

THE SEDONA CONFERENCE WORKING GROUP SERIES

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THE SEDONA CONFERENCE

Framework for Analysis of Standard-Essential Patent (SEP) and Fair, Reasonable, and Non- Discriminatory (FRAND) Licensing and Royalty Issues (Stage Two)

A Project of The Sedona Conference
Working Group on Patent Damages
and Remedies (WG9)

NOVEMBER 2019 PUBLIC COMMENT VERSION



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(Stage Two) Preface

Welcome to the November 2019 Public Comment Version of The Sedona Conference *Framework for Analysis of Standard-Essential Patent (SEP) and Fair, Reasonable, and Non-Discriminatory (FRAND) Issues (Stage Two)*, a project of The Sedona Conference Working Group on Patent Damages and Remedies (WG9). This is one of a series of Working Group commentaries published by The Sedona Conference, a 501(c)(3) research and educational institute dedicated to the advanced study of law and policy in the areas of antitrust law, complex litigation, and intellectual property rights. The mission of The Sedona Conference is to move the law forward in a reasoned and just way.

The mission of WG9, formed in November 2010, is “to create guidelines that will help to clarify and guide the evolution of patent damages and remedies considerations to encourage patent damages and remedies law to remain current with the evolving nature of patents and patent ownership.” The Working Group consists of members representing all stakeholders in patent litigation.

The WG9 *Framework* drafting team was launched in 2015 and is led by editors David W. Long, Mark Selwyn, and Leah Waterland. Earlier drafts of this publication were a focus of dialogue at the WG9/WG10 Joint Midyear Meeting in Miami in May 2015, the WG9/WG10 Joint Midyear Meeting in Pasadena in February 2016, the WG9/WG10 Joint Annual Meeting in Houston in February 2017, and the WG9/WG10 Joint Annual Meeting in Philadelphia in March 2019. Stage One of this *Framework* was published for public comment in February 2018. This Stage Two publication addresses the remaining important SEP/FRAND issues identified by WG9 that were not addressed in Stage One. The editors have reviewed the comments received through the Working Group Series review and comment process.

This *Framework* represents the collective efforts of many individual contributors. On behalf of The Sedona Conference, I thank in particular R. Eric Hutz, the Chair of WG9, and Matthew Powers, the Vice-Chair of WG9, who serve as the Editors-in-Chief of this publication, and Teresa Rea, the Vice-Chair of WG10 and WG9 Steering Committee member, who is serving as our WG9 Steering Committee Liaison. I also thank everyone else involved for their time and attention during this extensive drafting and editing process, including: David W. Long, Mark Selwyn, Leah Waterland, Byron Holz, Anne Layne-Farrar, Richard J. Stark, Koren W. Wong-Ervin, and Theodore Stevenson, III. We also thank other individuals who significantly contributed to the substantive development of this *Framework*, including, but not limited to Chris Dunstan. We further thank volunteer Henry Becker for his contributions.

The Working Group had the benefit of the review of our Judicial Review Panel formed for this *Framework*, consisting of Hon. Cathy Ann Bencivengo, Hon. Kathleen M. O’Malley, and Hon. James L. Robart. The statements in this *Framework* are solely those of the non-judicial members of the Working Group; they do not represent any judicial endorsement of any recommended practices.

Given the high stakes and highly contentious nature of these SEP/FRAND issues, it is important to emphasize the disclamatory language on the cover of this and all Sedona publications. The statements herein “do not necessarily represent the views of any of the individual participants or their employers, clients, or any organizations to which they may belong.” The numerous “some may argue” positions presented throughout this *Framework* may not represent the consensus of the

group described, and implicitly do not represent the consensus of the full drafting team or all of WG9. It would be expressly contrary to the Sedona consensus, nonpartisan spirit and mission to move the law forward in a reasoned and just way for the contents of this Sedona publication to be used against any of its WG9 member contributors in a litigation or other contexts.

Please note that this version of the *Framework* is open for public comment through May 15, 2020, and suggestions for improvements are welcome. After the deadline for public comment has passed, the drafting team will review the public comments and determine what edits are appropriate for the final version. Please send comments to comments@sedonaconference.org or fax them to 602-258-2499.

The *Framework* will be updated to account for future significant developments impacting this topic. The Sedona Conference hopes that, as the case law develops further, WG9 will follow with a series of consensus, nonpartisan principles and best practices for the future case management of SEP/FRAND litigation issues, which will evolve into authoritative statements of law, both as it is and as it should be.

Craig W. Weinlein
Executive Director
The Sedona Conference
November 2019

Foreword

In 2012, Working Group 9 (WG9) began an effort to add clarity and predictability to the area of patent remedies. Participants and observers of WG9 included a diverse group of in-house and outside attorneys representing both practicing and nonpracticing entities, expert witnesses involved in damages issues, and members of the federal judiciary. These efforts culminated in the Sedona Conference *Commentary on Patent Reasonable Royalty Determinations*,¹ published after extensive public commentary. WG9 has also published other white papers,² and more are forthcoming.

WG9 publishes here this *Framework for Analysis of Standard-Essential Patent/FRAND Issues* to address issues specific to alleged standard-essential patents (SEPs) and to consider the effects of commitments made to license patents on fair, reasonable, and non-discriminatory (FRAND) terms in infringement suits. To characterize these SEP/FRAND issues as difficult and complicated would be an understatement. While perhaps not a “doomed undertaking”—as at least one judicial opinion has characterized the issue(s)³—it has given rise to unique challenges in trying to reach a consensus presentation on a wide range of issues, including the following:

- The general approach taken throughout this *Framework* has been to present the various positions that SEP licensors and that SEP licensees may argue for key disputed issues. This approach has necessitated attempts to present positions in a balanced, neutral fashion with a similar level of detail provided to each position, instead of allowing the different stakeholders to advocate for their positions as they would in litigation.
- The result may give rise to “false equivalency” issues. This has been unavoidable, as the intent of Sedona and WG9 in this publication is to present a framework for analysis, and not to weigh in substantively where the law is still developing on these complex issues.
- There are certain arguments that may be reasonably raised in an adversarial litigation process that fall outside of our Sedona “rules of engagement,” where a brief and fair presentation of both sides is impossible within the context of our Sedona *Framework*

¹ The Sedona Conference, *Commentary on Patent Reasonable Royalty Determinations* (Dec. 2016 Edition), available at https://thesedonaconference.org/publication/Patent_Damages_and_Remedies [hereinafter *WG9 Reasonable Royalty Determinations Commentary*].

² See The Sedona Conference, *Commentary on Case Management of Patent Damages and Remedies Issues: Proposed Model Local Rule for Damages Contentions* (June 2017 Edition), available at https://thesedonaconference.org/publication/Patent_Damages_and_Remedies; and The Sedona Conference, *Commentary on Case Management of Patent Damages and Remedies Issues: Section on Patent Damages Hearings* (May 2017 Public Comment Version), available at https://thesedonaconference.org/publication/Patent_Damages_and_Remedies.

³ TCL Commc’n Tech. Holdings, Ltd. v. Telefonaktiebolaget LM Ericsson, 2018 WL 4488286, at *8 (C.D. Cal. Sept. 14, 2018).

here. E.g., arguments that actual statements made in court opinions should be limited as dicta, on the facts, etc.

- Identifying which nonfederal court opinion sources to include and exclude in support of various positions presented throughout this *Framework* has been a source of controversy. Some question the extent to which whether government agencies should weigh in at all or whether agency statements should have any weight in a court of law. The WG9 Steering Committee’s viewpoint is that appropriate statements from the various government agencies that address SEP/FRAND issues should be included in this publication. We applied the general standard of whether a court would find a given source informative to its analysis in an SEP/FRAND case and of sufficient weight to be included in a Sedona consensus, nonpartisan publication.
- Also challenging was how to address the few U.S. court decisions on SEP/FRAND issues without inadvertently putting too much weight on a particular decision given the still-developing state of this area of law. Cases from the U.S. Court of Appeals for the Federal Circuit, which has nationwide jurisdiction over patent disputes, are binding precedent in patent cases,⁴ but the regional circuits take appeals on antitrust issues and contract law.⁵ Illustrative of these sample size and jurisdictional issues, to date, there have been only a handful of bench trials determining a FRAND royalty, and each district court did not fully accept the FRAND royalty methodology proposed by each party and instead used its own methodology, which itself differed at least in some respects from the methodology used by any other district court.⁶ Each of those decisions are important to know about given the few cases in this area, but none alone provides definitive guidance on the issues, with several on appeal at the time of this publication.
- With respect to more recently issued district court cases, we generally sought to find the most appropriate single place in the paper to cite and provide as brief and neutrally presented discussion as possible.
- SEP/FRAND issues are being litigated in jurisdictions around the world, with more than 80 foreign decisions on these issues to date. A forthcoming Sedona WG9 drafting team will provide a Framework for Analysis “Global Edition” addressing these same SEP/FRAND issues as applied by courts around the world.

⁴ For example, the Federal Circuit’s decisions in *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1230 (Fed. Cir. 2014) and *Commonwealth Sci. & Indus. Research Org. v. Cisco Sys. Inc. (CSIRO)*, 809 F.3d 1295, 1305 (Fed. Cir. 2015) set forth holdings at least relevant to the issues addressed herein.

⁵ Although the Federal Circuit does sometimes address antitrust issues where the case also has patent issues, it does so by following the antitrust law of the regional circuit governing the district court in which the case was filed.

⁶ For relevant discussion, *see infra*, Sect. III.C.3 (FRAND Analysis—Additional Considerations...—“Top Down” v. “Bottom Up” Approaches).

The limited, and sometimes conflicting, case law that has been developed by judges struggling to address highly complicated areas of technology, economics, and the law in SEP/FRAND cases both heightens these challenges and highlights the need in the patent community for this publication, which is designed to help practitioners and the judiciary identify and put into the appropriate context the types of issues that frequently arise in SEP/FRAND disputes.

This WG9 *Framework* is the result of an extensive effort over a five-plus year period, and includes input from both in-house and outside counsel who have different views regarding SEPs and the FRAND commitment; economists; the judiciary; and various government agencies that address SEP/FRAND issues.

The editors would like to express their appreciation to the members of the drafting team for their valuable input and thoughtful commentary. This project required a significant time commitment by everyone and involved much discussion and compromise to prepare this publication. This was clearly a team effort.

As the Editors-in-Chief for this publication and as Chair of Working Group 9, we would like to personally thank the co-leads—David Long, Mark Selwyn, and Leah Waterland—as well as Jim Ko for their time and dedication in helping prepare a document that will be of significant benefit to the judiciary and patent bar.

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I. Introduction

Technical industry groups often form voluntary organizations to develop and adopt technical standards that advance the state of the technology and allow compatibility among different products made by different manufacturers so that any of those standard-compliant products can work together. For example, an industry group may develop a standard protocol for wireless communication so that wireless signals transmitted by one standard-compliant device can be received and understood by other standard-compliant devices no matter who made them. This *Framework* refers to such industry groups as standard-setting organizations (SSO), a broad term applicable to a wide variety of organizations that set technical industry standards.

Some SSOs may make seemingly arbitrary decisions for pure compatibility reasons, akin to deciding whether to drive on the left side or right side of the road: either will work equally well, but you must pick one for people to safely use the road.

In contrast, another category of SSOs creates technology and may spur technical innovations and patentable inventions along the way. These will be referred to here as standard-development organizations (SDOs). Standard-essential patent litigation typically involves this latter type of standards development, and as such SDOs are the focus of this publication.

SDOs often have policies concerning what their participants should do if they own intellectual property relevant to a standard that the SDO is developing. Such intellectual property rights (IPR) policies may require participants to disclose to the SDO if they have a patent that might be “essential” for someone to implement the standard (also called a “standard-essential patent” or “SEP”).⁷ The patent owner is typically not required to represent that the patents it declares are actually essential, and SDOs typically do not make an independent determination of whether any identified patents are actually essential to the standard.

IPR policies also may require the patent owner to let the SDO know if it is willing to license patents that are essential to the standard and, if so, under what terms. A common example is that a patent owner may commit to licensing its patents on “fair, reasonable and non-discriminatory” (FRAND) or “reasonable and non-discriminatory” (RAND) terms if those patents are essential to implementing the standard.

Standard-essential patents, including those with F/RAND (hereinafter FRAND) commitments, have been around for decades in all types of industries, but recent years have seen an increase in litigation concerning such patents. This paper explores the issues and distinct processes in the developing area of litigating standard-essential patent disputes in U.S. courts and the International Trade Commission (ITC).

⁷ SSO IPR policies may define what would make a patent *essential* under the standard at issue, which may differ from one SSO to another. The specific SSO IPR policy at issue should be considered in determining whether a patent is essential to that SSO’s standard.

II. *The SDO Commitment*

A. DIFFERENT TYPES OF SDO IPR POLICIES AND TERMS

Standard-development organizations generally maintain policies concerning the intellectual property rights relevant to the standards. IPR policies may serve to (1) encourage participants to contribute their patented innovations to the standard, (2) encourage the development of products that implement standards, and (3) reduce the risk of antitrust concerns that may otherwise arise from collaboration among industry participants in the development of a standard.⁸

SDO IPR policies vary. The “fair, reasonable and non-discriminatory” (FRAND) or “reasonable and non-discriminatory” (RAND) licensing commitments typically have some commonalities across SDO IPR policies. Nonetheless, when evaluating any particular SDO’s IPR policy, it is important to consider the specific text of the FRAND commitment and applicable IPR policy, because there may be significant differences from one policy to another. In addition, SDOs may revise their IPR policies from time to time; a different version of the IPR policy may be in effect depending on the particular date a FRAND commitment was made.

SDO policies may differ in a number of ways, including with respect to the following important policy issues: (1) the type of IPR licensing commitments and when they become applicable, (2) the patent disclosure commitments, (3) the treatment of nonmembers, (4) obligations of successors to patents with standard-setting commitments, and (5) reciprocity issues.

1. IPR licensing commitments

The SDO commitment may give rise to a variety of different types of obligations to license, usually defined by the SDO’s IPR policy. A common SDO approach is to require, or seek voluntary commitments from, participants to license their SEPs on FRAND terms. Other SDOs may require, or seek commitments from, participants to license on “FRAND-Zero” terms—meaning that the licenses would be granted on a royalty-free, reciprocal basis. And other SDOs’ policies may not be based on FRAND at all, but may have IPR policies based on other types of licensing terms. And for some that do require FRAND, they may also provide additional detail and information about what FRAND commitment they seek, and how it should be interpreted in the context of their SDO’s standards. This *Framework* focuses primarily on FRAND-committed SEPs.

One issue that may arise is the timing of *when* the licensing commitment becomes applicable. For some SDOs, voluntary agreement to be a member in the SDO will include some form of licensing commitment for any standards developed during the term of the membership. For other SDOs, a

⁸ As the U.S. Supreme Court wrote in *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492 (1988), “[t]here is no doubt that the members of such associations often have economic incentives to restrain competition and that the product standards set by such associations have a serious potential for anticompetitive harm. Agreement on a product standard is, after all, implicitly an agreement not to manufacture, distribute, or purchase certain types of products.” *Id.* at 500. But the Court also recognized that standards can have “significant procompetitive advantages,” provided that the SSO has “procedures that prevent the standard-setting process from being biased by members with economic interests in stifling product competition.” *Id.* at 501.

member's voluntary participation in a particular work stream includes a licensing commitment; that is, the member does not agree to a licensing commitment for *all* standards developed by the organization, but does agree to a licensing commitment for any standards that it assists in developing. A third approach is that members agree to make IPR "declarations" if and when they become aware that they own IPR that they reasonably believe is or may become essential to a particular standard. For such SDOs, the IPR owner may simultaneously identify the IPR it reasonably believes may be essential, and declare whether or not it will commit to license such IPR on the applicable SDO's terms. If the IPR owner declines to make the required commitment, then the SDO may choose to revise the relevant portions of the standard to avoid the IPR. Although an SDO may have a policy that it may consider revising a standard to avoid IPR absent a licensing commitment, in any given case, the SDO may or may not actually do so.

2. Patent declarations

In connection with the IPR commitment, SDOs often require that a patent owner provide notice to the SDO and other participants whenever it learns that it may own a patent that it reasonably believes might be or might become essential to a standard. The identification of particular patents helps the SDO and its participants understand who owns applicable IPR and whether to design around the IPR. This can assist participants in the standard-development process, as well as in subsequent licensing matters.

Some SDOs will accept a "blanket" licensing commitment, whereby the patent owner commits to license any patents that it owns that are, or may become, essential to the particular standard. While such commitments may not include specific identification of particular patents, the "blanket" commitment to license ensures that licenses to any patents owned by the patent owner will remain available. Such approaches can be particularly useful for SDO participants that do not have the resources to regularly review and analyze their patent assets as compared with the various SDOs with which their business teams are engaged.

3. Enforceability of standard-setting commitments by SDO members and nonmembers

While the issue of whether a standard-setting commitment constitutes a binding contract enforceable by SDO members or third parties depends on the language of the specific SDO IPR policy, courts that have considered this issue have generally held that the specific SDO IPR policies at issue in the matters before them constituted binding contracts, and that members of the SDO or third-party beneficiaries in the form of parties using the standard have standing to sue.⁹

Under many SDOs' IPR policies, the persons entitled to the benefit of a FRAND commitment are not limited to members of the SDO. But some SDOs—particularly smaller collaborations—may limit the licensing commitment to participants in the collaboration or may create multiple "tiers" of rights, with preferential terms provided to certain types of participants.

⁹ See, e.g., *Microsoft Corp. v. Motorola, Inc. (Microsoft III)*, 696 F.3d 872, 884–85 (9th Cir. 2012); *Apple, Inc. v. Motorola Mobility, Inc.*, 886 F. Supp.2d 1061, 1083–84 (W.D. Wis. 2012); *Microsoft Corp. v. Motorola, Inc. (Microsoft II)*, 864 F. Supp.2d 1023, 1031–33 (W.D. Wash. 2012).

4. Obligations of successors to patents with standard-setting commitments

Some SDOs have included provisions within their IPR policies that seek to ensure that licensing commitments will continue to bind subsequent transferees.¹⁰ Some SDOs address this as an issue of “circumvention” of the licensing commitment, and restrict transfers with the intent of circumventing such obligations. Other SDOs seek more specific commitments by patent owners, such as a commitment to include an agreement to abide by the applicable licensing commitment as part of the contractual patent transfer documents. Some SDOs encourage the treatment of the licensing commitment as an encumbrance on the patent, applicable to the transferee regardless of whether the patent owner has included such express contractual provisions. And some SDOs do not address the issue at all.

5. Reciprocity and defensive suspension

Some SDO IPR policies expressly contemplate that patent owners may refuse to license to prospective licensees who refuse to reciprocate with a cross-license, to the extent as addressed by the IPR policy. Relatedly, SDO IPR policies may include terms addressing “defensive suspension” as to existing licensees, whereby a patent owner may suspend a previously granted license in the event that the licensee sues the patent owner based on infringement of the licensee’s own patents.

For SDO IPR policies that permit these express terms, issues of the *scope* of reciprocity may or may not be addressed. That is, some IPR policies may state simply that reciprocity is required, but not provide further clarity as to whether such reciprocity must extend only to SEPs for the relevant standard, to all SEPs relevant to the SDO, or even to non-SEPs. Other SDO IPR policies expressly provide that the scope of reciprocity must be limited to the standard at issue between the parties, or do not address reciprocity at all.

B. COMMITMENT TO DISCLOSE RELEVANT IPR

Problems may arise if a patent holder has committed to timely disclose patents to an SDO but knowingly or in bad faith fails to do so, and later asserts one or more undisclosed patents.

In evaluating what disclosure commitment an SDO participant undertook with the SDO, the Federal Circuit has considered both the express language of the applicable IPR policy and how, in practice, the SDO members treated the language.¹¹ Even if the written policy does not impose “a

¹⁰ For example, 6.1bis of the ETSI IPR Policy (“Transfer of Ownership of ESSENTIAL IPR”) reads: “FRAND licensing undertakings made pursuant to Clause 6 shall be interpreted as encumbrances that bind all successors-in-interest. Recognizing that this interpretation may not apply in all legal jurisdictions, any Declarant who has submitted a FRAND undertaking according to the POLICY who transfers ownership of ESSENTIAL IPR that is subject to such undertaking shall include appropriate provisions in the relevant transfer documents to ensure that the undertaking is binding on the transferee and that the transferee will similarly include appropriate provisions in the event of future transfers with the goal of binding all successors-in-interest. The undertaking shall be interpreted as binding on successors-in-interest regardless of whether such provisions are included in the relevant transfer documents.” See ETSI IPR Policy, available at <https://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf>.

¹¹ See *Rambus Inc. v. Infineon Techs. AG*, 318 F.3d 1081, 1096–98 (Fed. Cir. 2003).

direct duty on members . . . expressly requiring disclosure of IPR information,” courts may nonetheless treat the language as imposing a disclosure duty where consistent with the treatment accorded to it by SDO members.¹² “The existence of a disclosure duty is a legal question with factual underpinnings.”¹³

If a disclosure duty is found to exist, the court will turn to determining its scope.¹⁴ In determining the scope of such a duty, the Federal Circuit has looked to the express language of the policy and, to the extent the written language is ambiguous, the expectations of SDO participants.¹⁵ While the Federal Circuit has cautioned against “after-the-fact morphing of a vague, loosely defined policy to capture actions not within the actual scope of that policy,” it has approved of a scope of disclosure requiring SDO participants to disclose patents and other IPR that “reasonably might be necessary” to a standard.¹⁶

The Federal Circuit has analyzed a breach of a duty of disclosure under various legal theories. For example, the Federal Circuit has found the equitable defense of implied waiver applicable in the SDO context where there was “intentional nondisclosure in the face of a duty to speak.”¹⁷ “[A] duty to speak can arise from a group relationship in which the working policy of disclosure of related intellectual property rights (‘IPR’) is treated by the group as a whole as imposing an obligation to disclose information in order to support and advance the purposes of the group.”¹⁸

The Federal Circuit has also recognized that equitable estoppel may be a defense for a patent holder’s breach of its patent disclosure commitments to an SDO.¹⁹ “To support a finding of equitable estoppel, the accused must show that [t]he patentee, through misleading conduct, led the alleged infringer to reasonably infer that the patentee does not intend to enforce its patent against the alleged infringer.”²⁰ Conduct, in this circumstance, “may include specific statements, action, inaction, or silence where there was an obligation to speak.”²¹ Other potentially applicable legal theories for a breach of a duty of disclosure may include implied license and laches.

The Federal Circuit has determined that a “district court may in appropriate circumstances order patents unenforceable as a result of silence in the face of an SDO disclosure duty, as long as the

¹² *Id.* (treating SDO IPR policy as imposing a disclosure duty notwithstanding that it contained no express disclosure duty, because members treated policy as imposing such).

¹³ *Qualcomm Inc. v. Broadcom Corp.*, 548 F.3d 1004, 1012 (Fed. Cir. 2008).

¹⁴ *Id.* at 1017.

¹⁵ *See, e.g., Rambus*, 318 F.3d at 1098–99.

¹⁶ *Id.* at 1100, 1102 n.10; *see also Qualcomm*, 548 F.3d at 1022.

¹⁷ *See Qualcomm*, 548 F.3d at 1021 n.8.

¹⁸ *Id.* at 1022.

¹⁹ *Id.* at 1022–24.

²⁰ *Hynix Semiconductor Inc. v. Rambus Inc.*, 645 F.3d 1336, 1348 (Fed. Cir. 2011) (quoting *A.C. Aukerman Co. v. R.I. Chaides Constr. Co.*, 960 F.2d 1020, 1028 (Fed. Cir. 1992) (en banc)).

²¹ *Id.* (quoting *Aukerman*, 960 F.2d at 1028).

scope of the district court’s unenforceability remedy is properly limited in relation to the underlying breach.”²² District courts generally have considerable discretion to fashion an unenforceability remedy “reflective of the offending conduct.”²³ The Federal Circuit ruled in *Core Wireless* that in determining whether to declare a patent unenforceable based on implied waiver, a court must consider whether the patentee “inequitably benefitted” from the failure to disclose, or whether the patentee’s conduct was “sufficiently egregious to justify finding implied waiver without regard to any benefit” that the patentee may have obtained as a result of that misconduct.²⁴ On remand, the district court held the patent was unenforceable under the implied waiver doctrine, finding an inequitable benefit where the SEP-licensor’s failure to timely disclose IPR improperly allowed it to obtain licensing fees and increase its licensing leverage over industry participants that manufacture standards-compliant products.²⁵

In contrast, in the ITC’s full Commission decision in *Samsung v. Apple*, the ITC found there was no implied waiver where (1) the accused infringer disputed whether the patents were essential to the standard; (2) the SDO itself had no clear guidance on what constitutes a “timely” disclosure of SEPs to the SDO; and (3) where the patent owner “can hardly be accused of patent hold-up when it has licensed its declared-essential patents . . . to more than 30 companies.”²⁶

C. COMMITMENT TO LICENSE IPR

Generally, a patent owner possesses “the right to exclude others from making, using, offering for sale, or selling the invention”²⁷ and is under no obligation to license its patent. An obligation to offer to license its patent can arise, however, if the patentee voluntarily makes a licensing commitment to an SDO, such as undertaking commitment to license on FRAND or RAND terms and conditions.

1. How the commitment arises

In some instances, an essential patent owner’s agreement to participate in an SDO may include an express agreement to make its essential patents available on FRAND or other licensing terms. In some U.S. cases, actual or potential SEP licensees have been treated as third-party beneficiaries of

²² *Qualcomm*, 548 F.3d at 1026.

²³ *Id.*

²⁴ *Core Wireless Licensing S.A.R.L. v. Apple Inc.*, 899 F.3d 1356, 1369 (Fed. Cir. 2018).

²⁵ *See Conversant Wireless Licensing S.A.R.L. v. Apple Inc.*, Case No. 15-cv-05008-NC, 2019 WL 4038419, at *6 (N.D. Cal. May 10, 2019).

²⁶ *In re Certain Electronic Devices, Including Wireless Communication Devices, Portable Music and Data Processing Devices, and Tablet Computers (Certain Electronic Devices)*, Inv. No. 337-TA-794, 2013 WL 12410037, at *40–41 (U.S.I.T.C. July 5, 2013).

²⁷ 35 U.S.C. § 154(a)(1).

the contract, and they may possess legally enforceable rights (e.g., the right to seek enforcement of the patent owner's FRAND commitments).²⁸

2. Duties associated with the commitment

Generally, the meaning of the patent owner's licensing commitment should be found by applying the traditional law of contract interpretation to the specific licensing commitment made by the patent owner. Thus, the inquiry requires examining the language of the governing commitments, the intent of the parties, and the other relevant facts and circumstances.²⁹ For most SDOs, the relevant documents include at least the patent owner's licensing commitment and the SDO's IPR policy. The patent owner's licensing commitment—often called a declaration—typically is the operative agreement, but the licensing commitment uses terminology from the IPR policy (e.g., “fair, reasonable, and nondiscriminatory”) and, therefore, may be construed with reference to the IPR policy.

Depending on the particular content of the contract documents (i.e., the patent owner's licensing commitment and the IPR policy) and the particular facts of the case, other issues may arise in a dispute concerning the obligation to license a patent. For example, a standard licensee might argue that a particular commitment creates an express or implied license;³⁰ that the patent owner is equitably estopped from asserting its patent;³¹ that the patent owner waived its patent rights, expressly or impliedly; or that the patent owner's conduct runs in contravention of the competition laws.³² The merit of each of these arguments, however, depends on the applicable facts.

Some litigants may argue that it is a competition law violation to fail to abide by a commitment to disclose relevant patents to an SDO or to license SEPs on FRAND or other licensing terms; others,

²⁸ See, e.g., *Microsoft Corp. v. Motorola, Inc. (Microsoft I)*, 854 F. Supp.2d 993, 999 (W.D. Wash. 2012) (“Microsoft, as a member of both the IEEE and the ITU, is a third-party beneficiary of Motorola's commitments to the IEEE and ITU.”).

²⁹ For discussion about the public interest, see *infra* Section IV.D (Injunctive Relief—eBay Factor 4).

³⁰ See, e.g., *De Forest Radio Telephone & Telegraph Co. v. United States*, 273 U.S. 236, 241 (1927) (“Any language used by the owner of the patent or any conduct on his part exhibited to another, from which that other may properly infer that the owner consents to his use of the patent in making or using it, or selling it, upon which the other acts, constitutes a license, and a defense to an action for a tort.”); *but cf. In re Innovatio IP Ventures, LLC Patent Litig. (Innovatio I)*, 921 F. Supp.2d 903, 915 (N.D. Ill. 2013) (“The existence of an obligation to license a patent on RAND terms, without more, is not an actual express license providing a defense to infringement.”). “The doctrines of legal estoppel and equitable estoppel have been applied by courts to imply a license.” *Spindelfabrik Suessen-Schurr, Stahlecker & Grill GmbH v. Schubert & Salzer Maschinenfabrik Aktiengesellschaft*, 829 F.2d 1075, 1080 (Fed. Cir. 1987).

³¹ *Aspex Eyewear Inc. v. Clariti Eyewear, Inc.*, 605 F.3d 1305, 1310 (Fed. Cir. 2010); *Hynix Semiconductor Inc. v. Rambus Inc.*, 645 F.3d 1336, 1347–48 (Fed. Cir. 2011).

³² *Barnes & Noble, Inc. v. LSI Corp.*, 849 F. Supp.2d 925, 931–32 (N.D. Cal. 2012).

however, may argue that mere failure to disclose or breach of a licensing commitment alone does not give rise to a competition law violation.³³

3. Available remedies for breach of FRAND commitment

If an essential patent owner is held to have breached its commitment to license its SEP on FRAND terms, then a court may order any available remedy, such as damages or specific performance (e.g., that the essential patent owner offer to license its SEP to the standard licensee on FRAND terms). The court may be called upon to determine whether a given offer by the patent owner or counter-offer by the prospective licensee is FRAND. If the essential patent owner sues for patent infringement and seeks injunctive relief, the standard licensee may argue that the patent owner should be enjoined from such relief as a violation of the FRAND commitment; may assert as a defense to injunctive relief that the essential patent owner breached its FRAND commitment by failing to offer a license on FRAND terms and is therefore not entitled to an injunction;³⁴ may argue that the seeking of an injunction itself is a breach of contract given the FRAND commitment made

³³ See generally *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297 (3d Cir. 2007); but see *Saint Lawrence Commc'ns. LLC v. Motorola Mobility LLC*, No. 2:15-CV-351-JRG, 2018 WL 915125, at *6-7 (E.D. Tex. Feb. 15, 2018) (*Broadcom* and other cited cases do not “stand for the proposition that a breach of FRAND obligations constitutes patent misuse” and “[w]hile a breach of FRAND obligations may be relevant to this inquiry, a breach of FRAND is not determinative of patent misuse.”).

In addition, the Federal Trade Commission has brought three enforcement actions against firms for the failure to disclose information regarding patent rights during the standard-setting process. See Complaint, *In re Dell Computer Corp.*, F.T.C. Docket No. C-3658, 121 F.T.C. 616 (May 20, 1996); Complaint, *In re Union Oil Co. of Cal.*, F.T.C. Docket No. 9305, 2005 WL 2003365 (Aug. 2, 2005); *Rambus, Inc. v. F.T.C.*, 522 F.3d 456 (D.C. Cir. 2008). Likewise, the Commission has brought three enforcement actions against firms for failing to abide by licensing commitments made during the standard-setting process, including the FRAND commitment. See Complaint, *In re Negotiated Data Solutions, LLC*, F.T.C. Docket No. C-4234, 2008 WL 4407246 (Sept. 22, 2008); Complaint, *In re Robert Bosch GmbH*, F.T.C. Docket No. C-4377, 2012 WL 5944820 (Nov. 21, 2012); Complaint, *In re Motorola Mobility, LLC and Google Inc.*, F.T.C. Docket No. C-4410, 2013 WL 3944149 (July 23, 2013).

The Department of Justice Antitrust Division’s current position on the role of antitrust law in standard setting organizations, however, emphasizes that “[d]eploying antitrust law to remedy a breach of a contractual FRAND commitment can chill participation in standard-setting activity, which, to date, has been guided by the principle that ‘the antitrust laws do not negate the patentee’s right to exclude others from patent property.’” U.S. Department of Justice, United States’ Statement of Interest Concerning Qualcomm’s Motion for Partial Stay of Injunction Appeal, *FTC v. Qualcomm* (July 16, 2019), at *6 (citing *Intergraph Corp. v. Intel Corp.*, 195 F.3d 1346, 1362 (Fed. Cir. 1999)), available at <https://www.justice.gov/atr/case-document/file/1183936/download>.

See overview discussion *supra* Section VII (The Evolving Relationship Between Federal Courts and Administrative Agencies in Governing and Regulatory SEP/FRAND Issues).

³⁴ See, e.g., *Apple Inc. v. Motorola, Inc. (Motorola)*, 757 F.3d 1286, 1331–32 (Fed. Cir. 2014), *overruled on other grounds* by *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015); see also *Microsoft III*, 696 F.3d 872, 889 (affirming the district court’s grant of a foreign anti-suit injunction to prevent Motorola from enforcing a patent injunction that it obtained against Microsoft in Germany).

by the essential patent owner;³⁵ or may argue that the seeking of an injunction itself forms part of a competition law violation (e.g., of the Sherman Act).³⁶

In contrast, the patent owner may argue that it has a First Amendment right to petition the court to grant injunctive relief,³⁷ which a court has discretion to grant upon considering defenses raised by the accused infringer, such as a FRAND defense.³⁸ Further, a patent owner may argue that a prospective licensee is an unwilling licensee or otherwise has not satisfied its obligations in order to benefit from the patent owner's FRAND commitment. The patent owner may argue that the prospective licensee should be enjoined from using the patented technology, that the prospective licensee pay some royalty during the course of the litigation, that any license to an unwilling licensee does not need to be limited to FRAND terms, or that the prospective licensee pay enhanced damages or royalties for willful infringement or such other relief that the court deems appropriate in the circumstances.³⁹

D. EXAMPLES OF FRAND LICENSING COMMITMENTS

Below we consider the IPR licensing policies of two SDOs: the European Telecommunications Standards Institute (ETSI), and the Institute of Electrical and Electronics Engineers (IEEE) (both its IPR policy effective 2007 and its IPR policy effective 2015). We do so not because the policies of these SDOs are representative of the IPR policies of SDOs generally, or to suggest that any approach taken is to be viewed more favorably than approaches taken in other SDO IPR policies; we provide them for the sole purpose of helping illuminate some approaches that have been taken by some SDOs with respect to some areas of controversy that often arise in SEP/FRAND litigation.

³⁵ *Apple Inc. v. Samsung Elecs. Co.*, No. 11-cv-1846, 2012 WL 1672493, at *9 (N.D. Cal. May 14, 2012); *Microsoft Corp. v. Motorola, Inc. (Microsoft VI)*, 795 F.3d 1024, 1047–49 (9th Cir. 2015).

³⁶ *Huawei Techs. Co. v. T-Mobile US, Inc.*, No. 2:16-cv-00052, 2017 WL 3928836 (E.D. Tex. Aug. 21, 2017); *Microsoft Mobile Inc. v. Interdigital, Inc.*, No. 15-723-RGA, 2016 WL 1464545, at *1–2 (D. Del. Apr. 13, 2016).

³⁷ *See, e.g., Apple, Inc. v. Motorola Mobility*, 886 F. Supp.2d 1061, 1076 (W.D. Wis. 2012) (“Because Motorola’s enforcement of its patents is privileged conduct protected by the First Amendment, the *Noerr-Pennington* doctrine applies.”); *Innovatio I*, 921 F. Supp.2d 903, 922 (N.D. Ill. 2013) (“Accordingly, Innovatio’s campaign is protected petitioning activity under the First Amendment and *Noerr-Pennington*.”); *TCL Commc’ns Tech. Holdings, Ltd. v. Telefonaktienbolaget LM Ericsson et al.*, Case No. SACV 14-0341, 2016 WL 7049263, at *2–4 (C.D. Cal. Aug. 9, 2016) (dismissing competition law claims under *Noerr-Pennington* and because “business uncertainty” from SEP lawsuit was not a cognizable “economic injury”).

³⁸ *See Motorola*, 757 F.3d at 1331–32 (no “per se rule that injunctions are unavailable for SEPs”; court should consider FRAND and SEP issues under the general *eBay* framework in exercising discretion whether to enter injunctive relief).

³⁹ *See Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc. et al.*, Case No. 2:14-cv-00912-JRG, Dkt. 130, at 1-2 (E.D. Tex. Mar. 7, 2019) (enhancing damages for willful infringement due to defendant’s license negotiation conduct).

1. European Telecommunications Standards Institute

ETSI is a leading standardization organization for Information and Communication Technology (ICT) standards. It has over 900 member organizations drawn from over 60 countries and five continents and plays a leading role in cellular standards. Since its founding in 1988, ETSI has published thousands of standards.

ETSI describes the significance of FRAND licensing within its IPR policy as follows: “The ETSI IPR Policy seeks to reduce the risk that our standards-making efforts might be wasted if essential IPRs are unavailable under Fair, Reasonable and Non-Discriminatory (FRAND) terms and conditions. At the same time, we recognize that IPR holders should be fairly and adequately rewarded for the use of their IPRs in the implementation of our standards. The objective of the ETSI IPR Policy is to balance the rights and interests of IPR holders and the need for standard licensees to get access to the technology defined in our standards under FRAND terms and conditions.”⁴⁰

The ETSI IPR Policy does not require participants to commit to licensing patents on FRAND terms, but it does require participants to state whether they are willing to do so. The ETSI IPR Policy sets forth the following FRAND commitment for its members:

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 to at least the following extent:

- 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.

The above undertaking may be made subject to the condition that those who seek licences agree to reciprocate.⁴¹

⁴⁰ ETSI IPR POLICY § 3.1 (Apr. 3, 2019), available at <http://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf>.

⁴¹ *Id.* § 6.1.

Manufacture is defined as “production of EQUIPMENT.”⁴² Equipment is defined as “any system, or device fully conforming to” the standard.⁴³

The ETSI IPR Policy does not contain explicit guidance on what constitutes FRAND terms. The ETSI Guide on Intellectual Property Rights states: “Specific licensing terms and negotiations are commercial issues between the companies and shall not be addressed within ETSI.”⁴⁴

ETSI has an IPR policy as well as a Guide on Intellectual Property Rights. Below is an excerpt from the guide that includes the IPR policy’s definition of the term “ESSENTIAL”:

Section 15.6 of the ETSI IPR Policy gives the following definition of essentiality:

“ESSENTIAL as applied to IPR means 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 that IPR. For the avoidance of doubt in exceptional cases where a STANDARD can only be implemented by technical solutions, all of which are infringements of IPRs, all such IPRs shall be considered ESSENTIAL.”⁴⁵

In simpler terms, an “essential IPR” is an IPR which has been included within a standard and where it would be impossible to implement the standard without making use of this IPR. The only way to avoid the violation of this IPR in respect of the implementation of the standard is therefore to request a license from the owner.

2. Institute of Electrical and Electronics Engineers

The IEEE is the world’s largest association of technical professionals and has published thousands of standards in a wide range of industries, including telecommunications, information technology, power, and networking.

The IEEE has maintained an IPR policy that has undergone various updates over time. Summarized below are portions of the IPR policies in effect as of 2007 and 2015.⁴⁶ There may be portions of these policies not summarized below that are pertinent to a particular dispute.

⁴² *Id.* § 15.8.

⁴³ *Id.* § 15.4.

⁴⁴ ETSI GUIDE ON INTELLECTUAL PROPERTY RIGHTS (IPRS) § 4.1 (Sept. 19, 2013), *available at* <http://www.etsi.org/images/files/IPR/etsi-guide-on-ipr.pdf>.

⁴⁵ *Id.* § 15.6.

⁴⁶ For current version of the IEEE IPR Policy, *see* IEEE-SA STANDARD BOARD BYLAWS § 6. PATENTS (Dec. 2017), *available at* <https://standards.ieee.org/about/policies/bylaws/sect6-7.html>.

a. 2007 update

In 2007, the IEEE's IPR policy relied on the submission of a "Letter of Assurance" (LOA) from holders of a "potential Essential Patent Claim." The LOA may indicate that the patent owner commits to license its patents on specific terms, or it may indicate that the patent owner would not commit as to whether or on what terms the patent may be licensed. The policy indicates that if a licensing commitment was given, the licensing assurance had to be either:

- a) A general disclaimer to the effect that the Submitter without conditions will not enforce any present or future Essential Patent Claims against any person or entity making, using, selling, offering to sell, importing, distributing, or implementing a compliant implementation of the standard; or
- b) A statement that a license for a compliant implementation of the standard will be made available to an unrestricted number of applicants on a worldwide basis without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.

The 2007 IPR policy defined "Essential Patent Claims" to mean any patent claim "the use of which was necessary to create a compliant implementation of either mandatory or optional portions of the normative clauses of the [Proposed] IEEE Standard when, at the time of the [Proposed] IEEE Standard's approval, there was no commercially and technically feasible non-infringing alternative." The policy also stated that an essential patent claim did "not include any Patent Claim that was essential only for Enabling Technology or any claim other than that set forth above even if contained in the same patent as the Essential Patent Claim." "Patent Claim," in turn, meant "one or more claims in issued patent(s) or pending patent application(s)."

b. 2015 update

In 2015, the IEEE updated its IPR policy.⁴⁷ The IEEE stated that its updated policy was intended to clarify (though there is dispute within the industry over whether this was a clarification or amendment) the scope of commitments from parties holding patent claims essential to IEEE standards regarding (1) the availability of "Prohibitive Orders"; (2) the meaning of "Reasonable Rate"; (3) the production levels (e.g., manufactures of components or sub-assemblies, or end use products) to which IEEE commitments apply through the definition of Compliant Implementation; and (4) permissible demands for reciprocal licenses.

The IEEE's 2015 IPR policy relies on the submission of a letter of assurance from holders of a "potential Essential Patent Claim." The LOA may indicate that the patent owner commits to license its patents on specific terms, or it may indicate that the patent owner would not commit as to whether or on what terms the patent may be licensed. If a licensing commitment is given, the licensing assurance shall be either:

⁴⁷ The 2015 Update was the subject of considerable debate among various technology companies prior to its approval by IEEE members. Certain opponents of the update continued to express their disagreement after the new language was approved.

- a) A general disclaimer to the effect that the Submitter without conditions will not enforce any present or future Essential Patent Claims against any person or entity making, having made, using, selling, offering to sell, or importing any Compliant Implementation that practices the Essential Patent Claims for use in conforming with the IEEE Standard; or,
- b) A statement that the Submitter will make available a license for Essential Patent Claims to an unrestricted number of Applicants on a worldwide basis without compensation or under Reasonable Rates, with other reasonable terms and conditions that are demonstrably free of any unfair discrimination to make, have made, use, sell, offer to sell, or import any Compliant Implementation that practices the Essential Patent Claims for use in conforming with the IEEE Standard. An Accepted LOA that contains such a statement signifies that reasonable terms and conditions, including without compensation or under Reasonable Rates, are sufficient compensation for a license to use those Essential Patent Claims and precludes seeking, or seeking to enforce, a Prohibitive Order except as provided in this policy.

Among other differences, the 2007 IEEE LOA language did not include the last sentence in subparagraph (b), or use the defined terms “Compliant Implementation,” “Prohibitive Order,” or “Applicant” introduced in the 2015 update.

The 2015 IPR policy defined “Essential Patent Claims” to mean any patent claim “the practice of which was necessary to implement either a mandatory or optional portion of a normative clause of the IEEE Standard when, at the time of the IEEE Standard’s approval, there was no commercially and technically feasible non-infringing alternative implementation method for such mandatory or optional portion of the normative clause.” The policy also states that an essential patent claim “does not include any Patent Claim that was essential only for Enabling Technology or any claim other than that set forth above even if contained in the same patent as the Essential Patent Claim.” “Patent Claim,” in turn, means “one or more claims in issued patent(s) or pending patent application(s).”

The IEEE’s 2015 policy sets forth specific guidance for licensing on reasonable and non-discriminatory (RAND) terms, including the following:

- ***Reasonable licensing rate:*** The IEEE policy contains a definition for what constitutes a “Reasonable Rate” for a license to an “Essential Patent Claim.” A “Reasonable Rate” means “appropriate compensation to the patent holder” but “exclud[es] the value, if any, resulting from the inclusion of that Essential Patent Claim’s technology in the IEEE Standard.” The 2007 IEEE policy did not include an express definition of “Reasonable Rate.”

The IEEE policy also lists three additional factors that should be considered in (but need not be limited to) the determination of a “Reasonable Rate”; these factors were not listed in the 2007 IEEE policy:

- “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.”
- “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.”
- **Non-discrimination:** The licensing assurance requires patent holders to license their essential patent claims “for any Compliant Implementation.” “Compliant Implementation” means “any product (e.g., component, sub-assembly, or end-product) or service that conforms to any mandatory or optional portion of a normative clause of an IEEE Standard.” The 2007 IEEE policy did not include an express definition of “Compliant Implementation.”
- **Limitations on availability of injunctions:** The submitter of a licensing assurance is prohibited from seeking, or seeking to enforce, a “Prohibitive Order” (e.g., an injunction or exclusion order), except in the circumstance where “the implementer fails to participate in, or to comply with the outcome of, an adjudication, including an affirming first-level appellate review, if sought by any party within applicable deadlines, in that jurisdiction 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.” The 2007 IEEE policy did not include an express definition of “Prohibitive Order.”
- **Reciprocity:** The submitter of a licensing assurance may condition its willingness to license on reciprocal licensing, that is, “the Applicant’s agreement to grant a license to the Submitter with Reasonable Rates and other reasonable licensing terms and conditions to the Applicant’s Essential Patent Claims, if any, for the referenced IEEE Standard, including any amendments, corrigenda, editions, and revisions.” The 2007 IEEE policy did not include an express definition of “Reciprocal Licensing.”

III. FRAND Analysis

A. GENERAL OVERVIEW

This section addresses methodologies that U.S. courts have considered so far on what constitutes a fair, reasonable, and non-discriminatory royalty for SEPs in U.S. litigation. General law on how to determine a reasonable royalty for patents applies to determining a FRAND royalty for SEPs but will be tailored to the specific circumstances presented by standardization and the FRAND commitment at issue.

Because not all FRAND commitments are the same, it is important when applying the principles presented herein to do so based on the specific FRAND commitment at issue.

It is important to understand the limited scope of this section. These limitations include:

- This section concerns determining a FRAND royalty in U.S. litigation before a judge or jury, which has substantive and procedural issues that may or may not translate directly into parties determining a FRAND royalty in bilateral negotiations outside of litigation or in non-U.S. litigation.
- This section largely concerns litigation to determine only a monetary FRAND royalty without determining nonmonetary terms that may be a component of real-world FRAND licensing. At least one court has further determined other material terms for an adjudicated FRAND license.⁴⁸

B. GENERAL FACTORS FOR A REASONABLE ROYALTY DETERMINATION AS APPLIED IN THE FRAND CONTEXT

1. Selective *Georgia-Pacific* factors in the context of FRAND

Title 35, section 284, of the U.S. Code states that a patent claimant that proves infringement shall be awarded “damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer.” Different methodologies may be used to determine a reasonable royalty. One common method—but not the only one—for determining what constitutes a “reasonable royalty” for a given patent is guided by a number of considerations drawn from *Georgia-Pacific*,⁴⁹ which attempts “to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began.”⁵⁰ This methodology is often termed a “hypothetical negotiation,” and the litigated reasonable royalty rate is the result of such a hypothetically negotiated license.

⁴⁸ See TCL Comm’n Tech. Holdings Ltd. v. Telefonaktienbolaget LM Ericsson, No. 8:14-cv-00341-JVS-DFM, Dkt. 1802 (C.D. Cal. Dec. 21, 2017).

⁴⁹ *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970).

⁵⁰ *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324 (Fed. Cir. 2009).

The *Georgia-Pacific* factors considered to determine the reasonable royalty rate for the hypothetically negotiated license are as provided below:

- (1) The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.
- (2) The rates paid by the licensee for the use of other patents comparable to the patent in suit.
- (3) The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.
- (4) The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
- (5) The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.
- (6) The effect of selling the patented specialty in promoting sales of other products of the licensee; that existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.
- (7) The duration of the patent and the term of the license.
- (8) The established profitability of the product made under the patent; its commercial success; and its current popularity.
- (9) The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.
- (10) The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.
- (11) The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.
- (12) The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.
- (13) The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.
- (14) The opinion testimony of qualified experts.

(15) The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement⁵¹

Although the *Georgia-Pacific* analysis captures certain potentially important considerations for calculating a reasonable royalty, it is not a one-size-fits-all test.⁵² Indeed, the Federal Circuit has declined to adopt categorical bright-line modifications to the *Georgia-Pacific* factors themselves in any case, including those involving SEPs subject to a FRAND commitment.⁵³ Rather, the *Georgia-Pacific* factors must be tailored, omitted, and modified as necessary in each particular case to account for the specific circumstances presented, which includes the specific FRAND or other standard-setting commitment at issue in the case.⁵⁴ “In a case involving RAND-encumbered patents, many of the *Georgia-Pacific* factors simply are not relevant; many are even contrary to RAND principles.”⁵⁵ Courts should consider the facts of record when instructing the jury, including the actual standard-setting commitment at issue in any given case.⁵⁶

Accordingly, the following discussion addresses each of the fifteen *Georgia-Pacific* factors in the context of a patent subject to a standard-setting commitment. Because not all FRAND commitments are the same, the discussion below is provided as general guidance. The specific FRAND commitment at issue should be considered to determine whether and to what extent a factor applies in a particular case.⁵⁷

- **Factor 1: The royalties received by the patentee for the licensing of the patent-in-suit, proving or tending to prove an established royalty.**

Factor 1 concerns licenses that include the patents-in-suit. A key issue is whether and to what extent such licenses are “comparable” to the hypothetically negotiated license at issue in the litigation, as discussed in Factor 15 below.

Section III.B.3 below addresses comparable licenses in the FRAND context.

- **Factor 2: The rates paid by the licensee for the use of other patents comparable to the patent-in-suit.**

⁵¹ See *Georgia-Pacific*, 318 F. Supp. at 1120.

⁵² See e.g., *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1230 (Fed. Cir. 2014).

⁵³ See *id.* at 1230–32.

⁵⁴ See *id.*; *Commonwealth Sci. & Indus. Research Org. v. Cisco Sys. Inc. (CSIRO)*, 809 F.3d 1295, 1305 (Fed. Cir. 2015).

⁵⁵ *Ericsson*, 773 F.3d at 1230.

⁵⁶ *Id.* at 1230–32.

⁵⁷ *Id.*

Factor 2 concerns licenses that do not include the patents-in-suit, but a party asserts licenses comparable to the hypothetically negotiated license at issue in the litigation. Section III.B.3 below addresses comparable licenses in the FRAND context.

- **Factor 3: The nature and scope of the license, as exclusive or non-exclusive or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.**

Factor 3 concerns whether the hypothetically negotiated license would have broad or limited scope, such as a grant of an exclusive right to practice the licensed invention, a field of use, geographic area restriction, or other terms affecting its scope. A FRAND commitment, however, would preclude the patent owner from granting an exclusive license that allows only one entity to practice the invention.

- **Factor 4: The licensor’s established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve the monopoly.**

Factor 4 concerns whether the patent owner has limited the practice of its invention to itself or only a select set of others under conditions that preserve the patent monopoly and prevent others from practicing the invention. A FRAND commitment generally will prevent the patent owner from maintaining that type of monopoly.⁵⁸ But some SDO IPR policies do allow FRAND commitments with reciprocity or defensive suspension provisions that may allow the patent owner to either: (1) not license others, such as an entity that refuses to give a cross-license on its SEPs, or (2) suspend a license granted to others, such as an entity that sues the patent owner. Thus, the specific FRAND commitment must be considered in the context of the case presented, such as whether that commitment has reciprocity, defensive suspension, or other conditions relevant to the case.

- **Factor 5: The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business, or whether they are inventor and promoter.**

Factor 5 concerns the commercial relationship between the parties, such as whether they are competitors, which would tend to increase the reasonable royalty in a typical patent case. However, the “non-discrimination” part of a FRAND commitment will preclude the patent owner from increasing the reasonable royalty because they are competitors.⁵⁹

- **Factor 6: The effect of selling the patented specialty in promoting sales of other products of the licensee; the existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or conveyed sales.**

⁵⁸ *See id.* at 1230 (“Because of Ericsson’s RAND commitment, however, it cannot have that kind of policy for maintaining a patent monopoly.”).

⁵⁹ *Id.* at 1231 (finding in that case factor 5 “irrelevant because Ericsson must offer licenses at a non-discriminatory rate”); *see infra* Section III.C.1 (Additional Considerations to the Factors Relevant to a FRAND Reasonable Royalty—Non-Discrimination).

Factor 6 concerns the patented technology's contribution to increased sales or promotion of the licensor's and licensee's other products, which would tend to increase the reasonable royalty. In applying this factor to a FRAND-committed SEP, care should be taken to avoid including sales or promotional value for other products that are attributable solely to the fact of inclusion in the standard, rather than the value of the patented technology.

- **Factor 7: The duration of the patent and the term of the license.**

Factor 7 concerns the duration of the patent and the hypothetically negotiated license. One court found that the hypothetical license term would cover the life of a RAND-committed SEP.⁶⁰ But real-world licenses often have limited durations, and the parties may present evidence that a different license term would have been agreed to during the hypothetical negotiation.

- **Factor 8: The established profitability of the product made under the patents; its commercial success; and its current popularity.**

Factor 8 includes consideration of the commercial success and popularity of the products that have the patented invention. In applying this factor in a case involving a FRAND-committed SEP, care must be taken to ensure that the commercial success or popularity considered is that which is attributable to the merits of the patented invention and not what is attributable to the technology being required by the standard.⁶¹

- **Factor 9: The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.**

Factor 9 concerns the patented technology's advantages over older technology that was used to achieve similar results. In applying this factor to a FRAND-committed SEP, the parties should consider the extent to which the accused product uses the patented invention because it is an improvement over older technology versus its use because it is essential to the standard.⁶² Parties can present evidence in the specific case to determine whether and to what extent this factor is relevant to the facts in the case.

Section III.B.2.a-b. below addresses arguments that parties may raise as to whether the time period to consider older technology should include when the standard was adopted as well as whether such

⁶⁰ *Microsoft Corp. v. Motorola, Inc. (Microsoft V)*, No. C10-1823, 2013 WL 2111217, at *19 (W.D. Wash. Apr. 25, 2013).

⁶¹ *See Ericsson*, 773 F.3d at 1231 (“an invention’s ‘current popularity’ . . . is likely inflated because a standard requires the use of the technology”); *see also CSIRO*, 809 F.3d 1295, 1305 (Fed. Cir. 2015) (district court should consider “the standard’s role in causing commercial success”).

⁶² *Ericsson*, 773 F.3d at 1231 (“Factor 9 . . . is also skewed for SEPs because the technology is used because it is essential, not necessarily because it is an improvement over the prior art.”).

alternative technology should be limited to what the standards body actually considered when adopting the standard. The law is not settled on these points.

- **Factor 10: The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.**

Factor 10 considers the commercial embodiment of the licensor, including, among other things, the accused infringing product's benefit from use of the invention. For a FRAND-committed SEP, care should be taken to apportion the benefit from use of the invention itself from benefits that arise merely because of standardization.⁶³

Section III.B.2.a-b. below discusses the relevant time period when considering benefits from the invention compared to alternatives.

- **Factor 11: The extent to which the infringer has made use of the invention, and any evidence probative of the value of that use.**

Factor 11 is generally considered along with Factor 10 discussed above.

- **Factor 12: The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.**

This factor concerns the customary portion of profits allowed for use of the patented invention and may be considered when addressing comparable licenses, which is discussed in Section III.B.3 (Comparable Licenses) below.

- **Factor 13: The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.**

Factor 13 concerns apportioning value attributable to the claimed invention from other non-patented features of the product. The issue of apportionment of a royalty base or a royalty rate is addressed in The Sedona Conference *Commentary on Patent Reasonable Royalty Determinations*,⁶⁴ the application of these apportionment issues in the context of SEP/FRAND cases may be addressed in “Stage Two” of the current publication.

The fact that a patent is standard-essential will require additional apportionment analysis, regardless of whether that patent is subject to a standard-setting commitment. *Ericsson* makes clear that, “[a]s

⁶³ *See id.* (stating that factor 10 “is also irrelevant as the standard requires the use of the technology”).

⁶⁴ *WG9 Reasonable Royalty Determinations Commentary*, *supra* note 1.

with all patents, the royalty rate for SEPs must be apportioned to the value of the patented invention.”⁶⁵ The Federal Circuit explained that:

When dealing with SEPs, there are two special apportionment issues that arise. First, the patented feature must be apportioned from all of the unpatented features reflected in the standard. Second, the patentee’s royalty must be premised on the value of the patented feature, not any value added by the standard’s adoption of the patented technology. These steps are necessary to ensure that the royalty award is based on the incremental value that the patented invention adds to the product, not any value added by the standardization of that technology.⁶⁶

Thus, “a royalty award for a SEP must be apportioned to the value of the patented invention (or at least to the approximate value thereof), not the value of the standard as a whole” and a “jury must be instructed accordingly.”⁶⁷ In determining a royalty, the infringer may argue that the factfinder should also consider the benefits the SEP owner has received (and will continue to receive) from the increased sales volumes due to standardization.

“[P]roof of damages” must be “carefully tied to the claimed invention itself.”⁶⁸ To be sure, that does not mean “that all SEPs make up only a small part of the technology in the standard.”⁶⁹ Instead, “if a patentee can show that his invention makes up ‘the entire value of the’ standard, an apportionment instruction probably would not be appropriate.”⁷⁰

- **Factor 14: The opinion testimony of qualified experts.**

Factor 14 concerns expert witness testimony on valuing the patented technology, which typically is the vehicle for presenting the *Georgia-Pacific* methodology in a case.

- **Factor 15: The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount that a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.**

⁶⁵ *Ericsson*, 773 F.3d at 1232.

⁶⁶ *Id.*

⁶⁷ *Id.* at 1233.

⁶⁸ *Motorola*, 757 F.3d 1286, 1324 (Fed. Cir. 2014).

⁶⁹ *Ericsson*, 773 F.3d at 1233.

⁷⁰ *Id.* (quoting *Garretson v. Clark*, 111 U.S. 120, 121 (1884)).

Factor 15 sets forth the hypothetical negotiation that is a fundamental part of the *Georgia-Pacific* methodology. In a typical patent case, the hypothetical negotiation takes place at the time that the accused infringer first started infringing the patent. But for FRAND-committed SEPs, there is some dispute whether that time period should be changed to the date that the standard was adopted, when there were pre-standardization options for consideration.⁷¹ Section III.B.2.a-b. below addresses this dispute.

2. Noninfringing alternatives

As stated in Principle No. 7(a) in The Sedona Conference *Commentary on Patent Reasonable Royalty Determinations*:

[t]he reasonable royalty must reflect the extent to which the patented invention represents an improvement over any commercially acceptable and available noninfringing alternatives, including any such alternatives disclosed in the prior art. A royalty which over- or undervalues the inventive contribution of the patent claim is not reasonable.⁷²

Evidence of commercially feasible noninfringing alternatives available at the time of infringement may be relevant to a reasonable royalty analysis. Availability of a noninfringing alternative may indicate that an alleged infringer's bargaining power in a hypothetical negotiation would have been increased because the alleged infringer would have negotiated with knowledge that it had an alternative way to implement the infringing feature or product. Standard-essential patents may present a unique set of circumstances when it comes to noninfringing alternatives, because once a standard is adopted there might not be an alternative to practicing a standard-essential patent.

If noninfringing alternatives are to be considered in a particular case, the next question becomes: how does this analysis differ—if at all—from a traditional noninfringing alternatives analysis in the nonessential patent context?

a. Must alternatives have existed at the time the standard was adopted?

Some parties may argue that in order for noninfringing alternatives to be considered in an SEP case, they must have been available at the time the standard was adopted. Other parties may argue that noninfringing alternatives that come into existence after this should be considered if they are available at the time infringement began.

In a traditional patent case, “to be an acceptable non-infringing substitute, the product or process must have been available or on the market at the time of infringement.”⁷³ In other words, an infringer would have been able to change how its infringing device operates to adopt a noninfringing substitute and still sell a functional, consumer-acceptable, noninfringing device. However, that might not necessarily be an option in a standard-essential patent damages scenario. The infringer may need to comply with the standard and infringe the asserted SEP. Similarly, once a standard is finalized,

⁷¹ See *id.* at 1234 n.10 (noting, but not resolving, this dispute).

⁷² *WG9 Reasonable Royalty Determinations Commentary*, *supra* note 1, at 42.

⁷³ *Grain Processing Corp. v. Am. Maize-Products Co.*, 185 F.3d 1341, 1349 (Fed. Cir. 1999).

changing its parameters can be difficult, or at least time consuming, such that switching to a noninfringing alternative technology is impractical. This will depend on the scope of the patent claims and other facts and circumstances in the particular case.

This has led some to argue that the court should consider noninfringing alternatives that existed at the time the standard was adopted, which would reflect that time at which the consideration of alternative technologies would have been made and locked into the standard, rather than alternatives available after the standard was adopted and the infringement began. Even if alternatives available at the time the standard was adopted are considered, others may argue that additional alternatives should also be considered based instead on the time when infringement began.

The Federal Circuit has acknowledged arguments about different potential times to consider alternatives in SEP cases but has declined to decide the issue.⁷⁴ Motorola presented the timing issue to the Ninth Circuit in the *Microsoft v. Motorola* case, but the Ninth Circuit declined to rule on a specific time frame for the hypothetical negotiation due to, among other things, Motorola's use of evidence that occurred over a widespread period of time that included both when the standard was adopted and when infringement began.⁷⁵ The Working Group has not reached a consensus as to the date to fix for assessing noninfringing alternatives and awaits further case law development of the issue.

If a court determines that additional alternatives should be considered based on the time when infringement began and thus which may have come into existence after the adoption of the standard, as stated in a broader context in The Sedona Conference *Commentary on Reasonable Royalty Determinations*, "it may be appropriate to set different royalty rates to account for the different economic circumstances before and after the date when that proposed alternative became available, acceptable, or noninfringing."⁷⁶

b. Must alternatives have actually been presented to the SDO?

If the approach of considering alternatives available when the standard was adopted (and not at the time when infringement began) is taken, the issue then arises as to whether only alternatives actually presented to the SDO should be considered, or whether additional alternatives in existence should also be considered.

In *Innovatio*, the court attempted to "reconstruct a plausible hypothetical licensing negotiation between the parties immediately before the adoption of the standard."⁷⁷ The court found that, as part of that negotiation, the parties would consider other alternatives the SDO could adopt because "the presence of equally effective alternatives to the patented technology that could have been adopted into the standard will drive down the royalty that the patent holder could reasonably

⁷⁴ *Ericsson*, 773 F.3d at 1234 n.10.

⁷⁵ *Microsoft VI*, 795 F.3d 1024, 1041–42 (9th Cir. 2015).

⁷⁶ *WG9 Reasonable Royalty Determinations Commentary*, *supra* note 1, at 44.

⁷⁷ *In re Innovatio IP Ventures, LLC Patent Litig. (Innovatio II)*, 2013 WL 5593609, at *20 (N.D. Ill. Oct. 3, 2013).

demand.”⁷⁸ However, in doing so, the court ruled that only alternatives actually presented to the SDO would be considered. The court found that “technology that did not even merit a mention by the IEEE in its deliberations about the standard was not likely to have been a serious contender for adoption into the standard.”⁷⁹ Further, the court found it implausible to believe that asserting such a technology would be an effective negotiating point.⁸⁰

A party may argue that other alternatives that were publicly known but not considered by the SDO should also be considered because any publicly available alternative could have been adopted into the standard. Further, it may argue that the SEP at issue may not have been identified to the SDO, which otherwise may have spurred more diligence at the time to identify alternatives to the technology. The Working Group has not reached consensus on whether alternatives must have been presented to the SDO and awaits further case law development.

c. The cost of a noninfringing alternative

Courts should consider the cost of implementing the proposed noninfringing alternatives, including whether an asserted noninfringing alternative is covered by other patents or is in the public domain.

Noninfringing alternatives for a standard-essential patent may be covered by other patents owned by the patent owner or someone else. When a proposed noninfringing alternative is patented, parties in a hypothetical FRAND negotiation would recognize that the alternative would likely not be available royalty free. That is, if the patented alternative had been adopted into the standard, the owner of the patent covering the alternative may require a royalty for use of the patented technology.⁸¹ Accordingly, patented alternatives “will not drive down the royalty in the hypothetical negotiation by as much as technology in the public domain.”⁸² Whether an alternative would drive down the royalty should not be presumed but depends on the particular circumstances presented, such as whether the alternative is of equal, lower, or higher value to the patented technology.

3. Comparable licenses

The Sedona Conference *Reasonable Royalty Determinations Commentary* provides a thoughtful discussion of the probative value of actual patent licenses in the context of patent damages.⁸³ In this section, the Working Group analyzes some circumstances that may present unique considerations regarding the comparability of licenses in the SEP-FRAND context, with the prior commentary providing a backdrop for this analysis.

⁷⁸ See *id.* at *19.

⁷⁹ See *id.* at *20.

⁸⁰ *Id.*

⁸¹ *Id.* (“[I]t is implausible that in the real world, patent holders would accept effectively nothing to license their technology.”).

⁸² *Id.*

⁸³ *WG9 Reasonable Royalty Determinations Commentary*, *supra* note 1, at 35–41.

In the SEP-FRAND context, licenses presented as comparable to a hypothetical license for the SEP(s)-in-suit may be relevant for two analyses: (1) assessing the value of the patented technology to determine a FRAND royalty; and (2) determining whether there was improper discrimination resulting in a breach of a FRAND commitment. This section will focus solely on the valuation analysis. For a discussion regarding the non-discrimination prong, *see* Section III.C.1 (Non-Discrimination)⁸⁴ below.

License agreements may be signed under differing commercial and legal circumstances, and evidence regarding comparable licenses can come up in a number of contexts in SEP-FRAND cases, including: (1) litigation over whether a given FRAND offer by a patent owner complied with its FRAND licensing commitments; (2) a patent infringement case in which an SEP is asserted; and (3) litigations to determine FRAND license terms for SEPs.

a. General considerations for comparable license determinations

Courts “look to licenses deemed ‘comparable’ as real-world evidence of the commercial market for the patent(s)-in-suit.”⁸⁵ In the context of patent damages, *Georgia-Pacific* factors 1, 2, and 12 provide for consideration of comparable patent license agreements.⁸⁶ The Working Group has previously observed that courts “have not yet provided a definitive, comprehensive outline stating what criteria must be evaluated to determine if a license agreement is properly ‘comparable.’”⁸⁷ Nevertheless, the Working Group’s prior commentary presents Principles and Best Practices in the general context of reasonable royalty determinations. Because the SEP-FRAND-specific issues raised here relate to comparability analysis, it is appropriate to briefly introduce part of that work. “Rigorously analyzing and adjusting for any material differences between a benchmark license and the hypothetical license, based upon evidence presented, provides a rational and justifiable basis for determining what royalty would result from the hypothetical negotiation.”⁸⁸

As stated as Principle No. 5 in *The Sedona Conference Commentary on Patent Reasonable Royalty Determinations*:

⁸⁴ Some may argue that licenses that might not otherwise be deemed comparable in a non-SEP context might still be relevant and comparable in assessing FRAND royalties given applicable non-discrimination obligations. Others may argue that a consideration of what constitutes “fair and reasonable” and the consideration of what constitutes non-discrimination are separate analyses, and that the set of licenses that should be considered for a non-discrimination analysis should not be broader than that for setting a “fair and reasonable” royalty.

⁸⁵ *WG9 Reasonable Royalty Determinations Commentary*, *supra* note 1, at 9.

⁸⁶ *See id.*

⁸⁷ *Id.* at 11; *see also id.* at 9–11 (reviewing cases allowing or excluding licenses).

⁸⁸ *Id.* at 35. The Federal Circuit has recognized that relevant prior licenses can usually be presented at trial to assist the jury in deciding what an appropriate royalty should be, even though those prior licenses will typically not be perfectly analogous to the hypothetical negotiation facts facing the jury, as long as courts “assess the extent to which the proffered testimony, evidence and arguments would skew unfairly the jury’s ability to apportion the damages to account only for the value attributable to the infringing features.” *See* *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1227–28 (Fed. Cir. 2014).

Any proposed comparable license offered as “comparable” to the hypothetical license must be evaluated for its similarities to and differences from the hypothetical license.⁸⁹

The contents of a license agreement and circumstances under which it was entered may shed light on how analogous comparable licenses are to the specific analysis being undertaken, and the Working Group believes that the context in which the license agreement is being considered should not alter the general principle that licenses deemed comparable may be considered where possible.⁹⁰

b. Potential factors for comparable license determinations

The comparability analysis has two primary aspects. First, prior licenses must meet a minimum level of comparability to be sufficiently relevant to be considered at all. Second, those licenses meeting that minimum threshold can be more or less comparable—and thus more or less relevant to a calculation of a royalty—depending on several factors.⁹¹ Those factors are discussed below.

i. Whether the licensor was under a FRAND commitment at the time of the proposed comparable license

Some may take the view that because a FRAND commitment imposes obligations on a licensor that do not exist absent the FRAND commitment, licenses negotiated without such a commitment are less comparable or not comparable to licenses with a FRAND commitment.⁹² Under this view, a

⁸⁹ *WG9 Reasonable Royalty Determinations Commentary*, *supra* note 1, at 35.

⁹⁰ While not all prior licenses may be sufficiently comparable to be admissible, the Federal Circuit in *Ericsson* reiterated that comparable licenses need not be identical to the hypothetical negotiation, and “the fact that a license is not perfectly analogous generally goes to the weight of the evidence, not its admissibility.” 773 F.3d at 1227. Some may interpret this statement from *Ericsson* as compelling the admission by the courts of all proffered comparable licenses. Others may contend that this statement should not be interpreted as going this far in light of other Federal Circuit precedent highlighting the courts’ gatekeeping function with respect to proffered comparable licenses. This issue of comparable licenses was addressed comprehensively in the predecessor *WG9 Reasonable Royalty Determinations Commentary*, and this *Ericsson* statement will be specifically addressed in a forthcoming update to the same.

⁹¹ As stated as in the *WG9 Patent Reasonable Royalty Determinations Commentary*, *supra* note 1, at 35:

The courts look to licenses deemed “comparable” as real-world evidence of the commercial market for the patent(s)-in-suit. While this remains the case, in recent years, the Federal Circuit has also shown a willingness to exclude from consideration, in assessing a reasonable royalty license, agreements that are not “sufficiently comparable” to either the patented technology or the economic circumstances of the hypothetical negotiation.

For a discussion of recent federal case law concerning comparable licenses, *see id.* at Sect. I.E.3. (Current State of the Law Regarding the Determination of a Reasonable Royalty—Comparability of Licenses), at 9–12.

⁹² *See Microsoft V*, 2013 WL 2111217, at *18 (W.D. Wash. Apr. 25, 2013) (“[*Georgia-Pacific*] factor 1 examines the royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty. In the RAND context, such licensing royalties for a given patent(s) must be comparable to RAND licensing circumstances. In other words, to prove an established royalty rate for an

license negotiated in the absence of a FRAND or similar commitment may have been unfair, unreasonable, or discriminatory and may not be comparable or may be considered only after making appropriate adjustments.⁹³

Others, however, may argue licenses that do not include any FRAND-committed patents, when evaluated for their similarities and differences from the hypothetical FRAND negotiation, may still be relevant licenses for a comparability analysis. Under this view, it should not be assumed that a prior license negotiated without a FRAND commitment was unfair, unreasonable, or discriminatory and therefore not sufficiently comparable.

Comparability analyses considering licenses that include a mix of FRAND-committed and noncommitted patents (SEPs and non-SEPs) pose additional considerations that will be discussed in Section III.B.3.b.iv (Whether the proposed comparable license is a portfolio license) below.

ii. Whether the proposed comparable license was entered into under threat of injunction

The Working Group previously has considered for all patents generally whether litigation settlement agreements may be deemed comparable licenses.⁹⁴ The Working Group here will not revisit that general analysis, but will consider specific considerations that might arise about the threat of injunctive relief underlying a proposed comparable license for a FRAND-committed SEP.

In an SEP-FRAND case, some may argue that only licenses negotiated without the threat of injunction are sufficiently comparable to be considered in determining a royalty for a FRAND-committed patent at issue in the case. The argument concerns whether a proposed comparable license may have an unduly higher royalty (or other increased consideration) based on leverage from an explicit or implicit threat of an injunction, which would not exist when negotiating a hypothetical license for the FRAND-committed patent at issue. Proponents of this view might therefore argue that where an agreement has been secured under the explicit or implicit threat of an injunction, whether in the United States or in another jurisdiction, royalties paid under such an agreement should not be probative of reasonable royalties consistent with a FRAND commitment.

Opponents of that view, however, may argue that there is no *per se* rule about injunctive relief for FRAND-committed SEPs, and any concerns about the threat of an injunction unduly influencing the terms of a proposed comparable license should be tied to the specific circumstances of the proposed comparable license. Under this view, differences, if any, between the injunction threat underlying the proposed comparable license and that appropriate for the FRAND-committed SEP at issue in the case should be addressed by making adjustments for the differences and otherwise go to the weight, not admissibility, of the proposed comparable license.

SEP, the past royalty rates for a patent must be negotiated under the RAND obligation or a comparable negotiation.”).

⁹³ See *id.*

⁹⁴ *WG9 Reasonable Royalty Determinations Commentary*, *supra* note 1, at 40.

See Section IV (Injunctive Relief) below for a more detailed discussion of differing views concerning the propriety of injunctive relief for a FRAND-committed SEP.

iii. Whether the royalty base for the proposed comparable license is aligned with the royalty base of the proposed license

The Federal Circuit in *Ericsson* ruled that a party is not precluded as a matter of law from relying on end-product licenses to establish a damage royalty for SEPs. Rather, expert testimony relying on such a license may be admissible “where expert testimony explains to the jury the need to discount reliance on a given license to account only for the value attributed to the licensed technology.”⁹⁵ Likewise, in *CSIRO*, the Federal Circuit found it was wrong to exclude a comparable license based on the fact that the product was licensed at the component level, noting that such an exclusion “runs afoul of *Ericsson*’s holding that a license may not be excluded solely because of its chosen royalty base.”⁹⁶

For more general discussion on royalty base and apportionment, see Section III.B.4 (Royalty Base and Apportionment) below.

iv. Whether the proposed comparable license is a portfolio license

Portfolio licenses can potentially be probative of FRAND license terms, including where the FRAND dispute likewise involves portfolio license terms, and even where the scope of coverage and terms of the licenses are not identical. Some courts have been willing to adjudicate disputes concerning what would constitute a FRAND royalty for a patent portfolio where the determination was related to resolving a breach of contract claim⁹⁷ or where the determination was relevant to patent claims and with the parties’ agreement.⁹⁸ But some courts have been unwilling to determine a binding FRAND royalty for a portfolio of patents outside of an infringement action without the consent of both parties.⁹⁹

⁹⁵ *Ericsson*, 773 F.3d at 1228.

⁹⁶ *CSIRO*, 809 F.3d 1295, 1307 (Fed. Cir. 2015).

⁹⁷ *E.g., Microsoft V*, 2013 WL 2111217; *TCL Commc’n Tech. Holdings v. Telefonaktienbolaget LM Ericsson*, No. 8:14-cv-00341-JVS-DFM, Dkt. No. 1802 (C.D. Cal. Dec. 21, 2017).

⁹⁸ *E.g., Innovatio II*, 2013 WL 5593609 (N.D. Ill. Oct. 3, 2013).

⁹⁹ *See, e.g., Ericsson, Inc. v. D-Link Sys., Inc.*, No. 6:10-cv-473, 2013 WL 4046225, at *21 (E.D. Tex. Aug. 6, 2013) (declining request to determine a worldwide RAND rate because “defendants . . . refus[all] to make any assurance they would accept such an offer” meant that any ruling “would have amounted to nothing more than an advisory opinion”), *aff’d in part, rev’d in part*, 773 F.3d 1201 (Fed. Cir. 2014); *Apple Inc. v. Telefonaktiebolaget LM Ericsson, Inc.*, No. 15-cv-00154, 2015 WL 1802467, at *2 (N.D. Cal. Apr. 20, 2015) (“there exists no legal basis upon which Apple may be compelled to take a license for Ericsson’s patents on a portfolio-wide basis”); *InterDigital Commc’ns, Inc. v. ZTE Corp.*, No. 13-cv-00009, 2014 WL 2206218, at *3 (D. Del. May 28, 2014) (declining to set FRAND terms where to do so “would have little utility and serve little to no useful purpose,” as it “would not lead directly to a patent license as multiple other license issues would still need to be negotiated . . . , any one of which could become a sticking point”).

To the extent that the portfolio covered by the potentially comparable license differs in relevant ways from the portfolio-in-suit, adjustments could potentially be made to account for such differences. For example, if a potentially comparable license included a license both to SEPs subject to a FRAND commitment and non-SEPs, it may be possible to propose an allocation of value between the consideration paid for the SEPs and the non-SEPs where there is data available to make such an allocation. Likewise, if a potentially comparable license included additional standards not at issue in the dispute, it may be possible to allocate value between the different standards. Issues may also arise in determining the value attributable to one of two portfolios involved in a cross-license, particularly where the agreement does not specify separate rates for each.

U.S. courts have attempted to determine the collective value of multiple FRAND-encumbered patents in a few instances to date, including cases involving groups of patents within a larger portfolio,¹⁰⁰ as well as at least one instance valuing an entire large portfolio involving mobile telecommunications standards.¹⁰¹ The bench trial decision in *TCL v. Ericsson* will be used here to illustrate briefly some of the considerations that may arise when examining potentially comparable portfolio licenses, without suggesting that it represents the only possible or only correct approach to these issues.

In *TCL v. Ericsson*, the court considered comparable license analysis for multiple licenses to Ericsson's portfolio, both when resolving allegations that Ericsson made discriminatory offers, and when setting FRAND rates for technologies covered by Ericsson's portfolio.¹⁰² Broadly speaking, the court first determined which of Ericsson's licensee firms were sufficiently similarly situated to TCL,¹⁰³ and then "unpacked" the cross-licenses with those firms in order to extract from each agreement effective royalty rates attributable to Ericsson's portfolio by valuing, e.g.: (1) how to allocate releases for past sales, (2) apportioning lump-sum payments covering multiple standards, and (3) accounting for differences in strength between cross-licensed portfolios.¹⁰⁴ A full analysis of these issues is beyond the scope of this section.

v. Whether the proposed comparable license is a patent pool

Generally, patent pools are voluntary agreements between two or more patent owners to license their patents to third parties in a single licensing package. Patent pools can cut down on transaction costs by establishing a licensing fee program that allows potential licensees to obtain licenses to the

¹⁰⁰ *Ericsson*, 773 F.3d at 1207 (assessing patent damages for three WiFi patents within Ericsson's portfolio); *Innovatio II*, 2013 WL 5593609, at *3 (valuing 19 WiFi patents within an IP Ventures portfolio); *Microsoft Corp. v. Motorola, Inc. (Microsoft IV)*, 904 F. Supp. 2d 1109, 1119 (W.D. Wash. 2012) (determining a RAND range for 15 H.264 patents and 11 802.11 patents, a subset of Motorola's larger SEP portfolio). The *Innovatio* and *Microsoft* matters involve issues specific to patent pool licenses discussed in the next subsection.

¹⁰¹ *TCL Commc'n Tech. Holding, Ltd. v. Telefonaktiebolaget LM Ericsson*, No. SACV 14-341, 2018 WL 4488286 (C.D. Cal. Sept. 14, 2018).

¹⁰² *See, e.g., id.* at *49-50.

¹⁰³ *See infra* Section III.C.1 (Additional Considerations to the Factors Relevant to a FRAND Reasonable Royalty—Non-Discrimination).

¹⁰⁴ *See TCL Commc'n* at *30, *35-41.

pool of patents without the need to negotiate individually with all the licensors in the pool, and vice versa. Patent pools may distribute royalties to their members on a per-patent basis, without an examination of a given patent's specific innovation, its strength, or its contribution to a given standard. A patent pool is voluntary; a patent holder may instead choose to license its patents in individual negotiations completely outside of the pool.¹⁰⁵

At least two U.S. district courts have expressly considered whether rates charged by patent pools for a portfolio of SEPs declared essential to a specific standard may be probative comparable licenses in determining a FRAND royalty for other patents alleged to be essential to the same standard.¹⁰⁶ One district court found the proposed patent pools to be relevant indicators of a RAND rate in that case, but the other court found, due to the factors discussed below, the proposed patent pool was not an appropriate comparable license in that case. In determining whether the proposed patent pools were relevant to the RAND determination, the courts generally examined:

- the circumstances surrounding the formation of the patent pool, including the number and types of companies participating in the pool,
- the number and quality of patents in the patent pool,
- the number of licensees licensed to the patent pool,
- the availability of alternative technologies outside of the pool, and
- the pool's royalty fee structure and licensing terms.

The courts then examined the proposed “comparable” patent pools to determine whether the pools would be helpful data points in determining RAND rates for the asserted patents.

In *Microsoft v. Motorola*, Microsoft proposed using the MPEG LA H.264 patent pool as a comparable license for the range of RAND royalties for H.264 SEPs, and the Via Licensing 802.11 patent pool for wireless SEPs.¹⁰⁷ Based on the evidence presented at the bench trial, the court held that “as a general matter . . . patent pools tend to produce lower rates than those that could be achieved through bilateral negotiations.”¹⁰⁸ After reviewing the specific patents pools and comparing them to

¹⁰⁵ A different type of organization is sometimes referred to as a “defensive patent pool” or defensive patent aggregator, which accumulates patents and licenses them to its membership. Members are typically operating companies that are the frequent recipients of patent assertions. The defensive patent pool attempts to remove patents from the market place to prevent them from getting in the hands of assertion entities. Rather than collecting licensing fees and distributing royalties, defensive patent pools charge fees to their membership, which funds the purchasing of patents. In contrast, an “offensive patent pool” or aggregator often refers to entities that acquire patents with the intention of monetizing them through licensing or litigation.

¹⁰⁶ *Microsoft V*, 2013 WL 2111217, at *74 (W.D. Wash. Apr. 25, 2013); *Innovatio II*, 2013 WL 5593609, at *36 (N.D. Ill. Oct. 3, 2013).

¹⁰⁷ *Microsoft V*, 2013 WL 2111217, at *74.

¹⁰⁸ *Id.* at *80.

the asserted patents, however, the Court went on to determine that both patent pools could serve as indicators of the range of royalties consistent with a RAND commitment.¹⁰⁹

In *Microsoft*, the court also articulated a concern specific to the context of its RAND-modified *Georgia-Pacific* analysis, that a patent-counting system for royalty allocation in a patent pool “does not consider the importance of a particular SEP to the standard or to the implementer’s products as the court’s hypothetical negotiation requires.”¹¹⁰

The court in *Innovatio* rejected the use of the Via Licensing patent pool as an indicator of the value of SEPs, concluding that the pool was not an appropriate comparable license in the case.¹¹¹ The court distinguished the decision in *Microsoft v. Motorola*, in which the court determined that Motorola’s 802.11 patents were not important to the 802.11 standard such that a low value patent could be a comparable license, whereas *Innovatio*’s patent portfolio is of “moderate to moderate-high importance to the 802.11 standard” such that a low value patent pool would not be a comparable license.¹¹² The court also observed that because the pool did not allocate royalties based on relative merit, this may discourage holders of high value patents from participating, and as a result, “the pool rates may be considerably depressed.”¹¹³

4. Royalty base and apportionment

Section 35 U.S.C. § 284 applies to both SEPs and non-SEPs. When infringement is found, courts “shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer”

In addition, the same apportionment principles that apply to traditional patent damages determinations apply with equal force to damages for SEPs. The Federal Circuit made this point clear in *Ericsson v. D-Link*, stating that “[a]s with all patents, the royalty rate for SEPs must be apportioned to the value of the patented invention.”¹¹⁴

There are “two special apportionment issues that arise” for SEPs:

First, the patented feature must be apportioned from all of the unpatented features reflected in the standard. Second, the patentee’s royalty must be premised on the

¹⁰⁹ *Id.* at *83–93. (The court found that the rate set by the MPEG LA H.264 patent pool was at the low end of the RAND range, and because Motorola did not demonstrate that its SEP portfolio provided significant contribution to the H.264 standard or significant value to Microsoft’s products, it too fell at the low end of the range. The court found the Via pool was less successful than the H.264 pool, but still had characteristics indicative of a RAND royalty rate. Because Motorola’s SEPs provided little value to the standard, the court found the pool rate a helpful data point.)

¹¹⁰ *Id.* at *80.

¹¹¹ *Innovatio II*, 2013 WL 5593609, at *35–36.

¹¹² *Id.*

¹¹³ *Id.* at *36.

¹¹⁴ *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1232 (Fed. Cir. 2014).

value of the patented feature, not any value added by the standard's adoption of the patented technology. These steps are necessary to ensure that the royalty award is based on the incremental value that the patented *invention* adds to the product, not any value added by the standardization of that technology.¹¹⁵

The first of these two principles stems from the Supreme Court's seminal *Garretson v Clark* decision, which found that when the entire market value (EMV) is not "properly and legally attributable to the patented feature," then "[t]he patentee . . . must in every case give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features."¹¹⁶ In its discussion of *Garretson*, the court in *Ericsson* noted that where "multi-component products are involved, the governing rule is that the ultimate combination of royalty base and royalty rate must reflect the value attributable to the infringing features of the product, and no more."¹¹⁷ The Federal Circuit's second requirement specific to SEPs clarifies that the royalty must not be premised on any value added by the adoption of the patented technology into the standard itself.

The smallest salable patent practicing unit (SSPPU) methodology is a means of apportioning the royalty base in both SEP and non-SEP cases.¹¹⁸ Generally, the SSPPU principle provides that, "where a damages model apportions from a royalty base, the model should use the smallest salable patent-practicing unit as the base."¹¹⁹ However, even if the SSPPU is used as the royalty base, further apportionment may be required based on the facts of the case.¹²⁰ "Under the entire market value rule, if a party can prove that the patented invention drives demand for the accused end product, it can rely on the end product's entire market value as the royalty base."¹²¹ The *Ericsson* court further recognized that "[j]ust as we apportion damages for a patent that covers a small part of a device, we must also apportion damages for SEPs that cover only a small part of a standard."¹²² The Court went on to say, however, "[o]ur decision does not suggest that all SEPs make up only a small part of the technology in the standard. Indeed, if a patentee can show that his invention makes up 'the entire value of the' standard, an apportionment instruction probably would not be appropriate."¹²³

¹¹⁵ *Id.* (emphasis in original).

¹¹⁶ *Garretson v. Clark*, 111 U.S. 120, 121 (1884).

¹¹⁷ *Ericsson*, 773 F.3d at 1226.

¹¹⁸ *See id.* at 1227.

¹¹⁹ *CSIRO*, 809 F.3d 1295, 1302 (Fed. Cir. 2015).

¹²⁰ As further stated as Principle No. 4(b) in *WG9 Reasonable Royalty Determinations Commentary*, *supra* note 1:

It may be appropriate to consider the smallest salable unit containing the feature or embodying the patented method for use as the apportioned royalty base; however, consideration of further apportionment may be required in assessing the royalty rate to ensure that the royalty reflects only the value of the patented features.

¹²¹ *CSIRO*, 809 F.3d. at 1302.

¹²² *Ericsson*, 773 F.3d at 1232–33.

¹²³ *Id.* at 1233 (citing *Garretson v. Clark*, 111 U.S. 120, 121 (1884)).

Again, case-specific factors and evidence should guide apportionment and damages calculations for SEPs, just as they do in traditional non-SEP patent damages calculations.

One court has held that the IPR Policy of a standard setting body (ETSI) did not require licensing SEPs based on the SSPPU given French contract law that governed the IPR Policy.¹²⁴ “To be clear, the ETSI IPR policy neither requires nor precludes a license with a royalty based on the SSPPU. Rather, whether a license meets the requirements of FRAND will depend on the particular facts of the case, as there is no prescribed methodology for calculating a FRAND license.”¹²⁵ In that case, the court ultimately held that Ericsson’s end-device SEP licenses provided “the best market-based evidence of the value of Ericsson’s SEPs.”¹²⁶ The court rejected HTC’s argument that Ericsson should have based its royalty calculation on the SSPPU, which HTC submitted was the baseband processor, reiterating its prior holding that the ETSI FRAND commitment (which covers 2G-5G standards) does not require licenses to be based upon the SSPPU.¹²⁷ In so holding, the court concluded that “Ericsson presented credible evidence” that: (1) “the baseband processor is not reflective of the value conferred by Ericsson’s cellular essential patents”; (2) “that Ericsson’s patents are not limited in claim scope to a baseband processor, and as a result, even if one were to indulge HTC’s approach, the baseband processor is not the proper SSPPU”; and (3) licenses based upon the end device are the industry practice with respect to cellular SEPs.¹²⁸

In contrast, in *GPNE Corp. v. Apple Inc.*,¹²⁹ the court found “as a matter of law” that the baseband processor chip in the accused smartphone and tablet computer devices was the SSPPU.¹³⁰ The court rejected the plaintiff’s arguments that (1) the SSPPU must be an item sold by the defendant, and (2) the entire accused devices are the SSPPU because “the patent claims are directed to the entire devices and not just the baseband processor chips.”¹³¹ The court ruled that the mere “recitation of the entire device in the asserted claims does not foreclose the component that directly impacts the invention from being the smallest salable patent-practicing unit for reasonable royalty purposes.”¹³² In arriving at this conclusion, the court emphasized “the policy behind the smallest salable patent-practicing unit doctrine,” and noted that adopting the plaintiff’s reasoning “would allow patent drafters to effectively abolish the smallest salable patent-practicing unit doctrine by simply drafting patent claims to cover end products rather than the individual components that actually embody the

¹²⁴ *HTC Corp. v. Telefonaktiebolaget LM Ericsson*, No. 6:18-CV-00243-JRG, 2019 WL 126980, at *5-6 (E.D. Tex. Jan. 7, 2019).

¹²⁵ *Id.* at *6.

¹²⁶ *Id.*, Dkt. 538, at *11 (May 23, 2019)

¹²⁷ *Id.* at *7–11.

¹²⁸ *Id.* at *11.

¹²⁹ No. 12-cv-02885-LHK, 2014 WL 1494247 (N.D. Cal. Apr. 16, 2014).

¹³⁰ *Id.* at *12-13.

¹³¹ *Id.* at *12.

¹³² *Id.*

invention.”¹³³ Similarly, in *In re Innovatio*,¹³⁴ the court found that “taking the profit margin on the sale of a chip for a chip manufacturer as the maximum potential royalty . . . accounts for both the principle of non-discrimination and royalty stacking concerns in RAND licensing.”

In determining Section 284 damages for past infringement of a FRAND-committed SEP and the application of any specific apportionment methodologies, the Working Group further refers to the The Sedona Conference WG9 *Reasonable Royalty Determinations Commentary* discussion of the royalty base issue for patents in general, which may inform that inquiry. In determining FRAND contractual obligations, however, courts consider the applicable IPR policy in the case to determine whether the language of that policy provides further guidance on the terms of the specific FRAND commitment.¹³⁵

The Federal Circuit made clear in *Ericsson* that even when applying traditional patent damages law to the unique factual context presented by an SEP case, the “essential requirement is that the ultimate reasonable royalty award must be based on the incremental value that the patented invention adds to the end product.”¹³⁶

The *Ericsson* court explained that “the legal standard [of the entire market value ‘rule’] actually has two parts, which are different in character. There is one substantive legal rule, and there is a separate evidentiary principle; the latter assisting in reliably implementing the rule when—in a case involving a per-unit royalty—the jury is asked to choose a royalty base as the starting point for calculating a reasonable royalty award.”¹³⁷

In describing the evidentiary principle of the entire market value rule supporting the substantive rule of apportionment, the court explained:

The point of the evidentiary principle is to help our jury system reliably implement the substantive statutory requirement of apportionment of royalty damages to the invention’s value. The principle, applicable specifically to the choice of a royalty base, is that, where a multi-component product is at issue and the patented feature is not the item which imbues the combination of the other features with value, care must be taken to avoid misleading the jury by placing undue emphasis on the value of the entire product. It is not that an appropriately apportioned royalty award could never be fashioned by starting with the entire market value of a multi-component product—by, for instance, dramatically reducing the

¹³³ *Id.* at *12–13.

¹³⁴ *Innovatio II*, 2013 WL 5593609, at *38 (N.D. Ill. Oct. 3, 2013).

¹³⁵ See *supra* Section III.C.2 (Additional Considerations to the Factors Relevant to a FRAND Reasonable Royalty Determination—Possible differences between contract law and patent damages law).

¹³⁶ *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014); see also *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1311 (Fed. Cir. 2018) (“[T]he fact that [a party] has established a royalty base based on the ‘smallest, identifiable technical component’ does not insulate them from the ‘essential requirement’ that the ‘ultimate reasonable royalty award must be based on the incremental value that the patented invention adds to the end product.’”) (quoting *Ericsson*, 773 F.3d at 1226)).

¹³⁷ *Ericsson*, 773 F.3d at 1226.

royalty rate to be applied in those cases—it is that reliance on the entire market value might mislead the jury, who may be less equipped to understand the extent to which the royalty rate would need to do the work in such instances.¹³⁸

In *CSIRO v. Cisco*, the Federal Circuit again recognized the award of reasonable damages for patent infringement “must reflect the value attributable to the infringing features of the product, and no more. This principle—apportionment—is the ‘governing rule’ ‘where multiple component products are involved.’”¹³⁹ In *CSIRO*, the district court ruled that the SSPPU—e.g., chip component in wireless device—was not the appropriate royalty base, stating that “Basing a royalty solely on chip price is like valuing a copyrighted book based only on the costs of the binding, paper, and ink needed to actually produce the physical product.”¹⁴⁰ The court explained that, “[w]hile such a calculation captures the cost of the physical product, it provides no indication of its actual value.”¹⁴¹ In reviewing the district court’s decision, the Federal Circuit recognized that under the apportionment principle “there may be more than one reliable method for estimating a reasonable royalty.”¹⁴² For this reason, the *CSIRO* court rejected as “untenable” the defendant’s argument that all damages methodologies must start with the SSPPU, holding that: “adopting [the accused infringer’s] position would necessitate exclusion of comparable license valuations that—at least in some cases—may be the most effective method of estimating the asserted patent’s value.”¹⁴³ The *CSIRO* court explained “[t]his adaptability is necessary because different cases present different facts.”¹⁴⁴ In *CSIRO*, the court found under the facts of that case that the SSPPU principle was inapplicable because the “district court did not apportion from a royalty base at all. Instead, the district court began with the parties’ negotiations.”¹⁴⁵

When looking at relevant comparable licenses as part of the damages analysis, the Federal Circuit has also cautioned that “a license may not be excluded solely because of its chosen royalty base,”¹⁴⁶ whether the royalty base is the entire end product or a component within the device. In *Ericsson*, the Federal Circuit cited the testimony at trial to conclude that real-world “licenses are generally negotiated without consideration of the EMVR.”¹⁴⁷ That court therefore concluded:

[W]here expert testimony explains to the jury the need to discount reliance on a given license to account only for the value attributed to the licensed technology,

¹³⁸ *Id.* at 1226-27; *accord*, *CSIRO*, 809 F.3d 1295, 1302 (Fed. Cir. 2015).

¹³⁹ *CSIRO*, 809 F.3d at 1301 (quoting *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1329 (Fed. Cir. 2014)).

¹⁴⁰ *Id.* at 1300 (quoting *CSIRO*, 2014 WL 3805817, at *11 (E.D. Tex. July 23, 2014)).

¹⁴¹ *Id.*

¹⁴² *Id.* at 1301 (quoting *Motorola*, 757 F.3d 1286, 1315 (Fed. Cir. 2014)).

¹⁴³ *Id.* at 1303–04.

¹⁴⁴ *Id.* at 1301–02.

¹⁴⁵ *Id.* at 1302.

¹⁴⁶ *Id.* at 1307 (citing *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1228 (Fed. Cir. 2014)).

¹⁴⁷ *Ericsson*, 773 F.3d at 1228.

as it did here, the mere fact that licenses predicated on the value of a multi-component product are referenced in that analysis—and the district court exercises its discretion not to exclude such evidence—is not reversible error.¹⁴⁸

The court also noted, however, that “when licenses based on the value of a multi-component product are admitted, or even referenced in expert testimony, the court should give a cautionary instruction regarding the limited purposes for which such testimony is proffered if the accused infringer requests the instruction. The court should also ensure that the instructions fully explain the need to apportion the ultimate royalty award to the incremental value of the patented feature from the overall product.”¹⁴⁹

C. ADDITIONAL CONSIDERATIONS TO THE FACTORS RELEVANT TO A FRAND REASONABLE ROYALTY DETERMINATION

1. Non-Discrimination

a. An illustrative non-discrimination analysis: the district court opinion in *TCL v. Ericsson*

While some cases have touched on the issue of non-discrimination,¹⁵⁰ a recent U.S. district court decision in *TCL v. Ericsson* has provided a detailed analysis of the application of the “non-discriminatory” aspect of FRAND in calculating royalties.¹⁵¹ This recent decision has provided some guidance on non-discrimination, as summarized below for the purposes of presenting some of the issues involved in a non-discrimination analysis and one illustrative example of such an analysis.¹⁵²

In the case, the parties agreed that, under the non-discrimination prong of the FRAND commitment, “like” or “close to like” rates must be offered to firms that are “similarly situated.”¹⁵³

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

¹⁵⁰ *See id.* at 1230–31; *Microsoft V*, 2013 WL 2111217, at *18 (W.D. Wash. Apr. 25, 2013); *Innovatio II*, 2013 WL 5593609, at *38 (N.D. Ill. Oct. 3, 2013).

¹⁵¹ *TCL Comm’n Tech. Holdings v. Telefonaktiebolaget LM Ericsson*, Case No. SACV 14-341, Memorandum of Findings of Fact and Conclusions of Law (C.D. Cal. Dec. 21, 2017) and 2018 WL 4488286 (C.D. Cal. Sept. 14, 2018).

¹⁵² The U.S. International Trade Commission also considered non-discrimination in holding that “[t]he FRAND nondiscrimination requirement prohibits ‘unfair discrimination,’ but it does not require uniform treatment across licensees, nor does it require the same terms for every manufacturer or competitor.” *In re Certain Wireless Devices with 3G Capabilities and Components Thereof*, Inv. No. 337-TA-800, 2013 WL 3961230, at *235 (U.S.I.T.C. June 28, 2013) (initial decision) (nonprecedential). Responding to an argument that the patent holder’s license offers were “discriminatory on their calculation of the ‘effective royalty rate’ of the offers,” ALJ Shaw held that “[a] nondiscrimination analysis, however, requires an examination of the whole of each license agreement, and not just the effective royalty rate.” *Id.*

¹⁵³ *TCL*, 2018 WL 4488286, at *29.

The parties considered “firms using the same technology and at a similar level in the value chain.”¹⁵⁴ The court found that because TCL was established in the world market, “for purposes of license comparisons the analysis should include all firms reasonably well-established in the world market.”¹⁵⁵ In explaining its rationale, the court examined the particular ETSI policy at issue and its goal of facilitating competition in the market.¹⁵⁶ The court noted that excluding large firms, such as Apple and Samsung, “would have the effect of insulating them, and further contributing to their dominant positions, by imposing a barrier in the form of higher rates for those not at the top end of the market”¹⁵⁷ Further, the court found that permitting the patent holder to pick and choose criteria with no relation to its SEPs or the FRAND commitment “would effectively allow [the patent holder] to read the non-discrimination prong out of the FRAND commitment.”¹⁵⁸

The court also addressed a number of other issues in its opinion. For example, with respect to whether companies are “similarly situated” for purposes of comparing license terms, the court considered, among other things, the geographic scope of the company, the scope of the license required, and a reasonable sales volume.¹⁵⁹ The court considered certain factors not relevant, such as exclusive applications, retail stores, brand recognition, and proprietary operating systems.¹⁶⁰ The court ruled that ETSI had rejected a most-favored-nations provision that would have required revisiting prior licensing agreements based on later entered agreements, so Ericsson would not be held accountable for agreements made after its offer to TCL.¹⁶¹

With respect to determining the royalty rates of comparable licenses for assessing discrimination, the court compared the effective royalty rate (both monetary and nonmonetary consideration) offered to the accused infringer with the effective royalty rate of licenses between the patent holder and companies “similarly situated” to the accused infringer.¹⁶² The court also evaluated the potential impact of royalty caps and floors.¹⁶³ The court found that harm to the firm offered discriminatory rates was sufficient; impairment of the development or adoption of the standard was not necessary for discriminatory harm.¹⁶⁴

¹⁵⁴ *Id.* at *31.

¹⁵⁵ *Id.* at *30.

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

¹⁵⁸ *Id.*

¹⁵⁹ *Id.* at *31.

¹⁶⁰ *Id.* at *33.

¹⁶¹ *Id.* at *7-8, *49.

¹⁶² *Id.* at *34-35.

¹⁶³ *Id.* at *37-38.

¹⁶⁴ *Id.* at *49.

With respect to the non-discrimination commitment, the court concluded “there is no single rate that is necessarily FRAND, and different rates offered to different licensees may well be FRAND given the economics of the specific license.”¹⁶⁵

The *TCL* court acknowledged that its comparable license analysis was “not perfect,” but the offers Ericsson made to TCL “are radically divergent from the rates which Ericsson agreed to accept from licensees similarly situated to TCL.”¹⁶⁶ The decision acknowledged that its analysis addresses a litigated dispute about non-discrimination and does not necessarily apply to what FRAND terms parties may reach in private negotiations.¹⁶⁷ Similarly, our focus in this *Framework* is case management in patent litigation and does not necessarily apply to address FRAND licensing terms that parties may reach in private negotiations outside of litigation.

b. Component-manufacturer v. end-product-manufacturer licensing

It must be noted that some parties argue that the “non-discriminatory” commitment of FRAND seeks to ensure broad market access to patents covering the standard, meaning the SEP owner must make a fair and reasonable offer to any party that wishes to implement the standard. This view finds support, for example, in *FTC v. Qualcomm*, in which the court found that Qualcomm’s FRAND commitments to the Alliance for Telecommunications Industry Solutions (ATIS) and the Telecommunications Industry Association (TIA) “include an obligation to license to all comers, including competing modem chip suppliers.”¹⁶⁸ SDO IPR policies may differ on the extent to which they specifically address this issue; at least one standard-setting organization has updated its policy guidelines to define the term “non-discriminatory” consistent with this view that an SEP licensor must make licenses available to all applicants.¹⁶⁹ Proponents of this position may further argue that an SEP licensor may also have a duty under the antitrust laws to license, even to its competitors.¹⁷⁰

However, other litigants may argue that the “non-discriminatory” aspect of FRAND simply means to treat similarly situated entities similarly. The current procedural posture of the above-referenced *FTC v. Qualcomm* case at the time of this publication is that the Ninth Circuit has stayed, pending the resolution of the appeal, portions of the district court’s permanent injunction. The Ninth Circuit found that Qualcomm met its burden of raising “serious questions as to the merits” for a stay of the

¹⁶⁵ *Id.* at *54.

¹⁶⁶ *Id.* at *50.

¹⁶⁷ *Id.* at *38 (“To be sure, in the course of private negotiations, parties may enter into a variety of licensing schemes that reflect each party’s unique assessment of the risk of a particular arrangement. However, the Court prefers to conduct its FRAND analysis on principles of general application which do not require the Court to discern the peculiarities of those risk assessments.”).

¹⁶⁸ *F.T.C. v. Qualcomm Inc. (FTC I)*, No. 17-CV-00220-LHK, 2018 WL 5848999, at *10 (N.D. Cal. Nov. 6, 2018) (citing *Microsoft Corp. v. Motorola Inc.*, 795 F.3d 1024, 1031 (9th Cir. 2015), where the court noted that a “SEP holder cannot refuse a license to a manufacturer who commits to paying the RAND rate.”).

¹⁶⁹ *See supra* Section II.D.2 (Examples of FRAND Licensing Commitments—Institute of Electrical and Electronics Engineers (IEEE)).

¹⁷⁰ *See FTC v. Qualcomm Inc. (FTC II)*, 2019 WL 2206013, at *82 (N.D. Cal. May 21, 2019).

district court's determination that Qualcomm has an antitrust duty to license its SEPs to rival chip suppliers.¹⁷¹ Whether a particular entity must be licensed, and on what terms, depends on the terms of the particular FRAND commitment at issue. Arguing that the words “non-discriminatory” impose an “all comers” requirement may oversimplify issues relating to the language of a particular IPR policy, industry practice and understanding concerning the policy, and the nature of the license grants affected by the policy.

The Working Group awaits further case law development on this issue.

2. Possible differences between contract law and patent damages law

Determining a FRAND royalty under contract law may be different than that determination under patent damages law (35 U.S.C. § 284). The extent of such differences may be unsettled and is disputed. As noted in Section II.A (The SDO Commitment—Different Types of SDO IPR Policies and Terms) above, courts have held that FRAND commitments under SDO IPR Policies are binding contracts.

When adjudicating whether offered terms and conditions are FRAND, the courts should look first to the SDO IPR Policy and the patent owner's commitment in question. As in a traditional contract case, the court should analyze the specific terms of the SDO IPR Policy to determine the scope and meaning of the commitment of the contracting parties (the SEP holder and the SDO). When the SDO IPR Policy is governed by foreign law, this will require application of foreign contract interpretation principles.¹⁷² As part of the analysis, the Court should consider whether the IPR Policy sets forth requirements for, among other things, how FRAND royalties should be calculated, the license terms and conditions that an SEP holder must offer, and/or the entities to which an SEP holder must license. In the event that the SDO policy is silent or ambiguous with respect to the issue(s) in dispute, however, then the court should look to the applicable law governing the contract.¹⁷³

¹⁷¹ See *FTC v. Qualcomm, Inc. (FTC III)*, 935 F.3d 752 (9th Cir. 2019).

¹⁷² See, e.g. *TCL Commc'n Tech. Holding, Ltd. v. Telefonaktiebolaget LM Ericsson*, 2018 WL 4488286, at *54–56 (C.D. Cal. Sept. 14, 2018) (applying French law as per the terms of the ETSI policy at issue).

This document focuses on FRAND and patent damages cases from the United States, but breach of FRAND claims may involve more than just U.S. patents and arise in the context of global portfolio licensing of patents from the U.S. and several other countries. In those cases, the parties may agree that the license offer to be adjudicated would cover multiple countries. This raises the issue of whether and how a U.S. court can adjudicate a FRAND claim involving the laws in other countries. See generally *Unwired Planet Int'l Ltd v. Huawei Techs. Co.* [2017] EWHC 711 (Pat) (U.K. patents court setting a global FRAND rate absent consent of the parties); *Unwired Planet Int'l Ltd v. Huawei Techs. Co.* [2018] EWCA Civ 2344 (court of appeal affirming in relevant part).

A framework for analysis for this topic and more will be the subject of the forthcoming Sedona WG9 drafting team on SEP/FRAND and FRAND Licensing and Royalty Issues—“Global Edition.”

¹⁷³ *Microsoft VI*, 795 F.3d 1024, 1040 (9th Cir. 2015) (“We reiterate that this is not a patent law action. Still, the Federal Circuit's patent law methodology can serve as guidance in contract cases on questions of patent valuation. The district court's analysis properly adapted that guidance to the current context.”)

Some may argue that a particular royalty may be FRAND, independent of particular strictures of U.S. patent damages law. A negotiated royalty is a bargained-for exchange and need not match exactly what a court might award as damages in a patent infringement case. In a contractual setting, the parties are free to agree on commercially convenient terms for royalties and other matters. When litigating a reasonable royalty under Section 284 in a patent infringement case, the patent is presumed to be valid and infringed, and damages are assessed in accordance with a certain legal framework.¹⁷⁴ Because the contractual approach and the patent-law approach differ substantively, they may lead to different results. Proponents of this view may further argue that the SDO IPR policy at issue was entered into prior to some of the litigation damages methodologies used in some court decisions or is not governed by U.S. law; therefore it may be improper to incorporate certain judicially developed damages methodologies into the patent owner's contractual commitment to the SDO.

Others, however, disagree that industry participants in a standard-setting organization can agree to set royalty rates by contract that are divorced from, or inconsistent with, patent damages law principles articulated by courts. If there is a dispute over whether the FRAND rate offered by the SEP licensor is not in compliance with its FRAND commitment, then proponents of this view may argue that this determination inherently requires the application of the applicable patent damages law.¹⁷⁵

3. “Top-down” v. “bottom-up” approaches

There are a variety of approaches for making a FRAND determination for a given SEP or set of SEPs—two of them include using a “top-down” or “bottom-up” approach.¹⁷⁶ The contours of these terms are not universally agreed upon or applied in a consistent fashion. These types of approaches may not always be mutually exclusive, and some arguments may consider aspects of both.

Under a “top-down” approach, a litigant will generally propose an aggregate royalty for all SEPs covering a particular standard. After determining a total aggregate royalty burden for products practicing that standard, the party will seek to allocate the appropriate portion of that aggregate to the relevant patent claims. In doing so, the litigant may look to the number and the strength of the asserted patent claims to determine the portfolio's share of the royalty. As discussed below, courts

¹⁷⁴ See *Saint Lawrence Commc'ns LLC v. ZTE Corp*, No. 2:15-cv-349-JRG, 2017 WL 679623, at *1-3 (E.D. Tex. Feb. 21, 2017) (hypothetical royalty rate for SEP based on presumption that patent is valid and infringed may be higher than rate of proposed comparable license, because the comparable license royalty rate may have been skewed low by litigation uncertainty and cost discount given for license negotiated without litigation).

¹⁷⁵ For example, as the Federal Circuit noted in *CSIRO*, “reasonable royalties for SEPs generally—and not only those subject to a RAND commitment—must not include any value flowing to the patent from the standard's adoption.” 809 F.3d 1295, 1305 (Fed. Cir. 2015).

¹⁷⁶ This discussion of “top-down” v. “bottom-up” approaches is not intended to be presented to the exclusion of the multiple factors for a reasonable royalty determination as applied in the FRAND context discussed in prior sections. See *supra* Sections III.B (FRAND Analysis—General Factors for a Reasonable Royalty Determination as Applied in the FRAND Context) and III.C (FRAND Analysis—Additional Considerations to the Factors Relevant to a FRAND Reasonably Royalty Determination).

have used different variations of the top-down approach to determine an aggregate royalty or to allocate a portion of that royalty to the patents at issue in a case.

In contrast, a “bottom-up” approach generally aims to assess the value of each asserted SEP individually and then adds up the value of those asserted SEPs-in-suit. The individual patent valuations can be done in multiple manners—e.g., by quantifying the technical benefits (bandwidth savings, battery-life improvement, etc.), by established licensing rates for the SEP, by comparable licenses, or other traditional patent damages analyses.

Regardless of one’s view of the optimal framework to determine FRAND, implementation of these frameworks, when applied, has varied greatly case to case. In the United States, several district court cases have undertaken a FRAND analysis touching on these frameworks. Three cases include: *Microsoft v. Motorola*,¹⁷⁷ *In re Innovatio IP Ventures*,¹⁷⁸ and *TCL v. Ericsson*.¹⁷⁹

Decisions determining FRAND royalty rates reflect differences even when the courts are looking at patents involving the same standard or the same features in a standard. Some of these differences in existing case law stem from the fact that courts adjudicating FRAND disputes have different evidence in front of them and are examining the contributions of one patent holder and a limited set of patent claims in a given case.¹⁸⁰

4. Royalty stacking¹⁸¹

“Royalty stacking can arise when a standard implicates numerous patents, perhaps hundreds, if not thousands. If companies are forced to pay royalties to all SEP licensors, the royalties will ‘stack’ on top of each other and may become excessive in the aggregate.”¹⁸² However, “the mere fact that thousands of patents are declared to be essential to a standard does not mean that a standard-

¹⁷⁷ *Microsoft V*, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013).

¹⁷⁸ *Innovatio II*, 2013 WL 5593609 (N.D. Ill. Oct. 3, 2013).

¹⁷⁹ No. SACV 14-341JVS, 2017 WL 6611635 (C.D. Cal. Dec. 21, 2017).

¹⁸⁰ See, e.g., *Microsoft V*, 2013 WL 2111217, at *3 (“However, this litigation is limited in scope by the pleadings and evidence provided to the court, and the court is therefore likewise constrained to determining what constitutes a reasonable royalty rate for Motorola’s SEP portfolio under the RAND obligation.”).

¹⁸¹ The issue of royalty stacking has been substantially debated in economic and academic literature. Compare A. Layne-Farrar & K. W. Wong-Ervin, *An Analysis of the Federal Circuit’s Decision in Ericsson v. D-Link*, CPI ANTITRUST CHRONICLE, 4–5 (March 2015), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2669269, with Jorge L. Contreras, *Aggregated Royalties for Top-Down FRAND Determinations: Revisiting Joint Negotiation*, ANTITRUST BULLETIN, Vol. 62(4), 690-709 (July 2018), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3051502

¹⁸² *Ericsson Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1209 (Fed. Cir. 2014).

compliant company will necessarily have to pay a royalty to each SEP holder.”¹⁸³ Thus, the Federal Circuit requires case-specific evidence before royalty stacking can be introduced to the jury.¹⁸⁴

In *Ericsson v. D-Link*, the Federal Circuit upheld the trial court’s decision not to instruct the jury on royalty stacking where the defendant had not come forward with specific evidence supporting the existence of royalty stacking.¹⁸⁵ The defendant’s reliance on the existence of a large number of declared SEPs was insufficient in the absence of specific royalty evidence, such as other licenses or royalty demands regarding the same standard.¹⁸⁶

In *CSIRO*, while discussing principles of apportionment, the Federal Circuit referred back to *Ericsson* when explaining that both “abstract recitations of royalty stacking theory, and qualitative testimony that an invention is valuable—without being anchored to a quantitative market valuation—are insufficiently reliable.”¹⁸⁷

There are a few examples in the case law of the type of evidence that courts look to to show royalty stacking. In *Ericsson*, for example, the Court stated: “In this case, D-Link’s expert ‘never even attempted to determine the actual amount of royalties Defendants are currently paying for 802.11 patents.’ In other words, D-Link failed to come forward with any evidence of other licenses it has taken on Wi-Fi essential patents or royalty demands on its Wi-Fi enabled products.”¹⁸⁸ In *Core Wireless*, the court denied a *Daubert* motion to exclude an expert from addressing the need to avoid royalty stacking in determining a FRAND royalty, finding that Apple presented “evidence that (1) numerous specific royalty demands have been made that, if paid, would exceed the profit margin of the baseband chip; and (2) Apple considers royalty stacking in real-world licensing negotiations.”¹⁸⁹ The court indicated in its ruling that it would exclude the opinion at trial if the damages expert failed “to identify a sufficient factual basis for his assertion that Apple would consider royalty stacking in its hypothetical negotiation.”¹⁹⁰ At trial, Apple presented evidence of the nature it had indicated pre-trial, and the court overruled the plaintiff’s renewed objection, allowing the evidence of royalty stacking to be admitted.¹⁹¹

Outside the context of a jury trial, some trial courts have considered in bench trials the concept of royalty stacking in their FRAND analyses. For example, the court in *TCL v. Ericsson* wrote that

¹⁸³ *Id.* at 1234.

¹⁸⁴ *See id.*

¹⁸⁵ *See id.*

¹⁸⁶ *Id.*

¹⁸⁷ *CSIRO*, 809 F.3d 1295, 1302 (Fed. Cir. 2015).

¹⁸⁸ *Ericsson*, 773 F.3d at 1234.

¹⁸⁹ *Core Wireless Licensing S.A.R.L. v. Apple Inc.*, No. 15-cv-05008 NC, 2016 WL 8231157, at *2 (N.D. Cal. Nov. 18, 2016).

¹⁹⁰ *Id.* at *3.

¹⁹¹ *Core Wireless Licensing S.A.R.L. v. Apple Inc.*, Case No. 5:15-cv-05008-NC, Dkt. 520, at 1148-49 (N.D. Cal. Dec. 9, 2016) (public transcript of December 9, 2016 proceedings before Hon. Nathanael Cousins).

“[t]he appeal of a top down approach is that it prevents royalty stacking.”¹⁹² In *Innovatio*, the court described royalty stacking analysis as “a way of checking the accuracy of a proposed RAND royalty’s correspondence to the technical value of the patented invention,” and considered both “a proposed RAND rate in light of the total royalties an implementer would have to pay to practice the standard” and “whether the overall royalty of all standard-essential patents would prohibit widespread adoption of the standard.”¹⁹³ In *Microsoft*, the court examined stacking allegations in multiple contexts, including “clear stacking concerns” presented by a proposed royalty rate that would result in an aggregate exceeding the total product price—concerns further “heightened” where the portfolio provided “only minimal contribution” to the standard.¹⁹⁴

5. Patent holdup and patent holdout

This section addresses the related concepts of SEP “holdup” and “holdout.” The Federal Circuit has identified patent holdup as a potential problem that could inhibit widespread adoption of the standard.¹⁹⁵ Patent holdup is alleged to exist when the SEP licensor demands excessive royalties after companies are locked into using a standard.¹⁹⁶ This issue of “lock-in” refers to the changed circumstances after a standard has been deployed in the market. Before standardization, alternative technologies may have been available to market participants. But after standardization, and as a direct result of the collective agreement of the companies participating in the standardization process, only the specific technologies included in the standard can be used for standards-compliant devices, thus “locking-in” any standard licensees of the standard.

The concept of “holdout” refers to a potential licensee that unreasonably delays or refuses to take a FRAND license, hoping that protracted, uncertain, and expensive legal proceedings may produce a better outcome than paying a FRAND royalty without such litigation. The resulting concern is that holdout risks “unfair downward pressure” on royalty rates, which may result in a lower than FRAND rate.¹⁹⁷

Either patent holdup or patent holdout can potentially disrupt the balance between the interests of IPR holders and licensees of standardized technology that SDO IPR policies seek to maintain.

¹⁹² *TCL Comm’n Tech. Holding, Ltd. v. Telefonaktiebolaget LM Ericsson*, 2017 WL 6611635, at *8 (C.D. Cal. Dec. 21, 2017). *See supra* Section III.C.3 for discussion of top-down analysis.

¹⁹³ *Innovatio II*, 2013 WL 5593609, at *10 (N.D. Ill. Oct. 3, 2013).

¹⁹⁴ *Microsoft V*, 2013 WL 2111217, at *73 (W.D. Wash. Apr. 25, 2013).

¹⁹⁵ As the Federal Circuit noted in *Ericsson v. D-Link*, “SEPs pose two potential problems that could inhibit widespread adoption of the standard: patent hold-up and royalty stacking.” 773 F.3d 1201, 1209 (Fed. Cir. 2014).

¹⁹⁶ *See id.*

¹⁹⁷ *See In re Certain 3G Mobile Handsets and Components Thereof*, Inv. No. 337-TA-613, 2015 WL 6561709, at *26 (U.S.I.T.C. Apr. 27, 2015) (Initial Determination on Remand).

In *Ericsson*, the Federal Circuit held that a district court “need not instruct the jury on hold-up . . . unless the accused infringer presented actual evidence of hold-up.”¹⁹⁸ The *Ericsson* court instructed that patent holdup evidence may comprise, for example, evidence that the patent holder “used its SEPs to demand higher royalties from standard-compliant companies” or that the patent holder “started requesting higher royalty rates after the adoption of the . . . standard.”¹⁹⁹ Similarly, evidence of actual patent holdout in the particular case at issue should be presented before patent holdout arguments, and evidence may be presented to the fact finder, assuming such evidence is relevant and admissible to an issue in the case. Evidence of patent holdout may come from the parties’ conduct in negotiations.²⁰⁰

With respect to holdup, some may argue that an SEP owner may demand royalty payments based not only on the market value of the patented invention, but also on the costs and delays of switching away from the standardized technology, and thus enables SEP licensors to improperly inflate the FRAND royalty rate. To counter an allegation of holdup, some may argue that a prospective licensee can file a breach of FRAND claim or seek a FRAND rate adjudication rather than pay a royalty that it believes is excessive.

With respect to holdout, some may argue that innovators who contribute to an SDO can be susceptible to licensee holdup or holdout if the contributed technologies have a market only within the standard. For example, the patent owner may have substantial sunk costs in researching and developing technology that has value only in the standard, and the patent owner can only recoup those costs through standard licensees based on reasonable and good-faith negotiations under the FRAND commitment. But someone using that technology may not negotiate reasonably and in good faith toward a FRAND license, which deprives the SEP owner of the benefit of its bargain from the FRAND commitment and puts pressure on the SEP owner to agree to a lower royalty in order to recoup the sunk costs it already invested. Some may also argue that a prospective licensee’s unwillingness to negotiate reasonably and in good faith also would be relevant to whether the patent owner’s license offer has discharged its FRAND commitment, and the prospective licensee can no longer benefit from the FRAND commitment.²⁰¹

In addition, SEP licensors and licensees may argue that certain prior licenses are not comparable because they were the product of patent holdout or holdup, respectively, and thus the royalty rates in those licenses do not accurately reflect the value of the technology.

In an ITC action, an Administrative Law Judge (ALJ) found that the accused infringers had not committed patent holdout during a first period of time but had committed patent holdout during a

¹⁹⁸ *Ericsson Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1234 (Fed. Cir. 2014).

¹⁹⁹ *Id.*

²⁰⁰ For example, in finding willful infringement of an SEP with a FRAND commitment, a district court admitted evidence of actual holdout—the party had abruptly terminated licensing negotiations, stated that it preferred to litigate, stated that it did not want to be the first in the industry to take a license, and did not present strong defenses at trial. *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, No. 2:14-cv-912-2016 WL 10749825, at *1-2 (E.D. Tex. Nov. 1, 2016).

²⁰¹ *See In re Qualcomm Litig.*, No. 3:17-cv-00108-GPC-MDD, Dkt. 1042, at 12-13 (S.D. Cal. Mar. 20, 2019).

second period of time.²⁰² Specifically, the ALJ found that the accused infringers had not committed patent holdout during a period of time after the ITC had found that they did not infringe the patent, because they “had every reason to be difficult negotiators.”²⁰³ But that changed after the Federal Circuit reversed the ITC decision of noninfringement.²⁰⁴ After that time, the accused infringer delayed in negotiating a license, failed to present evidence that the patent owner’s offer was not FRAND, and failed to present evidence of what would be FRAND terms.²⁰⁵

Courts that evaluate these patent holdup and holdout concepts do so on a case-by-case basis. Case law in this area is continuing to develop.

²⁰² *In re Certain 3G Mobile Handsets and Components Thereof*, Inv. No. 337-TA-613, 2015 WL 6561709, (U.S.I.T.C. Apr. 27, 2015) (Initial Determination on Remand).

²⁰³ *Id.* at *24.

²⁰⁴ *Id.* at * 24-26.

²⁰⁵ *Id.*

IV. Injunctive Relief

The Working Group recognizes that the general *eBay* factors and analysis governing issuance of an injunction in general patent cases should also apply in cases involving SEPs.²⁰⁶ The *Framework* drafting team, however, has divergent views on applying the *eBay* factors for injunctive relief on an SEP and, to date, there is little court guidance on the issue.

In *eBay*, the U.S. Supreme Court set forth the governing standard for issuance of injunctions in patent cases. Prior to *eBay* the Federal Circuit applied a “‘general rule’ unique to patent disputes, ‘that a permanent injunction will issue once infringement and validity have been adjudged.’”²⁰⁷ In *eBay*, the Court reversed the Federal Circuit, holding “that the decision whether to grant or deny injunctive relief rests within the equitable discretion of the district courts, and that such discretion must be exercised consistent with traditional principles of equity, in patent disputes no less than in other cases governed by such standards.”²⁰⁸ Those traditional equitable principles are embodied in a four-factor test requiring the movant to show: (1) irreparable injury; (2) that the remedies available at law are inadequate to compensate for that injury; (3) that the balance of hardships between the plaintiff and the defendant favors an injunction; and (4) that the public interest would not be disserved by issuance of an injunction.

Prior to 2014 there was an open question whether a court could issue an injunction prohibiting a party from practicing an SEP. That issue was addressed by the Federal Circuit in *Apple v. Motorola*.²⁰⁹ In *Motorola*, although the court acknowledged that “FRAND commitments are certainly criteria relevant to . . . entitlement to an injunction,” the court held that there was no need for “a separate rule or analytical framework for addressing injunctions for FRAND-committed patents. The framework laid out by the Supreme Court . . . provides ample strength and flexibility for addressing the unique aspects of FRAND-committed patents and industry standards in general.”²¹⁰ Because there is no *per se* rule, assessing the propriety of an injunction in an SEP setting turns on the application of *eBay* to the unique circumstances of a particular SEP enforcement.²¹¹

Many of the substantive arguments that may be raised by SEP patent holders and accused infringers, including those presented below, do not fit neatly within one specific *eBay* factor, but rather can be and often are raised when discussing multiple *eBay* factors.

²⁰⁶ See *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388 (2006).

²⁰⁷ *Id.* at 391 (quoting *MercExchange, LLC v. eBay, Inc.*, 401 F.3d 1323, 1339 (Fed. Cir. 2005)).

²⁰⁸ *Id.* at 394.

²⁰⁹ See *Motorola*, 757 F.3d 1286, 1332 (Fed. Cir. 2014).

²¹⁰ *Id.* at 1331-32.

²¹¹ See *id.*

A. **EBAY FACTOR 1: WHETHER THE PLAINTIFF HAS SUFFERED AN IRREPARABLE INJURY**

While a variety of issues and considerations can be relevant to assessing the first *eBay* factor, two issues in particular are often raised during the discussion of irreparable harm in the context of SEPs: arguments concerning the causal-nexus requirement, and those concerning willingness to license.

1. **The causal-nexus requirement**

“To satisfy the first *eBay* factor, the patentee must show that it is irreparably harmed by the infringement,” which “requires proof that a ‘causal nexus relates the alleged harm to the alleged infringement.’”²¹² The causal-nexus inquiry begins by asking whether “there is ‘some connection’ between the harm alleged and the infringing acts.”²¹³ This causation component requires that “the injury asserted to be irreparable be injury *from the defendant’s use of infringing features*.”²¹⁴ This may be established by showing that the infringing feature is “‘a driver’ of decisions by a substantial number of individual consumer decision-makers considering multiple features.”²¹⁵ If a connection is shown, then “[t]he strength of [the patentee’s] evidence of irreparable harm goes to this factor’s weight when assessing the propriety of the injunction.”²¹⁶

Given the complexity of certain devices, a defendant may argue that the Federal Circuit’s causal-nexus requirement restricts the availability for injunctive relief for devices incorporating multiple additional features and functionalities. The defendant may argue that consumer demand is driven by other features or functionalities of the product or that the aspects covered by the SEP have a negligible independent impact on consumer demand.

A patent holder may respond that the analysis requires only “some connection” between the patented features and the demand for the infringing products. “[I]t is enough that [the patent owner] has shown that these [patented] features were related to infringement and were important to customers when they were examining their [product] choices.”²¹⁷

A defendant may respond that any importance of the feature to customers stems from the need to comply with the standard that has other features sought by customers, and that the patented feature alone has little or no influence on the customer’s purchasing decision.

²¹² *Apple Inc. v. Samsung Elecs. Co. (Apple IV)*, 809 F.3d 633, 639 (Fed. Cir. 2015).

²¹³ *Id.* at 640 (quoting *Apple Inc. v. Samsung Elecs. Co. (Apple III)*, 735 F.3d 1352, 1364 (Fed. Cir. 2013)).

²¹⁴ *Genband US LLC v. Metaswitch Networks Corp.*, 861 F.3d 1378, 1382 (Fed. Cir. 2017) (emphasis in original).

²¹⁵ *Id.* at 1382 (emphasis deleted).

²¹⁶ *Apple IV*, 809 F.3d at 644 (citing *Apple III.*, 735 F.3d at 1364).

²¹⁷ *Id.* at 644, *see also id.* (“Apple did not establish that these features were the exclusive driver of customer demand, which certainly would have weighed more heavily in its favor. Apple did, however, show that ‘a patented feature is one of several features that cause consumers to make their purchasing decisions.’ We conclude that this factor weights in favor of granting Apple’s injunction.”) (internal citation omitted).

Whether this factor has been met and what weight to give it depends on the circumstances presented. In multi-purchaser, multi-feature situations, which often are presented in SEP cases, the standard here lies somewhere between (1) too-low showing of an “insubstantial connection” between the infringement and harm, and (2) a too-demanding requirement to show that the infringing feature is “*the driver*” or “sole reason” of customer demand for the product.²¹⁸

In some cases, more than one patent claim may be found infringed by more than one feature of the accused product. In those instances, “when considering whether to enjoin a product, it is proper for the court to consider the aggregate harm caused by all of the infringing features, rather than requiring a patentee to address each patent or claim individually.”²¹⁹

2. Willingness to license

“The irreparable harm inquiry endeavors to measure the harms that damages awards cannot remedy.”²²⁰ With respect to this prong, another factor that courts may assess in determining whether a patentee has been irreparably harmed is evidence that the patentee previously had chosen to license, or made promises to license, the patent.

In the SEP context, the Federal Circuit has held that a FRAND commitment, and prior history of licensing FRAND-committed patents, is strong evidence that a patent holder would not be irreparably harmed absent issuance of an injunction.²²¹ In other words, “[a] patentee subject to FRAND commitments may have difficulty establishing irreparable harm.”²²² This is particularly true where prior SEP licenses have been granted and the standard has become widely implemented in the industry.²²³

However, the patent holder may argue that past licensing history itself may show that there would be irreparable harm in the absence of injunctive relief. District courts should make a specific factual assessment of the circumstances surrounding past licensing behavior to determine the extent to which a past willingness to license evidences that a patentee will not be irreparably harmed if an

²¹⁸ *Genband*, 861 F.3d at 1382–84; *see also id.* at 1384 (“The standard . . . as appropriate to the multi-purchaser, multi-component context, lies between the unduly stringent ‘sole reason’ standard . . . and unduly lax ‘insubstantial connection’ standard[s] we rejected . . .”).

²¹⁹ *Motorola*, 757 F.3d 1286, 1330–31 (Fed. Cir. 2014).

²²⁰ *Hydrodynamic Indus. Co Ltd. V. Green Max Distributors, Inc.*, No. 2:12-cv-05058-ODW, 2014 WL 2740368, at *3 (C.D. Cal. June 16, 2014) (citing *Celsis In Vitro, Inc. v. CellzDirect, Inc.*, 664 F.3d 922, 930 (Fed. Cir. 2012)).

²²¹ *Motorola*, 757 F.3d at 1332 (“Motorola’s FRAND commitments, which have yielded many license agreements encompassing the ’898 patent, strongly suggest that money damages are adequate to compensate Motorola for any infringement.”).

²²² *Id.*

²²³ *Id.* (“Considering the large number of industry participants that are already using the system claimed in the ’898 patent, including competitors, Motorola has not provided any evidence that adding one more user would create such harm. Again, Motorola has agreed to add as many market participants as are willing to pay a FRAND royalty.”).

injunction is denied.²²⁴ Further, a past willingness to license is not always dispositive of irreparable harm,²²⁵ and a patent holder may argue that “an injunction may be justified where an infringer unilaterally refuses a FRAND royalty or unreasonably delays negotiations to the same effect.”²²⁶ To this end, the Federal Circuit has confirmed that “[p]rice erosion, loss of goodwill, damage to reputation, and loss of business opportunities are all valid grounds for finding irreparable harm.”²²⁷

The patent holder may argue that its FRAND commitment was to enter reasonable and good-faith negotiations toward a FRAND license and that its harm is not merely financial in some circumstances when a defendant does not negotiate reasonably and in good faith. For example, the patent holder may allege there has been reputational harm or lost opportunities based on that refusal to negotiate, which extends beyond financial injury. The defendant may counter, however, that any injury based on refusal to negotiate reasonably in the FRAND context can be fully compensated by monetary damages.

Finally, a patent holder may also argue that its past willingness to license the SEP should only be considered in connection with the separate *eBay* factor relating to the adequacy of monetary damages to compensate for infringement, discussed below, and should not undercut an otherwise adequate showing of irreparable harm.

B. EBAY FACTOR 2: WHETHER THE REMEDIES AVAILABLE AT LAW ARE INADEQUATE TO COMPENSATE FOR THE INJURY

The second *eBay* factor requires the standard-essential patent holder to prove that “remedies available at law, such as monetary damages, are inadequate to compensate for that injury.”²²⁸

A defendant opposing a request for injunction may argue that although there is no *per se* rule that injunctions are unavailable for SEPs, a FRAND commitment strongly suggests that money damages are adequate to fully compensate the patent holder for any infringement by standard-compliant products.²²⁹ As support, the defendant may cite to the licensing commitments themselves and associated IPR policies as well as case law addressing the seeking of injunctions despite a past history of licensing.²³⁰

An SEP-holder seeking an injunction may, on the other hand, argue that its willingness to license its standard-essential patents on FRAND terms does not automatically mean money damages are

²²⁴ See, e.g., *Apple III*, 735 F.3d 1352, 1369–70 (Fed. Cir. 2013).

²²⁵ *Id.*

²²⁶ *Motorola*, 757 F.3d at 1332.

²²⁷ *Celsis In Vitro, Inc., v. CellzDirect, Inc.*, 664 F.3d 922, 930 (Fed. Cir. 2012).

²²⁸ *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 391 (2006).

²²⁹ See, e.g., *Motorola*, 757 F.3d at 1331 (“FRAND commitments are certainly criteria relevant to [an] entitlement to an injunction”).

²³⁰ *Id.* at 1332.

sufficient compensation for infringement.²³¹ As support, the patent holder may point to the absence of any express waiver of the right to seek injunctive relief in its licensing commitment to the standard-development organization. The patent holder may also argue that interpreting the FRAND commitment to entirely preclude injunctions would conflict with the statements in *eBay* that even patent holders who choose to license their technology rather than use it exclusively are not *per se* precluded from obtaining injunctive relief under the *eBay* test.²³² The patent holder could also note that in *Apple v. Motorola*, the Federal Circuit rejected a categorical ban on injunctions for standard-essential patents.²³³

The patent holder might argue that monetary damages are inadequate to compensate for infringement of its standard-essential patents because of what it argues is “patent holdout” in the marketplace. The patentee may argue that when defendants—particularly those with large market share—routinely “hold out” by infringing standard-essential patents without timely taking licenses, this course of conduct could become the industry norm. This in turn makes it more difficult and expensive for the patent holder to efficiently and successfully license its standard-essential patents. The patentee may argue that the cost and burden of litigating becomes so high that the patent holder cannot secure full compensation in the form of money damages. Defendants may counter that seeking an injunction based on an SEP constitutes a form of patent “holdup,” whereby a patent holder seeks to leverage its monopoly power associated with ownership of a necessary patent to obtain excessive compensation. As the Federal Circuit has stated, “[p]atent hold-up exists when the holder of an SEP demands excessive royalties after companies are locked into using a standard.”²³⁴

A defendant may also argue that its willingness and ability to pay money damages likewise establish that remedies at law are adequate compensation for its use of the patented technology at issue. The patent holder may respond by pointing to the Federal Circuit’s reasoning in *Apple v. Samsung* that “a defendant’s ability to pay merely indicates that a court should look to other considerations to determine whether a damages award will adequately compensate the patentee for the harm caused by continuing infringement.”²³⁵ Further, if the defendant in fact demonstrated to be unavailable or unable to pay a judgment, the patent holder could use that fact to argue that money damages are inadequate compensation for the infringement.²³⁶

²³¹ *Apple III*, 735 F.3d 1352, 1369 (Fed. Cir. 2013) (“[A] defendant’s ability to pay a judgment does not defeat a claim that an award of damages would be an inadequate remedy.”).

²³² *eBay*, 547 U.S. at 393.

²³³ *Motorola*, 757 F. 3d at 1331–32 (holding that although “FRAND commitments are certainly relevant to [the] entitlement to an injunction,” there is no reason for “a separate rule” . . . for FRAND-committed patents”).

²³⁴ *Ericsson Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1209 (Fed. Cir. 2014).

²³⁵ *Apple III*, 735 F.3d at 1369.

²³⁶ *Id.* (recognizing that an infringer’s inability to pay a judgment “may demonstrate the inadequacy of damages”).

C. **EBAY FACTOR 3: WHETHER THE BALANCE OF HARDSHIPS BETWEEN THE PLAINTIFF AND THE DEFENDANT FAVORS AN INJUNCTION**

“To satisfy the third *eBay* factor, the patentee must show that the balance of hardships weighs in its favor.”²³⁷ “[This] factor ‘assesses the relative effect of granting or denying an injunction on the parties.’”²³⁸

In *Apple v. Motorola*, the Federal Circuit considered this factor in light of the “unique aspects of FRAND committed patents and industry standards in general.”²³⁹ In upholding the district court’s determination that the patent holder was not entitled to an injunction for infringement of its SEP, the Federal Circuit identified various factors that may be relevant to the balance of hardships:

- **The FRAND commitment:** Since the patent at issue was FRAND-committed, the patent holder had “agreed to add as many market participants as are willing to pay a FRAND royalty,” including competitors.²⁴⁰ The court also noted, however, that there is no *per se* rule that injunctions are unavailable for SEPs.²⁴¹
- **The status and nature of the license negotiations:** In this case, license negotiations were “ongoing,” and there was no evidence that the defendant had been “unilaterally refusing to agree to a deal.”²⁴² “On the other hand,” the court noted, “an injunction may be justified where an infringer unilaterally refuses a FRAND royalty or unreasonably delays negotiations to the same effect.”²⁴³
- **The number of industry participants already using the patent:** Because the patent was determined standard-essential, there was a lack of evidence that “adding one more user” would harm the patent holder.²⁴⁴

In assessing the balance of hardships, courts may consider the availability of money damages to the patent holder.²⁴⁵ In the case of FRAND-committed patents, the defendant may argue that it is willing to pay a court-ordered FRAND royalty to the patent owner and, therefore, no injunction should be entered because the patent owner ultimately will be made whole. The patent owner, however, may argue that such delayed royalty payment would not make the patent owner whole

²³⁷ *Apple IV*, 809 F.3d 633, 645 (Fed. Cir. 2015) (quoting *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 862 (Fed. Cir. 2010)).

²³⁸ *Apple III*, 735 F.3d at 1371.

²³⁹ *Motorola*, 757 F.3d 1286, 1332 (Fed. Cir. 2014).

²⁴⁰ *Id.*

²⁴¹ *Id.* at 1331–32.

²⁴² *Id.* at 1332.

²⁴³ *Id.* at 1333.

²⁴⁴ *Id.* at 1332.

²⁴⁵ *See, e.g., ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1341 (Fed. Cir. 2012).

because it would delay receipt of much needed funds to invest in its ongoing business or other considerations. This factor would ordinarily favor the defendant if it is willing to pay a court-ordered FRAND royalty. On the other hand, this factor may favor the patent holder if the defendant refuses or is unable to pay a court-ordered FRAND royalty.

Courts have also evaluated balance of hardships with respect to the existence of copying, finding such evidence tips the balance of hardships against a defendant.²⁴⁶ A defendant may argue that the existence of copying has no application to SEPs, because the very purpose of standards is to encourage widespread adoption. The patent owner, however, may argue that such an argument is incomplete, at most, because an important purpose of standards also is to create new and better standards that are worthy of widespread adoption; allowing someone to copy the technology in the standard without adequately compensating patent owners who contributed their innovations to the standard would frustrate that important purpose.

Courts have also considered the competitive relationship between the parties in assessing balance of hardships.²⁴⁷ The defendant may argue that the competitive relationship between the parties should not be relevant to a balance of hardships analysis where a FRAND-committed SEP is at issue because a FRAND license must be “non-discriminatory.” In summary, the FRAND commitment may make the “commercial relationship between the licensor and licensee” “irrelevant because [the patent holder] must offer licenses at a *non-discriminatory* rate.”²⁴⁸ The patent holder may argue, however, that the competitive relationship should be relevant in at least some instances in the SEP context; for example, where the defendant is an unwilling licensee or has refused to negotiate in good faith. Additionally, a patent holder may counter that *Ericsson* is not an injunction case, and that no current case law clearly defines the “non-discriminatory” requirement of FRAND to include eliminating the competitor relationship as a factor for consideration under an *eBay* analysis.

Outside of the SEP context, the Federal Circuit has found that the availability of a design-around tends to find in favor of the plaintiff in the balance of hardships analysis.²⁴⁹ Similarly, a sunset provision that gives the defendant time to design around the patent may mitigate the hardship to the

²⁴⁶ See *Apple, Inc. v. Samsung Elecs., Ltd.*, 678 F.3d 1314, 1338 (Fed. Cir. 2012) (finding “some evidence that Samsung altered its design to make it look like Apple’s . . . further tips the balance of hardships against Samsung”).

²⁴⁷ See, e.g., *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1156 (Fed. Cir. 2011) (“[R]equiring Bosch to compete against its own patented invention, with the resultant harms described above, places a substantial hardship on Bosch.”).

²⁴⁸ *Ericsson Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1230–31 (Fed. Cir. 2014) (finding under a *Georgia-Pacific* analysis that certain *Georgia-Pacific* factors are not relevant in the context of FRAND-committed patents).

²⁴⁹ See, e.g., *Douglas Dynamics, LLC v. Buyer Prods. Co.*, 717 F.3d 1336, 1345 (Fed. Cir. 2013) (when infringer “ha[s] a non-infringing alternative which it could easily deliver to the market, then the balance of hardships would suggest that [it] should halt infringement”).

defendant from an injunction.²⁵⁰ In the SEP context, however, the essential nature of the patent ordinarily means a design-around is impractical.

D. EBAY FACTOR 4: WHETHER THE PUBLIC INTEREST WOULD BE DISSERVED BY ISSUANCE OF AN INJUNCTION

“The fourth *eBay* factor requires the patentee to show that ‘the public interest would not be disserved by a permanent injunction.’”²⁵¹ “[T]he touchstone of the public interest factor is whether an injunction, both in scope and effect, strikes a workable balance between protecting the patentee’s rights and protecting the public from the injunction’s adverse effects.”²⁵²

The case law regarding injunctions for SEPs and application of the public interest factor continues to evolve.

The defendant may argue, among other things, that:

- the FRAND commitment “must be construed in the public interest because it is crafted for the public interest,” and that the public interest supports enforcement of the patent owner’s promise to license SEPs;²⁵³
- the standard exists to deter patent holdup harming competition and consumers, and the public interest is thus also served by enforcing the licensing commitment rather than permitting market exclusion;²⁵⁴
- there are various government agency policy statements and filings opposing injunctive relief for patents on the basis of public and consumer interests;²⁵⁵ and
- preventing companies from building standard-compliant products is contrary to the public interest.

On the other hand, the patent holder may argue, among other things, that:

²⁵⁰ See, e.g., *Broadcom Corp. v. Emulex Corp.*, 732 F.3d 1325, 1338–39 (Fed. Cir. 2013) (“[I]n exercising its discretion for equitable remedies, the district court formed a well-crafted sunset period.”).

²⁵¹ *Apple IV*, 809 F.3d 633, 646 (Fed. Cir. 2015) (quoting *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 391 (2006)).

²⁵² *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 863 (Fed. Cir. 2010).

²⁵³ See *Microsoft VI*, 795 F.3d 1024, 1052 n.22 (9th Cir. 2015) (internal quotation marks omitted).

²⁵⁴ See *Ericsson Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1209 (Fed. Cir. 2014). See also *supra* Section III.C.5 for more complete discussion of patent holdup.

²⁵⁵ See, e.g., U.S. DEPT. OF JUSTICE & PATENT & TRADEMARK OFFICE, POLICY STATEMENT ON REMEDIES FOR STANDARDS-ESSENTIAL PATENTS SUBJECT TO VOLUNTARY F/RAND COMMITMENTS, at 6 (Jan. 8, 2013), available at <https://www.justice.gov/atr/page/file/1118381/download>.

- granting an injunction on a valid and infringed patent is in the public interest;²⁵⁶
- the public interest also favors protecting the rights of SEP owners so that they will be encouraged to contribute innovations to standards, making such standards worthy of widespread adoption by consumers;
- the public interest favors enforcing the agreement between the patent holder and the SDO that a prospective licensee must negotiate reasonably and in good faith in order to benefit from a FRAND commitment;²⁵⁷ and
- the Federal Circuit precludes considering abstract arguments about patent holdup, which is only relevant based on specific evidence of holdup in a specific case.²⁵⁸

²⁵⁶ See *Apple IV*, 809 F.3d at 647 (holding that “the public interest nearly always weighs in favor of protecting property rights in the absence of countervailing factors” and “the encouragement of investment-based risk is the fundamental purpose of the patent grant, and is based directly on the right to exclude.”) (internal quotation marks omitted).

²⁵⁷ See *Motorola*, 757 F.3d 1286, 1332 (Fed. Cir. 2014) (“Motorola argues that Apple has refused to accept its initial licensing offer and stalled negotiations. However, the record reflects that negotiations have been ongoing, and there is no evidence that Apple has been, for example, unilaterally refusing to agree to a deal.”).

²⁵⁸ See *Ericsson*, 773 F.3d at 1234.

V. Standard-Essential Patents Not Subject to a Standard-Setting Commitment

Although standard-essential patents are often subject to some commitment to the organization that set the standard on which the patent reads, that will not always be the case. This section addresses issues to consider when a patent reads on a standard, but there is not a FRAND or other standard-setting commitment associated with the patent.

A. CIRCUMSTANCES IN WHICH SEPS ARE NOT SUBJECT TO A STANDARD-SETTING COMMITMENT

In many cases involving standard-essential patents, the patent owner (or a prior owner of the patent) will have provided some licensing assurances, often a FRAND commitment, in connection with its participation in the relevant standard-setting organization. However, sometimes a patent that is not subject to a FRAND or other standard-setting commitment may read on a standard. There are a variety of circumstances in which that might occur.

There may be circumstances where a standard is set without the participation or involvement of patent owners whose patents are encompassed within the standard. It is possible that those developing the SDO standard did not even know about a patent that turns out to read on its standard. The patent may have been pending in a patent application unknown to any participant and later issued with claims essential to the standard.

There may be circumstances where a patent owner submits a statement disclaiming any licensing commitment, but the patented technology is nonetheless included in the standard. SDOs might make such decisions based on the potential cost differential compared to alternative technologies (if any) or based on the technical merit of the technology for which no commitment was provided.

The circumstances leading to the absence of an SDO commitment may be relevant to a court in determining the appropriate remedy for infringement of a valid claim of an SEP.

B. THE AVAILABILITY OF INJUNCTIVE RELIEF FOR SEPS NOT SUBJECT TO A STANDARD-SETTING COMMITMENT

The Federal Circuit has made clear that even in the SEP context, courts should apply the traditional *eBay* factors to determine whether injunctive relief is appropriate.²⁵⁹

Under the traditional *eBay* factors, a court must consider whether (1) the patent owner has suffered an irreparable injury; (2) remedies available at law are inadequate to compensate for that injury; (3) the balance of hardships between the plaintiff and the defendant warrants a remedy in equity; and (4) the public interest is disserved by issuance of an injunction. The fact that a patent is standard-

²⁵⁹ For a more complete discussion of injunctions in the SEP context, see *supra* Section IV (Injunctive Relief); see also *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388 (2006).

essential but not subject to a standard-setting commitment will be more relevant to some of these factors than others.

1. Irreparable harm

For example, as discussed in Section IV (Injunctive Relief) above, where the owner of a FRAND-committed patent “may have difficulty establishing irreparable harm” considering its willingness to license and actual licensing of its patent,²⁶⁰ the situation may be different for the owner of a non-FRAND-committed SEP who has made no licensing commitment and has no history of licensing its patents. Such an SEP owner may have an argument that infringement causes it irreparable injury for which damages are not an adequate remedy. The merits of such arguments will depend on the facts and circumstances.

2. Remedies available at law

As discussed in Section IV above, the arguments concerning whether there is an adequate remedy at law in the absence of an injunction may mirror those presented in the irreparable harm factor above.

3. Balance of hardships

The defendant and patentee may still make many of the arguments discussed in Section IV above regarding the balance of hardships. Further, defendants may argue that the fact that a patent is an SEP may be relevant to the third *eBay* factor even absent a standard-setting commitment. In considering the balance of the equities, the harm to the defendant goes beyond not being able to practice just the patented invention, but extends to being unable to sell a product that is completely standard compliant. In considering this factor, the court may consider the conduct of the SEP owner, the defendant, and perhaps even the SDO. For example, the court may consider (1) whether the SEP owner knowingly acquiesced in the SEP being built around its technology, (2) whether the defendant knew or should have known that the patent owner had not agreed to give a licensing commitment to the patent, or (3) the conduct of the parties, if any, in negotiating a license.

4. The public interest

The defendant and patentee may still make many of the arguments discussed in Section IV above regarding the public interest.²⁶¹ Further, defendants may argue that the existence of standardization raises additional public interest concerns, even absent a FRAND commitment. Courts have recognized that standards may significantly benefit consumers as well as industry participants. The Federal Circuit observed in *Apple v. Motorola* that “the public has an interest . . . in ensuring that SEPs are not overvalued.”²⁶² An defendant, therefore, may argue that, regardless of how a patent became part of a standard, once it is an SEP, injunctive relief reaches more broadly than the four corners of the patent itself. The patent owner, however, may argue that U.S. law does not recognize compulsory licensing as being in the public interest.

²⁶⁰ *Motorola*, 757 F.3d at 1332.

²⁶¹ See *supra* Section IV.D (Injunctive Relief—*eBay* Factor 4).

²⁶² *Motorola*, 757 F.3d at 1332.

C. REASONABLE ROYALTY DAMAGES FOR SEPS NOT SUBJECT TO A STANDARD-SETTING COMMITMENT—*GEORGIA-PACIFIC* ANALYSIS

The fact that a patent is standard-essential will affect the way courts determine reasonable royalty damages. The *Georgia-Pacific* factors must account for standardization, even absent a FRAND commitment.²⁶³ Special care should be taken to apply apportionment principles to ensure that the SEP owner is not over- or undercompensated based on the SEP's inclusion in the standard.

The Federal Circuit has long accepted the *Georgia-Pacific* factors in making reasonable royalty calculations. However, as discussed in Section III.B above, not all of those factors are relevant in any particular case. Specifically, in the context of standardization, several factors need to be adjusted for SEPs generally.²⁶⁴ We discuss some of those factors below.

1. *Georgia-Pacific* Factor 8: The established profitability of the product made under the patents; its commercial success; and its current popularity.

Care should be given when considering “commercial success” and “current popularity” of the patented invention that is essential to a standard, because they are “likely inflated because a standard requires the use of the technology.”²⁶⁵

2. *Georgia-Pacific* Factor 9: The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.

The Federal Circuit has found that Factor 9, utility and advantages of the patented invention over the old modes or devices, “is also skewed for SEPs,” since the technology is used because it was required to practice the standard and not necessarily because it is an improvement over the prior art.²⁶⁶

3. *Georgia-Pacific* Factor 10: The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.

Factor 10 considers the commercial embodiment of the licensor, which the Federal Circuit has found “irrelevant as the standard requires the use of the technology.”²⁶⁷

²⁶³ See *CSIRO*, 809 F.3d 1295, 1304 (Fed. Cir. 2015) (“*Ericsson* explicitly holds that the adjustments to the *Georgia-Pacific* factors apply equally to RAND-encumbered patents and SEPs.” (citing *Ericsson*, 773 F.3d at 1231)).

²⁶⁴ *Ericsson*, 773 F.3d at 1230–31; see also *CSIRO*, 809 F.3d at 1305 (“*Ericsson* calls out Factors 8, 9, and 10 as all being irrelevant or misleading in cases involving SEPs.”).

²⁶⁵ *Ericsson*, 773 F.3d at 1231.

²⁶⁶ *Id.*

²⁶⁷ *Id.*

4. *Georgia-Pacific* Factor 13: The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.

As discussed under Factor 13 of the *Georgia-Pacific* factors in Section III.B above, the fact that a patent is standard-essential will require additional apportionment analysis, regardless whether the patent is subject to a standard-setting commitment. Where the patent owner specifically refused to provide any commitment to the SDO, and the SDO nonetheless included the patented technology in the standard, the patent owner may argue that such inclusion indicates that its SEP has a high value to the standard.

*VI. Unique Issues in Litigating SEPs/FRAND Before the International Trade Commission*²⁶⁸

The International Trade Commission is a venue that offers unique remedies for patent infringement in the United States. No damages are available; instead, pursuant to its enabling statute,²⁶⁹ the ITC can issue injunctive relief to prevent importation and sales of infringing articles in the United States. In Section 337 litigation, the ITC has the authority to issue two kinds of remedial orders: (1) limited or general exclusion orders, and (2) cease-and-desist orders. An exclusion order will bar importation into the United States of infringing products. A cease-and-desist directs a respondent in the Commission investigation to cease its unfair acts, including selling infringing imported articles out of U.S. inventory.

There are some unique issues that arise when litigating SEPs/FRAND before the International Commission, in particular concerning available remedies.

A. THE AVAILABILITY OF EXCLUSIONARY OR CEASE-AND-DESIST RELIEF IN THE ITC FOR INFRINGEMENT OF SEPS

The legal standard in the ITC for determining whether injunctive relief should be granted differs from the standard applicable in district court. As discussed above, the Supreme Court's *eBay* criteria govern the availability of injunctions against sales of infringing products in district court patent infringement litigation. However, the Federal Circuit has held that *eBay* does not apply to Commission remedy determinations under Section 337.²⁷⁰ Accordingly, the ITC has examined the issues relevant to SEPs using its own statutory framework.

The availability of exclusionary or cease-and-desist relief in the ITC for infringement of SEPs has been the subject of controversy. Some have argued that exclusion orders and cease-and-desist orders are inconsistent with an SEP owners' commitment to license on FRAND terms. Others have argued that this type of relief is appropriate, for example, to remedy prior "holdout" by companies that have been found to infringe.

Of the SEP-based cases that have been brought in the ITC, a number of them settled without any resulting substantive decisions by the Commission. In nearly all SEP cases that did not settle, the complainants failed to establish a violation of Section 337 (e.g., the patents were not shown to be valid and infringed, or the requisite domestic industry was not established). Accordingly, there was no need in those cases for the Commission to address remedial issues that may otherwise have been

²⁶⁸ For a complete discussion of ITC litigation in general, see Sedona WG10 Commentary on Patent Litigation Best Practices: International Trade Commission Section 337 Investigations Chapter (May 2019), available at: https://thesedonaconference.org/publication/Commentary_on_Patent_Litigation_Best_Practices_ITC_Section_337_Investigations.

²⁶⁹ 19 U.S.C. § 1337, usually referred to as "Section 337."

²⁷⁰ *Spansion, Inc. v. Int'l Trade Comm'n*, 629 F.3d 1331, 1359 (Fed. Cir. 2010).

implicated. As a result, there is limited case-law guidance from the Commission, let alone the Federal Circuit, on how ALJs should approach exclusionary or cease-and-desist issues involving SEPs subject to a FRAND commitment.

B. HOW SEP/FRAND ISSUES ARE RAISED BEFORE THE ITC

When alleged SEPs have been asserted to be infringed in ITC Section 337 investigations, respondents have generally raised FRAND/SEP issues in three ways: (1) affirmative defenses; (2) counterclaims; and (3) public interest considerations.

1. Affirmative defenses

As in district court litigation, respondents in the ITC may assert affirmative defenses to infringement. In the case of SEPs, respondents have asserted affirmative defenses such as waiver and estoppel, claiming that the patent owner breached a FRAND commitment and thereby waived or is estopped from enforcing the patent-in-suit, or that the patent owner failed to timely disclose its patent or patent application to the SSO consistent with the SSO's IPR Policy. Similarly, the affirmative defense of implied license has been raised, on the theory that a FRAND commitment operates as a license. Respondents have also asserted that breach of a FRAND commitment results in patent misuse, which would render the patent-in-suit unenforceable until the misuse is purged.

2. Counterclaims

To the extent a respondent seeks affirmative relief from a patent owner due to alleged breach of a FRAND commitment, the claim is more properly asserted as a counterclaim. In the ITC, counterclaims can be asserted but must be removed to district court for adjudication, as the ITC does not have the authority to award relief to a respondent.²⁷¹ Thus, for example, a claim for breach of contract based on breach of a FRAND commitment seeking damages against the patent owner would need to be asserted in district court, and would not be adjudicated during the ITC investigation.

3. Public interest considerations

In the remedy phase of an investigation, the ITC is required to consider the public interest.²⁷² Section 337 directs that if the Commission finds a violation, it “shall direct that the articles concerned . . . be excluded from entry into the United States” unless it determines that the public

²⁷¹ 19 U.S.C. § 1337(c) (“Immediately after a counterclaim is received by the Commission, the respondent raising such counterclaim shall file a notice of removal with a United States district court . . .”).

²⁷² The Commission denied a request to use the then pilot program to identify and adjudicate potentially dispositive issues within 100 days of institution (which was subsequently codified in June 2018, see *Rules of General Application, Adjudication and Enforcement*, 83 Fed. Reg. 21140 (May 8, 2018)) to address “whether the asserted patents are standards-essential and are encumbered by mandatory licensing obligations giving rise to public interest concerns,” stating this issue should be determined after the actual scope of any Section 337 violation is determined. *In re Certain Industrial Control System Software, Systems Using Same, and Components Thereof*, Inv. No. 337-TA-1020, 2016 WL 1156762, at *1 (U.S.I.T.C. Aug. 11 2016).

interest factors weigh against granting an exclusion order.²⁷³ The factors to be considered include the effect of the remedial order on (1) the public health and welfare; (2) competitive conditions in the U.S. economy; (3) the production of like or directly competitive articles in the United States; and (4) U.S. consumers.²⁷⁴

While the public interest is an issue that the full Commission must consider as part of a remedy determination, the Commission also has the option of delegating to the ALJ the task of developing a record on public interest. This option has become more widely used following a pilot project in 2010, and in the case of SEPs in particular, delegation of public interest to the ALJ allows a full development of the record on these issues, which can be quite complex and involve significant fact and expert testimony. One benefit of having the ALJ conduct fact finding on public interest issues is that it allows parties to conduct discovery, including third-party discovery, into these issues, and evidence is presented in a trial-type hearing, subject to cross-examination.²⁷⁵ In the few instances when the full Commission has held a hearing to take evidence on public interest issues, it has been a legislative-type hearing.

Which party (if any) bears the burden of proof on the public interest makes a difference to the hearing procedure, as it may be unclear as to which party's evidence should be characterized as opening or rebuttal, and consequently when and in what order that evidence will be presented (either in the form of written witness statements or at the hearing). Litigants in ITC cases where public interest has been delegated may therefore wish to seek an early ruling from the ALJ on the burden of proof issue, so that these matters may be clarified well in advance of the hearing.²⁷⁶

As noted above, there is limited case-law guidance from the Commission or the Federal Circuit on how ALJs should approach remedial issues involving SEPs subject to a FRAND commitment, and this includes the public interest considerations. As of this writing, the ITC has issued only one exclusion order in an SEP case²⁷⁷—and that order was subsequently disapproved by the U.S. Trade Representative (USTR), operating under authority delegated by the president of the United States.²⁷⁸

The USTR did not give specific reasons for disavowing the exclusionary relief in that case beyond referring to the various broad public interest policy concerns as they relate to “competitive

²⁷³ 19 U.S.C. § 1337(d)(1).

²⁷⁴ *Id.*

²⁷⁵ 19 C.F.R. § 210.36(d) (hearings are subject to Administrative Procedure Act requirements).

²⁷⁶ The Commission has not weighed in on this burden of proof question, but some ALJ's have. *See, e.g., In re Certain 3G Mobile Handsets and Components Thereof*, 337-TA-613, 2015 WL 6561709 (U.S.I.T.C. Apr. 27, 2015) (initial determination on remand) (holding that the standard burden of proof requirement under 19 CFR § 210.37 that “[t]he proponent of any factual proposition shall be required to sustain the burden of proof with respect thereto,” does not change when a public interest inquiry is raised).

²⁷⁷ *See Certain Electronic Devices*, 2013 WL 12410037, at *66 (U.S.I.T.C. July 5, 2013), in which Samsung sought and obtained a limited exclusion order that would have applied to certain Apple iPhone models.

²⁷⁸ The USTR, Ambassador Michael Froman, was delegated authority by President Obama. *See* Letter from Michael Froman to the Honorable Irving A. Williamson, Chairman, U.S.I.T.C. (Aug. 3, 2013) [hereinafter *Froman Letter*], available at https://ustr.gov/sites/default/files/08032013%20Letter_1.PDF.

conditions in the U.S. economy and the effect on U.S. consumers.”²⁷⁹ He did give guidance on what he would look for in future cases, indicating the ITC should take affirmative, proactive steps to develop a record and make specific findings on FRAND issues in its public interest determinations. In particular, the USTR suggested that the Commission should develop “information on the standards-essential nature of the patent at issue if contested by the patent holder and the presence or absence of patent hold-up or reverse hold-up,” and make “explicit findings on these issues to the maximum extent possible.”²⁸⁰

Subsequently, the Commission directed the development of a record on issues of the standards-essential nature of the patents, and the presence or absence of reverse holdup as suggested by the USTR in an investigation involving alleged SEPs.²⁸¹

²⁷⁹ *Id.* at 3.

²⁸⁰ *Id.*

²⁸¹ *See In re Certain 3G Mobile Handsets and Components Thereof*, Inv. No. 337-TA-613, 2015 WL 6561709 (U.S.I.T.C. Apr. 27, 2015) (Initial Determination on Remand).

VII. The Evolving Relationship Between Federal Courts and Administrative Agencies in Governing and Regulating SEP/FRAND Issues

SEP/FRAND issues operate in a fluid landscape, where patent law, contract law, and antitrust/competition law all converge with sometimes competing principles. There are numerous stakeholders involved, including the federal courts, the USITC, the U.S. Patent & Trademark Office (USPTO), the Department of Justice—Antitrust Division, and the Federal Trade Commission (FTC).

For example, in International Trade Commission Inv. No. 337-TA-794 case discussed above, where the ITC issued an exclusion order in an SEP case and the U.S. Trade Representative subsequently disapproved it under the authority delegated by the President of the United States, the USTR cited concerns about patent holdup by a patent owner and patent holdout by potential licensees that were raised in a 2013 Joint Policy Statement by the Department of Justice (DOJ) and USPTO concerning FRAND-committed standard-essential patents.²⁸² In December 2018, however, the DOJ formally withdrew its assent to the 2013 Joint Policy Statement.²⁸³

At the time of this writing, the DOJ—Antitrust Division and the FTC have expressed conflicting positions with respect to SEP/FRAND issues.²⁸⁴ This raises, among other things, the challenge of determining how much weight should be assigned to the various opinions, rulings, policy statements, etc. that are made over time and, in the case of the various administrative agencies, across changes in administrations.

This general subject matter will be explored in more detail in the forthcoming *Sedona WG10 Commentary on the Evolving Relationship Between Federal Courts and Administrative Agencies*.

²⁸² *Froman Letter*, *supra* note 277, at 2.

²⁸³ Makan Delrahim, Assistant Att’y Gen., Antitrust Div., U.S. Dep’t of Justice, Remarks at the 19th Annual Berkeley-Stanford Advanced Patent Law Institute: “Telegraph Road”: Incentivizing Innovation at the Intersection of Patent and Antitrust Law, at 6-7 (Dec. 7, 2018), available at <https://www.justice.gov/opa/speech/file/1117686/download>.

²⁸⁴ *FTC III*, 935 F.3d 752, 756 (9th Cir. 2019) (stating that “the two government agencies charged with the enforcement of antitrust laws—the FTC and the Antitrust Division of the Department of Justice, *see FTC v. AT&T Mobility LLC*, 883 F.3d 848, 862 (9th Cir. 2018) (en banc)—disagree as to whether Qualcomm’s conduct implicates the duty to deal. Indeed, while the FTC prosecuted this antitrust enforcement action, the DOJ filed a statement of interest expressing its stark disagreement that Qualcomm has any antitrust duty to deal with rival chip suppliers.”).

The Sedona Conference Working Group Series & WGS Membership Program

**“DIALOGUE
DESIGNED
TO MOVE
THE LAW
FORWARD
IN A
REASONED
AND JUST
WAY.”**

The Sedona Conference was founded in 1997 by Richard Braman in pursuit of his vision to move the law forward in a reasoned and just way. Richard’s personal principles and beliefs became the guiding principles for The Sedona Conference: professionalism, civility, an open mind, respect for the beliefs of others, thoughtfulness, reflection, and a belief in a process based on civilized dialogue, not debate. Under Richard’s guidance, The Sedona Conference has convened leading jurists, attorneys, academics, and experts, all of whom support the mission of the organization by their participation in conferences and the Sedona Conference Working Group Series (WGS). After a long and courageous battle with cancer, Richard passed away on June 9, 2014, but not before seeing The Sedona Conference grow into the leading nonpartisan, nonprofit research and educational institute dedicated to the advanced study of law and policy in the areas of complex litigation, antitrust law, and intellectual property rights.

The WGS was established to pursue in-depth study of tipping point issues in the areas of antitrust law, complex litigation, and intellectual property rights. It represents the evolution of The Sedona Conference from a forum for advanced dialogue to an open think tank confronting some of the most challenging issues faced by our legal system today.

A Sedona Working Group is created when a “tipping point” issue in the law is identified, and it has been determined that the bench and bar would benefit from neutral, nonpartisan principles, guidelines, best practices, or other commentaries. Working Group drafts are subjected to a peer review process involving members of the entire Working Group Series including—when possible—dialogue at one of our regular season conferences, resulting in authoritative, meaningful, and balanced final commentaries for publication and distribution.

The first Working Group was convened in October 2002 and was dedicated to the development of guidelines for electronic document retention and production. Its first publication, *The Sedona Principles: Best Practices Recommendations & Principles Addressing Electronic Document Production*, has been cited favorably in scores of court decisions, as well as by policy makers, professional associations, and legal academics. In the years since then, the publications of other Working Groups have had similar positive impact.

Any interested jurist, attorney, academic, consultant, or expert may join the Working Group Series. Members may participate in brainstorming groups, on drafting teams, and in Working Group dialogues. Membership also provides access to advance drafts of WGS output with the opportunity for early input. For further information and to join, visit the “Working Group Series” area of our website, <https://thesedonaconference.org/wgs>.

The Sedona Conference Working Group 10 on Patent Litigation Best Practices— List of Steering Committee Members and Judicial Advisors

The Sedona Conference's Working Group 10 on Patent Litigation Best Practices Steering Committee Members and Judicial Advisors are listed below. Organizational information is included solely for purposes of identification.

The opinions expressed in publications of The Sedona Conference's Working Groups, unless otherwise attributed, represent consensus views of the Working Groups' members. They do not necessarily represent the views of any of the individual participants or their employers, clients, or any organizations to which they may belong, nor do they necessarily represent official positions of The Sedona Conference. Furthermore, the statements in each publication are solely those of the non-judicial members of the Working Group; they do not represent judicial endorsement of the opinions expressed or the practices recommended.

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