Written Testimony of

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"The RESTORE Patent Rights Act: Restoring America's Status as the Global IP Leader"

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Chairman Coons, Ranking Member Tillis, and Members of the Subcommittee, thank you for the opportunity to discuss my concerns about the RESTORE Act with you today. My name is Joshua Landau. I serve as Senior Counsel for Innovation Policy with the Computer and Communications Industry Association, an international trade association which represents Internet, technology, and communications firms. Since 1972, CCIA has promoted competition in the technology and communications industries. Today, our member companies create hundreds of thousands of jobs in states and districts across the country, investing more than \$100 billion annually in research and development and contributing trillions of dollars in annual productivity to the U.S. economy.

CCIA members are recognized as technological leaders in many areas, including semiconductors, telecommunications systems, artificial intelligence hardware and software, cloud computing, and e-commerce. Our members are also active participants in the patent system, with CCIA members regularly represented in the top 5 annual recipients of U.S. patents as well as in the top 5 targets of patent assertion entities. This extensive experience both as patent owners and as litigation defendants gives our members a broad, balanced view on how patents can best fulfill their Constitutional mandate to "promote the progress of the useful arts." In addition to my work for the Association, I also teach a course in intellectual property law, including patent law and intellectual property remedies, at American University Washington College of Law.

I. Summary of Testimony

Five years ago, I testified before this Subcommittee on essentially the same topic as the one in front of you today—a proposal to overturn the $eBay\ v$. $MercExchange^1$ decision. My testimony then described the positive impacts of the eBay decision on our innovation ecosystem and how the proposed reversal of this decision would harm basic principles of the law of equity and remedies, and would almost exclusively benefit non-practicing entities.

In the past five years, nothing about the reality of injunctive relief has changed. The positive benefits of the *eBay* decision for investment in research and development, including in filing patents, continue to exist. Abusive patent litigation has not disappeared, but the rate of its growth has been reduced. Meanwhile, and contrary to the erroneous findings set out in the RESTORE Act, injunctive relief continues to be available according to the historical test for such relief. Operating companies can generally obtain injunctions on the patents they practice. Although

¹ eBay v. MercExchange, 547 U.S. 388 (2006).

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² Innovation in America: How Congress can make our patent system STRONGER: Hearing before the Subcomm. On Intell. Prop. Of the S. Comm. On the Judiciary, 116th Cong. (Sep. 11, 2019) (statement of Joshua Landau, Patent Counsel, Computer & Communications Industry Association), https://ccianet.org/wp-content/uploads/2019/09/2019-09-10-JSL-Testimony-for-Hearing-on-STRONGER.pdf.

non-practicing entities are less able to obtain injunctions, some still do. This is neither surprising nor problematic. Injunctions are a form of relief that has never been automatic, but rather a discretionary equitable remedies that is only available when ordinary legal remedies would fail to provide adequate recompense.

This approach to equitable relief has a long-standing basis in American law. As far back as the Founding, Congress was clear: "suits in equity shall not be sustained in either of the courts of the United States, in any case where plain, adequate and complete remedy may be had at law." In fact, the Supreme Court has itself summarized the principles of injunctive relief in a single sentence, holding that "[i]n brief, the bases for injunctive relief are irreparable injury and inadequacy of legal remedies." This well-established tradition was ignored by the Federal Circuit until their error was corrected by the *eBay* decision. This, in turn, returned the system of injunctive relief to its historical roots, a legal tradition in which competitive harms are remedied by injunctions while monetary harms are remedied by damages.

This system works—and it works well. Injunctions remain available, posteBay, for most classes of plaintiffs. Operating companies who successfully sue a
competitor will nearly always receive injunctions. Even some non-practicing
entities, such as universities working with an exclusive licensee of their technology,
can receive injunctions. Only in the specific circumstance of a plaintiff who licenses
their patent non-exclusively and indiscriminately, and does so without placing a
product on the market, are injunctions difficult to obtain—and even in such cases,
injunctions are still available in some circumstances.

The current injunctive relief system is also responsive to the realities of modern products. While a silent presumption of injunctive relief might have made sense when a product would embody one or two patents, that is no longer the situation. Modern products, especially in the high-tech industries in which CCIA members operate, can potentially implicate thousands or tens of thousands of patents. When a patent covers a seat warmer in a vehicle, providing the patent owner with the ability to force the manufacturer to halt production and sale of the entire vehicle line simply does not make sense. Instead, it provides the patent owner with inappropriate leverage in licensing negotiations by allowing them to extract not just the value created by their patented technology, but also a significant portion of the value created by the manufacturer's own innovations. The historical practice of only issuing an injunction when irreparable harm exists has helped to tether patent damages and patent licensing negotiations to the true value of patented technologies. And the economic literature is clear that, in this circumstance, the specter of injunctive relief can allow patent owners to extract value created not by their technology but by the defendant's innovations using the

³ Judiciary Act of 1789, § 16.

⁴ Amoco Prod. Co. v. Gambell, 480 U.S. 531, 542 (1987).

threat of an injunction removing their product from the market entirely. When a patent owner can level the threat of shutting down a defendant's entire business or removing a product from the market completely, the license being negotiated is no longer tied to the value of the patent but instead tilted towards the patent owner who can extract the entire market value of the product as a result. The *eBay* decision has mitigated this threat, placing the negotiating table back on a level footing and allowing patent owners and innovators to bargain fairly, without undue power on either side.

Adopting a presumption of injunctive relief would have another, perhaps unintuitive, impact—this one on American manufacturing. Because an injunction bars not just the sale of a product in the United States but also its manufacture here, an injunction against an American manufacturer threatens not just its U.S. sales but also its worldwide sales by removing the company's ability to make its products. In contrast, if a company manufactures their product overseas, a U.S. injunction only threatens their American sales. This disparity places American manufacturers at a disadvantage compared to companies that manufacture overseas, creating an incentive to move manufacturing outside of the United States in order to avoid the potential threat of an entire manufacturing line having to shut down. At a time when reshoring of manufacturing is a national priority, creating additional headwinds against those efforts is ill-advised.

A comprehensive presumption of injunctive relief for all plaintiffs against all products is fundamentally harmful, as my testimony explains. RESTORE as currently drafted would significantly harm innovation in the United States. At a minimum, RESTORE should be modified to avoid placing U.S. manufacturers at a competitive disadvantage. This could be done by limiting the presumption to situations in which a patent owner could meet the requirement that it actively works its patent, either itself or in conjunction with an exclusive licensee. In this situation, a presumption could in fact be appropriate. Conditioning the presumption of injunctive relief on this type of working requirement would mitigate competitive disparities between U.S. and foreign manufacture, make injunctive relief consistent with historical equitable practice, and would help increase innovative output and social welfare according to the economic literature on patents and negotiations. I would respectfully urge the bill's sponsors to include such a modification before reintroducing RESTORE.

II. The Positive Innovation Impacts of *eBay*

The Supreme Court's unanimous *eBay v. MercExchange* decision positively impacted patent litigation and the national innovation environment. It did so by eliminating the Federal Circuit's automatic injunction rule in patent infringement cases, reducing the deadweight loss imposed by excessive patent litigation and the

inappropriate economic transfer created by the negotiation position distortion created by the threat of injunctive relief.⁵

Since eBay, innovation has thrived. Investment in research and development continues to accelerate. In fact, in many industries—including the Internet, technology, and communications industries that CCIA members operate in-R&D investment began to grow faster after the eBay decision in 2006.⁶ There is empirical evidence that the eBay decision led directly to increases in corporate R&D spending in the information and communications industry. In one study, evidence based on differential exposure to patent litigation showed that after the eBaydecision, firms that were more exposed to patent litigation created more patents, created patents that were more likely to be cited by others, and shifted more money into R&D.7 A later, broader study found that, overall, eBay had only limited impact—positive or negative—on overall American innovative output, with it not even significantly affecting the rate of patent filings.⁸ Yet another recent study confirmed the earlier study's finding of a positive impact on innovation by previously targeted firms, further finding that the benefit is economically significant, while also confirming a lack of any evidence of a negative overall impact on innovation. Finally, a recent working paper modeled the innovation ecosystem in the context of changes to patent litigation dynamics and estimated that the *eBay* decision contributed to a 3.32% *increase* in social welfare by prompting an increase in innovative activity by both incumbent firms and new market entrants. 10

The eBay test, with its foundation in traditional principles of equity, also favors innovation by productive entities and competitors over innovation by non-competing entities. It does so by disfavoring injunctions on patents that are not being used to compete. The eBay decision did not significantly reduce the ability of operating companies to secure injunctions against competitors who unfairly use their technology, but primarily reduced the grant rate of injunctions for non-

⁵ This is not true for Hatch-Waxman cases, which have a separate non-equitable injunction provision. See 35 U.S.C. § 271(e)(4). In those cases, injunctions generally issue automatically.

⁶ See Barry Jaruzelski et al., strategy+business, "Software-as-a-Catalyst", Exhibit C (Oct. 15, 2016), https://www.strategy-business.com/feature/Software-as-a-Catalyst?gko=7a1ae.

⁷ Filippo Mezzanotti, *Roadblock to Innovation: The Role of Patent Litigation in Corporate R&D*, 67 Management Science 7362 (2021).

⁸ Filippo Mezzanotti & Timothy Simcoe, *Patent Policy and American Innovation After eBay: An Empirical Examination*, 48 Research Policy 1271 (2019),

https://www.kellogg.northwestern.edu/faculty/mezzanotti/documents/eBayInnovation.pdf.

⁹ Christian Helmers & Brian J. Love, *Patent Law Reform and Innovation An Empirical Assessment of the Last 20 Years*, Int'l Rev. L. & Econ. (forthcoming 2025), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4580645.

¹⁰ Samuel Antill *et al.*, *The Efficiency of Patent Litigation*, Working Paper at 35-36 (May 24, 2024), https://www.hbs.edu/faculty/Pages/item.aspx?num=66129.

¹¹ See Chris Seaman, Permanent Injunctions in Patent Litigation After eBay: An Empirical Study, 101 Iowa L. Rev. 1949, 90 (2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2632834.

competing entities.¹² This incentivizes invention by entities that actually bring that invention to fruition via a product, rather than entities that file for a patent and wait for someone else to independently invent that same technology, at which time they can benefit from the investment the manufacturer made in creating a product.

The changes proposed in the RESTORE Act would risk eliminating these positive changes to the patent system by overturning the eBay decision and creating a presumption of injunctive relief in patent cases.

III. eBay Applies Historical Equity Principles—RESTORE Violates Them

From the establishment of the federal judiciary in the Judiciary Act, the courts and Congress have been clear: "suits in equity shall not be sustained in any court of the United States in any case where a 'plain, adequate and complete remedy' may be had at law." The courts of equity have never been permitted to act when a remedy is available via the courts of law, and even after the merger of law and equity, this requirement has been maintained.

The Supreme Court has repeatedly and continually emphasized this position in a wide array of cases across all areas of law, establishing the long-standing equitable principle that courts will not act in equity when the requesting party has an adequate remedy at law and will not suffer irreparable harm if their request is denied. A harm that consists of no more than a "diminution of the value of the

¹² See, e.g., Seaman supra n. 11; Joshua Landau, Much Ado About Injunctions, Patent Progress (Aug. 1, 2019), https://www.patentprogress.org/2019/08/01/much-ado-about-injunctions/.

¹³ Enelow v. New York Life Ins. Co., 293 U.S. 379, 384 (1935).

¹⁴ See, e.g., Younger v. Harris, 401 U.S. 37, 43-44 (1971) ("courts of equity should not act ∏ when the moving party has an adequate remedy at law and will not suffer irreparable injury if denied equitable relief'); Beacon Theatres, Inc. v. Westover, 359 U.S. 500, 506-07 (1959) ("[t]he basis of injunctive relief in the federal courts has always been irreparable harm and inadequacy of legal remedies"); in re Debs, 158 U.S. 564, 593-94 (1895) ("the party aggrieved has no other adequate remedy for the prevention of the irreparable injury which will result from the failure or inability of a court of law to redress such rights"); Mechanics Foundry v. Ryall, 62 Cal. 416 (Cal. 1882) ("even repeated trespasses are not of themselves sufficient to justify the interference of a court of equity by injunction ... annoying it may be, but [a case], nevertheless, for which the ordinary remedies of the law are ample."); Parker v. Winnipiseogee Lake Cotton & Woolen Co., 67 U.S. 545, 551 (1863) ("Equity will interfere when the injury by the wrongful act of the adverse party will be irreparable ... or where the injury is of such a nature that it cannot be adequately compensated by damages at law"); Pennsylvania v. Wheeling & Belmont Bridge Co., 54 U.S. 518, 561 (1852) ("[t]he injury complained of [] must be irreparable by a suit at law for damages"); Judiciary Act of 1789, § 16 ("suits in equity shall not be sustained in either of the courts of the United States, in any case where plain, adequate and complete remedy may be had at law"); cf. Pierre Leval, Toward a Fair Use Standard, 103 Harv. L. Rev. 1105, 1135 (1990) ("the copyright statute and its predecessors express no preference for injunctive relief ... the tendency toward the automatic injunction can harm the interests of plaintiff copyright owners, as well as the interests of the public and the secondary user. Courts may instinctively shy away from a justified finding of infringement if they perceive an unjustified injunction as the inevitable consequence."); Harrisonville v. W.S. Dickey Clay Mfg. Co., 289 U.S. 334, 338 (1933) ("an injunction is not a remedy which issues as of course").

premises without irreparable injury is no ground for interference" via injunctive relief. Even the Federal Circuit, before it adopted its erroneous presumption of injunctive relief in patent cases, originally took the position that the belief "that once infringement is established and adjudicated, an injunction must follow" was mistaken. As the Supreme Court's past three decades of patent jurisprudence have emphasized, patent law is not special. It is simply one area of law and should abide by the general principles of the legal system. Returning patent law to compliance with this long-standing legal regime—and with the general principle that patent law is one form of law, not a separate discipline entirely—is precisely the effect of the unanimous eBay decision authored by Justice Thomas.

IV. The Facts Regarding Injunctive Relief in Patent Cases

The post-*eBay* legal regime is a simple one. Firms that practice their patents—that make something, that do something, that act to fulfill the Constitutional mission of our patent system by "promot[ing] the Progress" of the "useful Arts" —can usually obtain an injunction. That is because they can meet

¹⁵ Parker, 67 U.S. 545 at 552.

¹⁶ Roche Prods. v. Bolar Pharms., 733 F.2d 858, 866 (Fed. Cir. 1984).

¹⁷ See Dickinson v. Zurko, 527 U.S. 150 (1999) (rejecting the Federal Circuit's decision that the USPTO is not subject to APA requirements); Holmes Grp. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826 (2002) (rejecting the Federal Circuit's decision that jurisdiction over a case can exist based solely on patent counterclaims, contrary to other areas of law); eBay (rejecting the Federal Circuit's decision that patent cases did not need to abide by traditional principles of equity); MedImmune v. Genentech, 549 U.S. 118 (2007) (rejecting the Federal Circuit's rule that a challenge to patent validity does not establish declaratory judgment jurisdiction); Medtronic, Inc. v. Mirowski Fam. Ventures, LLC, 571 U.S. 191 (2014) (rejecting the Federal Circuit's rule that a declaratory judgment plaintiff bears the burden of proof on infringement rather than the patent owner); Octane Fitness, LLC v. ICON Health & Fitness, Inc., 572 U.S. 545 (2014) (rejecting the Federal Circuit's special standard for assessing whether a case is exceptional and use of a clear and convincing evidence standard for attorney's fee awards in favor of tests applied in other areas of law, including a preponderance standard); Highmark Inc. v. Allcare Health Mgmt. Sys., 572 U.S. 559 (2014) (rejecting the Federal Circuit's use of a use of de novo review of exceptional case determinations in favor of the abuse of discretion standard used in other areas of law); Teva Pharms. USA, Inc. v. Sandoz, Inc., 574 U.S. 318 (2015) (rejecting the Federal Circuit's use of de novo review for subsidiary factual matters in claim construction in favor of the clear error standard used in other reviews of subsidiary facts); Halo Elecs., Inc. v. Pulse Elecs., 579 U.S. 93 (2016) (rejecting the Federal Circuit's use of knowledge at the time of trial for determining willfulness in favor of the general rule of knowledge at the time of the act); Peter v. NantKwest, Inc., 140 S. Ct. 365 (2019) (rejecting special rule for § 145 patent cases forcing losing patent applicants to pay the government's attorney's fees in favor of the American Rule); cf. Michael Goodman, What's So Special About Patent Law?, 26 Fordham Intell. Prop., Media & Ent. L.J. 797, 814-820 (2016).

¹⁸ While my testimony focuses on the prongs of irreparable harm and inadequacy of legal remedies, there is also a longstanding history of the Court emphasizing the other prongs of the *eBay* test: public interest and balancing of the equities. *See, e.g., Yakus v. United States,* 321 U.S. 414, 440-42 (1944) ("the award [of an injunction] is a matter of sound judicial discretion, in the exercise of which the court balances the conveniences of the parties and possible injuries to them … in the exercise of [a court of equity's] discretion to protect the public interest").

¹⁹ U.S. Constitution, Art. I, § 8, Cl. 8.

that basic equitable threshold requirement of an irreparable harm. When your products are competing with an infringer's goods in the marketplace, the loss of market share and consumer goodwill that infringement could cause is a categorical example of an irreparable harm. And in some other circumstances, where a defendant engaged in a bad-faith refusal to negotiate or where the defendant will not be able to pay a court-awarded royalty, injunctions are also appropriate—and in those circumstances injunctions continue to be awarded, regardless of competitive presence.

But for firms who do not practice their patents, irreparable harm generally does not exist. This is not universal. For some firms of this type, such as universities, research institutions, and individual inventors who typically exclusively license their patent to a single firm which does practice the patent, their situation is essentially that of an operating company. Irreparable harm to their exclusive licensee exists. But the vast majority of these types of non-practicing firms—often referred to as patent assertion entities or patent trolls—assert their patents against anyone and license to any comer. Their fundamental business goal is to obtain money for use of their patents. They can receive money for use of their patents as a remedy in court. Their harm—that of not receiving money—is fully remedied by the award of monetary damages.²⁰ There is simply no irreparable harm or inadequacy of the remedy in these cases. And a business model's failure to meet the fundamental requirements of equitable relief is not a reason to change those requirements; rather, it is a signal that that business model does not require equitable relief.

The statistics bear this out. Even setting aside ANDA pharmaceutical cases, in which non-equitable injunctive relief is part of the statutory scheme, operating companies are still extremely successful in receiving injunctive relief when they win. The vast majority of studies examining the role of injunctive relief in the U.S. patent system after *eBay* have concluded that operating companies have not seen a significant decline in their rate of success.²¹ Depending on the precise dataset and method used to sort operating companies from patent trolls, the exact rate varies slightly, but non-pharmaceutical operating companies can expect to receive an

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²⁰ To the extent that there is a concern that damages do not fully recompense a patent owner, that is most appropriately dealt with by addressing the correct measure of damages rather than by enabling patent owners to obtain an injunction they can use to extract a supra-value payment. See Sections V and VI, infra. However, given that lost profits damages are available under 35 U.S.C. § 284, a patent plaintiff is categorically able to receive full compensation for the value of their invention. Between the two available damages remedies of lost profits and a reasonable royalty, full compensation for the value of the invention is available; to the extent an openly licensing patent owner believes they are not fully compensated, they have simply incorrectly judged the value of their technology on the open market.

²¹ See, e.g., Mezzanotti & Simcoe, Patent policy and American innovation after eBay, supra n. 8; Landau, Much Ado About Injunctions, supra n. 12; Seaman, Permanent Injunctions, supra n. 11; Kirti Gupta & Jay Kesan, Studying the Impact of eBay on Injunctive Relief in Patent Cases, UIC Coll. of Law Legal Studies Research Paper 17-03 at 25 (2016).

injunction around 88-90% of the time when they request one. Prior to eBay, that number was higher by approximately 2%. This difference is insubstantial and may not even be statistically significant.

Even the empirical work that is most critical of eBay admits that operating companies have not seen a significant decline in their success in obtaining injunctive relief when requested. And while non-practicing entities are significantly less likely to receive an injunction post-eBay, it is far from a categorical rule, with some injunctions still issuing, and with the type of non-practicing entity highly relevant to their success rate. Entities like universities and individual patent owners who do not practice their patent continue to succeed in obtaining injunctions at rates similar to operating companies, while pure patent assertion entities do not. 24

This leaves open the possibility that operating companies are less likely to request relief and thus are effectively less likely to obtain injunctions. However, this also appears to be incorrect. Total injunction request rates remained roughly constant before and after eBay;²⁵ instead, the majority of the decrease in total injunction request rate occurred in 2011 after the AIA forced non-practicing entities to end their practice of consolidating multiple defendants into a single lawsuit.²⁶ This drove up the number of non-practicing entity (NPE) cases, peaking in 2013-2015, while operating company cases remained roughly constant.²⁷ And this change is reflected in the data, with a nadir of request rates in the 2015-2017 period, consistent with the average time to resolution of a patent case.²⁸ In other words, the change in request rate observed in the data appears to be an artifact of higher numbers of NPE cases, not of a change in operating company behavior.

This conclusion is bolstered by the fact that in some analyses, operating companies were already reducing their rate of injunction requests in the six years **prior** to the *eBay* decision.²⁹ However, the decline for operating companies appears

²² Kristina M.L. Acri née Lybecker, *Injunctive Relief in Patent Cases: the Impact of eBay*, Colo. Coll. Working Paper 2024-01 at 11-15 (2024). Of note, Acri's paper contains total numbers of requests for injunctive relief that appear to significantly undercount injunctive relief. For example, Acri reports that of cases filed in 2016, there were requests for permanent injunctions in 12 of those cases and grants in 11 cases. In verifying the Acri paper, I located 22 cases filed in 2016 which resulted in not just a request for a permanent injunction but a grant of that injunction, an undercounting of 50%. A list of these cases, by docket number and court, is attached as Appendix A.

²³ See, e.g., Seaman, supra n. 11 at 1988.

²⁴ See Colleen Chien & Mark Lemley, Patent Holdups, 98 Cornell L. Rev. 1, 10 (2012).

²⁵ *Id*. at 10.

²⁶ Testimony of Rebecca Weires at FTC Hearing on Competition and Consumer Protection in the 21st Century, Session #4 (Oct. 24, 2018),

https://www.ftc.gov/system/files/documents/public events/1415062/ftc hearings session 4 transcript day 2 10-24-18 0.pdf at 88-89.

 $^{^{27}}$ *Id*.

²⁸ Acri, *supra* n. 22 at 10.

²⁹ Gupta & Kesan, supra n. 21 at Table 4.

to also be an artifact of the way the rate has been measured. Because many analyses calculate the rate against the total number of patent cases, rather than the total number of patent cases brought by operating companies, the significant increase in the raw number of non-practicing entity lawsuits over the past 25 years, particularly post-2010,³⁰ has affected the operating company request rate estimates. For example, using the Gupta & Kesan dataset and calculating against the total number of patent cases, the pre-eBay (1.6%) and post-eBay (0.99%) permanent injunction request rates appear to show a severe decline of approximately 40%.³¹ But if calculated against the number of operating company patent cases, rather than the number of patent cases in total, the pre-eBay (1.95%) and post-eBay (1.51%) permanent injunction request rates show a much lower decline of approximately 22%, roughly half as much.³² Because the difference in the rate of increase in lawsuits between operating companies and non-practicing entities is so extreme, with operating companies effectively not changing their rate of assertion while non-practicing entities increased the number of lawsuits they file by 600% in the same timespan, raw request rate analyses fail to accurately capture any changes in the behavior of operating companies.

V. A Presumption of Injunction Provides Unearned Rewards to Patent Owners but Provides No Countervailing Benefits

There is a good reason that the Supreme Court and the history of equity practice have insisted on injunctions being a limited and discretionary, rather than an automatic, remedy. A return to the presumptive injunction rule would primarily benefit non-practicing entities and entities with patents on minor features incorporated into complex products. The *in terrorem* threat of injunctions, based on the risk the entire product will be enjoined, allows patent owners to extract a reward far in excess of the value of their patents, even in the majority of cases where the defendant infringed innocently and without knowledge of the patent.³³ Particularly in complex, multi-component products such as semiconductors, smartphones, computers, and other high-tech products, a patent will typically only cover a small portion of the product. However, an injunction allows the patent owner to block the entire product from the market. Given the choice between an injunction that takes its product off the market or over-paying the patent owner for

³⁰ See, e.g., Shawn Miller et al., Who's Suing Us? Decoding Patent Plaintiffs since 2000 with the Stanford NPE Litigation Dataset, 21 Stan. Tech. L. Rev. 235 (2018).

³¹ Gupta and Kesan treat preliminary and permanent injunctions together as against total cases, both operating company and non-practicing entity, in numerous places. Others separate preliminary and permanent injunctions. Neither approach is incorrect, but in comparing conclusions across different studies, it is critical to compare commensurate metrics.

 $^{^{32}}$ Calculations based on data from Gupta & Kesan. The difference in pre- and post-eBay operating company request rates likely arises from suits in which an operating company sues in a market in which it does not compete and thus in which it could not show irreparable harm.

³³ It is generally considered impossible in the high-tech industry to be aware of the full scope of potentially relevant patents due to the number of patents involved and the relative lack of clarity of the scope of those patents.

a license, a product manufacturer will be willing to significantly over-pay for even a minor feature, allowing the patent owner to confiscate value that the product manufacturer created independently of the patent. Manufacturers do so in order to avoid the complete loss of value that would ensue from an injunction. These windfall settlements, where a patent owner obtains far more than its contribution, in turn incentivize additional patent litigation, particularly from non-practicing entities.

The difficulty in identifying relevant patents *ex ante* in turn illustrates a key economic point. An innocent infringer (one who was not aware of the patent before creating their product) is also an inventor of the patented technology. If the patent owner had not made their invention, the product manufacturer would still have done so. In such a circumstance, providing a reward to the patent owner in excess of the technical value of the shared invention is particularly inappropriate. If the invention would have occurred regardless of the availability of an injunction—which, definitionally, it will have, as the infringing product exists—then the propriety of an injunction is questionable at best, as Congress's power to grant a patent right is limited by the mandate to "promote the Progress of the useful Arts."³⁴

VI. A Presumption of Injunctive Relief Distorts Patent Licensing

The potential for injunctions can distort the economics of negotiation, particularly in situations where the value of the patented feature is very small in comparison to the value of the product, or in situations in which the cost of redesigning a product to a non-infringing alternative is high.

As a simple illustration, pretend that you are a manufacturer. You want to sell a product. You would make \$20 in profit on each sale of that product. You would like to pay to license a patent that your product could incorporate. How much would you be willing to pay to license that product? It would depend on the cost of an alternative design and the value of the infringing feature. For example, as you have not yet placed the product into production, you might have effectively no redesign cost. If you would be able to sell the redesigned product for \$19 in profit, you might be willing to pay up to \$1 per sale to license the patent. In no circumstance, however, even if the cost of a redesign became extremely expensive or the profit on the alternative product was nearly zero, would you be willing to pay more than the \$20 in profit you make on each sale. The value of the technology

³⁴ U.S. Const., Art. I, § 8, Cl. 8.

³⁵ In practice, the rate will be discounted based on the probability of a court finding the patent to be invalid or not infringed. Further, the split of the surplus between patent owner and licensor will depend on the negotiating skill of the parties—but there will be some split. A 50/50 division can be treated as a benchmark, meaning that the expected royalty rate would approach \$.50 per unit for a patent that is believed to be highly likely to hold up in litigation.

compared to alternative technologies sets the amount which would be reasonable to pay in the market for a license to that patent.

Now imagine that you developed your product and placed it on the market. Again, you make \$20 in profit on each sale. But this time, you were not aware of the patent until after you were selling your product. You are approached by a patent owner who wishes to offer you a license. How much would you be willing to pay to license the product? This time, you face not just the potential lower profit but also some cost to redesign your product not to infringe. Because your product is already on market, we assume redesign costs exist. If redesign costs are \$5 per unit and you would make \$19 in profit per sale of the alternative design, you might be willing to pay up to \$6 per sale for a license.

In the situation in which a patent owner would receive a reasonable royalty—but no injunction—at the end of a court case, they would be likely to accept that fair value as a royalty rate in negotiation. But imagine if the patent owner wishes to obtain more than this market value for their patent and knows that they would receive an injunction at the end of the case. In this circumstance, they would be able to not only obtain the value of their patented technology as damages for past use, but also to force your product off-market for as long as it takes you to conduct the redesign. You are now losing not just the \$6 per unit of the redesign and lower profit, but the entire \$20 profit per unit sale during this time span. How much would you be willing to pay for a license in this situation? You might pay nearly \$20 per unit not to have it forced off the market, more than three times the value of the patented technology.

In other words, the threat of an injunction provides the patent owner with leverage that will allow them to acquire not just the value of *their* technology to the product, but the *entire profitable value* of the product regardless of its connection to the patent.

To make matters worse, this assumes that the patent owner will win the case. In reality, the vast majority of patent cases are won by defendants³⁶—the patent owner misjudged the scope of their patent as covering a product that does not infringe or it asserted an invalid patent. Licensing rates are generally discounted to account for this possibility. You would not have been willing to pay \$6, but rather \$6 multiplied by the probability of patent owner success. Given the generally low success rate, you'd be likely to have paid something much closer to \$1 or even less. Now it isn't a threefold excess the patent owner has obtained, but twenty-fold.

³⁶ Miller *et al.*, *supra* n. 30 at 269 (showing that the average merits win rate for patentees is 29%, with patent assertion entities faring substantially worse and winning on the merits in only 13% of cases). This dataset includes both pre- and post-*eBay* litigations.

And even worse, in some situations a redesign is effectively impossible. This occurs most frequently in the case of standard-essential patents (SEPs), such as cellular or Wi-Fi patents. In this situation, there is no non-infringing alternative. Your options, when faced with an injunction, are to pay whatever the patent owner wants, or to leave the market entirely. In this circumstance you would always be willing to pay up to your profit margin per sale in order to avoid losing access to the market entirely, even if the patent is just one of thousands that might be involved in creating the technical value of the standard. You are now capturing not just the technological value of the other contributions to the product, but the value of the people using the standard itself. An economic analysis of SEP cases in which injunctions were requested confirmed that "injunctions can generate considerable leverage for an SEP owner during license negotiations." The same analysis, examining a set of three lawsuits as case studies, concluded that injunctions, especially in courts with automatic injunctions, can "cause[] manufacturers to accept excessive royalties ... rather than face market exclusion."

Finally, this example was presented in a situation in which the value of the patent was a relatively significant amount of the final profit on the product. This might have been a safe assumption at the creation of the U.S. patent system. It is no longer a safe assumption. In many modern industries, such as the high-tech industry CCIA members operate within, there can be thousands and tens of thousands of patents involved in a single product, each one contributing a few cents to the value of the total product. In these circumstances, the threat of an injunction is magnified significantly as the entire profit of the product is at risk despite the value of the patent that is the subject of the injunction being an insignificant fraction of the total profit. Instead of twenty-fold excesses, a patent owner can obtain rates that are hundreds or thousands of times the true value of their invention. In the extreme, even if a patent contributes a near-zero value to the product, the patent owner can still obtain significant negotiating leverage in the shadow of injunctive relief based on the cost of redesign and the possibility of the product being removed from the market, resulting in multipliers that approach infinity.

VII. Formal Economic Analyses of Bargaining in the Shadow of Injunctions Confirms Their Distorting Effect on Licensing

More formally, injunctions can be understood as "additional leverage in licensing" negotiations.³⁹ A full economic analysis of this situation, a simplified version of which is presented above, can be found in *Patent Holdup and Royalty*

³⁷ John Hayes & Assaf Zimring, *Injunctions in Litigation Involving SEPs*, GRUR Patent at 240 (June 2024), https://media.crai.com/wp-content/uploads/2024/07/02154935/Hayes-Zimring GRUR-Patent-2024-240-245 .pdf.

³⁸ *Id.* at 245.

³⁹ MercExchange, L.L.C. v. eBay, Inc., 401 F.3d 1323, 1339 (Fed. Cir. 2005), vacated, 126 S. Ct. 1837 (2006).

Stacking. The authors there conclude that "threatening to enjoin products that are predominantly non-infringing ... can easily enable a patent holder to negotiate a settlement for an amount of money significantly exceeding the amount that the patent holder could expect to earn in damages based on reasonable royalties." ⁴⁰ In general, no one would license a patent for a rate that would make the sale of their product unprofitable. The corollary to this is that an injunction allows a patent holder to obtain any amount of money from the enjoined party right up to that point.

But the value of a patent to a product is better assessed as a combination of the value of the patented technology over the next best alternative and the cost of designing the product to use that next best alternative. This is the surplus created by the patented technology, which—in the absence of an injunction—the parties would bargain to divide. The presence or threat of an injunction allows the patent owner to obtain not just all of the surplus value created by its patent—an amount that would be captured as a reasonable royalty in court—but also to capture the cost of redesign and the value contributed by other aspects of the product unless the total rate would make the product unprofitable.

Because the threat of an injunction allows a patent holder to obtain not just the value of their technology, but also this unrelated value, the *eBay* requirements of irreparable harm and inadequacy of legal remedies are essential. In other words, absent *eBay*, the threat of an injunction allows patent holders to unfairly and improperly obtain value that their patent had no part in creating, even in the absence of a court case, due to the *in terrorem* threat of an injunction shadowing the bargaining between the parties.

The experience of American companies in foreign courts is illustrative of the harms that a presumption of injunctive relief can create. German courts operate with a nearly automatic injunction system. But economic analysis of German court decisions has shown the flaws in this approach. In a case study focused on a German patent lawsuit, "the estimated settlement payment exceed[ed] the value of the invention by more than ten thousand." Further, when negotiating in the shadow of an automatic injunction rule, "the expected settlement payment will be dependent on the value of the defendant's accused product" and "may surpass the economic value of a patented invention by far." Settlements "may even approach the value of the defendant's products" while "the plaintiff receives significant leverage in bargaining over terms and conditions that deviate significantly from

⁴⁰ Mark Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 Tex. L. Rev. 1991, 2008 (2007).

⁴¹ Hendrik Fügemann & Neil Gallagher, *Economic Implications of Automatic Injunctions in German Patent Litigation*, Copenhagen Economics (Aug. 13, 2019),

https://copenhageneconomics.com/publication/economic-implications-of-automatic-injunctions-ingerman-patent-litigation/.

 $^{^{42}}$ *Id*.

what would otherwise be expected."⁴³ The experiences of American companies in foreign courts, as well as the economic analyses of those experiences, emphasize the problems with automatic injunctive relief in modern high-technology industries such as automobiles, computers, communications technology, and semiconductors. (A non-exhaustive list of recent exemplary cases in which American companies faced a threat of injunction, often from non-U.S. companies, is attached as Appendix B.)

The traditional counterargument to this economic criticism of injunctive relief is that, absent injunctions, patent owners lack sufficient leverage to force product makers to negotiate—that they would simply wait to pay the reasonable royalty awarded by a court.⁴⁴ But this argument is based in a set of false assumptions.⁴⁵ First, it ignores the cost of litigation. Prior to my work with CCIA, I worked as a patent litigator at a major law firm. The cost of engaging in a patent lawsuit, offensive or defensive, can run into the tens of millions of dollars.⁴⁶ Licensing a patent avoids those costs entirely. Second, it ignores the discounting effect. Before a patent is litigated, because of the uncertainty of the outcome, there is a discount applied to the licensing rate—the alleged infringer would pay less to account for this possibility. But after litigation, the reasonable royalty does not take this discount into account—because there is no longer uncertainty in outcome. The rate awarded by a court is higher than the rate that would have been reached in negotiation due to this. It also ignores the possibility of enhanced damages for deliberate and willful infringement and the potential need to pay attorneys' fees, all of which increase the cost to the infringer if they choose to litigate rather than license. Third, it presumes that manufacturers are aware of patents and choose to place infringing products on the market knowing they infringe, rather than the products being on the market before any awareness of the patent exists. In reality, evidence of copying technology is established in approximately 2% of patent cases, with the vast majority occurring within the pharmaceutical and chemical industries. 47 And finally, while injunctions are slightly less prevalent post-eBay, they are not non-existent. The possibility of an injunction remains, even if the likelihood is lower. And thus the threat of a forced royalty rate far in excess of the patent's value also remains and provides an impetus towards negotiation.

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 $^{^{43}}$ *Id*.

⁴⁴ See, e.g., Kristen Osenga, "Efficient Infringement" and Other Lies, 52 Seton Hall L. Rev. 1085 (2022)

⁴⁵ See Mark Lemley & Carl Shapiro, *The Role of Antitrust in Preventing Patent Holdup*, 168 U. Penn. L. Rev. 2019, 2049 (2020) ("Patent holdout is incoherent as a theoretical matter and rejected as an empirical matter.")

⁴⁶ See AIPLA, Report of the Economic Survey 2023 (Oct. 2023), https://www.aipla.org/detail/journal-issue/2023-report-of-the-economic-survey.

⁴⁷ Christopher A. Cotropia & Mark Lemley, *Copying in Patent Law*, 87 N.C. L. Rev. 1421, 1424 (2007).

An alternative counterargument is the idea that injunctions are needed to reward the innovation of under-resourced inventors who cannot afford to practice their patent, forcing them to operate as NPEs. This argument also fails. First, the majority of NPE cases are not brought by under-resourced inventors but instead by firms whose sole purpose is to acquire, license, and assert patents for a monetary gain. And second, while under-resourced inventors may occasionally benefit from NPE litigation, much of the benefit goes to well-resourced patent assertion entities, often with the support of litigation investment entities such as hedge funds and foreign sovereign wealth funds. Empirical research has found neither "any markers of significant NPE pass-through to end innovators, nor a positive impact of NPEs on innovation in the industries in which they are most prevalent." If the Subcommittee wishes to help small inventors, the restoration of automatic injunctive relief is not a useful way to do so.

As separate evidence drawn from the reality of the patent licensing ecosystem, the vast majority of CCIA's members have large legal departments with teams dedicated specifically to in-licensing of patents. They would not pay for those salaries if they were not actively interested in appropriately licensing patents. Failures of licensing occur when there is disagreement on the value of a patent or when there is disagreement on the probability that the patent is likely to be found infringed or valid in court.

Of course, there are circumstances in which no monetary award would suffice to recompense a patent owner for infringement. For example, if the patent owner is seeking to enjoin a competitor from competing with it in the market using its own patented technology. But in those circumstances, as described above in Section IV, injunctions already do issue—this is exactly what is captured by the *eBay* test of irreparable harm.

In summary, the presumption of an injunction that existed before *eBay*, and which the RESTORE Act seeks to recreate, systematically distorts negotiations over patent licenses such that patent owners can obtain not just the value of their invention but the value contributed by the entire rest of the product. But "the

 $^{^{48}}$ See Miller et al., supra n. 30 at Table 3 (showing that Category 1 plaintiffs comprise the majority of all NPE lawsuits.)

⁴⁹ See, e.g., U.S. Gov't. Accountability Off., GAO-25-107214, Intellectual Property: Information on Third-Party Funding of Patent Litigation 20-21 (Dec. 2024) (data shows "no major changes in the number of cases filed by individual inventors, start-up companies, or universities. These plaintiffs made up a very small proportion—about 4 to 6 percent—of patent infringement lawsuits overall.") ⁵⁰ Lauren Cohen et al., Patent Trolls: Evidence from Targeted Firms, 65 Mgmt. Sci. 5461 (2019); cf. Robin Feldman & Mark Lemley, The Sound and Fury of Patent Activity, 103 Minn. L. Rev. 1793, 1794-96 (2019) ("very few patent licensing demands seemed to be associated with any indicia of innovation or legitimate technology transfer"; "NPE licensing demands almost never result in technology transfer or new innovation by the target firm"; "licensing demands almost never result in technology transfer or new innovation in the computer industry, particularly when NPEs are doing the asserting").

limited and temporary monopoly granted to inventors was never designed for their exclusive profit or advantage; the benefit to the public or community at large was another and doubtless the primary object in granting and securing that monopoly."⁵¹ Patent owners can be rewarded for their invention, but that is not the purpose of the patent system—and the purpose is certainly not to reward them for the work of others.

VIII. A Presumption of Injunctive Relief Disincentivizes Manufacturing in the United States in Favor of Overseas Manufacturing

There is an additional concern regarding the restoration of the pre-eBay automatic injunction regime. If a manufacturer is making products in the United States, an injunction will prevent them from manufacturing their product entirely, regardless of the ultimate destination. Even if the product is destined for sale in Paris, France, if it was made in Paris, Texas, a U.S. injunction prevents its manufacture. But if the product is made in Georgia (the country), then only sales intended for the State of Georgia (and the rest of the United States) can be enjoined by a U.S. court. Manufacturing and sales intended for non-US destinations can continue. Injunctions thus provide manufacturers with strong incentives to move their operations outside of the United States and provide foreign manufacturers with an economic advantage over U.S. manufacturers. At a time when Congress is working hard to make the United States a more appealing environment for manufacturing and concerned about economic competition with foreign adversaries, it is unclear why Congress would pass a bill with the exact opposite effects.

IX. Reformulating RESTORE to Avoid These Negative Impacts

As I have explained above, there are situations in which injunctions are appropriate. A presumption of injunctive relief may even be appropriate in some of these situations. One possible solution would be to provide a presumption of injunctive relief, conditioned on the patent owner showing that their patent is actually being practiced in the United States—a so-called "working requirement." For example, the legislation could set forth a rebuttable presumption based on the patent owner providing unrebutted evidence that it has engaged in significant investment in the production or sale of an article or service within the United Sates that practices the patent in suit, or that its exclusive licensee has done so.

With this type of revision, plaintiffs who make a product that implements their patent—or who work with an exclusive licensee who does so—will receive the presumption. Plaintiffs who do not do so would not.⁵² This more restrained

⁵¹ Kendall v. Winsor, 62 U.S. 322, 327-28 (1858).

⁵² Critically, any working requirement provision must not define licensing activities as "working" the patent. If non-exclusive licensing activities are sufficient, then there is no meaningful limitation on the presumption, and the negative economic impacts described above, as well as the violation of historical principles of equity, would emerge. Most entities that fall within the raw definition of a

presumption closely follows the economic insights described above, as well as being compliant with the historical principles of equity. It would ensure that where irreparable harm exists and where the threat of an injunction does not provide inappropriate negotiating leverage, a presumption of injunctive relief attaches.

Conditioned on a properly defined and scoped working requirement, a presumption of injunctive relief could provide benefits by clarifying points of negotiation and increasing certainty in outcomes without providing inappropriate negotiating leverage or violating the principles of the law of equity. As currently drafted, the RESTORE Act fails to attain any of these goals while creating all the described problems. CCIA would be happy to work with the members of this Subcommittee to improve the bill in line with the suggestion above.

X. Conclusion

The RESTORE Act would cause serious harm to the United States patent system and the innovation economy. These changes would likely result in increases in the amount and cost of patent litigation, reduce spending on research and development by productive firms, drive manufacturing overseas, and incentivize settlements which transfer money away from productive uses.

CCIA appreciates the opportunity to discuss the proposed legislation and shares the Subcommittee's goal of ensuring that American innovators continue to lead the world in a variety of technologies. We look forward to working with the Subcommittee towards that end.

non-practicing entity, such as universities, prefer to engage in exclusive licensing practices and would thus not be prevented from obtaining injunctions in this circumstance.

APPENDIX A Patent Cases Filed in 2016 Terminating in Granted Injunction

Case Name	Docket No.	Court
Tinnus Enterprises, LLC et al v. Telebrands Corporation	6:16-cv-00033	E.D.Tex.
freal Foods LLC et al v. Hamilton Beach Brands, Inc. et al	1:16-cv-00041	D.Del.
Mya Saray, LLC v. Dabes et al	1:16-cv-00064	E.D.Va.
ESIP Series 1 v. Shenzhen Jing Xin Tai Houseware	2:16-cv-00178	D.Utah
Galderma Laboratories L.P. et al v. Amneal Pharmaceuticals LLC et al	1:16-cv-00207	D.Del.
CommScope Technologies LLC v. Dali Wireless Inc	3:16-cv-00477	N.D.Tex.
Genzyme Corporation et al v. Zydus Pharmaceuticals (USA) Inc.	1:16-cv-00540	D.Del.
Whirlpool Corporation v. Woodside Distributors, LLC	2:16-cv-00565	E.D.Tex.
Codexis, Inc. v. EnzymeWorks, Inc. et al	3:16-cv-00826	N.D.Cal.
Galderma Laboratories, L.P. et al v. Sun Pharmaceutical Industries Limited et al	1:16-cv-01003	D.Del.
Immunex Corporation et al. v. Sandoz Inc. et al	2:16-cv-01118	D.N.J.
Snaprays v. Ontel Products Corporation et al	2:16-cv-01198	D.Utah
Security5, LLC v. VSN Mobil, Inc. et al	3:16-cv-01431	S.D.Cal.
Sioux Steel Company v. Prairie Land Millwright Services, Inc.	1:16-cv-02212	N.D.Ill.

Curlin Medical Inc. et al. v. Acta Medical, LLC, et al.	2:16-cv-02464	D.N.J.
Amarin Pharma Inc. et al v. Hikma Pharmaceuticals USA Inc. et al	2:16-ev-02525	D.Nev.
J&M Industries, Inc. v. Raven Industries, Inc.	2:16-cv-02723	D.Kan.
Capbran Holdings, LLC et al v. Firemall LLC et al	2:16-cv-02980	C.D.Cal.
Deckers Outdoor Corporation v. Australian Leather Pty Ltd	1:16-ev-03676	N.D.III.
Lokai Holdings LLC, v. Barba et al	3:16-cv-04083	D.N.J.
Albert Kirakosian et al v. J and L D Sunset Wholesale and Tobacco et al	2:16-ev-06097	C.D.Cal.
TrainingMask L.L.C. v. Andvaris Virtual Solutions, Inc.	1:16-cv-22024	S.D.Fla.

APPENDIX B

Litigated Patent Cases Where American Defendants Are Affected By Injunctive Relief or the Potential Thereof

Unified Patent Court (Europe)

- 1. Philips v. Belkin (granted, 2024)
- 2. Lionra Tech v. Cisco (sought/pending, 2024)

China

1. Huawei v. Netgear (sought/pending, 2022)

Germany

- 2. Nokia v. Amazon (granted, 2024)
- 3. Nokia v. HP (sought/settled, 2024)
- 4. Huawei v. Amazon (granted, 2023)
- 5. Huawei v. Netgear (sought/pending, 2022)
- 6. Ericsson v. Apple (sought/settled, 2022)
- 7. IPBridge v. Ford (granted, 2022)
- 8. MiiCs v. Ford (sought/settled, 2022)
- 9. Koninklijke KPN v. Ford (sought/settled, 2022)
- 10. Sharp v. Tesla (sought/settled, 2022)
- 11. Sisvel v. Tesla (sought/settled, 2022)
- 12. Conversant v. Tesla (sought/settled, 2022)
- 13. IPBridge v. Tesla (sought/settled, 2022)
- 14. Motorola v. Microsoft (granted, 2012)
- 15. Motorola v. Apple (granted, 2011)

USITC

- 16. Nokia v. Amazon (sought/pending, 2023)
- 17. Nokia v. HP (sought/settled, 2023)
- 18. Samsung v. Apple (granted but vetoed by USTR, 2013)

Colombia

19. Ericsson v. Apple (preliminary injunction granted but reversed after 4 months, 2022)

Brazil

20. Nokia v. Amazon (preliminary injunction granted, 2024)

- $21.\,\mathrm{Nokia}$ v. HP (sought/settled, 2024)
- 22. DivX v. Netflix (granted, 2023)
- 23. Ericsson v. Apple (preliminary injunction granted, 2022)