



August 15, 2014

E-mailed to: d.ringle@ieee.org

Institute of Electrical and Electronics Engineers Standards Association 445 Hoes Lane Piscataway, NJ 08854-4141 Attention: David Ringle, Director, IEEE-SA Governance

Subject: Proposed Clarifications to IEEE By-Laws

Dear Mr. Ringle,

Marvell is a leading developer of semiconductors used in computing and networking. Our technology implements a number of IEEE standards, including 802.11 and 802.3. Our customers include leading developers of networking devices and wireless enabled consumer electronics products.

Unfortunately, our company and our customers have regularly become involved in disputes involving the licensing of patents that are claimed to be required to implement IEEE standards. We are aware of the IEEE Standards Association's discussion of clarifications to the provisions of the IEEE By-Laws and the form Letter of Assurance concerning the use of patented inventions in IEEE standards. We support changes to the policy along the following lines:

> 1. Require that signatories to the Letter of Assurance agree to waive their ability to seek injunctions and other exclusion orders for any Standards Essential Patent ("SEP"), except in the limited circumstance where the user or implementer of the standard refuses to participate in a judicial process or arbitration to determine RAND licensing terms. In our view, the rationale underlying the RAND requirement (e.g., incentivizing members of the industry to adopt and promote the standard, based on the assurance that reasonable licenses will be available) is thwarted if owners of SEPs retain the unrestricted and unilateral ability to enjoin standards-compliant products from being sold or imported.



- 2. Clarify that RAND licensing terms must be based on the actual value of the SEP to the smallest component that implements the essential technological aspects of the standard (e.g., often a computer chip rather than the larger end-user device that incorporates the chip), and also that any royalty demand must account for the value of any particular patent relative to the hundreds or thousands of other patents that are also essential to the standard. We and our customers have received grossly excessive licensing demands from patent assertion entities who have acquired patents that they claim are infringed by implementing IEEE standards. The proposed revisions would help us and our customers successfully resolve licensing negotiations by clarifying what RAND means.
- 3. Clarify that the "non-discriminatory" aspect of RAND mandates that RAND licensing terms must be made available to any requesting party, regardless of whether that party is a chipset vendor or a downstream system manufacturer. Some owners of purportedly standard-essential patents refuse to participate in licensing discussions with component suppliers like Marvell, preferring to assert patents against device vendors or against their customers, in an effort to recover larger royalties.
- 4. Require that RAND commitments follow patent transfers. Abusive SEP owners are often not the inventors of the standardized technology. Rather, they merely bought the patents from another company—usually one that followed the IEEE-SA's rules. Once the alleged SEPs are in the hands of a patent assertion entity, that entity may claim it has no obligation to license the patents on RAND terms because it did not personally make a commitment to the standards-setting organization. The clarified rules need to make clear that the RAND commitments stay with a SEP regardless of how many times the SEP is transferred or who owns it. This clarification would also prevent fraudulent transfers between corporate affiliates or successors for the purpose of attempting to avoid or circumvent the original patent owner's RAND commitments.

Thank you for your attention to these very important issues. Please feel free to share this letter with the members of the Standards Board.

Very truly yours,

Zining Wu

Chief Technology Officer Marvell Semiconductor, Inc.