

# IP Rights Delayed are IP Rights Denied: The Global Antitrust Institute's Comment on the European Commission's 2023 Proposal to Regulate Standard-Essential Patents

Alexander Raskovich, Antonin Scalia Law School, George Mason University Judge Douglas H. Ginsburg, Antonin Scalia Law School, George Mason University Bruce H. Kobayashi, Antonin Scalia Law School, George Mason University Abbott B. Lipsky, Jr., Antonin Scalia Law School, George Mason University John M. Yun, Antonin Scalia Law School, George Mason University

POSTED
August 2023

George Mason University Law & Economics Research Paper Series, 23-12

# IP Rights Delayed are IP Rights Denied: The Global Antitrust Institute's Comment on the European Commission's 2023 Proposal to Regulate Standard-Essential Patents

# August 10, 2023

The Global Antitrust Institute ("GAI") submits this comment to the European Commission ("EC") on its 2023 Communication and Proposal to regulate standard-essential patents ("SEPs").¹ This comment is based on the GAI's extensive experience and expertise in competition law and economics in general, and in particular the economics of intellectual property ("IP") rights.²

The heart of the EC's Proposal is the establishment of a regulatory authority—the "competence center"<sup>3</sup>—charged with maintaining a registry of SEPs with detailed information drawn from required submissions by SEP holders and "administering a system for essentiality checks and processes for aggregate royalty determination and FRAND determination . . ."<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> COM (2023) 232 final, 27.4.2023, 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 final. Brussels 27.4.2023. Available at: <a href="https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13109-intellectual-propertry-new-framework-for-standard-essential-patents-en">https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13109-intellectual-propertry-new-framework-for-standard-essential-patents-en</a>.

<sup>&</sup>lt;sup>2</sup> The GAI is a division of George Mason University's Antonin Scalia Law School and reports to the Dean of the Law School. In support of its mission, the GAI draws upon the independent expertise of the Law School faculty including Douglas H. Ginsburg, Professor of Law, Senior Judge, U.S. Court of Appeals for the District of Columbia Circuit, Chairman of GAI's International Board of Advisors, and a former Assistant Attorney General in charge of the Antitrust Division of the U.S. Department of Justice; Bruce H. Kobayashi, Paige V. and Henry N. Butler Chair in Law & Economics and former Director of the Bureau of Economics, FTC; Abbott B. Lipsky, Jr., Adjunct Professor, Director of Competition Advocacy for the GAI, former Acting Director of the Bureau of Competition, FTC, and former Deputy Assistant Attorney General for Antitrust, U.S. Department of Justice; Dr. Alexander Raskovich, the GAI's Director of Research; and John M. Yun, Associate Professor and former Acting Deputy Assistant Director, Bureau of Economics, FTC. We thank Sarah Kratt for excellent research assistance. The GAI is grateful for the generous contributions from the individuals, foundations, and corporations that enable the GAI to carry out its mission. Its finances are managed through the George Mason University Foundation, Inc., which is a 501(c)(3) corporation established to support the activities of George Mason University. More information may be found at <a href="https://gai.gmu.edu">https://gai.gmu.edu</a>.

<sup>&</sup>lt;sup>3</sup> For example, as a component of the European Union Intellectual Property Office.

<sup>&</sup>lt;sup>4</sup> EUR. COMM'N, *supra* note 1, at 18 para.13.

The stated aim of the Proposal is to facilitate licensing negotiations between SEP holders and implementers,<sup>5</sup> applying a balanced approach towards the bargaining parties.<sup>6</sup> Such negotiations are purportedly beset by a lack of "transparency" that hinders licensing agreements from being reached. The implicit rationale for the Proposal appears to be that the competence center would have greater expertise than non-specialist courts in determining essentiality and FRAND rates, thereby encouraging resolution of licensing disputes without recourse to court adjudication or private arbitration.<sup>7</sup>

As we discuss below, however, the Proposal's approach is highly unbalanced. It would sharpen incentives for holdout by implementers and thereby substantially weaken SEP holders' ability to appropriate the value of their IP. In particular, implementers would be empowered to substantially delay requests by SEP holders for injunctive relief against infringement. It is a truism that justice delayed is justice denied. Likewise, IP rights delayed are IP rights denied. Beyond delay, the Proposal would entirely bar the recovery of some losses from infringement in certain circumstances.

As a result, the practical effect of the Proposal would be to *induce* licensing disputes where there would otherwise have been none, supplanting private bargaining with a less well-informed and inefficient administrative process that would materially depress incentives for innovation and standardization.

The remainder of this comment is organized as follows. In Section I, we analyze what problem the Proposal is intended to mitigate. Although the EC's Communication couches the aim of the Proposal as improving transparency and lowering the transaction costs of licensing negotiations, we show that this argument is deeply flawed. Alternatively, the Proposal's structure suggests its aim may be to address implementers' claims of holdup by SEP holders, the concern that has driven much academic and policy discussion surrounding SEPs. As we explain, holdup concerns have been overblown compared to the relatively neglected problem of holdout by implementers.

<sup>&</sup>lt;sup>5</sup> *Id.* at 4 ("This initiative . . . aims to encourage, and reward the continued contribution of cutting-edge technologies to standards by facilitating the licensing of the patented technologies incorporated in the standards.").

<sup>6</sup> See id. at 1-2.

<sup>&</sup>lt;sup>7</sup> And presumably reducing costs when such adjudication does occur.

In Section II, we discuss the economic theory of bargaining and the insights it offers into SEP licensing. When key terms of trade are noncontractible—not effectively enforceable by a court—holdup and holdout are common problems in bargaining relationships. This is the case whether negotiations are over the supply of tangible or intangible goods. The problem of holdout is especially severe, however, for trade in intangibles such as SEP licensing, because without a deal IP is subject to expropriation.

In Section III, we analyze how the Proposal would exacerbate the holdout problem in SEP licensing and degrade the returns to IP investment. First, a SEP holder that fails to comply with the Proposal's requirement to register declared SEPs with the competence center within a six-month deadline is forever foreclosed from seeking compensation for infringements that occurred prior to registration. Depending on the extensiveness of the SEP information required by registration, compliance within the six-month deadline could be extremely costly, or perhaps infeasible. Aside from imposing on the SEP holder substantial compliance costs and risk of lost returns on its IP, this registration feature of the Proposal would furnish implementers with incentives to infringe rather than engage in substantive negotiations prior to SEP registration, insofar as implementers would rationally expect a substantial likelihood that the registration deadline will not be met.

Second, the Proposal would grant implementers the right unilaterally to initiate essentiality tests and FRAND determinations from the competence center, that is, without the consent of the SEP holder. SEP holders would be barred from seeking injunctive relief until after the competence center completes the likely lengthy process (unhindered by any time limit) of FRAND determination.

Section IV concludes. There we summarize our main points and offer an alternative proposal: That the competence center (and EUIPO) offer registration, essentiality-check and FRAND determination services on a purely voluntary basis, upon a joint request by both implementer and SEP holder.

# I. What Problem is the Proposal Intended to Solve?

The Communication never clearly specifies what is meant by a lack of transparency, but from the context the perceived problem appears to be that SEP

implementers generally lack information on (1) what SEPs are associated with a given standard, (2) the identities of the SEP holders, (3) whether the declared SEPs are in fact essential to the standard, and (4) what royalty rates are FRAND.

As an initial matter, characterizing these uncertainties as bargaining problems—and ones best addressed through regulation—is highly questionable. With respect to (1) and (2), standards developing organizations ("SDOs") typically require disclosure of SEPs by their holders. For example, the European Telecommunications Standards Institute ("ETSI") maintains an online database of registered IP rights associated with standards developed under its auspices.<sup>8</sup> Implementers, regardless of whether they participate in the SDO, have access to considerable information on ETSI SEPs. There are also private vendors that maintain SEP databases with more detailed information, accessible for a fee. In any case, if an implementer is otherwise unaware of the existence of a SEP, the SEP holder has an incentive to notify an infringing implementer of the holder's IP claim to royalties.<sup>9</sup> Indeed, doing so is only prudent under the holding of the European Court of Justice in the case of *Huawei v. ZTE*.

The fact that a licensing negotiation is in progress or that an implementer has been notified of an infringement claim implies that information on (1) and (2) is transparent and readily available to the implementers. Relatedly, it cannot be taken for granted that mandating participation in the proposed SEP registry, which would impose substantial costs on SEP holders, would lower rather than raise the information costs associated with SEP licensing.

If a government agency were to have a cost advantage in providing a registry listing goods and what firms supply them, buyers and sellers would tend to gain by participating in the registry. Voluntary participation signals that benefits exceed costs for the participants, that trade is indeed facilitated. Mandating participation silences that signal, raising risks that the regulation may waste resources and hinder trade.

<sup>&</sup>lt;sup>8</sup> See ETSI IPR Online Database, EUR. TELECOMMS. STANDARDS INST., https://ipr.etsi.org (last visited Aug. 1, 2023).

<sup>&</sup>lt;sup>9</sup> A SEP holder would willingly participate in the proposed registry if the benefits of doing so were to exceed the costs. Mandating participation on unwilling SEP holders would be inconsistent with the Proposal's stated aim of facilitating voluntary exchange between SEP holders and implementers.

One might argue, however, that the imposition of up-front registration costs on SEP holders is justified with regard to issues (3) and (4) above. That is, the proposed registry may, by facilitating the competence center's performance of essentiality checks and advisory FRAND determinations, ultimately lower transaction costs to facilitate the *conclusion* of licensing agreements. Even that argument, however, is not persuasive.

First, as noted above, there are numerous market alternatives for essentiality checks to which implementers (and patent holders) can turn. <sup>10</sup> The incremental value—in facilitating SEP licensing negotiations—of developing essentiality-check expertise by yet another supplier, the proposed competence center, is far from clear.

Second, SEP holders have incentives to provide implementers with additional information on essentiality (beyond what can be gleaned from SDOs) when doing so would hasten a licensing agreement or lessen the risk of a breakdown in negotiations that would lead to time-consuming and costly court adjudication or arbitration. It is not uncommon in SEP licensing negotiations for the SEP holder to provide the implementer with information on patent families, claim trees, and the like.<sup>11</sup>

Moreover, implementers that have actively participated in the SDO's development of a standard typically have first-hand knowledge of the SEPs incorporated into the standard and the technical aspects that bear on a patent's essentiality. In such cases, essentiality (or non-essentiality) should be readily transparent to the implementer in SEP licensing negotiations.

A SEP holder has an incentive to undertake the costs of presenting an implementer with information on essentiality only in case doing so would increase the speed or

<sup>&</sup>lt;sup>10</sup> A partial list: TT Consultants, GreyB, Sagacious Research, SciTech Patent Art, Clarivate, LexisNexis IPlytics, Angel IP, InQuartik SEP OmniLytics, and Questel. Many vendors of SEP essentiality checks also provide advice on FRAND terms. The EC must likewise analyze whether the proposed provision of advisory opinions on FRAND terms by the EUIPO would lower transaction costs relative to the market alternatives.

<sup>&</sup>lt;sup>11</sup> The Communication emphasizes the need for such evidence to come from an independent source. This is incorrect. Information verifiable by the recipient is credible regardless of the source. The fact that SEP holders oftentimes present implementers with information on essentiality is itself evidence of the potential credibility of that information; otherwise the SEP holder could not gain from this costly activity.

likelihood of reaching agreement. The Proposal's mandatory SEP registry would in essence require SEP holders to bear these costs in *every* case.

A rigorous cost-benefit analysis, one that the EC has yet to perform, is required to assess whether the competence center would likely lower the transaction costs of SEP licensing negotiations below those of the market alternatives currently available (including direct provision by the SEP holder), or would simply interpose additional layers of costly administration. For the reasons given above, that cost-benefit analysis is unlikely to support the Proposal on grounds of reducing transaction costs by increasing transparency.

The structure of the Proposal suggests an alternative rationale, however: lowering the costs of court adjudication of FRAND disputes when licensing negotiations break down. Further, the Proposal appears to strongly favor a particular method of determining FRAND by the EUIPO—the so-called "top-down" method, which may be inappropriate in many cases.

In Section II we analyze the Proposal's likely economic effects through the lens of this second rationale, after describing the holdup and holdout problems that may plague SEP licensing negotiations. In particular, we show that even if the competence center were to have a cost advantage over non-specialist courts and (potentially specialized) arbitrators in determining FRAND royalty rates, the Proposal would perversely weaken licensing negotiations in favor of costlier court adjudication.

In addition, the Proposal would create incentives for holdout that undercut incentives to invest in innovation and standardization, as we discuss in Section III. Thus, even if the Proposal were to lower SEP licensing costs in cases that go to court adjudication of FRAND rates, it would likely raise costs overall by inducing more frequent disputes for courts to resolve.

#### II. Holdup and Holdout in Bargaining

In the context of SEP licensing, holdup refers to the concern that a patent may gain market power on the sell-side by virtue of having been incorporated into a valuable standard.<sup>12</sup> Holdout refers to the obverse concern on the buy-side, that an implementer may gain bargaining leverage from the SEP holder having sunk investment into developing the patent. As we discuss below, both factors—or neither—may be present simultaneously in any particular licensing negotiation.

Given that for many years the twin concerns of holdup and holdout have been foci of SEP policy discussions, it is remarkable that the term "holdup" (and its cognates) appears nowhere in the EC's Communication, and "hold-out" appears just once, in an aside about a survey result.<sup>13</sup> Nonetheless, an understanding of these concerns—in the broader context of bargaining for any type of good, tangible or intangible—is key to analyzing the Proposal's likely economic effects on SEP licensing.

#### A. Double Moral Hazard in Bargaining

Consider the case of two firms, *A* and *B*, that can jointly produce a good valued by consumers. The value consumers place on the good increases with the investment in quality made by either firm. Ideally, both firms would invest at a high level that maximizes their joint profits. Suppose, however, that the investments are *noncontractible*. That is, once production starts each firm can infer the investment level made by the other by observing the resulting quality of the good, but these investment levels are not verifiable by a third party, such as a court. In this case, a contract between *A* and *B* that specifies the investment levels each must undertake cannot be effectively court-enforced against a party in breach.

In the economics literature, this problem is called *double moral hazard* because, in the absence of effective court enforcement of an investment contract between the parties,

7

<sup>&</sup>lt;sup>12</sup> A point often lost in discussions of holdup is that any market power gained by a SEP through its incorporation into a standard is limited by the market power commanded by the standard itself. To the extent that there are viable substitutes for the standard to which implementers could turn, the standard's market power—and derivatively the market power of SEPs embodied in the standard—will be low to nil. On the other hand, the greater the technological advance embodied in the standard, as determined by the intensity of consumer demand for goods produced using the standard, the greater will be implementers' willingness to pay to practice the standard. Likewise, SEPs that are truly essential to a highly valuable standard will tend to command high royalty rates based on their comparative merits.

<sup>&</sup>lt;sup>13</sup> EUR. COMM'N, *supra* note 1, at 6.

each might gain privately by investing less than the jointly optimal and agreed amount. There is a large economics literature on moral hazard problems and various ways they could be solved in theory. In practice, sometimes the best feasible (though far from perfect) mitigation of double moral hazard is through a simple revenue-sharing contract. Revenue sharing (as through a royalty rate) provides some incentive for each party to undertake investment, because revenue increases with investment. But the resulting investments would be below the levels that would maximize the firms' joint profits, as well as below what would most benefit consumers. This is because each firm captures only part of the incremental revenue generated by its own investment.<sup>14</sup>

One party's inability to fully appropriate the incremental gains from its noncontractible investment is commonly referred to as the problem of *holdup* by the other party. In the case of double moral hazard, each party holds the other up. When one party to a transaction is labeled the seller and the other the buyer, holdup of the seller is sometimes referred to as *holdout* by the buyer. This at least is how the terminology has developed in the setting of SEP licensing.

#### B. The Importance of Who Controls the Asset in Bargaining

In economics, the property rights theory of the firm<sup>15</sup> yields important insights into how the ownership of an asset by one or the other bargaining party affects the noncontractible investment levels each party chooses to undertake. The principal insight is that the party controlling the asset whose value is improved by investment has the sharper incentive to invest, all else equal. This is because the party in control of the asset has the ability to determine what happens to the asset in case negotiations break down.

<sup>&</sup>lt;sup>14</sup> Given simple revenue-sharing (or a royalty rate), the contract could be structured so that the party whose investment contributes more to the joint revenue captures the higher share of that revenue. Such an arrangement would yield higher joint revenues than any other split between the parties, if it yields returns acceptable to both.

<sup>&</sup>lt;sup>15</sup> See Sanford Grossman & Oliver Hart, The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration, 94 J. Pol. Econ. 691 (1986); Oliver Hart & John Moore, Property Rights and the Nature of the Firm, 98 J. Pol. Econ. 1119 (1990).

Perhaps the simplest example is the sale of a tangible good which remains in the seller's possession until an agreement to transfer the good to the buyer has been reached. If negotiations beak down, the seller retains the good and has the option to sell it elsewhere. All else equal, one could say that the buyer's holdout option is weak when there are other viable buyers to which the seller could turn. In this case, the seller's incentive to invest in the quality of the good is relatively high.

At the opposite pole, a buyer's holdout potential is high when the *buyer* retains control of the asset in case negotiations break down. This is the case for SEPs and other intangible assets whose value can be expropriated. If licensing negotiations break down, the implementer has the ability nonetheless to use the patent without a royalty agreement. Anticipating the possibility of infringement and uncertain compensation through the courts, an innovator's incentive to invest in SEPs is diminished.

Although holdup initially took center stage in policy discussions over SEPs, what distinguishes SEP licensing from trade in tangible goods is its inherently higher potential for holdout. A rational SEP licensing policy should be especially attentive to risks of holdout, which dulls innovators' incentives to engage in R&D and to participate in standards development. As we discuss in Section III, the Proposal fails utterly in this regard; its structure actually creates incentives for implementers to hold out.

# C. Self-Enforcement Through Repeat Dealing

One potential solution to moral hazard, when court enforcement of an explicit contract is difficult or infeasible, is self-enforcement of an *implicit* contract through repeat dealing by the parties. A simple example of such an arrangement is the sale of a branded consumer good, where consumers associate premium quality with the brand and so are willing to pay a premium for it. That premium represents a stream of future profits (*quasirents*) for the manufacturer that is contingent on the continued experience of high quality

<sup>&</sup>lt;sup>16</sup> Moreover, as the GAI has noted elsewhere, property rights in intangible goods should be treated symmetrically with those in tangible goods. *See* Joshua D. Wright & Douglas H. Ginsburg, *Whither Symmetry? Antitrust Analysis of Intellectual Property Rights at the FTC and DOJ*, 9 COMPETITION POL'Y INT'L 41 (2013).

by consumers. If, to economize on costs, the manufacturer "breaches" the implicit contract to provide high quality, consumers will catch on, no longer be willing to pay the price premium, and may switch purchases to another manufacturer. Cheating on quality would not be profitable to the manufacturer if the short-term gains from lower unit cost (while keeping price high) are outweighed by the long-term losses from lower unit sales and revenues. In this case, the implicit contract is self-enforcing.<sup>17</sup>

In the branded goods example, there is a single moral hazard: the potential for the manufacturer to cheat on an implicit promise to maintain high quality. A standards development process involves double moral hazard. Innovators and implementers collaborate under the auspices of an SDO to develop a standard, each side investing noncontractible effort and resources to the task. To be viable in the market, the standard must facilitate the creation of new goods that consumers will want to buy. To be technically feasible, the standard must overcome engineering challenges that span the capabilities of both innovators and implementers.

On this view, SDOs are akin to research joint ventures, their participants collaborating in pursuit of solutions to a standardization problem. The academic literature on holdup, however, commonly treats SDOs as if they cobble together standards from among a pre-existing set of relevant patents. The holdup problem could then easily be solved simply by having patentees announce in advance the royalty rates they demand, in a kind of auction. The SDO is conceived to be like a diner arranging a restaurant meal from a given set of menu options, based in part on the prices of the various items. Ironically, on this view of SDOs, the path to a successful standard is *transparent* in every dimension except price.

The core function of an SDO is to create a forum within which participants can effectively collaborate in the exchange of ideas to jointly develop a technically feasible

<sup>&</sup>lt;sup>17</sup> See Benjamin Klein & Keith B. Leffler, The Role of Market Forces in Assuring Contractual Performance, 89 J. POL. ECON. 615 (1981) (examining "the nongovernmental repeat-purchase contract-enforcement mechanism").

<sup>&</sup>lt;sup>18</sup> See generally Alexander Raskovich, Self-Regulation in Standard-Setting Organizations: FRAND Royalties in the Process of Discovering Standards, GEO. MASON L. & ECON. RESEARCH PAPER NO. 22-037. Available at SSRN: <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4220015">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4220015</a>.

and economically viable standard. A common albeit implicit understanding among SDO participants engaging in repeat dealing of what royalties are FRAND is key to spurring robust collaborative investments by both innovators and implementers. As in the revenue-sharing contract discussed above, innovators and implementers participating in an SDO are potentially subject to holdup/holdout by the other side with respect to their noncontractible investments in collaboration. This moral-hazard (or public goods) problem can likewise be solved through repeat dealing among SDO participants over a series of standards. On

#### D. SEP Licensing Parties are Best Informed About FRAND Commitments

A key takeaway from the foregoing is that the bargaining parties in SEP licensing negotiations are best informed about FRAND commitments:

SEP license agreements characterize FRAND commitments because the parties are fully informed about the relevant technology standards. These technology standards are extensive, detailed, and publicly available. The parties may have participated in the technical committees and decision making of the [SDO]. The parties also are fully informed about the patents because [SDOs] require public declaration of SEPs and detailed Letters of Assurance (LOAs) that specify the asserted patent claims. Technology standards often reference SEPs, which provides additional information to potential licensees. The parties involved in SEP license negotiations will

-

<sup>&</sup>lt;sup>19</sup> Collaborative investments include communicating with other SDO members that have complementary capabilities (e.g., between innovators and implementers), developing and exchanging ideas regarding interoperability, providing relevant information on available technologies and likely consumer preferences, participating in committees and subcommittees, and proposing and deliberating on standardization proposals being put to a vote. These are time-consuming activities whose costs are borne by individual participants but which tend to improve the quality of the standard to the benefit of all participants. The higher the royalty rate, the higher are SEP holders' incentives to undertake collaborative investments but, by the same token, implementers' investment incentives are lower. The FRAND rate strikes a balance between these countervailing effects, according to the relative productivities of investment, to maximize the value of the standard. An SDO provides a forum within which a common understanding can be fostered among participants of the appropriate range of FRAND royalties.

<sup>&</sup>lt;sup>20</sup> On the importance of repeat dealing in standardization and SEP licensing, *see* Richard A. Epstein, F. Scott Kieff & Daniel F. Spulber, *The FTC, IP, and SSOs: Government Hold-Up Replacing Private Coordination*, 8 J. COMPETITION L. & ECON. 1, 15–17 (2012).

tend to be informed because they are likely to be companies that are knowledgeable in the industry. Patent license agreements typically involve specialized patent attorneys. Companies involved in SEP license negotiations are likely to be well informed because they may have recurring business transactions and long-term business relationships.<sup>21</sup>

Despite the apparent "vagueness" of FRAND commitments, SEP litigation is exceedingly rare. For standards developed within ETSI, for example, only about one-half of one percent of declared SEPs have had FRAND rates litigated.<sup>22</sup>

FRAND commitments are vague from the perspective of relatively poorly informed outside observers such as academics and courts. The technical and market realities of any particular standardization process, though typically well understood by the parties to SEP licensing negotiations, remain substantially opaque to third parties, both non-specialist courts and "independent experts." The independence of experts, on which the Proposal insists for the EUIPO's FRAND determinations, essentially guarantees that the process would be poorly informed. This reflects the noncontractibility of collaborative investments in a standard; these investments are best understood by active participants in the standardization process. Court adjudication of FRAND terms, though far from ideal compared to a privately negotiated agreement, is serviceable for the tiny proportion of SEPs that end up in litigation. A principal problem with the Proposal, however, is that it would create perverse incentives for SEP disputes where none would have arisen otherwise.

# III. The Proposal Would Encourage Holdout and Introduce Other Distortions

Below, we discuss in turn three key features of the Proposal and the adverse effects they would likely have on incentives to innovate and participate in standardization.

<sup>&</sup>lt;sup>21</sup> Daniel F. Spulber, Licensing Standard Essential Patents with FRAND Commitments: Preparing for 5G Mobile Telecommunications, 18 COLO. TECH. L.J. 79, 118 (2020).

<sup>&</sup>lt;sup>22</sup> TIM POHLMANN & KNUT BLIND, IPLYTICS GERMANY, LANDSCAPING STUDY ON STANDARD ESSENTIAL PATENTS (SEPS) 3 (2016).

#### A. Mandatory Registration of SEPs

From the EC's Communication:

The SEP registration process is triggered when contributors or implementers notify the competence centre of a standard . . .and specific implementations of the standard. The competence centre publishes a notice inviting SEP holders to register. SEP holders have 6 months to register. To incentivise timely registration following the 6 months, SEP holders cannot enforce their SEPs until they register. A SEP holder that has not registered within the 6 months may also not seek royalties and damages prior to the registration. This is not only to encourage registration but also to ensure legal certainty for implementers.<sup>23</sup>

Note that SEP holders are not only barred from seeking injunctive relief for infringement until after they have completed registration, but also that if SEP holders fail to register by the six-month deadline, they are then *forever* barred from seeking damages for any infringement that occurred prior to registration. The Proposal's registration requirements thus pose significant risks of undermining SEP holders' IP rights in the EU, delaying injunctive relief and barring recovery of damages for infringement altogether in some circumstances. Depending on the level of detail on SEPs the competence center would require for registration, the process could take much longer than six months for SEP holders to comply. This possibility is especially strong for large SEP holders, firms that may have dozens or hundreds of SEPs relevant to a given standard.<sup>24</sup>

#### B. Essentiality Checks and FRAND Rate Determination

Under the Proposal, either a SEP holder or an implementer could request the competence center to conduct an essentiality check on a SEP, in which case both parties would be assessed fees to cover the costs of the procedure. "Determining whether a patent is essential to a standard is a very difficult technical task." <sup>25</sup> The Proposal sets no time limit within which the competence center must complete this task. Moreover, if an

<sup>&</sup>lt;sup>23</sup> EUR. COMM'N, *supra* note 1, at 12.

<sup>&</sup>lt;sup>24</sup> This, in addition to the compliance costs SEP holders would bear in registering, would weaken incentives to innovate and participate in SDOs.

<sup>&</sup>lt;sup>25</sup> EUR. COMM'N, *supra* note 1, at 12.

implementer (say) were to request a FRAND rate determination in addition to an essentiality check,<sup>26</sup> the FRAND determination would not likely be reached prior to the conclusion of the essentiality check.<sup>27</sup> "The [FRAND rate determination] should not last longer than 9 months"<sup>28</sup>—an aspirational figure rather than a hard deadline, and an essentiality check would likely add many more months or years to the procedure.

"The FRAND [rate] determination would be a mandatory step before a SEP holder would be able to initiate patent infringement proceedings or an implementer could request a determination or assessment of FRAND terms and conditions concerning a SEP before a competent court of a Member State." <sup>29</sup> Thus, an implementer could forestall a SEP holder from initiating an action for injunctive relieve against infringement by many months or years merely by unilaterally requesting an essentiality check and thereafter a FRAND rate determination. This is also contrary to the key safeguard required by *Huawei v ZTE* in the event of a dispute, namely the requirement that the implementer post a bond to secure its royalty payments in the event the SEP is held valid and infringed.

The Proposal would thus vastly increase the scope for holdout by implementers, once again undermining incentives for innovation and standardization.

# C. "Top-Down" vs. "Bottom-Up" Approaches to FRAND Rate Determination

Although the Proposal does not specify a methodology by which FRAND royalty rates would be determined by the EUIPO, the types of information the competence center would collect and the actions it would take strongly suggest a preference for the top-down approach.<sup>31</sup> In this approach, an aggregate royalty rate for access to the standard is

<sup>&</sup>lt;sup>26</sup> The essentiality check would be conducted by the competence center, whereas EUIPO would conduct the FRAND rate determination. *Id.* at 21, para. 32.

<sup>&</sup>lt;sup>27</sup> If a SEP were found not to be essential to the standard, the competence center might well determine the FRAND royalty rate to be zero, whereas it would be positive otherwise.

<sup>&</sup>lt;sup>28</sup> EUR. COMM'N, *supra* note 1, at 13.

<sup>&</sup>lt;sup>29</sup> *Id.* at 21, para. 33.

<sup>&</sup>lt;sup>30</sup> The EUIPO's FRAND royalty rate determination would only be an advisory opinion in a court proceeding. The salient point is that the Proposal would hold all court proceedings in abeyance until the EUIPO's determination has concluded.

<sup>&</sup>lt;sup>31</sup> For a discussion of top-down and bottom-up approaches to FRAND rate determination, as well as other possible methodologies, *see* e.g. Jorge L. Contreras, *Global Rate Setting: A Solution for Standards-Essential Patents*, 94 WASH. L. REV. 701 (2019).

determined first; then a SEP holder is assigned a share in the aggregate royalty according to the proportion of SEPs truly essential to the standard are owned by the SEP holder.

A perceived virtue of the top-down approach is that, once an aggregate royalty rate has been established and the technically difficult task of essentiality checks has been overcome, FRAND rate determination becomes a simple numbers game that is easy to implement mechanically, totting up SEPs and calculating shares by SEP holder. But that simplicity is also the method's chief downside. The top-down approach treats every SEP embodied in a standard as having equal value. SEPs may all be essential, but they typically vary in their contributions to the value of the standard. Moreover, the value of access to a standard varies by the end product for which it is practiced. Thus, setting a single aggregate royalty rate regardless of end-use fails to account for variation in values by end-use. But even if the aggregate royalty rate were somehow set correctly, low-value SEPs within the standard will be overcompensated and high-value SEPs will be undercompensated under by the top-down method. This tends to weaken innovator incentives to develop high-value SEPs.

In the bottom-up approach, by contrast, the value of each SEP is assessed individually, by reference to the royalty rates of the same or comparable SEPs in other, comparable standards. A perceived virtue of the bottom-up approach is that, if the comparisons are valid, imputed royalty rates will more accurately reflect the true value of each individual SEP. But that potential accuracy also has a downside—higher measurement costs.

Some courts have used the top-down approach; others have gone bottom-up.<sup>32</sup> The better-suited method may depend on the circumstances of the case. In particular instances, the tradeoff between measurement accuracy and measurement cost may favor one methodology over the other. The Proposal, however, conceives the construction of a vast and costly database tailored to applying the top-down approach. This raises the concern that, with hammer in hand, every problem may come to look like a nail. And a court that might otherwise correctly decide to use the bottom-up approach in a particular

 $<sup>^{32}</sup>Id.$ 

case may, when confronted with an advisory FRAND determination that has been constructed using the top-down approach, wrongly defer to the expert agency.

# IV. Conclusion and Policy Proposal

The EC's Communication points to several fundamental principles in EU law to which the Proposal must adhere. First, the Communication recognizes that SEP holders have a fundamental right to reap the fruits of the IP they have developed, citing Article 17(2) of the EU Charter of Fundamental Rights.<sup>33</sup> Moreover, the Communication notes that in *Huawei v. ZTE*<sup>34</sup> the Court of Justice of the European Union "recognized the right of the SEP holder to seek to enforce its patents in national courts." A key aspect of that enforcement is the right to seek injunctive relief against infringement.

But the Communication goes on to assert that the EU can restrict fundamental IP rights in pursuit of well-posed policy objectives, so long as that pursuit does not infringe the essence of innovators' fundamental rights:

According to settled case-law, fundamental rights can be restricted provided that those restrictions correspond to objectives of general interest pursued by the EU and do not constitute, with regard to the aim pursued, a disproportionate and intolerable interference which infringes the very essence of the rights guaranteed.<sup>36</sup>

As a logical consequence of the EC Communication's regulatory rationale given above, several hurdles must be overcome to justify the Proposal's infringement of innovators' fundamental rights. First, the EC must establish the existence of a substantial market failure to be addressed by the regulation. Second, the EC must show that the Proposal is likely to ameliorate the posited market failure (rather than exacerbate it). Regulatory

<sup>&</sup>lt;sup>33</sup> EUR. COMM'N, *supra* note 1, at 10.

<sup>&</sup>lt;sup>34</sup> Judgment of the Court of Justice of 16 July 2015, Huawei Technologies Co. Ltd v ZTE Corp. and ZTE Deutschland GmbH, C-170/13, ECLI:EU:C:2015:477. Case C-170/13, Huawei Techs. Co. Ltd. v. ZTE Corp. and ZTE Deutschland GmbH, ECLI:EU:C:2015:477 (Jul. 16, 2015).

<sup>&</sup>lt;sup>35</sup> Subject to conditions to avoid an abuse of dominant position. See Eur. COMM'N, supra note 1, at 3.

<sup>&</sup>lt;sup>36</sup> *Id.* at 10.

reform must be justified by rigorous cost-benefit analysis.<sup>37</sup> Third, the EC must show that the Proposal's restriction of IP rights is limited to what is required to promote the public interest in mitigating the posited market failure and does not expropriate SEP holders' IP assets excessively. Expropriation of IP undercuts innovators' incentives to develop IP and to participate in standardization.<sup>38</sup> The Proposal must therefore be shown to yield public benefits that exceed these social costs of regulation.

As discussed above, the Proposal fails on all three counts. It weakens IP rights in a variety of ways, perhaps most egregiously by barring a SEP holder forever from receiving any compensation for infringement that occurs prior to SEP registration, in case an arbitrary administrative deadline is missed. This surely constitutes a trampling of SEP holders' fundamental IP rights, "a disproportionate and intolerable interference which infringes the very essence of the rights guaranteed." The Proposal also empowers opportunistic implementers, giving them the right (over a SEP holders' objection) to demand essentiality checks and FRAND rate determinations to introduce lengthy delays before a SEP holder can initiate court proceedings for injunctive relief against infringement. IP rights delayed are IP rights denied.

We propose an alternative to the EC's Proposal that respects the facilitation of *voluntary* trade. We recommend that the main elements of the Proposal—the submission of SEPs to a centralized registry, checks for essentiality and FRAND determination—be offered by the proposed competence center and EUIPO on a voluntary basis, with approval by both parties required. In particular, the SEP holder and implementer should both have to agree to the EUIPO undertaking a FRAND determination. The SEP holder should retain the right to seek injunctive relief at any time, in accordance with the *Huawei* decision. Participation in the SEP registry should likewise be voluntary.

-

<sup>&</sup>lt;sup>37</sup> See e.g., John M. Yun, Douglas H. Ginsburg, Bruce H. Kobayashi, Abbott B. Lipsky, Alexander Raskovich & Joshua D. Wright, Justified Regulatory Reform in Antitrust Requires Cost-Benefit Analysis: Global Antitrust Institute Comment to the Australian Treasury on the Australian Competition & Consumer Commission's Digital Platform Services Inquiry, Interim Report No. 5, GEO. MASON L. & ECON. RESEARCH PAPER NO. 23-03. Available at SSRN: <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4335282">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4335282</a>.

<sup>&</sup>lt;sup>38</sup> The greater the expropriation risk associated with participating in a public standard, the more will innovators tend to prefer developing proprietary standards instead.

If, as the EC's Communication repeatedly asserts, the proposed regulations would benefit *both* SEP holders and implementers in a balanced way,<sup>39</sup> then both sides of SEP licensing negotiations would willingly participate in these arbitration-like procedures as an effective alternative to taking SEP disputes to court or a private arbitrator.

Our proposal has the self-validating feature that if the EC's *express* theory of SEP regulation is correct (i.e., to reduce transaction costs to the benefit of both bargaining parties),<sup>40</sup> then this would be revealed in broad adoption by market participants of the competence center's offerings. If adoption were poor, this would reveal that obligatory participation would have engendered substantial losses in the joint surplus of the bargaining parties. Finally, the competence center's services might increase the joint surplus of SEP bargaining parties net of costs in some circumstances but not in others. In this case, by setting the prices of competence center and EUIPO services to equal their marginal costs, SEP bargaining parties could efficiently sort themselves into participation or non-participation.<sup>41</sup>

If instead the EC's *implicit* theory of SEP regulation is to mitigate the litigation and administration costs of SEP disputes by non-specialist national courts, a similar point favoring voluntary participation in regulatory services would apply. A non-specialist court relies in part on the analyses of experts hired by the litigants. Although these analyses may be self-serving, but might be viewed naively as random draws from an unbiased distribution by a judge or jury, together the countervailing analyses tend to result in unbiased judicial outcomes.<sup>42</sup> If the parties to a SEP dispute were to rationally expect that a specialist regulatory authority would reach similarly unbiased opinions to

<sup>39</sup> See Eur. Comm'n, supra note 1, at 21, para.31 ("Ensuring access to swift, fair and cost-efficient ways of

resolving disputes on FRAND terms and conditions should benefit SEP holders and implementers alike."). <sup>40</sup> The EC's claims of evenhandedness are belied by responses to surveys the EC has conducted. Essentiality checks by a competence center are supported by 90% of implementers but rejected by 76% of SEP holders. Calculation of a maximum aggregate SEP royalty rate, as part of a FRAND determination by the EUIPO, is rejected by 80% of SEP holders but supported by 100% of implementers. *Id.* at 7.

<sup>&</sup>lt;sup>41</sup> The Proposal mentions fees to defray the cost of essentiality checks and FRAND advisory opinions, but does not specify the magnitude of these fees. For efficient service provision, the fees should equal marginal costs.

<sup>&</sup>lt;sup>42</sup> See Luke M. Froeb & Bruce H. Kobayashi, *Naive, Biased, yet Bayesian: Can Juries Interpret Selectively Produced Evidence*, 12 J. L. ECON. & ORG. 257 (1996).

those of a non-specialist court, but more quickly and at lower cost, then both parties would tend to accept the decisions of the regulatory authority in resolving their dispute short of going to court.

That at least would be the tendency *ex post* of SEP holders having sunk the costs of providing detailed information to the regulatory authority through registration of their declared SEPs. But registration costs, e.g., possibly involving the development of elaborate claim trees, may be too onerous for the SEP holder to bear. In this case, one possible solution would be to subsidize SEP holders' registration costs to the point at which SEP holders are just willing to register. If a regulatory authority could truly lower the transaction costs of SEP disputes to the benefit of both parties, a SEP registry would constitute a public good whose creation is worthy of financial support from the European Parliament's purse.