

IEEE's Efforts to Placate its Adversaries By Making Minor Changes to Its Patent Policy Will Create Unnecessary Risk and Uncertainty for Its Core Constituents

By Emily Luken & James Tierney



IEEE's Efforts to Placate its Adversaries By Making Minor Changes to Its Patent Policy Will Create Unnecessary Risk and Uncertainty for Its Core Constituents

By Emily Luken & James Tierney¹

The Institute of Electrical and Electronics Engineers' ("IEEE") recent updates to its Patent Policy for standards development, while substantively modest, have injected unnecessary uncertainty into the Policy that is ripe for potential abuse. The updates went into effect on January 1, 2023 and mark a departure from the 2015-2022 Patent Policy that was responsible for successful standards development. As a matter of substance, the updates are relatively minor. As before, the Patent Policy prohibits licensors from seeking injunctions under most circumstances, requires component-level licensing, and recognizes that the smallest saleable patent practicing unit is an appropriate royalty base. But the modifications add unneeded uncertainty to the Patent Policy's injunction and reasonable rate provisions, thereby fostering exactly the sort of opportunities for abuse that the IEEE rightly sought to prevent with its 2015 Policy text updates.

The 2015-2022 Patent Policy enjoyed broad support from the vast majority of IEEE stakeholders and contributors. None of the 2023 updates were necessary. Nevertheless, a small minority of aggressive and vocal holders of standards-essential patents ("SEPs") criticized the 2015-2022 Patent Policy, prioritizing the maximization of their short-term licensing revenues over sustainable technical standards development. IEEE responded to these criticisms by seeking to walk a middle path, retaining most of the substance of the 2015-2022 Patent Policy while tweaking a handful of provisions to which the SEP-holders objected. This attempt at compromise backfired: the updates did not appease the SEP-holders but nevertheless increased the

likelihood of licensing disputes and litigation for IEEE stakeholders.

This article briefly examines the background to the recently approved 2023 Patent Policy text updates, the associated pressure campaign from a few companies that culminated in the updates, and the likely effect of the text updates going forward.

I. IEEE's 2015 Updates Helped Curtail Abusive Litigation

IEEE began an earlier process to review its Patent Policy in about 2012. Like other standards development organizations ("SDOs"), the IEEE had long required licensing on "reasonable and non-discriminatory" ("RAND") terms (sometimes referred to by other SDOs as fair, reasonable, and non-discriminatory or "FRAND").² However, disputes inevitably arose concerning the meaning and interpretation of RAND under various SDOs' policies – especially regarding what constitutes an appropriate RAND royalty. IEEE standards were not immune, and potential licensees were soon subject to a wave of abusive litigation and licensing demands targeting IEEE technologies such as the 802.11/Wi-Fi standard.

For example, in one matter in the early 2010s, a non-practicing entity asserted its 802.11 SEPs against coffee shops and retail stores (among others), simply because they were offering free public Wi-Fi, and demanded thousands of dollars in royalties based on end products even

¹ Emily Luken is an associate in Orrick's antitrust and competition practice. James Tierney is a partner in the practice and the former head of the Technology & Financial Services Section at the Antitrust Division of the Department of Justice. The authors thank Jay Jurata for his contributions to an earlier draft of this publication.

² FRAND and RAND are generally used interchangeably. See *Microsoft Corp. v. Motorola, Inc.*, 795 F.3d 1024, 1031 n.2 (9th Cir. 2015).

where the components were already licensed³ Ultimately, the court adjudicated an appropriate RAND royalty of less than \$0.10 per unit and based on the component chip – a reduction of 160 times less than what was demanded in the case of tablets (and similar orders of magnitude lower for other products).⁴

In another matter around the same time, Motorola claimed that its 802.11 portfolio was worth up to \$4.50 per unit before a court ultimately concluded that the portfolio was worth less than \$0.04 per unit, a difference of over 100 times less than what was initially sought.⁵ And in yet another contemporaneous case, a SEP-holder sought royalties so high that, if successful, they would have put the Wi-Fi industry out of business and prevented further R&D, according to an amicus brief filed by three of the largest Wi-Fi chipmakers.⁶ On appeal, the Federal Circuit vacated the damages assessment due to deficient jury instructions and remanded, emphasizing that an appropriate RAND royalty “must be premised on the value of the patented feature, not any value added by the standard’s adoption of the patented technology.”⁷

In response, a growing chorus of industry participants, government officials, scholars, and others expressed concern over the ability of SEP-holders to exploit the lack of clarity surrounding RAND under various SDOs’ policies, including the IEEE. The U.S. Justice Department and others encouraged SDOs to clarify the specific licensing obligations attendant to promise to license on RAND terms.⁸

The IEEE responded. After multiple rounds of review and solicitations of stakeholder comments, and with extensive stakeholder

support, the IEEE Standards Association’s Board of Governors (“BOG”) adopted clarifications to its Patent Policy in late 2014, with a 2015 effective date. Significant aspects included:

- express provisions limiting the use of injunctions where RAND compensation is available from the licensee;
- clarification that all IEEE implementers, including component suppliers, would have the right to obtain licenses on RAND terms; *and*
- express direction that RAND royalties would *not* include the added value from standardization, and that certain additional considerations, such as the value of the component implementing the standard, “should” be used in assessing RAND rates.

It is significant that the IEEE described these amendments to the Patent Policy not as affirmative changes reflecting a divergence from the prior Policy but instead as clarifications to the existing Policy.⁹ Thus, and by means of example, the fact that the prior Policy did not contain explicit language addressing injunctions does not mean that the prior Policy permitted injunctions. To the contrary, it is generally inherent in a promise to license on RAND terms that a patent holder will not seek to exclude a user from the market (e.g. via an injunction). But because opportunistic SEP-holders were attempting to take advantage of the lack of explicit language in the Policy to argue otherwise, the IEEE determined that it was desirable to expressly address injunctions as well as other issues.

The IEEE requested a Business Review Letter from the Antitrust Division of the Department of

³ *In re Innovatio*, 2013 WL 5593609 at *18 (N.D. Ill. Oct. 3, 2013); see also *In re Innovatio IP Ventures, LLC, Patent Litigation*, Case No. 11-9308, Plaintiff’s Amended Complaint, Docket No. 431, paragraph 47 (Oct. 1, 2012) (SEP owner demanded “that end users of IEEE 802.11 equipment [...] agree to pay thousands of dollars to use components”).

⁴ *In re Innovatio*, 2013 WL 5593609 at *12, *45.

⁵ *Microsoft Corp. v. Motorola, Inc.*, 2013 WL 2111217, at *65, *72, *99 (W.D. Wash. Apr. 25, 2013), *aff’d*, 795 F.3d 1024 (9th Cir. 2015).

⁶ *Brief of Amici Wi-Fi Chip Companies Broadcom Corporation, Marvell Semiconductor, Inc., and MediaTek, Inc., Supporting Appellants, Ericsson Inc. v. D-Link Systems, Inc.*, Appeal No. 2013-1625, 2013 WL 7173257 *8 (“Such royalties would put the parties who paid them out of business and prevent them from funding future research and development.”).

⁷ *Ericsson Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1232 (Fed. Cir. 2014).

⁸ Renata Hesse, U.S. Department of Justice, *Six “Small” Proposals Before Lunch*, Remarks prepared for the ITU-T Patent Roundtable (Oct. 10, 2012), <https://www.justice.gov/atr/file/518951/download>.

⁹ See Letter from Michael A. Lindsay to the Honorable William J. Baer, Sep. 30, 2014, *available at* <https://www.justice.gov/sites/default/files/atr/legacy/2015/02/17/311483.pdf>.

Justice (Antitrust Division) before the 2015 Patent Policy went into effect. In response, the Antitrust Division indicated it would not challenge the 2015 Patent Policy because (among other reasons), the Policy “has the potential to benefit competition and consumers by facilitating licensing negotiations, mitigating hold up and royalty stacking, and promoting competition among technologies for inclusion in standards.”¹⁰

As the Antitrust Division predicted, standards development at the IEEE thrived under the 2015 Patent Policy.¹¹ IEEE Stakeholders and others widely viewed the 2015 Patent Policy as a success. The leading technical contributors to IEEE wrote to IEEE in support of the Policy, while only a few stakeholders opposed it.¹²

In short – and unlike at other SDOs – disputes and litigation decreased while IEEE standards development increased. One study shows that IEEE standards – despite their ubiquity – have been responsible for less than 2% of all litigation involving standards-essential patents.¹³ This suggests that clarity around the RAND obligation is good for innovation and standards adoption.

II. Changes to the 2015 Business Review Letter Open the Door to Further Revision

Despite the success of the 2015 Patent Policy in promoting standards development and

reducing litigation, a small group of SEP-holders advocated against it. Those opponents found a welcome audience in the Antitrust Division, then led by Assistant Attorney General Makan Delrahim. In September 2020, the Antitrust Division took the “the extraordinary step” of “supplementing” the 2015 Business Review Letter.¹⁴ The 2020 “supplement” effectively disclaimed the analysis in the 2015 Business Review Letter on grounds that it had been “widely misconstrued and misapplied.” The 2020 “supplement,” which was not requested by the IEEE, expressed a belief that injunctions should be freely available on FRAND-encumbered SEPs. In the spring of 2021, the Antitrust Division (under new leadership) effectively rescinded the 2020 “supplement” by transferring it to the competition advocacy section of its website but, as explained in the next section below, the damage already had been done.¹⁵

III. IEEE’s Supporters Told the BOG to Avoid Uncertainty, But IEEE Pressed on with 2023 Updates

Even though the IEEE’s 2015 Patent Policy was functioning well, the damage inflicted by the Antitrust Division’s 2020 “supplement” to the 2015 Business Review Letter led the IEEE to announce in 2021—a few months before the Antitrust Division effectively rescinded the supplement—that it would undergo a review of

¹⁰ Letter from Renata B. Hesse, Acting Assistant Att’y Gen. U.S. Dep’t of Justice, to Michael A. Lindsay, Esq., (Feb. 2, 2015), available at <https://www.justice.gov/atr/response-institute-electrical-and-electronics-engineers-incorporated>.

¹¹ One data analysis firm conducted a series of three influential studies regarding the IEEE’s successful standards development post-2015, and the continued heavy engagement at IEEE by all the leading technical contributors. IPLytics, *IEEE’s Empirical Record of Success and Innovation Following Patent Policy Update* (2018), at 14 https://www.iplytics.com/wp-content/uploads/2018/04/IPLytics_Report-on-IEEE-activities_2018.pdf; see also IPLytics, *Empirical study on patenting and standardization activities at IEEE* (2017), at 9, available at https://www.iplytics.com/wp-content/uploads/2018/01/IPLytics_2017_Patenting-and-standardization-activities-at-IEEE.pdf; IPLytics, *Empirical Analysis of Technical Contributions to IEEE 802 Standards* (2019), https://www.iplytics.com/wp-content/uploads/2019/01/IEEE-contribution-analysis_IPLytics-2019.pdf.

¹² Over 100 organizations and individuals submitted comments to IEEE in October 2021 expressing their support for the 2015 Patent Policy—nearly five times as many as those who opposed it. https://grouper.ieee.org/groups/pp-dialog/call_for_comments/PatCom_report_to_IEEE_SA_BoG_151121_1350.pdf. A lengthy summary of the years long back-and-forth is beyond the scope of this article. See generally Carrier and Scarpelli, *How Standard-Setting Orgs Can Curb Patent Litigation* (2021), available at <https://www.law360.com/articles/1392222/how-standard-setting-orgs-can-curb-patent-litigation>.

¹³ Carrier and Scarpelli, *How Standard-Setting Orgs Can Curb Patent Litigation* (2021), available at <https://www.law360.com/articles/1392222/how-standard-setting-orgs-can-curb-patent-litigation>.

¹⁴ Letter from Makan Delrahim, Assistant Att’y Gen. U.S. Dep’t of Justice, to Sophia A. Muirhead, General Counsel and Chief Legal Officer, IEEE (Sep. 10, 2020), available at <https://www.justice.gov/atr/page/file/1315291/download>.

¹⁵ Charlotte Kilpatrick et al., This week in IP: Counsel reveal VICO fears, *IEEE supplement sidelined, M&S sues over copy-caterpillar*, Apr. 16, 2021, <https://www.managingip.com/article/b1rf3tt2xmpcmj/this-week-in-ip-counsel-reveal-vico-fears-ieee-supplement-sidelined-mamps-sues-over-copycaterpillar>.

the Policy. During this review, more than 100 entities, including small enterprises, companies with global operations, trade associations, think tanks, and academics from around the world, encouraged the BOG to stay the course and reject intimidation from those few focused on maximizing royalty revenues rather than maximizing IEEE innovations.¹⁶

The BOG responded with a misguided attempt to strike a middle path between the aggressive SEP-holders advocating for change and the vast majority of IEEE stakeholders, who

supported the policy and are IEEE's core constituency. The BOG announced updates to the Policy on September 30, 2022, with an effective date of January 1, 2023. The BOG's decision also happened nearly a year after the IEEE ended its feedback period, with no opportunity to provide feedback on the new text, and with no advance notice to stakeholders as to its contents. As such, it is not surprising that the BOG's new text fails to address the best interests and needs of the IEEE and its members.

¹⁶ See *supra* note 12.

The table below presents several of the Policy’s key provisions as modified with the new text.

Issue	2015-2022 ¹⁶	2023 Updates
Component licensing	RAND Commitment is for “any Compliant Implementation,” meaning that a patent “cannot refuse to license its patents for use in IEEE-SA standards at certain levels of production.” ¹⁷	[unchanged]
Injunctive/ exclusionary relief	Companies agreeing to the IEEE RAND Commitment “shall neither seek nor seek to enforce a Prohibitive Order . . . unless the implementer fails to participate in, or to comply with the outcome of, an adjudication, including an affirming first-level appellate review . . . by one or more courts that have the authority to determine Reasonable Rates and other reasonable terms and conditions; adjudicate patent validity, enforceability, essentiality, and infringement; award monetary damages; and resolve any defenses and counterclaims.”	Companies agreeing to the IEEE RAND Commitment “shall neither seek nor seek to enforce a Prohibitive Order . . . <u>unless the implementer who is willing to negotiate in good faith for a license. Seeking further information upon initial notice of infringement or choosing to litigate or arbitrate over any of the foregoing issues [inter alia, validity, enforceability, essentiality, or infringement], however, does not by itself mean that a party so choosing is unwilling to negotiate in good faith.</u> ” fails to participate in, or to comply with the outcome of, an adjudication, including an affirming first-level appellate review . . . by one or more courts that have the authority to determine Reasonable Rates and other reasonable terms and conditions; adjudicate patent validity, enforceability, essentiality, and infringement; award monetary damages; and resolve any defenses and counterclaims.”

¹⁶ Direct quotes are from the Policy text, unless otherwise indicated.

¹⁷ Letter from Renata B. Hesse, *supra* note 10.

Reasonable Rate	Mandatory	“shall mean appropriate compensation . . . excluding the value, if any, resulting from the inclusion of [the patent claim’s] technology in the IEEE standard.”	[unchanged]
	Other considerations	<p>“Determination of [a] Reasonable Rate should include, but need not be limited to, the consideration of:”</p> <ol style="list-style-type: none"> 1. “The value that the functionality of the claimed invention or inventive feature within the Essential Patent Claim contributes to the value of . . . the smallest saleable Compliant Implementation that practices the Essential Patent Claim.” 2. “The value that the Essential Patent Claim contributes to the smallest saleable Compliant Implementation that practices that claim, in light of the value contributed by all Essential Patent Claims for the same IEEE Standard practiced in that Compliant Implementation.” 3. “Existing licenses covering use of the Essential Patent Claim, where such licenses were not obtained under the explicit or implicit threat of a Prohibitive Order, and where the circumstances and resulting licenses are otherwise sufficiently comparable to the circumstances of the contemplated license.” 	<p>“Determination of [a] Reasonable Rate should include, but need not be limited to, the consideration of:”</p> <p><u>“Some optional considerations for determination of Reasonable Rates are:”</u></p> <ol style="list-style-type: none"> 1. “[t]he value that the functionality of the claimed invention or inventive feature within the Essential Patent Claim contributes to the value of . . . the smallest saleable Compliant Implementation that practices the Essential Patent Claim <u>or to another appropriate value level of the Compliant Implementation</u>”; 2. “[t]he value that the Essential Patent Claim contributes to the smallest saleable Compliant Implementation <u>or to another appropriate value level of the Compliant Implementation that practices that Essential Patent Claim</u>, in light of the value contributed by all Essential Patent Claims for the same IEEE Standard practiced in that Compliant Implementation”; and 3. “Existing licenses covering use of the Essential Patent Claim, where such licenses were not obtained under the explicit or implicit threat of a Prohibitive Order, and where the circumstances and resulting licenses are otherwise sufficiently comparable to the circumstances of the contemplated license.”

IV. Although the Updates Are Substantively Minor, They Nonetheless Reintroduce Ambiguity and Uncertainty

As a preliminary matter, it is worth emphasizing that the BOG made no changes to two key portions of the 2015-2022 Policy with the 2023 updates:

- IEEE Policy continues to require licenses to any user of an IEEE standard that seeks one. That is entirely consistent with IEEE’s pre-2015 text, which always required (nearly as clearly as the 2015 and 2023 text) this exact result by mandating that licenses must be available to “an unrestricted number of applicants.”
- A “Reasonable Rate” must exclude any value added to the patented technology by virtue of standardization. Reflecting precedent,¹⁸ SEP-holders cannot seek value stemming from the industry’s agreement to use certain technologies and to reject alternatives.

However, the IEEE BOG created unnecessary uncertainty by revising text, at least in part, regarding two of the subjects for which the 2015-2022 Policy provided more clarity and predictability that was helpful in advancing the interests, investments, and innovation of IEEE stakeholders: (1) injunctions, and (2) reasonable rate considerations.

A. Injunctions

First, the BOG adopted revised text regarding specific restrictions on market exclusion, stating that the IEEE RAND commitment prohibits licensors from seeking exclusion orders against potential licensees that are “willing to negotiate in good faith.” Consistent with applicable precedent,¹⁹ requiring a patent-holder to prove issues of validity, enforceability, essentiality,

and infringement (among other considerations) does not render a potential licensee “unwilling.” This new text differs from the 2015-2022 version, which did not explicitly reference a licensee’s “good faith” but instead indicated that SEP-holders may not seek injunctions unless the potential licensee fails to participate or comply with the outcome of a RAND adjudication (among other issues).

Despite the addition of this new language, nothing in the new text would purport to affirmatively *allow* injunctions as a general matter or otherwise repudiate the 2015 Policy (just as nothing in the text prior to the 2015 updates would have endorsed the availability of injunctions).²⁰ The 2023 updates continue to underscore that the IEEE’s RAND commitment, as a general matter, encompasses a promise to refrain from seeking injunctive relief. But the BOG’s revisions are counter-productive because they swap out the *objective* limitations in the 2015-2022 Policy with *subjective* requirements in the 2023 Policy. Applying the 2023 Policy now requires an unpredictable psychological evaluation of a negotiating party’s “good faith.” For example, the 2023 Policy invites a gray area where any user of an IEEE standard who disagrees with licensing assertions directed against it – even in subjective “good faith” – might nevertheless become subject to threats of market exclusion and will potentially incur substantial legal fees in proving its subjective intent.

Nevertheless, if the “willing to negotiate in good faith” standard in the new policy text is interpreted reasonably, requests for injunctions should rarely be permissible. The standard specifically concerns a potential licensee’s willingness to *negotiate* in good faith rather than its ability to ultimately agree to license terms

¹⁸ *Ericsson Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1232 (Fed. Cir. 2014).

¹⁹ *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1328-32 (Fed. Cir. 2014).

²⁰ It has been suggested by at least one powerful SEP-holder that the BOG should have further amended this language to “achieve[] the same result substantively” by “saying you can’t *enforce* an injunction unless someone is unwilling.” See *Qualcomm executive highlights IEEE patent policy revision problems*, I AM Media, (Oct. 19, 2022), available at <https://www.iam-media.com/article/qualcomm-executive-highlights-ieee-patent-policy-revision-problems> (emphasis added). In other words, SEP-holders should be free to pursue injunctions, and the IEEE Policy should only kick in when the SEP-holder wishes to enforce an injunction. Contrary to the views of this SEP-holder, such a change in policy would not be minor. Both the 2015-2022 Policy and the 2023 Policy also apply to enforcing injunctions in addition to seeking them. If the Policy instead were inapplicable to seeking injunctions and only to enforcement, this would effectively be an attempt to override national laws regarding injunctions. Moreover, such a change would encourage SEP-holders to affirmatively seek injunctions without regard to whether the potential licensee is willing at the time the injunction is sought, thereby violating the 2023 Policy.

(particularly if the terms offered by the licensor are non-FRAND). This contrasts starkly with the “willing licensee” standard applied by certain European courts, which will sometimes grant injunctions without even evaluating whether the license on offer complies with FRAND.²¹ Further, IIEEE’s “willing to negotiate in good faith” standard should be interpreted consistent with the Federal Circuit’s guidance that although injunctions on FRAND-encumbered SEPs will generally not be available because a FRAND commitment “strongly suggest[s] that money damages are adequate to fully compensate . . . for any infringement,” exceptions might be available in the rare instances when a potential licensee refuses to negotiate or “unreasonably delays negotiations to the same effect.”²² The Federal Circuit has thus narrowly interpreted scope of licensee negotiating conduct that could open the door to an injunction. If IIEEE’s “willing to negotiate in good faith” standard is interpreted consistently, potential licensees that negotiate in good faith should typically be deemed willing and thus protected from injunction threats. Under such an interpretation, which is broader than the “willing licensee” standard applied by European courts,²³ many licensees likely would in fact be determined to be willing and thus protected against injunctions.

B. Reasonable Rate Considerations

Second, the BOG accepted revised text regarding what optional aspects “should” be considered for purposes of royalty analysis. The 2015-2022 Policy provided a non-exhaustive, illustrative set of factors recommended for determining a Reasonable Rate, including (1) the value that the patented technology contributes to the smallest salable component of the overall product, and (2) existing licenses that were not the product of an explicit or implicit threat of an injunction. The 2023 revised Policy maintains the discretionary nature of the recommended factors but (among

other things) (1) adds language indicating that, in addition to the value the patent contributes to the smallest salable unit, “another appropriate value level” may be considered, and (2) preserves the language about sufficient comparable existing licenses but removes the express reference to licenses that were obtained by threat of an injunction.

Once again, the changes to the prior policy were unnecessary. The 2015-2022 Policy, by its own terms, was discretionary and did “not mandate any specific royalty calculation methodology or specific royalty rates.”²⁴ The additional language about “another appropriate value level” is thus redundant. Fortunately, however, removing the reference to licenses entered into under a threat of an injunction is not tantamount to the IIEEE expressing that such licenses are affirmatively indicative of a RAND royalty. If the IIEEE wished to indicate as much, then it could have added language stating that licenses entered into under a threat of injunction should be considered. The IIEEE did not do so. Instead, the new text updates should be interpreted to mean that licenses entered into under a threat of an injunction are “not sufficiently comparable to the circumstances of the contemplated license.”

Nonetheless, the BOG’s use of revised terminology reintroduces gray areas that are ripe for abuse. In some jurisdictions, such as the U.S., courts have made clear that agreements negotiated under threat of market exclusion can never be comparable.²⁵ This is because the “threat of a lawsuit, following a history of litigation between the parties, cannot form the basis for . . . a reasonable negotiation” that should be the foundation for a reasonable royalty. However, the law is less clear in other jurisdictions, which creates opportunities for exploitation that are further described below.

²¹ See, e.g. *Sisvel International SA v. Haier Deutschland GmbH*, Case No. KZR 35/17, FRAND-Einwand II (Fed. Ct. Justice, Nov. 24, 2020).

²² 757 F.3d at 1332.

²³ See, e.g. *Sisvel International SA v. Haier Deutschland GmbH*, Case No. KZR 35/17, FRAND-Einwand II (Fed. Ct. Justice, Nov. 24, 2020).

²⁴ Letter from Renata B. Hesse, *supra* note 10.

²⁵ See, e.g. *Microsoft v. Motorola*, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013), at *67.

V. By Reducing Clarity, IEEE's 2023 Updates Will Encourage Abusive Litigation

As noted above, the 2023 updates are not particularly substantive. The BOG attempted to forge a middle path by removing text that a few companies complained about and adding text that they asked for but ultimately did not really change the proper application of the Patent Policy.

But sometimes the issue is predictability, not solely substance. The BOG might not have realized, for example, that foreign rules regarding injunctions and royalties vary widely and may be less predictable than in the United States, where the legal rules are already closely aligned with the IEEE's 2015-2022 Policy. The benefit, and perhaps even beauty, of the 2015-2022 Policy was that it assisted to conform international treatment of IEEE standards. The clarity of the Policy's text rendered moot the variance in court interpretation and application of that text.

Likewise, subjective references to "good faith" are problematic precisely because subjective analysis is by definition unpredictable. A user of IEEE standards cannot be sure that its good-faith business judgment will be viewed as such in *all* of the national courts around the world where it sells its products. In such circumstances, it will be no surprise if innovators and IEEE users – particularly smaller companies and SMEs that cannot afford to fight – might decide to accept licensing demands that they believe in good faith are not RAND, rather than risk high litigation fees or even a small risk of market exclusion. Even the minor possibility that a single national court might wrongly

assess a business's subjective intent, and order market exclusion on that basis, can be enough to deter investment in and deployment of IEEE technologies – or, from the patent holder's perspective, to coerce payment of above-RAND license fees. The BOG's decision will thus have significant, if unintended, consequences harming adoption and promulgation of IEEE standards, even if the 2023 Policy (construed properly) will continue to prohibit SEP-holders from seeking injunctions in most instances.

It seems the BOG failed to appreciate that IEEE standards are not just international as a technical matter but also have international legal ramifications. By making the text of the Patent Policy less clear, the BOG has harmed the certainty and predictability that IEEE users need in order to participate in IEEE standardization, invest in IEEE technologies, and innovate on top of IEEE standards. The BOG, in short, has created uncertainty that will almost certainly lead to more disputes and more litigation. The BOG should consider issuing further guidance to clarify the scope of the Patent Policy and ensure it is not interpreted in a way that encourages abusive litigation.

In the absence of additional guidance from the BOG, users of IEEE standards face the real risk that they will be subject to abusive but litigation by SEP-holders that will attempt to unreasonably overread the scope of the changes. Just like the coffee shops that shut down public Wi-Fi in 2012 rather than pay thousands of undeserved dollars in response to an abusive patent assertion, will users of IEEE standards once again have to spend millions of dollars on litigation fees just to prove that these types of assertions violate the Patent Policy?