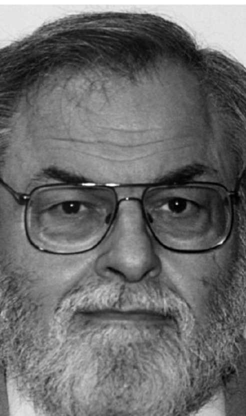

Coming down the home stretch in the Rambus standardization skullduggery saga: To levy or not to levy royalties

RICHARD STERN
rstern@khhte.com

•••••• The tale of Rambus's standardization skullduggery in developing JEDEC's (Joint Electron Device Engineering Council's) SDRAM standard has unfolded for this journal's readers in many Micro Law columns since the first report in the May/June 2001 issue.[1] First, Rambus and Infineon duked it out in the federal courts. Then the Federal Trade Commission (FTC) began a proceeding against Rambus in June 2002. That proceeding eventually led to a determination in July 2006 that Rambus engaged in unfair and deceptive practices. The FTC also found that ''Rambus engaged in exclusionary conduct that significantly contributed to its acquisition of monopoly power in four related markets.'' The Commission then announced that it would determine a remedy for the unlawful conduct after additional briefings and argument. In February 2007, the FTC issued its final order on remedy. The key controversy was whether mandatory licensing of Rambus's patents should be on a royalty-free or reasonable-royalty basis.

The five FTC Commissioners held, 3 to 2, that it would be proper to allow Rambus to continue to charge royalties for its abused patents (those used in the JEDEC standard), but the royalty should be limited to a maximum rate of 0.5 percent for double-data-rate (DDR) SDRAMs and a 0.25 percent maximum rate for SDRAMs—for three years, and after that zero. Two commissioners dissented in part, on the ground that Rambus should not be allowed to collect any royalties at all on the abused patents. Presumably, Rambus will appeal the case to a federal court of appeals. (In addition, there is ongoing litigation between Rambus and various semiconductor chip manufacturers.)

FTC majority opinion

The Commission's majority opinion explained why they reached their decision on royalties: The Commission began by pointing to its special expert competence in the area, and it rejected Rambus's argument that the FTC cannot order compulsory or royalty-free licensing when the circumstances call for such relief. According to the Commission, the Supreme Court has ''emphasized the Commission's wide discretion in its choice of remedy, and stated the expectation that the Commission would 'exercise a special competence in formulating remedies to deal with problems in the general sphere of competitive practices.''' Accordingly, ''[t]he Commission enjoys 'wide latitude for judgment' in fashioning a remedial order,'' and that latitude is subject only to ''the constraint that the requirements of the order [must] bear a reasonable relationship to the unlawful practices that the Commission has found.''

At this point, the majority and the dissenters parted company. The majority said: ''Having found liability, we want a remedy strong enough to restore ongoing competition and thereby to inspire confidence in the standard-setting process. At the same time, we do not want to impose an unnecessarily restrictive remedy that could undermine the attainment of pro-competitive goals.'' Since the Commission majority was committed to the importance of ''the contribution of intellectual property to innovation and consumer welfare,'' it felt it must be cautious ''against unwarranted antitrust enforcement activity that might undermine the patent system's incentives for innovation.'' Therefore, the FTC majority said, ''we agree that, before ordering royalty-free licensing,'' the FTC staff must convince the commissioners ''that this form of relief is necessary to restore the competitive conditions that would have prevailed absent Rambus's misconduct.'' The three-member majority was not convinced of that.

Under the stated legal standard, the FTC staff must persuade the commissioners that ''but for'' Rambus's deception of JEDEC, ''JEDEC would not have standardized Rambus technologies, thus leaving Rambus with no royalties.'' The proof of record fell short of that. The majority therefore turned to

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determining what a maximum reasonable royalty would be. After an elaborate analysis of the ''but for world,'' the FTC arrived at its 0.5 percent and 0.25 percent royalty rates for three years, after which the licenses would become paid up. The order applies to Rambus's outstanding licenses to semiconductor manufacturers as well as any new licenses.

In addition, the order prohibits Rambus from misrepresenting its patents or patent applications to any standard-setting organization or its members. It requires that Rambus abide by standard-setting organizations' requirements or policies to make complete, accurate, and timely disclosures of its patents or patent applications.

Rosch dissent

Commissioner Tom Rosch dissented in part, rejecting the idea that the facts required the FTC to permit reasonable royalty licensing. He argued that permitting Rambus to collect anything for the use of its patents would be a mistake, for it would let Rambus ''continue to reap the fruits of its ongoing violation of Section 2.''

Commissioner Rosch agreed with the legal test that the majority stated, but his analysis of the facts of record for reconstructing the ''but for world'' led him to several different conclusions. First, ''there is strong evidence in the record that if JEDEC had been aware of the potential scope of Rambus's patent portfolio, it would have adopted standards that would have avoided Rambus's patents. JEDEC's rules, the expectations of its membership, and the market's concerns with costs generally and the cost of Rambus's technologies in particular all strongly support a finding that a fully informed JEDEC'' would have adopted standards that did not incorporate Rambus's patents. Rosch argued:

> [T]he record seems to me strongly to support the conclusion that in the ''but for world'' JEDEC and its principal stakeholders (the DRAM manufacturers), if fully informed about Rambus's patents and pending patents, would not have incorporated Rambus's technologies in the SDRAM and DDR SDRAM standards. In a world with alternative technologies, which was the real world here, Rambus would not be in a position to collect royalties from those practicing those standards. That conclusion in turn would support a decree requiring Rambus to license on a royalty-free basis the patents that were not disclosed to those practicing the SDRAM and DDR SDRAM standards.

Rosch also disagreed with the majority's view that zero-royalty mandatory licensing would impair the objectives of the patent system. He conceded the validity of ''the majority's concerns that a zero-based royalty might stifle innovation and/or participation in standard-setting organizations.'' But he thought that ''it is equally plausible that honest inventors would be more, rather than less, inclined to innovate if they felt that rivals who engaged in deceptive conduct during the standard-setting process would be denied the fruits of their wrongdoing in their entirety.'' He did not explain why he thought this, and perhaps the argument is just a makeweight. Rosch then went on to explain his view of the governing policy, indicated earlier:

> Ultimately, I conclude that licensing on terms above zero would enable Rambus to obtain royalties it would not have obtained in the ''but for world.'' That would enable Rambus to continue to reap the fruits of its ongoing violation of Section 2.

Harbour dissent

Commissioner Harbour agreed with Commissioner Rosch that licensing should be royalty free, but would have extended it to subsequent generations of DRAM technology. Her main difference with the other commissioners was that she disagreed that the FTC staff had ''the burden of proving the 'but for' world with absolute certainty.'' As she saw it, ''my colleagues seek to restore the 'but for' world only to the extent Complaint Counsel has proven what that world would have looked like. I believe their approach incorrectly allocates the burden of proof.'' In this regard, she correctly pointed out that

> It is black-letter Supreme Court law that ''once the Government has successfully borne the considerable burden of establishing a violation of law, all doubts as to the remedy are to be resolved in its favor.''

In other words, ''the monopolist bears the risk of the uncertain consequences created by its exclusionary acts … and any plausible doubts should be resolved against the monopolist.''

A critique

From the standpoint of legal precedent, Commissioner Harbour would appear to have the better argument in this dispute. In addition, two other factors unmentioned in the opinions could appropriately have been considered as well.

First, it is unclear whether a decree of zero-royalty mandatory licensing in this case would discourage corporate participation in standard-setting organization activity. That may well be the case, and I don't think we can wholly disregard that possibility. However, the majority and apparently Commissioner Rosch as well thought that a decree of zero-royalty mandatory licensing in this case would discourage innovation. I think that conclusion is totally insupportable. Let us consider the innovation calculus. A corporate entrepreneur or individual inventor is sitting down at his breakfast table, pondering: ''Shall I invest my time

The Rambus patent caper

The Rambus patent caper began in a patent infringement suit in federal court in Richmond, Virginia. Rambus, a designer of high-speed synchronous DRAMs (SDRAMs), sued German chipmaker Infineon AG (a Siemens spin-off) for patent infringement. Infineon counter-charged Rambus with defrauding JEDEC (formerly the Joint Electron Device Engineering Council, now the JEDEC Solid-State Technology Association). The alleged fraud occurred when JEDEC was trying to set an open standard for SDRAMs.

Infineon claimed that Rambus had patent applications on file in the early 1990s when it was participating in drafting the JEDEC standard. At the time, Rambus failed to disclose that it had any patents pending. (JEDEC's patent policy is essentially the same as IEEE's.) Rambus resigned from JEDEC in 1996, but it maintained communications with a JEDEC panel member whom Infineon identified as ''Secret Squirrel.'' Secret Squirrel allegedly sent e-mails tipping Rambus off about the content of the emerging SDRAM standard. Rambus used this information to alter its patent applications to cover the specific technology being embodied in the JEDEC standard. The patents issued at the end of the 1990s to cover technology embodied in the JEDEC standards for single-data-rate (SDR) and double-data-rate (DDR) SDRAMs.

Rambus then threatened the SDRAM industry with infringement suits. Samsung, Hitachi, Mitsubishi, Matsushita, and several other DRAM manufacturers folded under the threats, taking rather pricey (3.5 percent) licenses. But Infineon, Hyundai (now Hynix), and Micron refused to take any licenses, which caused Rambus to sue them, leading them to counter-charge misconduct based on the JEDEC episode.

In June 2002, the FTC weighed in by suing Rambus for engaging in unfair competition, in violation of section 5 of the FTC Act, which encompasses violations of section 2 of the Sherman Act as well as any unfair or deceptive conduct or practices. In 2006 the FTC held that a violation occurred. In February 2007, the FTC entered the final order discussed in this Micro Law column.

and money in inventing? Or should I just sit here and have another cup of coffee and then go smell the violets? Hmm. I hear that the FTC enters orders of zero-royalty mandatory licensing when they find out that somebody has lied to a standard-setting organization about having patents that cover a standard that the SSO has under consideration. Gee, if that's what they do, I am going to have another cup of coffee and then smell the violets.'' That is a nonsensical scenario. It is inconceivable that in any nonimaginary world the FTC's entering an order of zero-royalty mandatory licensing to remedy standard-setting skullduggery will decrease the rate of innovation. When you throw in, additionally, the fact that this case involved the Secret Squirrel Caper (see sidebar), the likelihood that fear of becoming involved in the same scenario will deter innovation is even more far-fetched.

Second, there is a principle of fraud law called the ''benefit of the bargain rule.'' Damages in fraud cases are supposed to give the defrauded party the benefit of what would have happened if the fraudulent representations had been lived up to or were true. In this case, the hypothesis is that Rambus defrauded the members of JEDEC who adopted the standard by falsely representing that use of the standard would not infringe any Rambus patents and thus require the members to pay Rambus any royalties for using the standard. That was a false representation, but under the benefit of the bargain rule, it would be treated as a true representation. That would imply zero-royalty licensing.

Notes

1. See these Micro Law columns: ''Secret Squirrel and More Alleged Standards Skullduggery,'' sidebar in ''IEEE Preventing Abuse of IEEE Standards Policy,'' *IEEE Micro*, vol. 21, no. 3, May/June 2001, p 11; ''More Standardization Skullduggery,'' *IEEE Micro*, vol. 21, no. 4, July/Aug. 2001, pp. 12-15, 69; ''Another Update on Standardization Skullduggery,'' *IEEE Micro*, vol. 21, no. 5, Sept./Oct. 2001, pp. 8-10; ''FTC Piles Onto Rambus' Standardization Skullduggery,'' *IEEE Micro*, vol. 22, no. 4, July/Aug. 2002, pp. 6-7, 86-76; ''Weird Turn of Events in Continuing Rambus Saga,'' *IEEE Micro*, vol. 23, no. 1, Jan./Feb. 2003, pp. 76-80; ''Unresolved Legal Questions About Patents and Standard Setting,'' *IEEE Micro*, vol. 23, no. 5, Sept./Oct. 2003, pp. 5, 72-74.

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