Does FRAND or Competition Law Mandate Licensing Chips?

Jeffrey Blumenfeld[*]

Implementers have long argued to antitrust agencies and courts that FRAND requires licensing at the chip level, despite the even longer and ongoing industry practice of licensing at the device level.[1] They have made at least two sets of arguments:

- the mandate to license chips is inherent in the concept of FRAND: the "non-discrimination" element prohibits "discrimination" against chip makers in refusing to license them;[2] and
- the IPR policies of the major SDOs explicitly mandate, or should be read to mandate, that SEP owners must be willingness to license chips.

An essay by Professor Jorge Contreras in *IAM*[3] neatly encapsulated much of the implementer position. Titled "Sometimes FRAND does mean license-to-all," Professor Contreras' article concludes, broadly speaking, that some SDO IPR policies require explicitly or implicitly – and that most or all should be read to require at least implicitly – what he terms "license-to-all." In other words, that those policies require, or should be read to require, licensing at every attach point in the supply chain, including at the level of chips.

Professor Contreras concluded his article with these observations and recommendations:

 Mr. Blumenfeld is Co-Chair of the Antitrust/Competition Group at Lowenstein Sandler, LLP, specializing in competition issues facing technology-based companies, including at the intersection of IP and competition policy and law. The views expressed in this article are his own.

[1] The argument has two components: First, that licensing chips means that royalty rates must be set in proportion to the selling price of chips, that is, at a level much lower than would be a royalty rate based on the selling price of devices. Second, that licensing chips will, by operation of patent exhaustion, obviate licensing obligations at any point in the value chain downstream from the chips. Neither of these necessarily follows. Even if the licensing attach point is the chip, the value of the technology may still be determined by its value to the device in which the chip provides the patented functionality; the value – in the market for the device – of the technology in the device is the appropriate measure of the value of the technology and therefore of the appropriate royalty. Further, many standardized technologies include system claims and other claims that may not be fully practiced in the chip and therefore may require licensing at points downstream from the chip even if the chip is licensed.

[2] "Non-discrimination" is a term that has a long history in several areas of law, and consistently has been held to prohibit detrimental differential treatment of entities that are similarly situated, rather than mandating that all entities – no matter how dissimilar – must be treated identically. In antitrust law, for example, the Robinson Patman Act (15 USC ¶13), broadly speaking, prohibits discrimination by wholesalers in sales to retailers, but only where the disadvantaged retailer is a direct competitor of the privileged retailer, and even then, only when the differential treatment creates anticompetitive effects in the downstream market in which the disadvantaged and the privileged retailers compete. The FCJ decision in *Sisvel v Haier*, discussed above at pp. 3 *et seq.* demonstrates that European competition law holds the same view of the "non-discrimination" portion of the FRAND requirement, even assuming that the non-discrimination portion can be viewed as a distinct requirement. The remainder of the analysis in this article is focused on the IPR policies of SDOs and various court decisions and enforcement agency interpretations of them.

[3] *IAM* October 10, 2020

> FRAND commitments are creations of written policy documents and contract law. Accordingly, the existence of a license-to-all obligation under a FRAND commitment must arise from the relevant policy language. Numerous SDO policies expressly impose license-to-all requirements. Some SDO policies are ambiguous with respect to this requirement and such ambiguities should be resolved based on an examination of extrinsic evidence including the intentions of policy drafters, the shared understandings of SDO participants and the historical precedents for such policies.
>
> In many cases, an examination of these factors should lead to the conclusion that license-to-all is, indeed, required by the relevant policies. The only sure way to prevent the imposition of license-to-all obligations on SDO participants is to draft clear policy language expressly disavowing such obligations and permitting level discrimination in SEP licensing.

However, his conclusions that "[n]umerous SDO policies expressly impose license-to-all requirements" and that "[i]n many cases, an examination of these factors should lead to the conclusion that license-to-all is, indeed, required by the relevant policies" are not supported by a close review of the texts of the various components of those policies. And his suggested "examination of extrinsic evidence including the intentions of policy drafters, the shared understandings of SDO participants and the historical precedents for such policies" often leads to a conclusion that is exactly opposite to his.

Further, his characterization of SDO policies as "ambiguous" on the point is, at best, a stretch: SDO policies do not mention, much less specifically state, any requirement about the point in the value chain at which licensing must be made available to be consistent with FRAND. That does not give rise to an "ambiguity" but rather requires a revision of the text to conform it to the desired interpretation. Because a FRAND obligation is interpreted as a contractual obligation arising from a voluntary commitment made by a participating patent holder, it is more consistent with contract law to conclude:

- SDOs are highly experienced and sophisticated in both understanding and writing IPR policies.
- Therefore, if an SDO intended its IPR policies to require that patent holders be willing to license at a particular attach point, or even more particularly to license chips, its policies would say so explicitly.[4]
- If an SDO had concluded that its policies should be revised to state explicitly the attach point at which licensing should occur, the SDO would issue revised policies saying so explicitly.

[4] The IEEE revised its IPR Policy in 2015 to state an explicit requirement to be willing to license at the chip level. As discussed below, the subsequent impact of that revision is not a good argument for any other SDO to follow IEEE's example.

- Therefore, any SDO IPR policy that does not explicitly state a requirement to license chips, or to license at any other particular attach point in the downstream value chain, does not impose that requirement.

But even if the fact that the SDO policies do not mention a requirement to license at every level of the supply chain were correctly seen as an ambiguity, that ambiguity would require the examination of extrinsic evidence, and the extrinsic evidence equally does not support the argument that the SDO policies require licensing chips. Consider as extrinsic evidence: (a) throughout the thirty or so years of licensing SEPs under commitments to SDOs, patent owners have overwhelmingly chosen to license at the device level rather than at the chip level, and (b) throughout that time patent owners and implementers have overwhelmingly concluded agreements that license at the device level rather than at the chip level. If these licensing practices had been in violation of the policies of the SDOs throughout those decades, it is safe to assume that one or more of the SDOs would have said so, and would have revised its IPR policies accordingly, making explicit the obligation to make licenses available at the level of chips.

This article analyzes the IPR policies of the SDOs under whose aegis standards for the two most recent generations of video codecs – HEVC/H.265 and VVC/H.266 – were formulated :

- The H.265 High Efficiency Video Coding standard ("HEVC") was formed by U-T Study Group 16, and the VCEG and MPEG committees of collectively the ITU-T, the ISO, and the IEC.
- The H.266 Versatile Video Coding standard ("VVC") was formed by the VCEG and MPEG committees of, collectively, the ITU-T, the ISO, and the IEC.

Therefore, this article considers the IPR policies of the ITU, ISO and IEC (which collectively have a joint IPR policy), and for comparison purposes also the IPR policies of several other major SDOs under which standards relevant to the discussion have been issued, including ANSI, ATIS, TIA, ETSI, and the IEEE.

In addition, this article considers several decisions by U.S. courts on the issue of whether antitrust law, FRAND, and/or SDO IPR policies require licensing chips: the District Court rulings in *FTC v Qualcomm*, the Ninth Circuit opinion in *FTC v Qualcomm* overruling the District Court, and the District Court opinion in *HTC v Ericsson*.

Finally, this article considers the effects of the IEEE's 2015 revisions to its IPR policies to mandate licensing chips, and the Department of Justice's "supplementary" Business Review Letter issued to IEEE in response to the effects of the 2015 revisions.

Before beginning a close review of each of the SDOs' IPR policies, it is worth noting at a high level the "licensing commitment" language of each:

ITU-T/ISO/IEC (Common Patent Policy for ITU-T/ITU-R/ISO/IEC) – "with other parties"	"The patent holder is willing to negotiate licences with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations are left to the parties concerned and are performed outside ITU-T/ITU-R/ISO/IEC." "[T]he patent holder has to provide a written statement to be filed at ITU-TSB, ITU-BR or the offices of the CEOs of ISO or IEC, respectively, using the appropriate 'Patent Statement and Licensing Declaration' form "Recommendations | Deliverables are non-binding; their objective is to ensure compatibility of technologies and systems on a worldwide basis. To meet this objective, which is in the common interests of all those participating, it must be ensured that Recommendations | Deliverables, their applications, use, etc. are accessible to everybody. It follows, therefore, that a patent embodied fully or partly in a Recommendation | Deliverable must be accessible to everybody without undue constraints. To meet this requirement in general is the sole objective of the code of practice. The detailed arrangements arising from patents (licensing, royalties, etc.) are left to the parties concerned, as these arrangements might differ from case to case."
ITU-T/ISO/IEC (Declaration Form) – "to an unrestricted number of applicants"	"The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document."
ATIS – "to applicants"	"An irrevocable license will be made available under reasonable terms and conditions that are demonstrably free of any unfair discrimination, without compensation, to applicants desiring to utilize the license for the purpose of implementing the American National Standard or other ATIS Deliverable."
TIA – "to all applicants"	"A license under any Essential Patent(s), the license rights which are held by the undersigned Patent Holder, will be made available to all applicants under terms and conditions that are reasonable and non-discriminatory,"
ETSI – "prepared to grant licenses"	"an irrevocable undertaking in writing that it is prepared to grant irrevocable licences on fair, reasonable and non-discriminatory ("FRAND") terms and conditions under such IPR . . ." "the Declarant hereby irrevocably declares that (1) it and its AFFILIATES are prepared to grant irrevocable licenses under its/their IPR(s) on terms and conditions which are in accordance with Clause 6.1 of the ETSI IPR Policy, in respect of the STANDARD(S), TECHNICAL SPECIFICATION(S), or the ETSI Project(s), as identified above, to the extent that the IPR(s) are or become, and remain ESSENTIAL to practice that/those STANDARD(S) or TECHNICAL SPECIFICATION(S) or, as applicable, any STANDARD or TECHNICAL SPECIFICATION resulting from proposals or Work Items within the current scope of the above identified ETSI Project(s), for the field of use of practice of such STANDARD or TECHNICAL SPECIFICATION; and (2) it will comply with Clause 6.1bis of the ETSI IPR Policy with respect to such ESSENTIAL IPR(s)."

ITU, ISO, and IEC

ITU, ISO, and IEC adopted a joint "Common Patent Policy"[5] in March 2007 as well as a set of "Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC ("Common Guidelines)."[6] The Policy is quite brief, and describes itself as a "Code of Practice" setting forth "simple and straightforward" rules:[7]

> Recommendations | Deliverables are non-binding; their objective is to ensure compatibility of technologies and systems on a worldwide basis. To meet this objective, which is in the common interests of all those participating, it must be ensured that Recommendations | Deliverables, their applications, use, etc. are accessible to everybody.
>
> It follows, therefore, that a patent embodied fully or partly in a Recommendation | Deliverable must be accessible to everybody without undue constraints.

The use of "everybody" might seem to indicate that the Common Patent Policy requires licensing chips. But once again the Common Patent Policy itself contradicts that inference:

> To meet this requirement [that Recommendations and Deliverables must be accessible to everybody] in general is the sole objective of the code of practice. The detailed arrangements arising from patents (licensing, royalties, etc.) are left to the parties concerned, as these arrangements might differ from case to case.[8]

The use of "in general" as a modifier suggest that meeting the requirement of "accessible to everybody" is a broad ("general") requirement rather than a specific requirement; therefore, it is difficult to read it as a requirement to license at a particular attach point. Put another way, licensing chips is not a necessary condition to making the technologies embodied in the Recommendations and Deliverables available to everybody, particularly as the licensing statement makes clear that the purpose of the policy is to ensure that "Recommendations | Deliverables, their applications, use, etc. are accessible to everybody." In other words, the purpose of the policy is to ensure that the benefits of the technologies in Recommendations and Deliverables – the application, use, etc. of the Recommendations and Deliverables – is available to everybody; it is not necessary to license chips to ensure that everybody can benefit from the Recommendations and Deliverables. And that interpretation is supported by the very next sentence, which adds that the "detailed arrangements" – specifically including "licensing" – "are left to the parties concerned, as these arrangements might differ from case to case." That can only be read as saying that there is no specific licensing model, or license attach point, mandated.

---

[5] https://www.itu.int/en/ITU-T/ipr/Pages/policy.aspx

[6] https://www.itu.int/dms_pub/itu-t/oth/04/04/T04040000010005PDFE.pdf

[7] *Id.*

[8] Declaration, found at Common Guidelines, Annex 2, Declaration, at page 2.

Interestingly, the Declaration required of the holder of a SEP by the ITU/ISO/IEC Patent Policy does not include the wording of offering licenses "to everybody" that appears in the summary Policy. Instead, the Declaration to be filed by a patent owner willing to license states:

> The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document.[9]

This suggests quite plainly that "to everybody" is to be understood to mean to "an unrestricted number" of licensees, that the SEP holder cannot restrict the *number* of entities to which it will offer a license. But as is true in providing that licenses must be available to "everybody," the use of the words "to an unrestricted number of applicants" does not mandate a particular licensing attach point. This conclusion is consistent with the fact that the Policy goes on to say that "[n]egotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC."[10]

As will become clear from the next section, while the wording of the ATIS and TIA commitments are different from each other, and different from the wording of the ITU/ISO/IEC Common Patent Policy, what is similar to all of them is that none explicitly requires licensing at any particular level in the value chain.

ATIS (Alliance for Telecommunications Industry Solutions)

ATIS is one of the seven regional SDOs that are Organizational Partners in the 3rd Generation Partnership Project ("3GPP"), which developed the generations of GSM mobile telecommunications standards from 2G through 5G.

The ATIS IPR policy ("ATIS Policy"), set forth in Section 10 of the Operating Procedures for ATIS Forums and Committees ("ATIS Procedures"),[11] begins with a General Policy Statement stressing the balance between the rights of patent holders and the rights of the public:

> In all matters of intellectual property rights, it is the intention of ATIS and its Forums to benefit the public while respecting the legitimate rights of intellectual property owners.[12]

The ATIS Procedures specify that where a patented invention is required for complying with an ANSI standard[13], "the provisions of the ANSI Patent Policy, as adopted by ATIS" apply.

> In the event that use of the patented invention is required for purposes of adopting, complying with, or otherwise utilizing the standard, guideline, or other

---

[9] *Id.*

[10] Guidelines, Annex 2

[11] *Id.,* at 8-11. Both ATIS and TIA state that they adopt the ANSI IPR Policy.

[12] *Id.,* at 8.

[13] ATIS is accredited by ANSI. Given the overlap in mission, ATIS is engaged with ITU, ISO, and IEC.

> ATIS deliverable, the provisions of the ANSI Patent Policy, as adopted by ATIS . . . shall apply.[14]

The ATIS Operating Procedures in Appendix A note, at A.11, that ATIS has adopted the ANSI patent policy:

> A.11 PATENT POLICY
>
> ATIS has adopted the ANSI Patent Policy as described in Section 10.4 of the Operating Procedures. The ANSI Patent Policy is described in Section 3.1 of the ANSI Essential Requirements.[15]

The ANSI Patent Policy, set forth in Section 3.1 of the ANSI Essential Requirements, provides that if a pending or approved American National Standard would require the use of a patented technology, the patent holder must file an assurance either that it owns no patents, or if it does own patents it must file a formal statement in which it provides

> b) assurance that a license to such essential patent claim(s) will be made available to applicants desiring to utilize the license for the purpose of implementing the standard either:
>
> 1. i) under reasonable terms and conditions that are demonstrably free of any unfair discrimination; or
>
> 2. ii) without compensation and under reasonable terms and conditions that are demonstrably free of any unfair discrimination.[16]

Note that the wording of the ANSI Patent Policy is silent on the issue of where in the value chain licensing occurs. But it does further specify its meaning with the words "applicants desiring to utilize the license for the purpose of implementing the standard." While the phrase specifies only "applicants" rather that "all applicants," specifying "applicants desiring to utilize the license for the purpose of implementing the standard" might be argued to mean "any" or "all" implementers, and this phrase was seized upon by the court in *FTC v Qualcomm* in its ruling on the Motion for Summary Judgment, and in its Opinion on the merits, as evidence that the standard required licensing chip makers.[17]

The ATIS version of that ANSI standard (in Section 3.1 of the ATIS IPR Policy) similarly includes the phrase "applicants desiring to utilize the license for the purpose of implementing the standard."

---

[14] *Id.,* at 10. The ATIS Policy prohibits the discussion of licensing terms in the ATIS Forum developing the standard, requiring that all such discussions occur directly between a patent holder and an implementer.

[15] Operating Procedures for ATIS Forums and Committees, https://www.atis.org/wp-content/uploads/01_legal/docs/OP.pdf, at Appendix A, A-5

[16] https://www.tiaonline.org/wp-content/uploads/2018/05/ANSI-Essential-Requirements-2018.pdf ("ANSI Essential Requirements"), at 11.

[17] Discussed further below.

> The assurance a patent holder is required to file must also indicate that the patent holder will ensure that the assurance is binding on a transferee, that the transferee will require the same in a subsequent transfer, and a more general statement that the assurance is intended to be binding on successors-in-interest "regardless of whether such provisions are included in the relevant transfer documents."[18]

ATIS provides a form Patent Holder Statement ("ATIS Statement") for submission of the assurance[19] but the form itself notes that its use is voluntary.

Both the ATIS Statement and the ATIS Policy state that "the discussion and negotiation of all license terms shall occur directly between the holder of the patented invention and each prospective licensee outside the deliberations of ATIS and its Forums and Committees" and that "[n]o discussion or negotiation of license terms is permitted in any Forum or Committee."[20]

TIA (Telecommunications Industry Association)

TIA is one of five regional SDOs that are Organizational Partners in the 3rd Generation Partnership Project 2 (**"** 3GPP2"), which developed the CDMA standards in 2G (cdmaOne) and 3G (CDMA2000).[21]

The TIA IPR Policy[22,23] like the ATIS (ANSI) policy specifies that with respect to any Essential Patent(s) necessary for the practice of any or all Normative portions of a Standard, each Patent Holder must "indicate its willingness to make a licensing commitment" by stating either that it does not have the right to license any such Essential Patents or, if does, by stating an intent to offer either:

> (2) (a) A license under any Essential Patent(s), the license rights which are held by the undersigned Patent Holder, will be made available to all applicants under terms and conditions that are reasonable and non-discriminatory, without monetary compensation, and only to the extent necessary for the practice of any or all of the Normative portions for the field of use of practice of the Standard; or
>
> (2) (b) A license under any Essential Patent(s), the license rights which are held by the undersigned Patent Holder, will be made available to all applicants under terms and conditions that are reasonable and non-discriminatory, which may

---

[18] *Id*.

[19] https://www.atis.org/wp-content/uploads/01_legal/docs/ATIS%20Patent%20Assurance%20Form.pdf

[20] ATIS Policy, at 10; Statement, at 1 of 3.

[21] TIA is accredited by ANSI. Given the overlap in mission, TIA is engaged with ITU, ISO, and IEC.

[22] TIA Intellectual Property Rights Policy ("TIA Policy"), https://tiaonline.org/wp-content/uploads/2018/05/TIA_Intellectual_Property_Rights_Policy.pdf.

[23] The TIA Policy defines "Essential" to mean "only the claim(s) of a patent (whenever issued) which is (are) necessarily infringed by the practice of a Normative (mandatory, optional or alternate) portion of a TIA Standard." (TIA IPR Policy at 6). The Policy further defines "Normative (mandatory) elements" as "those elements of a Standard which always must be complied with in order to claim conformity with the Standard" and defines "Normative (optional) elements" as those elements of a Standard which may be selected in order to claim conformity with the Standard and which, if selected, must be implemented as specified in the Standard."

> include monetary compensation, and only to the extent necessary for the practice of any or all of the Normative portions for the field of use of practice of the Standard .[24]

Note some interesting points about this statement, particularly in light of the fact that ATIS and TIA both specify that they adopt the ANSI IPR policy. First, unlike the similar ATIS Policy, the TIA Policy inserts the term "all" in the phrase "will be made available to all applicants" while the ATIS Policy statement does not include the word "all." Second, unlike the similar ATIS Policy, the TIA Policy does *not* further specify that it applies to "applicants desiring to utilize the license for the purpose of implementing the standard."

A third interesting point in the TIA Policy is that immediately following paragraphs (2)(a) and (2)(b) shown above, the TIA Policy provides:

> In accordance with this Section, the Patent Holder shall submit a Patent Holder's Statement, ANNEX A or ANNEX B, affirming its willingness to grant licenses on RAND terms and conditions (either with or without monetary compensation) to applicants desiring to obtain such licenses for the purpose of practicing any or all Normative portions of this Standard for the field of use of practice of the Standard.[25]

Notice that this "in accordance" paragraph omits the word "all" but does specify that the Patent Holder Statement "must indicate the willingness to grant licenses . . . to applicants desiring to obtain such licenses for the purpose of practicing any or all Normative portions of this Standard for the field of use of practice of the Standard."

As also in the ATIS Policy, the TIA Policy requires that in its Statement the patent holder must agree that its willingness to grant a license must be irrevocable, and that the patent holder will ensure that the commitment is binding on a patent transferee, and that the commitment is intended to be binding on successors in interest whether or not provisions to that effect are included in the transfer documents.[26]

The TIA Policy provides two forms of the Patent Holder Statement ("TIA Statement") for patent holders. Unlike the practice in some SDOs, the TIA form Statement does not recite the commitment the patent holder makes by filing the Statement; instead the commitment the patent holder makes by filing a Statement references the commitment set forth in the TIA Policy.

The patent holder must file one copy of the "Patent Holder Statement – Specific" (Annex A[27]) for each Reference Document published by a TIA Formulating Group during the formation of the standard. A patent holder may elect to file a "Patent Holder Statement – General" (Annex B[28]) which allows the Patent Holder to commit more generally to some or all the parts of a

---

[24] TIA Policy, at 8-9.

[25] *Id.*, at 9.

[26] *Id.*

[27] *Id.*, at 13-15.

[28] *Id.*, at 16-19.

multipart Reference Document, or to all its Contributions to the designated Formulating Group, or to the TIA generally for all Formulating Groups in which the patent holder participates or to any TIA standard.

TIA also has adopted Guidelines to the Telecommunications Industry Association Intellectual Property Rights Policy[29] ("TIA Guidelines") which are described as:

> a companion document . . . not intended to substitute for the Policy itself but rather to provide supplemental information to the TIA IPR Policy, the TIA Procedures for American National Standards (PANS) and the TIA Engineering Committee Operating Procedures (ECOP).[30]
>
> These Guidelines are intended to review the Policy, with an explanation of the rationale and some explanation of the intent of the IPR Standing Committee.[31]

The Guidelines specifically recognize that "the treatment of intellectual property rights" includes a balance of interests between patent holders and implementers:

> On the one hand, there is an important industry and public interest in the availability of the latest technological ideas and developments for inclusion in new products and services for the benefit of users. At the same time, inventors and innovative creators rightfully expect to reap the benefits of their time, expense and creativity.[32]

The Guidelines note that it is the policy of both TIA and ANSI to permit the inclusion in standards of technology protected by patents "when necessary" pursuant to "a policy that seeks to make the IPR available on a reasonable and non-discriminatory basis for all that would use it to fashion products contemplated by the standard in question."[33]

In terms of required licensing scope, the TIA Guidelines use the same language as the TIA Policy:

---

[29] https://www.tiaonline.org/wp-content/uploads/2018/05/Guidelines_to_the_Intellectual_Rights_Policy_of_the_Telecommunications_Industry_Association.pdf

[30] TIA Guidelines, at cover.

[31] *Id.*, at 2.

[32] *Id.*, at 1.

[33] TIA Guidelines, at 1. The phrase "all that would use it to fashion products contemplated by the standard" does not add meaningful specificity on the issue of whether the standard is mandating licensing at any particular level in the downstream value chain, and in any event must be read in the context of all the relevant components of the TIA policy.

> Requiring reasonable and non-discriminatory (RAND)[34] licenses to all applicants prevents the inclusion of patented technology from resulting in a patent holder securing a monopoly in any market as a result of the standardization process.[35]

But the TIA Guidelines also emphasize that TIA's rules are intended to give a great deal of flexibility to the parties to negotiate specific terms. For example, the TIA Guidelines note that "the precise terms and conditions are left to the parties, or if the parties fail to agree and dispute the reasonable and non- discriminatory character of what the licensor offers, the matter is left to the courts."[36]

Further indicating the flexibility TIA intends its IPR rules to provide to parties negotiating licenses, the TIA Guidelines have this to say on the issue of non-discrimination:

> The term "non-discriminatory" does not mean or imply that licensing terms must be the same for all applicants. Discrimination and difference are not the same. It is understood that the process of license negotiation and the components of consideration between parties can vary substantially yet be fair. The term "non-discriminatory" implies a standard of even-handedness. An example of conduct that would constitute discrimination is a willingness to license all applicants except for competitors of the licensor.[37]

This last statement is particularly meaningful in the effort to discover what the TIA Policy means by the term "all applicants" and more particularly, whether the TIA Policy requires licensing at the chip level. A fair reading of this portion of the TIA Guidelines is that in requiring the licensing of "all applicants," TIA is not dictating a particular license attach point, and not dictating that patent holders who signed a TIA Statement must license chip makers. Rather the example indicates that a refusal by a patent holder to license its competitors would be inconsistent with a commitment to license to "all." That would mean that a SEP owner that makes mobile devices would act inconsistently with its commitment if it refused to license its SEPs to makers of mobile devices with which the SEP owner competed. And it would mean that a chip maker who had made a licensing commitment to TIA would act inconsistently with its commitment if it refused a license to other chip makers with which it competed. But it does not mean that a SEP owner that makes mobile devices would act inconsistently with its commitment if it did not license chip makers.

By 2014 (the date of the most recent TIA Guidelines found on the TIA website) TIA was certainly aware that there was active discussion of whether SDO IPR policies required licensing

---

[34] While "RAND" – an acronym for "reasonable and non-discriminatory" – is the term commonly used in the United States, all other countries use the term "FRAND" – an acronym for "fair reasonable and non-discriminatory. While there may once have been some slight difference in meaning, today the terms are interchangeable. This article uses the term "FRAND" which is the more commonly used of the two outside the United States.

[35] *Id.*, at 4.

[36] *Id.*

[37] *Id.* That description of what the TIA Guidelines mean by "non-discrimination" is consistent with the common understanding of the term as described above. *See*, fn.2, above.

chips.[38] If TIA's IPR policies mandated that a SEP owner that had made a FRAND commitment to TIA would act inconsistently with its commitment if it did not license chip makers, it would have been straightforward for TIA to say so explicitly.

Finally, TIA's goal that patent holders be adequately compensated is also reflected in TIA's Open and Voluntary Standards Policy[39] which articulate the loss to the public that would occur if technology licenses were free, which is worth reading in detail to note the importance of balance between the rights of SEP holders and the rights of implementers in TIA IPR policies.

> Recently, there have been some attempts to re-define "Open Standards" that may disrupt this process and its related balance of interests. The concept of "open" is being equated with patented technology that is "free" (without payment) or "free to use freely" (without payment and without any restrictions). These proposed re-definitions are being used to advocate policy changes that would undermine the rights of those who have invested in the development of the standardized technology.
>
> While the notion of patents being "free to use freely" is superficially attractive, like most "free" things, it comes at a cost. Technological capabilities and innovations most often result from substantial investments in R&D. Such investments typically drive the growth of the investor's patent portfolio. If patent holders in standards-setting activities are expected to give away or waive their patent rights, there are likely to be significant adverse results including:
>
> - Technology leaders will reduce or cease participation in (or technical contributions to) voluntary standards-related activities, or
>
> - Individuals and organizations will not invest (or will invest less) in the development of innovative and next-generation technology in the technical areas subject to standardization, thereby creating innovation "dead zones" in those areas.

[38] As discussed below, in 2015 the IEEE revised its patent policy to define "Reasonable Rates" (a component of the Letter of Assurance it required holders of essential patents to file) to say that reasonableness should be based on the SSPPU (*see, e.g.*, https://mentor.ieee.org/myproject/Public/mytools/mob/patut.pdf)

> [D]etermination of such Reasonable Rates should include, but need not be limited to, the consideration of:
>
> - The value that the functionality of the claimed invention or inventive feature within the Essential Patent Claim contributes to the value of the relevant functionality of the smallest saleable Compliant Implementation [SSPPU] that practices the Essential Patent Claim.
> - The value that the Essential Patent Claim contributes to the smallest saleable Compliant Implementation [SSPPU] 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.

[39] https://tiaonline.org/wp-content/uploads/2018/05/TIA_Open_and_Voluntary_Standards_Policy.pdf

> These types of adverse results would cause (a) the standardization system; (b) its open, voluntary and consensus-based process; and (c) ultimately the resulting Open Standards, to be less effective or successful than they are today.
>
> Moreover, TIA believes that these results would have a negative impact on global respect for intellectual property that helps stimulate innovation and develops local economies around the world.[40]

In summary, while both ATIS and TIA state in their IPR policies that they adopt the ANSI IPR Policy, the wording of the licensing commitment of ATIS and TIA are not identical.[41] ATIS states that licenses "will be made available to applicants" and TIA states that licenses "will be made available to all applicants." One would think that the presence of absence of the word "all" in otherwise similar language would be significant, perhaps even dispositive, if the scope of the license commitment were to be derived from the language of the commitment. That the presence or absence of the word "all" is not dispositive is further evidence of the fact that neither of these commitments speaks to the level in the value chain at which licensing must occur.

ETSI (European Telecommunications Standards Institute)

ETSI's IPR homepage[42] provides an overview ("ETSI Overview") of some key components of the ETSI IPR Policy ("ETSI Policy").[43]

First, the ETSI Overview notes that the ETSI IPR Policy defines "essential" in customary terms:

> Standards rely on technical contributions from various sources. These contributions may contain patented technologies which are commonly known as Standard Essential Patents (SEP). When it is not possible on technical grounds to make or operate equipment or methods which comply with a standard without infringing a SEP, i.e. without using technologies that are covered by one or more patents, we describe that patent as 'essential'.[44]

---

[40] *Id.*, at 2-3.

[41] ATIS: "a license to such essential patent claim(s) will be made available *to applicants* desiring to utilize the license for the purpose of implementing the standard either: i) under reasonable terms and conditions that are demonstrably free of any unfair discrimination or ii) without compensation and under reasonable terms and conditions that are demonstrably free of any unfair discrimination."

TIA: "A license under any Essential Patent(s), the license rights which are held by the undersigned Patent Holder, will be made available *to all applicants* under terms and conditions that are reasonable and non-discriminatory, which may include monetary compensation, and only to the extent necessary for the practice of any or all of the Normative portions for the field of use of practice of the Standard.

[42] https://www.etsi.org/intellectual-property-rights. ("ETSI Overview")

[43] https://portal.etsi.org/directives/41_directives_feb_2020.pdf. The ETSI Intellectual Property Rights Policy ("ETSI Policy") is set out in Annex 6 to the ETSI Rules of Procedure, at pages 39-49 of the ETSI Directives.

[44] ETSI Overview.

Second, the ETSI Overview notes that the ETSI Policy seeks to ensure that SEPs are available on FRAND terms:[45]

> The ETSI IPR Policy which is part of the ETSI Directives seeks to reduce the risk that our standards-making efforts might be wasted if SEPs are unavailable under Fair, Reasonable and Non-Discriminatory (FRAND) terms and conditions.[46]

Third, the ETSI Overview emphasizes that the "main objective" of the ETSI Policy and its view of FRAND is to ensure the balance of the rights of patent holder and implementers:

> The main objective of the ETSI IPR Policy is to balance the rights and interests of IPR holders[47] to be fairly and adequately rewarded for the use of their SEPs in the implementation of ETSI standards and the need for implementers to get access to the technology defined in ETSI standards under FRAND terms and conditions.[48]

In his *IAM* article, Professor Contreras claims that "[f]or example, the . . . ETSI policy does not clearly establish whether license-to-all is required or not." And he claims that, based on conflicting statements from individual ETSI personnel, "[t]he meaning of the ETSI policy remains uncertain today."[49] But ETSI issued a Public Statement[50] in December, 2018[51] in which it *does* "clearly establish" the parameters of what its IPR regime requires and what it does not, specifically reiterating with "certainty" that there is no ETSI policy mandating any particular licensing model, instead leaving that issue to the markets, meaning to the negotiating parties.

First, and most broadly, the Public Statement warns that there is no "ETSI position" on how to interpret its IPR Policy and Guidelines, and that both those documents stand on their own:

> *We issue this public statement to clarify that ETSI does not take any position regarding the correct interpretation of its IPR policy and its IPR Guide.*
>
> *The ETSI IPR Policy and the IPR Guide texts stand as independent documents in their own right.* [52]

---

[45] The second and third points of the ETSI Overview are reflected in very similar terms in Clause 3 of the Policy Objectives portion of the ETSI Policy, discussed below.

[46] *Id.*

[47] Consistent with this language, the ETSI Policy speaks in terms of "IPRs" and "IPR holders." Given our focus on patents, this memorandum uses the terms "patents" and "patent holders" rather than the ETSI terminology.

[48] ETSI Overview.

[49] The observation about conflicting statements from ETSI personnel is a reference to the testimony of two ETSI officials in the trial of *HTC v Ericsson*, which is discussed below. As will be seen in that discussion, the Court in that case credited the testimony of the ETSI official whose testimony undercuts, rather than supports, Professor Contreras' point.

[50] https://www.etsi.org/intellectual-property-rights..

[51] *See*, https://www.etsi.org/newsroom/news/1458-etsi-s-director-general-issues-public-statement-on-ipr-policy.

[52] Public Statement. Emphasis in the original.

Second, and most importantly, the Public Statement explicitly states that under the ETSI IPR regime (that is, including all components of ETSI's IPR guidance) negotiations and licensing terms are purely commercial issues between the parties that "shall not" be addressed within ETSI, and most importantly that ETSI's IPR regime expresses no preference for any particular licensing model:

> *It is reiterated that specific licensing terms and negotiations are commercial matters between the companies and shall not be addressed within ETSI. The basic principle of the ETSI IPR regime remains FRAND with no specific preference for any licensing model.*[53]

This is a very strong statement, close to a direct rebuke of those – including courts – who claim to have determined that the various components of the ETSI IPR policy regime require or mandate any particular licensing model such as licensing chips, or mandate that the base for calculating royalties must be the SSPPU or equivalent.

Moreover, the use of the words "[i]t is reiterated" to introduce the statement emphasizes that the statement expresses what has always been ETSI's views on its IPR regime, and can be read as a further rebuke – or perhaps more gently, "reminder" – that more aggressive readings of ETSI IPR guidance simply are not correct.

The ETSI Public Statement applies to the ETSI Policy and the ETSI Guide on Intellectual Property Rights[54] ("ETSI Guide"). The ETSI Policy defines "essential" in customary terms as meaning that "it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing" the patent or patents at issue.[55]

The objectives of the ETSI Policy are similar in terms to the statements in the ETSI Overview, including in seeking a balance between the interests of patent holders and the interests of implementers:

- to reduce the risk that investment and standards could be wasted if SEPs are not available;[56]
- to seek a balance between the needs of standards for public use and the rights of patent holders;[57]

---

[53] *Id*. Italics in the original.

[54] https://portal.etsi.org/directives/40_directives_apr_2019.pdf, "ETSI Directives", Version 41, dated 2 February 2020, at 55-76.

[55] ETSI Policy, at Clause 12.

[56] ETSI Policy, at Clause 3.1.

[57] *Id*.

- to ensure that patent holders "should be adequately and fairly rewarded" for the use of their patents in the implementation of standards and technical specifications;[58] and
- to ensure that ETSI activities in formulating standards and technical specifications enable them to be "available to potential users in accordance with the general principles of standardization."[59]

To ensure the availability of licenses for SEPs, the ETSI Policy at Clause 6.1 requires that a holder of one or more SEPs that have been disclosed to ETSI[60] must give "an irrevocable undertaking in writing that it is prepared to grant irrevocable licences on fair, reasonable and non-discriminatory ("FRAND") terms and conditions under such IPR . . ."[61]

It is worth noting that this statement does not include modifiers such as "every" or "all" or "all implementers" which are sometimes pointed to as indicating that a patent holder is required by the relevant SDO to license at the chip level in the downstream implementation chain, rather than permitting the patent holder to choose the license attach point.

The ETSI Policy at Clause 6.1bis further requires that the SEP holder's licensing commitments be interpreted as "encumbrances that bind all successors-in-interest" including language in transfer documents ensuring the commitment is binding on the transferee and that the transferee will similarly bind successors-in-interest.[62]

Clause 12 of the ETSI Policy notes that the contractual commitment of the ETSI Policy is governed by the laws of France, but also specifies that any rights of and obligations not found in the laws of another country must be understood "as being solely of a contractual nature."[63]

The IPR Licensing Declaration form, included as Appendix A[64] to the ETSI Policy, does not spell out the scope of the licensing commitment, but instead commits the patent holder (in the General IPR Licensing Declaration) to comply with Clauses 6.1 and 6.1bis (discussed above) of the ETSI Policy:

> the Declarant hereby irrevocably declares that (1) it and its AFFILIATES are prepared to grant irrevocable licenses under its/their IPR(s) on terms and conditions which are in accordance with Clause 6.1 of the ETSI IPR Policy, in

[58] *Id*., at Clause 3.2.

[59] *Id*., at Clause 3.3.

[60] The obligation of patent holders to disclose SEPs is described in Clause 4 of the ETSI Policy.

[61] ETSI Policy, at Clause 6.1. The requirement is that the license provide at least rights to make, have made, sell, and use, all in broad terms. ("MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee's own design for use in MANUFACTURE; sell, lease, or otherwise dispose of EQUIPMENT so MANUFACTURED; repair, use, or operate EQUIPMENT; and use METHODS.") It is worth noting that this statement does not include modifiers such as "every" or "all" or "all implementers."

[62] *Id*., at Clause 6.1bis.

[63] *Id*., at Clause 12.

[64] Appendix A to Annex 6 (ETSI Policy), at 46 of the ETSI Directives.

> respect of the STANDARD(S), TECHNICAL SPECIFICATION(S), or the ETSI Project(s), as identified above, to the extent that the IPR(s) are or become, and remain ESSENTIAL to practice that/those STANDARD(S) or TECHNICAL SPECIFICATION(S) or, as applicable, any STANDARD or TECHNICAL SPECIFICATION resulting from proposals or Work Items within the current scope of the above identified ETSI Project(s), for the field of use of practice of such STANDARD or TECHNICAL SPECIFICATION; and (2) it will comply with Clause 6.1bis of the ETSI IPR Policy with respect to such ESSENTIAL IPR(s).[65]

Similarly, the ETSI IPR Information Statement and Licensing Declaration form[66] does not specify the scope of the licensing commitment, instead referring back to the ETSI Policy. The form requires the patent holder to either state that it is "not prepared to make"[67] the irrevocable commitment, or to irrevocably commit that:

> To the extent that the IPR(s) disclosed in the attached IPR Information Statement Annex are or become, and remain ESSENTIAL in respect of the ETSI Work Item, STANDARD and/or TECHNICAL SPECIFICATION identified in the attached IPR Information Statement Annex, the Declarant and/or its AFFILIATES are (1) prepared to grant irrevocable licences under this/these IPR(s) on terms and conditions which are in accordance with Clause 6.1 of the ETSI IPR Policy; and (2) will comply with Clause 6.1bis of the ETSI IPR Policy.[68]

HTC v Ericsson

The ETSI IPR policy recently was analyzed by Judge Gilstrap of the District Court in the Eastern District of Texas in *HTC v Ericsson*[69] because ETSI was the SDO responsible for the 2G/3G/4G patents at issue in that case.

Finding nothing in the text to explain what the ETSI policy means by "fair, reasonable, and non-discriminatory" – the language that HTC insisted required Ericsson to license chips or at least base a royalty on the chip as the smallest saleable patent practicing unit (SSPPU) – Judge

---

[65] *Id.*

[66] *Id.*, at 47.

[67] A declarant noting that it is not prepared to make the irrevocable commitment is invited to complete the optional IPR Licensing Declaration Annex, found at page 49 of the ETSI Directives in which the declarant may provide a "written explanation of reasons for not making the IPR Licensing Declaration."

[68] *Id.* The ETSI IPR Information Statement and Licensing Declaration form filing must include the IPR Information Statement Annex found at page 48 of the ETSI Directives.

[69] *HTC Corp. v. Telefonaktiebolaget LM Ericsson, Ericsson Inc.* (E.D. TX January, 6:18-CV-00243-JRG, January 7, 2019) (slip opinion)

Gilstrap looked to extrinsic evidence including expert testimony from Dr. Bertram Huber.[70] Dr. Huber was a member of the ETSI IPR Committee from its first meeting in 1989 to the adoption of the ETSI IPR policy in 1994 and was actively involved in discussions of the general outline of ETSI's framework for IPR, as well as drafting the clauses and stipulations of the ETSI IPR Policy.

Dr. Huber explained that at the time the ETSI IPR policy was adopted, the general industry practice was to offer licenses at and based on the price of the end-user device (not on the component-level) and that "this prevailing industry practice in 1994 remained in place [at the time of the trial] and is reflected in the language of the ETSI IPR Policy, and the ETSI IPR Policy was understood not to upset that practice." He also stated that "licensing chip suppliers or using a component such as the chipset as a basis of reference for calculating FRAND royalties are not in line with industry practice in the mobile telecommunications industry" and that such a practice is not "contemplated, . . . much less even mandated, by the ETSI IPR Policy or any other provision of the ETSI Directives."[71]

In his opinion, Judge Gilstrap relied on the testimony of Dr. Huber in finding that "the parties to the ETSI IPR policy did not intend to impose a requirement that every FRAND license must be based on the SSPPU." He noted that this finding is "evidenced not only by the lack of express language to that effect in the FRAND commitment, but also by ETSI's affirmative representation that '[t]he basic principle of the ETSI IPR regime remains FRAND with no specific preference for any licensing model.'. . . Several independent sources confirm that the prevailing industry standard or approach has been to base FRAND licenses on the end-user device and not on the SSPPU."[72]

***FTC v Qualcomm* (District Court)**

The District Court opinion in *FTC v Qualcomm*[73] is one of only two U.S. court decisions that have found violation of a FRAND commitment to implicate U.S. antitrust law.[74]

In his *IAM* article, Professor Contreras cites the District Court's ruling in *FTC v Qualcomm* that Qualcomm was obligated as a matter of law to license chipmakers as support for his argument that "[o]ther U.S.-based SDOs have defined their FRAND requirements to mean that SEP holders must make licences available to 'all applicants'":

[70] HTC offered the testimony of Dr. Philippe Stoffel-Munck, who disagreed, but Judge Gilstrap's decision primarily reflects the testimony of Dr. Huber.

[71] *Id*., at 9-10.

[72] *Id*., at 11.

[73] https://www.ftc.gov/system/files/documents/cases/qualcomm_findings_of_fact_and_conclusions_of_law.pdf.

[74] The other is the Third Circuit decision in *Broadcom v Qualcomm*, 501 F. 3d 297 (3d Cir. 2007). That decision centered on a finding that Qualcomm had misled the SDO by making a FRAND commitment it did not intend to keep and that this fraudulent conduct violated the antitrust laws. As discussed below, that case has been read as limited to its facts, and not as holding more broadly that U.S. antitrust law mandates licensing chips.

> In the case of the Alliance for Telecommunications Industry Solutions (ATIS) and the Telecommunications Industry Association (TIA) - U.S.-based organisational partners of 3GPP and 3GPP2, respectively – the U.S. District Court for the Northern District of California held in granting the FTC's motion for partial summary judgment in *FTC v Qualcomm* that these all applicants requirements imposed license-to-all obligation on ATIS and TIA members.

The analysis of the ATIS and TIA IPR policies presented above indicates that those policies do not "impose license-to-all obligations on ATIS and TIA members." And, with a bit of unraveling, it will become apparent that the District Court ruling in *FTC v Qualcomm* was not a good choice in seeking support for the view that IPR policies require licensing chips.

In ruling in the FTC's favor on the FTC's Motion for Partial Summary Judgment,[75] the District Court cited the Ninth Circuit decision in *Microsoft Corp. v. Motorola*, saying "SDOs requir[e] members who hold IP rights in standard-essential patents to agree to license those patents *to all comers* on terms that are 'reasonable and nondiscriminatory, or 'RAND.'"[76] The District Court also stated that "[t]he Ninth Circuit repeated the same core principle three years later: a 'SEP holder *cannot refuse* a license to a manufacturer who commits to paying the RAND rate.'"[77]

But the IPR Policy the District and Circuit Courts were considering in *Microsoft v Motorola* was not the IPR policy of either ATIS or TIA (the relevant SDOs in *FTC v Qualcomm)*; rather it was the IPR policy of the JVT joint development group, a joint project of working groups in ITU and in ISO/IEC.

The *FTC v Qualcomm* District Court made the leap from the IPR policies at issue in *Microsoft. v. Motorola* (ITU/ISO/IEC) to an interpretation of the different IPR policies at issue in *FTC v Qualcomm* (ATIS and TIA) like this:

> Qualcomm ignores that the Ninth Circuit in *Microsoft II* was interpreting an SDO IPR policy *with almost identical language*[78] as the TIA and ATIS IPR policies. Under the SDO IPR policy at issue in *Microsoft II*, the SEP holder promised to "grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to use the patented material necessary in order to manufacture, use, and/or sell implementations" of

---

[75] *FTC v Qualcomm*, Order Granting FTC's Motion for Partial Summary Judgment (ND CA, 17-CV-00220-LHK, November 6, 2018) (slip opinion), found at https://www.ftc.gov/system/files/documents/cases/2018_11_06_order_granting_ftc_motion_for_partial_summary_judgment_dkt_931.pdf

[76] *Id*., at 17.

[77] *Id*.

[78] *Id*., at 18. (Emphasis supplied.) Describing the language of the various standards in play as "almost identical" is, at best, a stretch, and inconsistent with the facts that U.S. courts treat the FRAND commitment as a contractual commitment, and that contract law begins, and may end, with a close reading of the specific language of the contract at issue. As discussed in this article, while it is true that at a high level most SDO policies cover similar issues, each IPR policy is stated in the specific terms chosen by the relevant SDO, and given that a FRAND commitment to an SDO is a contractual commitment its meaning depends on the particular language of each particular standard.

> the relevant standard. . . . The Ninth Circuit emphasized that such IPR policy language "admits of no limitations as to who or how many applicants could receive a license . . . or as to which country's patents would be included.". . . As a result, the Ninth Circuit concluded that the SEP holder could not refuse to license any of its SEPs, including its international SEPs. . . . The Ninth Circuit further characterized the SEP holder's FRAND promise as "sweeping."[79]

But of course, what is "sweeping" in the FRAND commitment at issue is not a conclusion that licensing must occur at a particular point in the value chain, but rather that "the SEP holder could not refuse to license any of its SEPs, including its international SEPs."

The District Court Opinion continues:

> When the case returned to the Ninth Circuit in *Microsoft III,* the Ninth Circuit again affirmed that the FRAND promise means that a SEP holder "cannot refuse a license to a manufacturer who commits to paying the RAND rate.". . . Those binding precedents are clear: a SEP holder that commits to license its SEPs on FRAND terms must license those SEPs to all applicants. Moreover, the Federal Circuit has also held that SDO IPR policies require SEP holders to grant licenses to "an unrestricted number of applicants," and that such a FRAND commitment prohibits the SEP holder from refusing to license the SEP to others who wish to use the invention.[80]

As noted above, a licensing commitment to an SDO is a contractual commitment, and therefore the scope of the licensing commitment is determined by the language of the commitment itself or in reference to the IPR policy underlying it. On this approach, it seems odd that to determine the meaning of the FRAND commitment under the IPR policies of ATIS and TIA the District Court (a) would look to the language of a different commitment to a different set of SDOs (ISO/IEC/ITU), (b) would interpret the ISO/IEC/ITU commitment as requiring licensing to chip makers based on language not present in the commitment, and (c) then use that interpretation to support giving the same interpretation to the IPR policies of ATIS and TIA, which are similarly missing the words the interpretation seeks to impose. The Court's description of the language as "ambiguous" seems either an understatement or an exaggeration, as a label for the absence of language. Moreover, the analysis presented above on the ATIS, TIA, and ISO/IEC/ITU IPR policies does not agree that any of those IPR policies mandates licensing chips.

And most importantly, the Ninth Circuit does not seem to agree with Judge Koh's broad reading of Ninth Circuit precedent.

***FTC v Qualcomm* (Ninth Circuit)**

The Ninth Circuit opinion in FTC v Qualcomm[81] reversed the District Court's holding that a

[79] *Id*., at 18.

[80] *Id*., at 19.

[81] *FTC v Qualcomm*, 9th Circuit, (9th Cir. ,No. 19-16122, August 11, 2020). (slip opinion)

licensing commitment to an SDO is an antitrust violation:

> We therefore decline to hold that Qualcomm's alleged breach of its SDO commitments to license its SEPs on FRAND terms, even assuming there was a breach, amounted to anticompetitive conduct in violation of § 2.[82]

The Ninth Circuit did not reach the merits of the District Court's grant of partial summary judgment on the issues of whether Qualcomm's commitment to the SDOs required it to license chip makers, stating that:

> Because our reversal does not depend on the district court's grant of partial summary judgment with respect to Qualcomm's contractual commitments to license its SEPs to rival chip suppliers, we vacate that order as moot without reaching its merits[83].

But the Ninth Circuit did make some observations on that point, which suggest a lack of support for the District Court's ruling that the SDO policies should be held to require licensing chips or chipmakers:

> Because the FTC has not met its initial burden under the rule of reason framework, we are less critical of Qualcomm's procompetitive justifications for its OEM-level licensing policy—which, in any case, *appear to be reasonable and consistent with current industry practice*.[84]
>
> * * *
>
> Finally, we note the persuasive policy arguments of several academics and practitioners with significant experience in SDOs, FRAND, and antitrust enforcement, who have expressed caution about using the antitrust laws to remedy what are essentially contractual disputes between private parties engaged in the pursuit of technological innovation.[85]

IEEE (Institute of Electrical and Electronics Engineers) Revisions to IPR Policy

The IEEE's 2015 revision of its IPR policy offers a natural experiment in the effects that flow from an SDO clearly and unambiguously requiring licensing of chips. Specifically, in 2015 the IEEE revised its IPR Policy to explicitly impose just such a requirement, along with two other

---

[82] *Id*., at 40. Antitrust law in the U.S. is very clear that a violation of the antitrust laws can arise only from the breach of an obligation that itself arises from the antitrust laws; breaching an obligation imposed by any other source does not and cannot give rise to an antitrust violation. Therefore, even assuming that a SEP holder who gave a FRAND commitment to an SDO failed to fulfill that commitment, that "violation" of the FRAND commitment is not an antitrust violation under U.S. law, because the FRAND commitment is a contractual commitment, not an obligation imposed by antitrust law.

[83] *Id*., at 20.

[84] *Id*., at 4. (emphasis added)

[85] *Id*., at 39.

policies long advocated by some implementers, together mandating that a licensor who has submitted[86] a Letter of Assurance ("LOA") must:

- be willing to license chips at every level down to a chip[87]
- advocate that determination of royalty rate be based on the SSPPU[88]
- will not seek an injunction against an implementer unless the implementer "fails to participate in, or to comply with the outcome of, an adjudication" including a first level appeal[89]

These fundamental changes to historical practices – requiring licensing of components, requiring that reasonable rates be based on the value of the patented technology to the SSPPU, and establishing severe limitation on the right to seek an injunction – all impose limitations on the patent rights of IEEE licensors far beyond what courts have required.

So, it is not very surprising that the IEEE's revisions to its IPR policies have resulted in patent holders making substantially fewer declarations of patents and filing substantially fewer LOAs that commit to FRAND rates and terms. These reactions by SDO contributors clearly indicate that patent holders regard these changes as tipping the rules too far in favor of implementers.

One study of the impact of the revised IEEE Patent Policy concluded:

> The empirical findings suggest a decline in LoAs with several SEP holders reluctant to license under the new IPR policy terms. More importantly, uncertainty on implementers' side has increased, as new standards have been approved under the presence of negative and/or missing LoAs, and other standards are being developed under this "mixed bag" of LoAs. The CRP analysis reveals that the first two rounds of the process last on average longer after the policy change. Such a finding implies that the 802.11 balloting process has become more time consuming, which in turn results in a (potential) delay of approval/publication of standards. We also find that the number of new projects initiated (or PARs) in the IP-intensive IEEE standards (namely the 802 WGs)

---

[86] Holders of SEPs are encouraged, but not required, to file an LOA. *See, e.g.*, IEEE Patent Policy, at 2. Found at https://standards.ieee.org/about/policies/bylaws/sect6-7.html .

[87] "any Compliant Implementation", defined as "any product (e.g., component, sub- assembly, or end-product)"

[88] "determination of . . . Reasonable Rates should include . . . consideration of . . . the value that the . . . invention . . . contributes to the value of the relevant functionality of the smallest saleable Compliant Implementation that practices the Essential Patent Claim."

[89] determination of . . . Reasonable Rates should include, but need not be limited to, the consideration of:

- The value that the functionality of the claimed invention or inventive feature within the Essential Patent Claim contributes to the value of the relevant functionality of the smallest saleable Compliant Implementation that practices the Essential Patent Claim.
- 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.

have decreased, suggesting a potential deceleration of the growth rate of innovation after the policy change.[90]

In the years since the IEEE had issued its revised IPR Policy (2015-2019) "negative" LOAs – that is, LOAs in which contributors declined to make a RAND[91] commitment –increased 77%.[92] And the corresponding low rate of LOAs making RAND commitments had caused ANSI to decline to approve two IEEE-proposed amendments to the 802.11 standard.[93]

The 2015 IEEE changes in its IPR policies offer an unusual, and unusually illuminating, natural experiment in what effects follow from a set of clear mandates of the type long-advocated by implementers, including a mandate to license chips. That experiment resulted in a remarkable drop in positive LOAs committing to RAND licensing, a reduction in the number of patent holders and applicants participating in standards settings with that SDO, reduced coverage for implementers along with reduced assurance that patents would be offered on RAND terms. The compelling conclusion is that mandating licensing of chips is clearly inconsistent with public policy on innovation and is detrimental to the interests of both patent holders and implementers

CONCLUSION

Implementers and their advocates long have argued that FRAND and the IPR policies of SDOs mandate – or should be read to mandate – that SEP holders must be willing to license chips. Where a FRAND commitment is seen as a voluntary contractual undertaking, any determination of the scope of the commitment must be based on principles of contract interpretation, beginning with the language of the commitment and, where justified, an analysis of that language in the context of other portions of an SDO's IPR policies and relevant external factors, such as industry practice. No IPR policy states that mandate explicitly, other than the IEEE's revised 2015 statement of its IPR policy which has had predictably negative consequences for the standards and licensing ecosystem.

Efforts to argue that an SDO's policies implicitly support the argument require highly creative, and forced, readings. And the full context of all the components of any SDO's IPR policy, including language suggesting or stating that the parties to a license have the right to determine

---

[90] Effraimidis, G. and Gupta, K., *IEEE Patent Policy Revisions: An Empirical Examination of Impact*, found at https://www.law.northwestern.edu/research-faculty/clbe/events/roundtable/documents/effraimidis_gupta.pdf

[91] DOJ stated these facts in a September 2020 "revised" BRL it issued in relation o the IEEE's 2015 revision of its IPR policy, which criticized the revisions as not representing the then-current views of the DOJ and as being inconsistent with evolving law and policy. On May 5, 2021, Richard Powers, the Acting Assistant Attorney General for Antitrust issued a statement explaining that the Division had withdrawn the 2020 "revised" BRL: "The DOJ is restoring the 2015 business review letter to its original state by moving the 2020 competition advocacy letter to the competition advocacy portion of our website, and removing a watermark that had been placed on the 2015 letter. This action is a return to previous practice that is consistent with existing department regulations." https://www.law360.com/articles/1376134/does-doj-s-rebranding-of-patent-policy-letter-hint-at-more-

[92] 2020 BRL, at 9.

[93] *Id.*

the appropriate licensing model, further undercuts the effort to claim that any of the SDOs' policies mandate licensing of chips.

In addition, only one federal appellate court has come close to announcing such a mandate, in *Broadcom v Qualcomm*, and a careful reading of the case makes it clear that the licensing conduct implicated antitrust law only because of the deception involved.

Moreover, industry practice over many decades has been to license at the device level. SDO IPR policies have been created, revised, and enforced in the context of and with full knowledge of that history. If that historical licensing model had violated the IPR policy of any SDO at any point during those decades, that SDO would have reacted by noting the violation, and clarifying its policy as needed to make explicit the mandate to license chips rather than at the device level. Only the IEEE has ever done that, with results that have been disastrous for both licensors and licensees, discouraging licensors from making FRAND licensing commitments, dramatically reducing licensees' patent security, delaying issuance of new standards, and drawing a sharp rebuke from the Department of Justice.

In his *IAM* article, Professor Contreras, mirroring the position of many large patent implementers, contends that "sometimes FRAND does mean license-to all". However, an objective examination of the numerous SDO policies shows that this position is not supported by a close review of the texts of those policies, nor is this position supported by an objective examination of the intentions of policy drafters, the shared understandings of SDO participants, the historical precedents for such policies, decades of industry practice, or by the valid decisions of courts.