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## FRAND Arbitration Will Destroy FRAND

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# FRAND ARBITRATION WILL DESTROY FRAND

Barbara Lauriat\*

*Standard essential patent-licensing disputes have been raising the costs of business in the telecommunications industry for over a decade. As technology and interconnectivity extend beyond mobile phones into the Internet of Things (“IoT”), the number of these disputes will only increase. While many academics, policymakers, and stakeholders support arbitration to resolve these disputes, this article warns of the potential long-term consequences of doing so on a large scale.*

*Standard Setting Organizations usually require the owners of patented technology included in industry standards to commit to licensing on Fair, Reasonable, and Non-discriminatory (“FRAND”) terms to avoid potential abuse of their market power. Standards are global and patents are national, however; disputes between owners and implementers over FRAND rates have led to complicated jurisdictional problems. Some national courts have even set global FRAND licensing rates, leading to cross-border anti-suit, and even anti-anti-suit, injunctions.*

*International commercial arbitration of FRAND disputes may appear to be an efficient solution to the jurisdictional dilemma, but it would also reduce transparency, lead to increasingly inaccurate calculations of FRAND rates over time, cause information imbalances between the parties, create new conflict of laws problems, lead to under-enforcement of national antitrust laws, and harm the integrity of the broader patent system. Without significant change from current international commercial arbitration norms and practice, widespread FRAND arbitration would nullify the very purpose for which the FRAND commitment was created—thus, FRAND arbitration will destroy FRAND.*

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## INTRODUCTION

On July 20, 2022, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office (USPTO) Kathi Vidal signed a memorandum of understanding with Daren Tang, the Director General of the World Intellectual Property Organization (WIPO), agreeing on joint efforts to facilitate the resolution of standard essential patent (SEP) disputes.<sup>1</sup> Central to this five-year agreement is a plan to drive those involved in these disputes toward the services offered by the WIPO Arbitration and Mediation Center.<sup>2</sup> Director General Tang touted the broad merits of alternative dispute resolution and its particular suitability for dealing with SEP issues: “In the last few years, the WIPO Arbitration and Mediation Center has been facilitating the resolution of SEP-related disputes and the new collaboration with the USPTO is an exciting development which will contribute to improving the efficiency of standard implementation.”<sup>3</sup>

The fact that SEPs were the primary focus of this high-profile agreement between the USPTO and WIPO illustrates the extent to which they have attracted the world’s attention—and concern. In fact, aside from their central role in the global economy and Internet of Things (IoT), there is little consensus on anything to do with SEPs. However, it is no exaggeration to say that these standards daily affect almost every person on the planet.<sup>4</sup>

Telecommunications and the IoT require interoperability. In order for the next generation of mobile telephones produced by different manufacturers to access new 5G networks, sync with other digital devices, or simply call each other, there must be industry-wide

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<sup>1</sup> USPTO AND WIPO AGREE TO PARTNER ON DISPUTE RESOLUTION EFFORTS RELATED TO STANDARD ESSENTIAL PATENTS (Press Release: July 20, 2022), <https://www.uspto.gov/subscription-center/2022/uspto-and-wipo-agree-partner-dispute-resolution-efforts-related-standard> (visited March 27, 2023).

<sup>2</sup> *Guidance on WIPO FRAND Alternative Dispute Resolution (ADR)*, WIPO Arbitration and Mediation Center, <https://www.wipo.int/amc/en/center/specific-sectors/ict/frand/> (visited March 27, 2023).

<sup>3</sup> *Id.* On October 6, 2022, at a WIPO webinar on arbitration of SEP disputes hosted by Kathi Vidal, Heike Wollgast from the WIPO Arbitration and Mediation Center acknowledged that the Center had not administered any FRAND arbitrations to date and that the sixty alternative dispute resolution proceedings related to SEPs administered by the WIPO Center had been mediations. <https://www.wipo.int/amc/en/events/workshops/2022/sep/index.html> (visited March 27, 2023). While the WIPO Center itself has not been a popular institution for FRAND arbitration proceedings, there is evidence that its model submission agreements for SEP-related ADR have been in regular use by parties. Peter Picht & Gaspare Loderer, *Arbitration in SEP FRAND Disputes/ Overview and Core Issues*, 36 J. OF INT’L ARB. 575, 582 (2019).

<sup>4</sup> Chaesub Lee, *Standards Build Trust: How the International Telecommunication Union Supports Inclusive Sustainable Development*, 55 U.N. CHRON. (2018) (“[Standards] are at play in almost every product we consume and every process that readies them for consumption.”) <https://www.un.org/en/un-chronicle/standards-build-trust-how-international-telecommunication-union-supports-inclusive> (visited March 27, 2023).

agreement on certain technological standards.<sup>5</sup> As smart technology spreads beyond telecommunications into numerous other industries—from autonomous vehicles to household appliances—standard-setting is increasingly necessary and prevalent.<sup>6</sup>

Interoperability relies on setting new standards that often include patent-protected technology. SEPs are patents, the use of which is considered essential to manufacturing according to the standard.<sup>7</sup> The extra-strength patent protection of SEPs creates what this article refers to as “Problem A”: owners of genuine SEPs are necessarily in a dominant market position that could, if unchecked, allow them to engage in anticompetitive market behaviors. A solution to this problem is the “FRAND” commitment where SEP owners voluntarily declare their SEPs and agree to license them on “Fair, Reasonable, and Non-Discriminatory” terms.<sup>8</sup>

The FRAND obligation can be viewed as a solution to Problem A, aimed at preventing SEP owners from abusing their dominant market position and engendering negative market effects such as patent hold-up. However, this solution has created significant problems of its own. It is unclear what decisionmaker or authority has jurisdiction to determine whether a given global royalty rate for a large patent portfolio comprised of numerous national patents is FRAND. Nor is the methodology for evaluating FRAND clear.<sup>9</sup> The terms “Fair,” “Reasonable,” and “Non-discriminatory” are often undefined in policies.<sup>10</sup> As inherently relative terms, they raise issues around quantification and calculation. These “FRAND cases” have become one of the fastest-growing areas of global litigation.

FRAND cases tend to be very complex, often involving capacious patent portfolios, global licenses, complicated cross-licensing agreements, and large amounts of money.<sup>11</sup> Experts and courts disagree on the methods for valuing portfolios and calculating FRAND rates, and much of the information that would be pertinent to these calculations is

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<sup>5</sup> See generally Jorge L. Contreras, *Technical Standards, Standards-Setting Organizations and Intellectual Property: A Survey of the Literature*, RSCH. HANDBOOKS ON THE ECON. OF INTELL.PROP. L., VOL 2 - ANALYTICAL METHODS 185 (Peter S. Menell and David Schwartz, eds., 2019); See generally Mahda Noura, Mohammed Atiquzzaman, & Martin Gaedke, *Interoperability in Internet of Things: Taxonomies and Open Challenges*, 24 MOBILE NETW. APPL. 796 (2019), <https://doi.org/10.1007/s11036-018-1089-9> (visited on March 30, 2023).

<sup>6</sup> Marco Stief and Heike Röder-Hitschke, *Connected Cars, SEP and FRAND—CJEU Referral With a Focus on Multi-tier Supply Chains*, 16(6) J. OF IP L. & PRACTICE 455, 456 (2021).

<sup>7</sup> See *Standard Essential Patents (SEPS) Explained*, United Kingdom Intellectual Property Office Guidance, <https://www.gov.uk/guidance/standard-essential-patents-seps-explained>.

<sup>8</sup> The FRAND commitment is also sometimes known as “RAND” for “Reasonable and Non-Discriminatory.” This article uses the more-common acronym FRAND unless in a direct quotation.

<sup>9</sup> See *infra* Section I.C.

<sup>10</sup> See *infra* Section I.A.

<sup>11</sup> See generally IGOR NIKOLIC, LICENSING STANDARD ESSENTIAL PATENTS 1–7 (2021).

not publicly available.<sup>12</sup> Many declared SEPs in a portfolio may not be valid patents. Even if they are valid patents, they may not be essential or infringed by the alleged use.<sup>13</sup> Because of FRAND cases' complexity, they raise questions of law that implicate the public interest, touching on patent validity, property ownership, and market competition.<sup>14</sup>

Within the global FRAND ecosystem, incentives and opportunities still abound for abusive and anticompetitive behaviors. On one side of sharp practice, even with FRAND-encumbered patents, SEP owners may abuse their market dominance through techniques like over-declaration, excessive bundling of patents in their portfolios, and confidentiality gamesmanship.<sup>15</sup> On the other side of sharp practice, SEP implementers can take advantage of legal limitations placed on the SEP owners' ability to obtain injunctive relief by manufacturing without a license and continuing to manufacture when threatened by the SEP owner, using FRAND's uncertainty to prolong negotiations and reject all licensing offers.<sup>16</sup>

With transnational legal and commercial implications, the question of *who* can resolve these disputes has become even more contentious than *how* to resolve them. Patents are territorial rights, but standards are global. As a result, whether a national court can determine global FRAND royalty rates for a multinational patent portfolio license between two foreign companies raises new uncertainties. For instance, what if another nation's courts refuse to recognize the deciding court's jurisdiction?

The jurisdictional problem created by the FRAND commitment for SEP licensing is what this article refers to as "Problem B." While some national courts have empowered themselves to set global FRAND rates,<sup>17</sup> and others have granted anti-suit and even anti-anti-suit injunctions in response.<sup>18</sup> As an alternative, some policymakers view international commercial arbitration as a less controversial and more efficient means of resolving FRAND disputes over SEP licensing.

The leadership of the USPTO and WIPO are not alone in promoting arbitration as the answer to the growing problem of global SEP disputes. The patent subcommittee of the Japanese Ministry of Economy, Trade and Industry, for example, has found the arbitration of intellectual

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<sup>12</sup> See *infra* Section 1.C. See generally Fei Deng, Gregory K. Leonard, & Mario A. Lopez, *Comparative Analysis of FRAND Royalty Rates*, 32 ANTITRUST L.J. 47 (2018); Anne Layne-Farrar & Koren W. Wong-Ervin, *Methodologies for Calculating FRAND Damages: An Economic and Comparative Analysis of the Case Law from China, the European Union, India, and the United States*, 8 JINDAL GLOBAL L. REV. 127 (2017); Dennis W. Carlton & Allan L. Shampine, *An Economic Interpretation of FRAND*, 9 J. OF COMPET. L. & ECON. 531 (2013).

<sup>13</sup> See *infra* notes 63–66.

<sup>14</sup> See *infra* note 254.

<sup>15</sup> See *infra* note 69.

<sup>16</sup> See *infra* note 145.

<sup>17</sup> See *infra* note 151.

<sup>18</sup> See *infra* note 155.

property disputes, particularly SEPs, highly desirable,<sup>19</sup> and a 2022 UK Intellectual Property Office consultation raised the possibility of government intervention to promote arbitration over litigation in SEP cases.<sup>20</sup> Although the European Parliament has expressed an unwillingness to mandate alternative dispute resolution, ADR has nonetheless been a major focus of EU strategy discussions about dealing with SEP licensing.<sup>21</sup> Many academics,<sup>22</sup> lawyers,<sup>23</sup> standard-setting organizations (“SSOs”),<sup>24</sup> and even judges,<sup>25</sup> are also pushing these disputes out of the public sphere and into the realm of private dispute resolution.

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<sup>19</sup> The subcommittee found that the use of alternative dispute resolution techniques “such as arbitration and conciliation should be promoted to accelerate the process of solving disputes of standard-essential patents involving large numbers of patent rights.” *Review of the Intellectual Property Systems to Respond to the Fourth Industrial Revolution*, (February 2018) quoted on JAPAN PATENT OFFICE, INTELLECTUAL PROPERTY ARBITRATION PORTAL, [https://www.jpo.go.jp/e/support/general/chizai\\_chusai\\_portal/](https://www.jpo.go.jp/e/support/general/chizai_chusai_portal/) (visited on October 9, 2024).

<sup>20</sup> “The government seeks views on how best to encourage and promote greater use of arbitration and whether government should intervene. The government recognises that careful consideration would be needed in respect of any requirement on parties to enter into arbitration that could also be considered alongside voluntary approaches.” *Standard Essential Patents and Innovation: Call for Views*, U.K. INTELLECTUAL PROPERTY OFFICE (Updated July 5, 2023), <https://www.gov.uk/government/consultations/standard-essential-patents-and-innovation-call-for-views> (visited on October 10, 2024).

<sup>21</sup> *Communication from the Commission to the European Parliament, the Council, and the European Economic and Social Committee Setting out the EU Approach to Standard Essential Patents*, 3.4 (29 November 2017), <https://ec.europa.eu/docsroom/documents/26583> (visited on March 27, 2023) (“The Commission is, together with the EUIPO, mapping IP mediation and arbitration tools with the view to facilitating the further roll-out of IP mediation and arbitration services.”); See also Luke McDonagh & Enrico Bonadio, *Standard Essential Patents and the Internet of Things*, (January 2019), [https://www.europarl.europa.eu/thinktank/en/document/IPOL\\_IDA\(2019\)608854](https://www.europarl.europa.eu/thinktank/en/document/IPOL_IDA(2019)608854) (visited on March 27, 2023).

<sup>22</sup> Mark Lemley & Carl Shapiro, *A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents*, 28 BERK. TECH. L. J. 1135 (2013); Kai-Uwe Kühn et al., *Standard Setting Organizations Can Help Solve the Standard Essential Patents Licensing Problem*, CPI ANTITRUST CHRON. 1 (2013); Jorge L. Contreras & David L. Newman, *Developing a Framework for Arbitrating Standards-Essential Patent Disputes*, [2014] J. DISP. RES. 1 (2014); Enrico Bonadio, Diana Filatova & Anushka Anwar, *The UK Call for View on Standard Essential Patents and the Case for Arbitration*, KLUWER PATENT BLOG (January 18, 2022) <http://patentblog.kluweriplaw.com/2022/01/18/the-uk-call-for-view-on-standard-essential-patents-and-the-case-for-arbitration/> (visited on March 27, 2023).

<sup>23</sup> Richard A.H. Vary, *Arbitration of FRAND Disputes in SEP Licensing*, in GUIDE TO IP ARBITRATION (2021).

<sup>24</sup> “Standards Setting Organizations (SSO) such as the Institute of Electrical and Electronics Engineers (IEEE) suggest the use of arbitration (an arbitration agreement is thus integrated into a FRAND license offer), inter alia for the determination of royalties respecting FRAND principles. The advantages of arbitration lie in particular in the choice of specialized arbitrators as well as in the possibility of finding tailor-made solutions regarding issues of confidentiality in this highly competitive field.” THOMAS LEGLER, ASA BULL., ARBITRATION OF INTELLECTUAL PROPERTY DISPUTES 289, 301-302 (Matthias Sherer ed., 2019).

<sup>25</sup> Lord Justice Arnold of the Court of Appeal of England and Wales has called for mandatory global arbitration of SEP disputes. Richard Arnold, *SEPs, FRAND, and Mandatory Global Arbitration*, G.R.U.R. 123 (2021).

In response to the considerable momentum toward arbitrating SEP licensing disputes,<sup>26</sup> this article analyzes and critiques the potential consequences of widespread FRAND arbitration. While it may seem attractive to deal with complicated practical and jurisdictional problems by removing them from the purview of national legal systems, widespread FRAND arbitration will have profound public policy implications.

As a mechanism for dispute resolution, arbitration's efficiency arises in part from reduced discovery, lack of an appeal process, international enforceability, and limited opportunities for government oversight.<sup>27</sup> The privacy and confidentiality of such proceedings mean that data (both substantive and methodological) relevant to resolving future FRAND disputes is obscured. Relatedly, the use of selectively available information from arbitral awards in subsequent litigation creates additional risks.<sup>28</sup>

SEP licensing disputes are even more likely than other kinds of patent disputes to impact third parties and the public interest, and arbitration is not well-suited to accommodate interests beyond those placed directly before the arbitral tribunal. The nature of technology standards—private collective action that simultaneously implicates competition policy and the patent regime—extends beyond the immediate parties' concerns. In arbitration, these disputes are resolved entirely in a private law framework that exists beyond the reach of public law.<sup>29</sup> National courts lack meaningful opportunities to review an arbitral tribunal's FRAND awards to ensure compliance with national or regional antitrust or intellectual property laws.<sup>30</sup>

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<sup>26</sup> Picht & Loderer, *supra* note 3, at 576 (suggesting the trend towards arbitrating FRAND disputes is “likely to intensify”).

<sup>27</sup> See Barbara Lauriat, Navigating Public, Private, National, and Global: International Commercial Arbitration of Patent Disputes in IMPROVING INTELLECTUAL PROPERTY 180, 182 (Susy Frankel, Margaret Chon, Graeme B. Dinwoodie, Barbara Lauriat, Jens Schovsbo, eds., 2023).

<sup>28</sup> See, e.g., “A point arises in this case about a licence which was the product of an arbitration. A licence agreement settled in an arbitration is more like terms set by a court than it is like a licence produced by negotiation and agreement. ...A further difficulty with the particular licence in question is that the arbitral award has not been produced. So although we know what the licence terms are, we do not know what the reasoning was which led to them. As a persuasive authority an arbitrated licence without the arbitral award is not much use. There were a few references in the evidence to the way the arbitrators decided the case but without seeing the award itself I will not place weight on that.” *Unwired Planet v. Huawei*, [2017] EWHC 711 (Pat) ¶171 (Birss, J.).

<sup>29</sup> See Stephen J. Ware, *Default Rules from Mandatory Rules: Privatizing Law Through Arbitration*, 83 MINN. L. REV. 703, 712 (1999) (“[A]n agreement to arbitrate is, in effect, an agreement to comply with the arbitrator's decision whether or not the arbitrator applies the law. Such an agreement, then, contracts out of all the law that would have been applied by a court but for the agreement.”).

<sup>30</sup> For example, in the United States, the 7<sup>th</sup> Circuit Court of Appeals upheld an arbitral award against an antitrust-based public policy challenge, noting that the extent of its review was to ensure the arbitral tribunal “took cognizance of the antitrust claims and actually decided



This article first sets out Problem A, the initial problem created by standard-setting in areas with substantial patent protection, explaining how the FRAND commitment is intended to address this problem. It then examines the rise of patent arbitration, particularly in the arena of patent licensing disputes, with examples from several jurisdictions. Superficially, arbitration appears to be an attractive solution to some of the recognized problems created by the FRAND commitment in SEP licensing. Unfortunately, repeated arbitration of FRAND licensing disputes within the existing legal frameworks would lead to increasingly inaccurate calculations of FRAND rates within a given industry over time; cause anticompetitive information disparities between parties; and create new legal battlefields over disclosure, arbitrability, and competition issues. This article argues that using arbitration as the solution to Problem B could result in FRAND no longer serving as a solution to Problem A. Thus, it follows that FRAND arbitration could destroy the very purpose of the FRAND commitment.

This article is intentionally provocative in its direct challenge to FRAND arbitration to counteract the increasingly prominent endorsements in its favor.<sup>31</sup> Compared with national courts, arbitration may provide a more efficient and less volatile way of resolving global SEP licensing disputes and setting FRAND rates, but it must not be viewed as a panacea. The limitations of the current international commercial arbitration norms and frameworks must be recognized and dealt with before this important global issue is placed beyond the reach of national law and public notice. While this article is primarily intended to provide a necessary counterpoint to the growing pro-FRAND arbitration movement, it is also meant to lay out some of the significant systemic changes that would be required to make FRAND arbitration a desirable option. In the future, arbitration might provide at least part of the answer to the legal, economic, and logistical problems created by FRAND, but only if critical voices are loud enough to attract adequate oversight—from intellectual property, antitrust, and other authorities—before such a system becomes both entrenched and hidden.

## **I. PROBLEM A: STANDARD ESSENTIAL PATENTS AND POTENTIAL ABUSE OF MARKET POWER**

### **A. Standard Setting and Patents**

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them,” without considering the substantive merits of the antitrust claims. *Baxter Int'l, Inc. v. Abbott Lab.*, 315 F.3d 829, 832 (7th Cir. 2003).

<sup>31</sup> Thomas Legler and Andrea Schäffler, *International Arbitration—Intellectual Property Disputes: Overview*, in *INTERNATIONAL COMMERCIAL ARBITRATION PRACTICE: 21<sup>ST</sup> CENTURY PERSPECTIVES* § 55.05 (2023) (“In the last few years, IP arbitration has notably gained importance regarding the arbitration of the licensing of SEPs on FRAND terms. The EU Commission and the CJEU also acknowledged the potential benefits of arbitration in SEP licensing disputes.”).

Organized industry standard-setting is not a creature of the digital age. It traces back to antiquity. By the 5<sup>th</sup> century BCE, Athens had standardized the size of its amphorae, which allowed for easier re-use, simpler volume conversions, and more efficient transport.<sup>32</sup> This “Atticizing” of amphorae quickly spread across the Aegean.<sup>33</sup> Today, there are standards for everything from screwdrivers to boiler systems,<sup>34</sup> printer paper<sup>35</sup> to 5G.<sup>36</sup>

A chosen industry standard does not have to be the best, simplest, or cheapest option available. Often, standard selection arises organically, such as when one manufacturer happens to be first to the market. Any standard, even a flawed standard, can be better than no standard at all. At the same time, standards have the potential to harm trade.<sup>37</sup>

Today, standard-setting in telecommunications and many other industries is mostly private, with the major industry players represented in consensus-based decision-making. Although some countries, notably China, engage in a hybrid of state-mandated and privatized standardization,<sup>38</sup> in the United States, the American National Standards Institute (ANSI), a non-profit membership organization, offers accreditation of standard-setting organizations (“SSO”s) and sets out essential requirements for due process in standard development.<sup>39</sup> Other leading SSOs include the European Telecommunications Standards Institute (ETSI),<sup>40</sup> the Institute of Electrical and Electronics Engineers (IEEE), the International Telecommunication Union,<sup>41</sup> and the World Wide Web Consortium.<sup>42</sup>

Collaborative industry standard-setting is an unusual market behavior. Such collective action raises concern about potential

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<sup>32</sup> THOMAS FIGUEIRA, *THE POWER OF MONEY: COINAGE AND POLITICS IN THE ATHENIAN EMPIRE 156–7* (1998).

<sup>33</sup> *Id.*

<sup>34</sup> United Facilities Criteria, *Boiler Plan Instrumentation and Control Systems*, UFC 3-430-11, 11 (April 27, 2021) [https://www.wbdg.org/FFC/DOD/UFC/ufc\\_3\\_430\\_11\\_2021.pdf](https://www.wbdg.org/FFC/DOD/UFC/ufc_3_430_11_2021.pdf).

<sup>35</sup> *Paper Sizes and Formats Explained: The Difference Between A4 and Letter, Swift Paper* <https://www.swiftpublisher.com/useful-articles/paper-sizes-and-formats-explained>

<sup>36</sup> 5G, ETSI (2023) <https://www.etsi.org/technologies/mobile/5g?jjj=1688911632372>.

<sup>37</sup> Panagiotis Delimatsis, *Global Standard-Setting 2.0: How the WTO Spotlights ISO and Impacts the Transnational Standard-Setting Process*, 28 *DUKE J. OF COMPAR. & INT’L L.* 273, 275 (2018) (nothing standards can sometimes “impede trade” due to inflated compliance costs).

<sup>38</sup> Alexandra Bruer and Doug Brake, *Mapping the International 5G Standards Landscape and How it Impacts U.S. Strategy and Policy*, INFO. TECH. & INNOVATION FOUNDATION 3 (November 2021) <https://itif.org/publications/2021/11/08/mapping-international-5g-standards-landscape-and-how-it-impacts-us-strategy/> (visited on March 27, 2023).

<sup>39</sup> <https://www.ansi.org/american-national-standards/ans-introduction> (visited on March 23, 2023).

<sup>40</sup> <https://www.etsi.org/> (visited on March 23, 2023).

<sup>41</sup> <https://www.ieee.org/> (visited on March 23, 2023).

<sup>42</sup> <https://www.w3.org/> (visited on March 23, 2023).

anticompetitive effects.<sup>43</sup> Indeed, competitors coming together, setting formal, industry-wide policies, and agreeing that they will make the same commercial decisions is precisely the kind of activity that many antitrust laws are designed to prevent.<sup>44</sup> Just as with IP protection, however, economists carve out standard-setting as an exception because the overall benefits are clear. The public goods of increased efficiency, faster technological development, and better products that result from interoperability outweigh the risks of horizontal cooperation arrangements, provided those standards are transparently set to avoid other anticompetitive activities such as collusion, price-fixing, and exclusive dealing.<sup>45</sup>

Patent protection further complicates standard-setting.<sup>46</sup> Particularly in the telecommunications industry, a single technological standard may include technology that “reads on”<sup>47</sup> a large number of patented inventions.<sup>48</sup> While new technological standards are usually global in their reach, patents are territorial.<sup>49</sup> Patents give the owner a number of exclusive rights in the territory where they were granted, allowing patent-owners to prevent others from activities such as making, using, and selling the invention. These government-granted rights are considered necessary to incentivize the investments in research and development required to produce new and valuable inventions *and* the disclosure to the public of the details of how to make and use the invention.<sup>50</sup> While some may question whether hold-up by SEP owners

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<sup>43</sup> See generally, Carl Shapiro, *Setting Compatibility Standards: Cooperation or Collusion?* in EXPANDING THE BOUNDARIES OF INTELLECTUAL PROPERTY: INNOVATION POLICY FOR THE KNOWLEDGE SOCIETY 81 (eds. Rochelle Dreyfuss, Diane L. Zimmerman & Harry First) (2001).

<sup>44</sup> In sponsored standard setting in private industry, “proprietary control can create incentives for firms to manipulate technical standards so as to make their goods compatible with complementary components or substitute systems, as well as to engage in strategic price-setting.” Paul A. David & Shane Greenstein, *The Economics of Compatibility Standards: An Introduction to Recent Research*, 1 ECON. INNOV. NEW TECH. 3, 12–13 (1990).

<sup>45</sup> See Melonie L. McKenzie, *How Should Competing Software Programs Marry? The Antitrust Ramifications of Private Standard-Setting Consortia in the Software Industry*, 52 SYRACUSE L. REV. 139, 144–45 (2002); See Mark A. Lemley, *Antitrust and the Internet Standardization Problem*, 28 CONN. L. REV. 1041 (1996).

<sup>46</sup> See AM. BAR ASS'N, COMM. ON TECHNICAL STANDARDIZATION, SECTION OF SCI. & TECH. L., STANDARDS DEV. PATENT POLICY MANUAL x–xi (Jorge L. Contreras, ed., 2007)

<sup>47</sup> A document/invention “reads on” a patent claim when every element of the claim is present.

<sup>48</sup> Daniel F. Spulber, *Standard Setting Organizations and Standard Essential Patents: Voting and Markets* (July 1, 2017). NORTHW. L. & ECON. RESEARCH PAPER NO. 16-21, <https://ssrn.com/abstract=2865763> (visited March 27, 2023).

<sup>49</sup> Or regional, as in the case of the European Unitary Patent System.

<sup>50</sup> See “Why are patents useful (to society, business, individuals etc.)?” Frequently Asked Questions: Patents, World Intellectual Property Organization [https://www.wipo.int/patents/en/faq\\_patents.html](https://www.wipo.int/patents/en/faq_patents.html) (visited on Oct. 31, 2023). *But see* Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J. of L. & Econ. 265 (1977) (arguing in favor of a “prospect function” of patents).

would even be a problem in the absence of the FRAND commitment,<sup>51</sup> it is widely considered necessary to prevent anticompetitive market effects while still incentivizing innovation.<sup>52</sup>

Just as with standard-setting, antitrust law has been historically suspicious of patent protection because of the monopolistic character of the rights involved.<sup>53</sup> In the fundamental patent bargain, the state grants the inventor certain exclusive rights—essentially protection *against* competition—for a limited time in return for developing and sharing a new and non-obvious invention with the public.<sup>54</sup> While most modern economic theories accept some form of patent protection as a necessary incentive to innovation and disclosure, a balance must be struck lest patent protection stifle innovation instead of promoting it. Both overprotection and underprotection cause harm.

Competition authorities customarily distinguish between concerns involving the grant of an IP right and its exercise through licensing.<sup>55</sup> While patent owners with comprehensive holdings crucial to the manufacture of a particular product could decide to be the sole manufacturer on the market for the duration of patent protection, they will often sell licenses to their competitors for additional revenue. This may also benefit the public by allowing greater access to the technology and potentially lowering prices. Of course, the state grant of a registered patent does not preclude subsequent validity challenges. Rather, legitimate challenges to the validity of registered patents, even by licensees, are deemed to be in the public interest, remediating the harm of granting property protection where it should not have existed in the first place.<sup>56</sup> In other cases, however, refusing to accept and pay for a

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<sup>51</sup> Oscar Borgogno & Giuseppe Colangelo, *Disentangling the FRAND Conundrum*, DEEP-IN RESEARCH ARTICLE, (December 5, 2019) (using empirical research to question whether patent hold-up is likely to be a significant problem).

<sup>52</sup> The European Telecommunications Standards Institute (ETSI) states that its FRAND policy is intended “reduce the risk . . . that investment in the preparation . . . of standards could be wasted as a result of an essential IPR . . . being unavailable” while ensuring that the patent owners are “adequately and fairly rewarded for the use of their IPRs.” ETSI Intellectual Property Rights Policy § 3.1–3.2 (Eur. Telecomms. Standards Inst. 2014), <http://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf> (visited on March 23, 2023).

<sup>53</sup> For example, as seen in the broadly defunct “market power presumption” as set forth in *United States v. Loews, Inc.*, 371 U.S. 38, 45 (1962), holding that market power is “presumed when the tying product is patented or copyrighted.”

<sup>54</sup> See, e.g., John M. Golden, *Patent Privateers: Private Enforcement’s Historical Survivors*, 26 HARV. J.L. & TECH. 545, 550 (2013) (“At heart, patents themselves are devices to harness private law enforcement to advance a public policy of promoting scientific and technological progress.”).

<sup>55</sup> *Competition Policy and Intellectual Property Rights*, Organisation for Co-Operation and Economic Development (1997) 9, <https://www.oecd.org/daf/competition/1920398.pdf>.

<sup>56</sup> See Herbert Hovenkamp, *FRAND and Antitrust*, 105 CORNELL L. REV., 1683, 1733 (2020) (“Refusing to accept and pay for a license on an untested patent is not an abuse of the system. Rather, it is simply recognition of the fact there is a good chance that the patent that is being asserted is either invalid or not infringed.”).

patent license is brazen infringement that courts may recognize through enhanced damages.<sup>57</sup>

When SEPs are involved, the bargaining power between a would-be patent licensor and potential licensee can shift dramatically. By designating an industry-wide standard that includes patented technology, the SSO has, in effect, declared that certain patents are essential for use by every competitor in the market, forcing them to obtain licenses for technology that they are obliged to adopt in order to compete. Thus, the major players in a market engage in private collective action to choose a particular technology, which might incorporate any number of exclusively owned inventions, and mandate its exclusive use throughout that industry. In such a situation, the owner of a patent that is genuinely essential to a standard possesses excess power in that market: Problem A.<sup>58</sup> If the owners of standard essential patents were to refuse to license, or to offer only very high rates to those who are already locked into the standard, this could cause what is known as patent “hold-up.” Such a problem might be multiplied for a product like the smart phone, which incorporates many standards and SEPs belonging to different owners.

To mitigate potential damage to markets and competition, SSOs require their members to agree on intellectual property rights policies (“IPR policies”), allowing them to develop standards while avoiding the anticompetitive harms of hold-up.<sup>59</sup> In compliance with SSO IPR policies, members voluntarily declare the patents they own that are, or may be, essential to a standard, then the patents are placed on a registry with thousands of others.<sup>60</sup> Once declared essential, members of the SSO who own SEPs agree under the IPR policy to license their SEPs on FRAND terms.<sup>61</sup>

For a prospective licensee or future adjudicator of a dispute, information about validity, essentiality, subsequent licensing terms, and other data relevant to the standard would undoubtedly be useful in determining whether a license was given on FRAND terms or not, but it can be difficult to come by.<sup>62</sup> In contrast to patent registration systems,

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<sup>57</sup> *E.g.*, United States Patent Act 1952, 35 U.S.C. § 284 (2011).

<sup>58</sup> *See* Chryssoula Pentheroudakis & Justin A. Baron, *Licensing Terms of Standard Essential Patents: A Comprehensive Analysis of Cases*, JRC SCIENCE FOR POLICY REPORT, Europ. Comm’n 24–25 (2017)

<https://publications.jrc.ec.europa.eu/repository/bitstream/JRC104068/jrc104068%20online.pdf> (visited on March 30, 2023).

<sup>59</sup> *Id.* at 24–27. *See generally* MANVEEN SINGH, STANDARD-SETTING ORGANIZATIONS’ IPR POLICIES: INTELLECTUAL PROPERTY AND COMPETITION ISSUES (2022).

<sup>60</sup> *See* SINGH, *supra* note 59, at 50–54.

<sup>61</sup> *See, e.g.*, Pierre Larouche & Nicolo Zingales, *Injunctive Relief in the EU - Intellectual Property and Competition Law at the Remedies Stage*, in CAMBRIDGE HANDBOOK OF TECHNICAL STANDARDIZATION LAW: ANTITRUST AND PATENTS 419 (Jorge L. Contreras, ed., 2017).

<sup>62</sup> “Ideally, complete information both ex ante and ex post on the existence, validity, essentiality, ownership, scope, enforceability of the relevant patents would improve decision-making, prevent opportunistic behavior and reduce transaction costs in the licensing process.”

which involve rigorous substantive examination procedures before a patent is granted, SSOs do not scrutinize whether the patents declared to be standard essential are valid or essential to the standard. For example, ETSI, the dominant SSO in the mobile phone industry, takes its members' declarations of standard essentiality at face value and "makes no representations and/or warranties" regarding "the accuracy, completeness, validity, applicability or relevance" of the patents in its database.<sup>63</sup> In the United States, ANSI and its accredited SSOs also take no responsibility "for conducting inquiries into the legal validity or scope of those patents that are brought to their attention."<sup>64</sup>

The lack of scrutiny partly reflects a practical choice not to undertake the expensive and time-consuming burden of examination. It would be costly for SSOs to require it, and their members do not actually want it.<sup>65</sup> Yet, the lack of any objective oversight contributes to the complexity of negotiations and creates problems for decisionmakers when disputes arise later.<sup>66</sup>

Although parties have an apparent disincentive to declare their patents standard essential, since this would trigger the FRAND commitment and potentially reduce royalty rates for licensing that patent, over-declaration is common.<sup>67</sup> There are two strong incentives to over-declare SEPs. First, while the system lacks significant negative consequences for declaring an SEP later determined not to be standard essential, harsh consequences can follow for *failure* to declare patents later found to be standard essential.<sup>68</sup> In fact, ETSI goes even further, requiring that members who contribute to technical standards disclose

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*Chapter 1: Standardisation and SEP Licensing: A EU Policy Perspective* in *THE INTERPLAY BETWEEN COMPETITION LAW AND INTELLECTUAL PROPERTY: AN INTERNATIONAL PERSPECTIVE 14* (Gabriella Muscolo & Marina Tavassi, eds., 2019).

<sup>63</sup> *Disclaimer*, ETSI IPR ONLINE DATABASE, <https://ipr.etsi.org/> (visited on March 23, 2023).

<sup>64</sup> *ANSI Essential Requirements: Due process requirements for American National Standards*, 3.1.4

[https://share.ansi.org/Shared%20Documents/Standards%20Activities/American%20National%20Standards/Procedures,%20Guides,%20and%20Forms/2020\\_ANSI\\_Essential\\_Requirements.pdf](https://share.ansi.org/Shared%20Documents/Standards%20Activities/American%20National%20Standards/Procedures,%20Guides,%20and%20Forms/2020_ANSI_Essential_Requirements.pdf) (visited on March 23, 2023).

<sup>65</sup> *Id.* ("The reason why the IP policies of SDOs are less demanding than the full information benchmark is that the provision of reliable information entails costs and requires time."). This article uses the term "SSOs" broadly to include Standard-Development Organizations (SDOs) for the sake of simplicity; for a discussion of the terminological distinction, see NIKOLIC *supra* note 11, at 19–20.

<sup>66</sup> Matthieu Dhenne, *Calculation of Frand Royalties: An Overview of Practices Around the World*, 12 EUR. INTEL. PROP. REV., 754, 765 (2019) (noting "there is little doubt that the drifts that may appear at the stage of calculating the royalties are certainly also the fruit of upstream defects at the level of standardisation bodies") (noting "there is little doubt that the drifts that may appear at the stage of calculating the royalties are certainly also the fruit of upstream defects at the level of standardisation bodies").

<sup>67</sup> NIKOLIC *supra* note 11, at 33–36.

<sup>68</sup> *E.g.*, *Rambus Inc. v. Fed. Trade Comm'n*, 522 F.3d 456, 459 (D.C. Cir. 2008) (where Rambus's alleged failure to disclose SEPs resulted in the finding of a Sherman Act violation).

related patent rights that “may” be essential to the standard under development.<sup>69</sup>

Second, the assertion of essentiality itself can have the effect of increasing market power.<sup>70</sup> Companies boast of the sheer number of SEPs they claim to hold and use the quantity of SEPs in their portfolios to negotiate higher royalty rates. The patents are usually licensed in large bundles and the number of supposedly standard essential patents can be a justification for negotiating a higher FRAND royalty rate. As Mr. Justice Birss (as he was then) observed in *Unwired Planet v Huawei*, “[I]t must also be recognized that the fact that rates are negotiated by counting patents creates a perverse incentive to declare as many patents as possible, making over-declaration worse.”<sup>71</sup> Unsurprisingly, many patents registered as standard essential and subject to the FRAND commitment are neither standard essential, nor valid patents.<sup>72</sup> A 2013 study of 58 litigated SEPs found that “only 1 of every 8 SEPs tested in court has, in fact, been valid and technically essential to practice the standard.”<sup>73</sup>

## B. The Legal Basis for the FRAND Commitment

The FRAND commitment arose as the solution to Problem A (the potential market harms that SEP ownership can create). Yet, the precise legal basis for enforcement of the FRAND commitment lacks consensus. Does the FRAND commitment exist as a private agreement between a group of competitors...that somehow confers benefits on unknown third parties? Is the FRAND commitment a necessary concession to comply with national or regional competition laws? While a full examination of

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<sup>69</sup> *ETSI Guide on Intellectual Property Rights IPR Information Statement and Licensing Declaration* (“In accordance with Clause 4.1 of the ETSI IPR Policy the Declarant and/or its AFFILIATES hereby informs ETSI that it is the Declarant’s and/or its AFFILIATES’ present belief that the IPR(s) disclosed in the attached IPR Information Statement Annex may be or may become ESSENTIAL).

<sup>70</sup> “[P]atent holders may have an incentive to over-declare patents as essential in order to increase their bargaining power in licensing negotiations, or because failing to declare a patent as essential may make it later on more difficult to assert the patent against firms using the patented technology to implement the standard.” Justin Baron & Tim Pohlmann, *Mapping Standards to Patents Using Declarations of Standard Essential Patents*, 27 J. OF ECON. MANAGE. STRAT. 504, 506 (2018).

<sup>71</sup> *Unwired Planet v. Huawei*, [2017] E.W.H.C. 711, ¶ 202 (2017) (Birss, J.).

<sup>72</sup> In one FRAND case, the Tokyo IP High Court cited an analysis by Fairfield Resources International Inc. of the essentiality of 1889 declared SEP families that identified only 529 genuine SEPs. *Samsung Electronics Co. Ltd. v. Apple Japan Godo Kaisha*, Tokyo IP High Court, 10043, 132 (2013) (May 16, 2014). <https://www.ip.courts.go.jp/eng/vc-files/eng/file/25ne10043full.pdf> (visited on March 23, 2023); See also Mark A. Lemley & Timothy Simcoe, *How Essential are Standard-Essential Patents?* 104 CORN. L. REV. 607, 620–28 (2019).

<sup>73</sup> John Jurata & David B. Smith, *Turning the Page: The Next Chapter of Disputes Involving Standard Essential Patents*, (1) CPI ANTITRUST CHRONICLE 5 (2013). Joachim Henkel & Hans Zischka, *How Many Patents Are Truly Valid? Extent, Causes, and Remedies for Latent Patent Invalidity*, 8 EUROP. J. OF L. & ECON. 195 (2019).

the legal theories developed to account for the nature of FRAND licensing is beyond the scope of this article, this section aims to set out the importance of antitrust/competition considerations to FRAND policy debates, even in jurisdictions that view the FRAND commitment as primarily contractual. While antitrust laws exist to facilitate fair competition in the marketplace, the value of standardization alongside innovation in some markets means that the FRAND commitment must incorporate and reconcile two sets of seemingly opposing values: collaboration and competition alongside openness and exclusivity. This tension lies at the heart of the exceptional nature of SEPs in market behavior.

Both standard-setting and patent protection can be seen as desirable exceptions to ordinary competitive market behavior because they offer public benefits. When combined, however, technological standards for patent-protected inventions have the potential for dangerous anticompetitive effects within an industry, contrary to the interests of both the industry as a whole and the public.<sup>74</sup> If a standard is successful, competitors must license the SEPs in order to compete in that market, usually after they have already made specific investments that rely on compliance with that standard.<sup>75</sup> The problem of hold up, sometimes considered a “constructive refusal to deal,” can occur if SEP holders—even when bound by the FRAND commitment—are able to obtain an injunction to stop manufacture, either as a means of increasing the royalty rate over a FRAND rate or as a means of excluding downstream competitors.<sup>76</sup> The owner of an SEP could essentially hold it for ransom by refusing to license or by demanding excessive royalties. In order to prevent SEP owners from doing this, the FRAND commitment has often been interpreted to include limitations on the ability of the SEP owner to obtain injunctive relief against alleged infringers.<sup>77</sup>

Some courts, particularly those in the United Kingdom and the United States, have found that SEP declarations create an obligation, undertaken through contract, with potential licensees as third-party beneficiaries entitled to resulting rights.<sup>78</sup> Other legal systems situate the basis of the rights in estoppel; by means of voluntary commitment the SEP, the owner is estopped from seeking injunctive relief for an alleged infringement before offering a license on FRAND terms to the alleged

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<sup>74</sup> Tim W. Dornis, *Standard-Essential Patents and FRAND Licensing—At the Crossroads of Economic Theory and Legal Practice*, 11(10) J. E.U. COMP. L. & PRAC. 582–83 (2020).

<sup>75</sup> Mike Walker, *The Use of Economic Evidence in Competition Law Arbitrations*, in EU AND US ANTITRUST ARBITRATION: A HANDBOOK FOR PRACTITIONERS 7-099 (Blanke & Landolt, eds., 2011).

<sup>76</sup> A. Nicita & G. Corda, *The “New Madison” v. the “Old Europe” Doctrine: On Re-balancing Competition Policy Towards SEPs in THE INTERPLAY BETWEEN COMPETITION LAW AND INTELLECTUAL PROPERTY: AN INTERNATIONAL PERSPECTIVE* 53, 54 (Gabriella Muscolo & Marina Tavassi, eds., 2019).

<sup>77</sup> *E.g.*, *Huawei Tech. Co. v. ZTE* Case No. C-170/13 (2015) (CJEU).

<sup>78</sup> *Microsoft Corp. v. Motorola, Inc.*, 864 F. Supp. 2d 1023, 1031-33 (W.D. Wash. 2012).



infringer.<sup>79</sup> The anticompetitive behavior that FRAND licensing is intended to prevent strongly suggests that antitrust law also has a role to play, even if it may be less central to judicial decision-making in the United States and the United Kingdom, where courts have asserted that “it is not necessary to rely on competition law to enforce the FRAND undertaking.”<sup>80</sup>

Many civil law jurisdictions situate the FRAND commitment more centrally in the realm of antitrust and competition enforcement. In China, Taiwan, Japan, and South Korea, for example, FRAND is viewed as an antitrust issue.<sup>81</sup> In Europe, the competition considerations also dominate. There, the primary aim of the FRAND declaration is to ensure compliance with Articles 101 (collusive anticompetitive market behavior) and 102 (unilateral anticompetitive market behavior) of the Treaty of the Functioning of the European Union (TFEU).<sup>82</sup> In *Huawei v ZTE*, the Court of Justice of the European Union (CJEU) set down guidelines for determining whether an SEP owner could obtain injunctive relief against an infringer without abusing its dominant position.<sup>83</sup> Under the CJEU’s judgment, implementers could use FRAND defensively in response to SEP owners seeking an injunction.<sup>84</sup> The CJEU set out directions for how negotiations of SEP licensing should proceed, but also instructed parties unable to agree on the details of FRAND terms to seek an independent third-party determination of the royalty rate—thus explicitly pointing in the direction of arbitration as a route to resolving these disputes in compliance with European competition law.<sup>85</sup>

In the United States, the FRAND commitment is viewed as a contract with the SSO where implementers, if not members of the SSO themselves, are third-party beneficiaries under the contract with their

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<sup>79</sup> Jorge L. Contreras, *A Market Reliance Theory for FRAND Commitments and Other Patent Pledges*, 2015 UTAH L. REV. 479 (2015); Mark A. Lemley, *Intellectual Property Rights and Standard Setting Organizations*, 90 CALIF. L. REV. 1889 (2002).

<sup>80</sup> *Unwired Planet International Ltd. v. Huawei Technologies Co.*, [2015] E.W.H.C. 2097 ¶¶ 806.2 (2015).

<sup>81</sup> Kung-Chung Liu, *As a Matter of Standard for Asia and Beyond?* in SEPS, SSOs AND FRAND: ASIAN AND GLOBAL PERSPECTIVES ON FOSTERING INNOVATION IN INTERCONNECTIVITY 1 [3.1.2], [5] (2019).

<sup>82</sup> European Commission Decision, 29 April 2014 - *Samsung v. Apple* (3G); European Commission Decision, 29 April 2014 - *Motorola v. Apple* (3G).

<sup>83</sup> *Supra* note 70. A patent owner, even from a dominant position, exercising its rights is not abuse per se. See C-170/13 ¶46, EU:C:1988:477, ¶ 8; *RTE and ITP v Commission*, C-241/91 P and C-242/91 P, EU:C:1995:98, paragraph 49; and *IMS Health*, C-418/01, EU:C:2004:257, ¶ 34. However, refusal by the SEP proprietor to grant a license on FRAND terms could constitute abuse within the meaning of Article 102 of the TFEU.

<sup>84</sup> See C-170/13, ¶¶ 53–54.

<sup>85</sup> *Id.* at ¶ 68. See also Allison Jones, *Standard-Essential Patents: FRAND Commitments, Injunctions and the Smartphone Wars*, 10(1) EUR. COMPETITION J. 1 (2014) [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2394495](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2394495) (visited on October 10, 2024).

own cause of action.<sup>86</sup> Antitrust is not irrelevant, however.<sup>87</sup> For example, early in the days of FRAND litigation, the Court of Appeals for the Third Circuit held that:

(1) in a consensus-oriented private standard-setting environment, (2) a patent holder's intentionally false promise to license essential proprietary technology on FRAND terms, (3) coupled with an SDO's reliance on that promise when including the technology in a standard, and (4) the patent holder's subsequent breach of that promise, is actionable anticompetitive conduct.<sup>88</sup>

Moreover, in actions brought before the Federal Trade Commission (FTC), patent holders could face antitrust liability for seeking to enforce IPRs despite misrepresenting to an SDO that they did not hold IPRs in essential technologies before the standard was adopted.<sup>89</sup> According to the FTC, “[p]atent holders that seek injunctive relief against willing licensees of their FRAND-encumbered SEPs should understand that in appropriate cases the Commission can and will challenge this conduct as an unfair method of competition under Section 5 of the FTC Act.”<sup>90</sup>

While the FTC has raised concerns about the role of FRAND in antitrust enforcement, the controversial case of *Qualcomm v. Federal Trade Commission* demonstrates the agency's limited reach when dealing with what it considered to be anticompetitive market behavior in SEP licensing.<sup>91</sup> In *Qualcomm*, the FTC's attempt to hold Qualcomm accountable for subverting the FRAND commitment through downstream licensing was thwarted, in part, by intervention from the Department of Justice.<sup>92</sup> Regardless of the outcome, *Qualcomm* demonstrates how SEP owners might choose to license to end-manufacturers with more at stake rather than those higher up in the chain

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<sup>86</sup> See *Microsoft Corp. v. Motorola, Inc.*, 864 F. Supp. 2d 1023, 1030-33 (W.D. Wash. 2012); *Microsoft Corp. v. Motorola, Inc.*, 854 F. Supp. 2d 993, 999-1001 (W.D. Wash. 2012); *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 884 (9th Cir. 2012) (“[T]he district court’s conclusions that Motorola’s RAND declarations to the ITU created a contract enforceable by Microsoft as a third-party beneficiary (which Motorola concedes), and that this contract governs in some way what actions Motorola may take to enforce its ITU standard-essential patents (including the patents at issue in the German suit), were not legally erroneous.”).

<sup>87</sup> *Jurata & Smith*, *supra* note 73 (concluding that courts and government bodies are right to be concerned about the potential anticompetitive effects caused by SEPs).

<sup>88</sup> *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 314 (2007).

<sup>89</sup> *In the Matter of Dell Computer Corp.*, 121 F.T.C. 616, 618 (May 20, 1996). *In the Matter of Union Oil Co. of Cal.*, No. 9305 (F.T.C. July 27, 2005). *In the Matter of Rambus, Inc.*, No. 9302 (F.T.C. 2006).

<sup>90</sup> See *In the Matter of Robert Bosch GmbH*, Statement of the Fed. Trade Commission, No. 121-0081 (2012).

<http://www.ftc.gov/os/caselist/1210081/121126boschcommissionstatement.pdf> (visited March 31, 2023).

<sup>91</sup> *Qualcomm, Inc. v. FTC*, 969 F.3d 974, 2020 WL 4591476 (9th Cir. Aug. 11, 2020) (finding that Qualcomm’s “no license-no chip” policy was not a violation of the Sherman Act).

<sup>92</sup> See *United States’ Statement of Interest Concerning Qualcomm’s Motion for Partial Stay of Injunction Pending Appeal*, *Qualcomm, Inc.*, No. 19-16122 (2020). See also Hovenkamp, *supra* note 56, at 1685.

because they can get higher rates from them, and the case is cited as some evidence supporting the existence of hold-up.<sup>93</sup>

While there is undeniably a connection between FRAND enforcement and antitrust compliance, it would go too far to suggest that violating the FRAND commitment necessarily infringes antitrust laws or vice versa.<sup>94</sup> Yet, the tendency of competition authorities to over-rely on SEP IPR policies and FRAND as a proxy for antitrust enforcement in the United States and elsewhere has drawn criticism from academic observers, many of whom call for more aggressive antitrust intervention around the world.<sup>95</sup> There is a strong case that US antitrust policy pertaining to SEPs has leaned heavily on the FRAND commitment. Melamed and Shapiro have observed that “[f]or the past twenty years, antitrust enforcement related to standard setting has focused largely on the interpretation and implementation of the commitments made by patent holders as part of the standard-setting process to license their Standard-Essential Patents (SEPs) on Fair, Reasonable and Non-Discriminatory (FRAND) terms.”<sup>96</sup> In their view, patent and contract law play important roles, but they cannot be relied upon to prevent anticompetitive harms; rather, US antitrust law should do more to ensure that SEP owners do not abuse their monopoly power.<sup>97</sup> Tsilakis also argues that the law of FRAND licensing should be recentered with a focus on competition, positing that “viewing FRAND licensing terms as an obligation stemming directly from competition law, regardless of a SEP-holder’s previous contractual or other commitments, would infuse the standards-setting process with enhanced predictability by deterring opportunistic assertion and litigation of SEPs.”<sup>98</sup>

At a general level, the argument that courts and governments around the world are over-reliant on SSOs and private agreements to address a problem that falls clearly within the concerns of antitrust law is a persuasive one. In cases where the courts view the FRAND commitment as essentially contractual, it is particularly illogical to view compliance

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<sup>93</sup> Dornis, *supra* note 74, at 575, 588.

<sup>94</sup> Some courts disagree with this point on the basis that FRAND commitments could potentially be *more* stringent than national competition laws; for example, in *Unwired Planet*, *supra* note 80, at ¶806.3.

<sup>95</sup> Haris Tsilikas, *Antitrust Enforcement and Standard Essential Patents: Moving Beyond the FRAND Commitment*, 63-64 (2017). (“The breach of a voluntary commitment should be taken into account as an element of anticompetitive *intent*, which helpful as it might be for proving abuse of dominance should not be a necessary condition for such a finding.”); A. Douglas Melamed & Carl Shapiro, *How Antitrust Law can Make FRAND Commitments More Effective*, 127 YALE L. J. 2110 (2018); Hovenkamp, *supra* note 56, at 1706 (suggesting that the FRAND commitment creates a rebuttable presumption of sufficient market power in determining antitrust liability). Liu, *supra* note 81, at [4.4.2] (“The need for intervention by antitrust law is evident.”).

<sup>96</sup> Melamed & Shapiro, *supra* note 95, at 2111. They also highlight the potential liability under Section 1 of the Sherman Act of the SSOs themselves if their IPR policies fail to regulate the anticompetitive behaviors of their members. *Id.* at 2128–37.

<sup>97</sup> *Id.* at 2122–28.

<sup>98</sup> Tsilakis, *supra* note 95, at 66.

with an individual SSO IPR policy as decisive evidence of compliance with antitrust law.<sup>99</sup> Given valid concerns about whether public law principles like antitrust are currently playing a sufficiently active role in SEP-licensing, there are obvious dangers in shifting FRAND disputes completely outside of the public sphere. FRAND arbitration would not just privatize issues of patent and contract, but also oversight of SEP-related anticompetitive activities—placing them largely beyond the reach of national antitrust/competition authorities, as set forth below.<sup>100</sup>

### C. Calculating FRAND Rates

In a dispute over whether an SEP owner is offering a FRAND rate, the parties must present the decisionmaker with the means and evidence necessary to calculate that rate. Even where the calculation methods are concerned, there is no clear consensus as to the best approach; several methods have emerged, which may also be combined.<sup>101</sup> This section discusses the fundamental principles behind assessing the FRAND rate, focusing on the frequently used top-down and bottom-up/comparable license approaches to calculation. Even an abridged review of these methods demonstrates the critical importance of access to information regarding substantive patent data and comparable license agreements to use in calculations. In reality, information imbalances are rife and strategically exploited.<sup>102</sup>

Beyond the interests of the parties engaged in bilateral negotiations, there is a public interest in calculating FRAND rates accurately. Proper valuation helps to maintain functional markets, keep prices down, allow access to new technology, and stimulate innovation.<sup>103</sup> The aim of the FRAND commitment is to maintain a balance of competition in the market, artificially reducing the market power resulting from the combined effects of the standardization process and intellectual property protection; in theory, licensing at FRAND rates should allow implementers to adopt the standard and access the market efficiently without disrupting incentives for further industry innovation.<sup>104</sup>

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<sup>99</sup> As Hovenkamp observes with regard to the US law: “The question of an antitrust violation does not depend on whether the conduct breached a particular agreement but rather on whether it caused competitive harm. This can happen because the conduct restrained trade under section 1 of the Sherman Act, was unreasonably exclusionary under section 2 of the Sherman Act, or amounted to an anticompetitive condition or understanding as defined by section 3 of the Clayton Act.” Hovenkamp, *supra* note 56, at 1686.

<sup>100</sup> See *infra* note 225 *et seq.*

<sup>101</sup> “Several methods of calculation have been developed in the case law around the world. Often combined, these methods are essentially the following: (1) the hypothetical negotiations approach; (2) the comparable approach; (3) the top-down approach; (4) the incremental value approach; and (5) the bottom-up approach” Dhenne, *supra* note 66, at 755.

<sup>102</sup> See Barbara Lauriat, “Pay No Attention to the Comparable Behind the Curtain!” *The Harms of Opacity in Standard Essential Patent Licensing*, 38 BERK. J. OF L. & TECH. 463, 468 (2023).

<sup>103</sup> Dornis, *supra* note 74, at 582–83.

<sup>104</sup> Nicita & Corda, *supra* note 76, at 53.

FRAND rates are often described as the result of hypothetical bilateral negotiations between the licensor and the licensee that assumes the additional market power gained by inclusion if the standard were taken off the table.<sup>105</sup> Nevertheless, there is some debate as to whether the calculation ought to incorporate some of the value arising from standardization itself.<sup>106</sup> Reasonableness in the FRAND rate does not mean that the SEP owner must license at cost, but it should facilitate access by ensuring that the price does not reflect an undue advantage arising from the participants in the standard being locked in to the standardized technology.<sup>107</sup> Accordingly, one of the key assumptions used to assess the fairness of FRAND rates is that the fictional arms-length negotiation between the SEP owner and the implementer occurred when the technology was subject to normal competition, before the patent was deemed essential.<sup>108</sup> These calculations, which might involve thousands of patents and require access to immense quantities of data, could be costly and impracticable to complete ideally and comprehensively so the principle of non-discrimination also plays an important role in protecting against hold-up.<sup>109</sup>

It is generally, if not universally, accepted that FRAND does not require an SEP owner to license at the same rate to all comers.<sup>110</sup> FRAND is relative, and non-discrimination does not mean that the rates must be identical in every license to every company because the commercial context of an agreement may vary in ways that are unrelated to the influence of a standard. For example, because the added value of a standard used in inexpensive digital thermometers could be much lower than the added value of the same standard when used in automobiles and the manufacturers are not in competition with each

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<sup>105</sup> *Interim Report of the UMTS IPR Working Group*, EUR. TELECOMM STANDARDS INS. (Sept. 2008), [<https://perma.cc/C799-M5RZ>] (“The value of the ETSI IPR Policy as the sole vehicle for the handling of IPR issues relating to standards lies in . . . the fact that the complex commercial issues of the details of licenses, and of compensation therefore, are placed where they belong, at the center of bilateral negotiations between licensor and licensee.”).

<sup>106</sup> *E.g.*, J. Gregory Sidak, *The Value of Standard vs. the Value of Standardization*, 68 BAYLOR L. REV. 59 (2016) (proposing a method of using publicly available data to ascertain the incremental value to consumers of the selected standard versus the next-best alternative standard for consideration in FRAND rate calculations).

<sup>107</sup> CARL SHAPIRO & HAL R. VARIAN, *INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY* 241 (1999).

<sup>108</sup> Walker, *supra* note 75, at 226–27 (“The idea behind ‘fair and reasonable’ in these circumstances is that the price should be the price that would have prevailed *ex ante*, when the IP provider faced competition, rather than *ex post*, when it does not face competition.”) *See also* Stanley Besen, *Why Standards for Royalties in SEP cases Should Not Be Set By Courts*, 15 CHI.-KENT J. OF INTELL. PROP. 19, 27–34 (2006).

<sup>109</sup> *See generally* Carlton & Shampine, *supra* note 12.

<sup>110</sup> *Id.* at 548–50. *See also* Mark Patterson, *Confidentiality in Patent Dispute Resolution*, 93 WASH. L. REV. 827, 831–32 (2018); Yoonhee Kim, *Lifting Confidentiality of FRAND Royalties in SEP Arbitration*, 16 COLUM. SCI. & TECH. L. REV. 1 (2014) (acknowledging that while views on non-discrimination differ, “different license terms are at least problematic”).

other, the applicable FRAND rates would be different.<sup>111</sup> Thus, a royalty based on the smallest component, where all or substantially all of the inventive features of the SEP are practiced, is critical to ensuring that SEP valuation does not capture the value of contributions and inventions not covered by the SEP. Because non-discrimination in FRAND terms is limited to licensees who are similarly situated, the commercial context of a license agreement, including factors such as cross-licensing, the nature of the licensee's market, or the existence of long-term business relationship, may legitimately impact what rate is deemed FRAND for a given contract. Cross-licensing is common in the telecommunications industry, which is dominated by a relatively small number of global players, many of whom own SEPs.<sup>112</sup>

Given the number of SEPs owned by different owners, implementers, particularly pure implementers who own no SEPs, have raised concerns about having to overpay for the implementation of the standard as a whole as the result of being forced to negotiate licenses from multiple SEP owners, some of whom may engage in degrees of hold-up.<sup>113</sup> Thus, to avoid the harm of overpaying for a standard, known as "royalty-stacking," some proposals suggest a FRAND rate should reflect the value of the SEPs at issue relative to the aggregate value of the standard as a whole.<sup>114</sup>

The top-down approach to calculating FRAND rates provides a way of avoiding the harms of royalty-stacking by identifying the overall value of the technology and assessing the total royalties that should be due to all SEP owners for a given standard, and then dividing that amount among the licensees.<sup>115</sup> Concerns about maintaining the balance between continuing to incentivize SEP owners while avoiding royalty-stacking were reflected in the European Commission's 2017 Communication on SEPs, which can be broadly said to encourage a top-down approach.<sup>116</sup> The Commission's recommended valuation principles for determining FRAND rates included a "clear relationship to the economic value of the patented technology" and consideration of

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<sup>111</sup> See generally Eli Greenbaum, *Nondiscrimination in 5G Standards*, 94 NOTRE DAME L. REV. ONLINE 55 (2018) (discussing how 5G technology will complicate determinations of non-discrimination in SEP licensing because of the wide range of products and uses for which 5G standards will be applied).

<sup>112</sup> Pentheroudakis & Baron, *supra* note 58, at 18.

<sup>113</sup> NIKOLIC *supra* note 11, at 42,44.

<sup>114</sup> *Id.* at 45.

<sup>115</sup> Dhenne observes that "the collection of all royalty rates, which precedes their addition, can be particularly tricky. Most often the rates will not be disclosed. The judges do not find then obliged to rely on public communications of the patentee, if they exist. Nothing will prevent the holder from invoking a trade secret in order to maintain the confidentiality of agreements concluded with third parties." Dhenne, *supra* note 66, at 759.

<sup>116</sup> European Commission, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL AND THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, SETTING OUT THE EU APPROACH TO STANDARD ESSENTIAL PATENTS, (Brussels 2017) [2.1] <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52017DC0712&rid=2> (visited on March 23, 2023).

“the present value added of the patented technology...irrespective of the market success of the product... unrelated to the patented technology,” as well as accounting for an SEP’s value relative to the value of the standard as a whole while continuing to incentivize SEP owners to put forward their “best available technology” in standard development.<sup>117</sup> The Commission highlighted the relative nature of FRAND calculations when it stated the following:

to avoid royalty stacking, in defining a FRAND value, an individual SEP cannot be considered in isolation. Parties need to take into account a reasonable aggregate rate for the standard, assessing the overall added value of the technology. The implementation of measures on SEP transparency can already support this objective.<sup>118</sup>

The top-down approach has merits. If done accurately, it avoids the problems of including *ex post* value and royalty stacking. However, the amount of information and technical calculations required pose significant practical challenges. Effectively, decisionmakers must determine the combined value of the portfolios of all the other SEP holders as well as the relative value of the SEP owner’s portfolio.

Another common method for calculating FRAND rates in the United States involves reviewing comparable SEP license agreements as proxies. There is a growing consensus across jurisdictions that comparable licensing agreements “provide for the safest and most reliable evidence on how markets price standardised technologies and SEPs.”<sup>119</sup> The FRAND rate can be determined by comparing proposed royalty rates with comparable license rates while accounting for contextual differences and relevant commercial factors.

However, because comparable licenses may have been unduly influenced by patent hold-up themselves or the bargaining skill of negotiators, they may not accurately reflect the FRAND rate.<sup>120</sup> Accordingly, the fact-finder should attempt to identify the price that the patentee supposedly could have charged at the point in time prior to when implementers invested in the standardized technology: the *ex ante* price.<sup>121</sup> This technique is meant to separate the value of the technology from the additional value and market power conveyed by the fact that it is essential to the standard.<sup>122</sup> This does not, however, mean that a

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<sup>117</sup> *Id.*

<sup>118</sup> *Id.*

<sup>119</sup> Haris Tsilakis, *Emerging Patterns in the Judicial Determination of FRAND Rates: Comparable Agreements and the Top-Down Approach for FRAND Royalties Determination*, 69(9) G.R.U.R. INT’L 885, 886 (2020).

<sup>120</sup> Dornis, *supra* note 74, at 583.

<sup>121</sup> Jonathan D. Putnam, *Economic Determinations in ‘FRAND Rate’-setting: A Guide for the Perplexed*, 41 FORDHAM INT’L L.J. 953, 1008 (2018) (“[I]t is at that point that the patentee would have had to ‘bid’ against competing alternatives for selection into the standard, thereby ‘locking in’ implementers to the investment.”).

<sup>122</sup> “[I]t is also imperative to keep in mind that a FRAND rate is supposed ultimately to facilitate access to patents, because they are essential to a standard. This implies, on the one hand, emphasising the activity of the patentee (whether or not it is an operating entity) and, on

licensor must be able to afford the license, or that the SEP owner must operate at cost.<sup>123</sup>

Courts in the United States have recognized the probative force of comparable licenses in determining royalty rates; comparability appears in the first two of the fifteen *Georgia-Pacific* factors for determining reasonable patent royalties when calculating damages.<sup>124</sup> Some common features of FRAND disputes, however, such as the large number of SEPs in a standard, the non-exclusive nature of an SEP license, the principle of non-discrimination, and the *ex ante* nature of the SEP license, mean that not all of the *Georgia-Pacific* factors are equally valuable when calculating FRAND rates.<sup>125</sup> For example, factors such as the commercial success and established profitability of the products made under the patent should not be included in the calculation because they would be definitionally *ex post* and could be partly attributable to standardization.<sup>126</sup>

While each method has its flaws, there is the option of using more than one method of calculation, as in *Unwired Planet v. Huawei*, where Lord Justice Birss relied on comparable licenses to calculate the FRAND rate while also using a top-down approach to check the accuracy of that calculation.<sup>127</sup> The bottom line in FRAND calculation is identifying a rate that will not allow the SEP owner to abuse its position or result in an implementer paying SEP owners collectively more than their

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the other hand, taking into account the quality of the patents in question and their contribution to the standard as well as to the final product.” Dhenne, *supra* note 66 at 765.

<sup>123</sup> Walker, *supra* note 75, at ¶7-099.

<sup>124</sup> In summary: 1) Royalties patentee receives for licensing the patent in suit; 2) Rates licensee pays for use of other comparable to the patent in suit; 3) Nature and scope of license in terms of exclusivity and territory / customer restrictions; 4) Licensor’s established policy and marketing program to maintain patent monopoly by not licensing others to use the invention; 5) Commercial relationship between licensor and licensee, such as whether they are competitors or inventor and promoter; 6) 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; 7) Duration of patent and term of license; 8) Established profitability of the products made under the patent, its commercial success and its current popularity; 9) Utility and advantages of patent property over old modes and devices; 10) The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and benefits to users; 11) The extent to which the infringer has made use of the invention and the value of such use; 12) The portion of profit or selling price customarily allowed for the use of the invention; 13) The portion of realizable profit attributable to the invention as distinguished from non-patented elements, significant features / improvements added by the infringer, the manufacturing process or business risks; 14) Opinion testimony of qualified experts; 15) Outcome from hypothetical arm’s length negotiation at the time of infringement began. *See Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1119-20 (S.D.N.Y. 1970).

<sup>125</sup> *Microsoft Corp. v. Motorola*, C10-1823JLR, 2013 WL 2111217 31-32 (W.D. Wash. Apr. 25, 2013).

<sup>126</sup> *See, e.g., Microsoft Corp. v. Motorola* at 36-41 (modifying the *Georgia-Pacific* factors); *Ericsson, Inc., et al. v. D-Link Systems, Inc.*, 773 F.3d 1201 (Fed. Cir. 2014).

<sup>127</sup> *Unwired Planet v. Huawei* (2017), *supra* note 71, at ¶146.



technology is worth.<sup>128</sup>

For any method of calculating FRAND rates, it is apparent that access to relevant commercial information—from the SEP owner, SSO, and potentially third parties—is useful and important for accurate calculations when attempting to reach a FRAND rate or even a range of rates. Unfortunately, one of the difficulties faced by a decisionmaker in a FRAND case, even in a national court with inherent power to compel discovery, is access to relevant commercial data.<sup>129</sup> Contreras identifies three fundamental deficiencies that plague both public and private FRAND determinations, namely the “lack of *transparency*, lack of *consistency*, and lack of *comprehensiveness*” inherent in the existing system.<sup>130</sup>

Parties in FRAND disputes often want to keep relevant information about third-party comparable licenses confidential, whether for purposes of litigation strategy, concern for commercial interests, binding non-disclosure/confidentiality agreements or some combination of the above.<sup>131</sup> SSO IPR policies that fail to incentivize disclosure or information-sharing beyond the initial SEP declaration do little to ameliorate the situation. The barriers erected to obscure relevant data frustrates economists already struggling with the complexity of SEP valuation and FRAND rate calculation methodologies.<sup>132</sup> Given the difficulties of *ex ante* calculations and the challenges of assembling the data, some argue that a better system would establish the royalty rates prior to the standard being set. For example, Besen suggests that neither courts nor arbitrators should be calculating FRAND royalty rates *ex post* because they simply do “not have the information... needed to determine the royalty rates that would have been set prior to adoption of a standard including a patented technology, as called for by the consensus view.”<sup>133</sup>

The challenge of obtaining highly relevant commercial information for FRAND negotiations or calculations, both in public and private dispute resolution, presents one of the strange paradoxes of the SEP world. Under normal circumstances, it would be entirely inappropriate—and possibly a violation of antitrust laws—for competitors to share information about their various commercial licensing arrangements. In the case of setting FRAND rates, however, where the standard-setting process is already cooperative and the “non-

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<sup>128</sup> “Not all of these methodologies of calculation are mutually exclusive and may even be complementary but at the end of the day they should all be able to exclude abuses like patent hold-up and royalty stacking.” Dhenne, *supra* note 66, at 760.

<sup>129</sup> See generally, Haris Tsilikas & Spyros Makris, *Confidentiality and Transparency in FRAND Litigation in the EU*, 15 J. I.P.L. & PRAC. 173 (2020).

<sup>130</sup> Jorge Contreras, *Global Rate-Setting: A Solution for Standards-Essential Patents*, 94 WASH. L. REV. 701, 706 (2019) (emphasis in original).

<sup>131</sup> See generally, Lauriat, *supra* note 102.

<sup>132</sup> Dhenne, *supra* note 66, at 764–65 (noting “there is little doubt that the drifts that may appear at the stage of calculating the royalties are certainly also the fruit of upstream defects at the level of standardisation bodies”).

<sup>133</sup> Besen, *supra* note 108, at 42–43.

discriminatory” aspect of the determination is inherently comparative, information about competitors’ licensing arrangements is often necessary.<sup>134</sup> In fact, legal and regulatory authorities have repeatedly called for SSOs to require greater transparency from their members in terms of both (a) the validity and essentiality of their declared SEPs, and (b) their *ex ante* licensing agreements.<sup>135</sup> The recent proposal from the European Union for a Regulation on Standard Essential Patents acknowledges these deficiencies, supporting measures aimed at promoting better checks on essentiality and greater transparency in licensing,<sup>136</sup> but has been subject to criticism, particularly from SEP owners who view the proposed measures as too costly and radically disruptive to the status quo.<sup>137</sup>

For the most part, while SSOs have considered mandating member disclosure of *ex ante* licensing, they have largely failed to adopt any such disclosure requirements.<sup>138</sup> This is unsurprising given that implementers who are not also SEP owners are less likely to be members of SSOs or to be involved in the standard setting process. Consequently, since pure implementers are seldom involved in the process, their greater interest in disclosure fails to be incorporated into SSO policies. As Ohana and Biddle have observed, “[t]he relative prominence of patent holders compared to implementers in standards development processes may explain why efforts to encourage disclosure of future licensing terms (in groups that permit FRAND licensing) have been less broadly adopted than the development of rules to encourage the disclosure of patents.”<sup>139</sup> Furthermore, SEP owners collectively, as well as individually, have strong incentives to keep information about licensing as opaque as possible in their dealings with pure implementers.

In summary, while methods of calculation may differ, the relative nature of FRAND rates means that comparable license terms, the context

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<sup>134</sup> “In order to ascertain whether the royalties that the SEP owners are charging are fair and free of discrimination, comparison must be made between the royalties they have charged for the same SEPs, even between royalties they have charged for different SEPs.” Liu, *supra* note 81, at 16.

<sup>135</sup> NIKOLIC *supra* note 11, at 232. See also Lemley, *supra* note 79, at 1965; Dornis, *supra* note 74, at 591 (“Transparency and information are thus of utmost importance. This will not be achieved through court proceedings alone—it must occur in the sphere of SSOs as well.”).

<sup>136</sup> *Proposal for a regulation of the European Parliament and of the Council on standard essential patents and amending Regulation (EU) 2017/1001*, COM (2023) 232 (27 April 2023) [https://single-market-economy.ec.europa.eu/publications/com2023232-proposal-regulation-standard-essential-patents\\_en](https://single-market-economy.ec.europa.eu/publications/com2023232-proposal-regulation-standard-essential-patents_en).

<sup>137</sup> E.g., *IP Europe Regrets European Commission Patents Proposal, Calls on Parliament and Council to Support European IP Leadership* (April 27, 2023) <https://ipeurope.org/press-release/ip-europe-regrets-european-commission-patents-proposal-calls-on-parliament-and-council-to-support-european-ip-leadership/> (describing the proposal as “harmful and unbalanced”).

<sup>138</sup> Gil Ohana & C. Bradford Biddle, *The Disclosure of Patents and Licensing Terms in STANDARDS DEVELOPMENT IN PATENTS* 254 (ed. Jorge L. Contreras) (2018) (noting that while there has been much discussion in SDOs about ways to encourage disclosure of licensing terms, “the number of SDOs that have developed *ex ante* disclosure rules is small”).

<sup>139</sup> *Id.* at 256.

of past agreements, and information about the other SEPs comprising the standard are highly relevant data in most cases. Transparency and lack of access to data already pose a challenge to calculating FRAND rates. While national courts have the power to require parties to produce relevant documents subject to mechanisms designed to preserve confidentiality, arbitral tribunals lack the same power of compulsion.<sup>140</sup> Thus, when courts calculate FRAND rates they may not know the terms of past awards relevant to the SEPs, and, even when they do, they still need the context and reasoning of the award in order to use the information effectively. Parties in a FRAND dispute, particularly SEP owners who have strong incentives to avoid revealing commercial information from past licensing agreements, may welcome the privacy and possible confidentiality offered by arbitration.<sup>141</sup> However, given the incentives for SEP owners to maintain secrecy regarding commercial information, the opportunity to maintain high levels of confidentiality in the arbitration process means that it would be likely to exacerbate existing transparency problems. Transparency will decrease and yield increasingly less accurate calculations of FRAND rates and obscure potential antitrust violations.<sup>142</sup>

## II. PROBLEM B: FRAND COMMITMENTS CREATE NEW TRANSNATIONAL JURISDICTIONAL CHALLENGES

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<sup>140</sup> While parties can contractually agree on the scope of document production and the powers of the tribunal, the tribunal does not usually have the authority to coerce/enforce disclosure or order third party disclosure without seeking the assistance of national courts. In addition, international commercial arbitration practice lacks the same discovery norms as common law litigation. “Indeed, only two decades ago, a well-known civil law practitioner said ‘[i]t is perhaps an exaggeration, but not a big one, to state categorically that discovery does not exist in international commercial arbitration, with the possible exception of instances where both parties are represented by common lawyers.’” GARY BORN, *INTERNATIONAL COMMERCIAL ARBITRATION*, (3<sup>rd</sup> ed. 2021) quoting Briner, *Domestic Arbitration: Practice in Continental Europe and Its Lessons for Arbitration in England*, 13 *ARB. INT’L* 155, 160–61 (1997). See also NIGEL BLACKABY ET AL., *REDFERN AND HUNTER ON INTERNATIONAL ARBITRATION* § 6.92 (7<sup>th</sup> Ed. 2023) (describing differing expectations of discovery/disclosure between U.S. and European lawyers).

<sup>141</sup> “Typically, arbitration and arbitral awards are confidential, but litigation and court judgments are not. Patent owners may have an interest in confidentiality: - If it is determined that a patent is invalid or has not been infringed, then confidentiality may assist the owner to obtain a different result in a different case; - If decisions on the pricing of licences are confidential, that may assist the owner seek different pricing for different licensees. Prospective licensees may also have an interest in keeping decisions confidential, since that may assist in preserving bargaining power and negotiating positions in other cases.” *SEP/FRAND Disputes: Arbitration or Litigation?*, IP Alert, Akin Gump Strauss Hauer & Feld LLP 1, 3 (February 7, 2022) <https://www.akingump.com/a/web/vEaNWWctXqw2qy5dgR6VvG/3BAUXd/sep-frand-disputes-litigation-and-arbitration-draft-december-2021-4878-2544-9733-8-003-1.pdf> (visited on October 10, 2024).

<sup>142</sup> “Antitrust liability is potentially difficult to prove because it is difficult to show collusion towards an unlawful objective when both sides of the dispute tend to have their own, different incentives for confidentiality.” Patterson, *supra* note 110, at 879–80.

This section sets out the new problems that have arisen as the law attempts to hold SEP owners to their FRAND commitments. New legal battlefields have highlighted the significant challenge of resolving FRAND disputes when the technological standards and licensing agreements have international reach but the patents and applicable competition laws are strictly territorial. Many SEP licensing agreements in the telecommunications industry necessarily extend worldwide, and it is impractical—and likely to yield conflicting results—to bring actions in multiple jurisdictions to determine FRAND rates for national patent portfolios. Can a judge sitting in a national court require a potential licensee to accept a global license and set a global FRAND rate? Controversially, courts in the United Kingdom, the United States,<sup>143</sup> and China have answered yes.

This section lays out Problem B—the jurisdictional problems and inefficiencies of national courts deciding global FRAND issues—and why arbitration is increasingly held up as the best solution.

### A. Patent Hold-Out

As discussed above, the FRAND commitment has the effect of limiting the ability of SEP owners to obtain injunctive relief against infringers.<sup>144</sup> By contrast, when faced with a potential infringer, a patent owner would normally have recourse to preliminary injunctive relief to stop the alleged infringement while legal proceedings were underway. SEP owners reasonably opine that this shift in bargaining power has gone too far, allowing implementers to manufacture infringing products with impunity while incentivizing delaying negotiations.<sup>145</sup> If the implementers negotiate and show willingness to pay a FRAND rate, they have little risk of the injunction stopping their manufacturing operations; even if they are ultimately forced to pay royalties later, those royalties would still be capped at the FRAND rate. This strategy—employed by some implementers to delay while infringing SEPs and refusing licensing offers—is sometimes described as “patent hold-out.”

In the United States, hold-out has been a controversial subject due to shifting federal SEP policies that often result from changes in federal political power.<sup>146</sup> Because licensing negotiations usually begin after an implementer has begun manufacturing, the timing could place the implementer in an economically vulnerable position due to substantial investment already made in the standards. However, if the SEP holder

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<sup>143</sup> U.S. Courts have only set global FRAND rates when so requested by the parties, however. See *Apple Inc. v. Telefonaktiebolaget LM Ericsson, Inc.*, Case No. 15-cv-00154-JD (April 20, 2015) (noting “there exists no legal basis upon which Apple may be compelled to take a license for Ericsson's patents on a portfolio-wide basis”).

<sup>144</sup> See *supra* Section I.B.

<sup>145</sup> See NIKOLIC *supra* note 11 at 53–55.

<sup>146</sup> See generally, Jorge Contreras, *Rationalizing U.S. Standard Policy: A Proposal for Institutional Reform*, 35(2) ANTITRUST 41 (2021).

cannot obtain an injunction to stop the implementer from manufacturing, the implementer can take the upper hand in negotiations as it continues to make a profit without paying for a license. As Nicita and Corda note, [i]f the SEP holder is not allowed to issue an injunction against the implementer, when a commercial agreement has not been signed in the first instance, granting a “FRAND defense” for licensees is the equivalent to say that the implementer has a right of access without the need of obtaining preliminary consent by the SEP.<sup>147</sup>

Hold-out, the result of this unusual shift of power in the patent law framework, is a matter of real concern. However, an SEP owner seeking injunctive relief against an implementer before it has offered a license on FRAND terms, could constitute a violation of its contract and/or potentially unlawful anticompetitive behavior (at least under EU law).<sup>148</sup> Since it is impossible to strike a perfect balance between the choices of granting an injunction and not granting an injunction, the fairest solution is for the parties to enter into a licensing agreement on FRAND terms as quickly as possible. Unfortunately, the complex questions of jurisdiction and applicable law, combined with the practical realities of business strategy, render this solution unrealistic in many cases.

### B. Who Has the Authority to Set Global FRAND Rates?

The problem of global standards and territorial patents has existed for decades,<sup>149</sup> but the jurisdictional problem only reached a crisis point in 2020, when *Unwired Planet v. Huawei* reached the Supreme Court of the United Kingdom.<sup>150</sup> On August 26, 2020, the Supreme Court of the United Kingdom upheld the High Court judgment imposing a global FRAND rate, thus settling the law: UK courts could set global FRAND rates... in some cases.<sup>151</sup> This development caused great concern in China where courts reacted within weeks.<sup>152</sup> For example, in December 2020, the Shenzhen Intermediate People’s Court determined that it too

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<sup>147</sup> Nicita & Corda, *supra* note 76, at 54.

<sup>148</sup> See discussion *supra* note 80.

<sup>149</sup> See generally, Jorge L. Contreras, *Anti-Suit Injunctions and Jurisdictional Competition in Global FRAND Litigation: The Case for Judicial Restraint*, 11(2) N.Y.U. J. I.P. & ENT. L. 171 (2021).

<sup>150</sup> [2018] E.W.C.A. Civ. 2344; [2019] E.W.C. A Civ. 38.

<sup>151</sup> [2020] U.K.S.C. 37, ¶96.

<sup>152</sup> Jing He, Annie Xue & Melissa Feng, *Could (China-Based) Arbitration Save the FRAND Rate Setting Game?* CIP ANTITRUST CHRONICLE 1, 5 (March 2021). While a US court had previously set a global FRAND rate, it was with the agreement of the parties. See *TCL Commc’n Tech. Holdings v. Telefonaktiebolaget LM Ericsson*, No. CV 15-2370 JVS (C.D. Cal. 2018), *rev’d in part, vacated in part, & remanded* 943 F.3d 1360 (Fed. Cir. 2019).

had jurisdiction to set a global FRAND rate in a dispute between Oppo and Sharp.<sup>153</sup>

While anti-suit injunctions—where courts in one jurisdiction enjoin a party from taking action in a foreign court, also called “stays of litigation”—have been a presence in transnational litigation for many years, until recently, they were considered a rare and exceptional remedy.<sup>154</sup> However, between August 28, 2020 and January 1, 2021, Chinese courts issued four antisuit injunctions enjoining parallel proceedings in FRAND cases in foreign courts.<sup>155</sup>

One such instance occurred when Samsung and Ericsson, two non-Chinese companies, found themselves in Chinese court disputing FRAND rates for 4G and 5G standards where the Wuhan Intermediate People’s Court granted Samsung’s request for an anti-suit injunction on December 25, 2020. Three days later, Ericsson went to the Eastern District of Texas requesting an emergency *ex parte* restraining order, which the court granted and followed with an anti-anti-suit injunction against Samsung;<sup>156</sup> however, the parties settled before a Federal Court of Appeals could determine whether the anti-anti-suit injunction was properly issued.<sup>157</sup>

Contreras has observed that this case presents “a particularly salient example of forum shopping in FRAND cases, as both parties sought to litigate in jurisdictions other than their ‘home’ jurisdictions, presumably due to the advantages that they perceived in the laws and procedures of

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<sup>153</sup> *Is This Seat Taken? A Chinese IP Court Proclaims Its Authority to Declare Global FRAND Terms* (342) X NATIONAL LAW REVIEW (December 7, 2020), <https://www.natlawreview.com/article/seat-taken-chinese-ip-court-proclaims-its-authority-to-declare-global-frand-terms> (visited on March 23, 2023).

<sup>154</sup> See generally S. I. Strong, *Anti-Suit Injunctions in Judicial and Arbitral Procedures in the United States*, 66 AM. J. OF COMPARATIVE L. 153 (2018).

<sup>155</sup> Contreras, *supra* note 149, at 178.

<sup>156</sup> Memorandum Opinion and Preliminary Injunction, *Ericsson Inc. v. Samsung*, No. 2:20-CV-00380-JRG, 2021 WL 89980 (E.D. Tex. Jan. 11, 2021). There had been previous anti-anti-suit injunctions issued in international FRAND disputes. In July 2019, a German court granted Nokia’s preliminary injunction against Continental U.S. to withdraw its motion for an anti-suit injunction in the U.S. District Court for the Northern District of California and to refrain from applying for an anti-suit injunction or similar measures in the future; it later confirmed this injunction. See *Nokia v. Continental*, Higher District Court of Munich, Case-No. 6 U 5042/19 (Dec. 12, 2019). In *IPCom v. Lenovo Tribunal de grande instance [TGI]* [ordinary court of original jurisdiction] Nice, Nov. 8, 2019, RG 19/59311 (Fr.) a Paris court granted the SEP owner IPCom an anti-anti-suit injunction against Lenovo requiring it to withdraw an anti-suit injunction action filed before the US District Court for the Northern District of California. The Paris Court of Appeal confirmed this decision, finding that seeking the anti-suit injunction in the United States violated the patent owner’s right to have judicial determination of infringement in the patent jurisdiction. See *Cour d’appel [CA]* [Paris court of appeal] Mar. 3, 2020, RG 19/21426 ¶ 57 (Fr.) <https://www.cours-appel.justice.fr/sites/default/files/2020-03/3%20March%202020%20ICCP-CA%20RG%201921426%20EN.pdf> (visited on March 31, 2023).

<sup>157</sup> Supantha Mukherjee, *Ericsson Settles Patent Dispute with Samsung*, REUTERS (May 7, 2021), <https://www.reuters.com/business/media-telecom/ericsson-settles-patent-dispute-with-samsung-2021-05-07/> (visited March 23, 2023).

those jurisdictions.”<sup>158</sup> In the face of such jurisdictional chaos, it is understandable why many experts look to international commercial arbitration as the best available solution. SEPs are a problem that were first created by private ordering—why not allow private ordering to solve the problem it created?

### C. Arbitration as the Solution to Problem B

Given its transnational reach, arbitration offers a solution for FRAND rate determinations without raising some of the territorial and jurisdictional quandaries faced by national courts.<sup>159</sup> Global FRAND terms can be decided by one tribunal, parallel proceedings can be avoided or consolidated, and the race to court can be disincentivized. While some have claimed that Problem B does not really exist because negotiation and litigation are functioning well enough that arbitration is an unnecessary intervention,<sup>160</sup> others are quick to encourage—or even mandate—FRAND arbitration.<sup>161</sup> Still others claim that there is “no argument that arbitration would be a good alternative solution to [the] FRAND rate setting game.”<sup>162</sup>

In addition to reducing the burden on national courts, patent arbitration is seen to have many potential advantages over litigation for the parties involved. Arbitration offers clear advantages when dealing with disputes involving multiple jurisdictions and large patent portfolios containing many different national patents, which some SEP owners are happy to proclaim. Nokia, for example, has released press announcements touting its involvement in several FRAND arbitrations involving Blackberry,<sup>163</sup> LG,<sup>164</sup> and Samsung before the International Court of Arbitration of the International Chamber of Commerce, with the company’s president stating, “[t]he use of independent arbitration to

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<sup>158</sup> Contreras, *supra* note 149, at 179.

<sup>159</sup> See, e.g., Joff Wild, *Despite the Difficulties, it is Time to Embrace Arbitration as the Best Way to Resolve Licensing Disputes* (August 31, 2019), <https://www.iam-media.com/embrace-arbitration> (visited March 23, 2023).

<sup>160</sup> Pierre Larouche, Jorge Padilla & Richard S. Taffet, *Settling FRAND Disputes: Is Arbitration a Reasonable, Fair, and Nondiscriminatory Alternative*, 10(3) J. OF COMP. L. & ECON. 581, 590 (2014) (“There is, in short, no evidence that opportunism by SEP owners is an overarching or systemic problem requiring an overhaul of the existing voluntary-consensus standards process.”).

<sup>161</sup> See, e.g., Arnold, *supra* note 25.

<sup>162</sup> See He et al., *supra* note 152, at 3.

<sup>163</sup> *Nokia Welcomes Ruling of International Chamber of Commerce of International Court of Arbitration in Payment Dispute With Blackberry*, NOKIA PRESS RELEASE (December 1, 2017) <https://www.nokia.com/about-us/news/releases/2017/12/01/nokia-welcomes-ruling-of-international-chamber-of-commerce-international-court-of-arbitration-in-payment-dispute-with-blackberry/> (visited on March 23, 2023).

<sup>164</sup> *Nokia Receives Decision in Patent License Arbitration with LG Electronics*, NOKIA CORPORATION STOCK EXCHANGE RELEASE (September 18, 2017) <https://www.nokia.com/about-us/news/releases/2017/09/18/nokia-receives-decision-in-patent-license-arbitration-with-lg-electronics/> (visited on March 23, 2023).

resolve differences in patent cases is a recognized best practice.”<sup>165</sup> Additionally, parties can select the composition of the arbitral tribunal in a manner that avoids perceived, or actual, national biases,<sup>166</sup> and tribunals can engage in supranational or transnational decision-making outside the reach of national courts; parties may choose rules and decisionmakers particularly suited to the situation and subject matter, although it is not clear that this regularly occurs—or is even considered advantageous—in many patent cases; widespread implementation of the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards (1958) (‘New York Convention’) means that it is often far easier to enforce a foreign arbitral award than the judgment of a foreign court in many jurisdictions;<sup>167</sup> and international arbitration can be, though is not necessarily, less costly and more expeditious.<sup>168</sup>

Privacy—the exclusion of third parties from the proceedings—is a key characteristic of arbitration.<sup>169</sup> The confidentiality of proceedings, including their very existence, is not inevitable or obligatory. Instead, confidentiality is an option and an accepted norm in arbitration that can be attractive to commercial parties.<sup>170</sup> Submitting a dispute challenging the validity of a patent to arbitration may be strategically worthwhile for a patentee wanting to avoid a generally applicable judgment of invalidity because the patentee can avoid the risk that its “crown jewels”—highly commercially valuable patents—might be successfully challenged in court.<sup>171</sup> There can be benefits to the implementers too, who mainly avoid the costs of defending themselves against infringement actions in multiple jurisdictions.

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<sup>165</sup>Nokia Receives Decision in Patent License Arbitration with Samsung—Positive Financial Impact for Nokia Technologies, GLOBALNEWSWIRE (February 1, 2016), <https://www.globenewswire.com/news-release/2016/02/01/806180/27866/en/Nokia-receives-decision-in-patent-license-arbitration-with-Samsung-positive-financial-impact-for-Nokia-Technologies.html> (visited on March 23, 2023).

<sup>166</sup> See He et al., *supra* note 152, at 10 (suggesting that WIPO arbitration centers based in China would be an ideal forum for resolving SEP/FRAND disputes between Chinese and foreign companies).

<sup>167</sup> Convention on the Recognition and Enforcement of Foreign Arbitral Awards, June 10, 1958, 21 U.S.T. 2517, 330 U.N.T.S. 38 [hereinafter New York Convention].

<sup>168</sup> David H. Herrington, Zachary S. O’Dell & Leila Mgaloglishvili, *Why Arbitrate Intellectual Property Disputes?* GLOBAL ARB. REV. (2021), <https://globalarbitrationreview.com/guide/the-guide-ip-arbitration/first-edition/article/why-arbitrate-international-ip-disputes> (visited on October 10, 2024). The fact that arbitration usually lacks an appeal process contributes to the speed and cost reduction factors; while parties could include an appeal process in an arbitration agreement, it is unusual and generally discouraged.

<sup>169</sup> Marlon Meza-Salas, *Confidentiality in International Arbitration: Truth or Fiction?* KLUWER ARBITRATION BLOG (September 23, 2018), <https://arbitrationblog.kluwerarbitration.com/2018/09/23/confidentiality-in-international-commercial-arbitration-truth-or-fiction>.

<sup>170</sup> Legler & Schäffler, *supra* note 31, at § 55.04 (“Arbitration is often preferred in IP disputes for reasons of confidentiality.”).

<sup>171</sup> See David D. Caron, *The World of Intellectual Property and the Decision to Arbitrate* 19 ARB INTL 441, 443 (2003).



While heightened confidentiality may be attractive to parties, it creates challenges to the resolution of other FRAND disputes—a potential consequence of FRAND arbitration that has not gone unnoticed. In fact, most academic proposals recommending FRAND arbitration insist on the need for transparency, such as the Lemley and Shapiro proposal endorsing final offer (or “baseball”) arbitration in FRAND disputes.<sup>172</sup> Under the “baseball” arbitration proposal, parties would present their arguments with supporting evidence to the tribunal with a proposed FRAND royalty; the tribunal would then select one of the two royalties presented in part based on “the likelihood of validity and infringement.”<sup>173</sup> While often cited as an endorsement of FRAND arbitration generally, Lemley and Shapiro’s proposal rests heavily on full disclosure of all rates and arbitral awards,<sup>174</sup> a feature that does not currently exist in the FRAND arbitration world.<sup>175</sup> This level of disclosure in arbitral proceedings is, unfortunately, unrealistic within the current framework of international commercial arbitration practice where, although full confidentiality cannot be assumed, proceedings are private and parties can choose to heighten confidentiality and limit the scope of disclosure.<sup>176</sup> Without significant changes to SSO IPR policies or government intervention it is dangerous to endorse FRAND arbitration in the absence of a clear plan toward sufficient transparency.

### III. ARBITRATING PATENT DISPUTES

While the reasons for proposing international commercial arbitration as the best solution to Problem B are clear, a closer look at the existing norms and entrenched framework of international arbitration practice demonstrates that (1) substantial changes would need to take place to ensure that FRAND arbitration would be an effective system for resolving FRAND disputes, and (2) those changes would be unlikely to occur without government intervention.

Historically, both patent and antitrust disputes were considered inarbitrable due to inherent public interest concerns.<sup>177</sup> Over time, the global system of international commercial arbitration developed its own legal and practical norms and institutions, becoming indispensable to an

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<sup>172</sup> Lemley & Shapiro, *supra* note 22, at 1144.

<sup>173</sup> *Id.* at 1144, 1152.

<sup>174</sup> *Id.* at 1145.

<sup>175</sup> Contreras and Newman have also proposed some form of arbitration as a means of resolving FRAND disputes, they also note that SSOs would need to require members to disclose FRAND arbitrations. Contreras & Newman, *supra* note 22, at 41.

<sup>176</sup> See Robert W. Wachter, Grace Yoon & Minjae Yoo, *Confidentiality in International IP Arbitration*, in THE GUIDE TO IP ARBITRATION—SECOND EDITION, (GAR, 21 December 2022) (warning that full confidentiality should not be taken for granted and setting out strategies for creating more robust confidentiality in intellectual property arbitration proceedings) <https://globalarbitrationreview.com/guide/the-guide-ip-arbitration/second-edition/article/confidentiality-in-international-ip-arbitration> (visited on March 30, 2023).

<sup>177</sup> BORN, *supra* note 140, at 1051 (“Claims touching on patent rights were deemed to involve the public interest, and thus to be inappropriate for arbitration.”). See also Lauriat, *supra* note 27.

increasingly globalized economy. Jurisdictions steadily began loosening restrictions on arbitrability under their national laws, recognizing a general public policy in favor of arbitration. Despite this profound attitudinal change, the public policy concerns that alarmed policymakers in the past remain—indeed, they are particularly pertinent in SEP disputes.

SEP disputes have far more substantial and potentially damaging impacts on third parties and the public than other kinds of patent disputes. Therefore, for FRAND arbitration to be legally and economically effective, further the aims of the patent system as a whole, and avoid undesirable anticompetitive market impacts, it will need to look very different from FRAND arbitration as currently practiced.<sup>178</sup>

### A. Arbitrability

Traditional objections against patent arbitration raised concerns regarding the arbitrability of validity and infringement issues as matters of public policy as well as private interest.<sup>179</sup> When viewed as national grants derived from sovereign power, patent disputes can be seen as inherently subject to national mandatory laws beyond the reach of private contract, particularly when ownership, validity, and/or infringement are involved. Following the traditional arguments against patent arbitration, the public interest may require designated national authorities to decide questions of patent rights in a fully public manner so that all are on notice of the existence—or not—of important legal rights.

Such traditional concerns over the intermingling of public law and private law inherent in patent arbitration have been partially allayed by the fact that arbitral awards, even those concerning validity of patents, have solely *inter partes* effect,<sup>180</sup> in contrast to the *erga omnes/in rem* effect that would necessarily result from judgment by a national court with jurisdiction over national patent matters.<sup>181</sup> By giving an award only bilateral effects between the parties, the reasoning follows that an

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<sup>178</sup> See, e.g., Contreras, *Global Rate-Setting*, *supra* note 130, at 728–29 (discussing why “bilateral arbitration is not a panacea for multinational FRAND dispute” in arguing for the establishment of an international global rate setting tribunal for SEP disputes).

<sup>179</sup> See Matthew A. Smith, Marina Cousté, Temogen Hield, Richard Jarvis, Mrinalini Kochupillai, Barry Leon, Jacobus C. Rasser, Masamitsu Sakamoto, Andy Shaughnessy & Jonathan Branch, *Arbitration of Patent Infringement and Validity Issues Worldwide*, 19 HARV. J.L. & TECH. 299, 306–14 (2006).

<sup>180</sup> “I suppose the most difficult area for arbitration is the validity issue. Even here, so long as the result is clearly understood to be effective only between the parties, no great problem should exist. With *Lear v. Adkins* on record, it must be clear that no attempt to bind the public is being made.” Theodore L. Bowes, *Arbitration of Patent Disputes*, 18 P.T.C. J. RES. & ED. 49, 52 (1976).

<sup>181</sup> This is the case in most jurisdictions that allow the arbitration of patent disputes; Switzerland and Belgium are notable exceptions where arbitral awards in patent cases may have *erga omnes* effect. See TREVOR COOK & ALEJANDRO GARCIA, INTERNATIONAL INTELLECTUAL PROPERTY ARBITRATION 67 (Kluwer 2010).

arbitral tribunal in a patent dispute does not exercise any power to grant an award on terms that the parties would not themselves have had power to set in negotiating an agreement. For example, Grantham suggests patent arbitration cannot encroach on state sovereignty; by finding “non-infringement” instead of “invalidity” of a patent, the tribunal merely “awards the defendant something analogous to an equitable remedy: a right to use the disputed intellectual property. The arbitrable award simply regulates the enforceability of rights between the parties. It does not invalidate them generally.”<sup>182</sup>

While this legal theoretical framing bypasses some traditional objections to patent arbitration, it ignores the reality that results of arbitral proceedings can reach beyond the immediate dispute. Even when an award has only *inter partes* effect, there could be an impact on competitors who, because they must still pay for a license to use the patent in question, unwittingly find themselves at a competitive disadvantage.<sup>183</sup> In a situation where the enforcement of invalid patents outside the scope of the arbitration may cause anticompetitive harm to third parties and markets, a punctilious distinction between non-infringement and invalidity makes little difference. Moreover, patent ownership disputes can be decided without ever coming to the attention of third parties who might have their own legitimate claims.

Because arbitration is based on consent between parties it struggles to incorporate the interests of those outside its bilateral, consent-based framework.<sup>184</sup> Thus, a commercial arbitrator will generally not address public policy concerns not raised by the parties—and would possibly be discouraged from doing so.<sup>185</sup> Just as in the areas of antitrust, bankruptcy, and securities regulation, national IP regimes include mandatory law aimed at concerns beyond those of the immediate parties to a dispute and attempts to prevent negative externalities.<sup>186</sup> Even when the effect of an award dealing in a bilateral patent dispute is only *inter partes*, it is unclear how arbitration can ensure the application of mandatory law.

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<sup>182</sup> Grantham, *supra* note 178, at 187.

<sup>183</sup> See Rochelle Dreyfuss, *An Alert to the Intellectual Property Bar: the Hague Judgments Convention*, 2001 U. ILL. L. REV. 421, 445 (2001) (discussing the potential distortion of competition in the context of the Bradley proposal where foreign judgments on registered IP rights would have *inter partes* effect so as to preserve national court sovereignty over validity issues).

<sup>184</sup> Stavros Brekoulakis, *Chapter 2* in *ARBITRABILITY: INTERNATIONAL & COMPARATIVE PERSPECTIVES* ¶¶2-84 (Loukas A. Mistelis & Stavros L. Brekoulakis, eds. 2009) (noting that arbitration “has intrinsic difficulties to affect a circle of persons other than the contractual parties to an arbitration agreement”).

<sup>185</sup> BORN, *supra* note 140, at §1.02[A][2]; JASON FRY, SIMON GREENBERG, AND FRANCESCA MAZZA, *THE SECRETARIAT’S GUIDE TO ICC ARBITRATION* ¶¶ 3-768, 3-769 (ICC, Paris 2012). *Judgment of 19 January 1990, Immoplan v. Mercure*, 1991 REV. ARB. 125 (Paris Cour d’Appel) (annulling award that addressed issues not raised by the parties).

<sup>186</sup> Andrew Guzman, *Arbitrator Liability: Reconciling Arbitration and Mandatory Rules*, 49 DUKE L.J. 1279, 1283 (2000).

While early cases in the United States expressed the traditional objections to the arbitrability of patent disputes,<sup>187</sup> support for patent arbitration grew steadily as acceptance of commercial arbitration became more widespread and the costs and time associated with patent litigation increased.<sup>188</sup> Faced with a backlog of cases in the federal courts,<sup>189</sup> patent practitioners successfully lobbied for an amendment of the US Patent Act allowing for the arbitration of patent validity and infringement disputes.<sup>190</sup> Notably, the explicit recognition of patent arbitration in the US Patent Act was conditioned on notice of arbitral awards dealing with the validity or infringement of US patents being given to the Director of the USPTO.<sup>191</sup> At the time of its adoption, this notice provision was considered of central importance due to the aspects of public interest inherent in the patent system.<sup>192</sup> According to a lawyer who himself was involved in the development of the amendment, the notice requirement was critical [and] the award is unenforceable until the notice is received by the Commissioner. The purpose of the notice is to give information to any interested person that an arbitration has occurred and what its results turned out to be. [Notice is] intended to counter any fears that the arbitration would facilitate the parties' connivance at concealment of their differences or of the arbitrator's holding.<sup>193</sup>

One commentator at the time even hoped that the notice requirement would create a "centralized, public record of such awards," which would enable "monitoring of this new form of dispute resolution" that "will aid in analyzing the usefulness and impact of [the amendment]."<sup>194</sup>

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<sup>187</sup> See *Zip Manufacturing Co. v. Pep Manufacturing Co.*, 44 F.2d 184 (D. Del.) (1930) (denying a motion to enforce an agreement to arbitrate in a patent infringement dispute); See *Lear v. Adkins*, 395 U.S. 653, 677 (1969) (holding "[t]he national policy expressed in the patent laws, favoring free competition and narrowly limiting monopoly, cannot be frustrated by private agreements among individuals, with or without the approval of the state"). But see John F. Robb, *Arbitration Procedure Compared with Court Litigation in Patent Controversies*, L. & CONTEMP. PROB. 679 (1952) (taking the view that arbitration of patent disputes not involving validity and infringement were arbitrable under US law).

<sup>188</sup> See William Grantham, *The Arbitrability of International Intellectual Property Disputes* (1996) 14 BERK. J. INTL L. 173 (1996).

<sup>189</sup> Harry F. Manbeck Jr., *Voluntary Arbitration of Patent Disputes - The Background to 35 U.S.C. 294*, 11 APLA Q. J. 268, 270 (1983).

<sup>190</sup> 35 U.S.C. §294; For additional background of the amendments as related to arbitration, see Philip J Moy, *Arbitration of United States Patent Validity and Infringement under 35 U.S.C. 294* 17 George Washington J Intl L & Econ 637 (1983); Thomas G. Field, *Patent Arbitration: Past, Present and Future*, 24 IDEA 235 (1984).

<sup>191</sup> 35 U.S.C. § 294 (c)-(e).

<sup>192</sup> "While the arbitration process exists primarily for the parties, it also serves a secondary state interest-protecting the integrity of the patent grant process while encouraging such traditional virtues of the arbitration system as speed, economy and efficiency (although not, in this example, confidentiality)." Grantham, *supra* note 188, at 185.

<sup>193</sup> Manbeck, *supra* note 189, at 272.

<sup>194</sup> Moy, *supra* note 190, at 294.

Instead of creating a welcome opportunity for oversight, the notice requirement for arbitral awards in patent disputes has been largely ignored.<sup>195</sup> While the amendment is cited as a functional requirement of transparency in patent arbitration in the United States,<sup>196</sup> evidence suggests that there has been little compliance.<sup>197</sup> For example, in the case of a patent licensing dispute, the parties and/or the tribunal can avoid dealing explicitly with issues of validity and infringement to escape the reporting requirement.<sup>198</sup> However, even where arbitral awards have been filed with the USPTO, the parties redacted some portions of the award dealing with substantive issues of validity and infringement—the main reason for having the reporting requirement.<sup>199</sup> This is hardly surprising given the disincentives for reporting and the infrequency of actions for enforcement of international awards in the United States. If an arbitral award finds a patent likely to be invalid, or even if it just takes the likely invalidity “into consideration” when determining a portfolio royalty rate, then the prevailing party has achieved its desired result while also avoiding the arduous and expensive work of invalidating a patent—a result it would be forced to share with its competitors. On the other side, a patent holder wishing to avoid risking its exclusionary power over one contractual dispute is unlikely to insist upon transparency.<sup>200</sup>

Although the traditional concerns about transparency, state sovereignty and safeguarding public policy in patent arbitration have never been effectively addressed, the arbitration of patent and other IP disputes became an accepted reality by the end of the twentieth century.<sup>201</sup> Even before WIPO opened its own specialist IP arbitration

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<sup>195</sup> A Freedom of Information Act Request (No. F-23-00147) (May 10, 2023) for “a list of arbitration award notices and the associated patent numbers delivered to the Director of the USPTO or the USPTO’s Office of the Solicitor under 35 U.S.C. § 294 (d) since January 1, 2017” yielded zero records in response.

<sup>196</sup> *E.g.*, Susan L. Karamanian, *Courts and Arbitration: Reconciling the Public With the Private*, 9 *ARB. L. REV.* 65, 86 (2017) (asserting that “arbitrating disputes involving a patent is far from shrouded in secrecy as the arbitral award is required to be filed with the U.S. Patent and Trademark Office.”)

<sup>197</sup> *See* Patterson, *supra* note 110, at 838.

<sup>198</sup> *See* John Pegram, *An Analysis and Explanation of the Statutes Now Affecting Patent Arbitration*, 11 *APLA Q. J.* 274, 278 (1983) (“The principal significance of the possibility that patent license arbitrations are outside section 294 is the possible effect on jurisdiction of the courts in related proceedings, and it appears that no notice need be given to the Commissioner of Patents and Trademarks of awards in such arbitrations.”).

<sup>199</sup> *See, e.g.*, Notice of Arbitration Award, *Bayer v. Dow*, filed with the USPTO (Oct. 21, 2015) <https://patentlyo.com/media/2017/03/BayerCropSciencesArbAward.pdf> (visited on March 23, 2023).

<sup>200</sup> Miguel dels Sants Mirambell Fargas, *Economics of Arbitrability in International IP Contracting*, 37 *J.L. & COM.* 179, 237 (2019).

<sup>201</sup> *But see* Brekoulakis, *supra* note 191, at 8, ¶ 2.84 (noting that because arbitration is based on consent, “the conceptual boundaries of arbitration may have repercussions on the scope of arbitrability”).

and mediation center in 1994,<sup>202</sup> IP arbitration was already on the rise. Between 1990 and 1995, 11.7% of the arbitration cases filed at the ICC Court were reported to have contained a significant intellectual property aspect.<sup>203</sup> By 2016, IP arbitration in the United States was on the rise, with Europe not far behind.<sup>204</sup> In 2017, Hong Kong adopted an express amendment allowing for arbitration of intellectual property disputes, and Singapore followed suit.<sup>205</sup> In 2020, the London Court of International Arbitration reported that 5% of its 444 referrals were IP-based.<sup>206</sup>

Despite this evidence of widespread IP arbitration, hesitancy persists around arbitration's use to resolve IP disputes.<sup>207</sup> Due to the confidentiality of many proceedings—which often extends to their very existence—it is impossible to produce definitive data on the number or substance of patent arbitrations. However, silence about arbitrations does not mean that they are not happening. We can be sure of two things: more patent arbitrations are occurring than are publicly known and great efforts are being made to encourage even more patent disputes to be resolved through arbitration.

### B. Judicial Review of Awards in International Commercial Arbitration?

In the United States, the existence of a valid agreement to arbitrate will generally be enforced and remove the dispute from the reach of the courts or administrative agencies such as the International Trade Commission.<sup>208</sup> Since enforcing agreements to arbitrate SEP disputes

<sup>202</sup> Robert Briner, *Worldwide Forum on the Arbitration of Intellectual Property Disputes*, WIPO (3–4 March 1994) <https://www.wipo.int/amc/en/events/conferences/1994/briner.html> (visited on March 23, 2023).

<sup>203</sup> ICC INTERNATIONAL COURT OF ARBITRATION, FINAL REPORT ON INTELLECTUAL PROPERTY DISPUTES AND ARBITRATION ¶ 1.15 (1998).

<sup>204</sup> David Perkins & Richard Price, *A European Perspective on the Arbitration of Patent Disputes*, KLUWER ARBITRATION BLOG (March 29, 2016), <http://arbitrationblog.kluwerarbitration.com/2016/03/29/a-european-perspective-on-the-arbitration-of-patent-disputes/> (visited on March 23, 2023).

<sup>205</sup> Thomas Legler, *A Look to the Future of International IP Arbitration* in THE GUIDE TO IP ARBITRATION – SECOND EDITION (21 Dec. 2022) <https://globalarbitrationreview.com/guide/the-guide-ip-arbitration/second-edition/article/look-the-future-of-international-ip-arbitration> (visited on March 30, 2023).

<sup>206</sup> 2020 LCIA Annual Casework Report 11, <https://www.lcia.org/media/download.aspx?MediaId=855> (visited on March 23, 2023).

<sup>207</sup> Caron, *supra* note 171, at 444 (discussing the “perceived hesitancy” to resolve IP disputes through arbitration). “Despite amendments to the Patent Act to embrace arbitration and acceptance of arbitral awards by the courts, arbitration has not yet been embraced widely by patent litigators and clients involved in intellectual property litigation.” David C. Berry, *Harnessing the Sport of Kings: Using Pre-Dispute Arbitration Agreements to Control Discovery in Patent Disputes*, 9 W. MICH. COOLEY J. PRAC. & CLINICAL L. 1, 9 (2006); Clive Thorne, *Practitioners Overlook Arbitration When Resolving Patent Infringement*, RPC (4 April 2014); Alessandra Emini, *Patent Arbitration: The Underutilized Process for Resolving International Patent Disputes in the Pharmaceutical and Biotechnology Industries*, 9 ARB. L. REV. 323 (2017).

<sup>208</sup> *See Certain Pesticides and Products Containing Clothianidin*, USITC Inv. No. 337-TA634, (Order No. 5, May 8, 2008) ALJ Bullock (ID terminated investigation because of existence of

under US law (and the laws of many other jurisdictions) allows arbitrators to undertake decision-making on issues of mandatory law, the question arises whether national courts and other authorities have retained a genuine opportunity to ensure that those mandatory laws have been applied and enforced sufficiently to protect the public interest.

As a private process based on the parties' consent, international commercial arbitration removes disputes from public oversight, including those with public policy implications and third-party effects, such as patent disputes. However, without legal action in national courts by one or more of the parties, government authorities, the press, and public are unlikely to know of the existence of an arbitration or become aware of the resulting award. Furthermore, in cases of voluntary compliance with an award, there could be no knowledge of the proceedings and award beyond the immediate parties, arbitrators, and counsel. Because awards are not self-executing—they must be “recognized” or “confirmed” by courts—voluntary compliance may be in the best interest of a losing party since it avoids negative press attention and the ire of stockholders. Additionally, the losing party generally has no right to appeal the award. In fact, the finality that comes with the absence of an appeal process and limited oversight by national courts is often considered an advantage of arbitration. While there may be some opportunities for losing parties to attempt to vacate or oppose the recognition or enforcement of an arbitral award in national courts, the grounds for such challenges are very limited.<sup>209</sup>

Due to the global nature of SEP licensing, FRAND disputes are likely to fall into the category of international commercial arbitration, which has a different set of norms, standard practices, and applicable laws than purely domestic arbitration in the United States.<sup>210</sup> The New York Convention sets a high bar for national courts wanting to set aside or refuse to enforce foreign arbitral awards.<sup>211</sup> In the United States, the Federal Arbitration Act (FAA) requires a district court to “confirm an award made pursuant to the New York Convention” upon the application of a party “unless it finds one of the grounds for refusal or deferral of recognition or enforcement of the award specified in the said

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arbitration agreement); Kenneth R. Adamo, *Overview of International Arbitration in the Intellectual Property Context*, 2 GLOBAL BUS. L. REV. 7, 16 (2011) (discussing ITC proceedings terminated in view of an agreement to arbitrate).

<sup>209</sup> 2008 *Corporate Attitudes: Recognition and Enforcement of Foreign Awards*, THE GUIDE TO CHALLENGING AND ENFORCING ARBITRATION AWARDS, GLOBAL ARBITRATION REVIEW 13 (J. William Rowley, ed., 2d edn. 2021); Queen Mary University London, <https://arbitration.qmul.ac.uk/research/2008/> (visited on March 23, 2023).

<sup>210</sup> The New York Convention, which covers the recognition and enforcement of foreign awards, is incorporated into US law via Chapter 2 of the Federal Arbitration Act. Chapter 1 of the Federal Arbitration Act deals with domestic arbitration law. 9 U.S.C. §§ 201–208 and 9 U.S.C. §§ 1–16.

<sup>211</sup> Section 202 applies to commercial arbitration agreements and awards unless they are “between two United States citizens, involves property located in the United States, and has no reasonable relationship with one or more foreign states.” *Jain v. deMere*, 51 F.3d 686, 689 (7th Cir. 1995).

Convention.”<sup>212</sup> Thus, while both non-arbitrability and public policy are grounds for nonenforcement, and often go hand in hand, they have usually been narrowly construed and cautiously applied by courts wanting to foster a pro-arbitration environment in their jurisdictions.<sup>213</sup> For example, the Second Circuit has held that enforcement of a non-domestic arbitration award on the grounds of public policy “will be denied only if it violates the forum state’s most basic notion of morality and justice.”<sup>214</sup>

The process of recognizing, confirming, enforcing, or challenging an international arbitral award in a national court varies depending on the relationship between that jurisdiction, the arbitral proceedings, and the parties.<sup>215</sup> Challenges to arbitral awards may be brought under both domestic arbitration legislation<sup>216</sup> and the applicable provisions of the New York Convention.<sup>217</sup> If the judicial forum is the arbitral situs, the national court is likely to engage in a straightforward decision on a motion to confirm the award or a motion to vacate the award on the limited grounds available.<sup>218</sup> While in many cases parties will comply with arbitral awards without enforcement proceedings in national courts, an enforcement action may be brought to attach property in a jurisdiction where the losing party has assets.<sup>219</sup> Such enforcement proceedings tend to be viewed as a last resort rather than a norm in international

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<sup>212</sup> *InterDigital Communs. Corp. v. Nokia Corp.*, 407 F. Supp. 2d 522, 528 (S.D.N.Y. 2005) (quoting 9 U.S.C. § 207).

<sup>213</sup> New York Convention V(2)(a) and V(2)(b). See UNCITRAL Secretariat Guide on the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York 1958) 229, ¶ 10 (ed. 2016).

<sup>214</sup> *Parsons & Whittemore Overseas Co. v. Societe Generale de l’Industrie du Papier*, 508 F. 2d 969, 974 (2d Cir. 1974).

<sup>215</sup> “There is a substantial difference between ‘recognition’ and ‘enforcement’ of an award. Notwithstanding occasional imprecisions in terminology, recognition refers to judicial acceptance or confirmation of an arbitral award and the entry of a local court judgment accepting or confirming the operative terms of the foreign award, while enforcement refers to the subsequent reliance of local national courts on this judgment for execution, attachment, garnishment and similar remedies under local law.” BORN, *supra* note 140 at 3154. See also William W. Park, *Duty and Discretion in International Arbitration*, 93 AM. J. OF INT’L L. 805 (1999).

<sup>216</sup> In the United States, §10 of the Federal Arbitration Act provides the legal framework for setting aside domestic arbitral awards rendered in the United States. Interestingly, in *Bayer v. Dow*, the Federal Circuit applied the standards of the New York Convention pertaining to enforcement of awards, as implemented in Chapter 2 of the Federal Arbitration Act, which apply to “foreign awards,” meaning arbitral awards that were made in territory outside of the United States. Karamanian notes the incorrect application of the legislation: “Why the NY Convention applied to the award is not clear other than the parties agreed that it did...The arbitration clause provided that the place of arbitration was “the place of business of the defendant,” which is Indiana. Susan Karamanian, *The Road to the Tribunal and Beyond: International Commercial Arbitration and United States Courts*, 34 GEO. WASH. INT’L L. REV. 17, 571, fn.87 (2002).

<sup>217</sup> Penny Madden, Ceyda Knoebel and Besma Grifat-Spackman, *Arbitrability and Public Policy Challenges*, in G.A.R. 35 (2021).

<sup>218</sup> *Id.*

<sup>219</sup> *Id.*



commercial arbitration practice; it would be incorrect to assume that most arbitral awards result in “enforcement,” as such, in a national court.<sup>220</sup>

In patent cases, although the national law where the patent right was granted may or may not be relevant to the tribunal’s determination, it is usually irrelevant when it comes to recognition or enforcement.<sup>221</sup> However, while public policy concerning the arbitrability of patent disputes rarely poses a barrier to the enforcement of an agreement to arbitrate, public policy arguments may arise later when the losing party challenges the recognition or enforcement of the award in a jurisdiction where arbitration of the validity or infringement of patent rights is not permitted.<sup>222</sup> In some cases, enforcement of an award has been granted or denied in one jurisdiction despite non-recognition or recognition of the same award by courts in another jurisdiction.<sup>223</sup> Public policy arguments, however, are rarely successful in challenging the validity or enforceability of awards, and simple violations of national mandatory laws in an award are generally considered inadequate grounds for vacatur or non-enforcement.<sup>224</sup>

Arbitration as currently practiced is ill-suited to cases that have a combined antitrust and patent dimension, such as SEP disputes. In allowing for international commercial arbitration of US antitrust issues in *Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth*, the Supreme Court misguidedly tried to address public policy concerns with what is now known as the “second look doctrine,” claiming that “[h]aving permitted the arbitration to go forward, the national courts of the United

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<sup>220</sup> QMUL 2008, *supra* note 209, at 1.

<sup>221</sup> See e.g., ICC Award 6097 (1993) 4/2 ICC INT’L CT OF ARB. BULL. 80, in which a tribunal sitting in Geneva declared a German patent void but emphasized that the award was only binding upon the parties and could not effect the revocation of the patent *erga omnes*.

<sup>222</sup> For example, if the jurisdiction where enforcement is sought because a losing party has assets there considers disputes involving patent validity or infringement to be non-arbitrable, the national court could theoretically refuse to enforce an award dealing with such issues. See Elie Kleiman & Claire Pauly, *Arbitrability and Public Policy in The Guide to Challenging and Enforcing Arbitral Awards* (J. William Rowley, ed., 1<sup>st</sup> ed., Global Arbitration Review 2019). <https://globalarbitrationreview.com/guide/the-guide-challenging-and-enforcing-arbitration-awards/1st-edition/article/arbitrability-and-public-policy-challenges> (visited on March 23, 2023). *Public Policy and Arbitrability*, in: COMPARATIVE ARBITRATION PRACTICE AND PUBLIC POLICY IN ARBITRATION, ICCA Congress, New York, May 6-9, 1986, 178 (1987). “Public policy in relation to arbitrability, however - although it may still be a defence against enforcement - concerns the very beginning and basis of arbitration, namely the arbitration agreement or arbitration clause.” Patrick Rohn & Phillip Groz, *Drafting Arbitration Clauses for IP Agreements*, 7 JIPLP 652, 653 (2012).

<sup>223</sup> E.g. In re Arbitration of Certain Controversies Between Chromalloy Aeroservices and the Arab Republic of Egypt, 939 F. Supp. 907 (D.D.C. 1996) (enforcing an arbitral award rendered in Egypt after it was annulled by Egyptian courts).

<sup>224</sup> Jack I. Garvey, *Arbitration With Government*, 21 PEPP. DISP. RESOL. L.J. 281, 308 (2021) (“Public policy is rarely invoked with success to prevent the rendering or enforcement of an arbitral award.”); Pamela K. Bookman, *The Arbitration-Litigation Paradox*, 72 VAND. L. REV. 1119, 1149 (claiming that the US Supreme Court decisions after *Mitsubishi* “have all but eliminated the public policy defense”).

States will have the opportunity at the award enforcement stage to ensure that the legitimate interest in the enforcement of the antitrust laws has been addressed.”<sup>225</sup> The *Mitsubishi* Court, however, did not consider the possibility that parties in arbitral proceedings involving the Sherman Act might evade domestic oversight by choosing applicable law or an arbitral forum outside of the United States or enforcing the award elsewhere.<sup>226</sup> While the aim of the doctrine was to create a compromise incorporating some oversight by national courts while allowing for arbitration of rights with a public nature,<sup>227</sup> US federal courts have not reviewed arbitral awards dealing with antitrust claims to determine whether or not federal antitrust laws have been enforced.<sup>228</sup> Even when asserted, the *Mitsubishi* second look doctrine has not been interpreted to require merits review of the antitrust claims.<sup>229</sup> Similarly, in awards dealing with patent issues, the enforcing court would not consider whether or not the arbitral tribunal understood or applied patent law correctly.<sup>230</sup> Of course, allowing national courts to engage in merits review of antitrust or patent claims in arbitral awards would be a serious blow to the integrity and finality of the arbitral process.

Substantive review of awards interpreting European competition law has been similarly limited. In *Genentech v. Hoechst*, a sole arbitrator had found Genentech liable for running royalties under a patent license agreement where the European patent was revoked and the US patents had been found not to be infringed in a separate action.<sup>231</sup> Genentech sought annulment of the award in a French court, which referred the question of whether such an award violated European competition law to the Court of Justice of the European Union for a preliminary ruling.<sup>232</sup> The Advocate General’s Opinion expressed serious concern at the

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<sup>225</sup> *Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth, Inc.*, 473 U.S. 614, 638.

<sup>226</sup> *See Simula, Inc. v. Autoliv*, 175 F.3d 716 (9th Cir. 1999).

<sup>227</sup> Karim Youssef, *Chapter 3*, in *ARBITRABILITY: INTERNATIONAL & COMPARATIVE PERSPECTIVES* 66 [3-52] (Loukas A. Mistelis & Stavros L. Brekoulakis, eds., 2009).

<sup>228</sup> “Having the benefit of thirty three years of hindsight, if the look means a stare vs a glance, we should probably quietly turn the lights out on the ‘second look’ doctrine as there really is no proper ‘second look,’ the Supreme Court did not mean for there to be a proper ‘second look,’ and we do nothing to further the laudable goals of competition policy or arbitration policy to keep that doctrine breathing.” Richard Levin, *On Arbitrating Antitrust/Competition Disputes*, Kluwer Arbitration Blog (August 20, 2018)

<https://arbitrationblog.kluwerarbitration.com/2018/08/20/on-arbitrating-antitrustcompetition-disputes/> (visited on October 10, 2024).

<sup>229</sup> *Baxter Int’l, Inc. v. Abbott Lab.*, 315 F.3d 829 (7th Cir. 2003).

<sup>230</sup> *E.g., Immersion Corp. v. Sony Computer Entertainment Am. LLC*, 188 F. Supp. 3d 960, 977 (N.D. Cal. 2016) (“[T]he court cannot vacate an award even if the arbitrator misunderstood and misapplied the relationship between direct and indirect infringement under Japanese law.”). *Bayer Cropsciences AG v. Dow Agrosciences LLC*, 11 (Fed. Cir. 2017) (Stating “the relevant federal statutes and precedents make clear that ordinary legal or factual error is not a ground for disturbing an arbitral award” in a patent dispute).

<sup>231</sup> *Genentech Inc. v Hoechst GmbH and Sanofi-Aventis Deutschland GmbH*, C-567/14 (2016) <https://curia.europa.eu/juris/liste.jsf?language=en&num=C-567/14> (visited on October 10, 2024).

<sup>232</sup> *Id.*

limited review available for courts on public policy challenges to arbitral awards:

If the review of an international arbitral award in the light of European public policy rules (which cover only a very narrow category of rules in the EU legal order) had to be limited to manifest or flagrant infringements of [EU competition law], this review would be illusory since agreements or practices liable to restrict or distort competition are “frequently covert,” which would, in many cases, make it impossible (or excessively difficult) for individuals to exercise the rights conferred on them by EU competition law.<sup>233</sup>

The Advocate General went on to express the controversial view that the courts must have an opportunity for merits review of a potential competition law violation, asserting that “one or more parties to agreements which might be regarded as anticompetitive cannot put these agreements beyond the reach of review under [EU competition law] by resorting to arbitration.”<sup>234</sup> Yet, the CJEU skirted the issue of the level of review in its judgment,<sup>235</sup> and so it would seem that parties are effectively able to do exactly that.

Even with conscientious tribunals, a lack of appeal or merits review from private decision-making, often by decision-makers from other jurisdictions, combined with the public policy of deference to arbitral awards,<sup>236</sup> leads to underenforcement of national laws. The only reasonable conclusion that could be drawn from a highly deferential review that considers only whether the arbitral tribunal “took cognizance of the antitrust claims and actually decided them”<sup>237</sup> than that any review of awards would not provide meaningful consideration of whether US antitrust law was enforced or its aims effectuated?<sup>238</sup> The same reasoning applies to patent awards.

In their framework for arbitrating SEP disputes, Contreras and Newman claim that arbitral awards in patent cases could also be

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<sup>233</sup> *Id.* ¶ 64 (Opinion of A.G. Wathelet).

<sup>234</sup> *Id.* ¶ 72.

<sup>235</sup> *Genentech Inc. v Hoechst GmbH and Sanofi-Aventis Deutschland GmbH*, C-567/14 (2016) (CJEU Judgment).

<sup>236</sup> Susan Karamanian, *The Road to the Tribunal and Beyond: International Commercial Arbitration and United States Courts*, 34 *GEO. WASH. INT'L L. REV.* 17, 52 (2002) (“It has been well-documented that courts have yet to engage in the second look analysis that Mitsubishi contemplated.”); Vera Korzun, *Arbitrating Antitrust Claims: From Suspicion to Trust* 48 (3) *NYU J. OF INT'L L. & POLITICS* 867, 925, 931 (2016).

<sup>237</sup> Baxter, *supra* note 219, at 832.

<sup>238</sup> *Id.* at 836 (The dissenting opinion observed that “under the majority’s analysis, the rule that unlawful conduct cannot be commanded by arbitrators is consumed by the exception that, if the arbitrators themselves say that what they have commanded is not unlawful, then ‘their answer is conclusive’”). See Stephen J. Ware, ARTICLE: Default Rules from Mandatory Rules: Privatizing Law Through Arbitration, 83 *Minn. L. Rev.* 703, 754 (“To prevent parties from effectively contracting out of otherwise mandatory law, the Supreme Court must either (1) reverse its decisions that claims arising under otherwise mandatory rules are arbitrable or (2) require de novo judicial review of arbitrators’ legal rulings on such claims.”)

challenged on grounds of arbitrator bias and “disregard for the law,”<sup>239</sup> referring to the “manifest disregard” doctrine in US law.<sup>240</sup> However, since the Supreme Court’s decision in *Hall Street Associates v. Mattel*,<sup>241</sup> there has been a circuit split on whether the judge-created doctrine of manifest disregard is an independent basis to set aside an award, a “gloss” on the FAA or simply no longer good law.<sup>242</sup> Whatever its implications, *Hall Street* significantly limited the applicability of manifest disregard.<sup>243</sup> In any case, even where legally or jurisdictionally available, manifest disregard is rarely successful in vacating or opposing enforcement of an arbitral award. Indeed, in their reference to the doctrine, Contreras and Newman cited *Willemijn Houdstermaatschappij BV v. Standard Microsystems Corp.*,<sup>244</sup> where the Court of Appeals for the Second Circuit vacated the district court’s failure to enforce the arbitration award on the basis of manifest disregard and remanded with instructions to confirm the award.<sup>245</sup> More recent Second Circuit caselaw further limits manifest disregard to “those exceedingly rare instances where some egregious impropriety on the part of the arbitrator is apparent.”<sup>246</sup>

Even when highly circumscribed, there is a strong case that any substantive merits review of a foreign award, including manifest disregard, is in violation of the New York Convention. As incorporated into the Federal Arbitration Act at Section 207, challenges to foreign arbitral awards are limited to the seven Convention grounds.<sup>247</sup> Given the international nature of FRAND disputes, many, if not most, arbitrations would result in non-domestic awards from a US perspective, in which case, manifest disregard would rarely be available.<sup>248</sup>

It is evident that, even in those cases that implicate mandatory law and have potential public policy implications, courts in the United States

<sup>239</sup> Contreras & Newman, *supra* note 22, at 29. See *Wilko v. Swan*, 346 U.S. 427 (1953).

<sup>240</sup> A judge-made doctrine allowing a court to vacate arbitral award where the tribunal knew of, and failed to apply, a governing legal principle that was “well-defined, explicit, and clearly applicable,” *DiRussa v. Dean Witter Reynolds Inc.*, 121 F.3d 818, 821 (2d Cir. 1997).

<sup>241</sup> “Maybe the term ‘manifest disregard’ was meant to name a new ground for review, but maybe it merely referred to the §10 grounds collectively, rather than adding to them.” *Hall Street Associates v. Mattel*, 552 U.S. 576, 585 (2008) (restricting grounds to those provided in the FAA without fully discarding the manifest disregard doctrine).

<sup>242</sup> Stuart M. Boyarsky, *The Uncertain Status of the Manifest Disregard Standard One Decade After Hall Street*, 123 DICK. L. REV. 167 (2018)

<sup>243</sup> Michael H. Leroy, *Are Arbitrators Above the Law? The “Manifest Disregard of the Law” Standard*, 52 B.C. L. REV. 137, 171, 177.

<sup>244</sup> 925 F. Supp. 193 (S.D.N.Y. 1996) (vacating an arbitral tribunal’s unreasoned award in a patent license dispute).

<sup>245</sup> *Willemijn Houdstermaatschappij BV v. Standard Microsystems Corp.* 103 F.3d 9 (2d. Cir. 1997).

<sup>246</sup> *Seneca Nation of Indians v New York*, 988 F.3d 618, 626 (2d Cir. 2021).

<sup>247</sup> See 9 U.S.C. § 207.

<sup>248</sup> *Industrial Risk Insurers v. M.A.N. Gutehoffnungshutte GmbH*, 141 F.3d 1434, 1446 (11th Cir. 1998) (finding “no defense against enforcement of an international arbitral award under Chapter 2 of the FAA is available on [any] grounds not specified by the Convention” in a case involving a US award).

and elsewhere lack a meaningful opportunity to monitor the arbitral process, even after an award has been issued. While this minimal level of review is arguably desirable and appropriate in the vast majority of commercial arbitration proceedings, it is important to recognize that national laws cannot, by mere invocation, be relied upon as a safeguard to uphold mandatory law and the public interest in arbitral awards. Sweet and Grisel answer the question, “[h]ow well do national courts actually supervise what arbitrators are doing when they enforce mandatory law and public policy?” In their view: “poorly.”<sup>249</sup>

Yet, the paradox remains that allowing merits review of awards in a way that would give national courts a meaningful opportunity to protect the public interest would be undesirable because it would negate many of the benefits of international commercial arbitration, encourage forum-shopping, and even create transnational conflict of laws disputes not unlike those that already exist in the FRAND context. As the Second Circuit warned in *Baker Marine Ltd.*, “[m]echanical application of domestic arbitral law to foreign awards under the Convention,” may give “a losing party... every reason to pursue its adversary with enforcement actions from country to country until a court is found, if any, which grants the enforcement.”<sup>250</sup>

In summary, the limited opportunities and powers of national courts and institutions to provide any oversight of arbitral awards cannot prevent the negative impacts of widespread FRAND arbitration. While many commercial disputes dealing with predominantly private law issues may not raise significant public policy concerns, the nature of some disputes, such as SEP licensing, demand a level of scrutiny from public authorities that the current system is not equipped to provide. In his warning about the lack of oversight of commercial arbitration with public policy implications, Justice Breyer observed, “courts that pay little or no attention to their nation’s public policies can create, out of arbitration, a procedural method for nullifying those policies.”<sup>251</sup>

US courts have tended to place the public policy favoring arbitration above all other interests.<sup>252</sup> But, having no effective merits review of awards involving mandatory laws by national courts means that those laws may not be adequately enforced. On the other hand, allowing merits review of awards dealing with mandatory law would lead to increased uncertainty, loss of finality, and post-award forum-shopping, negating

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<sup>249</sup> ALEC STONE SWEET & FLORIAN GRISEL, *THE EVOLUTION OF INTERNATIONAL ARBITRATION: JUDICIALIZATION, GOVERNANCE, LEGITIMACY* 1-4, 185 (2017).

<sup>250</sup> *Baker Marine (Nig.) Ltd. v. Chevron (Nig.) Ltd.*, 191 F.3d 194, 197, n. 2 (2d Cir. 1999).

<sup>251</sup> STEPHEN BREYER, *THE COURT AND THE WORLD: AMERICAN LAW AND THE NEW GLOBAL REALITIES* 194 (2015).

<sup>252</sup> For example, the District Court in *Bayer Cropscience AG v Dow Agrosciences LLC*, (E.D.Va.) (Jan. 15, 2016), stated, “[u]ltimately, the most pressing public policy concern at this point in this matter is the public policy in favor of the arbitration process. The policy supporting, fair, competent, and judicially respected arbitration proceedings is about as strong and compelling a public policy that our federal courts embrace.”

many of the benefits of arbitration and create significant new problems in the resolution of SEP licensing disputes.<sup>253</sup>

#### IV. ARBITRATION OF SEP DISPUTES

##### A. FRAND Arbitration

FRAND arbitration is special because of the special character of SEPs, the exceptional nature of their existence, their role in creating new markets, and their ability to facilitate or impede innovation. Patent rights themselves are exceptional, and the concept of industry standard-setting involving patented technology defies usual norms of commercial behaviour in the marketplace. Thus, effectively resolving FRAND disputes presents an unusual challenge for arbitration, which does not comfortably accommodate broader interests beyond those of the parties subject to the arbitral proceedings.

In his keynote speech on Arbitration and Public Law at the Vienna Arbitration Days on February 21, 2020, Richard Kreindler addressed the dilemma posed by disputes that implicate important norms and values even as they cross the boundaries between public and private law and nations:

Environment, human rights, corruption, sanctions, insolvency, abuse of dominance, FRAND, and a whole host of other subject matters implicate public law and public policy making. They thereby implicate the question of what the fundamental norms of society are and should be. But society exists on the national level, on the EU level, on the regional level, on the global level, and including borderless social media.<sup>254</sup>

Significantly, Kreindler placed FRAND alongside corruption, human rights, and the environment, suggesting that it has similar public law concerns that should not be forgotten in the rush to privatization. Far from being more suitable for arbitration than other kinds of patent-related disputes, then, SEP licensing disputes are more likely to have an impact on third parties and the public interest because of the implications to the patent system and potential for antitrust violations.<sup>255</sup> As Lemley observed back in 1996, “there is something about the information industry in general and the Internet in particular that makes the application of normal antitrust rules problematic.”<sup>256</sup> Therefore, it is not enough to ask whether a particular FRAND dispute has been resolved in

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<sup>253</sup> Youssef, *supra* note 227, at ¶3–52.

<sup>254</sup> Richard Kreindler, *Arbitration and Public Law, Keynote Speech*, in AUSTRIAN YEARBOOK ON INTERNATIONAL ARBITRATION 2021, 293 (Klausegger, Klein, Kremslehner, et al., eds. 2021).

<sup>255</sup> See Kim, *supra* note 110, at 32 (arguing that not all patent licensing terms need to be made public, but “a FRAND licensing rate calls for scrutiny in light of its public nature”); Thomas K. Cheng, *Antitrust Treatment of No Challenge Clauses*, 5 N.Y. J. of IP & Enter. L. 437, 462–63 (2016) (“Given the fact that standardization would give patents a great deal of market power, the harm of allowing an invalid SEP to persist is much greater than for a non-SEP.”).

<sup>256</sup> Mark A. Lemley, *Antitrust and the Internet Standardization Problem*, 28 CONN. L. REV. 1041, 1042 (1996).

a manner that addresses the practical needs and legal rights of the parties involved; one must also consider the impact at a systemic level and from a global perspective.<sup>257</sup>

Resolving FRAND disputes through arbitration raises concerns of risk allocation, incentivization, access to information, competition, and transparency that go far beyond the comparatively straightforward party-autonomy-versus-public-interest questions arising in other commercial transactions. A finding of invalidity in the context of patent arbitration proceedings can result in the alleged infringer/potential licensee effectively obtaining a permanent license of the patent. Additionally, although the arbitration is binding under the doctrine of *res judicata* with respect to the alleged infringer/potential licensee, the patent owner can still enforce the patent against nonparties to the arbitration.<sup>258</sup> Furthermore, while confidentiality is not a requirement, or even a default, in all arbitration proceedings, parties to a patent dispute will often opt to include confidentiality in their agreements, meaning the results of the arbitral award, and even the existence of the dispute, may never reach the attention of the public.<sup>259</sup>

It can also be more difficult for arbitral tribunals to gain access to prior licensing agreements or arbitral awards that may be relevant to the dispute before the tribunal. International commercial arbitration does not typically allow for the extensive “discovery” practices customary in U.S. litigation.<sup>260</sup> Although it is generally accepted, and incorporated into most international arbitration rules, that tribunals can order the parties to produce relevant documents, an arbitral tribunal does not have the same powers as a court.<sup>261</sup> For instance, a tribunal can draw adverse inferences against a noncompliant party, but cannot compel document production unless the governing national arbitration laws permit enforcement proceedings of an arbitrator’s orders in domestic courts.<sup>262</sup> In the event of party’s noncompliance in a FRAND case, specifically, it could be

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<sup>257</sup> E.g. Picht & Loderer, *supra* note 3, at 593 (cautioning that “ADR parties and decision-makers must not neglect the susceptibility of SEP/FRAND proceedings to ordre public concerns based on competition law. Especially for arbitrators, this can be more easily said than done, all the more so as important aspects at the crossroads between ADR and EU (competition) law remain unclear: does the arbitral tribunal need to apply EU competition law *ex officio* or can it restrict itself to what the parties submitted?”).

<sup>258</sup> Smith, *et al.*, *supra* note 179, at 324.

<sup>259</sup> “How well do arbitrators take into account the public interest, through balancing or other means? The answer: no one knows. Just as in state courts, most commercial cases will turn on the contract and the facts, not on the application of mandatory law or the enforcement of public policy. Nonetheless, nearly all ICA awards in which tribunals do interpret and apply mandatory law, or take into account the public interest in other ways, are unavailable. Present policies on publication of awards give primacy to confidentiality interest...which makes it impossible for scholars, judges, other state officials, NGOs, the media, and the broader public to evaluate arbitral decision-making.” SWEET & GRISEL, *supra* note 249, at 186.

<sup>260</sup> BLACKABY, *supra* note 140, at § 6.92.

<sup>261</sup> See Gabrielle Kaufmann-Kohler & Philippe Bärtsch, *Discovery in International Arbitration: How Much is Too Much?* SCHIEDS VZ 13 (2004).

<sup>262</sup> *Id.* at 14, 21.

challenging for a tribunal to draw an adverse inference when the missing data is needed for rate-calculation rather than, for example, demonstrating breach of contract. Additionally, because relevant comparable licenses will contain the commercial information of third parties, they are likely to be protected by confidentiality and non-disclosure agreements, and some arbitral tribunals may hesitate to order the production of these documents since they implicate the rights of parties outside of the proceedings.<sup>263</sup> Even where tribunals are able to collect adequate data for accurate calculations, reassembling and recalculating for each new dispute produces inefficiencies and raises transaction costs.

Reduced transparency may also incentivize aggressive, rent-seeking behaviors by patent owners, by allowing them to bring frivolous actions against licensees under existing agreements without risking the loss of their rights on an *erga omnes* basis.<sup>264</sup> While arbitrating SEP licensing implicates the same problems that often arise when arbitrating more straightforward patent licensing disputes,<sup>265</sup> these problems are exacerbated by the essential nature of the technology, the size of the portfolios involved, the complexity of the global transactions, and the desire to withhold information about licenses and rates that parties believe will disadvantage them in future negotiations.

These concerns animated the policy debates around FRAND arbitration in 2012-14, when the European Commission brought antitrust proceedings against Samsung. In draft commitments, Samsung made an effort to shift future disputes over its FRAND obligations into arbitration until it faced pushback from interested third parties and the Commission itself.<sup>266</sup> The resulting Commitments Decision highlighted many of the same concerns raised in this article about the impacts of arbitrating FRAND disputes.<sup>267</sup> In response to these objections, which included concerns about transparency, limitations on challenges to patent validity, and the loss of precedential opportunity available in court proceedings, Samsung ultimately amended its Commitments to include voluntary submission of disputes to ICC arbitration if both parties to the dispute agreed or the British courts (or Unitary Patent Court) declined jurisdiction.<sup>268</sup>

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<sup>263</sup> Laurent Vercauteren, *The Taking of Documentary Evidence in International Arbitration*, 23 AM. REV. INT'L ARB. 341, 353 (2012) (discussing the reluctance of arbitral tribunals to order disclosure); Peter Ashford, *Documentary Discovery and International Commercial Arbitration*, 17 AM. REV. INT'L ARB. 89, 113 (2006) (discussing confidentiality as a reason for resisting disclosure in arbitral proceedings).

<sup>264</sup> Fargas, *supra* note 200, at 259 ("Given that a patent troll does not risk losing its IP right against third parties in the market, precisely because of the limited effects recognized to an international award, it is *ex ante* more incentivized to commence frivolous or anticompetitive suits.").

<sup>265</sup> *Genentech v. Hoechst* 526 [C-567/14] (2016).

<sup>266</sup> *European Commission Commitments Decision*, AT.39939 Samsung – Enforcement of UMTS Standard Essential Patents (May 13, 2014).

<sup>267</sup> *Id.* at [78].

<sup>268</sup> *Id.* at [98].



Similarly, when Hong Kong amended its law to allow explicitly for the arbitration of IP disputes in 2017, the Hong Kong Competition Commission gave significant thought to the competition implications of arbitrating IP disputes. Demonstrating its understanding of the exceptional nature of SEP disputes in this context, the Commission explained that where the dispute goes to the “root” of the IPR, confidentiality of the arbitral award may in certain circumstances lead to competition concerns. The Commission cites the example of an arbitral award which finds a patent invalid. The Commission considers that confidentiality of the outcome of arbitration may result in asymmetry of information and costs between the successful challenger (who is no longer bound by the patent) and its competitors (who are still bound by the patent), especially a new market entrant. This may, depending on the legal and economic context of the case, weaken competition in the market . . . .<sup>269</sup>

The Commission further noted that “the confidentiality of arbitral outcomes may, in the exceptional case[] of [SEPs], have a bearing on the patent holder’s discharge of its FRAND obligations, if any.”<sup>270</sup>

Legal scholars have also addressed arbitration’s threat to the integrity of SEP frameworks.<sup>271</sup> In his proposal for a global rate-setting tribunal, Contreras succinctly set out three primary reasons why international commercial arbitration is not a complete solution to the jurisdictional problems created by international FRAND disputes: it lacks (1) transparent proceedings; (2) comprehensive decision-making, for example, by failing to address the interests of affected third parties; and (3) horizontal equity resulting from the absence of precedential or res judicata effect.<sup>272</sup> While some discussions of FRAND arbitration assume incorrectly that arbitral tribunals are not in the position to determine patent validity or infringement,<sup>273</sup> even if tribunals avoid validity and infringement issues, FRAND disputes reach beyond the bilateral licensing dispute because the FRAND commitment itself implicates the public interest.<sup>274</sup>

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<sup>269</sup> *Supplemental Paper on the Government’s Response to the Issues Raised by the Bills Committee at the Meeting of 5 January 2017 - Views of the Competition Commission*, HONG KONG LC PAPER NO. CB(4)579/16-17(01), 2 (Department of Justice Intellectual Property Department, February 2017) <https://www.legco.gov.hk/yr16-17/english/bc/bc101/papers/bc10120170220cb4-579-1-e.pdf> (visited on March 23, 2023).

<sup>270</sup> *Id.*

<sup>271</sup> See Mark R. Patterson, *Leveraging Information about Patents: Settlements, Portfolios, and Holdups*, 50 HOUS. L. REV. 483 (2012); Herbert Hovenkamp, Mark Janis & Mark A. Lemley, *Anticompetitive Settlement of Intellectual Property Disputes*, 87 MINN. L. REV. 1719, 1722 (2003).

<sup>272</sup> Jorge Contreras, *Global Rate Setting: A Solution for Standard Essential Patents?* 94 WASH. L. REV. 701, 729 (2019).

<sup>273</sup> *E.g.*, NIKOLIC, *supra* note 11, at 241 (noting “the validity and infringement of patents can only be determined by courts”).

<sup>274</sup> Eli Greenbaum, *No Forum to Rule them All: Comity and Conflict in Transnational FRAND Disputes*, 94 WASH. L. REV. 1085, 1117 (2019).

Of course, due to the arbitrability issues discussed above and the potential threat to enforcement of an arbitral award, there can be incentives for parties and arbitral tribunals to skirt issues of patent validity even where they are relevant to the calculation of FRAND rates.<sup>275</sup> Even when patent validity is on the table, confidentiality norms often mean that there is limited, if any, public access to information about the proceedings. In fact, the United States is the only jurisdiction that has a notice requirement for patent arbitration awards, and it is easily avoided in part due to weak incentives for compliance.<sup>276</sup>

Widespread arbitration of SEP licensing disputes and FRAND rates is also harmful to the evolution of best practices for rate calculation and applicable commercial law.<sup>277</sup> The global FRAND ecosystem needs a higher level of transparency to develop effective methods and techniques for rate calculation rates and decision-making. For example, Chowdhury argues that even where it is in the best interests of the parties, arbitrating individual FRAND disputes harms a broader structural interest in developing and maintaining insights, models, and techniques that would arise from dispute resolution over time.<sup>278</sup> Widespread arbitration also harms industry development as it gives experienced players in the SEP-licensing space an increasingly significant advantage over new entrants to the market, who as a result not only lack information gleaned from past transactions, but also the information-gathering techniques and calculation expertise of market veterans.<sup>279</sup>

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<sup>275</sup> NIKOLIC, *supra* note 11, at 314. *See also* Korzun, *supra* note 236 at 927-928 (noting the tendency for “some arbitrators and counsel to adopt ‘the policy of the ostrich’” regarding complicated antitrust issues in arbitration proceedings).

<sup>276</sup> “The notice, when provided to the PTO, will necessarily reduce the privacy and confidentiality advantages of patent arbitration. Even only if a bare, win/lose award is filed, the fact that there was an arbitration, and the identity of the parties will be public information recorded in the patent file. Perhaps for these reasons, the notice requirement appears to be more honored in the breach. Indeed, it has been reported that the PTO has rarely received such notices.” Roderick M. Thompson, *Considering Patent Arbitration? Be Aware of the PTO Notice Requirement*, JAMS ADR INSIGHTS (December 4, 2020), citing Kevin Casey, *Arbitrating a Patent Issue? You Must Comply With the Notice Requirement!* in THE ADR ADVISOR. (“The PTO received only two such notices in 2017 and 2018, and four in 2015.”)

<sup>277</sup> Avinash Poorooye & Ronan Feehily, *Confidentiality and Transparency in International Commercial Arbitration: Finding the Right Balance*, 22 HARV. NEGOTIATION L. REV. 275, 301 (2017) (noting that one of the harms of commercial arbitration is that the “impossibility of or difficulty in obtaining these jurisprudential deliberations means that commercial law is effectively going underground”).

<sup>278</sup> A. Chowdhury, *Alternative Dispute Resolution in FRAND Licensing: Economic Considerations for an Effective Framework* in THE INTERPLAY BETWEEN COMPETITION LAW AND INTELLECTUAL PROPERTY: AN INTERNATIONAL PERSPECTIVE 39, 46 (Gabriella Muscolo & Marina Tavassi, eds., 2019).

<sup>279</sup> Submission to European Commission Call for Evidence for an Impact Assessment re: Intellectual Property – New Framework for Standard-Essential Patents, Christian Helmers & Brian J. Love, F3257444, 60–61 (9 May 2022). [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13109-Intellectual-property-new-framework-for-standard-essential-patents/F3257444\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13109-Intellectual-property-new-framework-for-standard-essential-patents/F3257444_en) (visited on March 23, 2023).

Effective merits review of arbitral awards in FRAND cases by national authorities would erode many of the supposed merits of arbitration, such as finality, and lead to further post-award litigation, possibly in multiple jurisdictions. Even under the limited grounds of the New York Convention, merits review could lead to novel conflicts of law and forum shopping problems by opening the door for parties to actions challenging awards in jurisdictions less friendly to patent arbitration and/or where public policy or non-arbitrability arguments hold sway with national courts.<sup>280</sup> While agreements to arbitrate might help avoid the initial rush to the courts and anti-suit injunctions,<sup>281</sup> international commercial arbitration of FRAND disputes could create equally complicated transnational conflicts at the recognition and enforcement stage—*after* time and money have already been spent on substantive proceedings. Furthermore, even if a national court at the arbitral *situs* sets aside an award, the prevailing party in the arbitration could seek enforcement of the award elsewhere.<sup>282</sup> For example, a Chinese court may refuse to enforce an award based on the inarbitrability of competition law disputes because the parties have not explicitly agreed to do so via contract.<sup>283</sup>

Given that the lack of transparency already generates practical problems in FRAND disputes,<sup>284</sup> it is irresponsible to encourage FRAND arbitration when the natural tendency of arbitration will further decrease transparency. As the Seventh Circuit observed in *Union Oil*, “[p]eople who want secrecy should opt for arbitration. When they call on the courts, they must accept the openness that goes with subsidized dispute resolution by public (and publicly accountable) officials.”<sup>285</sup> Nonetheless, the Hong Kong Competition Commission took for granted that, due to the “exceptional case of licensing of SEPs”

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<sup>280</sup> Legler, *supra* note 201.

<sup>281</sup> It is questionable whether arbitrating FRAND disputes would indeed eliminate this jurisdictional problem given the use of anti-suit injunctions in the international commercial arbitration context. See Robert Force, The Position in the United States on Foreign Forum Selection Clauses and Arbitration Clauses, Forum Non Conveniens, and Antisuit Injunctions, 35 TUL. MAR. L.J. 401, 441-64 (2011); Gabrielle Kaufmann-Kohler, How to Handle Parallel Proceedings: A Practical Approach to Issues Such as Competence-Competence and Anti-Suit Injunctions, 1 DISP. RESOL. INT'L 110 (2008); Chetan Phull, U.S. Anti-Suit Injunctions in Support of International Arbitration: Five Questions American Courts Ask, 28 J. INT'L ARB. 21 (2011).

<sup>282</sup> See generally, Linda Silberman & Robert U. Hess, *Enforcement of Arbitral Awards Set Aside or Annulled at the Seat of Arbitration*, CAMBRIDGE COMPENDIUM OF INTERNATIONAL COMMERCIAL AND INVESTMENT ARBITRATION (2002).

<sup>283</sup> Qingxiu Biu, *The Arbitrability of Antitrust Disputes: A Chinese Perspective*, 10 J. OF ANTITRUST ENFORCEMENT 303 (2022) (discussing the 2019 case of *Shell v. Huili*, in which the Intermediate People's Court of Hohhot found that public policy prevented an arbitration clause without express agreement to arbitrate competition issues).

<sup>284</sup> Dhenne, *supra* note 66, at 759 (observing “the collection of all royalty rates, which precedes their addition, can be particularly tricky. Most often the rates will not be disclosed...Nothing will prevent the holder from invoking a trade secret in order to maintain the confidentiality of agreements concluded with third parties.”).

<sup>285</sup> *Union Oil Co. of California v. Leavell*, 220 F.3d 562, 568 (7th Cir. 2000).

the FRAND commitment would require consideration of relevant past arbitral awards in its dealings with licensees, noting that failure to do so could be in breach of its competition law.<sup>286</sup> Similarly, Lord Justice Arnold called for mandatory transparency to accompany his proposal of mandatory FRAND arbitration.<sup>287</sup> While Lemley and Shapiro's proposal recognized that both parties in a FRAND dispute would likely want to keep arbitration proceedings secret, it acknowledged that such secrecy "would undermine the effectiveness of the FRAND regime."<sup>288</sup> In fact, in final-offer ("baseball") arbitration, information equality is even more important than in other forms of FRAND rate calculation because the stakes are higher. When the parties have disparities in the information they are using or expect the tribunal to use, it tends to result in wider divergences between the proposed rates and consequently a less accurate final rate.<sup>289</sup> While agreements to arbitrate can be customized to deal with some of these issues, arbitration clauses are rarely drafted in a manner that carefully anticipates future evidentiary disputes.<sup>290</sup>

WIPO, as a specialist IP organization, asserts expertise regarding broader policy concerns surrounding SEPs and has been actively working with national intellectual property authorities like the USPTO<sup>291</sup> to facilitate SEP licensing disputes.<sup>292</sup> Therefore, one might expect that the WIPO Arbitration & Mediation Center's efforts to arbitrate FRAND disputes would incorporate robust disclosure and transparency requirements in FRAND proceedings. However, the WIPO Guidelines on FRAND Alternative Dispute Resolution assure parties that they can resolve their FRAND disputes with maximum confidentiality under the WIPO Rules, stating that under the WIPO Arbitration and Expedited Arbitration Rules, unless otherwise agreed by the parties or required by law, *the existence of the arbitration, information on disclosures made during the arbitration, and the arbitration award itself enjoy high standards of confidentiality protection.*<sup>293</sup>

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<sup>286</sup> Hong Kong L.C., *supra* note 269, at 3.

<sup>287</sup> Arnold, *supra* note 25.

<sup>288</sup> Lemley & Shapiro, *supra* note 22, at 1145.

<sup>289</sup> Chowdhury, *supra* note 278, at 43 (noting the importance of disclosure rules because of the need for the parties to "have similar levels of information about the basis of the offers as the arbitrator").

<sup>290</sup> William W. Park, *Arbitration's Protean Nature: The Value of Rules and the Risk*, 19 ARB. INT'L 279, 296 (2003). ("Usually arbitration clauses will be 'cut and paste' jobs by transactional lawyers who have little relish for questions about evidence and briefing schedules.")

<sup>291</sup> See *supra* note 1.

<sup>292</sup> WIPO ADR for FRAND Disputes, World Intellectual Property Organization <https://www.wipo.int/amc/en/center/specific-sectors/ict/frand/> (visited on March 30, 2023).

<sup>293</sup> *Guidance on WIPO FRAND Alternative Dispute Resolution*, WIPO Arbitration and Mediation Center 12 [36] (2021) <https://www.wipo.int/publications/en/details.jsp?id=4232> (visited on March 30, 2023) (emphasis added).

Ultimately, in practice, the secrecy afforded by institutional arbitration for parties wishing to keep their licensing agreements secret in FRAND arbitration is touted as a great benefit.<sup>294</sup>

This sales pitch is aimed at what the “customers” of dispute resolution services want: secrecy.<sup>295</sup> Vary, a lawyer who has acted in FRAND arbitrations, describes the practical reality thus: “Neither party wants its licence agreement terms to become public. A party in a negotiation is at a great disadvantage if its opponent knows the terms of its licence agreements, but it does not know the terms of its opponent’s.”<sup>296</sup> For example, in proceedings brought by InterDigital to enforce a FRAND arbitration award against Huawei, both parties jointly moved for an order sealing the courtroom because “the written submissions and the record to date reference a significant amount of confidential business information.”<sup>297</sup> The judge denied the joint motion, finding it “incredible to think that the parties could not make intelligent legal arguments without referring to highly confidential information.”<sup>298</sup> Given that patents and SEP declarations are, by nature, public—not highly sensitive confidential information—the adjudicator’s incredulity is unsurprising. Nonetheless, as SEP owners, both InterDigital and Huawei had an incentive to keep as much relevant information about FRAND rates away from other implementers, lest it be used in subsequent negotiations or disputes. This stark example supports Patterson’s hypothesis that, “if parties prefer that their patent arbitrations be confidential, the preference may be one for competitive advantage rather than for a more defensible reason.”<sup>299</sup>

Of course, some of the transparency-based objections to FRAND arbitration may also be made for settlements.<sup>300</sup> For example, greater

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<sup>294</sup> Vary, *supra* note 23 (Vary highlights the benefits of arbitration compared to litigation in keeping licensing agreements secret, noting “arbitration institutions are under no obligation to allow the public into proceedings or publish awards, so leaks [of royalty rates] are rare.”)

<sup>295</sup> For example, a non-disclosure agreement at issue in *Vringo v ZTE Corp.* provided that the information provided in licensing negotiations would “not be used or referenced in any way by any Party in any existing or future judicial or arbitration proceedings or made the subject of any public comment or press release.” NO 14-cv-498 (S.D.N.Y. June 3, 2015).

<sup>296</sup> Richard Vary, *Arbitration in SEP Licensing*, *IAM Media*, (March 11, 2021)

<https://www.iam-media.com/global-guide/the-guide-ip-arbitration/1st-edition/article/arbitration-of-frand-disputes-in-sep-licensing>.

<sup>297</sup> *See id.*

<sup>298</sup> *InterDigital v. Huawei*, 15 Civ. 4485 (JGK), 2 (S.D.N.Y., Feb. 11, 2016).

<sup>299</sup> Patterson, *supra* note 110, at 839. It should be noted that Patterson himself served as an arbitrator in the FRAND arbitration proceedings between Interdigital and Huawei. *See InterDigital v. Huawei*, 166 F. Supp. 3d 463, 466 (S.D.N.Y. 2016). There is evidence suggesting Patterson’s hypothesis is correct. *See* James H. Carter, *FRAND Royalty Disputes: A New Challenge for International Arbitration?* in CONTEMPORARY ISSUES IN INTERNATIONAL ARBITRATION AND MEDIATION 78 (2015) (“Parties natural wish to maintain the privacy of their royalty arrangements to the greatest extent possible; but it will be difficult for arbitrators to make rulings on what is non-discriminatory without some access to information about related decisions and license.”)

<sup>300</sup> *See* Owen M. Fiss, *Against Settlement*, 93 YALE L.J. 1073 (1984); Megan M. La Belle, *Against Settlement of (Some) Patent Cases*, 67 VAND. L. REV. 375 (2014).

transparency in the terms of *ex ante* licensing agreements would be beneficial if achieved through fair and generally applicable mechanisms.<sup>301</sup> Even so, there is greater harm in maintaining the confidentiality of arbitral proceedings and awards because they are resolved by an independent and objective decisionmaker rather than the parties themselves.<sup>302</sup> While the lack of overall transparency and use of NDAs and confidentiality agreements in negotiated FRAND licensing is also a cause for concern,<sup>303</sup> secrecy surrounding agreed settlement is arguably less damaging at a systemic level than secrecy involving arbitration would be over time.<sup>304</sup> Provided that there is not a significant information imbalance between the parties, negotiated licenses are more likely to reflect closer agreement between the parties on both relevant data and valuation methodology; this is as it should be if FRAND royalty rates are seen as intended to mimic what *ex ante* bilateral negotiations between the parties would have been. Moreover, without transparency in the methods and data used in calculation, negotiated licenses become increasingly difficult to achieve; decreasing transparency encourages parties in future disputes to resort to litigation or arbitration instead of negotiation as a more effective means of gaining access to that information.

As described above, FRAND terms are impossible to determine accurately in a vacuum: the terms of other licensing agreements or arbitral awards related to the same patent portfolio are highly relevant to determining the fairness, reasonableness, and non-discriminatory nature of licensing terms in future disputes with similarly-situated third parties.<sup>305</sup> Yet, as noted above, those third parties may not have access to, or even know about, previous arbitral awards. Similarly, future decision-makers, whether national courts or arbitral tribunals, also might not be aware of, or have access to, this important information or the method(s) by which it was determined. Even if third parties, courts, and tribunals do have access to these decisions, or parts of them, they must still be able to assess the quality of the information provided in them in order to make the next decision... and the next.

Despite the EU Commission's claim in its 2017 communication on SEP licensing that the "benefits of [SEP dispute arbitration] are currently

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<sup>301</sup> "Competition authorities are advised to actively claim jurisdiction over FRAND licensing of SEP cases that impact the domestic market, especially when SEP licensees' civil lawsuits against SEP holders for violation of antitrust law have been withdrawn due to arbitration based on a forced arbitration clause or settlement." Liu, *supra* note 81, at [4.4.2].

<sup>302</sup> See Lauriat, *supra* note 102, at 479–81; Patterson, *supra* note 110, at 852.

<sup>303</sup> See Lauriat, *supra* note 102, at 472.

<sup>304</sup> See MUNICH FRAND ADR MANAGEMENT GUIDELINES 15 ("Rather, it is usually the parties who are best positioned to define by good-faith negotiations what the specific meaning of FRAND is.").

<sup>305</sup> See, e.g., Lemley & Shapiro, *supra* note 22, at 1141 (suggesting that SSOs would need a mechanism by which an SEP owner "is obligated to disclose to any willing licensee the terms on which it has already licensed its standard-essential patents to other parties, subject to a suitable mechanism to protect the owner's confidential non-price business information.").

underexploited,”<sup>306</sup> it may already be the case that more FRAND arbitration is happening than is desirable. There is evidence that FRAND arbitrations have grown more prevalent over the last decade.<sup>307</sup> Furthermore, given incentives for many SEP-owners, particularly in cross-licensing disputes, to engage in private and confidential arbitration proceedings, it is reasonable to assume that more FRAND arbitrations are occurring without public knowledge. Concerningly, some SSOs have adopted FRAND arbitration as part of their IPR policies.<sup>308</sup> While Patterson makes an alternative suggestion that the SSOs could simply amend IPR policies to mandate compliance with US patent law's requirement for filing arbitration awards, he cynically notes that “if parties to arbitration are not filing awards even with a statutory mandate, an SSO rule is not likely to produce significantly greater compliance.”<sup>309</sup>

While arbitration theoretically could allow parties to customize their proceedings in ways that address many of these policy concerns (e.g., increasing transparency), they are highly unlikely to do so voluntarily. At the same time, parties can customize their arbitral proceedings in ways that are further detached from national mandatory law, for example, by deciding that no specific substantive national law will be applied to their dispute.<sup>310</sup> Indeed, the transnational business network of SEP licensing already displays many of the characteristics of the closed “autopoietic system” that Wai observed could increase the degree of alienation from national law.<sup>311</sup> Wai warns that international commercial arbitration in the FRAND context can reinforce “the sense

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<sup>306</sup> *Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee, Setting out the EU approach to standard essential patents*, 29 November 2017, Section 3.4. 39.

<sup>307</sup> In 2013, Roger G. Brooks, an attorney at Cravath, Swaine, & Moore who had represented Qualcomm in proceedings against Nokia in 2006, stated that he had “litigated FRAND issues in two private arbitrations.” Roger G. Brooks, *SSO Rules, Standardization, and SEP Licensing: Economic Questions From the Trenches*, J. OF COMP. L. & ECON. 9(4), 859, 860. *See contra*, Contreras & Newman, *supra* note 22, at 29 (stating in 2014: “In the case of standards-essential patents, which have been arbitrated even less frequently, these procedures and frameworks remain almost completely unused.”). *See also*, NIKOLIC *supra* note 11 at 241 (“Indeed, many SEP disputes are already resolved through arbitration, although because of the confidential nature of arbitration there is no reliable statistical evidence of its use.”); David Perkins & Richard Price, *A European Perspective on the Arbitration of Patent Disputes*, (March 29, 2016) (“Owing to the difficulties encountered by courts handling such disputes both sides of the Atlantic, increasingly the telecoms sector is turning to international arbitration.”) <http://arbitrationblog.kluwerarbitration.com/2016/03/29/a-european-perspective-on-the-arbitration-of-patent-disputes/> (visited on March 23, 2023).

<sup>308</sup> *See* Jorge L. Contreras, *IEEE Amends its Patent (FRAND) Policy*, PATENTLY-O, <https://patentlyo.com/patent/2015/02/amends-patent-policy.html> (Feb. 9, 2015) (visited on March 23, 2023); Cook & Garcia, *supra* note 181, at 46.

<sup>309</sup> Patterson, *supra* note 110, at 82.

<sup>310</sup> *See generally* Eli Greenbaum, *Arbitration Without Law: Choice of Law in FRAND Disputes*, RES GESTAE 26 (2016).

<sup>311</sup> Robert Wai, *Transnational Liff-off and Juridical Touchdown: The Regulatory Function of Private International Law in an Era of Globalization*, 40 COLUM. J. TRANSNAT'L L. 209, 258 (2002).

of shared interests and norms among parties,” until it becomes “so significant that it colors perceptions of interests and leads parties not to appeal to national legal systems even where it might be in their interests otherwise defined.”<sup>312</sup> Under this framework, the interests and values of non-participants are seen as irrelevant—unwanted intrusions as knowledgeable insiders carry on the business of the system.<sup>313</sup> For its part, the business model of arbitration incentivizes arbitrators hoping for reappointment to please the industry’s repeat players,<sup>314</sup> and the complex nature of FRAND disputes strongly incentivizes the parties to appoint those arbitrators with past experience resolving FRAND disputes. In the FRAND context, the confidentiality allowed by arbitration may contribute to further alienation from national law while effectively removing FRAND disputes from governmental, academic, and journalistic oversight. As Liu cautions, “[w]ith FRAND royalties hidden in the dark, no creditable academic research or oversight from the Fourth Estate is possible, which will encourage patent abuse and trolls.”<sup>315</sup>

In addition to the public policy implications described above, FRAND arbitration would not necessarily solve, and could create new, transnational conflict-of-laws problems. These concerns, combined with the risks of removing significant portions of the global SEP-licensing system from scrutiny, should cause authorities to reconsider the wisdom of mandatory, or even voluntary, FRAND arbitration under existing frameworks. This article, however, presents another, more fundamental, objection to the prospect of FRAND arbitration. In changing FRAND arbitration to solve Problem B—the problem of who has jurisdiction to resolve disputes dealing with global standards but implicating national rights—it would no longer solve Problem A. Problem A—that SEP owners can abuse their market power—was what the FRAND commitment was principally intended to solve. As the next section explains, widespread FRAND arbitration within the current framework of international commercial arbitration practice would be antithetical to the goals that the FRAND commitment was created to achieve.

## **B. Arbitration as a Solution to Problem B Fails to Solve Problem A**

This section explains that SEP licensing disputes are not suitable for arbitration under the current framework for one important reason: the cumulative impact of individual FRAND arbitrations would render the calculation of FRAND rates by decision-makers increasingly less accurate. While precise methods of calculating FRAND rates differ, as discussed above, there is general consensus that (1) rates should account

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<sup>312</sup> *Id.* at 259.

<sup>313</sup> *Id.* at 259–60.

<sup>314</sup> Catherine Rogers, *The Arrival of the "Have-Nots" in International Arbitration*, 8 NEV. L.J. 341, 351 (2007) (noting that critics of commercial arbitration argue that “the structure of the market for arbitrator services creates incentives for arbitrators to favor repeat players, who are more likely to reappoint them in the future”).

<sup>315</sup> Liu, *supra* note 81, at ¶ 4.3.3; Larouche, Padilla & Taffet, *supra* note 160, at 602–03.



for the actual value of the SEPs relative to the standard as a whole, and (2) while FRAND rates are relative rather than strictly uniform for all licensees, they must not be discriminatory.

Consider the two most common approaches taken by a typical arbitral tribunal when determining FRAND royalty rates: the top-down approach and the use of comparable licenses. If an arbitral tribunal applies the top-down approach to calculate a FRAND rate, determinations of validity and essentiality are crucial to assessing the actual value of the SEPs relative to the technology as a whole.<sup>316</sup> Even if the tribunal finesses the language of the award to avoid an actual decision on patent validity, the high levels of invalidity and non-essentiality in SEP portfolios mean that, in most cases, the tribunal *must* have taken issues of invalidity and non-essentiality into account in order to calculate the FRAND royalty rate with any kind of accuracy. Whether the tribunal sets a rate that merely “takes into account” probable invalidity and non-essentiality in the broader SEP portfolio or one that makes a clear decision on invalidity or non-essentiality for some SEPs in the portfolio with *inter partes* effect, the resulting award will damage third parties and market competition because existing, and probably future, licensees must still pay royalties based on an SEP portfolio containing the same probably invalid and/or non-essential patents. It logically follows that a FRAND rate based on such an award would render many other present and future third-party licensing agreements necessarily discriminatory, since those parties would still be paying royalties on an SEP portfolio that included the probably invalid and/or non-essential patents. Of course, if the proceedings are confidential or there is a non-disclosure agreement, those third parties might never even know that some licensees are paying less for the same portfolios.<sup>317</sup>

If an arbitral tribunal applies methods using comparable licenses to calculate royalty rates, high levels of disclosure are required.<sup>318</sup> Not only is access to comparable licenses a requirement of the process, but also the context of those licenses is needed to determine whether they present useful approximations of *ex ante* royalty rates.<sup>319</sup> These challenges beset courts already affected by the information-based gamesmanship of

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<sup>316</sup> Dornis, *supra* note 74, at 590 (pointing out that in the top-down approach, the problems of over-declaration and lack of examination at the SSO level, “can be avoided only if courts also determine the relative value of rights—i.e., both their essentiality and validity”).

<sup>317</sup> For example, a non-disclosure agreement at issue in *Vringo v. ZTE Corp.* provided that the information provided in licensing negotiations would “not be used or referenced in any way by any Party in any existing or future judicial or arbitration proceedings or made the subject of any public comment or press release.” NO 14-cv-498 (S.D.N.Y. June 3, 2015).

<sup>318</sup> See James H. Carter, *FRAND Royalty Disputes: A New Challenge for International Arbitration?* in CONTEMPORARY ISSUES IN INTERNATIONAL ARBITRATION AND MEDIATION 78 (2015) (“Parties naturally wish to maintain the privacy of their royalty arrangements to the greatest extent possible; but it will be difficult for arbitrators to make rulings on what is non-discriminatory without some access to information about related decisions and license.”).

<sup>319</sup> Dornis, *supra* note 74, at 589.

parties attempting to strategically disclose comparable license information.<sup>320</sup>

As a group, SEP owners are in a far better position to gain access to comparable licensing than pure implementers. Paradoxically, however, those with experience practicing FRAND arbitration recognize that implementers are generally burdened with producing evidence of comparable licenses from third parties for the tribunal. For example, under a top-down approach, in order to argue that the royalty rate should be reduced, the implementer is required to put forward evidence about the validity and essentiality of other relevant SEP portfolios.... because, to a greater or lesser extent, all the primary methods used by courts or tribunals to date for determining royalties compare the SEP portfolio being licensed to other portfolios. It is not enough to argue that the SEP owner's portfolio contains some invalid or non-essential patents: to achieve a reduction in royalty rate the implementer must demonstrate that the SEP owner's portfolio is worse than other portfolios in that regard.<sup>321</sup>

Likewise, in front of a tribunal using comparable licenses in a bottom-up approach, the implementer "must show that the SEP owner's portfolio [contains more invalid and nonessential patents] than the other licensees believed when they entered their licence agreements with the SEP owner."<sup>322</sup> In both of these instances, a pure implementer engaged in arbitration would have extraordinary difficulty obtaining the evidence needed to meet these burdens of proof, particularly if non-disclosure agreements and confidential arbitration tied up information about the valuations of other relevant SEP portfolios.

While lack of transparency is already a problem in calculating FRAND royalty rates, a FRAND arbitration would further restrict access to relevant data by means of confidentiality and non-disclosure agreements. Because SEP owners do not wish to disclose licenses they view as unfavorable, they are unlikely to agree to a dispute settlement procedure that requires full transparency. Arbitration, however, would provide greater opportunities to avoid the disclosure of useful data. Through arbitration, transparency would decrease even further, leading to progressively less accurate FRAND rates in future arbitration. Persistent lack of transparency in arbitration proceedings means that FRAND royalty rate decision-making will become less and less accurate until the very concept of FRAND licensing itself—supposedly the

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<sup>320</sup> "Some licensors have been resistant to the idea that their licensing practices should be under any kind of external scrutiny (such as court or antitrust authority control) and wish to have free rein as to the terms they impose, keeping individual terms confidential. In my experience, potential licensees can place great weight on the decisions of courts and competition authorities as this is often the best evidence available to them as to what is reasonable for any given portfolio." *Interdigital v. Lenovo* [2023] EWHC 539 (Pat) (Mellor, J.) [2.29]. See also Lauriat, *supra* note 102, at 468.

<sup>321</sup> Vary, *supra* note 23.

<sup>322</sup> *Id.*

solution to a problem—no longer has any meaning. The smaller the industry, the greater the impact on competition.

Even if there were greater transparency in FRAND arbitration, however, there would still be cause for concern. One of the reasons why a certain amount of legal error is considered acceptable in arbitral proceedings, despite the lack of an appeal process, is because any potential harms are limited to one dispute and the parties involved that dispute. Since an arbitral award has no precedential value, the system can accept a legally flawed award without suffering significant harm, provided that it is not the result of corruption or gross misconduct. In FRAND cases, however, the errors of an arbitral tribunal are not confined to one dispute. Even if transparency were mandated and concerns about patent validity set aside, errors in calculating royalty rates could have lasting effects when future tribunals use them as comparable licenses to aid in their own calculations. As a result, misinterpretation of the effective rates in one case would affect others down the line. One mistaken award, against which a party would have no legal recourse, would compound unfair and discriminatory rates over time.<sup>323</sup>

On a systemic level, FRAND arbitration would eventually negate the purpose of FRAND. Transparency would decrease, and FRAND royalty rates would become increasingly less fair, less reasonable, and more discriminatory. Gaming disclosure of licensing terms is already present and a cause of competition problems.<sup>324</sup> The harm from imbalances would increase as SEP-licensing moves into IoT where potential licensees may find it difficult to predict whether rates for licensing SEPs will pose a barrier to market entry.<sup>325</sup> With ever-decreasing transparency, the FRAND commitment would no longer solve Problem A because unequal access to relevant information about the value of SEP portfolios would allow for the same anticompetitive abuses of market power that the FRAND commitment was meant to prevent.

### CONCLUSION

Individually, we trust our mobile phones to hold sensitive personal data, while, collectively, nations acknowledge the integrity of their communications networks is vital to national security. Whether we know it or not, we are also collectively placing our trust in the SSOs that set the standards for those technologies, the zero-scrutiny system of SEP declarations, industry self-regulation of anticompetitive practices, and perhaps even the private individuals who may be setting global FRAND

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<sup>323</sup> See Jonathan D. Putnam, *Economic Determinations in 'FRAND Rate'-setting: A Guide for the Perplexed*, 41 *FORDHAM INT'L L.J.* 953, 1008–09 (2018).

<sup>324</sup> Lauriat, *supra* note 102, at 428. Patterson, *supra* note 110, at 841.

<sup>325</sup> See Brian J. Love & Christian Helmers, *Are Market Prices for Patent Licenses Observable? Evidence from 4G and 5G Licensing*, Working Paper (2022), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4020536](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4020536) (visited on March 23, 2023).

rates that affect the pricing of every mobile phone in the world through arbitral awards. The ongoing geopolitical struggle for dominance in the telecommunications industry is real and the stakes are high. Furthermore, standard-setting will become increasingly important as the IoT opens up entirely new markets into which the problems of SEP licensing inevitably creep.<sup>326</sup>

Patent rights are based on openness and disclosure of innovation in return for limited exclusivity. Standard-setting is based on collective, cooperative action for the benefit of industry and the public. When patents and standards are combined in the form of SEPs, it is no surprise that private and confidential forms of bilateral, adversarial dispute resolution jar with the fundamental character of the rights involved.

The current system of international commercial arbitration may be well-equipped to deal with a wide range of complicated transnational commercial disputes. However, as tempting as it can be to encourage private parties, particularly in disputes over global licenses, to leverage their own resources to resolve their disputes privately, it is important to be aware of the new problems that removing these disputes from the public sphere can create—both for individual parties and the intellectual property ecosystem. Courts and lawmakers may struggle to interpret and structure the law in a way that fairly allocates risk between patent-holders and licensees while also accounting for third-party competitors, the market, and the public interest in a functional patent system. They may not always do so in a way that everyone finds satisfactory, but their decision-making is sufficiently transparent to enable criticism. By contrast, any economic and social effects of widespread private resolution of SEP licensing—hidden from view—might not raise concerns until long after the negative impacts are felt.

Ultimately, it may be that arbitration in some form—possibly even a public/private hybrid—will emerge as the best among bad options for dealing with FRAND disputes. As this article demonstrates, however, the nature of the existing global SEP structure, combined with the realities of international commercial arbitration practice, would create new, serious, and largely hidden problems that need to be addressed before wholesale privatization of these disputes. In the meantime, a more efficient private ordering solution should be sought since, in a functional system, courts and arbitrators are a matter of last resort.

Given the unusual economic nature of SEP-licensing markets—an artificial creation at the nexus of patent exclusivity and competitor cooperation—it may well be that further unusual market behavior in the form of collective private action is the way forward. Most notably,

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<sup>326</sup> “Although the majority of technology standards subject to SEPs are in the area of mobile communications, the standards directly or indirectly subject to SEPs are technologically more diverse than the inventions on which the declared SEPs build. This is especially important in view of upcoming Internet of Things (IoT) technologies that will connect devices, vehicles, buildings, and other items with electronics, software, or sensors.” Baron & Pohlmann, *supra* note 70, at 525.

collective licensing models via patent pools could provide more efficient licensing, greater price transparency and certainty, and, consequently, result in fewer individual licensing disputes.<sup>327</sup> Though some have raised concerns over the complications for competition that could arise from increasing the intensity of collective action in particular markets,<sup>328</sup> this possible alternative has been praised for its efficiency and clarity as well as the increased accessibility it could offer IoT industries that newly venture into the unknown territory of SEP-licensing.<sup>329</sup>

Whatever direction global SEP-licensing ultimately moves, national antitrust and IP authorities must be more alert to future risks of damage to markets and the patent system. As Hovenkamp warns: [o]versight of FRAND obligations is one area where it is critical for the courts to keep an eye on longer run concerns for innovation. FRAND has evolved into a highly successful but nevertheless vulnerable mechanism for facilitating joint innovation and product development . . . That system will be undermined, however, if one firm is able to renege on its voluntarily entered obligations, because others will then do the same. The regime of collaborative innovation that FRAND contemplates would very likely fall apart, and at great harm to competition and economic welfare.<sup>330</sup>

While trying to avoid over-catastrophizing, this article has sought to provide an aerial view of the potential impacts of the confidential arbitration of FRAND disputes over time while acknowledging the many advantages of arbitration and its value in contemporary transnational commercial legal practice. Overall, arbitration has proven itself to be an excellent system for resolving many of the modern era's complicated transnational commercial disputes. Policymakers cannot, however, let the general policy in favor of arbitration embedded in their national laws blind them to the consequences of arbitrating FRAND disputes on a large scale. Without significant oversight and external pressure to mitigate the potential harm to the patent system, competitive markets, and the broader public good, existing structural realities and entrenched incentives may lead to the systemic failure of FRAND arbitration as a means of maintaining healthy competition in industries where SEP-licensing is, or becomes, prevalent—ultimately nullifying the FRAND commitment's very purpose.

The results of individual FRAND disputes have far-reaching impacts, affecting issues like economic stability, global communications, national security, and the development of socially transformative businesses. This article hopes to inform a wider audience

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<sup>327</sup> NIKOLIC, *supra* note 11, at 242.

<sup>328</sup> John Jurata & Emily Lukens, *Glory Days: Do the Anti-Competitive Risks of Standard Essential Patent Pools Outweigh Their Benefits?* 58 SAN DIEGO L. REV. 417 (2021).

<sup>329</sup> EU Communication on Standard Essential Patents, [2.3] <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52017DC0712&rid=2> (visited on March 23, 2023).

<sup>330</sup> Hovenkamp, *supra* note 56, at 1743.

of the pitfalls lurking in a seemingly simple solution to a serious and complicated problem while there is still time to act—and before the world is hit by the next wave of FRAND disputes. Otherwise, FRAND arbitration will destroy FRAND.