No. 17-804

IN THE

Supreme Court of the United States

EVE-USA, INC. ET AL.,
Petitioners,

—v.—

MENTOR GRAPHICS CORP.,
Respondent.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

BRIEF FOR *AMICI CURIAE* EIGHTEEN INTELLECTUAL PROPERTY LAW PROFESSORS IN SUPPORT OF PETITIONERS

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INTEREST OF *AMICI CURIAE* [1]

Amici, law professors and academics who specialize in intellectual property law, have previously published on, or have interest in, the issue of patent remedies. *Amici* have no personal stake in the outcome of this case but have an interest in seeing that the patent laws develop in a way that promotes—rather than impedes—innovation and is consistent with Supreme Court precedent.

SUMMARY OF THE ARGUMENT

This brief addresses the correct measure of lost profit damages after a finding of patent infringement. An unbroken line of Supreme Court precedent holds that apportionment analysis is required in all damages calculations. *See, e.g.*, *Yale Lock Mfg. Co. v. Sargent*, 117 U.S. 536, 552 (1886). Though the Federal Circuit facially acknowledges the force of this precedent, *see, e.g.*, *Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1287 (Fed. Cir. 2017), both the panel and the Federal Circuit *en banc* fail to apply it to the instant case. The panel decision inappropriately conflates apportionment analysis with the causal analysis described in *Panduit Corp. v. Stahlin Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978), and the Federal Circuit *en banc* denial of rehearing

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[1] Pursuant to Supreme Court Rule 37.6, *amici curiae* affirms that no counsel for a party authored this brief in whole or in part, that no counsel or a party made a monetary contribution intended to the preparation or submission of this brief and no person other than *amici curiae*, their members, or their counsels made a monetary contribution to its preparation or submission. Moreover, both Petitioner and Respondent have given a blanket consent to filing of *amicus* briefs and were given more than 10 days notice in writing prior to the filing of this brief.

incorrectly applies the entire market value rule, *see Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1550 (Fed. Cir. 1995), to carefully elide the Court's apportionment requirement and avoid repeating the panel's error. Furthermore, the precedent set by the instant case is bad patent policy and discourages innovation in the high-tech industry. *Certiorari* should be granted to restore apportionment's proper place in lost profits damages calculations.

ARGUMENT

I. SUPREME COURT PRECEDENT REQUIRES APPORTIONMENT IN LOST PROFIT DAMAGES CALCULATIONS.

A. SUPREME COURT PRECEDENT REQUIRES A TWO-STEP APPORTIONMENT ANALYSIS WHEN CALCULATING LOST PROFITS.

Supreme Court precedent requires apportionment in lost profit damages calculations. *See Garretson v. Clark*, 111 U.S. 120, 121 (1884) ("The patentee . . . must in every case give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features."); *see generally* Eric Bensen, *Apportioning of Lost Profits for Patent Infringement*, Research Solutions (Apr. 2017) ("Between 1854 and 1915, the Supreme Court decided more than two dozen significant patent damages cases and in each, adhered to the rule that a patentee must satisfy the apportion requirement to recover for infringement."). In the instant case, the Federal Circuit acknowledged apportionment was necessary when calculating lost profits in panel decision. *See Mentor Graphics*, 851

F.3d at 1287 ("We agree with Synopsys that apportionment is an important component of damages law generally, and we believe it is necessary in both reasonable royalty and lost profits analysis."). However, despite acknowledging the need to apportion damages in name, the Federal Circuit refused to do so in practice.

Supreme Court precedent requires a two-step apportionment analysis. First, the fact finder must calculate the profits that the patent holder would have made but for the defendant's infringement (the "but for" step). *See Yale Lock*, 117 U.S. at 551 ("the reduction of prices by the plaintiff . . . is shown to have been directly and solely caused by the defendant's infringement"). Second, the fact finder must apportion the calculated profits between those attributable to the infringing features of the product, and those attributable to other, non-infringing, features (the "apportionment" step). *See, e.g.*, *Westinghouse Elec. & Mfg. Co. v. Wagner Elec. & Mfg. Co.*, 225 U.S. 604 (1912) (remanding for further proceedings when the trial court failed to consider apportionment). The second step ensures that the lost profits damages awarded to the plaintiff accurately reflect the impact of the infringing feature on the plaintiff's profits, rather than that of the infringing product as a whole.

In the instant case, the panel dropped the apportionment step due to the panel's misinterpretation of two Supreme Court decisions: *Yale Lock Mfg. Co. v. Sargent*, 117 U.S. 536 (1886), and *Aro v. Convertible Top Replacement*, 377 U.S. 476 (1964) (plurality opinion). In *Yale Lock*, the Supreme Court upheld the lower court's use of the two-step

analysis described above. The Court affirmed that but for the defendant's infringement, the patentee could have sold his product at a higher price. *See Yale Lock*, 117 U.S. at 548. The Court then affirmed the reduction of the damages award to reflect "all other causes which could have affected the plaintiff's prices." *Id.* at 553. In this manner, the Court went through both the first but for and apportionment steps in order to calculate the lost profits attributable to the infringing feature of the defendant's product, not the composite product as a whole.

The panel assumes *Aro* abrogated *Yale-Lock*; this is incorrect.[2] The primary holding of the Court in *Aro* was related to the recovery of lost profit damages from contributory infringer when a patentee had already fully recovered from the direct infringer. *See Aro*, 377 U.S. at 512-13 (remanding the case for further consideration of whether the patentee had been fully compensated by the direct infringer). Since there were no damages to be calculated in *Aro*, the Court did not consider apportionment. Thus, *Aro* does not support the panel's elimination of the apportionment step from the two-step lost profits damages calculation.

B. THE FEDERAL CIRCUIT FAILED TO APPORTION LOST PROFIT DAMAGES.

The panel erroneously conflates apportionment with "but for" causation. The Federal Circuit's misinterpretation arises from a statement first laid

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[2] *See* Bernard Chao, *Lost Profits in a Multicomponent World*, 59 B. C. L. REV. __ (forthcoming 2018), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3016814 explaining how the Federal Circuit misintepreted *Aro* and improperly dropped the second setp in the *Yale Lock* analysis).

out in *Yale Lock* and quoted in *Aro*: "[The plaintiff is entitled to] the difference between his pecuniary condition after the infringement, and what his condition would have been if the infringement had not occurred." *Aro*, 377 U.S. at 507 (quoting *Yale Lock*, 117 U.S. at 552). In its original context in *Yale Lock*, this quote did not imply that a patentee was entitled to all of the lost profits caused by an infringing compound *product*—after all, in *Yale Lock* itself the Court apportioned damages. *See Yale Lock*, 117 U.S. at 553. Rather, this statement was merely a basis for determining that lost profits were the correct measure of damages, as opposed to disgorgement or other form of damages. *See id.* Furthermore, *Aro* did not selectively quote *Yale Lock* to eliminate the apportionment step, but rather to distinguish lost profit damages from disgorgement of the infringer's profits. *See Aro*, 377 U.S. at 506-07. Nevertheless, the Federal Circuit cited this language to suggest that apportionment is incorporated by the *Panduit* factors—a measure of but for causation. *See Mentor Graphics*, 851 F.3d at 1288 ("We hold today that on the undisputed facts of this record, satisfaction of the *Panduit* factors satisfies principles of apportionment.").

Satisfaction of the *Panduit* factors is not equivalent to apportionment. Rather the *Panduit* analysis is part of the but for step of calculating damages, not the apportionment step. *See Panduit*, 575 F.2d at 1152. Specifically, the panel concluded that apportionment is satisfied by the first and second *Panduit* factors: demand for the product as a whole and absence of non-infringing alternatives. *See Mentor Graphics*, 851 F.3d at 1288 ("*Panduit's* requirement that patentees prove demand for the

product as a whole and the absence of non-infringing alternatives ties lost profit damages to specific claim limitations and ensures that damages are commensurate with the value of the patented features."). These factors do not address apportionment because they measure the demand for and the availability of a composite *product*, not the value of a specific infringing *feature*. By holding that apportionment is satisfied by the *Panduit* factors, the Federal Circuit excised the apportionment step from lost profits damages calculation.

Perhaps recognizing this inconsistency, the Federal Circuit en banc denied rehearing of the instant case on a wholly different basis. Rather than affirming the panel decision that the *Panduit* factors incorporated apportionment, the Federal Circuit en banc held that meeting the *Panduit* factors satisfied the entire market value rule making apportionment unnecessary. *Mentor Graphics Corp. v. EVE-USA, Inc.*, 870 F.3d 1298, 1300 (Fed. Cir. 2017). The entire market rule allows a patentee to recover lost profits based on the entire product, "[i]f it can be shown that the patented feature drives the demand for an entire multi-component product." *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012); *see also Rite-Hite*, 56 F.3d at 1550. Thus, the entire market rule says what the royalty base should be – a component or product that incorporates the component. It does not say what portion of that base should be attributed to the infringing feature. That is a distinct question that apportionment helps answer.

Yet the Federal Circuit en banc reasoned that, the first two *Panduit* factors, "'demand for the patented product' (factor one) and an 'absence of acceptable

noninfringing substitutes' (factor two)" together consider demand for the patented product as a whole and the particular features of the claimed invention in particular. *Mentor Graphics*, 870 F.3d at 1300. Relying on these statements. the opinion concludes that "further apportionment is unnecessary." *Id.* The text of these factors reveals immediate flaws in the Federal Circuit's reasoning. The two factors clearly discuss the *infringing product* but they say nothing about the specific *infringing features*.

Thus, the first two *Panduit* factors serve the same function as the entire market value rule. They serve to identify the universe of profits at issue. But like the entire market value rule, that do not say what portion of those profits should be apportioned to the infringing feature. That is supposed to occur when the fact finder applies *Yale Lock*'s second step, apportionment. Unfortunately, that step has disappeared from the Federal Circuit's lost profits jurisprudence.

II. THE FEDERAL CIRCUIT'S RULE IS BAD PATENT POLICY.

A. THE FEDERAL CIRCUIT'S PRECEDENT DISCOURAGES INNOVATION IN THE HIGH-TECH INDUSTRY.

The panel's conflation of apportionment with causation analysis and the *en banc* panel's inappropriate application of the entire market value rule unduly burden high-tech defendants and overcompensates patentees.

When a product contains multiple patented features, high-tech defendants are potentially exposed to liability in excess of their profits, making

research, development, and production economically infeasible. As a threshold matter, high-tech products are often covered by thousands if not hundreds of thousands of patents.[3] It is not difficult to imagine situations in which a defendant pays multiple lost profits damages awards to different patentees. Under the Federal Circuit's rule, each patentee would be entitled to all the lost profits due to the infringing product without apportionment. No company could pay these kinds of duplicative awards.

Now the Federal Circuit's decision suggests that multiple lost profit recoveries cannot occur because it asserts that the *Panduit* test can only result in a single "but for" cause. *See Mentor Graphics*, 851 F.3d at 1289. At first blush, the statement seems quite plausible. But considering how the *Panduit* test would operate in separate lawsuits demonstrates that multiple lost profit awards can occur. The problem with the Federal Circuit's analysis is that it fails to appreciate that the second *Panduit* factor excludes non-infringing alternatives from its "but for" analysis. Thus, even if the we know that in the real world customers would not have purchased the patentee's product but for the infringer's sales (*i.e.*, they would have chosen an infringing alternative), the fact finder in a lawsuit still

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[3] *See, e.g.*, Jorge L. Contreras, *Technical Standards, Standards-Setting Organizations and Intellectual Property: A Survey of the Literature (With an Emphasis on Empirical Approaches)*, *in* Research Handbooks on the Economics of Intellectual Property Law, Vol 2 — Analytical Methods (Peter S. Menell & David Schwartz, eds., forthcoming 2017) (manuscript at 8–9), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2900540 (summarizing studies that identify thousands to hundreds of thousands of patents that potentially cover technical standards used by most electronic devices).

must find that there is "but for" causation. Moreover, because the *Panduit* test will be used in different lawsuits on behalf of different patentees, it is quite possible for one manufacturer to be subject to multiple lost profits awards. *See* Chao, *supra*, at 25-26 (describing scenarios where a single manufacturer would be subject to multiple lost profits awards).

But even if the Federal Circuit is right and these latter plaintiffs are unable to obtain lost profits damages, there is still the problem of paying reasonable royalty damages on top of an unapportioned lost profits award. There may be insufficient money left over to pay other royalties and still maintain a return on the manufacturer's own investment. This is important because patent infringement is rarely an issue of intentional copying.[4] Rather infringers often improve on the underlying technology and patent law should allow for those subsequent innovators to earn a return on investment for any additional contributions they make.[5]

But even if patent law were not concerned about incentivizing subsequent innovation, "but for" lost

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[4] Christopher A. Cotropia & Mark A. Lemley, *Copying in Patent Law*, 87 N.C. L. REV. 1421, 1424 (2009) (finding that copying is quite rare in patent litigation).

[5] Suzanne Scotchmer, *Standing on the Shoulders of Giants: Cumulative Research and the Patent Law*, 5 J. ECON. PERSP. 29, 32 (1991) (explaining how giving first innovators broad patent protection "can lead to deficient incentives to develop second generation products."); Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 COLUM. L. REV. 839, 843-44 (1990) ("Without extensively reducing the pioneer's incentives, the law should attempt at the margin to favor a competitive environment for improvements, rather than an environment dominated by the pioneer firm.").

profit damages overcompensate patentees. The value of an infringing feature is necessarily less than the total value of the product containing the infringing feature. Similarly, profits lost as a result of a competitor's use of an infringing feature are necessarily less than the profits lost as a result of a competitor's product as a whole. "But for" profits that have not been apportioned, fail to make this distinction. The instant case demonstrates this point perfectly. At trial, Mentor Graphics obtained $36,417,661 representing all the profits Mentor Graphics would have made but for Synopsys' infringing product. *Mentor Graphics*, 851 F.3d at 1287. This award ignores the incremental profits lost by Mentor Graphics due to any other patents on Synopsys' infringing products, including Mentor Graphics' other patents.[6] Mentor Graphics initially asserted Synopsys infringed five patents, and held a portfolio of over 100 patents on the emulation technology used in the products at issue in this case, *Opening Brief and Addendum of Defendants-Appellants EVE-USA, Inc., et al.*, at 48, *Mentor Graphics*, 851 F.3d 1275 (Fed. Cir. 2017) (underlying document filed under seal). However, by awarding Mentor Graphics all its lost profits for one patent, the law treats other patents (including Mentor Graphic's other patents) as worthless.

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[6] *See* Brian J. Love, Note, *Patentee Overcompensation and the Entire Market Value Rule*, 60 STAN. L. REV. 263, 264-65 (2007) ("if a producer of a complex product has already been compelled to pay a reasonable royalty to a patentee based on the entire value of the complex product, the producer has effectively compensated the patentee for the value contributed by each and every component of that product").

B. THE FEDERAL CIRCUIT'S DECISION IS INCONSISTENT WITH SUPREME COURT PRECEDENT IN OTHER AREAS OF PATENT REMEDIES.

Supreme Court precedent in other areas of patent law create a uniform system distinguishing consideration of a specific feature from the product containing it as a whole. In *eBay Inc. v. MercExchange, L.L.C.*, the Court replaced the presumption in favor of a permanent injunction upon a finding of patent infringement with the traditional four factor equitable analysis used in other areas of the law. 547 U.S. 388, 396-97 (2006). This had the effect of largely preventing a plaintiff owning a patent on a feature of the product from obtaining an injunction against a defendant manufacturer of a larger product as a whole. The plaintiff would instead more likely receive an ongoing royalty, which would take into account the relative value of the patented feature rather than the value product as a whole. More recently in *Samsung Elecs. Co. v. Apple, Inc.*, the Court rejected Apple's attempt to disgorge all the profits Samsung earned on in its infringing smartphones. 137 S. Ct. 429, 433 (2016). Instead, the Court limited damages to profits attributable to the "article of manufacture." While in simpler cases, the article of manufacture might still be synonymous with an entire infringing product, at least one commentator has suggested that when products are complex, the article of manufacturer will likely be a much smaller part.[7] The Federal Circuit's refusal to

[7] *See* Sarah Burstein, *The "Article of Manufacture" in 1887*, 32 BERK. TECH. L. J. 1, 76 (2017) (suggesting that the "article of

apportion lost profits damages is inconsistent with this otherwise uniform system. Indeed, when calculating reasonable royalties, apportionment is the rule and there is widespread agreement that this rule is good patent policy.[8]

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manufacture" in *Apple v. Samsung* is not the entire smartphone but the "bezel and the screen conglomeration.").

[8] David O. Taylor, *Using Reasonable Royalties to Value Patented Technology*, 49 GA. L. REV. 79, 144 (2014) (suggesting that the *Georgia-Pacific* reasonable royalty test should "focus" the analysis on "the value of patented technology"); Amy L. Landers, *Patent Claim Apportionment, Patentee Injury, and Sequential Invention*, 19 GEO. MASON L. REV. 471, 473-74 (2012) (discussing apportionment based on the patent's contribution over the prior art); Mark Lemley, *Distinguishing Lost Profits from Reasonable Royalties*, 51 WM. & MARY L. REV. 655, 668-69 (2009) (approving the use of apportionment in reasonable royalty calculations).

CONCLUSION

For the reasons stated above, *amici* respectfully urge the Court to grant Defendant-Petitioner's Petition for Certiorari, reverse the Federal Circuit's decision, and restore the second step in *Yale Lock*'s analysis by requiring apportionment in lost profits damages calculations.

Respectfully submitted,

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