

No. 2024-2296

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In the  
United States Court of Appeals  
for the Federal Circuit

EXAFER LTD.,  
*Plaintiff-Appellant,*

v.

MICROSOFT CORPORATION,  
*Defendant-Appellee.*

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Appeal from the United States District Court for the District of Texas,  
No. 1:20-cv-131-RP, Judge Robert Pitman

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**BRIEF OF ASSOCIATION FOR COMPETITIVE TECHNOLOGY (ACT) AS  
*AMICUS CURIAE* IN SUPPORT OF THE DEFENDANT'S PETITION FOR  
REHEARING EN BANC**

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## CERTIFICATE OF INTEREST

Pursuant to Federal Circuit Rules 29(a) and 47.4, counsel for the Association for Competitive Technology certifies that:

1. The full name of the party that I represent is Association for Competitive Technology
2. There are no real parties in interest of the party that I represent
3. There are no parent corporations or publicly held companies that own ten percent or more of the stock of the party that I represent
4. No other law firms, partners, or associates who have not entered an appearance in this appeal either appeared for the party that I represent in the originating court or are expected to so appear in this Court
5. I do not know of any case in this or any other court or agency that will directly affect or be directly affected by this Court's decision in this case
6. No disclosure regarding organizational victims in criminal cases or debtors or trustees in bankruptcy cases is required under Fed. R. App. P. 26.1(b) or (c).

May 20, 2026

/s/ Brian Scarpelli  
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## INTEREST OF AMICUS CURIAE

The Association for Competitive Technology (ACT) is a global policy trade association for the small business technology developer community.<sup>1</sup> Our members include startups, app developers, and device manufacturers who implement industry standards (such as Wi-Fi and 5G) and rely on a fair, predictable licensing environment for standard-essential patents (SEPs). The value of the U.S. ecosystem ACT represents—the app economy—is approximately \$1.8 trillion and is responsible for 6.1 million American jobs, while serving as a key driver of the \$8 trillion internet of things (IoT) revolution.<sup>2</sup> Our members lead the development of innovative applications and products across consumer and enterprise use cases.

The panel’s decision in *Exafer* threatens our members by lowering the bar for including unaccused products in the royalty base. For small businesses, which lack the litigation budgets to fight complex *Daubert* disputes, the panel’s legally flawed standard invites royalty demands on entire product revenues based on nothing more than an asserted “causal connection”—regardless of actual infringing use. We therefore have a strong interest in ensuring that the reasonable royalty framework remains tethered to its statutory foundation under 35 U.S.C. § 284.

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<sup>1</sup> No counsel for any party wrote any part of this brief. No party other than amicus curiae’s members contributed money that was intended to fund the preparation or submission of this brief. This brief is accompanied by a motion seeking leave to file.

<sup>2</sup> ACT | THE APP ASS’N, STATE OF THE APP ECONOMY (2022), <https://actonline.org/wp-content/uploads/APP-Economy-Report-FINAL.pdf>.

## SUMMARY OF ARGUMENT

The panel held that a reasonable royalty may be based on unaccused products if there is a “causal connection” between the patented feature and those products. *Exafer Ltd. v. Microsoft Corp.*, No. 2024-2296, slip op. at 6–7 (Fed. Cir. Mar. 6, 2026) (“Panel Op.”). That standard is legally insufficient and conflicts with Section 284’s proximate-cause requirement. Longstanding precedent requires the royalty base to be limited to infringing activities. *See Enplas Display Device Corp. v. Seoul Semiconductor Co.*, 909 F.3d 398, 411 (Fed. Cir. 2018). The “causal connection” test creates a new, open-ended exception that threatens to eviscerate the smallest salable patent-practicing unit (SSPPU) doctrine, which requires apportionment down to the smallest accused component unless the entire market value rule applies.

For small businesses competing across consumer and enterprise markets, the implications are significant. Under this standard, a patent holder whose technology is “connected” to a smartphone’s processor, camera, or display could demand a royalty on the entire device’s revenue—bypassing decades of apportionment precedent. Small technology companies lack the resources to litigate complex *Daubert* disputes, making them uniquely vulnerable to hold-up and supra-FRAND royalties that will be passed to consumers or drive innovators out of business.

Rehearing en banc is necessary to reaffirm that damages under 35 U.S.C. § 284 must compensate for the use made of the invention, not for every product that

shares some causal link to the patented technology, and to restore the district court's primary role as the gatekeeper for expert testimony.

## ARGUMENT

### I. THE PANEL'S "CAUSAL CONNECTION" TEST UNDERMINES FUNDAMENTAL APPORTIONMENT PRINCIPLES

The Patent Act limits damages to a reasonable royalty "for the use made of the invention." 35 U.S.C. § 284. For over a century, the Supreme Court and this Court have required patentees to prove a proximate causal link between the acts of infringement and the royalty base. *See Garretson v. Clark*, 111 U.S. 120, 121 (1884); *WesternGeco LLC v. ION Geophysical Corp.*, 585 U.S. 407, 417 (2018); *Brumfield, Tr. for Ascent Tr. v. IBG LLC*, 97 F.4th 854, 877 (Fed. Cir. 2024). Accordingly, "the bottom-line royalty 'must be apportion[ed] to [the value of the patented technology]—by separating out and excluding other value in economic products or practices.'" *Brumfield*, 97 F.4th at 876–78 (citation omitted). The panel's "causal connection" standard discards that link, substituting a bare product-to-product relationship. That error (A) conflicts with statutory proximate-cause precedent, and (B) eviscerates SSPPU doctrine.

#### A. The "Causal Connection" Standard is Legally Insufficient, Conflicting with Section 284's Proximate-Cause Requirement

The panel held that a royalty base may include unaccused products if there is a "causal connection" between the accused features and those products. Panel Op at

6–7. But the statute requires more: damages must be proximately tied to “the use made of the invention.” 35 U.S.C. § 284. A generalized relationship between two products is not the same as proximate cause between acts of infringement and the royalty base. *See Brumfield*, 97 F.4th at 876–77 (proximate cause “requires but-for causation plus more, including the absence of remoteness”). This Court has repeatedly held that “[t]he royalty base for reasonable royalty damages cannot include activities that do not constitute patent infringement.” *Enplas*, 909 F.3d at 411 (citation omitted).

The panel purported to distinguish *Enplas* by finding a “causal connection” between the accused features (SmartNIC and VFP Fastpath) and unaccused virtual machines (VMs). Panel Op. at 6–7. But “causal connection” is not the statutory standard. Section 284 requires a nexus to infringing use, not a general relationship between two products. *See Brumfield*, 97 F.4th at 876–78. Further, a methodology that measures damages irrespective of whether the patented feature is actually used cannot satisfy this requirement. *See Niazi Licensing Corp. v. St. Jude Med. S.C., Inc.*, 30 F.4th 1339, 1357 (Fed. Cir. 2022) (patentees cannot recover damages based on “mere capability”). Exafer’s own experts admitted their model was “irrespective” of actual use. Pet. for Reh’g at 13–14.

The “causal connection” standard thus invites precisely the kind of royalty base expansion that the apportionment requirement was designed to prevent. *See Aro*

*Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 508 (1964) (“The rules prohibiting extension of the patent monopoly to unpatented elements are not so readily circumvented.”).

**B. The Panel’s Standard Conflicts with the SSPPU Doctrine, Which Requires Apportionment Down to the Smallest Accused Component**

As the Federal Circuit has recognized, “it is generally required that royalties be based not on the entire product, but instead on the smallest salable patent-practicing unit” unless the entire market value rule applies. *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012) (citations and quotations omitted).<sup>3</sup> The entire market value rule is a narrow exception, requiring proof that the patented feature drives customer demand for the larger product. *See Garretson*, 111 U.S. at 121. The panel’s “causal connection” standard, by contrast, has no demand-based limitation, effectively eviscerating the exception.

The panel attempted to analogize to method-of-manufacture cases, noting that “damages theories for claims directed to methods of manufacture commonly use the unaccused product made from the claimed method as the royalty base.”

Panel Op. at 7 (citing *Amgen Inc. v. Hospira, Inc.*, 944 F.3d 1327, 1341–42 (Fed.

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<sup>3</sup> See also Timothy Syrett, *The SSPPU is the Appropriate Royalty Base for FRAND Royalties for Cellular SEPs*, IPWATCHDOG (May 11, 2021) (noting that “black letter patent authority, industry practice, and changes in technology . . . support using the SSPPU as the royalty base for cellular SEPs, just as when valuing any patent that reads on a component in a complex multi-component product.”).

Cir. 2019)). That analogy fails because in method-of-manufacture cases, every instance of the method produces the end product. Here, the accused features did not produce VM hours; they merely freed capacity Microsoft could have used (but did not). *See* Pet. for Reh’g at 13–14 (noting admissions that accused features were rarely used, disabled by default, and unsupported by many VM classes). Extending the method-of-manufacture exception to a speculative, non-infringing “enabled” product is unsupported by precedent.

The reason for the SSPPU rule is simple: “[w]here small elements of multi-component products are accused of infringement, calculating a royalty on the entire product carries a considerable risk that the patentee will be improperly compensated for non-infringing components of that product.” *LaserDynamics*, 694 F.3d at 67. In SEP disputes, where the patentee has voluntarily committed to license on fair, reasonable, and non-discriminatory (FRAND) terms, this risk is particularly acute. If SSPPU were ignored, collective royalties for a product could become grossly excessive, contradicting the FRAND commitment to base royalties on the value of the patented technological contribution itself, not on downstream products with unrelated features.

Consider the laptop at issue in *LaserDynamics*: a \$1,000 computer could easily become encumbered with a royalty stack more than 100 times its value if royalties

were not required to be based on the SSPPU: “[L]aptop computers are complex products that implement at least 251 industry standards...If there are 5,000 patents used in a laptop and each were to receive a two percent royalty, the royalty on a \$1,000 laptop would be \$100,000.<sup>4</sup>

For these reasons, a damages assessment may be based on the entire product “only where the patented feature creates the basis for customer demand or substantially creates the value of the component parts.” *VirnetX, Inc. v. Cisco Systems, Inc.*, 767 F.3d 1308, 1326 (Fed. Cir. 2014). In all other cases, the royalty base for a SEP must be the SSPPU.

## **II. THE PANEL’S ERROR THREATENS SMALL BUSINESSES THAT IMPLEMENT SEPs**

The panel’s expansion of the royalty base to unaccused products based on a mere “causal connection” is not just a doctrinal error. For the thousands of small technology companies that implement SEPs, the decision will be weaponized in licensing negotiations, forcing them to pay royalties on entire product revenues rather than on the value of the standardized component. The result is higher prices, reduced innovation, and business failures.

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<sup>4</sup> Joseph Kattan, Janusz Ordoover, Allan Shampine, *FRAND and the Smallest Saleable Unit*, COMPETITION POLICY INT’L (2016), available at <https://ti-nyurl.com/3v9e7aa3>.

**A. SEP Holders Will Leverage a Mere “Causal Connection” to Demand Royalties on Entire Products, Not Just the Standard-Compliant Component**

SEP licensing is already fraught with power imbalances. SEP holders often demand royalties on a multicomponent device’s selling price even though their technology reads only on a single chip or module. *See, e.g., Microsoft Corp. v. Motorola, Inc.*, 795 F.3d 1024, 1031–32 (9th Cir. 2015).

The disparity between initial demands and judicially determined FRAND rates is staggering. For example, in *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823, 2013 WL 2111217 the patentee demanded 2.25 percent of the end product price (\$8.50 per unit on a \$400 Xbox), for SEPs covering Wi-Fi and video coding technology. The court found the FRAND rate to be \$0.04026 per unit—a difference of more than 200 times.<sup>5</sup> *Microsoft*, 2013 WL 2111217, at \*99–100.

Under existing law, inflated demands are tempered by the SSPPU and apportionment requirements. *See LaserDynamics*, 694 F.3d at 67–68; *VirnetX*, 767 F.3d at 1327–28. The panel’s “causal connection” standard erases that tempering. Under *Ex-fer*, a SEP holder would be able to claim that, because a smartphone contains a modem chip that implements a standard, that modem has a “causal connection” to every other component in the phone—the display, the battery, the memory—and that

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<sup>5</sup> *See* David J. Teece & Edward F. Sherry, *A Public Policy Evaluation of RAND Decisions in the U.S. Courts*, 1 CRITERION J. ON INNOVATION 113, 119 n. 42, 128 (2016), available at <https://tinyurl.com/4mt4xpwn>.

therefore the entire phone revenue is a proper royalty base. That argument was previously rejected as an end-run around the entire-market-value rule.

This is precisely the hold-up that FRAND commitments and the SSPPU doctrine were designed to prevent. *See Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 310–14 (3d Cir. 2007). The panel’s decision hands SEP holders a powerful new tool to demand supra-FRAND royalties, undermining the very bargains that enable standards to flourish.

**B. SMEs Lack Resources to Litigate Apportionment, Making Them Vulnerable to Hold-Up and Supra-FRAND Royalties**

For a company like Microsoft, litigating a flawed damages theory is costly but manageable. For a small innovator, a negotiation under the new *Exafer* precedent can be existential; it may have no realistic choice but to accept an inflated royalty or exit the market. Small technology companies cannot spend millions on expert discovery, depositions, motion practice, and potential appeals simply to exclude an unreliable methodology.

The consequences are not theoretical. An assessment report found that 38% of SEP implementors—disproportionately small and medium-sized enterprises—reported that licensing costs were so high they could force them “out of business/change business.”<sup>6</sup> As one startup founder put it: “There is no way for us to fight

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<sup>6</sup> See EUR. COMM’N, COMMISSION STAFF WORKING DOCUMENT: IMPACT ASSESSMENT REPORT at 15 (Apr. 27, 2023).

it, we are too small to take on a large organization.”<sup>7</sup> Another small-company respondent explained that evaluating a licensing demand would “delay my own innovation ... and add a lot of cost I cannot afford.”<sup>8</sup>

The panel’s “causal connection” standard magnifies these pressures. Under the old regime, a small company faced with a demand to pay a royalty on 100% of its product revenue could at least point to clear precedent that such a base is impermissible. Now, under *Exafer*, the SEP holder can credibly argue that because the small implementer’s product has a “causal connection” to some underlying patented standard, the entire product revenue is fair game.

By expanding the permissible base to cover unaccused products, the panel’s decision sets the stage for small technology innovators to be forced to pay supra-FRAND royalties, which will be passed on to consumers or drive innovators out of business.

### **III. THE PANEL ARROGATED THE DISTRICT COURT’S GATEKEEPING ROLE**

Even assuming the panel correctly identified district-court error, its remedy was wrong. Rather than vacating and remanding, the panel made an affirmative admissibility finding—declaring Mr. Blok’s testimony “satisfies the admissibility

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<sup>7</sup> Joachim Henkel, *Licensing Standard-Essential Patents in the IoT*, 51 RES. POL’Y 1, 7 (2022).

<sup>8</sup> *Id.* at 6.

standards of Rule 702.” Panel Op. at 8. That ruling usurps the district court’s gatekeeping function, which is “particularly essential in the context of patent damages.” *EcoFactor, Inc. v. Google LLC*, 137 F.4th 1333, 1340 (Fed. Cir. 2025) (en banc). The panel erred by evaluating the evidence itself.

The proper remedy was remand—not a de novo admissibility determination on appeal. *See Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 143 (1997) (remand appropriate where district court failed to apply correct standard). By conducting its own *Daubert* analysis on a cold record, the panel engaged in factfinding, not appellate review. Rehearing is needed to reaffirm that the district court—not an appellate panel—is the primary gatekeeper under Rule 702.

## CONCLUSION

The Court should grant rehearing en banc to resolve whether a damages expert may include sales of unaccused, non-infringing products in the royalty base based on a mere “causal connection.” For innovators that implement standards, the panel’s decision dismantles the apportionment protections that keep SEP licensing fair. By lowering the bar for royalty bases to “anything causally connected,” the panel ensures that patent hold-up will flourish—subjecting small technology companies to supra-FRAND demands on their entire product revenues. Amicus respectfully requests that the Court grant the petition for rehearing en banc, reverse the panel’s affirmative admissibility finding, and reaffirm that the royalty base must

be limited to infringing conduct, not unaccused products.

Respectfully submitted,

Dated: May 20, 2026

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## CERTIFICATE OF COMPLIANCE

Pursuant to Federal Rule of Appellate Procedure 32(g), the undersigned counsel for amicus curiae certifies that this brief:

(1) complies with the type-volume limitation of Federal Rule of Appellate Procedure 29(a)(5) and Federal Circuit Rule 29(b) because it contains 2,567 words, including footnotes and excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f) and Federal Circuit Rule 32(b); and

(2) complies with the typeface and style requirements of Federal Rule of Appellate Procedure 32(a)(5) and (a)(6) because this document has been prepared using Microsoft Office Word and is set in the Times New Roman font in a size equivalent to 14 points or larger.

Dated: May 20, 2026

/s/Brian Scarpelli  
Brian Scarpelli  
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## CERTIFICATE OF SERVICE

I hereby certify that, on this 20th day of May, 2026, I filed the foregoing with the Clerk of the United States Court of Appeals for the Federal Circuit via the CM/ECF system, which will send notice of such filing to all registered CM/ECF users.

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