

# PATENT INJUNCTIONS AND THE FRAND COMMITMENT: A CASE STUDY IN THE ETSI INTELLECTUAL PROPERTY RIGHTS POLICY

*Adam Mossoff*<sup>†</sup>

## ABSTRACT

Many academics and government officials claim that owners of patents on standardized technologies, such as 5G or Wi-Fi, cannot obtain injunctions as a remedy for infringement of their patents. They believe this is mandated in the contractual commitment by an owner of a standard essential patent (SEP) to license on fair, reasonable, and non-discriminatory (FRAND) terms. This conventional wisdom is profoundly mistaken. FRAND agreements do not prohibit SEP owners from receiving injunctions for continuing infringement of their patents. One of the oldest, exemplary FRAND agreements evinces this basic legal truth: the FRAND commitment set forth by the European Telecommunications Standards Institute (ETSI). According to the plain text, contractual context, and historical provenance of the ETSI FRAND commitment, it is clear that it does not prohibit injunctions as remedies for infringement of SEPs. In recent years, this has been confirmed by courts in jurisdictions throughout the world repeatedly issuing injunctions to SEP owners under the ETSI FRAND commitment. Unfortunately, the mistaken belief that FRAND prohibits injunctions persists among American academics and courts. It is important to clarify the legal requirements of FRAND and the availability of injunctive relief for SEP owners because normative theories or economic models about SEP licensing and litigation should be based in legal facts. Otherwise, incorrect claims about FRAND allegedly prohibiting injunctive remedies will continue to proliferate among academics and officials, provoking unnecessary litigation and unjustified agency actions by antitrust officials. These legal errors impose costs on innovators and implementers alike, which undermine the efficient growth in the global innovation economy.

---

DOI: <https://doi.org/10.15779/Z387S7HT4F>

© 2023 Adam Mossoff.

<sup>†</sup> Professor of Law, Antonin Scalia Law School, George Mason University. Thank you to Stéphane Tronchon and the participants in the Berkeley-NYU Symposium, *The Impact of the Patent System on Markets for Technology*, for comments on an earlier draft. Suzanne Johnson provided excellent research assistance.

## TABLE OF CONTENTS

<b>I.</b>	<b>INTRODUCTION</b> .....	488
<b>II.</b>	<b>A BRIEF HISTORY OF SDOs AND ETSI</b> .....	493
<b>III.</b>	<b>THE FRAND COMMITMENT IN THE ETSI IP RIGHTS POLICY</b> .....	495
A.	THE TEXT OF THE FRAND COMMITMENT IN CLAUSE 6.1 .....	496
B.	THE ETSI IP RIGHTS POLICY CONFIRMS THE FLEXIBLE FRAND COMMITMENT IN CLAUSE 6.1.....	499
C.	PROPOSALS BEFORE AND AFTER THE ADOPTION OF THE ETSI IP RIGHTS POLICY CONFIRM THAT ITS FRAND COMMITMENT DOES NOT PRECLUDE INJUNCTIVE REMEDIES .....	502
1.	<i>Clause 6.1 Replaced a Proposed 1993 FRAND Policy that Prohibited Injunctions and Imposed Other Contractual Restrictions on SEP Owners</i> .....	503
2.	<i>ETSI Has Rejected Attempts to Amend Clause 6.1 to Adopt Per Se Rules</i> .....	507
<b>IV.</b>	<b>EUROPEAN COURTS ARE GRANTING INJUNCTIONS TO SEP OWNERS UNDER THE ETSI IP RIGHTS POLICY</b> .....	508
<b>V.</b>	<b>CONCLUSION</b> .....	513

### I. INTRODUCTION

The vast array of technological devices and services produced in the global innovation economy rely on standardized technologies. It does not matter whether someone uses an Apple iPhone, a Samsung Galaxy, or a laptop computer produced by Apple, Microsoft, or a myriad of other manufacturers. They can send and receive emails, watch videos, listen to music, send text messages, and engage in innumerable other activities on all these products and services created by different companies throughout the world. This feat of interoperability is achieved by private organizations that develop standardized technologies, such as telecommunications technologies like 4G or 5G.<sup>1</sup> They are known as standard development organizations (SDOs).<sup>2</sup>

---

1. See Kirti Gupta, *How SSOs Work: Unpacking the Mobile Industry's 3GPP Standards*, in THE CAMBRIDGE HANDBOOK OF TECHNICAL STANDARDIZATION LAW 29 (Jorge L. Contreras ed. 2018).

2. SDOs are sometimes referred to as standard setting organizations (SSOs). In this Article, I use the term SDO, as SDOs refer to themselves as engaging in “standards development,” not standard setting. See, e.g., *About ETSI*, ETSI, <https://www.etsi.org/about>

Creators of these standardized technologies like 5G secure the fruits of their inventive labors with patents to facilitate licensing business models that recoup their research and development costs and fund additional innovation.<sup>3</sup> When these “standard-essential patents” (SEPs) are contributed to the standard-development process at an SDO, many SDOs require these patent owners to contractually commit to license their SEPs on fair, reasonable, and non-discriminatory (FRAND) terms with implementers (device manufacturers) of these standardized technologies.<sup>4</sup>

To turn a phrase from the Bard: there’s the rub. What is the function of an SEP owner’s commitment to offer a license on FRAND terms? Does this contractual commitment with the SDO limit the remedies an SEP owner may request and receive for infringement of its patents?

Some courts state that the function of the FRAND commitment by an SEP owner with an SDO is to prevent “patent holdup,”<sup>5</sup> which, in this context, occurs when an SEP owner uses the threat of an injunction as leverage to compel a license with an implementer at supra-optimal royalty rates.<sup>6</sup> Academics similarly assert that the FRAND commitment requires an SEP owner to forego injunctive relief for patent infringement.<sup>7</sup> These courts and

---

(“[T]he many benefits of membership include . . . direct participation in *standards development*”) (emphasis added) (last visited June 12, 2022); *About Us*, IEEE-SA STANDARDS ASS’N, <https://standards.ieee.org/about/> (“The IEEE SA *standards development* process is open to members and non-members, alike.”) (emphasis added) (last visited June 12, 2022).

3. See, e.g., Fed. Trade Comm’n v. Qualcomm Inc., 969 F.3d 974, 982 (9th Cir. 2020) (“Qualcomm protects and profits from its technological innovations through its patents, which it licenses to original equipment manufacturers (‘OEMs’) . . . . Qualcomm’s patents include cellular standard essential patents (‘SEPs’), non-cellular SEPs, and non-SEPs.”).

4. See *infra* Part III.A–B.

5. See *Apple Inc. v. Qualcomm Inc.*, No. 317CV00108GPCMDD, 2017 WL 3966944, at \*2 (S.D. Cal. Sept. 7, 2017) (“The FRAND commitment . . . is designed to prevent patent holdup.”); *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 914 (N.D. Ill. 2012), *aff’d in part, rev’d in part and remanded*, 757 F.3d 1286 (Fed. Cir. 2014) (“By committing to license its patents on FRAND terms, Motorola committed to license . . . to anyone willing to pay a FRAND royalty and thus implicitly acknowledged that a royalty is adequate compensation for a license to use that patent.”); *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 876 (9th Cir. 2012) (“Many SSOs try to mitigate the threat of patent holdup by requiring members who hold IP rights in standard-essential patents to agree to license those patents to all comers on terms that are ‘reasonable and nondiscriminatory,’ or ‘RAND.’” (citing Lemley, *infra* note 7, at 1902, 1906)).

6. See Alexander Galetovic, Stephen H. Haber & Ross Levine, *An Empirical Examination of Patent Holdup*, 11 J. COMPETITION L. & ECON. 549, 556–57 (2015); see also Alexander Galetovic & Stephen H. Haber, *The Fallacies of Patent Holdup Theory*, 13 J. COMPETITION L. & ECON. 1 (2017) (describing conceptual concerns with shifting senses of “patent holdup” as this theory is used by legal scholars and economists throughout the literature).

7. See, e.g., Doug Lichtman, *Understanding the RAND Commitment*, 47 HOUS. L. REV. 1023, 1043 (2010) (“Courts could interpret RAND as a public commitment . . . the patent

commentators do not quote any SDO intellectual property (IP) policy that expressly states that the function of a FRAND commitment is to preclude injunctive relief for infringement of SEPs.

Despite these claims by courts and scholars, no SDO states that the primary function of the FRAND commitment in its IP policy is to prevent SEP owners from obtaining injunctive relief for the infringement of their patents. For a brief period, one SDO did alter its IP policy to state that an SEP owner is effectively prohibited from obtaining an injunction against an infringing implementer. In 2015, the Institute for Electronics and Electrical Engineers (IEEE) revised its patent policy to adopt this position.<sup>8</sup> It was extremely controversial.<sup>9</sup> Commentators recognized that the 2015 IEEE patent policy diverged from SDO practices,<sup>10</sup> but supporters of its new patent policy “hoped that other SSOs will soon follow.”<sup>11</sup> The exact opposite occurred. In September 2022, the IEEE revised its patent policy and

holder would be deemed to have permanently waived his right to seek triple damages or to ask for injunctive relief, but would otherwise be allowed to invoke patent law’s damages regime.”); Joseph Farrell, John Hayes, Carl Shapiro & Theresa Sullivan, *Standard Setting, Patents, and Hold-Up*, 74 ANTITRUST L. J. 603, 609 (2007) (“Many standard-setting organizations have rules relevant to the patent hold-up problem. . . . requiring participants to license essential patents on ‘Fair, Reasonable and Non-Discriminatory’ (FRAND) or ‘Reasonable and Non-Discriminatory’ (RAND) terms.”); Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CALIF. L. REV. 1889, 1967 (2002) (“IP owners who join an SSO are committing themselves to important contractual obligations. In some cases they may have to give up their IP rights altogether, and, in any event, they generally are agreeing to give up their right to injunctive relief and extraordinary damages.”).

8. See IEEE SA Standards Board Bylaws, 6 Patents (Feb. 8, 2015), [https://www.bipc.com/assets/PDFs/Insights/Article-Antitrust\\_Intellectual\\_Property\\_Litigation-IEEE\\_Approves\\_Updated\\_Patent\\_Policy\\_for\\_Standard\\_Essential\\_Patents-IEEE\\_Patent\\_Policy-20150209.pdf](https://www.bipc.com/assets/PDFs/Insights/Article-Antitrust_Intellectual_Property_Litigation-IEEE_Approves_Updated_Patent_Policy_for_Standard_Essential_Patents-IEEE_Patent_Policy-20150209.pdf); Jorge L. Contreras, *IEEE Amends its Patent (FRAND) Policy*, PATENTLYO (Feb. 9, 2015), <https://patentlyo.com/patent/2015/02/amends-patent-policy.html> (describing the changes and some of the process).

9. See, e.g., Nicolas Petit, *The IEEE-SA Revised Patent Policy and Its Definition of “Reasonable” Rates: A Transatlantic Antitrust Divide?*, 27 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 211 (2017), <https://ir.lawnet.fordham.edu/iplj/vol27/iss2/1>. On the overall controversy, which addressed everything from the internal process at the IEEE that produced the new patent policy to whether the change was justified or not, see J. Gregory Sidak, *Testing for Bias to Suppress Royalties for Standard-Essential Patents*, 1 CRITERION J. INNOVATION 301 (2016), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3176693](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3176693); J. Gregory Sidak, *The Antitrust Division’s Devaluation of Standard-Essential Patents*, 104 GEO L. J. ONLINE 48 (2015), <https://www.criterioneconomics.com/docs/antitrust-divisions-devaluation-of-standard-essential-patents.pdf>.

10. See, e.g., Ron D. Katznelson, *Perilous Deviations from FRAND Harmony - Operational Pitfalls of the 2015 IEEE Patent Policy*, IEEE 9TH INTERNATIONAL CONFERENCE ON STANDARDIZATION AND INNOVATION IN INFORMATION TECHNOLOGY (2015), <https://ieeexplore.ieee.org/document/7535599>.

11. Contreras, *supra* note 8.

effectively abrogated its earlier prohibition of injunctive relief that it adopted in 2015.<sup>12</sup> Thus, it is possible to say again that no SDO explicitly states that injunctions are prohibited by the FRAND commitment in its patent or IP policy.

Whence did the narrative arise that a FRAND commitment necessarily precludes injunctive relief? It apparently begins with a 2002 article by Mark Lemley in which he asserted that “many private SSOs” require SEP owners to “forgo injunctive relief altogether.”<sup>13</sup> Yet, he did not quote a single SDO IP policy or FRAND commitment that expressly stated this. He could not. The U.S. National Academies surveyed the IP policies and FRAND commitments of twelve leading SDOs and concluded that “[n]one of the policies of the surveyed SSOs imposes any restrictions on what legal remedies a member or third-party beneficiary of a licensing commitment may pursue in court.”<sup>14</sup> Except for the seven-year period when the IEEE deviated from this institutional norm among SDOs in their FRAND commitments, this remains true today.

Still, the narrative remains, and it has proven difficult to dislodge from the minds of courts and commentators. Professor Lemley’s article continues to be cited for his (incorrect) claim that SDOs prohibit SEP owners from receiving injunctive relief through IP policies and FRAND commitments.<sup>15</sup> Many U.S.

---

12. IEEE SA Standards Board Bylaws, 6 Patents (Sept. 30, 2022), <https://standards.ieee.org/wp-content/uploads/import/governance/bog/resolutions/september2022-updates-sasb-bylaws.pdf>.

13. Lemley, *supra* note 7, at 1902.

14. COMMITTEE ON INTELLECTUAL PROPERTY MANAGEMENT IN STANDARD-SETTING PROCESSES ET AL., PATENT CHALLENGES FOR STANDARD-SETTING IN THE GLOBAL ECONOMY: LESSONS FROM INFORMATION AND COMMUNICATIONS TECHNOLOGY 47 (Keith Maskus & Stephen A. Merrill eds., 2012), <https://nap.nationalacademies.org/read/18510/chapter/4>.

15. *See, e.g.*, Fed. Trade Comm’n v. Qualcomm Inc., No. 17-CV-00220-LHK, 2018 WL 5848999, at \*10 (N.D. Cal. Nov. 6, 2018), *vacated*, 969 F.3d 974 (9th Cir. 2020) (“To avoid giving SEP holders the power to prevent other companies from practicing the standard, SSOs maintain IPR policies that impose on SEP holders ‘an obligation to license IP rights on reasonable and nondiscriminatory terms.’” (quoting Lemley, *supra* note 7, at 1913)); *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 876 (9th Cir. 2012) (“Many SSOs try to mitigate the threat of patent holdup by requiring members who hold IP rights in standard-essential patents to agree to license those patents to all comers on terms that are ‘reasonable and nondiscriminatory,’ or ‘RAND.’” (citing Lemley, *supra* note 7, at 1902, 1906)); FED. TRADE COMM’N, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 235 n.93 (2011), <https://www.ftc.gov/reports/evolving-ip-marketplace-aligning-patent-notice-remedies-competition> (“Some have argued that the RAND commitment should bar the patentee from seeking an injunction” (citing, among others, Lemley, *supra* note 7, at 1902, 1925)); Joseph Scott Miller, *Standard Setting, Patents, and Access Lock-in: Rand Licensing and the Theory of the Firm*, 40 IND. L. REV. 351, 376 (2007) (“Professor

scholars and judges seem to be unaware of the actual FRAND commitment in SDO policies and how these policies have been consistently interpreted by courts throughout the world in granting injunctions to SEP owners.<sup>16</sup>

This Article fills a gap in this literature by describing and analyzing the European Telecommunications Standards Institute (ETSI) IP rights policy, demonstrating how its FRAND commitment does not preclude the award of injunctive relief to an SEP owner. The academic literature largely focuses on normative debates about whether a FRAND commitment should prohibit injunctions for ongoing patent infringement. Yet, as the legal realists recognized, policy arguments are “empty without *objective description* of the causes and consequences of legal decisions.”<sup>17</sup> If normative arguments lack a proper descriptive foundation in the text and legal meaning of an SDO’s IP policy, then incorrect claims about FRAND will continue to proliferate in the literature, in court decisions, and in agency actions.

The ETSI IP rights policy is an ideal candidate for this study because it is a leading SDO. More than 70% of all declared SEPs worldwide have been declared in ETSI.<sup>18</sup> The U.S. Court of Appeals for the Fifth Circuit referred to ETSI as “a preeminent standard setting organization in the mobile telecommunications field.”<sup>19</sup> For this reason, ETSI’s IP rights policy is often the focal point of SEP disputes in courts throughout the world.<sup>20</sup> ETSI is arguably the SDO with the most important IP policy and FRAND commitment today.

This Article proceeds in three Parts. First, it briefly describes the history of SDOs and ETSI. Second, it details the ETSI IP rights policy and its FRAND commitment, engaging in classic legal interpretation in reviewing the plain meaning of the text, the related provisions in the ETSI Directives in which the IP rights policy is embedded, and external sources of meaning, including the equivalent of its legislative history and subsequent failed attempts at its amendment. Significantly, the FRAND commitment in the ETSI IP

---

Lemley, who offers the most extended and penetrating legal analysis of the RAND promise, repeatedly casts its role in conferring long-term access on adopters as a patentee’s waiver of the injunction right.” (citing Lemley, *supra* note 7, at 1902).

16. See *infra* Part IV.

17. Felix S. Cohen, *Transcendental Nonsense and the Functional Approach*, 35 COLUM. L. REV. 809, 849 (1935) (emphasis added).

18. See Tim Pohlmann & Knut Blind, *Landscaping Study on Standard Essential Patents (SEPs)*, 11 (2016), <https://ec.europa.eu/docsroom/documents/20741/attachments/1/translations/en/renditions/native> (“Most SEPs were declared at ETSI representing over 70% of all worldwide SEP declarations.”).

19. *HTC Corp. v. Telefonaktiebolaget LM Ericsson*, 12 F.4th 476, 481 (5th Cir. 2021).

20. See *infra* Part IV (discussing a selection of European cases); see also *HTC Corp.*, 12 F.4th at 483–88 (interpreting and applying the ETSI IP policy).

rights policy was born of a “protracted controversy” precipitated by ETSI’s first proposed IP rights policy in 1993 that would have prohibited injunctions and imposed other restrictive commercial mandates on SEP owners.<sup>21</sup> The current IP rights policy was adopted in 1994, replacing the 1993 IP rights policy, and removed the prohibition on injunction relief and other restrictive mandates. This is highly dispositive of the legal meaning of this FRAND commitment. Lastly, it reviews some illustrative examples of tens of court decisions in various jurisdictions in Europe that have construed the ETSI IP rights policy and its FRAND commitment; contrary to the conventional wisdom among U.S. commentators and courts, these courts have granted injunctions to SEP owners as a remedy for the ongoing infringement of their patents. In sum, the FRAND commitment in the ETSI IP rights policy, an exemplar of most SDO IP policies, does not preclude injunctive relief for SEP owners faced with ongoing infringement of their patents.

## II. A BRIEF HISTORY OF SDOs AND ETSI

SDOs are private organizations that have existed for over a century. The IEEE, for example, first arose from private organizational efforts in the 1880s by innovators, technicians, and businesspersons to share information and promote faster dissemination of the new technologies being invented and patented at that time by Thomas Edison and Guglielmo Marconi, among many others.<sup>22</sup> Starting in the early twentieth century, these information-sharing and information-distribution efforts developed into more explicit efforts at creating efficiencies in the marketplace by establishing standardized nomenclature both for the new art of electrical engineering and for the many new electrical products and services sold to consumers.<sup>23</sup>

---

21. Eric J. Iversen, *ETSI’s controversial search for new IPR-procedures*, STANDARDIZATION AND INTELLECTUAL PROPERTY RIGHTS, at 3 (K. Jacobs & R. Williams, eds., 1999), [https://eprints.utas.edu.au/1297/1/Iversen\\_ETSI\\_2002.pdf](https://eprints.utas.edu.au/1297/1/Iversen_ETSI_2002.pdf); see also Roger G. Brooks & Damien Geradin, *Interpreting and Enforcing the Voluntary FRAND Commitment*, 9 INT’L J. OF IT STANDARDS & STANDARDIZATION RSCH. 1, 8 (2011), <https://www.igi-global.com/article/interpreting-enforcing-voluntary-frand-commitment/50572> (describing the “heated opposition” to the proposed IP policy and the even “louder opposition” once the 1993 IPR policy was adopted). A draft version of this article is available at <https://papers.ssrn.com/abstract=1645878>.

22. See *History of IEEE*, IEEE, <https://www.ieee.org/about/ieee-history.html> (last visited July 2, 2022).

23. Standards are developed by many SDOs for innumerable products and services in the modern era; it is not a market practice only in the modern telecommunications sector. See U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, ANTI-TRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 33 n.5 (2007), [http://www.usdoj.gov/atr/public/hearings/ip/chapter\\_2.pdf](http://www.usdoj.gov/atr/public/hearings/ip/chapter_2.pdf) (“Hundreds of

There are innumerable SDOs with significant variances in structures, rules, and functions for a myriad of products and services, especially in the high-tech sector of the modern global innovation economy.<sup>24</sup> SDOs arose from a simple market need for interoperability between different products sold by different commercial firms; for example, an Android smartphone, such as a Samsung Galaxy, communicates with an Apple iPhone. The IEEE and ETSI, among many other SDOs, arose to increase efficiency in the adoption of interoperability standards in the marketplace.

SDOs thus benefit commercial firms and consumers alike because they preempt wasteful conflicts between different manufacturers selling incompatible products or equally inefficient “standards wars” in which private firms vie in the marketplace for dominance in becoming the industry standard with their own products.<sup>25</sup> Even with the prevalence of SDOs, standards wars still do occur. The marketplace battle between VHS and Betamax in the 1980s and the similar battle between HD DVD and Blu-ray in the 1990s are two well-known examples of such standards wars.<sup>26</sup> Manufacturers and consumers both benefit by avoiding standards wars and promoting interoperability, especially in the modern global telecommunications sector based on global standards for innumerable products and services used by billions of people worldwide.<sup>27</sup> The rapid growth in technological innovations—and in new consumer products and services in the modern telecommunications sector in the past four

---

collaborative standard-setting groups operate worldwide, with diverse organizational structures and rules.”). For example, the shipping container that was invented (and patented) in the mid-twentieth century, and which was the launching pad for the modern global innovation economy, was the subject of a standardization process. See MARC LEVINSON, *THE BOX: HOW THE SHIPPING CONTAINER MADE THE WORLD SMALLER AND THE WORLD ECONOMY BIGGER* 127–49 (2008) (describing the setting of a standard for shipping container specifications in extensive negotiations among cargo ship owners, railway companies, trucking companies, port operators, and longshoremen unions, among other stakeholders).

24. See C. Bradford Biddle, *No Standard for Standards: Understanding the ICT Standards-Development Ecosystem*, in *THE CAMBRIDGE HANDBOOK OF TECHNICAL STANDARDIZATION LAW* 17 (Jorge L. Contreras ed. 2018) (“There is no standard for standards. Technology standards are created, maintained, and propagated in a bewildering variety of ways, by a diverse set of actors.”).

25. See Kristen Osenga, *Ignorance over Innovation: Why Misunderstanding Standard Setting Organizations Will Hinder Technological Progress*, 56 U. LOUISVILLE L. REV. 159, 169 (2018).

26. See Knut Blind & Brian Kahin, *Standards and the Global Economy*, in *THE CAMBRIDGE HANDBOOK OF TECHNICAL STANDARDIZATION LAW* 11 (Jorge L. Contreras ed. 2018).

27. See, e.g., Manveen Singh, *Tracing the Evolution of Standards and Standard-Setting Organizations in the ICT Era*, 24 MARQ. INTELL. PROP. L. REV. 217, 224–25 (2020) (describing benefits of SDOs to firms and consumers, including interoperability, efficiencies in market interactions, and avoidance of standards wars); Osenga, *supra* note 25, at 166–70 (same).



decades—exemplifies the value and benefits of SDOs for innovators, commercial enterprises, and consumers alike.

ETSI is one of many SDOs operating in today’s global innovation economy that has successfully developed technological standards that propelled the mobile revolution, such as digital transmission technologies like 4G and today’s 5G. ETSI was created in 1988 by “the European Conference of Postal and Telecommunications Administrations (CEPT) in response to proposals from the European Commission.”<sup>28</sup> It was a byproduct of a 1987 European Commission Green Paper that proposed “the rapid development of standards and specifications at national and European level . . . supported by the creation of a European Telecommunications Standards Institute.”<sup>29</sup> The Green Paper recognized that “standardization is a necessary requirement for a truly open competitive market” and that “substantial . . . resources” should be applied to achieving this goal.<sup>30</sup> ETSI has been incredibly successful in its purpose to “draw flexibly on experts . . . in order [to] substantially . . . accelerate the elaboration of standards and technical specifications, [which are] indispensable for an open competitive market environment.”<sup>31</sup>

### III. THE FRAND COMMITMENT IN THE ETSI IP RIGHTS POLICY

Like most SDOs, ETSI adopted an IP rights policy to balance the interests of the relevant stakeholders who participate in the development of the standards that it adopts, including the interests of both innovators and implementers.<sup>32</sup> This incentivizes both innovators and implementers to participate in the development of technological standards. Such participation is necessary for several reasons. It ensures the best technological standard is developed by an SDO. It also ensures a standard in which the stakeholders in the relevant sector have “buy in” and thus they will adopt and promote the standard in their commercial activities. These in turn contribute to the chances

---

28. *See History of ETSI*, ETSI, <https://www.etsi.org/about> (last visited July 17, 2022).

29. COMMISSION OF THE EUROPEAN COMMUNITIES, TOWARDS A DYNAMIC EUROPEAN ECONOMY: GREEN PAPER ON THE DEVELOPMENT OF THE COMMON MARKET FOR TELECOMMUNICATIONS SERVICES AND EQUIPMENT, COM(87) 290, at 5 (June 30, 1987).

30. *Id.* at 22.

31. *Id.*

32. *See* EUROPEAN TELECOMMUNICATIONS STANDARDS INSTITUTE, ETSI DIRECTIVES Version 45, at 43 (June 22, 2022), [https://portal.etsi.org/directives/45\\_directives\\_jun\\_2022.pdf](https://portal.etsi.org/directives/45_directives_jun_2022.pdf) (“ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.”).

of successful adoption of the standard in the marketplace to the benefit of firms and consumers alike.

The ETSI IP rights policy sets forth a contractual commitment by SEP owners to make available licenses that are FRAND compliant. This is a contractual commitment between the SEP owners and ETSI. The construction of legal instruments—whether contracts, patents, statutes, or regulations—is governed by a long-settled two-step process. First, a court starts with the express text of the relevant clause or provision in the legal instrument.<sup>33</sup> Second, if these terms are deemed ambiguous in resolving the question presented to a court, then a court may look to other sources of meaning (such as other provisions in the overall statute or legal instrument),<sup>34</sup> external evidence concerning the circumstances of the adoption of the legal instrument (such as legislative history or industry norms), and other accepted sources of meaning.<sup>35</sup> These interpretative rules make clear that the FRAND commitment in the ETSI IP rights policy does not prohibit any specific remedies already available to an SEP owner under the patent laws, such as an injunction. This Part applies these two interpretative steps for construing a legal instrument—text and surrounding circumstances—to the FRAND commitment in the ETSI IP rights policy.

#### A. THE TEXT OF THE FRAND COMMITMENT IN CLAUSE 6.1

First, we start with the actual text of the legal commitment by SEP owners with ETSI concerning the FRAND licensing of their patents covering an ETSI

---

33. *See, e.g.*, *Connecticut Nat. Bank v. Germain*, 503 U.S. 249, 253–54 (1992) (“We have stated time and again that courts must presume that a legislature says in a statute what it means and means in a statute what it says there. When the words of a statute are unambiguous, then, this first canon is also the last: ‘judicial inquiry is complete.’” (quoting *Rubin v. United States*, 449 U.S. 424 (1981)) (some citations omitted); *Louisville & N.R. Co. v. Gaines*, 3 F. 266, 276 (C.C.M.D. Tenn. 1880) (“Where the language is clear and explicit the court is bound.”).

34. *See, e.g.*, *Graham Cty. Soil & Water Conservation Dist. v. U.S. ex rel. Wilson*, 559 U.S. 280, 290 (2010) (“Courts have a ‘duty to construe statutes, not isolated provisions.’”) (quoting *Gustafson v. Alloyd Co.*, 513 U.S. 561, 568 (1995)); *Food & Drug Admin. v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 133 (2000) (“It is a ‘fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme.’”) (quoting *Davis v. Michigan Dept. of Treasury*, 489 U.S. 803, 809 (1989)); *Louisville & N.R. Co.*, 3 F. at 276 (discussing that a legal text “must be construed as a whole. The office of a good expositor, says My Lord Coke, ‘is to make construction on all its parts together.’”).

35. *See, e.g.*, *Frigalimint Importing Co. v. B.N.S. Int’l Sales Corp.*, 190 F. Supp. 116, 118 (S.D.N.Y. 1960) (reviewing trade usages and the actions by the parties under a contract in construing the meaning of the term “chicken” in a purchase contract given that “the word ‘chicken’ standing alone is ambiguous”).

standard. The specific commitment is in Clause 6.1 in Annex 6 of the ETSI Directives, which contains the ETSI IP rights policy.<sup>36</sup> Clause 6.1 states:

6.1 When an ESSENTIAL IPR<sup>37</sup> relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months 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.<sup>38</sup>

With respect to legal remedies, the plain text in Clause 6.1 is clear. The FRAND commitment in Clause 6.1 is devoid of mandates concerning the remedies available to an SEP owner that sues an implementer for patent infringement.<sup>39</sup> The only express obligation of the FRAND commitment is that an SEP owner must provide “in writing that it is *prepared to grant* an irrevocable license” on FRAND terms and then Clause 6.1 specifies the scope of this license to methods and products necessary to implement the SEP.<sup>40</sup> In sum, SEP owners are expressly committing in the ETSI IP rights policy to

---

36. See ETSI, *supra* note 32, at 43–54.

37. This is a standard acronym for an intellectual property right (IPR) in Europe and in other jurisdictions, and thus ETSI uses it in its written documents. It is not a standard acronym in the U.S. Since I am writing primarily for a U.S. audience in this article, I have been using the standard nomenclature of “IP right,” but I have retained the usage of IPR in quoted material from the ETSI Directives and other documents to remain true to the primary source documents that I am relying on in this article.

38. *Id.* at 43–44.

39. *Cf.* *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1231 (Fed. Cir. 2014) (“Rather than instruct the jury to consider ‘Ericsson’s obligation to license its technology on RAND terms,’ J.A. 226, the trial court should have instructed the jury about Ericsson’s *actual* RAND promises.”).

40. ETSI, *supra* note 32, at 43–44 (emphasis added).

make available FRAND licenses to implementers; this is confirmed by the title of Clause 6.1: “Availability of Licenses.”<sup>41</sup>

An SEP owner must ultimately make an offer in good faith—or through negotiations make a final offer in good faith—of a license that is FRAND compliant in its terms. This is the totality of the FRAND commitment in the express terms of Clause 6.1 in the ETSI IP rights policy. It is a flexible contractual obligation that does not mandate any specific remedies or other terms in a FRAND-compliant license offered by an SEP owner. Clause 6.1 explicitly leaves the parties free to negotiate the specific royalty rates and other contractual terms for the licensed use of SEPs.

In *Unwired Planet v. Huawei*, the United Kingdom Supreme Court recognized the plain meaning of the FRAND commitment in the ETSI IP rights policy that it is devoid of specific mandates or per se rules governing the nature of the royalties paid in SEP licenses. The *Unwired Planet* Court stated:

[I]t would have required far clearer language in the ETSI FRAND undertaking to indicate an intention to impose the more strict, ‘hard-edged’ non-discrimination obligation . . . . Any reasonable person who seeks to engage with the ETSI regime, whether as a SEP owner or as an implementer who is a potential licensee, would understand this. Those engaging with the ETSI regime are highly sophisticated and well-informed about economics, practice in the market and competition laws across the world.<sup>42</sup>

Although the *Unwired Planet* Court was addressing whether the “non-discrimination” element in the FRAND commitment mandates equal treatment of all licensees in terms of specific royalty rates, the general interpretative point equally applies to the availability of injunctive remedies under this same IP rights policy. The FRAND commitment in the ETSI IP rights policy imposes no “hard-edged” or per se mandates prohibiting injunctions, just as it does not mandate anything about the specific nature of FRAND royalty rates. The sophisticated parties—the large firms creating and licensing standardized technologies and those manufacturing and selling the devices that implement these technological standards—would have included these express licensing requirements or prohibitions on remedies in Clause 6.1 if this was the function of its FRAND commitment.

As Justice Antonin Scalia famously said in the context of statutory interpretation, “Congress . . . does not alter fundamental details of a regulatory scheme in vague terms [in a statute] . . . [I]t does not, one might say, hide

---

41. *Id.* at 43.

42. *Unwired Planet Int’l Ltd. v. Huawei Technologies Co. Ltd.* [2020] UKSC 37, 124].

elephants in mouseholes.”<sup>43</sup> Similarly, it would be significant for SEP owners to forego a fundamental, longstanding remedy for patent infringement—such as an injunction for ongoing or willful infringement<sup>44</sup>—in a contract with an SDO, especially given the legal and commercial sophistication of all parties to the contract. The expressly stated obligation set forth in Clause 6.1 is that an SEP owner must be “prepared to grant irrevocable licenses[.]”<sup>45</sup> It is the equivalent of hiding an elephant in a mousehole to infer from this plain text that it contains a per se prohibition against injunctive relief for any or all infringements of an SEP.

B. THE ETSI IP RIGHTS POLICY CONFIRMS THE FLEXIBLE FRAND COMMITMENT IN CLAUSE 6.1

Even if a court deemed the text of Clause 6.1 to be unclear or ambiguous concerning the scope of injunctive remedies, the ETSI IP rights policy within which Clause 6.1 is situated confirms the absence of any “hard-nosed” mandates or per se rules concerning royalties or remedies. As noted above, Annex 6 of the ETSI Directives contains its IP rights policy. There is no mention of legal remedies in the other provisions of the ETSI IP rights policy, but it does repeatedly address the nature of the contractual commitment its IP rights policy represents in terms of the scope and nature of the obligations for SEP owners. In this respect, ETSI consistently and repeatedly avoids any mandates or per se rules, and instead leaves SEP owners and implementers generally free to negotiate within their appropriate technological and commercial context a FRAND-compliant license. If the ETSI IP rights policy generally foregoes mandates on licensing terms, then, all things being equal, it similarly foregoes mandates prohibiting injunctive remedies.

As a preliminary matter, the flexibility and generalized obligation imposed on SEP owners by the FRAND commitment Clause 6.1 is consistent with the express policy of the ETSI IP rights policy. ETSI states that the policy objective is to achieve “a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.”<sup>46</sup> An IP policy that balances the respective rights and needs of both SEP owners and implementers using SEPs in telecommunications services

---

43. *Whitman v. American Trucking Ass’n, Inc.*, 531 U.S. 457, 468 (2001).

44. See Adam Mossoff, *The Injunction Function: How and Why Courts Secure Property Rights in Patents*, 96 NOTRE DAME L. REV. 1581, 1587 (2021) (“In the context of patent litigation . . . following a patent owner establishing . . . ongoing or willful infringement of this valid property right, an injunction issued presumptively.”); see *id.*, at 1597-1601 (detailing historical cases).

45. ETSI, *supra* note 32, at 43.

46. *Id.* at 43.

would not impose unilateral prohibitions or restrictions on only one side of this equation.

This is not a mere inference, as ETSI explains what it means by the balance it seeks to achieve with its IP rights policy. On the one hand, “ETSI . . . seeks to reduce the risk . . . that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD or TECHNICAL SPECIFICATION being unavailable.”<sup>47</sup> On the other hand, ETSI recognizes that “IPR holders, whether members of ETSI and their AFFILIATES or third parties, should be adequately and fairly rewarded for the use of their IPRs in the implementation of STANDARDS and TECHNICAL SPECIFICATIONS.”<sup>48</sup> In sum, as the *Unwired Planet* Court recognized in construing the FRAND commitment in the ETSI IP rights policy, its purpose is “to achieve a fair balance between the interests of SEP owners and implementers, by giving implementers access to the technology protected by SEPs and by giving the SEP owners fair rewards through the licence[s]” that provide them royalties.<sup>49</sup>

Other provisions in the ETSI IP rights policy further confirm that the FRAND commitment in Clause 6.1 contains no per se rules or prohibitive mandates on SEP owners, such as a prohibition on the availability of injunctive relief. The commitment is generalized and open-ended to conform to the specific context of a license in balancing the respective interests of both SEP owners and implementers. Two other provisions in the ETSI IP rights policy support this conclusion.

First, Clause 4.1 of the ETSI IP rights policy states that “[s]pecific licensing terms and negotiations are commercial issues between the companies and shall not be addressed within ETSI.”<sup>50</sup> In other words, ETSI does not dictate any specific licensing terms in FRAND-compliant licenses, such as royalty rates, royalty structures, or even a contractual term that an SEP owner agrees to forego injunctive relief (a term that can be negotiated and included in any license). ETSI further states in Clause 4.1 that it will neither create nor mandate a database of FRAND-compliant licenses under its IP rights policy, because this will create a “misleading impression” that the terms of these licenses are either prescribed by ETSI or at least endorsed by ETSI.<sup>51</sup> SEP owners and implementers are free from any mandates or per se rules under the ETSI IP

---

47. *Id.*

48. *Id.*

49. *Unwired Planet Int’l Ltd. v. Huawei Technologies Co. Ltd.* [2020] UKSC 37, ¶ 14.

50. ETSI, *supra* note 32, at 70.

51. *Id.* (“No detailed licensing terms should be available from ETSI to avoid a misleading impression.”).

rights policy generally and Clause 6.1 specifically to negotiate the terms of the licenses for SEPs covering ETSI technology standards.

Second, in the Guide on Intellectual Property Rights, ETSI states that “[t]he basic principle of the ETSI IPR regime remains FRAND with no specific preference for any licensing model.”<sup>52</sup> Accordingly, a range of FRAND-compliant licenses are appropriate in the licensing of SEPs covering an ETSI technology standard, such as 5G. For example, the FRAND commitment in the ETSI IP rights policy does not mandate any specific licensing model, such as national-level licenses of single patents or global portfolio licenses. The Guide on Intellectual Property Rights further states that

Members do NOT have a duty to: . . . disclose within the Technical Body the commercial terms for licenses for which they have undertaken to grant licenses under FRAND terms and conditions. Any such commercial terms are a matter for discussion between the IPR holder and the potential licensee, outside of ETSI.<sup>53</sup>

This is consistent with and reconfirms the policy in Clause 4.1, as well as the plain text of the FRAND commitment in Clause 6.1 that the FRAND commitment does not prohibit or mandate any specific contract or patent rights, whether specific royalty rates or the availability of injunctive relief for an SEP.

Courts have consistently and repeatedly recognized the contextual, flexible nature of the FRAND commitment for SEP owners. For example, courts have acknowledged that there is no specific, single royalty rate mandated by the FRAND commitment; instead, there is a *range* of royalty rates and other contractual terms that are acceptable for FRAND-compliant licenses.<sup>54</sup> In *HTC v. Ericsson*, the Court of Appeals for the Fifth Circuit acknowledged that “ETSI . . . has chosen to give patent holders some flexibility in coming to reasonable agreements with different potential licensees.”<sup>55</sup> In this case, the Fifth Circuit affirmed the trial court’s decision that a multi-tiered royalty rate complies with the FRAND commitment in the ETSI IP rights policy, i.e.,

---

52. *Id.* at 57.

53. *Id.* at 62.

54. *See, e.g., In re Certain Wireless Devices*, Inv. No. 337-TA-868, at 113 (June 13, 2014) (Initial Determination) (noting that “a FRAND rate is a range of possible values”); *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 2111217, at \*101 (W.D. Wash. Apr. 25, 2013) (approving a FRAND royalty rate for Motorola’s H.264 SEP portfolio with a *range of thirty times* from the lowest to the highest rates and a FRAND royalty rate for the 802.11 SEP portfolio with a *range of twenty-four times* from the lowest to the highest rates).

55. *HTC Corp. v. Telefonaktiebolaget LM Ericsson*, 12 F.4th 476, 486 (5th Cir. 2021).

Clause 6.1 does not mandate any specific licensing terms or a specific royalty rate in the licenses negotiated between SEP owners and implementers.<sup>56</sup>

Given the text of Clause 6.1 and the provisions that confirm the meaning of this text throughout the ETSI IP rights policy and its Directives, the conclusion seems inescapable: there are no specific mandates or prohibitions in the ETSI IP rights policy for SEP owners other than the express obligation that they be “prepared to grant” a FRAND-compliant license. All license terms from the amount and structure of the royalty rate to other commercial and patent rights are left to the parties to negotiate in their licenses for the use of SEPs covering ETSI technological standards. This includes whether an SEP owner retains or chooses to sell its preexisting patent right to obtain an injunction for continuing or willful infringement of its patents by the implementer.

C. PROPOSALS BEFORE AND AFTER THE ADOPTION OF THE ETSI IP RIGHTS POLICY CONFIRM THAT ITS FRAND COMMITMENT DOES NOT PRECLUDE INJUNCTIVE REMEDIES

The provenance of Clause 6.1 further supports the construction of this contractual provision that it sets forth a flexible, balanced commitment by SEP owners to offer FRAND-compliant licenses without any prohibition on injunctive remedies. As detailed in this Section, Clause 6.1 was adopted by ETSI in 1994 to replace a previously proposed IP rights policy, identified as the “1993 Undertaking,” that did impose per se rules on FRAND-compliant licenses, including restrictions on the availability of injunctions for infringement of SEPs. ETSI eliminated these per se rules and licensing mandates in the 1993 Undertaking when it adopted Clause 6.1 in its IP rights policy in 1994. Moreover, some ETSI members attempted to revise Clause 6.1 in subsequent years to impose various mandates, but ETSI rejected these proposals. This “legislative history” of the FRAND commitment in Clause 6.1 confirms the interpretation of its text and of the broader IP policy in which it is embedded: the FRAND commitment in the ETSI IP policy does not impose per se rules or mandates concerning the terms of FRAND-compliant licenses or what legal remedies are available to SEP owners for infringement of their patents by implementers.

---

56. See *HTC Corp. v. Telefonaktiebolaget LM Ericsson*, 407 F. Supp. 3d 631, 637 (E.D. Tex. 2019), *aff'd*, 12 F.4th 476 (5th Cir. 2021) (“The market-based evidence of the value of cellular . . . demonstrates the reasonableness of Ericsson’s proposed royalty rates of \$2.50 or 1% with a \$1 floor and a \$4 cap per 4G device.”).



1. *Clause 6.1 Replaced a Proposed 1993 FRAND Policy that Prohibited Injunctions and Imposed Other Contractual Restrictions on SEP Owners*

The FRAND commitment contained in Clause 6.1 of the ETSI IP rights policy is essentially unchanged since ETSI adopted it in 1994, but this was not the first IP rights policy or FRAND commitment considered for adoption by ETSI. ETSI adopted Clause 6.1 in 1994 in lieu of an IP rights policy and FRAND commitment it first proposed to its members in 1993, eventually identified as the 1993 Undertaking.<sup>57</sup> The 1993 Undertaking mandated, among other restrictions, that SEP owners must commit *ex ante* to a “maximum royalty rate” for any future licenses with implementers before the adoption of a standard, that SEP owners can license only on a most-favored licensee condition in which any implementer can “require replacement of the terms and conditions of its license” with any “terms and conditions that are clearly more favourable” granted to any another implementer, and, of most relevance to this Article, that SEP owners “undertake[] not to seek an injunction against a PARTY in respect of any essential IPR.”<sup>58</sup>

The 1993 Undertaking immediately precipitated a “protracted controversy” within ETSI and among stakeholders in the telecommunications sector, leading to its abrogation the following year in the adoption of Clause 6.1 of the ETSI IP rights policy.<sup>59</sup> The reasons why ETSI proposed the 1993 Undertaking is of interest to economists and political scientists who study institutional economics and interest-based policies that drive competitive actors, and that is beyond the scope of this Article. This Article instead focuses on the statements and other materials that are relevant to courts and other officials as evidence in applying the legal rules for interpreting and applying a legal instrument, such as a statute, a patent, or a contract. In this context, the express abrogation and replacement of a prior rule by a subsequent enactment of a contrary rule is dispositive in construing the meaning of the subsequent rule.<sup>60</sup> This is the *legal significance* of the 1993 Undertaking for the purpose of understanding whether the FRAND commitment in Clause 6.1 in the ETSI

---

57. See European Telecommunications Standards Institute, Intellectual Property Policy and Undertaking (March 16-18, 1993).

58. *Id.* at U2, U6, U8–9.

59. Iversen, *supra* note 21, at 3; see also Brooks & Geradin, *supra* note 21, at 18 (describing the “heated opposition” to the 1993 Undertaking and the “louder opposition” once the 1993 Undertaking was initially adopted).

60. *Cf.* *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 15 (1966) (“Congress intended by the last sentence of § 103 to abolish the test it believed this Court announced in the controversial phrase ‘flash of creative genius’ used in *Cuno Engineering Corp. v. Automatic Devices Corp.*, 314 U.S. 84 (1941).”).

IP rights policy prohibits injunctions as remedy for infringement of an SEP that covers an ETSI technology standard.

The crux of the controversy over ETSI's 1993 Undertaking that imposed numerous *per se*, restrictive mandates on SEP owners in a FRAND commitment—a prohibition on injunctions, a most-favored licensee requirement, an *ex ante* commitment to a maximum royalty rates—was that ETSI was “depart[ing] from normal practices” in SDOs in the telecommunications sector.<sup>61</sup> The 1993 Undertaking was viewed as unbalanced and discriminatory against SEP owners, which was contrary to the commitment by ETSI to an IP rights policy that properly balanced the interests of all stakeholders in the development and use of technology standards.<sup>62</sup>

Numerous ETSI members who were leading innovators in the high-tech sector at the time threatened to quit if ETSI implemented the 1993 Undertaking.<sup>63</sup> Apple, IBM, AT&T, and Motorola, among others, expressed strong opposition to the 1993 Undertaking.<sup>64</sup> Apple, for example, wrote to ETSI that it “operates under a number of basic principles in the worldwide development of standards and protection of intellectual property,” and that it believed that the 1993 Undertaking “compromises these principles and departs significantly from accepted international standards practices.”<sup>65</sup> IBM expressed similar opposition to the 1993 Undertaking, stating in strident language that it represented “a severe departure from accepted international standards practices.”<sup>66</sup> In a lengthy letter detailing numerous concerns about and criticisms of the 1993 Undertaking, Philips stated bluntly that the 1993 Undertaking represented a “failure to strike a reasonable balance between the interests of those having substantial IPR portfolios based on their R&D investments and users of ETSI standards.”<sup>67</sup> In expressing these complaints,

---

61. Iversen, *supra* note 21, at 3.

62. *See* Comments by Mr. Peters, Koninklijke Philips N.V. (Philips), DRAFT MINUTES OF THE 15TH GENERAL ASSEMBLY OF ETSI, ETSI/GA 15(93)34, at 4.

63. Brooks & Geradin, *supra* note 21, at 9.

64. *See* LETTERS FROM ETSI MEMBERS REGARDING THE SIGNATURE OF THE ETSI IPR UNDERTAKING, ETSI/GA 17(93)3 (June 4, 1993).

65. Letter from H.W.F. Borgerhoff Mulder, Associate General Counsel, Apple Computer Europe, to K.H. Rosenbrock, Director, ETSI, May 19, 1993, *in* LETTERS FROM ETSI MEMBERS REGARDING THE SIGNATURE OF THE ETSI IPR UNDERTAKING, ETSI/GA 17(93)3 (June 4, 1993).

66. Letter from R.H. Dunkel to K.H. Rosenbrock, ETSI, April 28, 1993, *in* LETTERS FROM ETSI MEMBERS REGARDING THE SIGNATURE OF THE ETSI IPR UNDERTAKING, ETSI/GA 17(93)3, at 4 (June 4, 1993).

67. Letter from R.J. Peters, Philips International B.V., to K.H. Rosenbrock, ETSI, February 10, 1993, *in* ETSI IPR POLICY AND UNDERTAKING, ETSI/GA 15(93)29, at 3 (March 16-18, 1993).

all of these companies threatened to withdraw from ETSI if it required them to commit to the terms of the 1993 Undertaking. Ultimately, ETSI received approximately 12–14 letters from ETSI members “who threatened to pull out of ETSI if it implemented the 1993 policy.”<sup>68</sup>

In addition to ETSI members’ expressing opposition to the 1993 Undertaking and threatening to withdraw if adopted, several ETSI members filed a complaint with the European Commission. IBM, AT&T, Philips, and others filed a complaint alleging “that ETSI’s approach to IPRs [in the 1993 Undertaking] contravened European competition law.”<sup>69</sup> This complaint was significant because it essentially alleged that the 1993 Undertaking contradicted the European Commission’s original justification for creating ETSI, as expressed in the 1987 European Commission Green Paper that ETSI should “accelerate the elaboration of standards and technical specifications, indispensable for an open and competitive market environment.”<sup>70</sup>

Beyond the internal controversy within ETSI and the legal complaint filed with the European Commission, political actors were engaged in the debate as well, which reveals the full extent of this significant controversy at the birth of the mobile revolution. The United States engaged in what one commentator has identified as a “phenomenal” effort in urging ETSI to reject the 1993 Undertaking.<sup>71</sup> In addition to external political efforts, such as President Bill Clinton and other U.S. officials speaking with European governmental officials to express opposition to the 1993 Undertaking,<sup>72</sup> representatives from the U.S. government voiced opposition within ETSI. At an ETSI General Assembly meeting in the late fall 1993, Earl Barbely, an official with the U.S. Department of State, stated that the 1993 Undertaking represented “a major departure from accepted international standard-setting practices.”<sup>73</sup> Among many concerns, he noted that the 1993 Undertaking “inappropriately specifies a mechanism for setting maximum royalty rates and demonstrates a strong bias toward monetary remuneration” as a remedy for infringement of SEPs.<sup>74</sup> Mr. Barbely further stated that the United States “believe[s] that the basis for determining reasonable compensation should be fair and reasonable commercial terms that

---

68. Iversen, *supra* note 21, at 6.

69. *Id.* (describing the complaint). These companies argued in part that “ETSI intended to flush the dissenters out of the institute” in adopting the 1993 Undertaking and thus this exposed “ETSI’s IPR Approach was at heart competition distorting.” *Id.*

70. See COMMISSION OF THE EUROPEAN COMMUNITIES, *supra* note 29, at 22.

71. Iversen, *supra* note 21, at 6.

72. *Id.*

73. Comments by Mr. Barbely, U.S. Dep’t of State, DRAFT MINUTES OF THE 15TH GENERAL ASSEMBLY OF ETSI, ETSI/GA 15 (93)34, at 3.

74. *Id.*

are demonstrably free of any unfair discrimination and without specific reference to monetary remuneration.”<sup>75</sup> Ultimately, the U.S. government viewed the 1993 Undertaking as a fundamentally unbalanced policy that did not serve the goal of ETSI to “have access to the best technology available in the field of telecommunications” because it “ignore[d] the rights of innovative companies whose ideas are driving this industry.”<sup>76</sup>

The broad array of criticisms and the broader political and legal efforts prompted ETSI to start a process in late 1993 to reconsider and revise the 1993 Undertaking that it had adopted earlier that year. ETSI explicitly framed the 1993 IP rights policy as only an “Undertaking,” and less than a year later it adopted a new “interim” IP rights policy.<sup>77</sup> The interim IP rights policy became the official IP rights policy in 1994 with the FRAND commitment in Clause 6.1, which is essentially the same to this day.

This historical provenance of Clause 6.1 informs its meaning. In the adoption of a legal instrument, if a proposed provision is considered and then expressly rejected in favor of a different provision, then this is strong evidence that the earlier, now-rejected provision is abrogated by the provision adopted into law or agreed upon by parties to a contract. Patent lawyers know this interpretative rule in applying prosecution history estoppel in an equivalents infringement lawsuit; in this context, a change in claim scope during patent prosecution in which the original claim would have covered the now-alleged equivalent is deemed to preclude equivalents liability.<sup>78</sup> In applying this general interpretative rule to the FRAND commitment in the ETSI IP rights policy, it is clear that the *per se* rules in the 1993 Undertaking, including the prohibition on injunctive relief, were abrogated by the adoption of Clause 6.1 in 1994.

---

75. *Id.*

76. *Id.* at 4. This broader involvement by political actors is fodder for additional research by economists and political scientists in exploring a competitive geopolitical dimension to this dispute in the early 1990s between the U.S. and Europe. U.S. companies, such as Motorola and Bell Labs, were leading innovators who launched the mobile telecommunications revolution in the 1970s. Motorola was the largest licensor of telecommunications technologies at the time. European telecommunications companies were primarily implementers. A representative from a U.S. company to ETSI who participated in the debate at the time commented to me orally that the 1993 Undertaking was characterized at the time as “the anti-Motorola policy.”

77. See Brooks & Geradin, *supra* note 21, at 9.

78. See *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 733–34 (2002) (“When, however, the patentee originally claimed the subject matter alleged to infringe but then narrowed the claim in response to a rejection, he may not argue that the surrendered territory comprised unforeseen subject matter that should be deemed equivalent to the literal claims of the issued patent.”). The preclusive function of prosecution history estoppel works only if the change was done to meet the patentability requirements. *Id.* at 735–37.

2. *ETSI Has Rejected Attempts to Amend Clause 6.1 to Adopt Per Se Rules*

In the years following the adoption of Clause 6.1 in 1994, ETSI has rebuffed efforts to amend Clause 6.1 that sought to impose express, restrictive mandates as FRAND requirements for SEP owners.<sup>79</sup> In addition to the legislative history of ETSI's express rejection of prohibitive mandates, as detailed above, these subsequent developments further support the conclusion that the FRAND commitment does not prohibit injunctive relief for SEP owners. Two specific events are relevant in this interpretative analysis.

Approximately two decades after the adoption of Clause 6.1 in the ETSI IP rights policy, some members proposed in 2012 that ETSI amend Clause 6.1 to mandate a new "royalty base" for SEP licenses.<sup>80</sup> They proposed that ETSI reject the "communication device" as the royalty base given that the allegedly "more apt [royalty] base is the baseband chip (i.e. 'smallest saleable patent-practicing unit' or 'smallest priceable component,' respectively)."<sup>81</sup> ETSI chose not to amend Clause 6.1, which has remained largely unchanged to this date.<sup>82</sup>

A few years later when the IEEE changed its patent policy to mandate the smallest salable patent practicing unit standard for royalties and effectively prohibited injunctions for SEPs,<sup>83</sup> Christian Loyau, ETSI Director of Legal Affairs, commented on the IEEE's new patent policy. Mr. Loyau stated that the 2015 IEEE patent policy "would not be compatible with the ETSI IPR policy as commercial discussions between members . . . take place outside ETSI and [there is] no provision in the [ETSI] IPR policy rules [on the] use of injunction[s]."<sup>84</sup> In sum, ETSI has chosen not to adopt any per se rules or restrictive mandates in its FRAND commitment in its IP rights policy, both in

---

79. See Brooks & Geradin, *supra* note 21, at 9–10 (describing multiple efforts by some ETSI members to revise Clause 6.1).

80. Dirk Weiler, IPR SC Chairman, *Status of discussions: overview of the possible scenarios, associated historical information and wording proposals where appropriate*, ETSI IPR (12)12\_002r2, at 2 (Sept. 26, 2012).

81. *Id.* at 2–3.

82. See Brooks & Geradin, *supra* note 21, at 9.

83. See *supra* notes 8–12 and accompanying text (discussing the 2015 IEEE patent policy, the controversy over it that was similar to the controversy over the 1993 Undertaking, the change in the IEEE patent policy in 2022).

84. Bertram Huber, *Why the ETSI IPR Policy Does Not and Has Never Required Compulsory "License to All": A Rebuttal to Karl Heinz Rosenbrock* 6 (2017), <https://papers.ssrn.com/abstract=3038447> (quoting statement by Christian Loyau, ETSI Director of Legal Affairs, in the Draft Minutes from the meeting of the ETSI General Assembly, ETSI/GA(15)65\_030r2, at 11 (March 17-18, 2015)); see also *supra* notes 53–**Error! Bookmark not defined.** and accompany text (quoting the ETSI Guide on Intellectual Property Rights that commercial terms in SEP licenses are "outside of ETSI" and thus are not matters governed by the ETSI IP policy).

response to efforts to amend its FRAND commitment and in response to the “peer pressure” created by the IEEE’s change in its patent policy.

#### IV. EUROPEAN COURTS ARE GRANTING INJUNCTIONS TO SEP OWNERS UNDER THE ETSI IP RIGHTS POLICY

The official interpretation and application of a legal instrument is another source for ascertaining the meaning of this legal instrument. In common law jurisdictions, as opposed to the civil law jurisdictions in the European Union, court decisions interpreting legal instruments have the weight of *stare decisis*.<sup>85</sup> In this regard, European courts in multiple jurisdictions have been issuing injunctions to SEP owners requesting this remedy and who have committed to FRAND licensing under the ETSI IP rights policy. The purpose of this Part is to describe some of these court decisions, and a small sample will have to suffice given the limitations of the scope of this Article. This admittedly brief survey of the case law interpreting and applying the ETSI IP rights policy in issuing injunctions for ongoing infringement of SEPs is important. First, it confirms the textual analysis in the prior Parts that the FRAND commitment in Clause 6.1 of the ETSI IP rights policy does not preclude injunctive relief for infringement of SEPs. Second, U.S. courts and academics seem to be unaware of these court decisions, and thus the following review may disabuse them of their mistaken belief that a FRAND commitment necessarily precludes injunctive relief for SEP owners.

The legal and evidentiary framework applied by European courts in issuing injunctions for the ongoing infringement of SEPs is derived from the seminal 2015 decision by the Court of Justice of the European Union (CJEU) in *Huawei v. ZTE*.<sup>86</sup> In *Huawei*, the CJEU affirmed the right of SEP owners to request and receive injunctive remedies for infringement of their patents when the SEP owner is negotiating a FRAND-compliant license in “good faith,” and the implementer is engaging in strategic “delaying tactics,”<sup>87</sup> commonly

---

85. See *Payne v. Tennessee*, 501 U.S. 808, 827–28 (1991) (“*Stare decisis* is the preferred course because it promotes the evenhanded, predictable, and consistent development of legal principles, fosters reliance on judicial decisions, and contributes to the actual and perceived integrity of the judicial process”).

86. Case C-170/13, *Huawei Technologies Co. Ltd. V. ZTE Corp. and ZTE Deutschland GmbH*, ECLI:EU:C:2015:477 (July 16, 2015). I have read only English translations of the continental European court decisions, or the relevant portions of the court decisions and relevant case summaries. See *Case Law post CJEU ruling Huawei v ZTE*, 4IPCOUNCIL (July 6, 2015), <https://caselaw.4ipcouncil.com/cjeu-decisions/huawei-v-zte>.

87. *Case Law post CJEU ruling Huawei v ZTE*, 4IPCOUNCIL (July 6, 2015), <https://caselaw.4ipcouncil.com/cjeu-decisions/huawei-v-zte> (quoting Case C-170/13, *Huawei*

characterized as “holdout.”<sup>88</sup> Patent holdout (a.k.a. hold-out) is bad faith negotiating behavior by an implementer that unduly delays a license or forces an SEP owner to sue for infringement, compelling ultimately a “license as adjudicated” by a court.<sup>89</sup>

Subsequent to the *Huawei* decision, numerous courts of national jurisdiction in the UK and EU have identified a myriad of circumstances in which implementers have engaged in “holdout” tactics. In these cases, the courts have ruled that SEP owners were right to request or receive injunctive relief for the infringement of their patents.<sup>90</sup>

In 2019, for example, the Court of Appeal of The Hague in the Netherlands ruled that Asus was infringing the SEPs owned by Philips, and that Asus was engaging in holdout tactics that justified issuing an injunction against Asus for its continuing infringement of Philips’ SEPs.<sup>91</sup> In *Philips v. Asustek*, the Court of Appeal acknowledged that Asus had raised some licensing issues in its negotiations with Philips, but it concluded that these were

---

Technologies Co. Ltd. V. ZTE Corp. and ZTE Deutschland GmbH, ECLI:EU:C:2015:477, ¶ 65 (July 16, 2015).

88. *Unwired Planet v. Huawei*, [2018] EWCA Civ 2344 (Oct. 23, 2018), at ¶ 5 (“As we shall explain, the negotiation of licenses for SEPs on FRAND terms may be far from straightforward, however. . . . [T]he infringer may refuse to engage constructively or behave unreasonably in the negotiation process and so avoid paying the license fees to which the SEP owner is properly entitled, a process known as ‘hold-out.’”); see also Anne Layne-Farrar & Koren W. Wong-Erwin, *An Analysis of the Federal Circuit’s Decision in Ericsson v. D-Link*, CPI ANTITRUST CHRON. 5 n.14 (Mar. 2015) (“[H]oldout [is] when licensees either refuse to take a RAND license or delay in doing so”).

89. Trial Transcript, *Optis v. Apple*, Case No. 19-cv-00066, 221:9-23 (E.D. Tex. Aug. 12, 2020) (No. Dkt. 490) (“This is another element of Apple’s strategy. This is, once again, from an internal Apple document. Apple talks about a range of approaches, and one of the approaches it likes to use is called license as adjudicated. This is the plans of Apple’s lawyers. And why do they want to say license as adjudicated? Well, that’s a funny word for, let someone sue us. Now, why in the world would you want to wait for someone to sue you for patent infringement? Well, we actually know the answer to that, because it’s in their internal documents. The reason for it is because they want to delay payments. They want to avoid having paid the money for as long as possible.”); see also *Optis Cellular Tech. L.L.C., Optis Wireless Tech. L.L.C. & Unwired Planet Int’l Ltd. v Apple Inc.*, [2022] EWCA Civ 1411 (Oct. 27, 2022), at ¶ 115 (“Apple’s behaviour in declining to commit to take a Court-Determined Licence once they had been found to infringe . . . and their pursuit of their appeal, could well be argued to constitute a form of hold out”).

90. See, e.g., Bundesgerichtshof [BGH] [Federal Court of Justice] Nov. 24, 2020, KZR 35/17 (Ger.); *Unwired Planet International Ltd v. Huawei Technologies Co. Ltd* [2020] UKSC 37, ¶ 26; Hof’s-Hague 7 May 2019 (Koninklijke Philips N.V./Asustek Computers INC); *TQ Delta v Zyxel Communications*, UK High Court of Justice - HP-2017-000045 - [2019] EWHC 745 (Pat), 18 March 2019; Landesgericht, Mar. 18, 2019, O 73/14 (Ger.); Landesgericht, Jan. 29, 2016, O 66/15 (Ger.).

91. Hof’s-Hague 7 May 2019 (Koninklijke Philips N.V./Asustek Computers INC);

merely stalling tactics by Asus.<sup>92</sup> Underneath a patina of negotiating tactics, Asus was engaging in the “behaviour also referred to as ‘hold-out.’”<sup>93</sup> Thus, when negotiations formally broke down and Philips filed lawsuits for patent infringement against Asus in courts in the UK, Germany, France, and the Netherlands, the Court of Appeal of The Hague held that Philips was justified in seeking an injunction against Asus as an infringing implementer engaging in holdout.

In the same year as the *Asus* decision in the Netherlands, the UK High Court of Justice ruled in *TQ Delta v ZyXEL Communications* that ZyXEL engaged in “patent holdout” by delaying negotiations and refusing to accede to a license on FRAND terms for the use of SEPs owned by TQ Delta.<sup>94</sup> Given ZyXEL’s explicit “holdout” practices, the UK Court of High Justice granted an injunction against ZyXEL, explaining that it would be “unjust” not to issue an injunction because this “would enable ZyXEL to benefit from their strategy of hold-out.”<sup>95</sup> If the injunction was denied, or if the injunction was stayed during an appeal by ZyXEL, this “would amount to a compulsory licence of the patentee’s exclusive rights and deprive it of meaningful protection in circumstances where the Defendants have elected not to enforce the [F]RAND undertaking.”<sup>96</sup>

In 2020, the German Federal Court of Justice held that Sisvel, an SEP owner, rightly sought an injunction against Haier given Haier’s holdout tactics. In *Sisvel v Haier*,<sup>97</sup> the Federal Court of Justice explicitly recognized that an implementer cannot claim to be a willing licensee if it predicates a license on the condition that a court must first decide that the SEPs are valid and infringed.<sup>98</sup> The court explained that, if it accepted Haier’s argument, this would force SEP owners like Sisvel to engage in many years of litigation before any SEP license would be executed. This would distort the licensing market for SEPs, as implementers would be incentivized to holdout given the added negotiating leverage created by the fact that they are receiving revenues from their infringing use of the SEPs while SEP owners would receive nothing from the as-yet unlicensed use of their patented technologies.

---

92. *Id.* at ¶ 4.179.

93. *Id.*

94. *TQ Delta v. ZyXEL Commc’ns*, UK High Court of Justice - HP-2017-000045 - [2019] EWHC 745 (Pat), dated 18 March 2019, at ¶ 12.

95. *Id.* at ¶ 13.

96. *Id.* at ¶ 22.

97. Bundesgerichtshof [BGH] [Federal Court of Justice] Nov. 24, 2020, KZR 35/17 (Ger.).

98. *See id.* at ¶ 95.



The Federal Court of Justice further observed that Haier’s contention was unjustified that the FRAND commitment required Sisvel to accept the national-level license offered by Haier. Haier was using Sisvel’s SEPs in the global innovation economy, and thus Haier had no “legitimate interest” in a “selective licensing” program that was limited to only its corporate affiliates in a single country (Germany).<sup>99</sup> Haier’s license offers would not create licenses of Sisvel’s global portfolio of SEPs in any country other than Germany; Sisvel would be forced to engage in a costly and lengthy litigation campaign in which Sisvel would be required to sue Haier’s corporate affiliates throughout the world “patent by patent and country-by-country.”<sup>100</sup> The restricted scope of Haier’s license confirmed that its counteroffers in the negotiations were merely pretextual.

In sum, the Federal Court of Justice held that Haier’s conduct as a whole reflected a deliberate campaign of “patent hold-out.”<sup>101</sup> According to Haier’s arguments, Sisvel would have to engage in years, if not decades, of licensing efforts and lawsuits throughout the world in innumerable countries before Sisvel could even request an injunction against Haier for its ongoing infringement of Sisvel’s SEPs. According to the Federal Court of Justice, Haier was clearly exploiting the “structural disadvantage” in the use of SEPs in the telecommunications sector of the global innovation economy: SEP owners cannot sue implementers or request an injunction until after a FRAND offer is made and there is some evidence of holdout tactics or bad-faith by the implementer.<sup>102</sup> At the same time, the implementer can use the SEPs and profit from this infringing use while the SEP owner makes nothing, creating undue leverage for the implementer against the SEP owner. Since Haier was an implementer engaging in holdout and Sisvel provided both notice to Haier of both its infringement and made a FRAND offer, the Federal Court of Justice concluded Sisvel had met its obligations under the *Huawei* framework and thus could seek injunctive relief.<sup>103</sup>

Lastly, in 2020, the UK Supreme Court held in *Unwired Planet v. Huawei* that SEP owners have the right to seek an injunction against an implementer who is committing ongoing infringement and engaging in “the mischief of ‘holding out.’”<sup>104</sup> Although the UK is no longer part of the EU, its courts continue to

---

99. *Id.* at ¶ 117.

100. *Id.*

101. *Id.* at ¶ 61.

102. *Id.*

103. *See id.* at ¶ 52.

104. *Unwired Planet Int’l Ltd. v. Huawei Technologies Co. Ltd.* [2020] UKSC 37, ¶ 10 (referring to clause 3.2 of the ETSI Policy).

apply the *Huawei* framework in granting injunctions to SEP owners.<sup>105</sup> Among many legal issues raised in *Unwired Planet*, the court rejected Huawei's argument that an SEP owner must license and enforce its respective national patents only on a country-by-country basis, precluding global portfolio licenses of SEPs and enforcement of SEPs in the global innovation economy. Aside from a country-by-country enforcement rule being "impractical,"<sup>106</sup> the UK Supreme Court recognized the lack of balance between SEP owners and implementers in Huawei's proposed enforcement rule. If licenses and enforcement were limited in such a way, an implementer simply "would have an incentive to hold out country by country until it was compelled to pay."<sup>107</sup> It is notable that the UK Supreme Court in *Unwired Planet* engaged in the same analysis and reasoned to the same conclusion as the German Federal Court of Justice in *Sisvel*, although these cases were decided only months apart from each other in late 2020.<sup>108</sup>

Ultimately, the UK Supreme Court recognized that Unwired Planet—and Conversant in its SEP infringement lawsuit filed against Huawei and ZTE and consolidated with Unwired Planet's lawsuit against Huawei—had demonstrated that it had been willing to grant a license on FRAND terms to Huawei. Since Unwired Planet and Conversant had shown a willingness to license on FRAND terms with Huawei and ZTE, the UK Supreme Court granted an injunction as "necessary in order to do justice" if the offer of the FRAND-compliant license was not accepted by Huawei and ZTE as infringing implementers.<sup>109</sup>

These summaries represent only an illustrative sample of the numerous court decisions in the UK, EU, and in other countries around the globe that find implementers to be engaging in a myriad of holdout strategies. These and other courts have consistently affirmed the preexisting right of SEP owners to receive injunctions under their national patent laws. Accordingly, they have issued injunctions for ongoing infringement of SEPs when an implementer has notice of infringement and is engaging in holdout tactics, and the SEP owner has offered a license on FRAND terms or is negotiating in good faith to a FRAND-compliant license. In reaffirming the right of an SEP owner to request and receive an injunction, the CJEU recognized in *Huawei* that holdout

---

105. *See id.* at ¶ 157 ("The scheme set up by the CJEU [in *Huawei*] . . . provides the SEP owner with a route map which . . . will ensure it can seek an injunction").

106. *Id.* at ¶ 166.

107. *Id.* at ¶¶ 168–69 (quoting *Unwired Planet International Ltd v. Huawei Technologies Co. Ltd* [2018] EWCA (Civ) 2344, ¶ 111).

108. *See Bundesgerichtshof [BGH] [Federal Court of Justice] Nov. 24, 2020, KZR 35/17 (Ger.)*.

109. *Unwired Planet Int'l Ltd.*, at ¶ 169.

by implementers against license offers by SEP owners is a commercial reality that can only be addressed by the appropriate legal remedy of an injunction to balance the market asymmetry between SEP owners and implementers.<sup>110</sup>

## V. CONCLUSION

Despite claims by commentators and courts in the United States, the FRAND commitment does not preclude the award of an injunction to an SEP owner. The ETSI IP rights policy is an exemplar of the legal rules and commercial norms in FRAND commitments among SDOs. Clause 6.1 in the ETSI IP rights policy implements a policy of balancing the interests of SEP owners and implementers, and thus it foregoes any per se rules or restrictive mandates dictating royalty rates, licensing terms, or the absence of injunctive relief for SEP owners. Its express terms require only one action by SEP owners: they must be “prepared to offer an irrevocable license” on FRAND terms. It is notable that the ETSI IP rights policy does not even mandate that an SEP owner enter into a license, but only that it be prepared to *offer* a license on FRAND terms.

The FRAND commitment in the ETSI IP rights policy does not preclude injunctions for SEP owners. The conclusion is clear from its express terms, its historical provenance in the failed 1993 Undertaking, the other provisions in the ETSI directives and guidelines, and in ETSI’s rejection of attempts to amend Clause 6.1 subsequent to its adoption in 1994: Clause 6.1 does not impose any per se rules prohibiting injunctions as legal remedies nor any other mandates of commercial practices or royalties. For this reason, courts in multiple jurisdictions have issued injunctions to SEP owners who are committed to making offers of FRAND licenses under the ETSI IP rights policy when implementers have been unwilling to enter into licenses and engaged in holdout tactics. It is time for U.S. courts and commentators to recognize and apply this overwhelming legal authority.

---

110. *See supra* note 44 (explaining the fundamental function of an injunction as a necessary legal predicate for a contractual negotiation to occur in the marketplace).

