

No. 19-832

IN THE
Supreme Court of the United States

APPLE, INC.,
Petitioner,

v.

VIRNETX INC., ET AL.,
Respondents.

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

**BRIEF OF THE R STREET INSTITUTE, THE
ELECTRONIC FRONTIER FOUNDATION, AND
ENGINE ADVOCACY AS *AMICI CURIAE* IN
SUPPORT OF THE PETITION**

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INTEREST OF *AMICI CURIAE*

The R Street Institute¹ is a nonprofit, nonpartisan 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 economic growth and individual liberty.

The Electronic Frontier Foundation is a nonprofit civil liberties organization that has worked for more than 25 years to protect innovation, free expression, and civil liberties in the digital world. EFF and its more than 34,000 active donors have a powerful interest in ensuring that intellectual property laws serve the general public by promoting more creativity and innovation than they deter.

Engine Advocacy is a nonprofit technology policy, research, and advocacy organization that bridges the gap between policymakers and startups, working with government and a community of high-technology, growth-oriented startups across the nation to support the development of technology entrepreneurship. Part of amplifying startup concerns includes highlighting the unique challenges small startups face when confronted with abusive, and typically opaque, patent litigation.

¹Pursuant to Supreme Court Rule 37.2(a), all parties received appropriate notice of and consented to the filing of this brief. Pursuant to Rule 37.6, no counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of the brief. No person or entity, other than *amici*, their members, or their counsel, made a monetary contribution to the preparation or submission of this brief.

SUMMARY OF ARGUMENT

Certiorari is warranted on both questions presented, because they are questions of law that the Federal Circuit has consistently failed to answer, because lack of clarity impacts a wide range of important domestic industries, and because the lack of clarity is ripe for abusive exploitation.

I. Certiorari should be granted to settle the Federal Circuit's decades-long failure to articulate how to apportion damages when the patent owner seeks to prove a reasonable royalty based on prior licenses. The appellate court currently permits a broad range of dissimilar licenses as admissible evidence. Though it has occasionally said that the dissimilarities must be considered in some fashion, the court has never given guidance to enforce that principle, leaving it to juries to fashion legal rules for apportionment.

This lack of guidance has widespread and troubling consequences. Like the smartphones at issue here, there are numerous complex, multifunction products and services in diverse industries today. Computers, software, cars, genetic tests, pharmaceuticals, and biomedical research all feature technologies with numerous components, putting them at risk for liability to numerous patents and heightening the effects of a failure of apportionment. Furthermore, overreliance on prior licensing is ripe for abusive exploitation by enterprising patent asserterers, since one can easily procure high royalty rates through carefully constructed contracts, and then use those artificially high rates to inflate damages computations in litigation. This abuse across multiple industries likely diminishes valuable innovation; besides being eco-

nomically harmful, that is a backward result for a patent system meant to promote innovation.

II. Certiorari should also be granted on the second question of whether an intervening unpatentability determination requires reconsideration of a copending infringement determination, among other reasons because the question is likely to recur in view of an alternate pathway for patent adjudication. Patent owners can seek relief for infringement from an administrative agency called the U.S. International Trade Commission, and the timeline for disposition of that administrative investigation is remarkably close to the timeline for an unpatentability proceeding before the U.S. Patent and Trademark Office.

This confluence of timelines means that races between infringement and unpatentability proceedings are likely to occur. Indeed, patent owners can effectively circumvent the congressional scheme for patent reconsideration by taking advantage of an administrative-agency patent litigation forum. The unfairness and gamesmanship of that state of affairs warrants review on certiorari to avoid it.

ARGUMENT

I. CERTIORARI SHOULD BE GRANTED ON THE FIRST QUESTION PRESENTED

This Court's review is warranted on the question of apportionment of reasonable royalty analyses based on prior licenses for at least the following four reasons. First, the Federal Circuit has consistently failed to articulate rules on how prior license royalty rates are to be used at all, let alone are to be apportioned. Second, the question has broad economic importance on a national scale because it is not confined to the smartphone industry: Diverse industries also involve complex, multifunction devices that could become victim to the same problem. Third, indeterminacy of prior license analysis encourages patent lawyers to manipulate negotiations in troubling ways. Finally, the sum total of these problematic consequences of the Federal Circuit's failure to guide the lower courts is a concerning disincentive for innovation.

A. FOR DECADES, THE FEDERAL CIRCUIT HAS FAILED TO ARTICULATE RULES ON HOW TO APPORTION REASONABLE ROYALTIES BASED ON PAST LICENSES

The problem that the petition identifies in its first question presented is a long-running one: The Federal Circuit has repeatedly declined to state a methodology for applying apportionment in the context of past licenses. *See* Bernard Chao, *Implementing Apportionment*, 2019 Patently-O Pat. L.J. 20, 20 (2019). Without this Court's intervention, this lacuna in patent damages law is likely to persist and plague the district courts for years to come.

In assessing a reasonable royalty, courts generally rely on the fifteen factors identified in *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970). Of those, several relate to any “established royalty” for licensing of the patent in suit or “comparable” patents; another factor relates to apportionment of the value of the patented invention “distinguished from non-patented elements.” *Id.* at 1120 (factors 1–2, 13). Yet *Georgia-Pacific* provides no guidance on how the factors are applied or even how they interrelate; experts and practitioners complain that the factors are a “grab bag” that “provides little or no guidance to juries.” Fed. Trade Comm’n, *The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition* 182 (2011), available online.²

When considering prior licenses, the Federal Circuit repeatedly pays lip service to the notion that “use of past licenses” for computing reasonable royalties “must account for differences in the technologies and economic circumstances of the contracting parties.” *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1211 (Fed. Cir. 2010). Yet it provides no guidance on how to account for those differences, leading to contradictory outcomes. In 2014, the court opined that apportionment “calculated as some percentage of the value of a multi-component product” was warranted in assessing a reasonable royalty in cases where prior “licenses based on the value of a multi-component product are admitted.” *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1227–28 (Fed. Cir. 2014). Yet in 2015, the same court held apportionment incompatible with prior-license analysis, stating that separat-

²Locations of authorities available online are shown in the Table of Authorities.

ing out unpatented components from patented ones “conflicts with our prior approvals of a methodology that values the asserted patent based on comparable licenses.” *Commonwealth Sci. & Indus. Research Org. v. Cisco Sys., Inc.* (“*CSIRO*”), 809 F.3d 1295, 1303 (Fed. Cir. 2015).

Nor has the Federal Circuit explained what any apportionment based on prior licenses must look like. In many cases, the Federal Circuit finds nothing more necessary than for an expert to lay out the past royalty rates and the differences, leaving the jury to figure out how to use that information for apportionment or otherwise. *See, e.g., Finjan*, 626 F.3d at 1212; *ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1333 (Fed. Cir. 2012). To be sure, the court has frequently deemed prior licenses wholly irrelevant or inadmissible³ but generally sets a low bar for similarity sufficient to deem a license admissible. *See, e.g., ActiveVideo*, 694 F.3d at 1333; *Elbit Sys. Land & C4I Ltd. v. Hughes Network Sys., LLC*, 927 F.3d 1292, 1300 (Fed. Cir. 2019); *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1326 (Fed. Cir. 2014).

The Federal Circuit is not unaware of this lack of guidance. *Ericsson* remarked that “a separate instruction culled from *Garretson* would be preferable in future cases” but neither required this “preferable” instruction nor stated what it should look like or how it would apply. *See* 773 F.3d at 1228 n.5. And in other contexts, the appeals court has recognized that laying out numbers without sufficient guidance “cannot help but skew the damages horizon for the jury, regardless of the contribution

³*See, e.g., Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1325–32 (2009); *LaserDynamics, Inc. v. Quanta Comput., Inc.*, 694 F.3d 51, 77–78 (Fed. Cir. 2012); *Wordtech Sys., Inc. v. Integrated Networks Sols., Inc.*, 609 F.3d 1308, 1320 (Fed. Cir. 2010).

of the patented component to this revenue.” *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011). Yet despite this recognition of the need for clarity in application of apportionment to prior licenses, the Federal Circuit offers nothing but platitudes.

Commentators similarly agree that prior license royalty rates “are likely to require extensive adjustment before they can be considered fairly comparable” but that the *Georgia-Pacific* factors “do not prescribe any particular method for quantifying the appropriate royalty.” Roy J. Epstein & Alan J. Marcus, *Economic Analysis of the Reasonable Royalty: Simplification and Extension of the Georgia-Pacific Factors*, 85 J. Pat. & Trademark Off. Soc’y 555, 572 (2003); see Christopher B. Seaman, *Reconsidering the Georgia-Pacific Standard for Reasonable Royalty Patent Damages*, 2010 BYU L. Rev. 1661, 1694 (2010) (“[E]mphasis on royalty rates for comparable licenses may conflict with economic reality . . .”).

The *VirnetX, Inc. v. Cisco Systems, Inc.* Federal Circuit opinion that preceded the one presently on petition illustrates all the failures of the Federal Circuit’s indeterminate jurisprudence. Contrary to the brief in opposition (at 18), the Federal Circuit did not reverse the district court’s reliance on prior licenses based on apportionment; instead, the appeals court expressly approved the district court’s admission of testimony relating prior licenses to the reasonable royalty rate, with no requirement of apportionment.⁴ See 767 F.3d 1308, 1330–31 (Fed. Cir. 2014) (Pet. App. 117–19a). The court first deemed the prior licenses admissible because they did not pertain to “vastly

⁴The brief in opposition cites to page 1326 of the opinion (Pet. App. 108a), which discusses a different legal argument.

different situations,” suggesting a wide berth for admissible prior licenses. *Id.* at 1330 (Pet. App. 118a). The court then recited that the reasonable royalty determination “must account for differences” between the prior licenses and the instant case, but again offered no explanation for how to do that accounting. *Id.* (Pet. App. 117a). To be sure, the district court then had relied on a different methodology such that apportionment of prior license analysis was not directly at issue in *VirnetX*, but the Federal Circuit’s hazy treatment nonetheless reveals the paucity of clarity in this area of the law.

The brief in opposition (at 17) contends that the Federal Circuit “expressly recognizes the need for apportionment, even where the patentee uses comparable licenses.” Putting aside the case law’s own internal inconsistencies on whether apportionment is required, the appellate court has nevertheless “not identified any kind of concrete analysis that apportionment requires.” Chao, *supra*, at 21. The ambiguity left by that failure is tantamount to ignoring apportionment entirely, since expert witnesses are free to acknowledge differences but then summarily wave them away. Certiorari is warranted at least to resolve this question, which the Federal Circuit has left unresolved for decades.

**B. NUMEROUS INDUSTRIES INVOLVE COMPLEX
MULTIFUNCTION PRODUCTS AND SERVICES
INCOMPATIBLE WITH NONAPPORTIONMENT OF
PATENT ROYALTIES**

Resolving apportionment with respect to prior-license royalty analysis is important to a wide range of industries that deal with products and services that aggregate multiple functions and that are thus potentially

exposed to numerous unrelated patents. Failure to apportion royalties adequately imposes costs not just on smartphone manufacturers like the petitioner, but on all these diverse industries.

1. COMPUTER DEVICES

Computer devices other than smartphones are often complex, multifunction devices that could trigger the same apportionment problems present in this case.

In *Cornell University v. Hewlett-Packard Co.*, the patent owner sought damages on “entire server and workstation systems.” 609 F. Supp. 2d 279, 283 (N.D.N.Y. 2009). Yet the patent claimed just “a small part of the [Instruction Reorder Buffer], which is a part of a processor, which is part of a CPU module, which is part of a ‘brick,’ which is itself only part of the larger server.” *Id.* Recognizing that the accused systems “include vast amounts of technology beyond the infringing part of the processors,” Judge Rader of the Federal Circuit (sitting by designation) faulted the lack of apportionment, reducing the royalty “to account only for the value of the processors incorporating the patented technology.” *Id.* at 283, 285; see also *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 635 (2008) (“[E]ach Intel microprocessor and chipset practices thousands of individual patents . . .”).

Cornell does not rely on prior licensing royalties, leaving one to wonder whether the court would have required apportionment had the patent owner relied on prior licensing information. *Cf. CSIRO*, 809 F.3d at 1302–03. By leaving the rules of prior-license apportionment unknown, the Federal Circuit thus invites inflated arguments for reasonable royalties on the entire class of computer devices and systems, such as that in *Cornell*.

2. SOFTWARE

Computer software also exhibits the multifunctionality phenomenon. In *Lucent Technologies, Inc. v. Gateway, Inc.*, the patent related to a graphical element for choosing dates on a calendar; the allegedly infringing software was Microsoft Outlook, “an integrated suite of abilities to do email, to set up contacts, to arrange meetings, to maintain your personal calendar, et cetera.” 580 F.3d 1301, 1332 (2009). The jury awarded over \$357 million for infringement of this single-feature patent. Given the “hundreds, if not thousands,” of features in the software, the Federal Circuit found it “inconceivable” that “the use of one small feature, the date picker, constitutes a substantial portion of the value of Outlook.” *Id.* at 1333.

Undeterred by this disproportionality, the patent owner in *Lucent* alleged that the lump sum was reasonable in view of supposedly comparable industry licenses. *See id.* at 1325–27. The Federal Circuit rejected those comparable licenses, largely on the technicality that they were for running royalties rather than lump-sum payments, *see id.* at 1327,⁵ but made no suggestion that it would have considered apportionment had the patent owner overcome that technical error. Without guidance on apportionment based on prior licenses, an “inconceivable” award could very well have stood for complex software such as Microsoft Outlook.

3. AUTOMOTIVE INDUSTRY

Many, including this Court, have acknowledged the multifunctional nature of modern cars. “Automotive sup-

⁵The Federal Circuit rejected other comparable licenses as too far afield from the patent at issue. *See id.* at 1328–33.

ply chains are among the most complex in the world, with each vehicle containing more than 20,000 parts originating from thousands of different suppliers.” Shefali Kapadia, *Moving Parts: How the Automotive Industry Is Transforming*, Supply Chain Dive (Feb. 20, 2018), *available online*. Cars today include even software components to perform functions from accessories control to safety alerts. See Jonathan Bach & Mike Colias, *Is It a Car or a Computer?*, Wall St. J. (Sept. 19, 2016), *available online*. Each of these thousands of components is a potential subject of patent litigation.

This complexity has driven the automotive industry’s concerns for cabining the consequences of patent law with respect to multifunctional technologies. In an *amicus curiae* brief, two associations noted that “the automobile industry is particularly susceptible to patentees’ extraction of royalties based on innovations wholly unattributable to the patentable invention,” wondering whether owners of mobile phone chip patents “could demand a cut of the profits attributable to even a car’s *leather seats*.” Brief of Association of Global Automakers et al. at 21–22, *Fed. Trade Comm’n v. Qualcomm Inc.*, No. 19-16122 (9th Cir. Nov. 29, 2019). And in *Impression Products, Inc. v. Lexmark International, Inc.*, this Court observed that the “smooth flow of commerce would sputter if companies that make the thousands of parts that go into a vehicle could keep their patent rights after the first sale.” 137 S. Ct. 1523, 1532 (2017).

The automotive industry, like the mobile phone, computer, and software industries, thus has a strong interest in ensuring that reasonable royalties are properly apportioned.

4. GENETIC TESTING

The genetic testing industry provides a striking example of how complex, multifunction technologies are not just the domain of computers and electronics.

Advances in gene sequencing technologies have made genetic testing an increasingly important and cost-effective element of diagnostic health care, by virtue of testing for multiple genes. A single round of testing might include a panel of hundreds of genes, providing patients with a wealth of potentially lifesaving information all at once. *See* Dan Vorhaus & John Conley, *Whole-Genome Sequencing and Gene Patents Coexist (For Now)*, Genomics L. Rep. (renamed Privacy Rep.) (Aug. 11, 2009), *available online*.

Multi-gene panels make genetic testing a multifunction technology potentially subject to dozens of patents. Indeed, genetic testing services have repeatedly observed how patenting of individual genes created a “thicket” that could potentially have stifled the development of the genetic testing industry, since negotiating a license for each of those many patents would have been an intractable challenge. Subhashini Chandrasekharan & Robert Cook-Deegan, *Gene Patents and Personalized Medicine—What Lies Ahead?*, 1 *Genome Med.* 92, 93 (2009).

Gene patent thickets have largely been avoided in view of *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576 (2013). But given technological changes and recent legislative interest in revisiting this aspect of patent law,⁶ it is worth considering how genetic

⁶*See* Paige Winfield Cunningham, *The Supreme Court Banned Patenting Genes. But Congress Might Change That*, *Wash. Post* (June 3, 2019), *available online*.

testing service royalties might play out in the face of renewed assertion of patents on genes or similar material. The holder of a patent on a particular gene might first license the patent to a service offering a 5-gene testing panel, basing its royalty on 20% of the service's profits. In litigation against a 100-gene panel, that patent holder might then contend that its prior 20%-based royalty rate should control the reasonable royalty determination. Without rules for apportionment, the court would have no legal mechanism to avoid this analysis despite the patented gene constituting only 1% of the 100-gene panel.

The Federal Circuit may thus exaggerate the value of patents in the genetic testing industry due to the multi-function nature of modern genetic tests.

5. PHARMACEUTICALS AND BIOMEDICAL RESEARCH

Drugs and medical treatments are also frequently complex, multifunction products potentially subject to patents on only small components thereof. In *AstraZeneca AB v. Apotex Corp.*, the holder of a patent to omeprazole (Prilosec) sued a generic manufacturer for infringement damages. *See* 782 F.3d 1324, 1328 (Fed. Circ. 2015). The patent on the active compound had expired, and the asserted patent was instead directed to the coating applied to the drug. *See id.* at 1328–29. The generic manufacturer thus argued that damages should be based on the coating, apportioned from the drug itself. *See id.* at 1337.

Nevertheless, the Federal Circuit rejected apportionment. It first held this Court's precedent, *Garretson v. Clark*, 111 U.S. 120 (1884), inapplicable on the grounds that the apportionment rule therein (curiously termed

the “entire market value rule”) is irrelevant when the patent recites the entirety of the product, regardless of which of those recitations were to unpatentable material. See *AstraZeneca AB*, 782 F.3d at 1338. It further recognized a need to “determine how to account for the relative value of the patentee’s invention,” *id.*, but concluded that since the coating “substantially created the value of the entire omeprazole product,” there was “no reason to exclude the value of the active ingredient when calculating damages in this case.” *Id.* at 1339–40.

This reasoning leads to paradoxes: Should the holders of two separate patents, one on the drug and another on the coating, both enjoy royalties based on the unapportioned whole, effectively forcing a double recovery? Problems like these show that the Federal Circuit lacks a unified, coherent approach to apportionment that could affect the pharmaceutical industry.

Indeed, the lack of clarity on apportionment would have widespread impact across the life sciences generally. In a now-famous article, Professors Heller and Eisenberg recognized that in biomedical research, patents on small components could stack up and frustrate development of complex technologies—a “tragedy of the anticommons.” See Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research*, 280 *Science* 698, 698 (1998). Aside from the gene fragment patent issues discussed above, Heller and Eisenberg worried that patents on biomedical research tools, many of which would be used in the course of a single project, would create “a proliferation of fragmented and overlapping intellectual property rights” that could “lead paradoxically to fewer useful products for improving human health.” *Id.* at 700–01.

It is imperative to understand that the present case is not just about the computer or electronics industries. In considering the impact of the Federal Circuit's failure to manage apportionment of royalties, the effects for health care, drug prices, and life sciences research are equally if not more important.

C. THE FEDERAL CIRCUIT'S DECISION EXACERBATES ONGOING PROBLEMS WITH ABUSIVE GAMESMANSHIP IN PATENT LICENSING

The Federal Circuit's practice of accepting preexisting, unapportioned royalty rates is tailor-made for exploitation by patent owners and attorneys hoping to maximize returns on litigation. This is because patent owners can structure their royalty arrangements, perhaps with the cooperation of licensees, in ways that artificially inflate future court awards. This troubling and abusive practice is already occurring today, signaling an urgent need for this Court's review.

It is not hard to imagine a "variety of strategies" for licensing patents at inflated royalty rates to convince a court of a high reasonable royalty. Erik Hovenkamp & Jonathan Masur, *How Patent Damages Skew Licensing Markets*, 36 Rev. Litig. 379, 406–09 (2017) (cataloging such strategies). The patent owner could, for example, recite a high royalty rate but then offer discounts or offsets (or even just forego collecting the royalty) to convince potential licensees to accept that high rate. The patent owner could also incorporate unrelated value, such as payments for cross-licenses or past infringement, into the forward-running payments to produce an apparently higher-looking rate. See Layne S. Keele, *Res"Q"ing Patent Infringement Damages After Resqnet: The Dan-*

gers of Litigation Licenses as Evidence of a Reasonable Royalty, 20 Tex. Intell. Prop. L.J. 181, 228 (2012). See generally John C. Jarosz & Michael J. Chapman, *The Hypothetical Negotiation and Reasonable Royalty Damages: The Tail Wagging the Dog*, 16 Stan. Tech. L. Rev. 769, 788 (2013).

Indeed, patent practitioners recommend “structuring your settlement to reflect a high effective royalty rate that the patentee can use in pursuing other larger defendants,” a strategy that commentators note “has the potential to work significant mischief.” Keele, *supra*, at 228 (quoting Brian Pandya, *Why Pay More? Using Patent Settlements to Calculate Reasonable Royalty Rates*, Corp. Couns. (May 31, 2010), *available online*).

While the above examples of royalty manipulation require coordination between the patent owner and the licensee, inappropriate royalties can also be set without such coordination. Licensees often agree to royalty rates for “[m]any considerations other than the value of the improvements patented,” such as “transaction costs of further litigation,” bargaining skill, and degree of risk aversion. *Rude v. Westcott*, 130 U.S. 152, 164 (1889); *Evans v. Jeff D.*, 475 U.S. 717, 734 (1986); Jarosz & Chapman, *supra*, at 786. The patent owner could also choose initial licensees based on their likelihood of accepting abnormally high royalty rates, because they have less bargaining power or sell single-function products where a higher royalty rate is warranted.

In all these cases, the licensee agrees to a higher-than-appropriate royalty rate, which the patent owner can present to a court as evidence of a supposedly “reasonable” royalty. Indeed, the Federal Circuit has noted that patent owners could “inflate the reasonable royalty anal-

ysis with conveniently selected licenses,” *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 872 (Fed. Cir. 2010) (per curiam), and that “patentees could artificially inflate the royalty rate by making outrageous offers,” *Whitserve, LLC v. Comput. Packages, Inc.*, 694 F.3d 10, 30 (Fed. Cir. 2012) (quoting *Deere & Co. v. Int’l Harvester Co.*, 710 F.2d 1551, 1557 (Fed. Cir. 1983)).

Patent owners have engaged in this royalty-inflation gambit multiple times already. In *Microsoft Corp. v. Motorola, Inc.*, the patent owner sought a royalty rate of 2.25%, supported by several comparable license agreements. *See* No. 10-cv-1823, slip op. at 130 (W.D. Wash. Apr. 25, 2013) (findings of fact and conclusions of law), *aff’d*, 795 F.3d 1024 (9th Cir. 2015). Each of those supposedly comparable rates, however, showed signs of manipulation. In many cases, the patent owner in fact did not enforce the royalty rate and only collected nominal amounts in actual royalties, suggesting that the rate in the contract was a sham. *See id.* ¶¶ 418, 453, at 134–35, 145. Furthermore, the royalty agreements were largely “fashioned under duress of litigation,” rendering the rates unreliable. *Id.* ¶ 443, at 142. And it is noteworthy that, much like the present case the allegedly infringing products were complex, multifunction systems including operating system software and gaming computers, while the supposedly comparable licensed products included an “obsolete” radio and two children’s toys. *Id.* ¶ 418, at 135.

Ericsson, Inc. v. InterDigital Communications Corp., which involved patent licensing among three mobile communications firms, also shows the propensity to manipulate agreed royalty rates to affect third-party determinations. Ericsson and Nokia entered into a license agreement in which Nokia agreed to pay royalties computed in

part based on Ericsson’s other royalty rates. *See* 418 F.3d 1217, 1219 (Fed. Cir. 2005). Subsequently, Ericsson and InterDigital settled their ongoing patent litigation, agreeing upon a royalty rate. *See id.* Nokia then disputed the royalty rate that it was required to pay in view of the InterDigital settlement, demanding sealed litigation documents in an apparent effort to show that the InterDigital royalty rate was inappropriate in some way. *See id.* at 1229. Ultimately, Nokia was unsuccessful and thus presumably bound to the royalty as selected between Ericsson and InterDigital. *See id.* at 1224.

Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc. further suggests the mechanisms of exploitation of the Federal Circuit’s overreliance on unapportioned prior licenses. There, the patent owner presented evidence that its “model license agreement includes an upfront fee of \$15 million,” and the jury relied on that testimony to award the exact same amount in damages. 699 F.3d 1340, 1358 (Fed. Cir. 2012). The patent owner conceded that it “sometimes discounts that fee,” but testified that it would have offered the defendant no such discount. *Id.*

With no doctrinal mechanism for apportionment of prior licenses, the Federal Circuit was forced to acquiesce in the unapportioned award—despite credible protestations that apportionment was warranted⁷ and the judges’ own admission that they “may well not have awarded such a high royalty.” *Id.* Besides demonstrating the propensity of prior licenses to capture patent value inaccurately, *Transocean* shows how easily patent owners

⁷The model license provided rights to make, use, offer to sell, and sell the patented invention; the defendant had no need for the rights to make or use it. *See id.* at 1357.

can manipulate the reasonable royalty analysis, by announcing a “model license agreement” with an exceptionally high base rate, offering discounts on a case-by-case basis, and then simply testifying that no discount would be offered to the defendant.

To be sure, in some of these cases, courts did not accept the prior licenses as indicators of a reasonable royalty. That is a coincidental matter of the patent owners’ failure to obfuscate their licensing ploys sufficiently, and one can only wonder how many times patent owners have succeeded in this strategy. The manipulability of prior licenses confirms their unreliability, the error of the Federal Circuit in crediting them with near-dispositive weight, and the harms that would befall numerous industries absent this Court’s review.

D. EXCESSIVE ROYALTIES RESULTING FROM OVERRELIANCE ON PAST LICENSES WILL DETER INNOVATION

The ultimate consequence of inappropriately high royalty awards is that innovation will be discouraged, particularly in the many complex industries noted above. This consequence is both economically regressive and directly contrary to the very purpose of patent protection.

“When patentees are compensated for more than their invention is worth,” scholars have recognized “a corresponding disincentive for potential infringers to engage in beneficial commercial activity.” Brian J. Love, *Patentee Overcompensation and the Entire Market Value Rule*, 60 Stan. L. Rev. 263, 279 (2007). For one thing, increased liability “effectively raises the potential infringer’s marginal cost, which in turn raises the price of the infringer’s products and reduces its level of output”;

the decline in productivity “is a deadweight economic loss to society.” *Id.*; see Thomas F. Cotter, *Four Principles for Calculating Reasonable Royalties in Patent Infringement Litigation*, 72 *Santa Clara Computer & High Tech. L.J.* 725, 737 (2011). Furthermore, higher exposure to patent infringement “may threaten to over deter would-be users from lawfully designing around” patents to avoid infringement. Cotter, *supra*, at 737. Design-arounds are an important wellspring of innovation that ought to be encouraged, not deterred through excessive royalty awards. See *State Indus., Inc. v. A.O. Smith Corp.*, 751 F.2d 1226, 1236 (Fed. Cir. 1985); *Slimfold Mfg. Co., Inc. v. Kinkead Indus., Inc.*, 932 F.2d 1453, 1457 (Fed. Cir. 1991).

Thus, the Federal Trade Commission and others find: “Overcompensation raises costs through multiple mechanisms and can deter innovation.” Fed. Trade Comm’n, *supra*, at 148; Suzanne Michel, *Bargaining for RAND Royalties in the Shadow of Patent Remedies Law*, 77 *Antitrust L.J.* 889, 895 (2011) (“Indeed, inflated damage awards can discourage innovation by raising the costs of product development and increasing the risks of investment for other innovators and manufacturers.”) (citing Carl Shapiro, *Patent Reform: Aligning Reward and Contribution*, in 8 *Innovation Policy and the Economy* 111, 113 (Adam B. Jaffe et al. eds., 2007)).

Nonapportionment of reasonable royalties amplifies this disincentive, particularly with respect to complex, multifunction products and services. See Love, *supra*, at 279. As a manufacturer or firm adds further features alongside others, the relative value of each feature with respect to the overall product tends to decrease, so overcompensation resulting from a lack of apportionment is exacerbated as more features are introduced. This may

discourage adding features to products, effectively stifling an important dimension of innovative product development and ultimately restricting consumer choice.

Besides being economically backwards, disincentives for innovation and adding features to products are contrary to the very aims of the patent system itself. The Constitution conditions the grant of patents upon the requirement that they “promote the progress of science and useful arts,” and this Court has recognized that the purpose of patents is to promote the public interest in innovation, not merely to reward inventors with monopolies. U.S. Const. art. I, § 8, cl. 8; *see, e.g., Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co.*, 324 U.S. 806, 815–16 (1945). No doubt it is right for an inventor to be made whole for infringement of a patented invention, but only to the extent of that invention’s contribution to the public and not so far as to discourage further innovation that may be done by others downstream. *See Garretson*, 111 U.S. at 121. The Federal Circuit’s failure to apportion royalties to the meritorious contribution of a patent thus ignores, and indeed contravenes, this age-old purpose of the patent laws.

II. CERTIORARI SHOULD BE GRANTED ON THE SECOND QUESTION PRESENTED BECAUSE THE QUESTION IS LIKELY TO RECUR FREQUENTLY

In its second question presented, petitioner asks this Court to vacate a judgment of patent infringement based on a concurrent determination that the patent was erroneously issued in a proceeding before the U.S. Patent and Trademark Office. Certiorari should be granted on this question at least because this question is likely to recur—

indeed, the patent owner has almost complete power to cause it to recur.

When a patent owner seeks redress for infringement, district court litigation is not the only option. The patent owner may also file a complaint for an investigation before the U.S. International Trade Commission, an agency with statutory authority to issue exclusion or cease-and-desist orders enjoining the importation or sale of products determined to infringe patents. *See* Tariff Act of 1930 § 337(a)(1)(B), 19 U.S.C. § 1337 (2012). The elements of a cause before the ITC differ in relatively minor ways from district court litigation,⁸ so patent practitioners widely view ITC investigations as an alternate form of patent litigation before an executive tribunal. *See* Colleen Chien, *Patently Protectionist? An Empirical Analysis of Patent Cases at the International Trade Commission*, 50 *Wm. and Mary L. Rev.* 63, 92–95 (2008).

The key advantage of the ITC is speed. Investigations there typically take only 15 to 16 months to complete. *See* U.S. Int'l Trade Comm'n, *Annual Performance Plan, FY 2019–2020 and Annual Performance Report, FY 2018*, at 9 (2019), *available online*.

It is that expedited timeline that explains the likelihood of recurrent races between unpatentability and infringement proceedings. A USPTO proceeding for cancellation of a patent has a statutory completion date of 12 to 18 months. 35 U.S.C. § 316(a)(11). Thus, if an ITC investigation and USPTO proceeding are filed at around

⁸In particular, the ITC requires the patent owner to show the existence of a domestic industry of using the patent in the United States, and applies statutory public interest factors in lieu of this Court's four-factor injunction test under *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388 (2006). *See* Tariff Act § 337(a)(2), (c); *Spansion, Inc. v. Int'l Trade Comm'n*, 629 F.3d 1331, 1359 (Fed. Cir. 2010).

the same time, they will likely be completed and thus be ripe for appeal at about the same time. Theoretically, the ITC could stay its own proceedings until completion of the USPTO determination, but in practice ITC adjudicators will “almost never stay their investigations.” Eric J. Fues, *The Interplay Between the ITC and the PTAB—More Progress Needed*, Bloomberg L. (Jan. 22, 2019), *available online*.

As a result, a patent owner can use an ITC investigation to obtain an infringement determination and remedy potentially before completion of a USPTO cancellation proceeding. Should this Court not review the Federal Circuit’s refusal to reconsider a patent infringement remedy after cancellation of a patent, patent owners would have a simple strategy for obtaining relief on patents even if those patents are invalid and canceled.

Indeed, patent practitioners already recommend this ITC timing strategy, even explaining that the “unpredictability” of the timing issue could force a defendant firm to “design around the patent or settle with the patentee” despite the patent ultimately being deemed erroneous and of no value. *Inter Partes Review and the ITC: The Benefits and Risks of Filing IPR on Patents Asserted in an ITC Investigation*, Quinn Emanuel Bus. Litig. Rep., Mar. 2015, at 1, 3, *available online*.

While the petition (at 38) expresses concern about random outcomes due to the “happenstance of docket management,” the reality is far more concerning: Patent owners have a well-defined pathway to circumventing the congressional scheme for patent challenges by availing themselves of administrative agency patent litigation before the ITC. Certiorari is warranted to prevent this gamesmanship.

CONCLUSION

For the foregoing reasons, the petition for a writ of certiorari should be granted.

Respectfully submitted,

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