RECENT FEDERAL CIRCUIT DECISION IN *RAMBUS V. INFINEON* IMPACTS PARTICIPATION IN TECHNICAL STANDARDS DEVELOPMENT ORGANIZATIONS

On January 29, 2003, the Federal Circuit overturned the Virginia district court ruling in *Rambus v. Infineon*,[1] vacating the grant of judgment as a matter of law ("JMOL") for Infineon that there was no infringement of Rambus patents, and concluding further that the evidence adduced did not support a jury finding that Rambus had committed fraud in its participation in the JEDEC standard-setting body. The Federal Circuit remanded to the district court to decide: 1) whether Infineon had infringed the Rambus patents under the Federal Circuit's claim construction; and 2) whether and to whom to grant attorney fees.

This is a significant decision on several levels. Most notably, the decision highlights the need for standards development organizations ("SDOs") to establish clear written patent policies that explain in unambiguous terms what, how, when, and to whom members are expected to disclose patent information.

I. Background

Rambus develops and patents memory technologies used in semiconductor memory devices (*e.g.,* computer memory). Rambus does not manufacture any memory devices itself, but relies instead on licensing its patent portfolio for revenue. Patent applications on Rambus technology go back to April 1990, when Rambus filed its first patent application, U.S. Patent Application Serial No. 07/510,898 (the "'898 Application"), with claims directed to a computer memory technology known as dynamic random access memory ("DRAM"). In the course of prosecuting the '898 Application (since abandoned) over the next several years, Rambus filed numerous divisional and continuation applications -- at least thirty-one of which have issued. Many of these patents claimed aspects of a memory technology known as Rambus DRAM ("RDRAM"). Rambus also filed an international PCT patent application under the Patent Cooperation Treaty (the "WIPO Application") in April 1991, claiming priority to the '898 Application.

In February 1992, Rambus officially joined the Joint Electron Devices Engineering Council ("JEDEC"), an SDO associated with the Electronic Industries Association ("EIA") that develops standards for semiconductor technologies, including standards for RAM. At least by 1993, JEDEC required members to disclose patents and patent applications that "related to" JEDEC's standard-setting work. Further, if patented technology was included in a standard, members were required to license their patents on reasonable and non-discriminatory ("RAND") terms.

---

[1] *Rambus, Inc. v. Infineon Technologies AG*, Docket Nos. 01-1449, -1583, -1604, -1641, 02-1174, -1192, 2003 U.S. App. LEXIS 1421 (Fed. Cir. January 29, 2003).

Rambus disclosed to a JEDEC committee its first-issued RDRAM patent, U.S. Patent No. 5,243,703 (the "'703 Patent"), a divisional of the '898 Application, shortly after it issued, in September 1993. As a divisional, the written description of the '703 Patent was substantially identical to that of the '898 Application. In fact, the only substantial difference among any of the Rambus patents based on the '898 Application was the part of the specific technology claimed as the invention. Around the same time, another JEDEC member also disclosed Rambus's WIPO application to the organization.

Rambus withdrew from JEDEC in June 1996. After leaving JEDEC, Rambus continued to file more divisional and continuation patent applications based on the '898 Application.

During the time Rambus was a member, JEDEC adopted a standard for synchronous dynamic random access memory ("SDRAM"). JEDEC adopted and published its SDRAM standard in early 1993, before disclosure by Rambus of the '703 Patent.

In December 1996, after Rambus withdrew, JEDEC began work on a standard for double data rate-SDRAM (DDR-SDRAM), the successor to SDRAM technology. JEDEC adopted and published the DDR-SDRAM standard in 2000.

In late 2000, Rambus sued Germany's Infineon Technologies AG, a manufacturer of semiconductor memory devices (including SDRAM and DDR-SDRAM) and a member of JEDEC, for infringing patents allegedly covering basic DRAM technology. Infineon counterclaimed that Rambus committed fraud by seeking to patent the technology being standardized at JEDEC while participating as a member and not disclosing its patents to JEDEC, so that it could later bring the infringement suits against implementers of the standard.

II. <u>District Court Decision</u>

The district court found in Infineon's favor on nearly all counts, holding that Infineon did not infringe the Rambus patents, and that Rambus had committed fraud during the SDRAM (but not the DDR-SDRAM) standardization process. Rambus was ordered to pay $3.5 million in punitive damages (later reduced to $350,000) and attorney fees.[2] That decision was cross-appealed to the Federal Circuit. In the meantime, two declaratory judgment actions, which had been initiated against Rambus by Hyundai Electronics Industries (now "Hynix Semiconductor") in California and Micron in Delaware (on grounds similar to Infineon's counterclaims, and in which Rambus counterclaimed for patent infringement), had also been stayed pending the Federal Circuit's decision on this appeal.

The district court's decision relied on the fact that Rambus violated the JEDEC patent disclosure policy, rather than articulating an independent duty to disclose. The district court found that Rambus had, while still a JEDEC member, steered pending divisional and continuation patent applications to track the developing JEDEC SDRAM standard while failing to disclose its

[2] *Rambus, Inc. v. Infineon Technologies AG*, 164 F. Supp. 2d 743 (E.D. Va. 2001).

relevant patent applications, in violation of JEDEC's patent policy. The court also found that Rambus had made affirmatively misleading statements designed to persuade JEDEC members that it had no relevant patent applications, when in fact it did.

III. Federal Circuit Decision

On appeal, the Federal Circuit ruled that the lower court erred in its interpretation of the Rambus patent claims. Specifically, it disagreed with the construction of certain critical terms in the patents. As a result, it vacated the grant of JMOL of noninfringement and remanded for the district court to reconsider infringement in light of its revised claim construction.

Additionally -- and importantly for all SDOs and their members -- the court found that substantial evidence did not support the jury finding that Rambus breached the relevant patent disclosure duty during its participation in the JEDEC standards committee, and vacated the fraud holding.

A. Rambus Had a Duty to Disclose

The Federal Circuit found that the written JEDEC patent policy was extremely vague and did not *expressly* require members to disclose patent information.[3] Nonetheless, because the JEDEC members testified that they treated the ambiguous language in the written policy as imposing a disclosure duty, the court found, as a matter of fact, that such a duty existed, and therefore that Rambus had a duty to disclose patent information while it was a member.[4]

Importantly, the court analyzed the issue of whether a disclosure duty existed as a question of *fact* for the jury to decide because: 1) this is how the district court had analyzed it; and 2) neither party challenged this analysis on appeal. However, the court also noted that the law in related areas "strongly suggests that this issue may well be a legal question with factual underpinnings [for the court to decide]."[5] It is unclear whether the Federal Circuit would have found a disclosure duty had the court instead analyzed the issue as a legal question.

B. The Scope of the Rambus Duty to Disclose

In analyzing the scope of Rambus's duty to disclose, the Federal Circuit initially focused on the language of the JEDEC patent policy that encouraged disclosure of information "covered by"

---

[3] In fact, the court strongly criticized JEDEC for failing to set forth clear policies, stating that there was a "staggering lack of defining details" in the JEDEC patent policy, and that a policy that does not define clearly "what, when, how, and to whom the members must disclose does not provide a firm basis for the disclosure duty necessary for a fraud verdict." *Rambus, Inc. v. Infineon Technologies AG*, 2003 U.S. App. LEXIS 1421, *55. The court added, "[j]ust as lack of compliance with a well-defined patent policy would chill participation in open standard-setting bodies, after-the-fact morphing of a vague, loosely defined policy to capture actions not within the actual scope of that policy likewise would chill participation in open standard-setting bodies." *Id*. at *56.

[4] *Id*. at *43.

[5] *Id*. at *12.

patents or pending patents. The court concluded that this language indicated that JEDEC identified the duty to disclose "based on the scope of claimed inventions that would cover any standard and cause those who use the standard to infringe."[6]

The Federal Circuit then turned to the well-established understanding of JEDEC members that disclosure was required for patents and patent applications "related to" the standardization work of a JEDEC committee. Based largely on JEDEC members' testimony, the court found that whether a patent or application is "related to" the standard depends on the actual patent *claims* of the patent or application, rather than on the *description* of the patent or application.

Combining these two lines of analysis -- on the "covered by" language of the written policy and on the JEDEC group's understanding of patents and applications "related to" a JEDEC standard -- the Federal Circuit concluded that a JEDEC member was required to disclose a patent or application only when a *claim* of such patent or application "reasonably might be necessary to practice a standard." The court stated that this would not require a formal infringement analysis. Rather, "the duty operates when a reasonable competitor would not expect to practice the standard without a license under the undisclosed claims. Stated another way, there must be some reasonable expectation that a license is needed to implement the standard."[7]

The Federal Circuit also concluded, however, that the disclosure duty did *not* arise for a claim that recited individual limitations directed to a feature of the JEDEC standard as long as that claim also included limitations not needed to practice the standard. This was so because "such a claim could not reasonably be read to cover the standard or require a license to practice the standard."[8] "To hold otherwise," the court stated, "would contradict the record evidence and 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 [such as improvement patents, implementation patents, and patents directed to the testing of standard-compliant devices]. The record contains . . . evidence suggesting that the JEDEC members did not perceive the disclosure duty to include obligations of that breadth."[9]

Finally, the Federal Circuit concluded that the record failed to show that the JEDEC patent policy applied the above disclosure obligation to a participating member's future plans or

---

[6] *Id*. at *44.

[7] By contrast, the dissent, citing a JEDEC manual, interpreted the duty of disclosure mandated by the patent policy as requiring disclosure not only of "essential patent claims" (as the majority had found), but also of patents and pending applications that "might be involved in the work of the committee" during the development of the standard. It argued that "[t]he majority's comparison of pending claims to the final standard does not take into account the possibility that, during the course of its work, the committee considers, debates, rejects and amends various proposals as the standard evolves." *Id.* at *79.

[8] A patent claim is not infringed unless a product or method includes all of the limitations recited, and the standard could necessarily be practiced without using the unnecessary limitations.

[9] *Rambus, Inc. v. Infineon Technologies AG*, 2003 U.S. App. LEXIS at *52.

intentions. Therefore, while disclosure was required for "certain patents or pending patents," it was not required for "a member's intentions to file or amend patent applications."[10]

C. When Rambus's Duty to Disclose Arose

The Federal Circuit found that the JEDEC written patent policy did not state *when* a committee member's duty to disclose arose. Based on its review of the testimony, however, the court held that "[t]he most a reasonable jury could conclude is that the disclosure duty is triggered when work formally begins on a proposed standard." Moreover, the court held that the disclosure inquiry was not only *claim*-specific (as noted above), but also *standard*-specific (*i.e.*, the disclosure duty applicable to one standard is not triggered by discussion of proposals aimed at a different standard).[11]

D. No Breach of Rambus's Duty to Disclose

Despite the fact that Rambus had a duty to disclose "reasonably necessary" patent claims, the Federal Circuit held that the evidence did not support a finding that any of the issued or pending Rambus patent claims fell within this disclosure duty because: 1) in the case of the SDRAM standard, no Rambus patent claim would be necessary to practice the standard; and 2) in the case of the DDR-SDRAM standard, Rambus had withdrawn from JEDEC before formal consideration of the standard had begun.

Two key factors led to these conclusions. First, the Federal Circuit majority found that Infineon, not Rambus, had the burden of proof that there were reasonably necessary claims, namely Infineon had to "present clear and convincing evidence that there is a reasonable expectation that the standard cannot be practiced without a license under the undisclosed claims," and Infineon had not met its burden.[12] Second, the court held that the duty to disclose at issue was based on an "objective standard" (*i.e.*, whether in fact a patent claim "reasonably might be necessary to practice a standard"), and thus Rambus's personal and subjective beliefs about whether its patent claims would likely be infringed by the SDRAM standard *were irrelevant* to its duty to disclose.[13]

Under this objective standard, the court found the following to be particularly relevant: 1) Rambus's statements in its briefs that Rambus "did not have a single undisclosed patent claim,

---

[10] *Id.* at *54-55.

[11] *Id.* at *54.

[12] By contrast, the dissent argued that Rambus bore the burden of showing that it "did not actually have any pending patent claims that read on the standard" as a defense to rebut Infineon's fraud case. To this the majority responded: "[w]hether Rambus had claims that reasonably might read on the standard, however, goes to the question of whether Rambus breached its disclosure duty. It is not a defense for Rambus to prove, but an element of Infineon's fraud case." *Id.* at *63.

[13] Specifically, the court stated: "The JEDEC policy, though vague, does not create a duty premised on subjective beliefs. . . . A member's subjective belief that it had pending claims covering the standard does not substitute for the proof required by the objective patent policy." *Id.* at *61-62.

issued or pending, that any JEDEC member would have been required to license (even arguably) to practice the JEDEC standards at issue;" and 2) the majority's independent assessment that substantial evidence did not exist to support a finding that the Rambus patent applications at issue had claims that "read on" the SDRAM standard or that "reasonably would be needed to practice the SDRAM standard."[14] "Rambus's actions might constitute fraud under a different patent policy," the court noted; "however, they do not constitute fraud under this policy."[15]

The court reversed the $2.4 million fraud verdict against Rambus and vacated the award of $7 million in attorneys' fees to Infineon.

IV. Key Implications of the Federal Circuit Decision

At bottom, this decision highlights the critical importance for SDOs to establish clear IP policies that provide guidance on what, when, how and to whom participants must disclose patent information, and for participating members to understand their obligations under such policies. As the differences between the District court and the Federal Circuit's decisions in *Rambus* illustrate (as does the difference between the majority and dissenting opinions within the Federal Circuit's decision), an unclear use of key words in an organization's IP policy can make all the difference between millions of dollars in liability as a result of a successful fraud claim, on the one hand, and, on the other hand, no liability at all because no clear duty to disclose arose under the policy.

More broadly, the Federal Circuit's decision provides hints on how to interpret the meaning of phrases like "patents relating to," "patents that read on," "patents that cover" and the like, with which SDOs are constantly grappling in their attempts to develop or clarify IP policies. For example, the Federal Circuit appears to equate the phrase "patent claims that cover a standard" with the phrase "patent claims that read on a standard." It also uses the terms "implement a standard" and "practice a standard" practically synonymously.

Finally, perhaps the most contentious aspect of the decision is the Federal Circuit's finding that the disclosure duty established in JEDEC was based on an *objective standard* under which Rambus's and other members' personal and subjective beliefs were irrelevant. It is not clear that the court is entirely consistent on this point. On the one hand, the court states that disclosure is required for patent claims that "reasonably might be necessary to practice a standard." On the other hand, it is difficult to see how Rambus's belief, held while it was a member of JEDEC, that its patent claims were likely necessary to practice the SDRAM standard could be deemed completely "irrelevant" to the question of whether these patent claims had to be disclosed to JEDEC. The dissent criticized this key aspect of the majority's decision,[16] and concluded that:

---

[14] *Id.* at *60.

[15] *Id.* at *62.

[16] *See id.* at *97, n.16 ("Rambus's statements [contained in e-mail messages and other discovered internal company documents] that it believed it had pending claims covering the SDRAM standard is evidence that Rambus did in fact have claims covering the SDRAM standard").

> the majority's restatement of the JEDEC policy might prove impossibly complex. The majority's application of its rule arguably requires a *Markman* claim construction, application of the doctrine of equivalents, a *Festo* analysis, and perhaps even a *Johnson & Johnston* analysis before anyone can say for sure whether a claim reads on a standard. As a result, an action for fraud will become more a federal patent case than a case arising under state law.[17]

In defense of its position, the majority points out an opposite (and not insignificant) problem that could arise if a *subjective belief* standard were deemed to apply: "[T]he standard would exempt a member from disclosure if it truly, but unreasonably, believes its claims do not cover the standard."[18]

Whether one agrees with the Federal Circuit majority or the dissent on this critical point, one conclusion is clear: this aspect of the court's decision requires that SDOs make absolutely clear whether they intend for their patent policies to establish a purely *objective* standard for assessing if and when a disclosure obligation arises, or whether a member's actual *personal and subjective beliefs* about its patents or applications are also relevant to this assessment.

* * * * * * * * * * * *

If you have questions regarding the *Rambus* decision or desire our assistance in participating in any technical standards development organizations, please contact Frank Buono (202-303-1104 fbuono@willkie.com) in our D.C. office, or Philip A. Gilman (212-728-8779 pgilman@willkie.com) or Natasha Snitkovsky (212-728-8180 nsnitkovsky@willkie.com) in our New York office.

Willkie Farr & Gallagher is headquartered at 787 Seventh Avenue, New York, NY 10019. Our telephone number is 212-728-8000 and our facsimile number is 212-728-8111. Our Web site is located at <www.willkie.com>.

February 28, 2003

Copyright © 2003 by Willkie Farr & Gallagher.

All Rights Reserved. This memorandum may not be reproduced or disseminated in any form without the express permission of Willkie Farr & Gallagher. This memorandum is provided for news and information purposes only and does not constitute legal advice or an invitation to an attorney-client relationship. While every effort has been made to ensure the accuracy of the information contained herein, Willkie Farr & Gallagher does not guarantee such accuracy and cannot be held liable for any errors in or any reliance upon this information.

---

[17] *Id.* at *102.

[18] *Id.* at *62.