Efficient Infringement in the SEP Space

5

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I. INTRODUCTION

Many of the most innovative companies in the 5G and Internet of Things (IoT) spaces rely on patent rights. Not only do patents provide property rights over the technology invented and submitted to standards development organizations (SDOs), but the ability to license their patents allows these companies to recoup their research expenditures and invest in further development of innovative technologies. Unfortunately, due to a variety of legal and policy decisions, these companies' ability to effectively license their patents is being hindered; instead, manufacturers of standards-compliant goods are opting to engage in efficient infringement before, or even in lieu of, negotiating and accepting a license to use these patents.

To understand efficient infringement, it is helpful to think first about patent infringement more generally. A patent grants to the owner an exclusive right, or the ability to exclude others from making, using, selling, or offering for sale the subject matter of the patent without permission.¹ If a patent owner believes a party is infringing the patent, the patent owner can bring a lawsuit for patent infringement in a US District Court. The accused infringer will often defend by asserting that the patent claims are invalid. The court will then determine infringement and invalidity, as well as reviewing other raised defenses. If the patent is determined to be infringed and not invalid, the court will generally award damages, either actual damages or a reasonable royalty, for past infringement and issue a permanent injunction to prohibit infringement going forward. Through the damages award,

¹ US Const., art. I, § 8, cl. 8; 35 U.S.C. § 154(a)(1) ("Every patent shall contain ... a grant to the patentee, his heirs or assigns, the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States").

the patent owner is made whole for previous trespasses upon their exclusive right, and through the injunction, the patent owner's exclusive right is restored.

Not only is injunctive relief entirely consistent with the patent grant of an exclusive right, but it also plays a role in maintaining an effective private ordering system surrounding patent rights. Specifically, the knowledge that an injunction would result in the case of patent infringement serves as a good deterrent to those considering whether to infringe. Anticipating that their actions could lead to injunctive relief, most potential infringers would instead seek a license to use the patent or, alternatively, endeavor to design around the patent, rather than face having to revamp their entire manufacturing and distribution system ex post to abide by the injunction.² In addition to encouraging pre-infringement negotiations between potential infringers and patent owners, the possibility of injunction also incentivizes pre-litigation negotiations and settlements of lawsuits.³ In short, the availability of injunctive relief creates a viable ecosystem for nonjudicial transactions surrounding patent rights. This ecosystem of transactions surrounding patent rights then provides a viable business model for innovative companies wishing to participate in SDOs.

On the other hand, if there is no credible threat of injunction for patent infringers, this balanced ecosystem is upset. Instead, a more nefarious course of action is allowed to flourish that forces patent transactions into the judicial system at great cost to patent owners. Efficient infringement is the idea that, if an injunction is unlikely to issue in the future, it may be more rational for a party to "infringe now, pay later." Because the worst expected outcome for the infringer will be to pay damages for past infringement and an ongoing royalty for any future infringement, the infringer is no worse off than it would have been had it negotiated a license before commencing infringement. In fact, because damages are not awarded until after the trial, which could be years after the infringement began, the infringer ends up with what is essentially an interest-free loan for the period of time preceding the lawsuit. Perversely, the infringer may even end up in a better position, if the royalty rate set by the court is lower than the parties would have arrived at via negotiation.⁴

Of course, the calculus behind efficient infringement is only attractive if the infringer is relatively certain that an injunction will not be issued should a court make a finding of infringement. Relevant to this book, in fields where technology standards are prevalent – including 5G and IoT – the availability of injunctive relief is not certain and, in fact, injunctions are rarely granted. While injunctive relief used to be essentially guaranteed in cases of patent infringement, in part due to the

³ John M. Golden, *Litigation in the Middle: The Context of Patent Infringement Injunctions*, 92 TEX. L. REV. 2075, 2081 (2014) (explaining how injunctive relief affects the expected gains and losses from litigation and may alter settlement decisions).

⁴ Adam Mossoff & Bhamati Viswanathan, *Explaining Efficient Infringement*, C-IP2 (May 11, 2017), https://cip2.gmu.edu/2017/05/11/explaining-efficient-infringement/.

² Karen Sandrik, Reframing Patent Remedies, 67 U. MIAMI L. REV. 95, 98 (2012).

acknowledgment of a patent's grant of exclusive rights, the Supreme Court's 2006 decision in *eBay*, *Inc. v. MercExchange*, *LLC*⁵ altered this landscape. Stating that injunctive relief should not be categorically granted, as the US Court of Appeals for the Federal Circuit (Federal Circuit) had long done, nor categorically denied, as the district court in the *eBay* case had presumed, the Supreme Court instead imposed a four-factor test to be used when deciding to issue injunctive relief. The four factors to be considered include: (i) irreparable harm to the patent owner; (ii) remedies at law (damages) are inadequate; (iii) balance of hardship; and (iv) public interest.⁶ In most cases, these factors weigh in favor of granting an injunction because the patent owner's exclusive right is irreparably harmed by infringement and money damages cannot restore that exclusivity after the fact.⁷ Further, the public has a strong interest in a reliable and effective patent system, which respects the patent owner's exclusive rights.

Despite the exhortation that categorical grants or denials of injunctions are inappropriate, Justice Kennedy concurred to explain that injunctions perhaps should not issue in cases where the patent owner is a non-practicing entity, where the patent covers only a small component of a much larger product, and where the patented technology is a business method.⁸ Kennedy warned against injunctions being used in cases of "patent holdup," although he did not reference it as such. Specifically, he noted that "an injunction, and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent," and that "[w]hen the patented invention is but a small component of the product the companies seek to produce," injunctive relief is "employed simply for undue leverage in negotiations."⁹ Because of these issues highlighted in Justice Kennedy's concurrence and because of how courts have applied the four-factor *eBay* test, there are two particular groups of patent owners for whom injunctive relief is uncertain or possibly even unlikely – non-practicing entities and owners of standard-essential patents (SEPs).

Efficient infringement is of particular concern in the SEP space, including 5G and IoT, because injunctive relief is generally unavailable to SEP owners. This chapter explains that courts are unlikely to grant requests for permanent injunctions and SEP owners are unlikely to even seek injunctive relief, setting up the necessary condition for efficient infringement to flourish. Unsurprisingly, there is evidence that infringers are selecting to "infringe now, pay later" when it comes to SEPs, and

- ⁸ Id. at 395–97 (Kennedy, J., concurring).
- ⁹ Id. at 396 (Kennedy, J., concurring).

^{5 547} U.S. 388 (2006).

⁶ *Id.* at 391.

⁷ Id. at 395 (Roberts, C.J., concurring) (noting that injunctions should continue to issue in the "vast majority" of patent cases, as the right to exclude is difficult to capture via monetary damages).

this chapter sets out the case why this is problematic for a well-functioning innovation system.

II. COURTS ARE UNLIKELY TO GRANT INJUNCTIVE RELIEF IN SEP CASES

It is difficult to accurately quantify whether efficient infringement is occurring because it presumes a mental calculus by the infringer that infringing first, paying later would be a viable option. However, it is possible to determine if the conditions are favorable for efficient infringement by assessing the relative threat of being enjoined in the face of infringement. This section explains why the *eBay* factors present difficulties for SEP owners and then provides some exemplary cases where this analysis was performed by a court. This section concludes with some data about the current state of injunctive relief in patent infringement cases.

A. SEPs and the eBay Factors

Based on the four-factor test set forth in the Supreme Court's *eBay* opinion, SEP owners are unlikely to obtain injunctive relief in most cases due to the FRAND commitment the SEP owner made to the SDO. This section explains how the FRAND commitment interacts with the *eBay* factors.

SDOs generally have intellectual property (IP) rights policies that address issues surrounding the IP of the companies who participate in the SDO. One typical provision of IP rights policies requires SDO participants to disclose patents and patent applications covering technology that the participant has submitted to the SDO for potential incorporation into the standard. If that technology becomes part of the standard and the participant deems the patent or patent application to be essential for the practicing of a standard, it becomes known as an SEP. Another common provision of an SDO's IP rights policy is a commitment by SDO participants to license any SEPs related to the standard on fair, reasonable, and nondiscriminatory (FRAND) terms to any company who wants to make or offer standards-compliant goods or services.¹⁰ The purpose of the FRAND commitment is to facilitate widespread adoption of the standard while still providing SEP owners an opportunity to recoup their investments in the research and development of the technology, as well as to promote the standardization process.

Courts are likely to deny injunctive relief, based on the *eBay* factors, to an SEP owner that has made a FRAND commitment. Specifically, courts will generally find that SEP owners fail to meet the first two *eBay* factors – irreparable harm and money

¹⁰ Kristen Osenga, Ignorance over Innovation: Why Misunderstanding Standard Setting Organizations Will Hinder Technological Progress, 56 U. LOUISVILLE L. REV. 159, 183–87 (2018).

damages are inadequate. The argument is that, by accepting a FRAND commitment, an SEP owner has voluntarily relinquished its exclusive rights in exchange for having its patented technology incorporated into the standard. Because the SEP owner has committed to license its patent to all-comers, it cannot claim irreparable harm in the form of loss of exclusive rights, and similarly, because the SEP owner has accepted the FRAND commitment, it has signaled to all that money is sufficient to make it whole. As one commentator summed it up, an SEP owner that has obligated itself to FRAND "is, by definition, willing to license rather than exclude, and benefits from the widespread adoption of its technology resulting from standardization."¹¹

Some courts have also found that the FRAND commitment also causes the third and fourth *eBay* factors to support a denial of injunctive relief. The balance of the hardships argument weighs in favor of the infringer because the FRAND commitment means that the SEP owner has given up its rights, while the infringer would be greatly harmed if they were unable to make standards-compliant products like everyone else. The public interest argument also weighs in favor of the infringer being allowed to continue infringing, because the public has an interest in having access to standards-compliant products from multiple implementers. This interest of the public in innovative devices takes precedent over both the public's interest in a robust standardization ecosystem and a strong and reliable patent system.

While superficially appealing, the aforementioned application of the *eBay* factors to SEP owners is too facile and is exactly the type of categorical denial that the Supreme Court warned against in that case. Although the FRAND commitment obligates the patent owner to offer and accept a license to use its SEP on fair, reasonable, and nondiscriminatory terms, there is no concomitant obligation on the potential infringer to accept, or even negotiate in good faith for, these terms. While this one-sidedness is more accurately a problem with the overall construct of the FRAND commitment, it does play a role in both the *eBay* analysis as well as the infringer's decision to infringe. As to the eBay factors, FRAND affects the acceptability of monetary damages as sufficient and, because the infringer has no obligation to negotiate, implicates the irreparability of harm to the patent owner's exclusive rights. Finally, while the public does have an interest in standards-compliant products, the fact that SEPs are licensed on FRAND terms to any desiring manufacturer means that the infringer is unlikely to be the only source of any standardscompliant product. An injunction issued against any particular manufacturer will likely not deprive the public of its much-loved and useful devices.

Looming behind the flawed, or at least thoughtless, application of the *eBay* factors to SEPs is Kennedy's callout to patent holdup in his concurrence in that case.

¹¹ Thomas F. Cotter, *Reflections on Holdup and Royalty Stacking*, *Part* 1, COMPAR. PAT. REMEDIES (June 11, 2014, 4:20 AM), http://comparativepatentremedies.blogspot.com/2014/06/ reflections-on-holdup-and-royalty.html.

Patent holdup is the idea that a patent owner could force a firm wishing to make or offer standards-compliant goods or services to pay an excessively high royalty rate, relying on the fear of injunctive relief if the infringer fails to pay the royalty. This is particularly acute where the patented technology may be just a small portion of a standard encompassing hundreds or thousands of patents.¹² Although there has been much research and debate over whether patent holdup is merely theoretical or actually occurs, courts have openly reflected a concern about holdup when deciding not to grant injunctive relief for infringement of SEPs.¹³

Despite objections to how courts view SEP owners under the *eBay* factors and a largely misplaced concern about patent holdup, the examples in the next section demonstrate that courts will generally decline to issue an injunction for infringement of an SEP.

B. Courts, eBay, and SEPs

Very few cases exist that illustrate how courts assess the *eBay* factors after a finding of patent infringement of a SEP. The dearth of cases may be, in part, because SEP owners do not seek injunctive relief – even as they avail themselves of other remedies. This failure to seek an injunction could be due to an SEP owner's determination that they are unlikely to obtain this remedy or because another consideration prevents it. Both of these situations are described in the following sections. The cases that exist, however, provide interesting insight into how courts think about SEPs and injunctions. The following section provides a few examples of these insights.

1. Hynix Semiconductor Inc. v. Rambus Inc.

While this case is more commonly known for a number of other issues, how the court assessed injunctive relief is instructive.¹⁴ The SEP in question covered DRAM technology, patented by Rambus and found to be infringed by Hynix. The bulk of Hynix's DRAM fell under the JEDEC standard. Rambus developed and licensed

¹² J. Gregory Sidak, Holdup, Royalty Stacking, and the Presumption of Injunctive Relief for Patent Infringement: A Reply to Lemley & Shapiro, 92 MINN. L. REV. 714, 714 (2008).

¹³ For just a few examples, see Jonathan M. Barnett, Has the Academy Led Patent Law Astray?, 32 BERKELEY TECH. L. J. 1313 (2017); Damien Geradin & Miguel Rato, Can Standard-Setting Lead to Exploitative Abuse? A Dissonant View on Patent Hold-Up, Royalty-Stacking, and the Meaning of FRAND, 3 EUR. COMP. J. 101, 101–02 (2007); Kirti Gupta, The Patent Policy Debate in the High-Tech World, 9 J. COMPETITION L. & ECON. 827 (2013); F. Scott Kieff & Anne Layne-Farrar, Incentive Effects from Different Approaches to Holdup Mitigation Surrounding Patent Remedies and Standard-Setting Organizations, 9 J. COMPETITION L. & ECON. 1091 (2013); Maureen K. Ohlhausen, The Federal Trade Commission's Path Ahead, 2 CRITERION J. INNOVATION 31, 33 (2017).

¹⁴ 609 F. Supp. 2d 951 (N.D. Cal. 2009).

chipset technology; although Rambus did not make a product that competed with Hynix, there was competition because Rambus' design competed with the JEDEC standard.

In determining whether to grant Rambus injunctive relief, the court begins by recounting the eBay factors, but then instantly proceeds to a section entitled "Injunctions Should Not Encourage Holdup."15 The court cites the holdup language from Justice Kennedy's concurrence in eBay, but then proceeds to examine some very old cases (from 1882 to 1900) that address holdup and arrives at the propositions that injunctive relief poses a disproportionate cost on the infringer and that injunctions are not meant to be punitive. The court then returns to analyze the eBay factors, specifically the factors of irreparable harm and inadequacy of monetary damages. The court determined that, although Rambus does not lose sales to Hynix because Rambus does not sell competing products, Rambus did stand to "lose" due to Hynix's continued infringement because the JEDEC standard would "win" over Rambus' proprietary design. The court, however, determines this to be a minimal harm, because Rambus has multiple other licensees.¹⁶ Rambus also argues irreparable harm and inadequacy of money damages due to diminished royalty rates and harm to its innovation-based model, after the CSIRO case (described in Section 4). The court was unpersuaded by these arguments, stating that Rambus was in the business of seeking money because it has a licensing program and thus money damages were indeed sufficient.¹⁷ As to the remaining eBay factors of balance of the hardships and public interest, the court found that Hynix would go out of business in the face of injunctive relief, which would be disproportionately more harmful than the "slight" harm faced by Rambus.¹⁸

In deciding the *Hynix* case, the judge drew comparisons between that case and *Broadcom v. Qualcomm*, calling it the most significant case since *eBay*.¹⁹ The *Broadcom* case also involved telecom chipsets falling under different standards. The court there found irreparable harm, even where the chipsets were under different standards, because the competition between the companies was not sale for sale, but for domination of design.²⁰ The judge then issued injunctive relief on a sunset basis, giving the infringer 20 months to stop infringing, while paying an ongoing royalty, as a means to protect the public.²¹ For the *Broadcom* court, the bottom line was that a company who builds their business on infringement cannot complain that their business will fail if an injunction is granted. However, the *Hynix* court noted that if the infringement was clearly not willful, or where there exist

- ¹⁷ Id. at 983–85.
- ¹⁸ Id. at 984–85.
- ¹⁹ *Id.* at 969.
- ²⁰ Broadcom Corp. v. Qualcomm Inc., 543 F.3d 683, 686–87 (Fed. Cir. 2008).
- ²¹ Id. at 687–88.

¹⁵ Id. at 966.

¹⁶ *Id.* at 981.

serious questions about the patent's validity, the balance may tip back in favor of not enjoining the infringer.²² Ultimately, in the *Hynix* case, the court denied injunctive relief.

2. Apple Inc. v. Motorola Inc.

In this case involving cross-infringement suits,²³ Judge Posner, sitting by designation at the district court, determined that neither side would be entitled to an injunction or damages even upon a finding of infringement, and so dismissed the case.²⁴ Although the case is a bit messy because Judge Posner found that neither side had presented an adequate case with respect to damages, the case does present a commonly held viewpoint with respect to injunctions. As Judge Posner noted: "I do not see how, given FRAND, I would be justified in enjoining Apple from infringing the '898 unless Apple refuses to pay a royalty that meets the FRAND requirement."²⁵ Essentially, in the face of outright refusal, courts are unable to see how an SEP owner can meet the *eBay* factors for injunctive relief. On appeal to the Federal Circuit, that court took note of Judge Posner's statement presented earlier.²⁶ The Federal Circuit then acknowledged that while it is difficult to establish irreparable harm in cases involving SEPs, there is no categorical prohibition on awarding injunctive relief.²⁷ Specifically, injunctions may be justified where the infringer unilaterally delays FRAND negotiations or rejects FRAND offers.²⁸ Although this interpretation is more generous than that of the Hynix court that limited injunctive relief to willful infringement, it still creates a quite narrow set of difficult facts that an SEP owner must prove to obtain injunctive relief.

3. Microsoft Corp. v. Motorola, Inc.

While the *Hynix* case provided a fairly standard perspective on the *eBay* factors and SEPs, it did allow for a small ray of hope in a case where the patent owner could show willfulness and the *Apple v. Motorola* case gave two additional pathways to injunctions. On the other hand, the *Microsoft v. Motorola* case takes the idea of injunctive relief for infringement of SEPs in an entirely different direction.²⁹ Midcase, Microsoft moved to dismiss Motorola's request for injunctive relief based on the argument that the *eBay* factors could not be met in the case.³⁰ After discussing

- ²⁷ Id. at 1332.
- ²⁸ Id.

³⁰ Id. at *30.

²² Hynix, 609 F. Supp. 2d at 970.

²³ Apple Inc. v. Motorola, Inc., 869 F. Supp. 2d 901 (N.D. Ill. 2012).

²⁴ Id. at 924.

²⁵ Id. at 913–14.

²⁶ Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1331 (Fed. Cir. 2014).

²⁹ No. C10-1823JLR, 2012 U.S. Dist. LEXIS 170587 (W.D. Wash. Nov. 29, 2012).

SEPs and Motorola's FRAND commitments under the H264 and 802.11 standards, the court determined without much analysis that there is no irreparable harm given the FRAND commitment and further that monetary damages are perfectly sufficient to make Motorola whole in this case.³¹

The situation became much more interesting when, a year later, Microsoft argued to a jury that Motorola breached its FRAND commitment in even seeking injunctive relief.³² The jury found in favor of Microsoft on this point, and the judge denied Motorola's motion for judgment as a matter of law, leaving intact the finding that a mere request for injunctive relief by a SEP owner was incompatible with a FRAND commitment.³³ The US Court of Appeals for the Ninth Circuit (Ninth Circuit) went on to affirm this finding.³⁴ This notion that an SEP owner may not even seek an injunction for fear of breaching a duty of good faith and fair dealing with respect to the FRAND obligation creates a difficult choice for an SEP owner.³⁵

4. CSIRO v. Buffalo Tech Inc.

There is, of course, an exception that proves the rule. Although the *CSIRO* case is better known as a rare decision where an injunction is granted to a non-practicing entity, it is also a case involving an SEP.³⁶ Commonwealth Scientific and Industrial Research Organisation (CSIRO) is a research arm of the Australian government, not unlike the National Science Foundation or National Institutes of Health in the United States. CSIRO received a patent on WLAN technology, and IEEE reached out to CSIRO to inquire whether the organization would commit to FRAND licensing of this patented technology. When CSIRO agreed, IEEE incorporated the technology into the 802.11 and 802.11 g standards, although the more popular 802.11 b standard does not include CSIRO's technology.³⁷ CSIRO then sued Buffalo Tech for infringement based on their making and selling of WLAN products compliant with 802.11 and 802.11 g. In the infringement case, the patent was found to be not invalid and infringed on summary judgment.³⁸ CSIRO then sought a permanent injunction.

The court applied the *eBay* factors. As to irreparable harm, CSIRO argued that it is difficult to incentivize a manufacturer to take a license when other manufacturers

³⁸ Id. at 602.

³¹ Id. at *26-30.

³² Microsoft Corp. v. Motorola Inc., 795 F.3d 1024, 1034 (9th Cir. 2015) (recounting the district court proceedings).

³³ Id.

³⁴ Id. at 1047–48.

³⁵ The same concept, that seeking injunctive relief is a breach of FRAND, was also approved of by Realtek Semiconductor Corp. v. LSI Corp., 964 F. Supp. 2d 998, 1008 (N.D. Cal. 2013).

³⁶ 492 F. Supp. 2d 600 (E.D. Tex. 2007).

³⁷ Id. at 601–02.

are infringing. As expected in these cases, Buffalo Tech argued that there is no irreparable harm due to the FRAND commitment and that CSIRO is in the business of licensing patents. The court recognized that the harm to CSIRO was not merely financial, because the organization used its licensing program to fund its research and development activities, compete for ideas and scientists, and more. Because funding makes these activities possible, infringement represents a lost opportunity and an irreparable harm.³⁹ For similar reasons, money damages were insufficient to make CSIRO whole.⁴⁰ The balance of the hardships was found to favor CSIRO, as the infringing products were only a small amount of Buffalo Tech's business and Buffalo Tech opted to infringe rather than license.⁴¹ Finally, the court recognized that the public has a strong interest in an effective patent system, particularly where there are no health or safety concerns at issue.⁴²

While this case could represent a path forward for SEP owners to obtain injunctive relief, as was tried in the *Hynix* case described earlier, the *CSIRO* court drew two distinctions that make it difficult to extend that case to more typical SEP cases. First, the court noted that CSIRO's patented technology was not a small component of a larger product, but was instead the whole of the invention.⁴³ This is generally not true of today's standardized technologies, such as 5G and IoT. Second, the court found CSIRO's mission as a research organization particularly compelling, noting that "the work of research institutions has produced enormous benefits to society" and is "fundamental to scientific advancement."⁴⁴ It is unlikely courts would extend the same sort of reasoning to innovative for-profit firms, despite any societal benefits or scientific advancements.

C. Injunctions Are Being Denied

Efficient infringement is only an attractive option when the infringing firm believes it is unlikely to be enjoined, even if adjudged to be infringing a valid patent. Numerous studies have been conducted post-*eBay* to understand whether and when injunctive relief is being denied. Although most of these studies are focused on non-practicing entities, rather than SEP owners, the reasons provided for denying injunctive relief to non-practicing entities overlaps with the reasons given to SEP owners. That courts are willing to deny injunctive relief in a significant portion of patent infringement cases provides the necessary foundation for efficient infringement to occur.

³⁹ Id. at 603–04.

^{4°} *Id.* at 605–06.

- ⁴¹ CSIRO v. Buffalo Tech Inc., 492 F. Supp. 2d 600, 606 (E.D. Tex. 2007).
- ⁴² Id. at 607.
- ⁴³ Id. at 606.
- 44 Id. at 607.

Studies of injunction grants prior to *eBay* found that injunctive relief was granted in 95–100% of cases where patent infringement was found.⁴⁵ Studies done in the first decade after *eBay* found that requests for permanent injunction were granted in approximately three-quarters of the cases where patent infringement was found (and an injunction was requested). In a widely cited study covering the time period between *eBay* in 2006 and 2013, Professor Christopher Seaman found that requests for permanent injunction were granted in 72.5% of cases.⁴⁶ Similar numbers were shown in studies by Professors Colleen Chien and Mark Lemley (70% covering June 2006 through August 2011) and Professor Jay Kesan and Kirti Gupta (80% between June 2006 and December 2012).⁴⁷ In the study conducted by Professor Seaman, discussed previously, requests for injunction were granted 16% of the time when the patent holder was not practicing the patent.⁴⁸ Similar low grant rates for non-practicing entities were seen in the studies by Chien and Lemley, as well as Kesan and Gupta.

Current research shows that these numbers have remained steady since the *eBay* case. This chapter's author has looked at decided patent infringement cases since the *eBay* decision where permanent injunctive relief was disputed. Cases decided by default (due to defendant's failure to answer) or cases where an injunction was issued by consent, stipulation, or settlement were not considered. This resulted in 342 cases with written opinions. Of those 342 cases, 249 resulted in the issuance of an injunction and 93 cases where injunctive relief was denied. This is approximately a 73% grant rate for permanent injunction requests and is generally consistent with the earlier noted studies (Figure 5.1).

From this data, it is fair to assert that courts are willing to deny injunctive relief in cases that do not, in the court's estimation, satisfy the *eBay* factors. However, it is difficult to say much else, particularly about SEPs. Of the cases represented in the data, only seven implicate SEPs and only one resulted in the grant of a permanent injunction (the *CSIRO* case). There are significant selection effects in the data overall, in that very few cases of patent infringement are actually litigated and even fewer reach the stage where a court must decide a dispute about injunctive relief. Beyond that, there are concerns that, especially in SEP cases, the SEP owner does not seek injunctive relief, as will be discussed later. Further, some SEP cases address the injunction question even before tackling infringement and validity (such as the *Apple v. Motorola* case) and so were not captured in the data set. Given the data and

⁴⁵ Ryan T. Holte, The Misinterpretation of eBay v. MercExchange and Why: An Analysis of the Case History, Precedent, and Parties, 18 CHAP. L. REV. 677, 719 (2015).

⁴⁶ Christopher B. Seaman, Permanent Injunctions in Patent Litigation after eBay: An Empirical Study, 101 IOWA L. REV. 1949, 1983, fig. 1, fig. 3 (2016).

⁴⁷ Colleen V. Chien & Mark Lemley, Patent Holdup, the ITC, and the Public Interest, 98 CORNELL L. REV. 1, 11 (2012); Kirti Gupta & Jay P. Kesan, Studying the Impact of eBay on Injunctive Relief in Patent Cases (July 10, 2015) (unpublished manuscript), http://papers.csm .com/sol3/papers.cfm?abstract_id=2629399.

⁴⁸ Seaman, *supra* note 46.

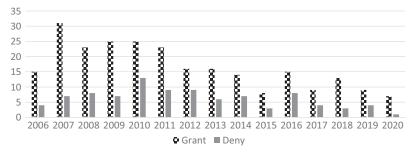


FIGURE 5.1. Graph of injunction grants & denials June 2006–December 2020

the discussion previously, parties considering efficient infringement may find that the likelihood of being enjoined upon infringing an SEP is sufficiently low enough that it is a prudent decision.

III. SEP OWNERS ARE UNLIKELY TO SEEK INJUNCTIVE RELIEF

One of the difficulties in gathering data about efficient infringement in the SEP space, or at least understanding the favorability of the conditions surrounding it, is that SEP owners do not always (or even often) seek injunctive relief when bringing a patent infringement lawsuit. Of course, if an SEP owner does not seek injunctive relief, none will be granted – again setting up conditions where efficient infringement is likely to flourish. This section will discuss why SEP owners are unlikely to seek an injunction, as well as consider.

A. SEP Owners Are Dissuaded by eBay and SEP Case Law from Seeking Injunctive Relief

As described previously, case law precedent and general conceptions surrounding the *eBay* factors are likely to dissuade SEP owners from seeking injunctive relief. It is quite difficult for an SEP owner to successfully argue irreparable harm or insufficiency of monetary damages, unless that SEP owner happens to be a governmental research organization. Except in very narrow circumstances, the presence of a FRAND commitment is likely to prove fatal to any sort of injunction being issued. These narrow circumstances – including willful infringement or failure to either negotiate or pay – are difficult to prove and, as will be illustrated later, do not seem to encourage SEP owners to seek injunctive relief in any case.

B. Additional Considerations Affecting Seeking Injunctive Relief for SEP Infringement

SEP owners are not just discouraged from seeking injunctions by *eBay* and the SEP cases that have followed. There are also additional considerations that have made

injunctive relief nearly impossible for SEP owners to obtain and, in some cases, even prohibit SEP owners from seeking injunctive relief. Some of these considerations are driven by the government, from the White House to administrative agencies like the Federal Trade Commission (FTC) and the Department of Justice's Antitrust Division (DOJ). Other considerations come straight from SDOs as part of their IP rights policies. In addition to directly impacting an SEP owner's decision to seek injunctive relief, these considerations also have influenced courts' decisions about whether to grant injunctions in favor of SEP owners.⁴⁹

1. Government Interventions against SEPs

Government entities are increasingly calling for injunctive relief to be unavailable to SEP owners, although these appeals date back nearly a decade or longer. In 2013, the DOJ and the United States Patent and Trademark Office (PTO) issued a policy statement strongly suggesting that injunctive relief was generally inappropriate in patent infringement cases involving SEPs.⁵⁰ Specifically, the statement stated that, absent extraordinary circumstances, an injunction for infringement of an SEP "may be inconsistent with the public interest."⁵¹ This notion, coupled with the idea that an SEP owner who has committed to FRAND licensing cannot suffer irreparable harm and is made whole by money damages, makes application of the *eBay* factors a near certainty for the infringer. The basis for this position, as described by the statement, is a concern over patent holdup, although no evidence about the existence and extent of patent holdup was presented in the statement.⁵²

Under the previous administration, there was a shift away from a near-categorical bar to injunctive relief for infringement of SEPs. The DOJ and PTO withdrew their support for the 2013 policy statement and jointly issued a new policy statement on remedies for SEPs subject to FRAND obligations in December 2019, together with the National Institute of Standards and Technology (NIST).⁵³ This statement noted that "All remedies available under national law, including injunctive relief and adequate damages, should be available for infringement of standards-essential patents subject to a F/RAND commitment."⁵⁴ One stated purpose of this position is to encourage good faith licensing negotiations between SEP owners and

⁴⁹ Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1332, 1333 (Fed. Cir. 2014) (both the majority and dissent cite the 2013 Policy Statement, *infra* note 50, for their position).

⁵⁰ US Dep't of Just. & US Pat. & Trademark Office, Policy Statement on Remedies for Standards-Essential Patents Subject to Voluntary F/RAND Commitments (Jan. 8, 2013), www.justice.gov/ atr/page/file/118381/download.

⁵¹ Id. at 6.

⁵² Id. at 4–5.

⁵³ U.S. Dep't of Just., U.S. Pat. & Trademark Office, & Nat'l Inst. for Standards and Tech., Policy Statement on Remedies for Standards-Essential Patents Subject to Voluntary F/RAND Commitments (Dec. 19, 2019), www.justice.gov/atr/page/file/1228016/download.

⁵⁴ Id. at 3-4.

companies wishing to make or offer standards-compliant goods or services.⁵⁵ Although unstated, the policy was also intended both to make efficient infringement less attractive and to reinvigorate a viable ecosystem for nonjudicial transactions surrounding patent rights.

With the Biden Administration, however, government policy has shifted back to disfavoring injunctive relief for infringement of SEPs. In July 2021, President Joseph Biden issued the Executive Order on Promoting Competition in the American Economy, where, among other things, he "encouraged [the Attorney General and the Secretary of Commerce] to consider whether to revise their position on the intersection of intellectual property and antitrust laws, including by considering whether to revise" the 2019 DOJ-PTO-NIST joint policy statement.⁵⁶ In response, the three agencies issued a Draft Policy Statement on Licensing Negotiations and Remedies for Standards-Essential Patents Subject to Voluntary F/RAND Commitments in December 2021.⁵⁷ Under this new guidance, injunctions are again unlikely to issue for SEP infringement: "Where a SEP holder has made a voluntary F/RAND commitment, the *eBay* factors, including the irreparable harm analysis, balance of harms, and the public interest generally militate against an injunction."⁵⁸

This latest policy statement does recognize the importance of a viable ecosystem for patent licensing, acknowledging the value of "widespread and efficient licensing of SEPs" and recognizing the "efficient negotiation of F/RAND licenses is likely to improve standardization efforts and support competition and innovation."⁵⁹ The agencies, however, fail to understand that efficient infringement is an attractive option where injunctive relief is unavailable and that efficient infringement is the antithesis of efficient licensing. In any case, where the government has come out repeatedly and strongly against the availability of injunctive relief, the likelihood of a court granting an injunction or an SEP owner seeking injunctive relief is quite low.

As of June 8, 2022, the three agencies withdrew the 2019 DOJ-PTO-NIST joint policy statement and, at this point, have not adopted the 2021 Draft Policy Statement.⁶⁰ In announcing the withdrawal, the agencies noted that the issues of injunctive relief will be addressed on a case-by-case basis, but no additional guidance has been provided, and the direction of the path forward is unclear.

⁵⁵ Id. at 3.

⁵⁶ Exec. Order No. 14036, 86 Fed. Reg. 36987, 36991 (July 9, 2021).

⁵⁷ US Dep't of Just., US Pat. & Trademark Office, & Nat'l Inst. for Standards and Tech., Draft Policy Statement on Licensing Negotiations and Remedies for Standards-Essential Patents Subject to Voluntary F/RAND Commitments (Dec. 6, 2021), www.justice.gov/atr/page/file/ 1453471/download.

⁵⁸ Id. at 9.

⁵⁹ Id. at 10.

⁶⁰ US Dep't of Just. Office of Public Affairs, Justice Department, the United States Patent and Trademark Office and National Institute of Standards and Technology Withdraw 2019 Standards-Essential Patents (SEP) Policy Statement (June 8, 2022), www.justice.gov/opa/pr/ justice-department-us-patent-and-trademark-office-and-national-institute-standards-and.

2. SDO's Prohibition on Injunctive Relief

SDOs have also weighed in on whether injunctive relief should be permitted for infringement of SEPs. While some SDOs have remained neutral, at least one major SDO has restricted the ability of its participants to seek injunctive relief. This certainly has a great impact in making efficient infringement a reasonable choice for makers of standards-compliant products.

In 2015, under the purported basis of addressing patent holdup, the Institute for Electronics and Electrical Engineers (IEEE) amended its IP rights policy to, among other things, address injunctive relief.⁶¹ Unfortunately, the process by which these amendments were made was not the usual open, consensus-driven activity that is typical for SDO activity, but was driven largely by implementers, or those that make standards-compliant products, over the objection of SEP owners.⁶² Specifically, the amended IEEE policy stated that a FRAND commitment to the IEEE "precludes seeking or seeking to enforce" an injunction unless the infringer "fails to participate in, or to comply with the outcome of, an adjudication including an affirming first-level appellate review" or "where the failure to request a Prohibitive Order in a pleading waives the right to seek a Prohibitive Order at a later time."⁶³ This prohibition is even more restrictive than what had been seen in the courts, where at least there was a possibility of injunctive relief where the infringer had refused to negotiate, as described earlier. In September 2022, the IEEE withdrew this language from its policy, effective January 1, 2023.

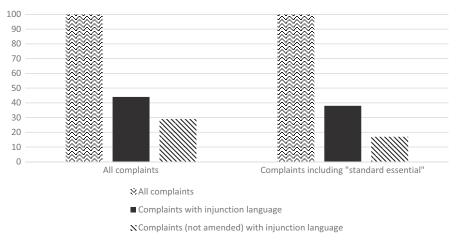
C. Showings Indicative of Efficient Infringement

Although it is difficult to fully grasp how often efficient infringement is occurring, there are anecdotes and circumstantial data that support its existence. Anecdotes, while difficult to find, often provide very compelling illustrations of infringers making conscious choices to not negotiate licenses with SEP owners. Circumstantial data, on the other hand, is easier to obtain but complicated to interpret. It is possible to gauge how often SEP owners seek injunctive relief by considering their filed complaints, but this does not often address why they made this choice. Similarly, SEP owners often allege willful infringement when companies refuse to negotiate a license or in the wake of failed negotiations, but this too does not fully capture whether and how much efficient infringement is occurring in

⁶¹ J. Gregory Sidak, The Antitrust Division's Devaluation of Standard Essential Patents, 104 GEO. L.J. ONLINE 48, 50 (2015).

⁶² J. Gregory Sidak, Testing for Bias to Suppress Royalties for Standard-Essential Patents, 1 CRITERION J. INNOVATION 301, 302 (2016).

⁶³ IEEE-SA Standards Board Bylaws, IEEE STANDARDS ASS'N § 6.2 (Dec. 2015), http://standards.ieee.org/develop/policies/bylaws.pdf.



Percentage of complaints with injunction language

FIGURE 5.2. Graph of complaints seeking injunctive relief

the SEP space. In lieu of better information, however, this section briefly considers these data points.

In another chapter in this book – Restoring *Deterrence: The Case for Enhanced Damages in a No-Injunction Patent System* by Jonathan M. Barnett and David J. Kappos – the authors provide a number of anecdotes illustrating efficient infringement. One of the more striking is worth recounting here – Core *Wireless v. LG Electronics.*⁶⁴ In that case, Core Wireless, a joint endeavor of Microsoft and Nokia, assigned its portfolio to Conversant Intellectual Property Management.⁶⁵ Conversant initiated licensing talks with LG Electronics, which ultimately responded with a "terse one-page presentation stating that a lawsuit was ... 'preferable' to a license and that LG would prefer to wait until another major cell phone manufacturer licensed the portfolio" before taking a license.⁶⁶

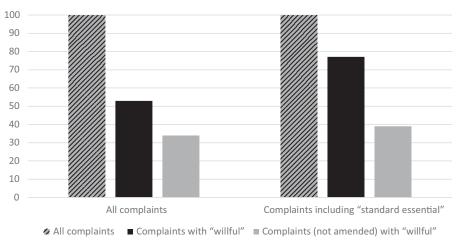
Following the precedent and other considerations described previously, it would be expected that SEP owners seek injunctive relief less often than other patent owners. A quick text search of complaints filed in patent cases between *eBay* and March 1, 2022, seems to bear this out,⁶⁷ although more in-depth analysis is warranted and beyond the scope of this chapter (Figure 5.2).

⁶⁴ Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc., No. 2:14-cv-912-JRG, 2016 WL 10749825 (E.D. Tex. Nov. 2, 2016).

⁶⁵ *Id.* at *1.

⁶⁶ Id.

⁶⁷ Out of all complaints filed in patent cases for that date range (85,531 documents), approximately 44% of complaints (38,207 documents) include the phrases, "permanent injunction" or "injunctive relief." If the complaints are narrowed to exclude amended complaints (removing largely duplicative filings), approximately 29% (25,379 documents) of the complaints appear to



Percentage of complaints with "willful"

FIGURE 5.3. Graph of complaints indicating "willful"

It is difficult to draw many conclusions from this data, other than if a complaint includes the term "standard essential," it is slightly less likely to also include the terms "permanent injunction" or "injunctive relief." The data is, of course, subject to significant selection effects, as described previously, and also is simply a text-based search for relevant terms. However, this could signal that SEP owners are less likely to seek injunctive relief in some circumstances, particularly when coupled with the case law precedent and additional considerations detailed in the previous sections.

Performing a similar textual search based on the presence of "willful" in patent infringement complaints also may provide some insight about efficient infringement, subject to the same caveats and need for further research analysis (Figure 5.3).⁶⁸

Again, it is difficult to draw any certain conclusions from this data, but in reading from the complaints for patent infringement of an SEP that include the term "willful," there are many cases where licensing negotiations are hindered by the

seek injunctive relief. Looking again at all complaints filed in patent cases, if the set is narrowed to those that include the phrase "standard essential," there are 234 documents total. Running the same text searches for "permanent injunction" or "injunctive relief" yields 38% (89 documents) and excluding amended complaints yields 17% (40 documents), including the terms for injunctive relief.

⁶⁸ Out of all complaints filed in patent cases for that date range (85,531 documents), approximately 53% of complaints (45,831 documents) include the phrase "willful." If the complaints are narrowed to exclude amended complaints (removing largely duplicative filings), approximately 34% (29,463 documents) of the complaints appear to seek injunctive relief. Looking again at all complaints filed in patent cases, if the set is narrowed to those that include the phrase "standard essential," there are 234 documents in total. Running the same text searches for "willful" yields 77% (182 documents) and excluding amended complaints yields 39% (93 documents), including willfulness.

infringer, where negotiations continue for multiple years often attributed to delay tactics by the infringer, and where multiple offers are made by the SEP owner but are declined by the infringer.⁶⁹ What is interesting is that, as these negotiations continue and are, in essence extended by the infringer, that same party is continuing to use, without paying, the patented technology of the SEP. This is the very essence of efficient infringement.

IV. CONCLUSION

Efficient infringement, or the decision by an infringer to "infringe now, pay later," is only an attractive option where injunctive relief is unavailable to a patent owner who has successfully demonstrated infringement of its patent. One sector where injunctions are routinely unavailable is in the SEP space, particularly where the SEP owner has obligated itself to FRAND licensing. Under these circumstances, it is difficult for the SEP owner to make a satisfactory showing against the *eBay* factors, used by courts to grant injunctive relief. Policymakers and SDOs have also weighed in, in favor of denying injunctions to SEP owners, concerned about the unproven phenomenon of patent holdup. SEP owners are often discouraged, or even prohibited, from seeking injunctive relief.

In these conditions, where injunctive relief is routinely unavailable (or even not sought), efficient infringement is able to flourish. Although it is difficult to measure efficient infringement, there are indications that it is occurring in the SEP space. From anecdotes to alleged facts in complaints to court determinations, it is clear that at least some makers of standards-compliant goods and services are willing to delay or even decline licensing of SEPs and to take their chances in court instead. Because the worst that could happen for these infringers is a damages award reflecting past infringement and providing a royalty for future infringement, the option of efficient infringement seems rational. What is missing from these anecdotes and the circumstantial data is how efficient infringement is harming SEP owners. It is time to stop acting as though efficient infringement does not exist; there are plenty of theoretical reasons and actual indicia that it does. Instead, it is time to study the negative effects it is having on standardization and innovation.

⁶⁹ Complaint, Ericsson Inc. v. TCL Comme'n Tech. Holdings, 2:14-CV-667 (E.D. Tex. June 3, 2014), ECF No. 1; Complaint, Nippon Tele. & Tele. Corp. v. Acer Inc., 6:20-CV-769 (W.D. Tex. Mar. 25, 2020), ECF No. 1.