under discussion at JEDEC," 318 F.3d at 1100, which Complaint Counsel has described as applications that "might involve" technologies being standardized at JEDEC. The evidence at trial will demonstrate that the JEDEC disclosure policy was not so broad and amorphous. As the Federal Circuit held, assuming that the policy reached applications, "the relevant disclosure duty hinges on whether the issued or pending claims are needed to practice the standard. This construction accords with the primary JEDEC goal of adopting open standards that can be practiced without unreasonable license fees or terms." *Id.* As the Federal Circuit further held, any other interpretation of the duty would be nonsense:

> To hold otherwise would . . . render the JEDEC disclosure duty unbounded. Under such an amorphous duty, any patent or application having a vague relationship to the standard would have to be disclosed. JEDEC members would be required to disclose improvement patents, implementation patents, and patents directed to the testing of standard-compliant devices – even though the standard itself could be practiced without licenses under such patents.

Id. at 1101. If, however, the duty were so broad, the Federal Circuit has already held that "Rambus disclosed the '703 patent and thus satisfied such a construction of the duty," *id.* at 1100, because "the written description and drawings of the undisclosed patents and applications are identical to the disclosed '703 patent." *Id.* at 1099.

What is more, Complaint Counsel cannot save its case by resting on proof that Rambus might have *believed* (albeit wrongly) that claims in its application, if issued, would have covered technologies being standardized by JEDEC. As the Federal Circuit observed, the JEDEC policy has nothing to do with subjective beliefs:

> The JEDEC policy, though vague, does not create a duty premised on subjective beliefs. JEDEC's disclosure duty erects an objective standard. It does not depend on a member's subjective belief that its patents do or do not read on the proposed standard. Otherwise the standard would exempt a member from disclosure, if it truly, but unreasonably, believes its claims do not cover the standard. As discussed above, the JEDEC test in fact depends on whether claims reasonably might read on the standard. *A member's subjective beliefs, hopes, and desires are irrelevant.* Hence, Rambus's mistaken belief that it had pending claims covering the standard does not substitute for the proof required by the objective patent policy.

318 F.3d at 1104 (emphasis added). The evidence at trial will verify the Federal Circuit's holding – any JEDEC patent disclosure duty can only be triggered by the objective fact that a JEDEC member holds patent interests that would cover a technology being standardized; a duty to disclose is not, and cannot be triggered, by an incorrect belief about patent interests.[23]

Third, Complaint Counsel must prove the disclosure duty fell upon JEDEC members who only passively participated as opposed to members who were presenting their technologies. It is undisputed that Rambus never made any presentation at JEDEC. In fact, JEDEC's leadership twice prevented Rambus from presenting at JEDEC because Rambus openly refused to subject itself to JEDEC's patent policy. The evidence at trial will show that a reasonable person would have construed any JEDEC duty to disclose patent applications to fall only on those presenting a technology for standardization. This interpretation was entirely

---

[23] In any event, it surely cannot be the Commission's intention to impose antitrust liability for a company's failure to make *false* representations of fact about the scope of claims in its patent applications.

reasonable given the concern that a presenter would lead JEDEC to adopt the presenter's patented technology. Further, the evidence at trial will show that the conduct of JEDEC members comports with this understanding; the instances of self-disclosure of patent applications invariably involved presenters.

Fourth, Complaint Counsel must prove that a duty to disclose was triggered while Rambus was a member of JEDEC. The evidence at trial will show that Rambus left JEDEC before JEDEC began (and *long* before it finalized) the DDR SDRAM standard. Complaint Counsel, therefore, must prove that a duty to disclose patent applications relevant to the DDR standard arose before Rambus left JEDEC. The evidence at trial will demonstrate that any duty to disclose did not arise merely because technologies are discussed at JEDEC; rather, any duty would arise only when "legitimate proposals were directed to and formal consideration began on the DDR-SDRAM standard." *Infineon*, 318 F.3d 1105. Further, the evidence will show that as the Federal Circuit found, "JEDEC did not begin formal work on the DDR-SDRAM standard until December 1996." *Id.*

To maintain their antitrust claims, Complaint Counsel must therefore prove that JEDEC imposed a clear and unambiguous duty to disclose (1) patent applications; (2) including applications that "might involve" the technologies standardized by JEDEC, i.e., even those that if issued as patents would not be infringed by practicing the standard but somehow related in some undefined way on the technologies; (3) held by members that were not presenting their technologies for standardization, and (4) with respect to DDR SDRAM, that a duty to disclose arose before Rambus left JEDEC.

9

F. Complaint Counsel Must Prove That Rambus Knowingly and Intentionally Breached a Duty to Disclose to Mislead JEDEC

To prevail on their monopolization claim, Complaint Counsel must prove that Rambus "willfully acquired or maintained this monopoly power by anticompetitive conduct." *Concord Boat*, 207 F.3d at 1060. That is, Complaint Counsel must prove that Rambus intentionally engaged in anticompetitive conduct. *See, e.g., U.S. Football League v. National Football League*, 842 F.2d 1335, 1359 (2d Cir. 1988) ("The willfulness element certainly requires proof of intent."). To prevail on their attempted monopolization claim, Complaint Counsel must prove that Rambus engaged in exclusionary conduct with "a specific intent to monopolize." *Spectrum Sports*, 506 U.S. at 456. Importantly, the intent necessary to support either of Complaint Counsel's claims – an intent to gain monopoly through anticompetitive conduct – must be distinguished from an intent to achieve market position through lawful competition:

> The "intent" to achieve or maintain a monopoly is no more unlawful than the possession of a monopoly. Indeed, the goal of any profit-maximizing firm is to obtain a monopoly by capturing an ever increasing share of the market. Virtually all business behavior is designed to enable firms to raise their prices above the level that would exist in a perfectly competitive market. Economic rent – the profit earned in excess of the return a perfectly competitive market would yield – provides the incentive for firms to engage in and assume the risk of business activity. Monopolies achieved through superior skill are no less intentional than those achieved by anticompetitive means . . . . so the intent relevant to a § 2 Sherman Act claim is only the intent to maintain or achieve monopoly power by *anticompetitive means*.

State of Ill., ex rel. Burris v. Panhandle Eastern Pipe Line Co., 935 F.2d 1469, 1481 (7th Cir. 1991) (emphasis original).

In this case, therefore, it is not enough for Complaint Counsel to show that Rambus sought to obtain patents for its inventions that were being incorporated into the JEDEC standards; as discussed above, the patent laws gave Rambus the right to do so. Given this, biting, hard-driving comments about preparing a patent minefield, directing claims at standards, ensuring that others infringe Rambus patents, or even hoping to sue other companies, absent more, *do not* show an anticompetitive intent. *See, e.g., Advo, Inc. v. Philadelphia Newspapers, Inc.*, 51 F.3d 1191, 1199 (3d Cir. 1995) (affirming summary judgment on attempted monopolization claim where plaintiff's attempt to "cut and paste" unrelated quotes from defendant's documents containing "colorful, vigorous hyperbole" – including statements that when defendant saw "the competition drowning" it would "stick a water hose down their throats" – failed to prove specific intent to monopolize); *Ocean State Physicians Health Plan v. Blue Cross & Blue Shield*, 883 F.2d 1101, 1113 (1st Cir. 1989) (evidence of an intent to "crush" a competitor does not show anticompetitive intent). This type of evidence, without more, simply shows that Rambus sought to gain a competitive advantage through lawful means, ensuring that the inventions disclosed in the original Farmwald-Horowitz application were properly claimed.

Here, the anticompetitive conduct alleged by Complaint Counsel is that Rambus intentionally sought to mislead JEDEC. Complaint Counsel must therefore prove that Rambus intended through its actions or omissions to mislead JEDEC, i.e., Rambus knowingly violated a JEDEC disclosure rule. *Cf. Pence v. United States*, 316 U.S. 332, 337 (1942) (for federal common law fraud claim, plaintiff must show that representation was made with knowledge of its falsity and with intent to deceive); *MCI Communications Corp. v. American Tel. and Tel. Co.*, 708 F.2d 1081, 1149 (7th Cir. 1983) (holding that representations about product must be "knowingly false or misleading before it can amount to an exclusionary practice"); *ILC Peripherals Leasing Corp. v. International Business Machines Corp.*, 458 F. Supp. 423, 442 (C.D. Cal. 1978) (granting directed verdict on monopolization and attempted monopolization claims based on allegedly misleading statements where there was "nothing knowingly false" about the representations). The evidence at trial, however, will show that upon joining JEDEC and thereafter, Rambus attempted to discern JEDEC's rules and sought to abide by those rules. Indeed, the evidence will show that Rambus sought the advice of its counsel as to how it should conduct itself at JEDEC. Rambus was advised to avoid any conduct that could be construed as indicating that it would not enforce its patents, and it conformed its conduct to that advice. Finally, the evidence at trial will confirm what the Federal Circuit concluded: Rambus did not breach any duty to disclose to JEDEC because it never had any patent or patent application that was required to be disclosed.

V. Even if Rambus Breached a Duty to Disclose, Complaint Counsel Must Prove a That Rambus's Alleged Conduct Caused Anticompetitive Effects

Assuming that Complaint Counsel were able to prove that the JEDEC disclosure duty was so broad as to require Rambus to disclose its patent interests to JEDEC, Complaint Counsel would still have to prove that Rambus's conduct caused or threatened to cause anticompetitive effects. *See, e.g., Trans Sport, Inc. v. Starter 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)); *see also Taylor Pub. Co.*, 216 F.3d at 474 (stating that in an attempted monopolization case, court must find threatened anticompetitive effects); *E.I. du Pont de Nemours & Co. v. FTC*, 729 F.2d 128, 141 (2d Cir. 1984) (vacating Commission order under Section 5 regarding unilateral conduct and requiring nexus between conduct and "adverse competitive effects").

Anticompetitive effects cannot be inferred from proof of exclusionary conduct and intent to monopolize; the effects must be proven. *See Spectrum Sports*, 506 U.S. at 549 (reversing because "the trial instructions allowed the jury to infer specific intent and dangerous probability of success from the defendants' predatory conduct, without any proof of the relevant market or of a realistic probability that the defendants could achieve monopoly power in that market"); *see also Ashkanazy v. I. Rokeach & Sons*, 757 F. Supp. 1527, 1540 (N.D. Ill. 1991) (holding in an attempted monopolization case that there must be a "causal link between the anticompetitive behavior and the dangerous probability of success").

Under Complaint Counsel's theory, the causal chain is exceptionally long. To prove that Rambus's alleged misleading conduct caused competitive harm, Complaint Counsel must prove: (1) that JEDEC members were actually misled by Rambus's conduct, i.e., that they relied on the alleged omissions; (2) that reliance on those omissions was reasonable under the circumstances; (3) that there existed acceptable noninfringing alternatives to each of Rambus's technologies; (4) that JEDEC would have adopted those alternatives had Rambus disclosed its patent interests (or JEDEC members would have negotiated lower royalties from Rambus); (5) that the market would have accepted an alternative standard instead of DRDRAM; (6) that consumer welfare would be enhanced by the adoption of this alternative standard; and (7) the DRAM industry is locked-in to using Rambus's technologies so that members in the industry cannot switch to noninfringing alternatives. A failure to prove any one of these links breaks the causal chain, and Complaint Counsel's case must collapse.

A. Complaint Counsel Must Prove That JEDEC Members Reasonably Relied On Rambus's Conduct at JEDEC to Conclude that They Could Incorporate Rambus's Technologies Without Concern for Rambus's Potential Patent Rights

To establish the first step in this chain, Complaint Counsel must prove that JEDEC would have adopted a different standard but for Rambus's alleged failure to disclose. *See, e.g.,* 2 H. HOVENKAMP, ET. AL., IP AND ANTITRUST § 35.5, at 35-40 (2002) (stating that an antitrust plaintiff "must establish that the standard-setting organization adopted the standard in question, and would not have done so but for the misrepresentation or omission"). The gravaman of Complaint Counsel's case is that Rambus, through its conduct, made false and misleading representations to JEDEC regarding Rambus's patent interests. As the leading antitrust treatise explains for antitrust cases premised on misleading representation, "To determine the impropriety of a representation implicates the usual tort issues with respect to nondisclosure (when is there a duty to speak?), the distinction between fact and opinion, the knowledge or due care of the speaker, the actual degree of reliance by those allegedly deceived, and the reasonableness of any such reliance." 2 H. HOVENKAMP. ET. AL., IP AND ANTITRUST LAW ¶ 782b (2002). Thus, Complaint Counsel must first prove that JEDEC members relied on Rambus's alleged misrepresentations and that their reliance was reasonable.[24]

---

[24] Complaint Counsel have previously contended that they need not show reliance because "the standard for causation is less stringent in an antitrust case." Summary Decision Opp., p. 91. According to Complaint Counsel, they need only show that Rambus's conduct was a "material cause" of JEDEC's adopting Rambus's technologies, and they "'need not exhaust all possible alternative sources of injury in fulfilling [its] burden.'" *Id.* at 91-92 (quoting *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 114 n.9 (1969)). In making this assertion, Complaint Counsel misstate or ignore well-settled principles of antitrust law. Every case cited by Complaint Counsel for this proposition deals with a standard that has no application in this case – the standard applied to a private antitrust plaintiff under Section 4 of the Clayton Act to show that *its particular injury* was caused by the anticompetitive effects flowing from defendant's conduct. *See, Zenith Radio*, 395 U.S. at 114 n.9 ("Zenith's burden of proving the fact of damage *under § 4* of the Clayton Act is satisfied by its proof of some damage flowing from the unlawful conspiracy" (emphasis added)); *Bohack Corp. v. Iowa Beef Processors, Inc.*, 715 F.2d 703, 711 (2d Cir. 1983) (discussing Section 4 standard and stating that plaintiff need only show "that the violation 'played a substantial part' in causing *its losses*" *not* "competitive harm" as misquoted in Complaint Counsel's brief); *Law v. National Collegiate Athletic Ass'n*, 5 F. Supp. 2d 921, 927 (D. Kan. 1998) ("In order to establish causation *under Section 4*, plaintiffs must demonstrate that the anticompetitive activity was 'a material cause' of their injury." (emphasis added)). What Complaint Counsel fail to mention is that this inquiry only comes *after* there is proof that the defendant's conduct caused anticompetitive effects; a private plaintiff must then prove that its particular damages flowed from those effects. Under Section 4, "the antitrust plaintiff 'must show (1) that the alleged violation tends to reduce competition in some market and (2) that the plaintiff's injury would result from a decrease in that competition rather than from some other consequence of the defendant's actions.'" *Tennessean Truckstop, Inc. v. NTS, Inc.*, 875 F.2d 86, 88 (6th Cir. 1989). The standard in these cases, therefore, has no bearing on the level of proof needed to show a causal link between a defendant's conduct and anticompetitive effects; it only comes into play after this causal link has been established. In other words, having proven that the defendant's

Just as in a fraud or patent equitable estoppel case,[25] an antitrust plaintiff whose claim is based on misrepresentations or omissions must prove reliance on the alleged misrepresentations or omissions. To prove an antitrust claim based on fraudulent patent procurement, for example, the claimant not only must demonstrate that the patentee knowingly and willfully made a fraudulent omission or misrepresentation with clear intent to deceive the patent examiner, but also must make a "*clear showing of reliance*, i.e., that the patent would not have issued but for the misrepresentation or omission" that "*cause[d]* [the] PTO to grant [an] invalid patent." *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 1070-71 (Fed. Cir. 1998) (emphases added). Similarly, where an antitrust plaintiff claims that a defendant monopolized through false advertising, the courts require evidence that consumers are clearly likely to rely on the misrepresentations. *See, e.g., American Professional Testing Service, Inc. v. Harcourt Brace Jovanovich Legal and Professional Publications, Inc.*, 108 F.3d 1147, 1152 (9th Cir. 1997) (affirming judgment as a matter of law because of lack of reliance evidence). Moreover, as Complaint Counsel recognize, reliance must be "reasonable." Summary Decision Opp., p. 95.

---

conduct has harmed competition, antitrust law gives more flexibility for a private plaintiff to prove that its particular injury was caused by that anticompetitive conduct.

[25] A plaintiff making similar allegations in support of a fraud claim would have to prove that JEDEC and it members acted in reliance on Rambus's alleged failure to disclose – both in forming a false understanding of Rambus's patent position and in adopting the JEDEC standards that incorporated Rambus's technologies. *See Alicke v. MCI Communications Corp.*, 111 F.3d 909, 912 (D.C. Cir. 1997) (citing *Pence v. United States*, 316 U.S. 332, 338 (1941) (federal common law)); *see also Bank of Montreal v. Signet Bank,* 193 F.3d 818, 827 (4th Cir. 1999) (noting that under Virginia law fraud by omission requires a showing that the accused knew "the other party [was] acting upon the assumption that the [concealed] fact does not exist") (internal quotation marks omitted). In a like manner, a patent infringement defendant asserting an equitable estoppel defense (such as in the cases Complaint Counsel rely upon) must "show that, in fact, it substantially relied on the misleading conduct of the patentee in connection with taking some action." *A.C. Aukerman Co. v. R.L. Chaides Const. Co.*, 960 F.2d 1020, 1042-43 (Fed. Cir. 1992).

1. The Evidence Will Show That JEDEC Members Were Aware of Rambus's Potential Patent Rights and That They Did Not Rely on Rambus's "Representations"

Complaint Counsel will not be able to prove reliance. The evidence at trial will demonstrate that both the members of the JEDEC subcommittee (JC-42.3) and the chairman of that subcommittee *were* aware that Rambus might in the future assert intellectual property rights with respect to features incorporated into the contemplated standards. The evidence will show that descriptions of the technologies were available to JEDEC members from Rambus's technical presentations or publicly available articles. The evidence will also show that a reasonable engineer or patent attorney reading the written description of the '703 patent or the PCT application would realize that Rambus could obtain patent claims over the inventions that were incorporated into the SDRAM and DDR standards. Finally, the evidence will not only show that a reasonable engineer or patent attorney *should* have recognized this, the evidence will show that JEDEC members *did* in fact recognize this possibility and that they were very concerned about it.

The evidence will further show that the members of JEDEC recognized this threat but *chose to disregard it*, choosing instead to act on their belief that any effort by Rambus to obtain valid patent rights covering the technologies in issue would fail. More specifically, the evidence will make clear that JEDEC and its members incorporated Rambus's technologies into the standards because they repeatedly assured themselves and one another that Rambus would be unable to obtain valid patents in light of prior art.[26]

[26] For a patent to be valid, the claimed invention must be novel (*i.e.*, not previously known or used by others and not described in certain publicly available types of documents), *see* 35 U.S.C. § 102, and nonobvious (*i.e.*, not obvious to a person of ordinary skill in the art), *see* 35 U.S.C. § 103. Both novelty and nonobviousness are measured against the "prior art," which includes prior patents, publications, and anything publicly known or used prior to the date of the invention. Whether a patent is valid, therefore, depends on "the scope and content of the prior art" as well as "differences between the prior art and the claims at issue." *Graham v. John Deere*, 383 U.S. 1, 17 (1966).

Finally, the evidence will also show that Rambus put JEDEC's leadership on notice (as early as 1992) that it would not comply with JEDEC's patent policies, and that Rambus's conduct continued to put JEDEC members on notice of this fact throughout the time that Rambus participated in JEDEC. In particular, the evidence will show that when asked by JEDEC chairmen, Rambus repeatedly refused to discuss its patent position. These refusals raised red flags, and the internal documents of JEDEC members show that their concerns were heightened by the refusals to comment. Moreover, the evidence will show that in September 1995, Rambus warned JEDEC *in writing* that its "presence or silence at committee meetings does not constitute an endorsement of any proposal under the committee's consideration *nor does it make any statement regarding potential infringement of Rambus intellectual property*."

2. The Evidence Will Show That Any Reliance Was Not Reasonable

In addition to proving actual reliance, Complaint Counsel must prove that reliance was reasonable under the circumstances. As is the requirement of actual reliance; reasonable reliance is a necessary link in the causal chain. *See, e.g., Grubb v. Federal Deposit Ins. Corp.*, 868 F.2d 1151, 1162 (10th Cir. 1989) ("The 'justifiable reliance' requirement ensures that a causal connection exists between the misrepresentation and the plaintiff's injury."). Thus, where an allegedly deceived plaintiff had information available that put him on notice that the representations could not be trusted, reliance on those representations is not reasonable; the plaintiff has a duty to investigate. *See, e.g., Hershey v. Donaldson, Lufkin & Jenrette Securities Corp.*, 317 F.3d 16, 25 (1st Cir. 2003) (holding that plaintiff's reliance on alleged misrepresentation was unreasonable given information available to plaintiff). Moreover, where a

---

The evidence will show that JEDEC members believed Rambus could not obtain valid patents broad enough to encompass the technologies adopted in the SDRAM and DDR SDRAM standards because of their assumptions about the prior art.

9

plaintiff has made an investigation, even a partial investigation, reliance on the misrepresentation is not reasonable. *See, e.g., Bank of Montreal v. Signet Bank*, 193 F.3d 818, 827 (4th Cir. 1999) ("A plaintiff who, after a misrepresentation has been made, undertakes a full investigation of the misrepresented information cannot claim justifiable reliance on the misrepresentation. Similarly, when a plaintiff 'makes a partial inquiry, with full opportunity of complete investigation, and elects to act upon the knowledge obtained from the partial inquiry,' he cannot claim reliance."). Again, antitrust law is no different; antitrust cases based on misrepresentations require evidence that reliance would be reasonable. *See, e.g., American Professional Testing Service*, 108 F.3d at 1151 (requiring evidence that reliance would be reasonable); *In re Independent Service Organizations Antitrust Litigation*, 85 F. Supp. 2d 1130, 1158 (D. Kan. 2000) (same).

The evidence at trial will show that any actual reliance by JEDEC members was unreasonable. First, the evidence will show that the JEDEC patent disclosure policy was ambiguous, unclear, and the subject of multiple interpretations; therefore, any reliance on another member conforming to this "policy" was inherently unreasonable. *See, e.g., Hershey*, 317 F.3d at 24 (holding that reliance on ambiguous statement was not reasonable). Second, given Rambus's repeated refusal to comment on its patent position, any reliance on Rambus's supposed failure to disclose its patent position would be unreasonable – that conduct should have (and did) put JEDEC members on notice that they should themselves investigate Rambus's patent position. Third, the evidence will show that JEDEC members did, in fact, investigate Rambus's patent position, and this investigation led them to conclude that Rambus might seek to obtain patents over technologies being incorporated into the SDRAM and DDR standards. The fact that JEDEC members investigated Rambus's ability to obtain broad patents precludes a finding of reasonable reliance. *See, e.g., Bank of Montreal*, 193 F.3d at 827.

B. Complaint Counsel Must Prove That Had Rambus Disclosed, JEDEC Would Have Adopted Alternative Technologies and That the Alternative Standard Would Have Been Accepted In the Market

Assuming that Complaint Counsel could prove (1) that JEDEC imposed a duty to disclose that was so broad as to reached Rambus's patent interests, (2) that Rambus intentionally breached that duty, (3) that JEDEC members in fact relied on Rambus's "representation," and (4) that despite repeated warnings to the contrary, the JEDEC members' reliance was reasonable, to prove causation, Complaint Counsel must still prove that JEDEC would have rejected Rambus's technology had Rambus made the allegedly required disclosures. This, in turn, requires Complaint Counsel to prove (a) that there existed acceptable (i.e., equal or superior to Rambus's inventions in terms of performance and cost (considering Rambus's royalties)) noninfringing alternatives at the time JEDEC formulated its standards, (b) that JEDEC would have in fact adopted those alternatives had Rambus disclosed its patent interests (i.e., that the prospect of paying royalties would have driven JEDEC away from its first choice in terms of technology), and (c) that this alternative standard would have been accepted in the market. Otherwise, any market power Rambus may have was created not by the alleged conduct but by the superior technology covered by its patents. *See, e.g.*, H. HOVENKAMP, ET. AL., IP AND ANTITRUST § 35.5, at 35-42 ("if the patent is one that actually confers an economic monopoly because of the absence of feasible noninfringing alternatives, it is the patent itself – not the patentee's failure to disclose it to the standard-setting organization – that restricts competition in the market").

1. Complaint Counsel Must Prove That Acceptable Non-Infringing Alternatives Existed For Each Technology

Rambus's patents claim two key inventions that are incorporated in both the SDRAM standard and the DDR SDRAM standards: programmable latency and variable burst length. Rambus has also patented two additional inventions that are incorporated in the DDR

SDRAM standard: dual-edge clocking and the use of an on-chip DLL. For Complaint Counsel to show that Rambus's alleged breach of its disclosure obligations had any market impact, Complaint Counsel must prove that there was an available and acceptable noninfringing alternative for *both* of the necessary SDRAM technologies and for *all four* of the necessary DDR SDRAM technologies. If an alternative does not exist for any one of these technologies then Rambus could have sought – no matter what happened at JEDEC – exactly the royalties it did seek. That is, if there were no alternative for one of the two inventions incorporated into the SDRAM standard, JEDEC would have had no choice but to adopt Rambus's technology and standard-complaint products would still infringe Rambus's patents, giving it a right to royalties. The same situation would apply if there were no alternative for one of the four inventions incorporated into the DDR standard.

Where, as here, the alleged alternatives were not actually in the market, "[m]ere speculation or conclusory assertions will not suffice"; rather, there must be "concrete factual findings" sufficient to support an inference an acceptable alternative was in fact available. *Grain Processing Corp. v. American Maize-Products Co.*, 185 F.3d 1341, 1353-54 (Fed. Cir. 1999) To establish that acceptable alternative technologies existed, Complaint Counsel must prove, at a minimum, the following:

First, Complaint Counsel must prove that each alternative is noninfringing. Any alternative would have to avoid both Rambus's patents and other companies' patents. If the alternative was covered by a Rambus patent, then Rambus would be able to demand the same royalties that it currently demands. *See, e.g.,* Complaint Counsel's Memorandum in Support of Motion to Dismiss the Complaint, *In the matter of VISX, Inc.*, Dkt. No. 9286 ("Complaint Counsel *VISX* Br."), pp. 6-7 (requesting dismissal of complaint seeking to enjoin enforcement of patent allegedly procured by fraud because Respondent received new patent "that will give [Respondent] monopoly power in the technology market and market power in the apparatus market to the same extent as the old one"). If the alternative is covered by another's patent, absent evidence that the patentee would license the technology for less than Rambus's royalties, DRAM industry members would still have to pay royalties on standard-compliant products (or, they might be enjoined from producing any of those products).

Second, Complaint Counsel must prove that there were alternatives for each of Rambus's inventions that had satisfactory technical performance. That is, the performance of the alternatives met or exceeded the performance of the respective Rambus invention as applied in the applicable standard. *See, e.g., Grain Processing*, 185 F.3d at 1349 (in considering whether there were acceptable noninfringing alternatives, court must look at "the intended use for the patentee's product, similarity of physical and functional attributes of the patentee's product to alleged competing products, and price"); *BIC Leisure Products, Inc. v. Windsurfing Int'l, Inc.*, 1 F.3d 1214, 1219 (Fed. Cir. 1993) (to be an acceptable, noninfringing alternative must be "substantially similar" to patented product).[27]

---

[27] The issue of whether there exist acceptable noninfringing alternatives arises in patent damages actions seeking lost profits, where the patentee must prove the absence of such alternatives to establish but for causation, *i.e.*, but for the infringement, the patentee would have made higher profits. *See, e.g., Rite-Hite Corp. v. Kelley Co., Inc.*, 56 F.3d 1538, 1545 (Fed. Cir. 1995). The issue in those cases is whether consumers could have switched to an alternative rather than to the patentee's product. These cases are accordingly very instructive, but they do not necessarily reflect the heightened antitrust concern for the impact on consumer welfare. The patent law cases simply look to whether consumers *could* switch in the absence of the infringing product; the cases are not concerned with whether consumers are better off by switching. The fact that consumers could switch to an inferior or more expensive alternative in the absence of the infringing product does not mean that consumer welfare is improved. Here, should Complaint Counsel prove that JEDEC would have adopted an inferior alternative in terms of quality-adjusted price, Complaint Counsel would only succeed in proving that consumers are better off with the Rambus inventions and that there was no anticompetitive effect. Thus, the acceptable alternative standard in patent law can only be used as a guide; acceptability under this standard is necessary but not sufficient to show acceptability under antitrust principles.

Third, Complaint Counsel must prove that each alternative was sufficiently extendible. The evidence at trial will show that the DRAM industry preferred to incorporate technologies with performance characteristics that would allow the technology to be used in the anticipated future generations of DRAM products. If the Rambus technologies were essential to the extendibility of the SDRAM and DDR standards, any alternative would have to match this characteristic. *See, e.g., Joy Technologies, Inc. v. Flakt, Inc.*, 954 F. Supp. 796, 803 (D. Del. 1996) ("Whether a product is an acceptable non-infringing substitute is a function of the purchaser's needs. . . . The Court looks to the purchaser's motivation, first, then to the product features in determining whether a substitute exists.") (citations omitted).

Fourth, Complaint Counsel must prove that the combination of the alternatives was not more costly than the Rambus inventions (accounting for Rambus's royalty). If the cost of using alternatives for both of the Rambus inventions incorporated into the SDRAM standard would cost more to implement than paying Rambus's SDRAM royalties, the alternatives would not be acceptable. Similarly, if the cost of using alternatives for all four of the Rambus inventions incorporated into the DDR standard would cost more to implement than paying Rambus's DDR royalties, the alternatives would not be acceptable. *See, e.g., Kaufman Co., Inc. v. Lantech, Inc.*, 926 F.2d 1136, 1142 (Fed. Cir. 1991) ("To be deemed acceptable, the alleged acceptable noninfringing substitute must not have a disparately higher price than or possess characteristics significantly different from the patented product."); *Bose Corp.*, 112 F. Supp. 2d at 162 (products not substitutes where patent holder's product is substantially more expensive than infringer's).

Fifth, Complaint Counsel must prove that the technologically feasible, sufficiently extendible, cost effective, noninfringing alternatives were *available* at the time JEDEC made its decision to incorporate Rambus's inventions into the SDRAM and the DDR standards. *See, e.g., Grain Processing*, 185 F.3d at 1353 (stating that availability at the relevant time must be proven, "substitutes only theoretically possible" do not suffice).

Complaint Counsel cannot meet this burden. The evidence at trial will show that every alternative technology suggested by Complaint Counsel fails to meet these criteria.

2. Assuming That Alternatives Existed, Complaint Counsel Must Prove That JEDEC Would Have Rejected Rambus Technologies

Furthermore, it is not enough for Complaint Counsel to prove that acceptable noninfringing alternatives existed; Complaint Counsel must further prove that JEDEC would have adopted the noninfringing alternatives had Rambus disclosed its patent interests. The fact that JEDEC chose to incorporate Rambus's inventions proves that JEDEC members preferred Rambus's inventions over any available alternatives (economists call this a "revealed preference"). Complaint Counsel must prove, therefore, that had Rambus made the allegedly necessary disclosure, this would have caused JEDEC to reject Rambus's inventions.

The evidence at trial will show that, even if Rambus had disclosed, JEDEC would have proceeded to incorporate Rambus's inventions because JEDEC members were convinced that Rambus's inventions were obvious in light of the prior art. The evidence will show that Rambus warned a consortium of DRAM manufacturers that their efforts to develop a competing DRAM standard were running headlong into Rambus's patent position. Undaunted, the consortium of the same DRAM manufacturers who are in JEDEC dumped millions of dollars and thousands of engineer hours into these efforts, apparently believing that Rambus would be unable to obtain relevant patents because of prior art. There is no reason to believe that these JEDEC members would have acted any differently had Rambus made the disclosures that Complaint Counsel allege were necessary.

Moreover, the evidence at trial will show that when a patent interest on a technology was disclosed, JEDEC invariably adopted the technology upon receiving a letter of assurance from the patentee that it would grant licenses to all comers royalty free or terms that are reasonable and nondiscriminatory ("RAND"). Similarly, had Rambus disclosed and given a RAND assurance, JEDEC would have adopted the Rambus inventions. This, in turn, means that Rambus would have been able to collect royalties on the use of those inventions. Complaint Counsel, therefore, must prove that JEDEC would have deviated from its practice and rejected Rambus's technologies despite the disclosure.

3. If JEDEC Would Have Adopted Rambus's Technologies, Complaint Counsel Can Only Show Competitive Harm If It Can Prove That Rambus's Royalties Would Have Been Lower

If, as the evidence will show, JEDEC would have adopted Rambus's technologies had Rambus disclosed, to show competitive harm, Complaint Counsel must prove that Rambus's conduct allowed it to negotiate higher royalties than it would have received if it had disclosed. Complaint Counsel have previously asserted that had Rambus disclosed, JEDEC members would have negotiated with Rambus prior to the time that the standard was set (or at least prior to production of the products) – so-called "*ex ante* bargaining." In other words, Complaint Counsel has asserted that JEDEC members would have negotiated with Rambus for a license before the issuance of its patents. According to Complaint Counsel, this *ex ante* bargaining would have resulted in lower royalty rates.

Complaint Counsel, however, will be unable at trial to adduce any evidence of *ex ante* bargaining even with regard to technologies incorporated into the JEDEC standards covered by *issued* patents. Such *ex ante* bargaining would be especially unlikely here given that JEDEC members were convinced that prior art would prevent Rambus from acquiring patent rights over the relevant technologies. What is more, the economic testimony will demonstrate that, such bargaining is not only unlikely but may in fact lead to a *higher* royalty rate because the scope of the claims in patent *applications* often change during prosecution.

To prove competitive harm, therefore, Complaint Counsel must prove that Rambus's royalty rates are not "reasonable" and "nondiscriminatory." The evidence at trial, however, will show that Rambus's royalty rates are reasonable in that they are consistent with royalty rates charged by other patent holders in the semiconductor industry for similar technology. Further, the evidence will show that Rambus's licenses are nondiscriminatory.

4. Complaint Counsel Must Show That The Market Would Have Accepted an Alternative Standard and That Consumers Would Have Been Better Off

Assuming that acceptable noninfringing alternatives existed, and that JEDEC would have rejected Rambus's inventions in favor of these alternatives, Complaint Counsel must still prove that the standard would have been accepted by the market and that consumer welfare would have been enhanced. In this regard, Complaint Counsel faces two hurdles.

First, the evidence at trial will show that the JEDEC imprimatur is neither necessary nor sufficient for marketplace acceptance of a DRAM standard. Complaint Counsel must therefore prove that the DRAM industry would have adopted the alternative JEDEC standard rather than DRDRAM. Had the industry adopted DRDRAM, its products would of course fall under Rambus's patents, and Rambus would be in the same position as it is now. Thus, Complaint Counsel must prove that the DRAM manufacturers' boycott of DRDRAM in favor of the alternative standard would have been as successful as it was in favor of SDRAM and DDR.

Second, Complaint Counsel must also prove that consumers of DRAM would have been better off with the hypothetical alternative standard. At the core, the antitrust concern in this case is not whether certain industry participants must pay royalties that they might have avoided. The antitrust concern is whether or not economic welfare has been diminished. Accordingly, for Complaint Counsel to prove that Rambus's conduct caused anticompetitive harm, it is not enough for Complaint Counsel to prove that JEDEC members would have preferred to use noninfringing alternative. Thus, for example, if JEDEC would have rejected Rambus's inventions without a careful cost-benefit analysis simply because the possibility that Rambus might obtain patents, JEDEC's choice would have harmed consumer welfare. Complaint Counsel must therefore prove that the hypothetical adoption by JEDEC of a different standard would have increased consumer welfare because the alternative was better than using Rambus's inventions on a quality-adjusted price basis.

C. If Acceptable Non-Infringing Alternatives Exist and JEDEC Would Not Have Adopted Rambus's Inventions Had Rambus Disclosed, Complaint Counsel Must Prove That JEDEC Members Could Not and Cannot Switch To the Alternatives

Assuming that Complaint Counsel could prove that there were available and acceptable noninfringing alternatives at the time JEDEC adopted the SDRAM and DDR standards, and Complaint Counsel could prove that JEDEC would have rejected Rambus's inventions in favor of those alternatives, to show that Rambus's conduct caused competitive harm, Complaint Counsel must prove that JEDEC members – once notified of Rambus's issued patents – could not then switch to the alternatives. In antitrust terms, Complaint Counsel must prove that there are significant switching costs rendering JEDEC members "locked-in" to using Rambus's inventions. *See, e.g., Eastman Kodak Co. v. Image Technical Services, Inc.*, 504 U.S. 451, 476-77 (1992) (allowing for possible inference of market power where customers are locked-in to using single-brand parts and services because of high switching costs). Absent prohibitive switching costs, JEDEC members could turn to the alternatives thereby dissipating the market power Complaint Counsel alleges Rambus acquired. *See, e.g., Alcatel USA, Inc. v.*

DGI Technologies, Inc., 166 F.3d 772, 783-84 (5th Cir. 1999) (rejecting monopolization claim because plaintiff failed to prove significant switching costs); *United Farmers Agents Ass'n, Inc. v. Farmers Ins. Exchange*, 89 F.3d 233, 237-39 (5th Cir. 1996) (affirming summary judgment because antitrust plaintiff failed to show market power (even though defendant held 100% of relevant market) because switching costs were low).[28] Complaint Counsel must therefore prove lock-in with regard to each JEDEC standard.

1. Complaint Counsel Must Prove That JEDEC Members Could Not and Cannot Switch to Alternative SDRAM Technologies

With regard to the SDRAM-standard-compliant products, the evidence at trial will demonstrate that, assuming that acceptable noninfringing alternatives existed, the cost for industry members to switch to those alternatives was not prohibitive. The evidence will show that DRAM manufacturers routinely redesign standard-compliant DRAM within the lifetime of a given standard. Available alternatives could have been introduced during these redesigns. Moreover, the evidence will show that the SDRAM standard itself went through several revisions – promulgated by Intel, not JEDEC – requiring DRAM manufacturers as well as controller manufacturers to redesign their products. The industry, therefore, could have adopted alternatives at the time of revisions.

2. Complaint Counsel Must Prove That JEDEC Could Not and Cannot Switch to Alternative Technologies For DDR

With respect to DDR-standard-compliant products, the evidence will show that had they existed, JEDEC could have adopted alternative technologies at the time it formulated the DDR standard (which was not published until 2000). To manufacture DDR-standard-

[28] Switching costs in this sense are akin to entry barriers that prevent the entry of competing technologies. Proof of barriers to entry is essential to sustain a monopolization claim: "neither monopoly power nor a dangerous probability of achieving monopoly power can exist absent evidence of barriers to new entry or expansion." *American Professional Testing Service*, 108 F.3d at 1154.

compliant products, industry members had to redesign each component of the memory subsystem: DRAM, DIMMs, controllers, and boards. Alternative technologies therefore could have been incorporated at the time of the publication of the DDR SDRAM standard. Even after manufacturing began, switching costs did not prohibit industry members from adopting alternative technologies. Like SDRAM products, DDR products have gone through several versions. The industry could have coordinated the adoption of alternatives, even without a new JEDEC-promulgated standard, at these transitions.

3. Complaint Counsel Must Prove That JEDEC Cannot Use Alternative Technologies For Future Standards

In addition to claiming that Rambus has monopolized the markets for technologies incorporated in JEDEC-standard-compliant SDRAM and DDR products, Complaint Counsel has also asserted that Rambus's conduct will affect products compliant with future JEDEC standards – DDR2 and DDR3. The evidence will show that JEDEC did not even start work on these standards until the 2000 time frame – after Rambus's patents issued and after Rambus had brought claims of patent infringement against DRAM manufacturers. Complaint Counsel thus allege that there is a dangerous probability that Rambus will monopolize the markets for technologies incorporated into products that *do not exist* based on standards that *have not yet been promulgated*. Accordingly, Complaint Counsel must prove that, for some reason, JEDEC – equipped with the full knowledge that Rambus's patents cover technologies being incorporated into these future standards – could not adopt alternative technologies. Moreover, Complaint Counsel must prove that DRAM industry members – similarly equipped with the knowledge that JEDEC-compliant products would infringe Rambus's patents – will be forced to build infringing JEDEC-compliant DDR2 and DDR3 devices.

VI. Complaint Counsel's Proposed Remedy Is Beyond The Commission's Authority

Should Complaint Counsel somehow prove liability, it is plain the remedy they seek is legally defective. The "cease and desist" order that Complaint Counsel propose in this case is unprecedented. Complaint Counsel have proposed an order that would require Rambus to forfeit its right to recover past-due royalties as damages for infringement of its valid patents through the use of JEDEC-compliant SDRAM and DDR SDRAM technology and that would permanently prohibit it from seeking to enforce its valid patents in the future against any JEDEC-compliant SDRAM and DDR SDRAM technology. Complaint, p. 23 ¶¶ 1-4. Indeed, Complaint Counsel has previously recognized that this form of remedy is unheard of:

> 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 of an essential facility is found liable under section 2 of the Sherman Act, the remedy is an order requiring access on reasonable terms, not free access. *E.g., United States v. Terminal Railroad Ass'n*, 224 U.S. 383 (1912).

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), p.7 n.5.

As Complaint Counsel suggested in their *VISX* brief, the proposed order in this case exceeds the Commission's remedial authority under Section 5 of the FTC Act, 15 U.S.C. § 45. *First*, the proposed remedy would impose an impermissible penalty based on conduct that was long ago completed. Under the proposed order, Rambus would be required to forfeit its rights of action against any JEDEC-compliant infringer of its valid patents and its right to hundreds of millions of dollars in royalties under its valid patents. As the Supreme Court has recognized, an order requiring the forfeiture of property is a punishment. *Austin v. United States*, 509 U.S. 602 (1993). The Commission does not have the authority to inflict punishments for antitrust violations. Rather, a "cease and desist" order is the Commission's exclusive remedy under Section 5, and it is well-established that "cease and desist" orders may not be used to impose punishments for past conduct. *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."); *Heater v. FTC*, 503 F.2d 321, 323-24 (9th Cir. 1974) (holding that restitution is an impermissible "penalty" under Section 5 and that the FTC lacks authority to "order private relief for harm caused by acts which occurred before the Commission). Indeed, the exclusive authority to seek forfeiture as a remedy in an antitrust enforcement matter rests with the Department of Justice, which can seek forfeiture only in a civil action in a federal district court in which the defendant is afforded its Seventh Amendment right to a jury trial. 15 U.S.C. §§ 4, 6; *United States v. Addyston Pipe & Steel Co.*, 85 F. 271, 301 (6th Cir. 1898) (holding that forfeiture may be obtained as an antitrust remedy only pursuant to 15 U.S.C. § 6 and that a forfeiture action "involves a trial by jury"). Ordering forfeiture in this administrative proceeding would thus violate the prohibition against imposing punishments in Section 5 cases and deprive Rambus of its Seventh Amendment right to a trial by jury.

Second, the proposed remedy would allow any JEDEC-compliant manufacturer to use Rambus' patented technology on a royalty-free basis, dedicating Rambus' patented technology to JEDEC-compliant manufacturers. Courts consistently have rejected royalty-free licensing as a remedy in antitrust cases. *Hartford-Empire Co. v. United States*, 343 U.S. 444

(1952); *United States v. National Lead Co.*, 332 U.S. 319, 338-39 (1947); *United States v. Singer*, 231 F. Supp. 240, 241 (S.D.N.Y. 1964), *aff'd* 374 U.S. 174, 197 (1963). These cases hold that royalty-free licensing or forced dedication of patent rights is impermissibly confiscatory. Rather, courts have consistently permitted patent holders found to have violated the antitrust laws in securing their patent rights to license their patents at reasonable royalty rates. *United States v. Glaxo Group Ltd.*, 410 U.S. 52, 59 (1973) (citing *Besser Mfg. v. United States,* 343 U.S. 444 (1952); *United States v. U.S. Gypsum Co.*, 340 U.S. 76 (1950); *International Salt Co. v. United States*, 332 U.S. 392 (1947); *Hartford-Empire Co. v. United States*, 323 U.S. 386 (1945)); *American Cyanamid Co. v. FTC*, 363 F.2d 757, 770 (6th Cir. 1966), *aff'd after remand sub. nom. Chas Pfizer & Co. v. FTC*, 401 F.2d 574, 586 (1968).[29]

Accordingly, the proposed order included in Complaint Counsel's complaint is contrary to established law and cannot be issued in this proceeding.

VII. Conclusion

Upon scrutiny, Complaint Counsel's case collapses. Complaint Counsel will not be able to prove the Rambus engaged in exclusionary conduct. Rambus had valid business reasons for maintaining the secrecy of information regarding its patent claims. Any construction of the JEDEC rules that could avoid the implications of this would render those rules anticompetitive, and a failure to abide by anticompetitive rules is not exclusionary. Complaint Counsel cannot prove that Rambus had any duty to disclose its patent interests to JEDEC. And Complaint Counsel cannot prove that Rambus intentionally violated any duty to JEDEC.

---

[29] Further, the proposed remedy may constitute an impermissible taking without just compensation in violation of the Fifth Amendment. The remedy would substantially diminish the value of Rambus' patent rights. Under the Fifth Amendment, the government cannot 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).

Nor will Complaint Counsel be able to prove that Rambus's conduct caused any anticompetitive harm. Complaint Counsel cannot prove that JEDEC members were misled by Rambus's supposed failure to disclose; they cannot prove that JEDEC members relied on Rambus's "representations"; they cannot prove that any such reliance was reasonable. Complaint Counsel cannot show that there were available any acceptable noninfringing alternatives to Rambus's inventions. They cannot show that JEDEC would have adopted any such alternatives or that the market would accept alternative standards. They cannot show that consumers would be better off with alternative standards. And they cannot show that the DRAM industry is locked in to using Rambus's inventions.

The Complaint should be dismissed.

DATED: April __, 2003 Respectfully submitted,

____

Gregory P. Stone
Steven M. Perry
Sean P. Gates
Peter A. Detre
MUNGER, TOLLES & OLSON LLP
355 South Grand Avenue, 35th Floor
Los Angeles, California 90071
(213) 683-9100
(213) 687-3702 (facsimile)

A. Douglas Melamed
IJay Palansky
Kenneth A. Bamberger
WILMER, CUTLER & PICKERING
2445 M Street, N.W.
Washington, D.C. 20037
(202) 663-6000

Sean C. Cunningham
John M. Guaragna
Gray, Cary, Ware & Freidenrich LLP
401 "B" Street, Suite 2000
San Diego, California 92101
(619) 699-2700

UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION

In the Matter of RAMBUS INCORPORATED, a corporation.	)	Docket No. 9302

CERTIFICATE OF SERVICE

I, Jacqueline M. Haberer, hereby certify that on April 22, 2003, I caused a true and correct copy of the *Trial Brief of Respondent Rambus Inc.* to be served on the following persons by hand delivery:

Hon. Stephen J. McGuire
Chief Administrative Law Judge
Federal Trade Commission
Room H-112
600 Pennsylvania Avenue, N.W.
Washington, D.C. 20580

Donald S. Clark, Secretary
Federal Trade Commission
Room H-159
600 Pennsylvania Avenue, N.W.
Washington, D.C. 20580

Richard B. Dagen, Esq.
Assistant Director
Bureau of Competition
Federal Trade Commission
Room H-372
600 Pennsylvania Avenue, N.W.
Washington, D.C. 20580

M. Sean Royall, Esq.
Deputy Director, Bureau of Competition
Federal Trade Commission
Room H-372
600 Pennsylvania Avenue, N.W.
Washington, D.C. 20580

Malcolm L. Catt, Esq.
Attorney
Federal Trade Commission
Room H-372
600 Pennsylvania Avenue, N.W.
Washington, D.C. 20580

Jacqueline M. Haberer

9

UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION

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

CERTIFICATION

I, Jacqueline M. Haberer, hereby certify that the electronic copy of the *Trial Brief of Respondent Rambus Inc.* accompanying this certification is a true and correct copy of the paper version that is being filed with the Secretary of the Commission on April 22, 2003 by other means.

Jacqueline M. Haberer
April 22, 2003