Micro Law

FTC piles onto Rambus’ standardization skullduggery

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The Rambus standardization skullduggery saga continues. As related in the May/June, July/August, and September/October 2001 Micro Law columns, SDRAM technology licensor Rambus sued chipmaker Infineon for patent infringement because Infineon refused to take a license under Rambus’ patents. (SDRAMs are synchronous dynamic random-access memory chips. Instead of running asynchronously (like ordinary DRAMs), SDRAMs are refreshed by a synchronous system clock. By 1999, SDRAM had largely replaced asynchronous DRAM.) Infineon then countersued for common-law fraud based on Rambus’ alleged abuse of the standard-setting process.

After a trial in which the judge assessed $7 million in damages against Rambus, the company appealed to the Federal Circuit appeals court. After its recent hearing of the opposing arguments, the Federal Circuit will probably take at least six months to hand down an opinion. In June 2002, the Federal Trade Commission weighed in by suing Rambus for engaging in unfair competition, in violation of section 5 of the FTC Act.

FTC enters the fray

The FTC complaint against Rambus adds new details to the saga. The complaint (available at http://www.ftc.gov/os/2002/06/rambuscmp.htm) is one of the longest and most detailed FTC complaints in recent years, setting out vast amounts of FTC-gathered evidence. The FTC’s action raises Rambus’ stake in the controversy and provides additional insight into how Rambus carried out the scheme. The complaint also provides insight into the FTC’s thinking about the abuse of the standardization process and what legal steps it advocates in curbing this abuse.

The FTC’s complaint restates in detail the history of the evolution of JEDEC’s standard for SDRAMs. The core facts are (as stated at greater length in the earlier Micro Law columns): Rambus and other chip companies met for several years in the early 1990s to develop an industry standard for SDRAMs. Rambus had pending patent applications during this time that eventually resulted in patents whose claims covered part of the technology embodied in the JEDEC SDRAM standard. But Rambus quit JEDEC before the patents were actually issued and did not
disclose its patent applications to JEDEC. The FTC examined JEDEC policies and procedures for standard setting. During the period that Rambus belonged to JEDEC, according to the FTC’s complaint, JEDEC required that to the extent any JEDEC member knew or believed that it possessed patents or pending patent applications that might involve the standard-setting work that JEDEC was undertaking, the member was required to disclose the existence of the relevant patents or patent applications and to identify the aspect of JEDEC’s work to which they related.

In addition, JEDEC required the following:

In the event that technologies covered by a member’s known patents or patent applications were proposed for inclusion in a JEDEC standard, the member was required to state whether the technology would be made available either “without compensation” or under “reasonable terms and conditions that are demonstrably free of any unfair discrimination.” Absent the member’s agreement to one of these two conditions, the JEDEC rules would not allow the technology to be incorporated into a proposed standard.

**Rambus’ scheme**

In 1992, Rambus formed a business plan (the FTC complaint refers to it as “Rambus’ scheme to capture the SDRAM standards”) to secure patents. According to a 1992 Rambus internal memorandum quoted in the FTC complaint, “Sync DRAMs infringe claims in Rambus’s filed patents and other claims that Rambus will file in updates later in 1992.” Then, Rambus waited until “late 1999, after DRAM manufacturers and their customers had become ‘locked in’ to the JEDEC standards, before seeking to enforce its patents against memory manufacturers producing JEDEC-compliant SDRAM.”

At that point, Rambus pounced on the industry, demanding that SDRAM manufacturers take licenses and suing those who refused. According to the FTC, the following was “the basic scheme upon which the company would embark”:

...a scheme whereby Rambus would actively seek to perfect patent rights covering technologies that were the subject of an ongoing, industry-wide standardization process, in which Rambus itself was a regular participant, without disclosing the existence of such patent rights (or the pertinent patent applications) to other participants, many of whom, by producing products compliant with the standards, would later be charged with infringing Rambus’ patents.

Rambus carried out the scheme by tailoring the claims in its pending patent applications so that they would cover the evolving SDRAM standard. The Rambus electrical engineer in charge of the JEDEC SDRAM standard project and the company’s patent lawyer worked hand in glove to keep the patent claims congruent with the standard. They worked together in part by having the engineer e-mail the patent lawyer details of the JEDEC meetings and discussions in real time as they occurred. The patent lawyer then amended the claims on the basis of the e-mails. The FTC claims that this was “a continuous pattern of deceptive, bad-faith conduct.” That conclusion followed from the fact that Rambus never disclosed to JEDEC the fact that, throughout the duration of its membership in the organization, Rambus had on file with the PTO (US Patent and Trademark Office), and was actively prosecuting, patent applications that, in its view, either covered or could easily be amended to cover elements of the existing and future SDRAM standards.

**Proving causation**

The FTC papers emphasize causation—a point that, as discussed in the earlier Micro Law columns, the *Rambus v. Infineon* litigation slurred over. As discussed in the July-August 2001 Micro Law, we need to ask whether the following is true:

JEDEC would not have embodied the same technology (Rambus’) into the SDRAM standard, had it known what Rambus would do: tailor its pending patent applications to make users of the standards become infringers of Rambus’ patents. That is, had Rambus not deliberately engineered an unfair disparity of information between JEDEC and Rambus about Rambus’ patent activity, JEDEC would have followed a different standard-setting course. It would have selected other available SDRAM technology... This would be technology on which no patents existed or one that its owners would license to users of the standard on a reasonable-royalty basis per JEDEC’s, IEEE’s, and ANSI’s patent policies. Would that have happened? Unfortunately, nobody is addressing the facts on this point.

The FTC does address this question, but not as crisply as I might have hoped. It asserts (the italics are mine, not FTC’s):

The design objectives served by inclusion of programmable CAS [column address strobe] latency and programmable burst length [programming memory chips to adjust the number of times data is transmitted between CPU and memory for a single instruction] continued on p. 86
technologies in the first- and second-generation JEDEC standards likely could have been accomplished through use of alternative DRAM-related technologies available at the time these standards were developed. At a minimum, there would have been uncertainty at that time regarding the potential to identify or develop feasible alternative technologies....

In addition, the FTC asserts (again, these are my italics, not the FTC's):

The design objectives served by inclusion of on-chip DLL technology (Delay lock loop synchronization of a system clock and a memory chip's internal clock) in the second-generation JEDEC standard likely could have been accomplished through use of alternative DRAM-related technologies available at the time these standards were developed ... The design objectives served by inclusion of dual-edge clock technology in the second-generation JEDEC standard likely could have been accomplished through use of alternative DRAM-related technologies available at the time these standards were developed.

These technologies—programmable CAS latency, programmable burst length, on-chip DLL, and dual-edge clocking—as applied to SDRAMs became part of Rambus patents. Company lawyers tailored these applications to cover the JEDEC standards. To these causation allegations, the FTC adds the supplemental allegation that it is now economically infeasible to alter or work around the JEDEC standard for SDRAMs to avoid the Rambus patents.

The FTC claims that Rambus' failure to disclose its patents and patent applications to JEDEC, contrary to the JEDEC rules in effect at the time, amounted to a false and deceptive factual representation (a misrepresentation) to JEDEC:

Rambus's very participation in JEDEC, coupled with its failure to make required patent-related disclosures, conveyed a materially false and misleading impression—namely, that JEDEC, by incorporating into its SDRAM standards technologies openly discussed and considered during Rambus's tenure in the organization, was not at risk of adopting standards that Rambus could later claim to infringe upon its patents.

Puzzling switch in direction

Now comes what I found surprising and puzzling in the FTC's set of charges. All of this background seems to be working up to a charge of false, misleading, and deceptive conduct, in violation of section 5, which prohibits unfair or deceptive acts or practices. In this case, that violation would be more egregious because of its harmful economic impacts on the DRAM industry and its adverse potential impact on standard setting in general. But this is not what the FTC charged.

Instead, the FTC charged three violations of section 5. Its complaint defines five complicated so-called relevant product technology markets:

- **Latency.** Technologies for this market specify the length of time (latency) between a memory's receipt of a read request and its release of data corresponding to the request.
- **Burst length.** Technologies for this market specify the number of times a CPU transmits data to memory for a single request or instruction.
- **Clock synchronization.** Technologies for synchronizing clocks include on-chip delay-loop technology and any economically viable substitute for it in SDRAMs.
- **Data acceleration.** Technologies for accelerating the data transmission rate between a CPU and memory include dual-edge clock technology and any economically viable substitute for it in SDRAMs.
- **Synchronous DRAM.** This market represents the sum of the preceding four markets.

Rambus' acts and practices have, among other things, the FTC says, increased prices for DRAM chips and products that incorporate them; decreased incentives for memory manufacturers to make SDRAMs; decreased incentives for memory manufacturers to participate in JEDEC and other industry standard-setting organizations; and decreased the willingness of memory manufacturers to rely on standards set by industry standard-setting organizations.

But the FTC, instead of charging that these effects add up to a deceptive practice, rather asserts that they amount to monopolization, attempted monopolization, and restraint of trade. Thus its complaint states:

Rambus has willfully engaged in a pattern of anticompetitive and exclusionary acts and practices, undertaken over the course of the past decade, and continuing even today, whereby it has obtained monopoly power in the synchronous DRAM technology market and narrower markets encompassed therein, namely, the latency, burst length, clock synchronization, and data acceleration markets... in violation of section 5 of the FTC Act...
In this same way, further writes the FTC, Rambus also has attempted to monopolize those markets and has unreasonably restrained trade in those markets.

In other words, the FTC is charging what look like classic antitrust violations and is taking on all of the burdens associated with proving such cases. There is no additional charge of deceptive acts or practices here and no charge that the conduct is just unfair.

An unfairness charge could include an incipient antitrust violation not yet matured into a full-blown violation. It could also include unfairness in the sense that the conduct is substantially injurious to consumers, that ordinary consumers cannot avoid its impact on their own, and that countervailing economic benefits do not outweigh the harm.

**A mistake in the making?**

It seems to me that the FTC might be making a big mistake. Suppose that it cannot prove the complicated, relevant product technology markets that it defined. Or suppose it appears that the affected market is all memory devices—hard disks, EPROMs, magnetic tapes, or whatever. Suppose (as a result of one misstep or another) that the relevant market share that the patents cover then falls to 20 percent or less. Given these scenarios, the case would probably founder under present antitrust theories. For example, if a defendant’s market share is 40 percent or less, courts usually hold that a defendant is not liable for attempted monopolization because as yet, the defendant has no dangerous probability of success in gaining a monopoly.

In contrast, the FTC would have to prove far less for a deceptive act or practice case. It would only need to argue that Rambus’ failure to disclose its patent activity to JEDEC amounted to patent skulduggery—Rambus falsely and misleadingly represented to JEDEC that it could adopt the SDRAM standard without creating patent infringement liability to Rambus. Proof of such a contention would be enough to make Rambus guilty of violating section 5. Such a finding would also justify an order prohibiting Rambus from similar conduct in the future.

**Gambling for higher stakes**

However, the FTC asked for broader relief than future restraint—it’s gambling for higher stakes. It wants to prohibit Rambus from enforcing its SDRAM technology patents against users of the JEDEC SDRAM standard. Whether it can obtain such relief in a deceptive practices case is unclear. In past cases, courts have ordered corrective advertising and similar relief to undo the effects of false advertising. Perhaps, by analogy, the FTC could similarly justify this type of corrective relief applied to patent enforcement.

If not, the next step (still an easier one than proving an antitrust violation) would be to prove either a case of unfairness based on consumer injury or on incipientcy. The latter arises from language like the following from Supreme Court decisions (this passage is from FTC v. Brown Shoe):

> The Commission has broad powers to declare trade practices unfair. This broad power of the Commission is particularly well established with regard to trade practices, which conflict with the basic policies of the Sherman and Clayton [Antitrust] Acts even though such practices may not actually violate these laws....It is...clear that the FTC Act was designed to supplement and bolster the Sherman Act and the Clayton Act...to stop in their incipiency acts and practices which, when full blown, would violate those acts...as well as to condemn as “unfair methods of competition” existing violations of them.

Precedents also say that the FTC has the power to declare unlawful and nip in the bud those practices that violate the spirit of the antitrust laws. This body of doctrine would seem to support finding section 5 violated here even if the relevant market proof did not live up to the FTC’s hopes, as expressed in its complaint. This type of section 5 theory could justify patent relief even if a deceptive-practice theory could not.

The point is that it makes no sense for the FTC to travel the hard route when it does not need to. In Rambus v. Infineon, Infineon alleged antitrust violations somewhat like those of the FTC complaint (albeit much less elegantly). However, the court threw the antitrust case out because Infineon could not satisfy all the difficult requirements of an antitrust case.

It’s realistic to wonder if the FTC will fare any better than Infineon’s lawyers. But Infineon’s lawyers bailed themselves out to the tune of over $7 million by having a common-law fraud case. By failing to charge the additional, non-antitrust violations of section 5 described earlier, the FTC threw away that opportunity.

Only time will tell whether the FTC’s self-confidence is justified or reckless.