No. 16-1011

IN THE

Supreme Court of the United States

WESTERNGECO, LLC,

Petitioner,

v.

ION GEOPHYSICAL CORPORATION,

Respondent.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

BRIEF OF ELECTRONIC FRONTIER FOUNDATION AND R STREET INSTITUTE AS *AMICI CURIAE* IN SUPPORT OF RESPONDENT

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STATEMENT OF IDENTITY AND INTEREST OF *AMICI CURIAE*[1]

The Electronic Frontier Foundation ("EFF") is a nonprofit civil liberties organization that has worked for more than 25 years to protect consumer interests, innovation, and free expression in the digital world. EFF and its more than 40,000 dues-paying members have a strong interest in helping the courts ensure that intellectual property law furthers the public interest.

The R Street Institute is a non-profit, non-partisan public-policy research organization. R Street's mission is to engage in policy research and educational outreach that promotes free markets, as well as limited yet effective government, including properly calibrated legal and regulatory frameworks that support Internet economic growth and individual liberty. R Street's particular focus on Internet law and policy is one of offering research and analysis that show the advantages of a more market-oriented society and of more effective, more efficient laws and regulations that protect freedom of expression and privacy.

As part of their mission, EFF and/or R Street have served as *amici* in key patent cases, including *Impression Prods. Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523 (2017);

1. No counsel for a party authored this brief in whole or in part, and no such counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than the *amici curiae*, or their counsel, made a monetary contribution intended to fund its preparation or submission. Both Petitioner and Respondent filed blanket consent to the filing of amicus briefs, both of which are on file with the Clerk.

Alice Corp. Pty. Ltd. v. CLS Bank International, 134 S. Ct. 2347 (2014); *Limelight Networks, Inc. v. Akamai Technologies, Inc.*, 134 S. Ct. 2111 (2014); *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120 (2014); *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749 (2014); *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238 (2011); *Bilski v. Kappos*, 561 U.S. 593 (2010); and *Quanta Computer, Inc. v. LG Elecs. Corp.*, 553 U.S. 617 (2008).

INTRODUCTION AND SUMMARY OF ARGUMENT

The Court's ruling in this case could vastly expand the reach of U.S. patent law. Although the dispute before the Court involves a claim brought under 35 U.S.C. § 271(f), the theory of damages advanced by the Solicitor General and others could allow extraterritorial damages in *all* patent cases. Expanding patent damages in this way would effectively transform every U.S. patent into a worldwide patent. As explained below, that result cannot be justified as a matter of doctrine or policy.

I. Damages for patent infringement are limited to acts within the United States—to hold otherwise would contradict the plain text of the Patent Act, which has a clear domestic focus. Section 271(a), which limits infringement to acts "within the United States" and importation "into the United States," is expressly limited to domestic conduct. And although § 271(f) was enacted in response to an extraterritoriality decision of this Court, that statutory provision does not provide for extraterritorial damages; rather, it remains firmly rooted in conduct "in or from the United States." The legislative history makes clear that Congress' sole intention with § 271(f) was narrowly to abrogate that decision of this Court and no more, contradicting the notion that § 271(f) expands patent remedies to overseas use. Thus, contrary to the arguments of Petitioner and some *amici*, the Patent Act explicitly renders foreign injuries inactionable, an observation sufficient to reject Petitioner's arguments and dispose of this case.

II. The long-standing assumption of international patent policy is that an innovator who wishes to recover damages for sales or uses in a jurisdiction must apply for a patent in that nation. Disrupting that arrangement will cause a number of harms, many of which would be felt particularly by companies operating in the United States. Extraterritorial damages, especially if imposed under a theory that would apply even to infringement under § 271(a), could expose companies that conduct research and development in the United States to worldwide damages. This would discourage companies from innovating here.

International damages could also undermine other nations' sovereignty. Both the scope of patent law and available remedies differ around the world. This means that allowing damages in U.S. courts for sales and uses overseas could undermine the autonomy of nations that have chosen not to extend patent law to certain fields. Moreover, allowing extraterritorial damages might encourage other nations' courts to impose damages for sales and use in the United States, thereby undermining U.S. sovereignty.

ARGUMENT

I. Patent Damages Based on Extraterritorial Activity Conflict with the Statutory Text

Although the parties center their dispute on the extraterritoriality rule of *RJR Nabisco, Inc. v. European Community*, 136 S. Ct. 2090 (2016), the easier and correct path to resolving this case is in the plain statutory text: damages for patent infringement should be limited to domestic acts, because the Patent Act declares extraterritorial activity to be outside the scope of infringement. First, the express terms of § 271(a) include territorial limitations, which make clear that patentees cannot recover damages for overseas sales or uses of infringing products. As one commentator has noted, "it is hard to imagine a starker expression of territorial limits" in a statute. Timothy R. Holbrook, *Boundaries, Extraterritoriality, and Patent Infringement Damages*, 92 Notre Dame L. Rev. 1745, 1779 (2017). Likewise, the Congressional intent underlying § 271(f) is clear. The statute was enacted for the narrow purpose of closing a loophole in § 271(a). That is all. Accordingly, this Court should rule that remedies awarded for infringement under § 271(f) are subject to the same territorial limitations applicable to remedies awarded for infringement under § 271(a).

These statutory provisions give legal force to the "traditional understanding that our patent law operates only domestically and does not extend to foreign activities." *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 455 (2007) (quoting Alan M. Fisch & Brent H. Allen, *The Application of Domestic Patent Law to Exported Software: 35 U.S.C. § 271(f)*, 25 U. Pa. J. Int'l Econ. L. 557, 559 (2014)) (punctuation and alterations omitted). That is sufficient to dispose of this case. Petitioner's argument that § 284 offers compensation for infringing acts conducted outside the United States would essentially render extraterritorial acts infringing contrary to § 271(a) and (f), and therefore cannot be correct.

A. Section 271(a) Is Expressly Limited to Domestic Conduct

Under § 271(a) of the Patent Act, a direct infringer is one who:

> . . . without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention.

The phrase "within the United States" expressly limits the statute to activity conducted within this country's borders. Indeed, before this statute was enacted, this Court strictly enforced the same rule. *See Dowagiac Mfg. Co. v. Minnesota Moline Plow Co.*, 235 U.S. 641, 650 (1915) (holding that "there could be no recovery of either profits or damages" for allegedly infringing "drills . . . sold by the defendants . . . in Canada" because "no part of the transaction occur[ed] within the United States" and "[t]he right conferred by a patent under our law is confined to the United States and its territories"); *Brown v. Duchesne*, 19 U.S. (1 How.) 183, 195-96 (1856) (stating that "the use of [patented invention] outside of the jurisdiction of the United States is not an infringement of [the patentee's] rights, and [the patentee] has no claim to any compensation for the profit or advantage the party may derive from it").

Recently, patentees in both *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 711 F.3d 1348 (Fed. Cir. 2013) and *Carnegie Mellon University v. Marvell Technology Group, Ltd.,* 807 F.3d 1283 (Fed. Cir. 2015), reh'g en banc denied in part, 805 F.3d 1382 (Fed. Cir. 2015), sought to avoid § 271(a)'s territorial limitations by seeking to recover foreign damages that were arguably caused by domestic infringement. In the first case, Power Integrations presented evidence that power supply manufacturers typically incorporate the same semiconductor chip in all units of a particular power supply model, including units sold outside the United States. *See* Non-Confidential Brief for Plaintiff-Cross Appellant Power Integrations, Inc. at 44, *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 711 F.3d 1348 (Fed. Cir. 2013) (Nos. 2011-1218, 2011-1238), 2011 WL 2827447. Thus, Power Integrations argued that losing domestic sales also caused it to lose sales worldwide, and it sought lost profits for all those sales.

Similarly, Carnegie Mellon argued that infringing uses that occurred in the United States during Marvell's sales cycles (which involved design, testing, and customer feedback) allowed Marvell to make foreign sales of semiconductor chips that otherwise had no connection to the United States (*i.e.* that were made, purchased, and used abroad). Accordingly, Carnegie Mellon sought a reasonable royalty on those overseas sales. *See* Bernard Chao, *Patent Imperialism*, 109 Nw. U. L. Rev. Online 77 (2014) (discussing the facts of *Power Integrations* and *Marvell* in more detail).

The Federal Circuit rejected the worldwide causation theory in both *Power Integrations* and *Marvell*. This was the correct result. Section 271(a)'s explicit territorial limitations should also apply to remedies. Otherwise, a law Congress expressly drafted to only regulate domestic conduct would expand to regulate international sales and uses. Petitioner understandably wants the Court to focus on § 284, since that provision does not include an express territorial limitation. But the fact that a more general provision for remedies appears in a different statutory section is of little weight. *See Hughey v. United States*, 495 U.S. 411, 419 (1990) (applying the "principle of *ejusdem generis*—that a general statutory term should be understood in light of the specific terms that surround it"). The general term in § 284, calling for "damages adequate to compensate for the infringement," must be understood in light of § 271(a)'s specific limitation of infringement to domestic acts, and not in a way that opens a loophole to rendering foreign activity infringing.

This Court should reject international damages whether it considers the question through the *RJR Nabisco* framework or through the more general framework of proximate cause. Applying *RJR Nabisco*, the Court should construe § 271 and § 284 together in light of the strong presumption against extraterritoriality. Considering § 284 in isolation would allow its general language to override Congress' clearly stated intent in § 271.[2] More general

2. This Court considered an analogous situation in *Hughey*, where the government argued that a "catchall phrase" in 18 U.S.C. § 3580(a), which concerned the amount of restitution under the Victim and Witness Protection Act of 1982, allowed it to impose restitution for crimes other than the offense of conviction. *See* 495 U.S. at 418. This Court found that it would be "anomalous" to allow such general language in a remedial provision to trump the more specific provision "which governs the court's authority." *Id.*

principles of proximate cause should lead to the same result. *See* Brief of Intellectual Law Professors In Support of Neither Party at 20 (noting that proximate cause "is complex inquiry that includes policy and justice, similar to the concerns that underlie the presumption [against extraterritoriality] itself"). International uses and sales, which are expressly not covered by the Patent Act, should be considered intervening acts that cut off the chain of causation begun by an act of domestic infringement.

This approach, like the *Power Integrations* and *Marvell* decisions, does not prevent patentees from recovering damages for domestic infringement. Patentees remain free to seek either lost profits or reasonable royalties for the infringer's domestic sales.

Although WesternGeco has not explicitly argued that this Court should overturn *Power Integrations* and *Marvell*, the Solicitor General had made this argument. *See* Government Petition Br. at 19 (arguing that the Federal Circuit made the "same analytical error" in *Power Integrations*, *Marvell*, and the current dispute); *cf.* Petitioner Br. at 46-49 (dismissing concerns with allowing "damages for domestic misconduct [to include] foreign lost profits or foreign lost wages"). The reason why this case has such potentially important implications to the patent world is that if the Court sides with WesternGeco, it may either intentionally or unintentionally open the doors to recovering overseas damages in § 271(a). Such an outcome would dramatically increase the amount of damages that U.S. patentees could recover. For example, in *Marvell*, worldwide damages were calculated to be in excess of a billion dollars while domestic damages were substantially lower, somewhere between one hundred sixty to two hundred eight million dollars. Chao, *supra*, 109 Nw. U. L. Rev. Online at 89; *see also Power Integrations v. Fairchild Semiconductor*, 711 F.3d 1348, 1375 (Fed. Cir. 2013) (worldwide damages were approximately 4 to 5 times larger than domestic damages). But excessive damages are not the only downside to WesternGeco's position: a decision eliminating the territorial limitations on patent damages will disrupt how the international patent system currently operates. *See* Part II *infra*.

B. Section 271(f) Also Focuses on Domestic Conduct

Even though the text of § 271(f) refers to acts that occur outside this country, that language does not mean that the statute allows patentees *to recover damages* for overseas conduct. Like § 271(a), § 271(f) is focused on domestic conduct.[3] Indeed, WesternGeco concedes this point characterizing § 271(f) as "target[ing] domestic conduct undertaken with an intent to facilitate foreign combinations." Petitioner Br. at p. 2.

Congress enacted § 271(f) in response to a gap in §271(a) that was exposed in a prior Supreme Court decision, *Deepsouth Packing Co. v. Laitram,* 406 U.S. 518 (1972). In that case, the defendant, Deepsouth, was

3. Section 271(f)(1) states: "Whoever without authority supplies or causes to be supplied in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer."

found liable for making shrimp deveining machines that infringed Laitram's patent. However, part of Deepsouth's business also involved making individual parts of its deveining machines, and then exporting the components in separate boxes for assembly abroad. *Id.* at 524. Deepsouth argued that this conduct should not be considered infringement under § 271(a) because the individual parts were not patented. Laitram countered that Deepsouth was effectively selling the entire product. *Id.* at 527. The Supreme Court sided with Deepsouth holding that the defendant's acts did not violate § 271(a) because the potentially infringing conduct—making the entire infringing product—took place abroad. *Deepsouth* is important for two reasons. First, it shows how seriously this Court has viewed the presumption against the extraterritorial application of U.S. laws in the patent context.

Second, and more importantly for the current case, the decision motivated Congress to pass § 271(f). Congress' intent was clear. The Senate Report specifically says, "[t]his provision is a response to the Supreme Court's 1972 *Deepsouth* decision . . ." S. Rep. No. 98-663, at 2-3 (1984). The legislation had no loftier goals like extending patent damages extraterritorially, beyond what would be recoverable under § 271(a). Indeed, the Senate Report went on to say, "The bill simply amends the patent law so that when components are supplied for assembly abroad to circumvent a patent, the situation will be treated the same as when the invention is 'made' or 'sold' in the United States." S. Rep. No. 98-663, at p. 3. There was no intent to expand patent *remedies* to encompass overseas conduct. But as the Federal Circuit astutely noted below, that is what the petitioner is seeking. *WesternGeco L.L.C. v. ION*

Geophysical Corp., 791 F.3d 1340, 1351 (Fed. Cir. 2015) ("A construction that would allow recovery of foreign profits would make § 271(f), relating to components, broader than § 271(a), which covers finished products."). Of course, WesternGeco may also be seeking to upend § 271(a) damages law as well. But that view is inconsistent with § 271(a)'s explicit territorial limitations.

To be the perfectly clear, the issue in this case is not whether WesternGeco can recover damages. It can, and it has. *WesternGeco,* 791 F.3d at 1351 ("WesternGeco received such a royalty here."). But the focus of that inquiry was on Ion's acts of domestic infringement under § 271(f), not on any downstream sales made by Ion's foreign customers.

When Congress enacted § 271(f), it only intended to close the *Deepsouth* loophole so that the exportation of components that make up a larger infringing product would be treated just like exporting the entire infringing product itself. It did not intend to expand patent remedies extraterritoriality. With that understanding in mind, the Court need look no further than the express limits found in § 271(a) and the undisputed Congressional Record of § 271(f). Patentees can only recover for damages based directly on domestic acts of infringement. They cannot recover for damages that were caused by foreign acts of infringement that were in turn caused by domestic acts of infringement. Such damages are simply too remote and circumvent the express limitations found in the patent statutes.

II. This Court Should Not Allow Extraterritorial Damages in Patent Cases

The Patent Act's domestic focus is good policy. Allowing worldwide damages, in contrast, would cause a wide array of harms and distortions. These harms fall into three broad categories. First, exposing companies that conduct research and development in the United States to worldwide damages will discourage companies from investing here. Second, allowing worldwide damages will overcompensate patent owners by inflating already large awards. Finally, extraterritorial damages will interfere with other nations' patent systems and, in turn, may encourage other nations to interfere with U.S. policy.

These harms will be most acute if the Court announces a rule broad enough to allow extraterritorial damages under § 271(a). Many acts of alleged infringement under § 271(a)—such as use in domestic product development—could conceivably be seen as a proximate cause of wholly overseas sales and uses. Damages for overseas sales in such cases would expose U.S. companies (and only U.S. companies) to worldwide liability. Petitioner argues that "allowing lost foreign sales to form a measure of damages for domestic misconduct raises no serious question of international law and no serious prospect of international discord." Petitioner Br. 46. This is wrong. Allowing damages for foreign sales would upend the international patent system and, ultimately, would harm U.S. innovation.

A. A Worldwide Damages Regime Would Discourage Companies from Conducting Research and Development in the United States

To see how worldwide damages would harm U.S. innovation, consider how such a regime might impact two hypothetical companies. Two companies, a domestic one A and a foreign one B, design and test semiconductor chips and contract with a foreign manufacturer to produce their designs. A patent owner claims that both companies' testing processes infringe a patent, and demands damages for the manufactured chips on the theory that those chips' manufacture and sale are proximately and factually caused by the infringing testing. If the Solicitor General's damages theory is accepted, Company A could be liable for a reasonable royalty on its worldwide sales. In contrast, Company B would likely only be liable for royalties on its U.S. sales. This would effectively punish Company A for conducting research and development in the United States.

This hypothetical example is not far-fetched. Rather, it is directly inspired by the facts of *Marvell*. In *Marvell*, the patent owner argued that it should be entitled to world-wide royalties because Marvell's international sales were a foreseeable consequence of domestic research and development. *See Carnegie Mellon Univ. v. Marvell Tech. Grp., Ltd.*, 986 F. Supp. 2d 574, 638 (W.D. Pa. 2013) (noting that CMU sought damages resulting "from Marvell's use of the patented methods during research, development, chip design, qualification, [and] use of engineering samples" in the United States). The district court awarded over $1.5 billion in damages for past infringement, most of which related to chips that never entered the United States. *Marvell*, 807 F.3d at 1288. As noted above, the Federal Circuit vacated most of damages award, allowing the recovery of a reasonable royalty only on chips imported into the U.S. (the court remanded for a partial new trial to determine the location of the sale of other Marvell chips). *See id.*

The government argues that the Federal Circuit erred in *Marvell* and that this Court should abandon the presumption against extraterritorial damages, even in cases brought under § 271(a). *See* United States Petition Br. at 19; *see also* AIPLA Br. at 20-21 (suggesting that an international "proximate cause" standard would at least leave open the possibility of international damages in cases like the *Marvell*). But extraterritorial damages would drastically disadvantage U.S. companies like Marvell compared to their international competitors because they would be uniquely vulnerable to claims for worldwide royalties.

No concomitant domestic benefit accrues to countervail this disincentive upon domestic industry. United States patent owners stand to win greater damages awards should foreign activity count as infringement, but most United States patent owners are not United States companies: in recent years, more than 50% of U.S. patents have been issued to foreign entities. *See* USPTO, *U.S. Patent Statistics Chart Calendar Years 1963 – 2015*, URL *supra* p. vii. To return to the hypothetical example above, both Company A (the domestic chip company) and Company B (the foreign chip company) may apply for U.S. patents on their innovations. But if the companies assert some of their respective patents against each other, Company

B could claim that Company A's infringement through U.S. research and development entitles it to royalties on Company A's global sales. In contrast, Company A would only be able to seek royalties on Company B's U.S. sales. This imbalance would play out in all industries where U.S. companies conduct research and development at home but compete globally.

If for some reason Congress *wants* to enable foreign owners of U.S. patents to punish American companies with worldwide damages, it is free to do so through legislation. But that is a matter for the legislative branch to decide. The presumption against extraterritoriality exists so that radical policy changes only occur as a result of clear statutory language drafted after consideration of all the issues. *See Microsoft Corp.*, 550 U.S. at 454–55.

B. A Worldwide Damages Regime Will Lead to Overcompensation for Patent Owners

A ruling that allows extraterritorial damages in patent cases, especially if the Court's reasoning extends to cases brought under § 271(a), may allow inventors who obtain both U.S. and foreign patent rights to recover damages twice. Patent owners could recover damages once by asserting U.S. patent rights against domestic uses to recover a royalty reflecting the value of all uses worldwide, and again by asserting foreign patent rights in foreign nations where the patented technology was principally used.

As this Court has recognized, a company that wishes to protect its innovations in overseas markets should apply for patents in those markets. *See Microsoft Corp.*, 550

U.S. at 439 ("[F]oreign law alone, not United States law, currently governs the manufacture and sale of components of patented inventions in foreign countries [and thus,] [i]f [a patentee] desires to prevent copying in foreign countries, its remedy today lies in obtaining and enforcing foreign patents."). Under the present regime of international patent law, individual countries issue and enforce their own patents. As a result, "an inventor seeking worldwide protection for her creation would have to obtain a patent in every country that offers patent protection." Martin J. Adelman, et al., Global Issues in Patent Law 1 (2011). Indeed, the preamble to the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) recognizes the need to provide for the "effective and appropriate means for the enforcement of trade-related intellectual property rights, taking into account differences in national legal systems." Agreement on Trade-Related Aspects of Intellectual Property Rights, adopted by United States Dec. 8, 1994, 1869 U.N.T.S. 299.

Inventors who do obtain both U.S. and foreign patent rights may be able to obtain double recovery for the same conduct: once by asserting a U.S. patent against domestic use to recover a worldwide royalty, and once again by asserting foreign patent rights in foreign nations where the technology was actually used and infringed. Although this Court ruled in favor of international exhaustion in *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523 (2017), it is not clear that nations will uniformly conclude that patent rights issued by their governments are exhausted (or will otherwise deny recovery) under these facts. *See, e.g.*, WIPO Standing Committee on the Law of Patents, Exceptions and Limitations to Patent Rights: Exhaustion of Patent Rights at 3 (Oct. 6, 2014), URL *supra* p. vii (finding that some nations apply national exhaustion, some apply regional exhaustion, some apply international exhaustion, and others apply a mixed regime).

If permitted, double recovery of this nature may result in extreme overcompensation. For many technologies, the cumulative total of worldwide foreign use exceeds domestic use in the United States.[4] In the *Power Integrations* litigation, the ratio was greater than four-to-one. *See* 711 F.3d at 1370 (noting that the district court concluded that just 18% of the jury verdict "represented U.S. sales for which Fairchild was liable by way of inducement"). Given such ratios, the possibility of recovering extraterritorial damages in U.S. courts could effectively transform U.S. patent law into an international patent law. *See* Chao, *Patent Imperialism*, 109 Nw. U.L. Rev. at 87.

Excessive damages can overly deter potential infringers from engaging in beneficial commercial activity and conversely, overly encourage efforts to monetize patents through aggressive enforcement. *See, e.g.*, Douglas Melamed, *Over-Rewarding Patenting: You Get What You Pay For*, 39 Harv. J.L. & Pub. Pol'y 59, 60 (2016) ("[E]xcessive remedies for patent infringement not only overcompensate patent holders, but also reduce both product output and invention itself."). Moreover, the

4. *See, e.g.*, Tess Townsend, *Here's where Alphabet makes its money,* Recode (April 29, 2017), *URL supra* p. vi. (noting that Google's parent company makes more than 50% of its revenue outside the United States); Jeff Dunn, *Here's how Apple's iPhone sales break down by region,* Business Insider (March 20, 2017), URL *supra* p. vi. (noting that more than 70% of Apple's global iPhone sales in 2016 took place overseas).

deterrent effect of excessive extraterritorial damages will apply with particular force to companies that conduct research and development in the United States (because these are the companies most at risk of having damages awards applied to their global sales). When patent law deters domestic research and development, it serves the exact opposite of its intended purpose.

C. A Worldwide Damages Regime Will Undermine Other Nations' Domestic Patent Policies

Just as U.S. patent law is domestic law, the patent law of other nations is their domestic law. While the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) has resulted in a fair degree of uniformity among patent laws, nations still retain discretion in how to structure their patent system. Moreover, treaties such as TRIPS are not immutable. Treaties can be amended and nations may elect to withdraw from such agreements. Ultimately, all nations retain discretion over how to structure their patent law and patent system. A regime where one nation's law effectively provides for worldwide damages, and thus a worldwide patent regime, undermines this sovereignty.

Patent owners pursuing extraterritorial damages in U.S. courts could be seeking orders inconsistent with the domestic patent law of the nation where the sales took place. Appearing as an *amicus* in this case, Power Integrations suggests that it should be able to "rel[y] on the U.S. patent system" to protect it against lost foreign sales. *See* Power Integrations Br. at 1, 3. If allowed, this use of the U.S. patent system risks undermining international sovereignty. Other countries may have expressly chosen to provide different remedies or may not even extend their patent system to cover the systems or methods at issue.

In other words, a holding allowing extraterritorial damages would encourage companies to leverage U.S. patent litigation to evade more restrictive patent regimes in force in foreign nations. *See* Chao, *supra*, 109 Nw. U.L. Rev. Online at 86-88 (making this argument in greater detail). Compared to the United States, many foreign nations provide much more modest remedies for patent infringement. The median damages award in a U.S. patent case between 2012 and 2016 was about $5.8 million. *See* PricewaterhouseCoopers, 2017 Patent Litigation Study, URL *supra* p. vi. These amounts are substantially higher than those awarded in other jurisdictions. *See* Nicolas van Zeebroeck & Stuart Graham, *Comparing Patent Litigation Across Europe: A First Look*, 17 Stan. Tech. L. Rev. 655 (2014); Xiaowu Li & Don Wang, *Chinese Patent Law's Statutory Damages Provision: The One Size That Fits None*, 26 Wash. Int'l L.J. 209, 211 (2017) (the "average damages awarded in patent infringement cases in China from 2006 to 2013 [was] a mere RMB 118,266.00 (approximately $18,253.00)"). The massive divergence in potential remedies will strongly encourage companies to seek damages in U.S. courts rather than in the foreign nations where the infringement actually took place.

Differences in patent scope across jurisdictions raise similar concerns. To take one important field, patent laws differ markedly regarding the patentability of software. In 2013, New Zealand amended its Patent Act to provide that "[a] computer program is not an invention and not a manner of manufacture for the purposes of this Act."

Section 11(1) of the Patents Act of 2013 (N.Z.). This reform was enacted with the overwhelming support of New Zealand's domestic software industry. *See* Christopher Mims, *How New Zealand banned software patents without violating international law,* Quartz (August 28, 2013), URL *supra* p. v. (noting that a poll of the Institute of IT Professionals revealed that 94% were in favor of banning software patents). India also does not allow software patents. *See* Vindhya S. Mani et. al., *The Indian Patent System: A Decade in Review*, 8 Cybaris An Intell. Prop. L. Rev. 1, 41-47 (2017). In contrast, Japan's patent law is generally understood to be far more permissive toward patent claims directed to software. *See* Japan Patent Office, Examination Guidelines for Patent and Utility Model in Japan, pt. 3, ch. 1 (Eligibility for Patent and Industrial Applicability), Sec. 2.2.2 at p. 6-7 (2017), URL *supra* p. v. In the United States, the law has moved from the Federal Circuit's very permissive standard under *In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994), to a more restrictive rule that declares abstract software patents ineligible. *See Alice Corp. Pty. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014). In sum, nations have made radically different choices about whether and how patents should impact software development, sales, prices, and consumer choice.

Software is not the only area of substantive patent law with international variation. Indian law provides that "the mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance" is not patentable. Section 3(d) of The Patents Act, 1970 as amended by The Patents (Amendment) Act, 2005 (India). In practice, this imposes a higher utility standard on pharmaceutical inventions as compared to U.S. patent law. *See* Javier

Esparza, *Indian Patent Law: Working Within the Trips Agreement Flexibilities to Provide Pharmaceutical Patent Protection While Protecting Public Health*, 24 J. Transnat'l L. & Pol'y 205, 214–15 (2015) (contrasting the approaches of the Federal Circuit and the Indian Supreme Court).

Differences in patent law across jurisdictions mean that a U.S. company could develops a product covered by the claims of a U.S. patent that would not be patentable in another nation. For example, a patent owner might claim that allegedly infringing U.S. research and development is a proximate cause of New Zealand or Indian sales and seek royalties on those sales, even though the relevant product or method could not be patented in New Zealand or India. Any damages award in such a case would undermine foreign sovereignty because it would conflict with policy choices that those nations reached through the democratic process after careful debate. *See* Chao, *Patent Imperialism,* 109 Nw. U.L. Rev. at 86-88.

U.S. policymakers would be extremely disconcerted if the circumstances were reversed and another country tried to impose its domestic patent rules on products made and sold in the United States. For example, since Japan takes an approach to the patentability of software that is more expansive than in the United States, it would undermine U.S. sovereignty if a Japanese court awarded damages for U.S. sales for infringement of a Japanese patent that would not be eligible under U.S. law. Ultimately, allowing extraterritorial damages in U.S. cases could encourage other nations to do the same with their own patent law, which would undermine U.S. sovereignty.

CONCLUSION

For the foregoing reasons, the decision of the Court of Appeals should be affirmed.

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