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## GLOBAL LICENSING ON FRAND TERMS IN LIGHT OF *UNWIRED PLANET V. HUAWEI*

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# Global Licensing on FRAND Terms in Light of *Unwired Planet v. Huawei*

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*Roya Ghafele*

## **Introduction**

The 2017 decision by Justice Sir Colin Birss, which was upheld on appeal by Lord Sir David Kitchin and Lord Justices Sir Christopher David Floyd and Dame Sarah Jane Asplin in the matter of *Unwired Planet v. Huawei*, bears the potential to alter the Standard Essential Patents (SEPs) licensing ecosystem at the global level. In light of the fact that the case was heard by the U.K. Supreme Court in October 2019, this Article addresses some of its potential effects on future SEPs licensing negotiations that are to be concluded on fair, reasonable, and non-discriminatory (FRAND) terms.

The FRAND licensing rate set by the 2017 decision, which was set on a global basis, makes the validity, essentiality, and infringement of global SEPs contingent on the opinion of the judiciary of England and Wales. As this allows the patentee to reduce transaction costs associated with global FRAND licensing, it also increases information asymmetry with respect to extraterritorial SEPs, as a national court is inherently limited in an international undertaking. This can affect FRAND licensing negotiations that precede formal court intervention.

To overcome the inherent tension between a territorially limited patent system and an increasingly international economic order, a global FRAND licensing rate should be set by an international court, which has transnational authority. At the European level, the establishment of such a court is already under way in the form of the Unified Patent Court, which is expected to come into place at some point.

## **I. Court Decisions can Affect Future SEPs Licensing Behavior**

The recent decision by Justice Birss in *Unwired Planet International Ltd. v. Huawei Technologies Co.*,<sup>1</sup> which was upheld by the Court of Appeal,<sup>2</sup> bears the potential to alter the FRAND licensing and litigation ecosystem beyond the borders of the United Kingdom (U.K.). Arguably, *Unwired Planet v. Huawei* marks a turning point in FRAND enforcement as the case

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<sup>1</sup> *Unwired Planet Int'l Ltd. v. Huawei Techs. Co.* [2017] EWHC (Pat) 711 (Eng. & Wales).

<sup>2</sup> *See Unwired Planet Int'l Ltd. v. Huawei Techs. Co.*, [2018] EWCA (Civ) 2344 (Eng. & Wales).

embraces the concept of a global FRAND licensing rate enforced under the risk of an injunction by the U.K. court.

With the appeal heard by the U.K. Supreme Court in October 2019,<sup>3</sup> it is important to assess the case's core tenets from a FRAND licensing perspective. Central to the analysis is the question of how a global FRAND licensing rate, sanctioned by a permanent injunction in England and Wales, can potentially affect future licensing negotiations.

In *Unwired Planet v. Huawei*, Justice Birss recognized that FRAND licensing cannot be decontextualized from the institutional arrangements in which it is embedded. Rather, FRAND licensing is an expression and reflection of a specific set of organizational structures that incentivizes or disincentivizes certain licensing practices. Implicit to this argument is the notion that firms engaging in bilateral licensing negotiations must respect the legal background and context in which they are operating. Hence, licensing negotiations are strongly affected by legal consequences that the parties to a dispute can face.

The governance framework set by lawmakers strongly influences the nature and course of licensing negotiations; this is because both parties are aware of the legal consequences a court judgment could trigger. In the case at hand, Justice Birss determined a global FRAND licensing rate and sanctioned the rate with a permanent injunction in England and Wales.<sup>4</sup> A party not willing to accept the global FRAND licensing rate set by the court was considered an unwilling licensee.<sup>5</sup>

Knowledge of the type of legal remedies that courts can use influences licensing negotiations, as both parties formulate their negotiation position with respect to how the ultimate legal recourse could look. Robert Cooter, Stephen Marks, and Robert Mnookin, for example, argue that negotiations occur in the “shadow of the law;” that is, licensing negotiations occur in light of what the parties' expectations of the potential legal outcome could be, should licensing negotiations fail.<sup>6</sup> If the SEP holder knows that it can seek legal redress from a court, which is likely to be of a certain value, then a freely negotiated license will not likely be significantly below that rate. From a public interest perspective, court decisions should provide a level playing field. If and to what extent courts succeed in doing so is often subject to debate. This

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<sup>3</sup> Amy Sandys, *Supreme Court Hears Landmark FRAND Cases*, JUVE PATENT (Oct. 21, 2019), <https://www.juve-patent.com/news-and-stories/cases/supreme-court-hears-landmark-frand-cases>.

<sup>4</sup> For reasons of simplicity, this Article refers to the scope of the injunction as the U.K., even though it is more correct to speak of England and Wales. See *Unwired Planet*, [2017] EWHC 711 [594], [793].

<sup>5</sup> *Id.* [680], [683], [685], [693].

<sup>6</sup> See Robert Cooter, Stephen Marks & Robert Mnookin, *Bargaining in the Shadow of the Law: A Testable Model of Strategic Behavior*, 11 J. LEGAL STUD. 225 (1982); see also Suzanne Michel, *Bargaining for RAND Royalties in the Shadow of Patent Remedies Law*, 77 ANTITRUST L.J. 889 (2011).

can also be explained by the fact that there are usually many different ways of assuring the public interest.

## **II. Core Aspects of *Unwired Planet v. Huawei***

Unwired Planet is a patent assertion company (PAE), and its business consists of assuring monetary returns from intellectual property through licensing transactions.<sup>7</sup> Huawei is a Chinese multinational technology company.<sup>8</sup> SEPs held by Unwired Planet, acquired from Ericsson, were the subject of the dispute.<sup>9</sup> Core to the case was whether a global FRAND license should be granted, and if so, what the proper rate of such a license should be.<sup>10</sup> Unwired Planet contended that it was entitled to a global license because a global license is FRAND.<sup>11</sup> Huawei, on the other hand, stated that Unwired Planet should only be entitled to a U.K. portfolio license, as a global license would not be FRAND.<sup>12</sup> The justice sought to resolve these questions by first aiming to define FRAND.<sup>13</sup> The court proceeded to determine an adequate FRAND royalty rate and subsequently assessed whether there were any other disputed issues associated with the FRAND license.<sup>14</sup>

### **A. *The Unwired Planet v. Huawei* Decision is Driven by the Desire to Counter Hold-Out**

In *Unwired Planet v. Huawei*, the court emphasized that the need to strike a balance between the rightsholders and the downstream innovators is fundamental to the FRAND licensing framework.<sup>15</sup> In this way, the public interest can best be maintained: “While the inventor must be entitled to a fair return on their invention . . . the inventor must not be able to prevent others from using the patented invention . . . as long as implementers take an appropriate license and pay a fair royalty.”<sup>16</sup> In the court’s view, avoiding hold-out is necessary to achieve such a balance of power between the licensor and the licensee.<sup>17</sup> Hold-out was subsequently defined as the behavior of an “unscrupulous licensee [to] use their economic strength to avoid paying

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<sup>7</sup> *Unwired Planet*, [2017] EWHC 711 [1].

<sup>8</sup> *Huawei - Statistics & Facts*, STATISTA (Jul 15, 2019) <https://www.statista.com/topics/2305/huawei>.

<sup>9</sup> For a helpful case history, see generally Jorge L. Contreras, *Global Markets, Competition, and FRAND Royalties: The Many Implications of Unwired Planet v. Huawei*, 17 ANTITRUST SOURCE 1, 2 (2017).

<sup>10</sup> *Unwired Planet*, [2017] EWHC 711 [22].

<sup>11</sup> *Id.* [23].

<sup>12</sup> *Id.*

<sup>13</sup> *Id.* [24].

<sup>14</sup> *Id.*

<sup>15</sup> *See id.* [83], [92], [139], [161].

<sup>16</sup> *Id.* [83].

<sup>17</sup> *Id.* [95].

anything to a patentee, unduly dragging out the process of licence negotiation, thereby putting the patentee to additional cost and forcing it to accept a lower royalty rate than is fair.”<sup>18</sup> The idea is based on the fact that intellectual property (IP) is intangible in nature. Hence, it may be fairly easy to misappropriate IP assets through the use of the invention or method contained in patents.<sup>19</sup> Intangibles are characterized by their non-excludability and non-rivalry in consumption. As a result, intangibles are truly public goods, which associates them with market failure by their very nature.<sup>20</sup> The introduction of property rights over intangibles aims to counter the free-riding behavior that market failure can trigger; however, IP can only be effective if it is adequately respected.<sup>21</sup> Free riding can, in theory, erode the incentive to invest in patented inventions.<sup>22</sup> Therefore, such behavior should be avoided.

The court acknowledged that Unwired Planet’s submission included hold-out but considered hold-out to be less significant than what the plaintiff had submitted.<sup>23</sup> Within the context of hold-out, Justice Birss considered that an injunction plays a significant role in intellectual property disputes,<sup>24</sup> leaving the licensee with no choice but to accept a court-determined FRAND licensing rate or to cease trading its infringing products.<sup>25</sup> Such a licensing rate should be global in character.<sup>26</sup> As a result, Justice Birss’ findings were commensurate with what he held to be current market practice, stating that anything else would be sheer “madness.”<sup>27</sup>

Justice Birss explained that the significant transaction costs associated with country-by-country licensing quasi-automatically leads to hold-out, as a licensor would never be in a position to enforce its SEPs in every country of the world.<sup>28</sup> This reasoning is core to Justice Birss’ findings and led him to conclude that only a global portfolio licensing rate can be FRAND.<sup>29</sup> However, the same reasoning may apply when one seeks to pursue extraterritorial invalidation procedures.

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<sup>18</sup> *Id.*

<sup>19</sup> See David J. Teece, *Capturing Value from Technological Innovation: Integration, Strategic Partnering, and Licensing Decisions*, 18 INTERFACES 46, 49 (1998).

<sup>20</sup> MARCO R. DI TOMMASO ET AL., THE GEOGRAPHY OF INTANGIBLES 18–23 (2002).

<sup>21</sup> See Corinne Langinier & GianCarlo Moschini, *The Economics of Patents*, in INTELLECTUAL PROPERTY RIGHTS IN ANIMAL BREEDING AND GENETICS 31, 31–33 (Max Rothschild & Scott Newman, eds., 2002).

<sup>22</sup> Branko Ilić & Bojan Pretnar, *The Economic Notion of the Incentive to Invent in the Legal Perspective of Patent Protection*, 6 ECON. & BUS. REV. FOR CENT. & SOUTH-E. EUR. 275 (2004).

<sup>23</sup> *Unwired Planet*, [2017] EWHC 711 [666], [669].

<sup>24</sup> *Id.* [658].

<sup>25</sup> *See id.* [807(18)].

<sup>26</sup> *Id.* [543].

<sup>27</sup> *See id.* [542]–[543].

<sup>28</sup> *See id.* [533]–[535].

<sup>29</sup> *See id.* [533]–[544].

A downstream innovator pursuing such procedures on a country-by-country basis would face equally significant transaction costs.

In reaching this conclusion, Justice Birss permits the bundling of patents declared to be essential to a standard across jurisdictions.<sup>30</sup> Justice Birss' decision is also based on an assumption that a plaintiff will litigate in every single country of the world,<sup>31</sup> which in reality is not the case. Rather, a plaintiff would prefer to obtain licensing revenues at an international level by taking legal action in key jurisdictions, which can significantly reduce transaction costs in comparison to country-by-country licensing.<sup>32</sup>

With regards to hold-outs in the FRAND debate, Justice Birss' reasoning stands in contrast to how other judges have sought to come to grips with the question. Judge Richard Posner, for example, argued in *Apple, Inc. v. Motorola, Inc.* that the "purpose of the FRAND requirements . . . is to confine the patentee's royalty demand to the value conferred by the patent itself as distinct from the additional value—the hold-up value—conferred by the patent's being designated as standard essential."<sup>33</sup> Similarly, in *Microsoft Corp. v. Motorola, Inc.*, more emphasis was put on hold-up rather than on hold-out: "[w]hen the standard becomes widely used, the holders of SEPs obtain substantial leverage to demand more than the value of their specific patented technology."<sup>34</sup> In *Ericsson, Inc. v. D-Link Systems, Inc.*, again, the U.S. Court of Appeals for the Federal Circuit explained that "the patentee's royalty must be premised on the value of the patented feature, not any value added by the standard's adoption of the patented technology."<sup>35</sup>

Justice Birss defines hold-up as "the ability of the owner of a SEP to hold implementers to ransom by reason of the incorporation of the invention into the standard by declining to grant them a licence at all or only granting one on unfair, unreasonable or discriminatory terms."<sup>36</sup> Despite recognizing the problem of hold-up, the court hardly took this into consideration in its reasoning. Arguably, the court believed that a willing licensee would never have to pay more than the FRAND licensing rate set by the court, which would reflect "the terms a truly willing

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<sup>30</sup> *See id.* [534].

<sup>31</sup> *See id.* [543] (considering "country by country licensing" rather than licensing in key jurisdictions).

<sup>32</sup> If one litigates in all 195 countries of the world, this costs much more than if one only litigates in 10 countries. This argument just makes the same reasoning as applied in the judgment, but applies it to patent validation rates.

<sup>33</sup> *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 913 (N.D. Ill. 2012).

<sup>34</sup> *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 2111217, at \*10 (W.D. Wash. Apr. 25, 2013).

<sup>35</sup> *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1232 (Fed. Cir. 2014).

<sup>36</sup> *Unwired Planet*, [2017] EWHC 711 [92].

licensor and truly willing licensee would agree upon in the relevant negotiation in the relevant circumstances absent irrelevant factors such as hold-up and hold-out.”<sup>37</sup>

However, a licensee seeking to pursue invalidation and essentiality procedures in other jurisdictions would face equally significant transaction costs.<sup>38</sup> Pursuing such actions on a country-by-country basis would be extremely time- and resource-consuming. In addition, the results of such an undertaking would likely take much longer than the length of typical court proceedings in the U.K. Hence, the same efficiency gains would arguably need to be afforded to downstream innovators seeking to pay for a FRAND rate reflecting valid, essential, and infringed patents.

While invalidation could occur in multiple jurisdictions, the invalidation would not necessarily affect the rate payable under the Unwired Planet license. The reason for this is twofold. First, the China rate acts as an irreducible minimum or a royalty floor<sup>39</sup> (*i.e.*, this would be the case even if all of Unwired Planet’s patents in China were to be invalidated). Second, multiple patents would need to be invalidated to affect the rate by changing a country’s classification status from a major to a non-major market. This is because, although Justice Birss calculates Unwired Planet’s royalty entitlement based on the number of “relevant” SEPs,<sup>40</sup> when determining the Major Market nations, he bases the distinction on *declared* patents.<sup>41</sup> Therefore, if one takes the U.K. as an example, in order to change the 4G rate in the settled license, Huawei would need to invalidate eleven of Unwired Planet’s thirteen declared patents in the U.K.<sup>42</sup> Practically, this means that Justice Birss did not account for the fact that patents can be invalidated.

While a downstream innovator does have the option of seeking a declaratory judgment or challenging the patents in *ex parte* proceedings, this Article contends that the incentives of doing so would be skewed. To expand upon the U.K. example above, Huawei would be required to have a declaration that eleven of Unwired Planet’s thirteen UK 4G declared SEPs were not essential. This would have the effect of reducing the rate from the Major Market rate of 0.052

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<sup>37</sup> *Id.* [156].

<sup>38</sup> *See supra* note 32. This argument just takes the arguments made in the judgment itself on transaction costs, but applies it to invalidation procedures. Clearly, further research would be needed to study length and costs of such transactions.

<sup>39</sup> *Unwired Planet*, [2017] EWHC 711 [586], [589], [778], [807 (12)]. The China rate serves as the baseline for the ‘other markets’ countries because this is where the goods are made.

<sup>40</sup> *Id.* [186], [197].

<sup>41</sup> *Id.* [587].

<sup>42</sup> *See id.* [annex 1.i].

percent to the China rate, which is payable in other markets, of 0.026 percent.<sup>43</sup> If one assumes that global smartphone sales are \$500 billion,<sup>44</sup> the U.K. accounts for approximately two percent of the global market (*i.e.*, \$ten billion), and a company such as Samsung accounts for nearly thirty percent of the U.K. market (*i.e.*, \$three billion).<sup>45</sup> Unwired Planet’s annual licensing demand would be \$1.560 billion if the U.K. is a Major Market. If a company such as Unwired Planet succeeded in eleven cases, then the U.K. would no longer be considered a Major Market, reducing the royalty demand by half. This situation strongly reduces a downstream innovator’s options when it believes that patents from another jurisdiction within a given SEP portfolio are invalid. In such a scenario, a downstream innovator may feel limited to seeking a declaratory judgment or challenging the patents in an ex-parte proceeding.

## **B. The FRAND Royalty Rate is Based on Portfolio Licensing**

For reasons of brevity, this Article is limited to discussing the FRAND royalty rate determination from the perspective of portfolio licensing. It is beyond the scope of this Article to address at length the FRAND royalty rate calculations undertaken in the *Unwired Planet v. Huawei* case.

The fact that patents can be invalidated is insufficiently reflected in the *Unwired Planet* decision.<sup>46</sup> Patent validity was dealt with in a first phase of the case.<sup>47</sup> In particular, the patent validity of three of the patent families in the Unwired Planet portfolio was determined, and two were found to be valid and infringed.<sup>48</sup> However, it was assumed that the other patents which Unwired Planet asserted to be essential were also valid and infringed.<sup>49</sup> This meant that validity for at least some extraterritorial SEPs was assumed; this was later criticized by Huawei in the appeal but dismissed by the Court of Appeal.<sup>50</sup>

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<sup>43</sup> See *id.* [586], [591]; see also *id.* [587] (“Outside China, a FRAND approach would be to divide the rest of the world into major markets (MM) and other markets (OM) by reference to the number of declared SEPs in force held by Unwired Planet in that country.”).

<sup>44</sup> Analyst firm GfK estimates that the global smartphone market reached 522 billion USD in 2018. *Global Smartphone Sales Reached \$522 Billion in 2018*, GfK (Feb. 22, 2019), <https://www.gfk.com/insights/press-release/global-smartphone-sales-reached-522-billion-in-2018>.

<sup>45</sup> S. O’Dea, *Market Share of Mobile Device Vendors in the United Kingdom (UK) 2010-2018*, STATISTA (Sep. 25, 2019), <https://www.statista.com/statistics/487780/market-share-of-mobile-device-vendors-uk/>.

<sup>46</sup> See *Unwired Planet*, [2017] EWHC 711 [207], [597], [599].

<sup>47</sup> *Id.* [2].

<sup>48</sup> *Id.* [19].

<sup>49</sup> *Id.* [597].

<sup>50</sup> See *Unwired Planet Int’l Ltd. v. Huawei Techs. Co.* [2018] EWCA Civ 2344 [41], [42], [79], [80], [81] (Eng. & Wales).

According to Justice Birss, the FRAND obligation applies to patent families:<sup>51</sup> “As soon as patent portfolios are being licensed it is not straightforward to say that a demand for payment for a portfolio licence is for payment for a given patent in the portfolio.”<sup>52</sup>

Patents are probabilistic rights.<sup>53</sup> If a patent is found to be invalid, it will be invalid *ab initio*. An invalid patent cannot be infringed and hence does not require a license.<sup>54</sup> In *Huawei*, the court decided to take a global perspective on patents.<sup>55</sup>

The court recognized that hinging the FRAND royalty rate on SEP declarations can further promote the over-declarations of patents as essential to a standard.<sup>56</sup> However, for practical reasons, the court considers this to be an unavoidable side effect: even “[i]f one of the declared but non-[r]elevant SEPs in a portfolio was revoked, leaving [r]elevant SEPs behind, it would not change the benchmark royalty rate.”<sup>57</sup> Such a situation could possibly be circumvented by adding some language in the contract. Hence, this is not an inherent shortcoming of multi-jurisdictional portfolio licensing.<sup>58</sup>

To come to grips with the number of SEPs, the court looked at the methods presented by Unwired Planet and by Huawei.<sup>59</sup> In court, each party presented a methodology for determining the total number of essential patents to the relevant standard(s). Unwired Planet presented the Revised Modified Numeric Proportionality Approach (Revised MNPA), and Huawei introduced the Huawei Patent Analysis (HPA).<sup>60</sup> The Revised MNPA method extracts all declared SEPs in the ETSI intellectual property rights (IPR) database, restricts the dataset to relevant SEPs, then groups the SEPs into families and removes families without a pending or issued United States

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<sup>51</sup> *Unwired Planet*, [2017] EWHC 711 [546].

<sup>52</sup> *Id.* [531].

<sup>53</sup> See Mark A. Lemley & Carl Shapiro, *Probabilistic Patents*, 19 J. ECON. PERSP. 75, 75 (2005) (explaining that what is meant by the term ‘probabilistic right’ is that “[w]hen a patent holder asserts its patent against an alleged infringer, the patent holder is rolling the dice. If the patent is found invalid, the property right will have evaporated”).

<sup>54</sup> See Roya Ghafele, Benjamin Gibert & Paul DiGiammarino, *Driving Innovation Through Patent Application Review: The Power of Crowdsourcing Prior Art Search*, 16 J. INTELL. PROP. RTS. 303 (2011) (discussing how crowdsourcing can potentially improve patent validity rates and alternative ways to source prior art).

<sup>55</sup> The Court determined a FRAND rate would be global in character. *Unwired Planet*, [2017] EWHC 711 [543].

<sup>56</sup> *Id.* [202]; see also *id.* [182].

<sup>57</sup> *Id.* [531].

<sup>58</sup> See *id.* [532].

<sup>59</sup> *Id.* [198].

<sup>60</sup> *Id.* [273].

(U.S.) or European Patent Office (EP) patent.<sup>61</sup> The Revised MNPA methodology further limits the dataset by filtering out all patents with a priority date after December 31, 2008 and groups the remaining families in handset or infrastructure patents.<sup>62</sup> Lastly, the method applies an essentiality filter to account for the issue of over-declaration.<sup>63</sup> The rate of the essentiality filter was established by reviewing two sets of patents, previously identified by the HPA as essential, for essentiality.<sup>64</sup> This exercise resulted in an estimate that the proportion of essential patents in the two samples was 16.6 percent and 9.4 percent.<sup>65</sup>

The HPA method creates a de-duplicated list of patent families declared essential from the ETSI database and the Korean Telecommunications Technology Association database.<sup>66</sup> The list reflects families including “at least one issued and non-expired patent and an English or Chinese language member.” These were then divided into groups based on relevant standards.<sup>67</sup> Lastly, patents from the remaining families are reviewed for essentiality in thirty minute reviews, following the logic that if there is no clear reason to rule out the patent as essential, a family is considered essential.<sup>68</sup> The court noted that the HPA method was initially intended for an arbitration between Ericsson and Huawei, and, in that case, it acted as a filter to screen out non-SEPs rather than establish true essentiality.<sup>69</sup> The court also noted that the five- to six-hour analysis conducted in the Revised MNPA was likely to generate a number closer to the true figure of SEPs, rather than the thirty minute reviews undertaken in the HPA approach.<sup>70</sup>

The court ultimately concluded that both methods produced the wrong answer. It found that the Revised MNPA overstated the value of Unwired Planet’s SEP portfolio and that the HPA understated the value of the same portfolio.<sup>71</sup> As an example, the HPA method identified 1,812 patents essential to handset 4G, whereas the Revised MNPA approach generated a corresponding number of 355.<sup>72</sup> Thus, Justice Birss reverted to subjective evaluation of the evidence, concluding that both values were off by about a factor of two.<sup>73</sup> By way of example, the court found that there were 800 “true” LTE (4G technology) SEP families by taking a middle figure

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<sup>61</sup> *Id.* [274].

<sup>62</sup> *Id.*

<sup>63</sup> *See id.*

<sup>64</sup> *Id.* [333].

<sup>65</sup> *Id.* Unwired Planet used the highest value (16.6 percent) in their revised MNPA-method. *Id.* [275].

<sup>66</sup> *Id.* [286].

<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

<sup>69</sup> *Id.* [341], [361].

<sup>70</sup> *Id.* [333], [362].

<sup>71</sup> *Id.* [807].

<sup>72</sup> *Id.* [377].

<sup>73</sup> *Id.*

between Unwired Planet's estimate and Huawei's estimate.<sup>74</sup> In contrast, Unwired Planet and Huawei declared 6,619 and 7,077 families to the LTE standard, respectively.<sup>75</sup> Taking a conservative approach, Justice Birss estimated that only 800 out of 6,619 (twelve percent) declared LTE patents were truly essential. For the remaining standards, the court concluded that adjusting the figures derived from the HPA in the same method as done for 4G was appropriate for calculating the pool of SEPs.<sup>76</sup> These figures reflect a compromise between the parties' respective opinions. The figures reflect what the court held to be a fair and appropriate number for the pool of SEPs.<sup>77</sup>

The court further accepted that the license will be on all declared patents even though the royalty was only set with reference to the relevant SEPs in the U.K., which was the only part of the portfolio discussed with great detail in the case. This is particularly problematic, as essentiality checks can only be undertaken through court.

I also find it inconsistent that the "SEPs declaration counting" technique was only reflected when determining the total number of SEPs but not when determining the value of Unwired Planet's U.K. SEPs. Justice Birss mainly explained the total number of relevant SEPs by indicating that in this instance, he sought a compromise between the two very different positions submitted by the parties (as noted above, Unwired advocated that there were 355 LTE SEPs, whereas Huawei said that there were 1,812).<sup>78</sup>

Last but not least, the decision did not conclude that the non-discrimination limb of FRAND required Huawei to be offered the much lower licensing rate that Samsung had paid to Unwired Planet.<sup>79</sup> Similarly, the license between Unwired Planet and Lenovo<sup>80</sup> and the license between Ericsson and Huawei<sup>81</sup> were not considered comparable.

### **C. Sanctioning a Global FRAND Licensing Rate with a Permanent Injunction in England and Wales**

Efficiency gains are a key motivator for the *Huawei* decision. Efficiency gains explain why Justice Birss prefers a worldwide licensing rate over a country-specific licensing rate. In the court's judgment, asking a global licensee to take a global license reflects current market

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<sup>74</sup> *Id.*

<sup>75</sup> *Id.* [278], [288].

<sup>76</sup> More specifically, as  $800/1812 = 44$  percent, the court factored the remaining figures from the HPA by 0.44 to generate final SEP numbers for each standard. *Id.* [377].

<sup>77</sup> *Id.*

<sup>78</sup> *Id.* [377].

<sup>79</sup> *Id.* [485], [521].

<sup>80</sup> *Id.* [389].

<sup>81</sup> *Id.* [432].

practice. A license which is not global in character would make global business rather difficult since obtaining a license for each country would be lengthy and complicated. Even if there are SEPs that would be found invalid and not essential, a global FRAND license would still be FRAND, not inherently anti-competitive, and could be circumvented through contractual arrangements.<sup>82</sup> In my opinion, any such contractual arrangement would only be able to manage a situation whereby a minor fraction of the portfolio is found invalid and/or not standard essential.

Huawei's argument that "the multi-jurisdictional bundling and also the bundling of SEPs with non-SEPs which took place in Unwired Planet's April 2014 offer, pose an obvious and real threat of distortions in competition"<sup>83</sup> was dismissed. While the court held that the patent owner holds a dominant position in the market, it found that the threat of an injunction was not contrary to competition law because the market undertaking is covered by the FRAND contract, which was said to weaken the SEP owner's dominant position.<sup>84</sup> According to Justice Birss, a global licence does not need to include SEPs from all over the globe. It is enough if the SEPs have satisfactory country coverage to justify a global licensing contract.<sup>85</sup> The court found satisfactory coverage in Unwired Planet's case, where the portfolio covered forty-two out of 195 countries in the world. The Justice argued that Unwired Planet's portfolio is large enough in scope and coverage for a worldwide license and that it would be simply unpractical to "fight over every patent."<sup>86</sup>

That there are case decisions pending on the same matter in other jurisdictions, and that some of these patents may be revoked in other countries, makes no material difference to the Justice's conclusion that only a worldwide license would be FRAND between the parties.<sup>87</sup> Such a worldwide license can be sanctioned by an injunction in the U.K.,<sup>88</sup> even if the licensor only has a very small patent portfolio in the U.K. The extent to which this can pay adequate justice to the forum non-conveniens doctrine may be further explored. The forum non-conveniens doctrine provides the basis for the discretionary exercise of jurisdiction by English courts in private international law disputes.<sup>89</sup> After all, Unwired Planet only held a small fraction of its portfolio

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<sup>82</sup> *Id.* [549], [552].

<sup>83</sup> *Id.* [527].

<sup>84</sup> *Id.* [670].

<sup>85</sup> *Id.* [535], [538].

<sup>86</sup> *Id.* [542].

<sup>87</sup> *Id.* [570]–[572].

<sup>88</sup> *See id.* 807(18).

<sup>89</sup> *See* ARDAVAN ARZANDEH, FORUM (NON) CONVENIENS IN ENGLAND: PAST, PRESENT AND FUTURE 80 (2018).

in the U.K. In conclusion, the court found that a willing licensee would need to agree to such a global licensing rate as FRAND, or accept an injunction in England and Wales.<sup>90</sup>

### **III. Appeal of the Decision**

Huawei appealed this decision on various grounds. It particularly argued that the justice set a global rate where sixty four percent of the money payable relates to Chinese, rather than U.K., patents owned by Unwired Planet. It also argued that the court ignored the ongoing litigation in relation to the patents in Germany and China.<sup>91</sup> Moreover, there were some countries where Unwired Planet had no relevant patents at all.<sup>92</sup>

Huawei also criticised that an implementer does not have an obligation to pay licence fees for patents which have been granted in error without there being any opportunity to terminate the license that contains that obligation.<sup>93</sup> Yet, the Court of Appeal by and large dismissed Huawei's appeal and more or less affirmed the decision of Justice Birss. Importantly, the Court of Appeal upheld the finding that willing and reasonable parties would agree on a global FRAND licensing rate.<sup>94</sup> The Court of Appeal disagreed with Justice Birss and stated that there could be a range of FRAND rates and terms in any given set of circumstances.<sup>95</sup> This leaves open the possibility that in other cases both a global and a U.K. license can be FRAND.

### **IV. SEPs Licensing Negotiations Involving Patent Assertion Entities (PAEs)**

According to Michael J. Mazzeo *et. al.*, a characteristic of a PAE is that it is usually set up to have a strategic advantage in licensing negotiations.<sup>96</sup> PAEs do not usually face patent infringement countersuits because they lack products that litigants may target.<sup>97</sup> In principle, this enables a PAE to assert its patents without the risk of an injunction affecting its business.<sup>98</sup> Often, a PAE can seek to license IP in markets in which it does not participate directly. Its

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<sup>90</sup> *Unwired Planet*, [2017] EWHC 711 [543], [594], [807 (20)]; *see also* *Unwired Planet Int'l Ltd. v. Huawei Techs. Co.*, [2018] EWCA (Civ) 2344 [286], [289] (Eng. & Wales).

<sup>91</sup> *Unwired Planet*, [2018] EWCA 2344 [19].

<sup>92</sup> *Id.*

<sup>93</sup> *Id.* [93].

<sup>94</sup> *Id.* [128].

<sup>95</sup> *Id.* [121].

<sup>96</sup> *See* Michael J. Mazzeo *et al.*, *Do NPEs Matter? Non-Practicing Entities and Patent Litigation Outcomes*, J. COMP. L. & ECON 879 (2013).

<sup>97</sup> *See id.* at 902.

<sup>98</sup> *See id.* at 883–84, 902.

primary goal is to obtain a maximum number of licensing contracts at an attractive rate.<sup>99</sup> A PAE extracts economic worth from its patents through a third party's business operations.<sup>100</sup> This allows it to establish a relationship between the operating company's future and historic cash flows and its IP portfolio.

Both the downstream innovator and the PAE face risks in licensing negotiations. The key risk for the PAE is that it may lose the core assets of its business.<sup>101</sup> This can happen if its SEPs are declared non-essential or if a court finds the SEP invalid or partially invalid. In this case, the PAE not only loses business opportunities with this downstream innovator, but it also loses business opportunities with other companies that may have to pay for their infringement of the PAE's patents. Hence, I contend that in an attempt to counter PAE licensing requests, downstream innovators may often turn to patent invalidation proceedings to restore parity in licensing negotiations.

Similarly, the downstream innovator also faces risks. If it infringes valid and essential SEPs and refuses to pay for a FRAND license, it may incur an injunction, which means it loses the opportunity to do business in a given jurisdiction. The downstream innovator may also have to pay damages. In the U.K., these are lower than the damage awards one may expect in the U.S., which could include punitive damages.<sup>102</sup> In the case at hand, the Judge set the damage awards, should they be applicable at the same rate as the FRAND rate.<sup>103</sup>

Neither the PAE nor the downstream innovator exists in isolation. The licensing transaction between the two parties can affect the entire licensing market. Both parties are keen on setting a precedent to which they can refer in potential future negotiations. At the same time, other market participants will try to observe the transaction in order to understand the effects on their

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<sup>99</sup> See Tim Pohlmann & Marieke Opitz, *Typology of the Patent Troll Business*, 43 R&D MGMT. 103, 104 (2013).

<sup>100</sup> See *id.* at 104–05.

<sup>101</sup> *Id.* at 104; see also *id.* at 103–120; Patricia S. Abril & Robert Plant, *The Patent Holder's Dilemma: Buy, Sell, or Troll?*, 50 COMM. ASS'N COMPUTING MACHINERY 37 (2007).

<sup>102</sup> For example, in a report issued by the European Commission in 2010, it was stated that: "Measures, procedures and remedies provided for by the Directive must be effective, proportionate and dissuasive. At present, damages awarded in intellectual property rights cases remain comparatively low. Only a few Member States have reported an increase in the damages awarded, as a result of implementing the Directive." *Application of Directive 2004/48/EC of the European Parliament and the Council of 29 April 2004 on the Enforcement of Intellectual Property Rights*, at 8, COM (2010) 779 final (Dec. 12, 2010). If and to what extent the U.K. may take a different path after Brexit remains to be seen.

<sup>103</sup> *Unwired Planet Int'l Ltd. v. Huawei Techs. Co.* [2017] EWHC (Pat) 711 [807(21)] (Eng. & Wales). To the extent damages should be awarded, they would be at the same rate as the appropriate FRAND rate. *Id.*

business, provided that the transaction is not obscured through a non-disclosure agreement, which may often be the case.

Scalability matters for both the PAE and the downstream innovator. In general, the PAE will not just approach one single company, but instead will seek to obtain a licensing rate from a host of similar companies for the same portfolio, ideally while maintaining the same strategy. I contend that this allows a PAE to maximize revenues while minimizing costs, a goal every business aims to achieve.

Similarly, the downstream innovator who settles with a PAE will experience scalable effects. Agreeing to a licensing request from a PAE signals to the market that the innovator is prepared to pay for a licensing request from a PAE at a given rate. If such practices become the norm, then a range of other PAEs or other licensors may decide to approach the downstream innovator with a licensing request. This may trigger additional licensing requests, legitimate or not, which will affect the innovator's costs of doing business, its profitability, and its competitiveness in the market. I contend that these signalling effects also impact the licensing market as a whole because other PAEs and other operating companies may follow suit in light of the established precedent. I substantiate my opinion with reference to the following example. After the patent licensing aggregator Avanci settled with BMW on a licensing rate for its 2G, 3G, and 4G essential patents, it announced that it had established the licensing rate for its portfolio within the context of the automotive industry.<sup>104</sup> Following that announcement, Audi, Porsche,<sup>105</sup> and (a month later) Volkswagen<sup>106</sup> agreed on a license for connected car patents with the aggregator.

## **V. Potential Effects of the *Unwired Planet v. Huawei* Decision on Future Licensing Negotiations**

The *Unwired Planet v. Huawei* decision might affect the licensing relationship between PAEs and downstream innovators at a global level, as the *Huawei* court has set a global FRAND licensing rate. The decision has enabled a PAE to obtain a global FRAND licensing rate

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<sup>104</sup> Richard Lloyd, *Deal with BMW Is the First of Many with Auto-Makers, Says Avanci Boss*, INTELL. ASSET MGMT. (Dec. 4, 2017), <https://www.iam-media.com/litigation/deal-bmw-first-many-auto-makers-says-avanci-boss>; *Avanci Announces Patent License Agreement*, BUSINESSWIRE (Dec. 1, 2017, 7:00 AM), <https://www.businesswire.com/news/home/20171201005140/en/Avanci-Announces-Patent-License-Agreement>.

<sup>105</sup> Mathieu Klos, *Audi and Porsche Agree on Avanci Licence*, JUVÉ PATENT (Apr. 4, 2019), <https://www.juve-patent.com/news-and-stories/people-and-business/audi-and-porsche-agree-on-avanci-licence>.

<sup>106</sup> Mathieu Klos, *VW Partially Agrees on Avanci Licence*, JUVÉ PATENT (May 2, 2019), <https://www.juve-patent.com/news-and-stories/people-and-business/vw-partially-agrees-on-avanci-licence>.

primarily on the grounds of the information available in the U.K., but it has not assessed the quality of the foreign patents upon which most of the global royalties are based. In this way, the *Huawei* decision risks equating intangible property rights with tangible property rights. Such an approach may be fairly remote from a Posnerian theory of intellectual property rights as a temporary and restrictive property right.<sup>107</sup>

A failure of courts to comprehend the uncertain features of intellectual property can lead to unsatisfactory results. In Justice Birss' *Unwired Planet* decision however, these undesired results are enhanced, as the Justice opted for a global FRAND licensing rate. The court was ultimately obliged to make a decision on the basis of incomplete information. In future licensing negotiations, judges may make similarly blind pronouncements on licensing rates and conditions.

To make a fully enlightened decision, the court would need high quality information on extraterritorial SEPs. Obtaining such information would be very expensive and time consuming. To avoid the scenario in which the costs of doing so become a knock-out criterion for Small and Medium Sized Enterprises (SMEs), any other court seeking to establish a licensing rate in the same way would need to do obtain high quality information in a cost-efficient manner. This can only occur if officials create an international patent court.

Under the framework set forth by the *Huawei* court, the perceptions of risk and return rates may shift for both a PAE and a downstream innovator. Bronwyn H. Hall and Rosemarie Ziedonis already criticize the fact that invalidation procedures can take much longer than the issuance of an injunction.<sup>108</sup> As a result, a downstream innovator would prefer taking a license to facing an injunction, even if the validity of the underlying asset is uncertain.<sup>109</sup> Such a risk increases if a licensee is not in an adequate position to verify the validity, infringement, and essentiality of SEPs in a portfolio, be they territorial or extraterritorial in nature.

A global FRAND licensing rate set by a national court makes the validity, essentiality, infringement, and global royalty rate of SEPs dependent on the opinion of the judiciary of a single nation. I am of the opinion that under a global FRAND rate determined by a national court in this manner, a PAE does not expose all of its SEPs to the same risk. While U.K. SEPs will be subject to particular scrutiny, U.K. Courts may scrutinize extraterritorial SEPs to a much lesser extent. Within a given portfolio, the value of SEPs held in the U.K. can increase, compared to those SEPs that are outside of U.K. jurisdiction. The judicial framework of one nation can in this way influence the economic worth of a PAE's global SEP portfolio. While it

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<sup>107</sup> WILLIAM M. LANDES & RICHARD A. POSNER, *THE POLITICAL ECONOMY OF INTELLECTUAL PROPERTY LAW* (2004).

<sup>108</sup> Bronwyn H. Hall & Rosemarie Ham Ziedonis, *An Empirical Analysis of Patent Litigation in the Semiconductor Industry 8* (Univ. Cal. Berkeley, Working Paper No. 217-242, 2007), [https://eml.berkeley.edu/~bhall/papers/HallZiedonis07\\_PatentLitigation\\_AEA.pdf](https://eml.berkeley.edu/~bhall/papers/HallZiedonis07_PatentLitigation_AEA.pdf).

<sup>109</sup> *Id.* at 7–8.

may certainly not be the court's intention to pave the way for the structuring of portfolios primarily around a few strong British patents, this may be one of the judgment's practical consequences.

From the PAEs' perspective, these peculiar circumstances may give rise to a range of strategies. I am of the opinion that a PAE's reduced exposure to risk may enhance its credibility among potential investors, which may help the PAE win further capital for its patent monetization activities. This situation may also mean that the PAE is under less pressure to structure a global SEP portfolio with strong SEPs throughout all jurisdictions. Such bundling of assets can lead to portfolios in which a few "star" SEPs are combined with SEPs that may only read on minor features of the standard, or which may even be non-existent. The judgment may also reduce the PAEs' costs of substantiating licensing requests through claim charts.

The downstream innovator again has either the option to accept a global FRAND licensing rate set by a court, which may not adequately account for the extraterritorial nature of SEPs, or face a disruption of its business operations in the U.K.<sup>110</sup> Under the *Huawei* decision, the innovator's ability to counter a global licensing request with multi-jurisdictional patent invalidation proceedings may also be hampered. I contend that once the U.K. court has set the global rate, even if further invalidity proceedings do occur globally, the costs of these proceedings are likely to exceed any marginal reduction in royalty rate for that country. This can further weaken the innovator's bargaining power in licensing negotiations.

When lack of information affects the decision to take a license, innovators may make the decision with the knowledge that a national court is unable to adequately assess the validity, essentiality, and infringement of a global SEP portfolio. How the licensing request relates to the value of a SEP portfolio may be less relevant. Such a decision-making process may lead to FRAND licensing payments, which may be decoupled from the portfolio's FRAND value in the context of the alleged infringer's business. Though not pertinent to SEPs, an illustrative example arises in the patent lawsuit *NTP v. RIM*,<sup>111</sup> which shows that a company can make a payment to avoid an injunction. In light of an impending permanent injunction, Research in Motion, the former developer of the BlackBerry brand of smartphones and tablets, agreed to an irrevocable settlement fee of \$612.5 million, even though, at that time, the United States Patent and Trademark Office (USPTO) had already preliminarily—but not finally—invalidated all five of the patents around which the case centered.<sup>112</sup>

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<sup>110</sup> See *Unwired Planet Int'l Ltd. v. Huawei Techs. Co.* [2017] EWHC (Pat) 711 [543], [594] (Eng. & Wales).

<sup>111</sup> *NTP, Inc. v. Research in Motion, Ltd.* 397 F. Supp. 2d 785 (E.D. Va. 2005).

<sup>112</sup> See *id.*; Mark Heinzl & Amol Sharma, *RIM to Pay NTP \$612.5 Million To Settle BlackBerry Patent Suit*, WALL ST. J. (Mar. 4, 2006, 12:01 AM), <https://www.wsj.com/articles/SB114142276287788965>. For

I contend that other factors affecting the decision-making process in a licensing negotiation are the downstream innovator's outside options, its ability to refrain from using the standard, past investments, and future expected earnings.<sup>113</sup> Innovators will weigh these factors against the risks associated with a permanent injunction, and they will seek to determine how costs associated with a potential injunction relate to the global FRAND rate.

The permanent injunction that sanctions the global FRAND licensing rate forces the downstream innovator to carefully weigh the importance it attributes to its market presence in the U.K. against the potential global FRAND rate that a court may determine. Furthermore, the risk of a permanent injunction may deter operating companies from coming to the U.K. if the entrance to the U.K. market exposes them to worldwide license demands from PAEs. In light of the fact that U.K. courts can sanction a global FRAND rate with a permanent injunction, the licensing negotiation may be shaped by how much the downstream innovator values its presence in the U.K. and whether its U.K. operations affect other markets. When Qualcomm, for example, obtained a permanent injunction against Apple in the Munich District Court for the infringement of a (non-standard essential) patent reading on technology that extends battery life in smartphones in December 2018, Apple was presented with the choice to either cease the sale, offers for sale, and importation of infringing iPhones<sup>114</sup> or to switch providers. The ultimate loser was, in my opinion, Apple's former chip provider Intel, which lost its European chip market linked to the infringing phones when Apple made Qualcomm its chip provider.<sup>115</sup>

This argument points to a more nuanced academic discussion than the one advanced by Marc Lemley and Carl Shapiro in 2007.<sup>116</sup> While the authors contend that an injunction categorically tilts the bargaining power in licensing negotiations,<sup>117</sup> this Article does not make that argument. Rather, this Article is concerned with a licensing transaction that forces a choice between a rate for unverifiable extraterritorial SEPs and an injunction in the U.K. that can potentially tilt the bargaining power in a licensing negotiation. In licensing negotiations that precede formal court intervention, a decision such as that pronounced in *Unwired Planet v. Huawei* can influence

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a commentary, see, e.g., William R. Allen, *RIM v. NTP, Yet Again*, IEE SPECTRUM (July 26, 2010, 3:19 PM), <https://spectrum.ieee.org/at-work/innovation/rim-v-ntp-yet-again>.

<sup>113</sup> See Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 1993–95, 1997–99, 2029–2031 (2007).

<sup>114</sup> *Qualcomm Granted Permanent Injunction Against Apple in Germany*, QUALCOMM (Dec. 20, 2018), <https://www.qualcomm.com/news/releases/2018/12/20/qualcomm-granted-permanent-injunction-against-apple-germany>.

<sup>115</sup> Jon Porter, *Apple's Workaround to Qualcomm Patent Woes in Germany Is to Use Qualcomm Chips* (Feb. 14, 2019, 5:44 AM), <https://www.theverge.com/2019/2/14/18224598/apple-qualcomm-patent-dispute-germany-intel-modems>.

<sup>116</sup> Lemley & Shapiro, *supra* note 113.

<sup>117</sup> See *id.* at 2000–03.

future SEP licensing negotiations between a PAE and a downstream innovator. Both parties negotiate strategically and make decisions based on their expected risk and return. These negotiation decisions are made in light of the overarching judicial reasoning in which they operate.<sup>118</sup>

Given the legal circumstances of the *Huawei* decision, a downstream innovator may carefully consider whether to expose its global SEP licensing costs to the scrutiny of the British courts. Though firms' transaction costs may decrease, firms will nevertheless find it difficult to negotiate different rates in other jurisdictions, particularly for those SEPs in the portfolio that may not be as strong, or that may, for example, only read on minor features of the standard.

Recent case law illustrates that such an argument is not necessarily hypothetical. In *TQ Delta v. Zyxel*, the defendant declared that it would rather accept an injunction and exit the U.K. market than take a global FRAND rate determined by a British court.<sup>119</sup> Similarly, Conversant, another PAE, filed lawsuits against Huawei and ZTE in the U.K. in order to obtain a global FRAND license under conditions similar to those in *Unwired Planet v. Huawei*.<sup>120</sup> I contend that in the highly interconnected information and communication technologies (ICT) sector, the number of firms exposed to such strategies may significantly increase, and the described mechanisms may scale up. The PAEs' business model may become more attractive than the prospect of continuing to manufacture products. This Article only sketches out some of the potential effects that the decision could have on future licensing negotiations. As time passes and more licensing transactions occur in light of this decision, it would be helpful to study its effects in greater detail.

## **VI. The Need to Move Towards International Patent Enforcement**

This decision may be viewed as a means to counter hold-out and enhance efficiency from a licensor's perspective. In many ways, this decision has done pioneering work and offered many new insights.

The *Huawei* decision points, however, to the inherent tension that persists between the international and national patent systems and underlines the dire need for multilateral solutions. While Justice Birss is right to point out the shortcomings of country-specific patent

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<sup>118</sup> See Cooter, Marks, & Mnookin, *supra* note 6.

<sup>119</sup> See *TQ Delta LLC v. Zyxel Commc'ns Ltd.* [2019] EWHC 1089 (Pat) (Eng & Wales); Skeleton argument on behalf of Zyxel, *TQ Delta*, [2019] EWHC 1089, at 11; Transcript of proceedings on Apr. 17, 2019, *TQ Delta*, [2019] EWHC 1089, at 97–99; Transcript of proceedings on Mar. 18, 2019, *TQ Delta*, [2019] EWHC 1089, at 51–52.

<sup>120</sup> *Huawei Techs. Co., Ltd. v. Conversant Wireless Licensing* [2019] EWCA (Civ) 38 (Eng. & Wales).

transactions,<sup>121</sup> his court does not have the full ability to resolve this issue. The Court of Appeal clearly states that the English Courts are not entitled to invalidate foreign patents or verify their essentiality, at least where their validity and essentiality is challenged.<sup>122</sup> I contend that pursuing invalidation procedures in foreign jurisdictions raises significant transaction costs and is highly inefficient. I substantiate my claim with reference to the transaction costs argument pursued by Justice Birss himself, but I use this argument to look at invalidation procedures instead. The impact of a single national court on minimizing transaction costs associated with global FRAND licensing is limited in light of the international nature of the IP architecture. Due to its lack of international authority, one nation's court cannot pronounce a global FRAND licensing rate. For example, it is unclear whether a global FRAND license issued by a national court must be recognized in other countries.

An international body, established through an international treaty, should determine the global FRAND rate. Such an organization should be established through an international treaty.<sup>123</sup>

Two organizations could serve as a model. For global patent protection, the International Bureau of the World Intellectual Property Organization (WIPO) has been doing pioneering work.<sup>124</sup> Through the Patent Cooperation Treaty (PCT), which WIPO administers, it has become possible to obtain patent protection in 153 countries in one single application.<sup>125</sup> The one-stop shop design of the PCT respects national sovereignty while also offering patent protection in a swift, uncomplicated, and relatively affordable manner. The PCT significantly reduces transaction costs associated with filing patents on a country-by-country basis. This institution is an important instrument for enhancing the integration of international markets. The PCT was established at a remarkable speed. The treaty was signed on the last day of a 1970 conference held in Washington. It subsequently entered into force only eight years later.<sup>126</sup> A similar instrument could be created for global patent enforcement. For example, a multilateral agreement could be established that would act as a one-stop shop for patent validity checks.

An international patent could be created. This would allow for rapid patent enforcement at the international level. Alternatively, one could design the patent system in a such a way that international enforcement would not affect national sovereignty. Instead, the international

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<sup>121</sup> See *Unwired Planet Int'l Ltd. v. Huawei Techs. Co.* [2017] EWHC (Pat) 711 [543] (Eng. & Wales).

<sup>122</sup> See *Unwired Planet Int'l Ltd. v. Huawei Techs. Co.* [2018] EWCA (Civ) 2344 [48], [52], [76] (Eng. & Wales).

<sup>123</sup> See *Setting Out the EU Approach to Standard Essential Patents*, at 8, COM (2017) 712 final (Nov. 29, 2017), <https://ec.europa.eu/docsroom/documents/26583>.

<sup>124</sup> See *PCT FAQs*, WIPO, <https://www.wipo.int/pct/en/faqs/faqs.html> (last updated Oct. 2017).

<sup>125</sup> See *The PCT Now Has 153 Contracting States*, WIPO, [https://www.wipo.int/pct/en/pct\\_contracting\\_states.html](https://www.wipo.int/pct/en/pct_contracting_states.html) (last visited Jan. 8, 2020).

<sup>126</sup> See WIPO, *The First Twenty-five Years of the Patent Cooperation Treaty (PCT) 1970-1995* at 141 (1995).

enforcement body could, just like the PCT, only undertake formality checks and then rely on national courts to enforce patents according to their national laws. Such a one-stop shop could facilitate international trade. By allowing one body to determine the FRAND rate at the global level, this system could gather information on validity, essentiality, and infringement from national courts and then use this information to offer a global FRAND licensing rate. This would lead to a significant improvement in efficiency while also relying on national courts to determine the validity, essentiality, and infringement of patents. Additionally, the system could use information gleaned from national courts to determine a global FRAND licensing rate. In this way, a global FRAND licensing rate could be calculated by using enhanced information needed to undertake a global FRAND licensing rate. Presently, the international IP system enables swift international patent filing but not equally swift patent enforcement.

A significantly more competitive approach would be to follow the European example. At the European level, efforts to establish a pan-European Patent Court have been under way for decades, as it has been very difficult to overcome legal differences and arrive at a compromise.<sup>127</sup> However, it must also be kept in mind that the Unified Patent Court (UPC) has done pioneering work—something like a unitary patent had never existed before. Such groundbreaking work does need time. Nonetheless, in the long run, it could also serve as the blueprint for international patent enforcement or for the establishment of a series of higher regional courts throughout the world.

As the plan stands, the UPC will be a joint court for the contracting members of the Unified Patent Court Agreement (UPCA) and will be part of the contracting member states' judicial system.<sup>128</sup> Ideally, the UPC will have exclusive jurisdiction with regard to European patents and European patents with unitary effect. The UPC will, however, be subject to a transition period.<sup>129</sup> The UPC will be in a position to determine patent infringement and to invalidate patents granted in the territories of its member states.<sup>130</sup> The UPC will make these judgments in a single court ruling, which may apply directly to the UPCA's contracting parties.

Through the establishment of a pan-European Patent Court, Europeans are trying to provide a patent enforcement environment that better serves the novel market structure arising out of pan-European integration.<sup>131</sup> During the course of the preparations of the UPC, decision makers

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<sup>127</sup> Attempts to establish a unitary patent go back as far as the 1970s. *See Convention for the European Patent for the Common Market (Community Patent Convention)*, 1976 O.J. (L017) 1.

<sup>128</sup> *See About the UPC*, UNIFIED PATENT COURT, <https://www.unified-patent-court.org> (last visited Nov. 25, 2019).

<sup>129</sup> *See id.*

<sup>130</sup> *See Agreement on a Unified Patent Court*, 2013 O.J. (C 175), art. 32.

<sup>131</sup> *See Council of the European Union, Draft Agreement on the European Union Patent Court and Draft Statute*, Document WD 14970/08 PI 78 (Nov. 4, 2008),

invested funds to study the possibility that such a court may spur PAE activities. In particular, research undertaken by Dietmar Harhoff states that patent quality should be enhanced in order to avoid litigation over potentially non-existent subject matter.<sup>132</sup>

Both the WIPO and UPC have inspired intergovernmental treaty-making, which could enable an international body to enforce patents efficiently at the international level. Following WIPO's PCT example is advantageous in that it would not require the creation of a global patent. On the other hand, one could also pursue the UPC route, which uses a unitary patent approach. In my opinion, such a tactic would certainly lead much more quickly to the integration of international patent enforcement, but it would probably be much more difficult to obtain consensus for such a globally recognised unitary patent. Policymakers should encourage further research regarding the feasibility of setting a novel global architecture for transnational patent enforcement. In addition, it would be important to further reinforce the international exchange between competing authorities as well as courts. Such further international collaboration would, at the very least, allow for a better exchange of information on pertinent issues of SEP enforcement. Further international exchange and collaboration could also address important aspects of burden of proof. If, for example, costs associated with verifying SEPs at the international level could be carried equally by the licensor and licensee, this could further enhance an equal-level playing field.

The current state of play has left the international technology community with a half-heartedly realized international patent system. While it is possible to obtain international patent protection in a fairly uncomplicated manner, no such possibility exists for international patent enforcement. As the Westphalian state order continues to define international patent litigation, a world that is characterized by territorially limited patent rights risks regulating a world order of the past. The borderless world, which owes its existence to the very information communication technologies that the patent system is supposed to promote, requires a more stringent enforcement approach.

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<http://register.consilium.europa.eu/pdf/en/08/st14/st14970.en08.pdf>; Council of the European Union, *Towards an Enhanced Patent Litigation System and a Community Patent - How to Take Discussions Further*, WD 11622/07 PI 35 (July 12, 2007),

<http://register.consilium.europa.eu/pdf/en/07/st11/st11622.en07.pdf>. See also Nikolas Thumm, *The Good, the Bad and the Ugly—the Future of Patent Assertion Entities in Europe*, 30 *TECH. ANALYSIS & STRATEGIC MGMT.* 1046 (2018); Stefania Fusco, *Markets and Patent Enforcement: A Comparative Investigation of Non-Practicing Entities in the United States and Europe*, 20 *MICH. TELECOMM. & TECH. L. REV.* 439, 439 (2014); Dietmar Harhoff, *Economic Cost-Benefit Analysis of a Unified and Integrated European Patent Litigation System*. (Inst. Innovation Research, Tech. Mgmt. & Entrepreneurship, Final Report, 2009); *SEEK Project 2010: Patent Litigation in Europe*, ZEW, <https://www.zew.de/en/forschung/seek-project-2010-patent-litigation-in-europe/?cHash=d2b5615141f012c802c699a0f8dfe3b7> (last visited Nov. 25, 2019).

<sup>132</sup> See HARHOFF, *supra* note 131, at 7, 53.