



RICHARD H. STERN

r.stern@computer.org

More standardization skullduggery

..... As a follow-up to the May/June Micro Law column on abuse of the standard-setting process, I now turn to Rambus' version of the previously summarized Secret Squirrel saga. A jury in Richmond, Virginia, found that with the aid of a secret informant (designated Secret Squirrel) inside the Joint Electronic Devices Engineering Council (JEDEC) standard-setting group, Rambus engaged in industrial-grade standardization skullduggery. The jury found that Rambus defrauded JEDEC and the dynamic RAM (DRAM) industry badly enough to warrant a verdict of \$3.5 million in punitive damages. The jury also awarded Infineon \$1 in compensatory damages. The court then reduced the \$3.5 million punitive damages verdict to

\$350,000 because under Virginia law punitive damages cannot exceed that amount.

Rambus has now filed papers explaining why it is not guilty of fraud and asking the court to overturn the verdict. Some of Rambus' arguments raise fundamental questions about the patent system's policies and the operative function of the law of fraud.

Background

Rambus sued Infineon for patent infringement because, along with Hyundai and Micron (also sued), Infineon had refused to go along with the rest of the DRAM industry in taking licenses under Rambus' patents at a rather pricey 3.5 percent royalty rate. The patents cov-

ered technology embodied in the JEDEC standards for single-data-rate (SDR) and double-data-rate (DDR) synchronous DRAMs (SDRAMs). Rambus had initially been a member of JEDEC and its SDRAM standard-setting group, but in 1996 withdrew from both because it did not want to comply with JEDEC's patent policy. The policy required participants in standard-setting groups to agree to royalty-free or reasonable-royalty licensing for their patented technology embodied in the standards that the group created. Afterward, Rambus continued to modify its patent applications to track the evolving JEDEC standard, with the aid of its secret informant inside the JEDEC group.

After JEDEC released its SDRAM standard embodying Rambus' patented technology, Rambus threatened the industry with patent infringement suits. Most manufacturers knuckled under, and Rambus sued the other three for patent infringement. The three companies defended their use of the technology, claiming that Rambus had tricked JEDEC and its members into approving a standard that was vulnerable to Rambus' pending patent applications.

Now let's turn to Rambus' version of what happened.

JEDEC knew or should have known that Rambus had patents

Rambus says that JEDEC's members knew or should have known that they were walking into a patent minefield. The



patent infringement defendants either were stupid or were just concocting a story about how Rambus deceived them. Either way, they shouldn't be entitled to complain of fraud.

For example, in September 1995, before it withdrew from JEDEC, Rambus handed JEDEC a letter stating, "Our 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." Furthermore, Rambus says, at that time, the JEDEC patent policy obliged members to disclose only their patents, not their patent applications. (Rambus' statement is actually incorrect. JEDEC had already added pending patent applications to its patent policy in October 1993, but Rambus complains that JEDEC did so without explicitly advising Rambus.) Anyway, Rambus had no SDRAM patents in 1995; they did not issue until 1999.

In June 1996, Rambus sent JEDEC a letter announcing its withdrawal. The letter added that Rambus would continue to license its proprietary technology on terms consistent with its business plan, "and those terms may not be consistent with the terms set by standards bodies, including JEDEC." Moreover, Rambus told JEDEC, "Rambus reserves all rights regarding its intellectual property." According to Rambus, "this letter placed every JEDEC member on notice that Rambus had, or was in the process of obtaining, patents that covered products built to the JEDEC standard."

Rambus had no duty to warn JEDEC

Infineon must prove that Rambus had a duty to disclose its patent applications to JEDEC. Existence of that duty and its violation are essential elements in finding fraud. But, according to Rambus, there is no such duty, either in general or in this case. The facts in this case are complicated by the existence of two JEDEC SDRAM standards—one for SDR and one for DDR SDRAMs. JEDEC published the final SDR

.....

Infineon must prove that Rambus had a duty to disclose its patent applications to JEDEC.

.....

standard in March 1993 and the final DDR standard in June 2000. Rambus quit JEDEC in June 1996, between the two publication dates. I will try to keep the description of the facts simple, but the court papers do not always make clear when Rambus did what, and whether the SDR or the DDR standard was the one involved. Now, why does Rambus say it had no duty to disclose its pending patents?

First, Rambus maintains it had no such duty, because it quit JEDEC well before JEDEC published the final DDR SDRAM standard in June 2000. Because Infineon did not begin designing SDRAMs conforming to the proposed standard until 1998, Rambus argues that what it did with patents after it quit JEDEC in 1996 had no effect on what Infineon did. When Rambus quit in 1996, DDR standard setting was still at the concept stage. Infineon argued that it was immaterial that Rambus quit then, because the concepts shaped the ultimate DDR standard. Rambus says that Infineon's argument is just a desperate effort to "avoid the evidentiary death knell" that the fact of Rambus' 1996 exit from JEDEC creates for Infineon's case.

If this rejoinder is implausible (and also because it does not cover SDR SDRAMs), Rambus has a fallback argument: Accepting Infineon's theory would stifle standard setting and discourage participation in standard-setting organizations. Fear of being held fraudulent because a jury might second-guess a failure to disclose pending patent applications would intimidate technology companies and make them stay away from the standard-setting process.

Furthermore, Rambus maintains that

the evidence clearly shows that it did not intend to deceive JEDEC. Intent to deceive is an essential element of a fraud case. Rambus says it was completely candid about its intention to maintain its intellectual property rights, and no reasonable jury could have believed otherwise. When a judge finds that a jury has reached a conclusion based on unreasonable beliefs, then as a matter of law the judge must set the verdict aside.

Finally, Rambus argues, there simply is no duty to disclose patent applications, ever. Rambus was entitled to keep them as trade secrets unless and until patents issued. Even the patent office was under a statutory duty not to reveal Rambus' pending patent applications to third parties. Hence, Rambus had no duty to disclose the pending patent applications to JEDEC. It is left as an exercise for the reader to puzzle that one out.

No patent claims existed when Rambus belonged to JEDEC

Rambus filed the applications for the particular patents on which it sued Infineon from six to 18 months after Rambus quit JEDEC, and the patents issued years later. Therefore, no patent claims covering the JEDEC standard existed while Rambus was a JEDEC member. By the same token, while still a JEDEC member, Rambus could not possibly have disclosed to JEDEC that it had pending claims covering the standard, since at the time it didn't. Once Rambus quit JEDEC, as a nonmember it shouldn't have any duty to disclose anything to JEDEC. One way or the other, why should Rambus be obliged to tell JEDEC about patent claims that came into existence only after Rambus quit JEDEC?

According to Rambus, the evidence at trial does not prove otherwise. All it shows is a series of e-mail messages between Rambus officials, saying that they *thought* they could draft patent claims that would cover the eventual JEDEC standard. (Of course, there was also the evidence about Secret Squirrel, which Rambus never mentioned in its brief supporting its motion to set aside the jury verdict. Moreover, the officials must have *done* what they thought

.....

**Rambus' argument
about the patents'
and claims' earlier
nonexistence is just
semantic fancy
footwork.**

.....

they could do; otherwise, why was Rambus suing the standards users for patent infringement?) There is a flaw in the argument about nonexistence of patents and patent claims while Rambus belonged to JEDEC. Rambus' relevant patent applications appear to be so-called continuations, continuations-in-part, or divisionals of ancestral ("parent") patent applications that Rambus had filed much earlier. The patent claims on which Rambus sued Infineon were based on the technical disclosures contained in the earlier, parent applications. (An applicant files a *continuation* or *continuation-in-part* application to explore some additional variations on what the applicant tried to accomplish in an earlier, parent patent application. A *divisional* is part of an application that the patent office arbitrarily makes an applicant pursue separately because the office considers processing it along with the parent application to be too much work.)

So what did not exist during the period of Rambus' JEDEC membership were the particular patent claims on which Rambus sued its rivals. They were added later to cover the delay-lock loop (DLL) aspect of the SDRAM standard. The Secret Squirrel e-mail messages mainly concerned the DLL technology. Rambus modified its pending patent applications to include claims to DLL technology only after it quit JEDEC.

But the basis for those claims had already existed, far earlier, in parent applications pending when Rambus was a JEDEC member. And the point of the Secret Squirrel correspondence was to

help Rambus shape and mold the later patent applications (divisionals and so on) to give Rambus patent coverage over the DDR SDRAM standard that was still evolving after Rambus quit JEDEC. In short, Rambus' argument about the patents' and claims' earlier nonexistence is just semantic fancy footwork.

Did Rambus have a duty to speak out?

This gets us very close to the meat of the coconut. The gist of Rambus' legal argument is that

- as a nonmember of JEDEC, it had no duty to tell JEDEC about its efforts to shape and mold pending patent applications to cover the evolving JEDEC standard; and
- Federal Circuit precedent legally entitled Rambus to amend its pending patent applications to cover rivals' products, as long as the original patent application described the technology on which the new claims were based.

As abstract principles applied to most patent cases, these positions find substantial legal support. But applying them in the factual context of this particular case raises some difficult questions.

The societal purpose and function of the law of fraud and misrepresentation, on which the jury based its \$3.5 million verdict, is to address the use of disparate access to information in business transactions. This law applies to transactions in which possession of the information would influence how parties carry out their business. Typically, the defrauder gives the defrauded party a misimpression about facts, causing the latter to act or refrain from acting, in detrimental reliance on the supposed facts. At one level, the law of fraud satisfies our moral sensibilities: Rascals should not profit by deceiving innocent dupes.

At another level, the law of fraud helps legitimate the socioeconomic system. First, it makes the obvious disparities in allocation of economic rewards seem less

based on institutionalized violence and abuse of power. (It opposes Proudhon's suggestion in his slogan, *Qu'est-ce que la propriété? C'est le vol!*, ["property is theft" or "property is robbery"]). The theory of social contract, as developed from the insights of Thomas Hobbes, is that government in general—and property law and contract law in particular—rescue us from the state of nature, which according to Hobbes is the war of all against all (random, noninstitutionalized violence and theft.) That natural state, if left unmediated, would leave us to nasty, brutish, and short lives. It would be Attila the Hun on all sides.

Second, the law of fraud provides a legitimating supplement to the law of contracts, an important element in the System. Social and economic bargains are essential to the functioning of the System. Without bargains there would be no commerce. However, one kind of defect in a system based on social bargains is that some people when bargaining will take unfair advantage of their superior access to certain kinds of information. Their unfairness might make many others unwilling to keep bargains, because they perceive that bargains are too one-sided and thus illegitimate. The unwillingness of the many to keep bargains would destabilize the System. The law of fraud provides redress against, and therefore inhibits, antisocial abuse of superior access to information.

The law of fraud thus plays an important mediating role. It helps to maintain allegiance to, and thus stability of, the socioeconomic system. The law of fraud has evolved and differentiated. In the 19th century, the principle of caveat emptor—let the buyer beware—reigned. (That is the rule that, in substance, Rambus argues here.) By the 1970s caveat emptor was shot full of exceptions, reflecting growing social uneasiness about unequal access to information and exploitation of that inequality, primarily in the context of consumers versus big business, but in business versus business contexts as well.

Much of this body of law addresses when someone has a duty to disclose

information to another person, as in the case of a seller and a buyer. When is silence permissible? When does failure to speak out amount to a representation that the unspoken-of matter is not so? When is it all right to quietly take advantage of information not generally known (say, in insider trading), to gain a business or economic advantage over those who do not know the information?

So, did Rambus have any duty to disclose how it was prosecuting its patent applications, once it quit JEDEC? Was Rambus like a used car salesman who failed to inform you that he turned back the odometer? Was Rambus like you trading in your used car and failing to tell the dealer that your transmission has been acting up from time to time for the last few weeks? Should we believe Rambus when it looks us straight in the eye and says, "I am not a crook!"?

Did it make any difference that Rambus had a mole (Secret Squirrel) inside JEDEC that, unknown to JEDEC, was leaking information to Rambus about the evolving standard? Was Rambus entitled to use that information to ensnare the SDRAM manufacturers in a net of patents? Did Rambus fulfill whatever disclosure duty it had by clearly telling the engineers on the JEDEC standard-setting committee such things as:

Our 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.... Rambus will continue to license its proprietary technology per its business plan and those terms may not be consistent with the terms set by standards bodies, including JEDEC.... Further, Rambus reserves all rights regarding its intellectual property.

Rambus said that this body of disclosure "placed every JEDEC member on notice that Rambus had, or was in the process of obtaining, patents that covered

Other developments—business fraud or antitrust?

A similar controversy has recently surfaced involving Sun Microsystems (owner of patents covering part of another JEDEC standard) and Kingston Technologies (a memory-module manufacturer). Sun participated in a JEDEC panel that drafted an interface standard for a 64-bit memory bus and dual inline memory modules (DIMMs). Sun did not disclose that it had patents or pending patent applications in the field. After Sun sued Kingston for patent infringement, Kingston counterclaimed for antitrust violation on the same theory as Infineon's counterclaims against Rambus.

Sun and Kingston have now settled: Sun dropped its patent infringement suit and its demands for royalties on the 64-bit memory-module interface. At the same time, Sun also waived Kingston's royalties on unrelated Sun patents covering interfaces for Sparcstation workstations and servers. This concession was presumably aimed to stop the antitrust case. However, before the settlement, Kingston had complained to the US Federal Trade Commission, which started an ongoing investigation of Sun.

Other memory product manufacturers say the FTC has questioned them about whether it should implement a trade regulation rule against concealing patent information from standard-setting bodies or publish advisory guidelines to this effect. According to the manufacturers, the FTC is dissatisfied with having to undertake repeated, case-by-case investigations of this apparently widespread practice. The agency may therefore promulgate a rule requiring, or guidelines urging, that standard-setting participants disclose their relevant pending patent applications or anticipated patent rights to the group. (That procedure is already part of the patent policy of many standards development organizations.)

Violation of the FTC rule, if it issued, would create a presumption of violation of section 5 of the Federal Trade Commission Act, which outlaws unfair methods of competition and unfair or deceptive acts or practices. Antitrust violations are included under the umbrella of section 5, but so are oppressive or unscrupulous (unfair) and fraudulent business practices. Most states have so-called Little FTC Acts with comparable provisions.

In many ways, section 5 is administratively more apt for handling abuse of the standard-setting process than are antitrust laws. For one thing, elaborate inquiry into relevant-market facts is unnecessary under section 5. In addition, perhaps the values that the laws against business fraud and misrepresentation recognize and the societal purposes that they accomplish are more congruent to standard setting as an institutional process than are those of the antitrust laws.

In the Rambus case, the court threw out the antitrust charges by Infineon, on relevant market grounds, but left in the fraud charges. That court action illustrates how federal and state laws governing unfair methods of competition and fraudulent business practices may more readily fit such situations than may the antitrust laws.

products built to the JEDEC standard." Apparently, the jury did not agree.

Was it all right to reshape the patent applications?

On Rambus' second main legal point, the Federal Circuit said in the 1988 *Kingsdown* case that "it is not improper to amend or add patent claims intended to cover a competitor's product about which

the patent applicant has learned" while the patent application was pending. Thus far, the Federal Circuit's only stated limitation on the rule is that the original patent application must contain a technology disclosure that provides a basis for the new claims, so that if the new claims had been present originally the patent office would have granted a patent on them.

continued on p. 69

Rambus asked the trial judge to give the jury an instruction based on *Kingsdown*. The judge said he would do so, but only with an added statement saying that the newly added claims cannot be based on wrongfully obtained information. Rambus did not like that addition and preferred no instruction on *Kingsdown* to that one, so none was given. Rambus said that the judge's addition would make the instruction "incorrect and confusing to the jury." Rambus now asserts that it was legal error for the trial judge to refuse to give an instruction, as Rambus requested it, without the judge's addition.

The Federal Circuit based the *Kingsdown* rule on the normal situation where the patent applicant learns of the competitive product from the trade press or other public source. The rule presumably does not contemplate unusual information-gathering expedients, such as industrial espionage. Even in a "normal" situation, however, observers have criticized the rule. Patents with late-added claims are often called "submarine" patents and their exploitation is termed "patent ambush." Often they cover devices that someone else has invented and brought to market—someone else who is then torpedoed by the submariner. The late Jerome Lemelson was widely considered the grand master of submarine patents, mulcting industry for hundreds of millions of dollars with them. Many, such as Lemelson's unwilling licensees, believe that the Federal Circuit's rule allowing late modification of claims to cover competitors' new products is counterproductive.

The problem with *Kingsdown* is that it may tilt the legal balance too much in favor of patent owners. Anyone developing a new product inevitably runs the risk that a pending patent will later issue and by coincidence cover the new development. The US bases its patent system on the concept of no-fault liability, meaning that an infringer is liable for making an infring-

ing product regardless of whether intentional copying occurred. This rule makes for greater business certainty and greater security for investments in patented technology. Therefore, as a trade-off, subjecting market innovators randomly to risks from pending patents is socially desirable. It encourages inventors to use the patent system, thereby disclosing their innovations to the public; it thus promotes technological progress. This rule of patent law also fosters investment in patented technology because it makes return on such investment more predictable.

When this no-fault liability is a random process (tough luck, not skullduggery), maybe the trade-off is sound and the risk of an unlucky coincidence is acceptable. But *Kingsdown* lets owners of pending patent applications change their claims nonrandomly after they find out that a competitor has developed a new product (in effect, after they have seen the other player's cards). They can bring a competitor's new product within the patent by stretching the patent wider to cover the new product. That may well go too far. *Kingsdown* gives an added increment of encouragement of investment in invention ("inventive incentive") but at the cost of an adverse, disincentive effect on those who actually create new products and create a market for them. Is there a net social and economic gain or loss?

The US is now implementing one way to address this problem. Congress passed a law requiring publication of pending patent applications 18 months after filing, as already occurs in Europe and Japan. This would tell everyone what's in the pipeline. Another option (not yet adopted anywhere) would be to place a time limit on how late during the pendency of patent applications applicants can expand the claims—say, only up to two years after filing the patent application.

Anyway, that's the normal trade-off situation under *Kingsdown*, where information about competitors is public. Rambus wants to throw improperly acquired information into the balance pan on the patent applicant's side as well. That perhaps makes too much of an already over-

extended concept. Rambus also puts the policy of inventive incentive on a collision path with the law of fraud and misrepresentation, which regulates business dealings involving exploitation of disparity in information.

When Rambus tailors its patent claims to cover JEDEC's standard, thanks to tip-offs from Secret Squirrel, it carries a good joke too far. It's not funny any more.

Another issue—causation

The unstated factual premise of Infineon's argument against Rambus must be that JEDEC would not have embodied the same technology (Rambus') into the SDRAM standards 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, maybe an alternative to using DLL. It would have selected a 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 explicitly addressing the facts on this point. No doubt, the foregoing, unstated factual premise is why Rambus is arguing so strenuously that its convoluted lawyer-speak statements to JEDEC insulated Rambus from fraud liability. Rambus thus argues that it put JEDEC members on full and fair notice of the patent problem, preventing the existence of any alleged disparity in information. Perhaps, it is fair to conclude that the jury implicitly accepted this premise.

Suppose, therefore, that we accept as valid and believe Infineon's factual premise. It then comes down to whether the law of fraud and misrepresentation trumps the patent law's *Kingsdown* policy. The Federal Circuit will probably have the last say on that.