

No. 06-937

In the Supreme Court of the United States

QUANTA COMPUTER, INC., ET AL.,

Petitioners,

v.

LG ELECTRONICS, INC.

Respondent.

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

**BRIEF OF DELL INC., HEWLETT-PACKARD,
CO., CISCO SYSTEMS, INC., AND EBAY INC.
AS AMICI CURIAE
IN SUPPORT OF PETITIONERS**

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James Bessen & Michael J. Meurer, <i>Lessons for Patent Policy from Empirical Research on Patent Litigation</i> , 9 LEWIS & CLARK L. REV. 1 (2005)	20
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**BRIEF OF DELL INC., HEWLETT-PACKARD,
CO., CISCO SYSTEMS, INC., AND EBAY INC.
AS AMICI CURIAE
IN SUPPORT OF PETITIONERS**

INTEREST OF THE AMICI CURIAE

Amici Dell Inc. and Hewlett-Packard Company are leading manufacturers of personal computers and other technology products. Cisco Systems, Inc., a recognized leader in internet technology, sells software, hardware, and services that together provide fast, durable, and secure networks over the internet for business, education, government, and home communications. These products incorporate many patented components and processes. Amicus eBay Inc. provides a global online marketplace for others to buy and sell, among other items, technological products such as those sold by the other amici.¹

Many of the computers manufactured by amici Dell Inc. and Hewlett-Packard Company incorporate microprocessor chips manufactured by Intel Corporation and memory components manufactured by other companies. In some cases, amici purchase the chips and memory from an outside firm as a single assembled component. In others, amici purchase the chips and memory separately and assemble the sub-components themselves. Petitioners are among the firms from which amici purchase the assembled component.

¹ Pursuant to Rule 37.6, amici affirm that no counsel for a party authored this brief in whole or in part and that no person other than amici and its counsel made a monetary contribution to its preparation or submission. The parties' letters consenting to the filing of amicus briefs have been filed with the Clerk's office.

Respondent LG Electronics, Inc. takes the position—endorsed by the Federal Circuit in this case—that even though it has received a royalty from Intel for patents allegedly infringed by Intel’s microprocessor chips (when combined with memory), it can extract another royalty payment from petitioners because it included a condition in the license granted to Intel stating that purchasers from Intel did not receive a “license” from respondent to use Intel products “by combining [them] with any non-Intel product.” J.A. 143-44. Amici have learned that respondent already is imposing a similar limitation on the “license” that it is granting to the former defendants to this action that have settled with respondent. Accordingly, amici have every reason to believe that if the Federal Circuit’s decision is permitted to stand, respondent will seek to require amici to pay yet a third royalty for the same articles.

Of course, the Federal Circuit’s legal standard is not limited to the patents owned by respondent. Three of the four amici are engaged in the frequent purchase and sale of technology products. Many of the products bought and sold by amici consist of hundreds or even thousands of components, each of which can implicate a number of patents. Those components, like the component here, often are manufactured and assembled in multiple steps by multiple entities before reaching amici. The regime created by the Federal Circuit’s revision of the patent exhaustion doctrine allows each patent owner to work its way through every manufacturing chain that in any way implicates its patents, extracting a separate royalty for the same invention at each stage of the process. It also adds unjustified costs to manufacturing and distribution processes without serving any purpose of the patent system.

With respect to amicus eBay, Inc., this regime exposes eBay's downstream sellers to claims of patent infringement for the resale of previously purchased products. It also already has subjected eBay to patent-owner pressure to remove listings of the allegedly infringing items and to sanction its sellers.

Equally harmful is the Federal Circuit's holding that exhaustion can never apply to patent claims relating to the "method" of using a patented article (in contrast to the patent's "apparatus" claims, which describe the article itself, and which at least remain eligible for the Federal Circuit's newly-truncated exhaustion doctrine). Here, for example, respondents' patents included both "apparatus" claims describing the patented article and "method" claims expressing the means of using and enjoying the patented article.

Under this Court's jurisprudence, patent exhaustion applies to any method claim that simply describes the intended use and enjoyment of the exhausted apparatus claims embodied in an article. If the rule were otherwise, every patentee could avoid exhaustion entirely simply by adding to his apparatus claims a method claim describing how to use the article.

Because of the significant effect of the Federal Circuit's ruling on these two aspects of the exhaustion doctrine, amici have a strong interest in urging the Court to overturn the Federal Circuit and reinstate the doctrine of patent exhaustion as previously articulated by this Court.

SUMMARY OF ARGUMENT

The doctrine of patent exhaustion appropriately circumscribes the bundle of rights granted to patentees by Congress. Those rights are intended to encourage innovation but come at a significant cost to

other market participants and are “restrictive of a free economy” (*United States v. Masonite Corp.*, 316 U.S. 265, 280 (1942)). Indeed, this Court recently recognized that when patent rights are not appropriately defined, “patents might stifle, rather than promote, the progress of useful arts.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1746 (2007). The Court accordingly has emphasized that the rights granted to a patentee should be interpreted so as not to go beyond what is essential to “the necessary requirements of the patent statute.” *Masonite Corp.*, 316 U.S. at 278-80.

The patent exhaustion doctrine is a long-settled limitation on patent owner rights that advances the purposes of the patent act efficiently while avoiding harmful consequences. It protects the patent owner’s right to compensation for the use of its invention by others while at the same time providing a clear standard precluding the assertion of infringement claims against those who purchase patented articles. The doctrine holds that upon the purchase of an article in an authorized sale—from either the patentee or a licensee authorized by the patentee to make and sell the article—the patentee’s rights with respect to that article are exhausted.

The Federal Circuit in this case abandoned the doctrine of patent exhaustion as it has been defined by this Court for over a century. The lower court’s new regime is not necessary to enable patent owners to obtain full compensation for use of their invention, will create considerable confusion and uncertainty for downstream participants in the manufacturing process (as well as for sellers and the ultimate users of any products containing components implicating a patent), and opens the door to new, and very substantial, abusive patent infringement claims. Long a

clear, understandable constraint on patent rights, the doctrine of patent exhaustion has been reduced by the Federal Circuit to a mere default rule of contract interpretation that easily is avoided, opening the door to infringement actions against any person or entity that uses or sells a patented article at any point in its travels through commerce.

Moreover, by categorically excluding all method claims from the patent exhaustion doctrine, the Federal Circuit has created an exception that swallows the rule—allowing patentees to avoid exhaustion simply by adding a method claim that describes the intended use of their apparatus claim. Rather, it is common sense, and good patent policy, that the exhaustion of an apparatus claim upon the first authorized sale of a patented article also exhausts any method claim that describes the intended use and enjoyment of that apparatus claim.

The patent regime contemplated by the Federal Circuit’s ruling is impractical, unfair, and inefficient. It does not best serve the purpose of the patent system—promoting the progress of science and the useful arts—but only furthers the goals of those seeking to extract multiple royalties on the same patented article or otherwise extend the power of their patent beyond the receipt of the royalty that they are due.

ARGUMENT

I. THE EXHAUSTION DOCTRINE BARS INFRINGEMENT CLAIMS AGAINST THE PURCHASER IN AN AUTHORIZED SALE OF AN ARTICLE THAT PRACTICES THE PATENT.

“The declared purpose of the patent law is to promote the progress of science and the useful arts by granting to the inventor a limited monopoly, the

exercise of which will enable him to secure the financial rewards for his invention.” *United States v. Univis Lens*, 316 U.S. 241, 250 (1942) (citing U.S. Const., Art. I, § 8, cl. 8; 35 U.S.C. §§ 31 & 40). That purpose “is fulfilled with respect to any particular article when the patentee has received his reward for the use of his invention by the sale of the article[;] * * * once that purpose is realized the patent law affords no basis for restraining the use and enjoyment of the thing sold.” *Id.* at 251.

Accordingly, “[t]he first vending of any article manufactured under a patent puts the article beyond the reach of the monopoly which that patent confers.” *Id.* at 252. And any condition on the use and enjoyment of a patented article after an authorized sale “derives ***no support from the patent***,” but instead, “must stand on the same footing * * * as like stipulations with respect to unpatented commodities.” *Id.* at 251 (emphasis added); see also *Keeler v. Standard Folding Bed Co.*, 157 U.S. 659, 666 (1895) (whether a patent owner can impose conditions on the post-sale use and enjoyment of a patented article is “a question of contract, and not [a question] under the inherent meaning and effect of the patent laws”).²

This Court also made clear in *Univis Lens* that all patent rights are exhausted upon the first sale, “[w]hether the [patent owner or] licensee sells the

² *Accord Masonite Corp.*, 316 U.S. at 277-78 (“There are strict limitations on the power of the patentee to attach conditions to the use of the patented article. As Chief Justice Taney said in *Bloomer v. McQuewan*, 14 How. 539, 549, when the patented product ‘passes to the hand of the purchaser, it is no longer within the limits of the monopoly. It passes outside of it, and is no longer under the protection of the act of Congress.’”) (emphasis and internal citation omitted).

patented article in its completed form or sells it before completion for the purposes of enabling the buyer to finish and sell it.” 316 U.S. at 252.³

Notwithstanding the clarity of this Court’s holding in *Univis Lens* regarding the exhaustion doctrine, the Federal Circuit in this case adopted a different principle that allows a patent owner to easily circumvent *Univis Lens*. According to the decision below, “[i]t is axiomatic that the patent exhaustion doctrine commonly referred to as the first sale doctrine, is triggered by an unconditional sale * * * [but] does not apply to an expressly conditional sale or license.” Pet. App. 5a-6a. In other words, the Federal Circuit has turned an essential constraint on the limited rights granted to a patentee—that they extend to the first authorized sale of an article manufactured under the patent but no further—into an optional limitation, easily avoided by altering the terms of sale.

The Federal Circuit’s rule not only is inconsistent with this Court’s precedents, it serves no useful purpose under the Patent Act, encourages the assertion of abusive infringement claims against downstream purchasers of patented products, and imposes significant unnecessary transactional costs on the manufacturing process.

³ The district court in the present case found that the factual predicate relied upon by the Court in *Univis Lens* is satisfied here: the microprocessors sold to the defendants by Intel were “destined * * * to be finished by the purchaser in conformity with the patent because they have no reasonable non-infringing use.” Pet. App. 46a (internal quotation marks omitted). That factual finding was not disturbed on appeal.

A. Patent Owners Can And Do Realize The Full Economic Value Of Their Patents In The First Authorized Sale.

The patent exhaustion doctrine allows the owner of a patent to extract the entire value associated with the use of the invention embodied in a particular article at a single—and extremely logical—step in the chain of commerce: when the patent owner sells the article or licenses another to manufacture and sell the article.⁴ The patent owner at that point has both the opportunity and the negotiating leverage to demand a payment reflecting the full value of the use of its invention over the life of the article. If that sum is not paid, the patent owner’s monopoly rights en-

⁴ By licensing another to manufacture and sell the patented article, the patent owner essentially authorizes someone else to step into its shoes. In that case, the patent owner may negotiate its royalty with its licensee, but also can control the licensee’s negotiations with purchasers if it so chooses. See *General Talking Pictures Corp. v. Western Elec. Co.*, 305 U.S. 124, 127 (1938). What it cannot do under this Court’s decision in *Univis Lens* is to retain the right to assert infringement claims against those purchasers. Although *General Talking Pictures* held that the purchaser, in addition to the manufacturing licensee, was guilty of infringement for a sale that violated a field-of-use restriction in the manufacturing license, that was only because the purchaser “ordered, purchased and leased [the unlicensed device] knowing the facts” (305 U.S. at 126), placing it “in no better position than if it had manufactured the [device] itself without a license” (*id.* At 127). In other words, the purchaser was guilty of contributory infringement because of its participation in a conspiracy to violate the manufacturing license. The Court did *not* hold that a field-of-use limitation in the manufacturing license would constrain a purchaser in the normal course. In fact, it explicitly reserved that question (*ibid.*), although the authorities discussed above teach that the purchaser would take the device free of any claims under the patent law.

able him to prevent the first purchaser from obtaining the article (or a manufacturer from producing it).

And the first purchaser will be willing and able to pay an amount sufficient to meet the patent owner's demands—as long as the patent owner has properly assessed the economic value of its invention to the ultimate users—because it has the ability to pass along that cost to its customers. The value of the invention, as reflected in the royalty paid by the first purchaser for that invention, becomes just another part of the negotiations over the terms of subsequent sales of the article. In this way, the total royalty paid to the patent owner by the first purchaser is naturally and efficiently distributed, through normal market forces, across every party that owns and makes use of the invention according to the value that each party assigns to the invention.

Because the patent owner thus receives the full royalty that it is due for its invention as embodied in that article, the exhaustion doctrine ensures that the first purchaser acquires all of the normal rights of ownership relating to the sale and use of the article. And when the first purchaser sells the article (whether to a manufacturer, distributor, or end user) and seeks to pass along the cost of the royalty paid to the patent owner, its customer will be protected against the threat of paying twice for the invention: once to the first purchaser and a second time in an infringement action asserted against it by the patent owner.

These legal rules thus allow the patent system to fulfill its function—encouraging progress in the useful arts by rewarding innovation—with minimal intrusion into the operation of the free market and minimal disturbance to the normal conception of ownership. Long ago, this Court recounted the virtues of

that traditional doctrine of patent exhaustion—a full reward for the inventor, simplicity for all parties, and peace for owners of the patented article—and opined that “[t]he inconvenience and annoyance to the public that an opposite conclusion would occasion are too obvious to require illustration.” *Keeler*, 157 U.S. at 667.

The Federal Circuit in this case reached that very “opposite conclusion” by treating the doctrine of patent exhaustion as nothing more than an assumption about the intent of contracting parties, making exhaustion entirely optional depending on the conditions that the patent owner attaches to a sale of a patented article. The “inconvenience and annoyance” that this Court predicted over a century ago—in particular, an economically irrational system of bewildering complexity—is certain to ensue. See Part B, *infra*.

Moreover, in contrast to this Court’s patent exhaustion jurisprudence, under which the patent owner extracts the entire royalty that it is due for its invention at a single point, the system advocated by respondent and endorsed by the Federal Circuit requires multiple separate negotiations between the patent owner and each entity that ever owns or uses the article in question. These negotiations are in addition to those between the firms that buy and sell the article and may come as an unwelcome surprise to subsequent purchasers to whom the patent owner is a complete stranger.

The Federal Circuit’s regime also adds uncertainty and search costs to the already complex process of purchasing components for technology products. As described in more detail below, when technology firms design products and source components, they often are unable to acquire full information

about the various intellectual property rights implicated by those components. The Federal Circuit's holding means that even when a vendor is authorized by a patent owner to sell articles practicing its patent, a purchaser still cannot be sure that the component is free of the patent owner's intellectual property claims. To obtain certainty, a purchasing firm would need to investigate the specific terms of the patent owner's agreement with the vendor (as well as its agreements with every prior owner of the patented component)—essentially conducting a title search on each component that it purchases. And if the vendor has paid only a “partial royalty,” the purchasing firm would need to discover the actual amounts paid by the vendor and every other prior owner of the patented article in order to estimate its own potential exposure to further royalty payments. Of course, such information will rarely if ever be available.⁵

These additional transaction costs serve no useful purpose under the patent laws. Certainly neither the Federal Circuit nor respondent has explained why this very substantial expansion of the bundle of rights granted to patent holders by the Patent Act is necessary to further the purposes of the Act rather than simply to benefit the financial interests of aggressive patent owners. Specifically, respondent has never explained why it could not have obtained the full royalty that it is due through a single payment from Intel. The added transaction costs and uncer-

⁵ As the redacted petition in this case demonstrates, negotiations over patent rights and cross-licensing in the high technology field are very sensitive, confidential, and often quite literally opaque to other parties. Downstream users are in most instances simply unable to gain information about the outcome of prior negotiations over intellectual property rights.

tainty inherent in respondent's strategy by themselves show that, far from promoting the development of science and the useful arts, this regime impedes that progress.

As we next discuss, the Federal Circuit's rule is not only unnecessary to enable patent owners to exploit their monopoly fully, it will produce very significant injury to the interests in innovation protected by the patent law.

B. The Federal Circuit's Novel "Optional Exhaustion" Doctrine Would Encourage The Assertion Of Abusive Infringement Claims Against Downstream Purchasers Of Patented Products.

The Federal Circuit rationalized the result in this case as follows: "The theory behind" the patent exhaustion doctrine is that, in "[a]n unconditional sale of a patented device," "the patentee has bargained for, and received, an amount equal to the full value of the goods," but in "an expressly conditional sale or license * * * it is more reasonable to infer that the parties negotiated a price that reflects only the value of the 'use' rights conferred by the patentee." Pet. App. 5a. That not only misconstrues the nature of the patent exhaustion doctrine—which is a fundamental restriction on the rights granted to patent owners, not an assumption about the intent of a contracting party—it also is bad policy founded on a false premise.

The regime envisaged by the Federal Circuit, where patent owners can partition their rights in a patented article and sell those rights piecemeal, obtaining a portion of the total royalty from each entity that purchases or uses the article (presumably according to the proportional value derived from the

invention by each entity), is economically and practically unrealistic.

No business contemplating manufacture or use of an article that infringes a patent would enter into a licensing agreement with—and pay significant value to—a patent owner, when that business’s customers could not use or sell the resulting products without negotiating a separate license with the patent owner. The business would be purchasing the right to make a product that is literally worthless to its customers unless a future contingency occurs over which it has no control.⁶

Thus, in the situation in which patent rights were negotiated at the outset—before significant investment in the alleged infringing article—the new version of the exhaustion doctrine formulated by the Federal Circuit would be completely impractical. Theoretically, the patent owner could undertake multiple, simultaneous negotiations with each entity that would own or use the article in question so that each firm would know that it would have a market that had permission to use its product. But that is not a realistic, or even an efficient or desirable, method of negotiating a royalty, particularly given the enormously complex intellectual property rights that are implicated by many modern products.⁷

⁶ As we discuss below in Part B, Intel’s decision to enter into an agreement with respondent here reflects the additional leverage of a patent owner who enters the scene only after a product is well-established.

⁷ Moreover, as petitioners point out (Pet. Br. 49 & n.16), economic theory indicates that a patent owner should not be able to obtain greater royalty payments by negotiating in such a piecemeal fashion because there is, in theory, but a single monopoly profit available to a manufacturing monopoly. As we discuss in Part B, amici believe that, in the real world, respondent’s

Rather, as the circumstances of this case make clear, the only situation in which respondent's strategy makes sense for a patent owner is when the patent owner asserts its claim *after* the target has made a significant investment in the alleged infringing technology. In that context, the Federal Circuit's rule will promote abusive infringement claims that deter progress in the useful arts by imposing substantial costs upon the creators of new products and services, or—even worse—by erecting an insuperable barrier that will prevent bringing those new products and services to markets.

1. Many products and services—especially those in the computer hardware and software, aviation, financial services, telecommunications, and biotechnology sectors—incorporate inventions reflected in hundreds or even thousands of patents, some of which may be defined ambiguously. See Fed. Trade Comm'n, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY CH. 3, AT 15-56 (Oct. 2003) [hereinafter FTC REPORT]; Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting*, in 1 INNOVATION POLICY AND THE ECONOMY 119, 125-26 (Adam B. Jaffe et al. eds., 2000). Thus, a single computer program may practice hundreds or thousands of patents (Nat'l Research Council for the Nat'l Academies, A PATENT SYSTEM FOR THE 21ST CENTURY 37 (Stephen A. Merrill et al. eds., 2004)) and “a given semiconductor product * * * will often embody hundreds if not thousands of ‘potentially patentable’ technologies” (Bronwyn H. Hall & Rosemarie Ham Ziedonis, *The Patent Paradox Revisited: An Empiri-*

strategic exploitation of sunk costs and the threat of litigation would allow it to obtain unjustified, excessive royalty payments.

cal Study of Patenting in the U.S. Semiconductor Industry, 1979–1995, 32 RAND J. ECON., NO. 1, 101, 110 (2001)).

When a technology business is developing a new device or a new computer program, it often is extraordinarily difficult, notwithstanding the business's best efforts, to identify all of the existing patents and pending patent applications that may be relevant to each of the hundreds or even thousands of components that make up that new product. FTC REPORT, Ch. 2, at 28. In the computer hardware industry, for example, hundreds of thousands of patents are spread among tens of thousands of patentees. Hall & Ziedonis, *supra*, at 101, 110.

With this myriad of often-overlapping patents, no technology business can review every potentially relevant patent before designing and commercializing a new product. As a result, the firm may invest substantial time and resources in a new product *before* becoming aware that an arguably patented technology is embedded somewhere within its design. This is especially true because, in these rapidly changing fields, the grant of a patent may lag the introduction of a product by many years, and may not be brought to the attention of the industry until many years after that. Shapiro, *supra*, at 126 (“In these industries, the danger that a manufacturer will step on a land mine is all too real.”).

If a hardware or software company becomes aware of the possibility of a patent infringement claim before it designs a new product, it has the choice of designing around the allegedly patented technology or obtaining a license to use it. At that point, the cost of a license would reflect the relative

difficulty of designing around the technology as well as the strength of the potential infringement claim.⁸

The situation becomes dramatically different from a business perspective when, as is often the case, an infringement claim is asserted *after* the company has already initiated production or invested substantial time and resources in research and development. At that point, backtracking to design around the now-integrated technology will almost certainly involve substantial expense, waste, and delay. Shapiro, *supra*, at 125-26; see also *KSR*, 127 S. Ct. at 1744 (“In automotive design, as in many other fields, the interaction of multiple components means that changing one component often requires the others to be modified as well.”).

Indeed, “redesigning a product after significant costs have been sunk is usually not economically viable.” FTC Report, Ch. 3, at 40. As a result, there will be overwhelming pressure on the company to obtain a license of the patent that allegedly is being infringed. The patent owner asserting infringement for that reason can demand a royalty that reflects the technology company’s sunk costs—and the significant costs of defending against an infringement claim—not just the ordinary market value of the license. Adam B. Jaffe & Josh Lerner, *INNOVATION AND ITS DISCONTENTS* 112 (2004).

In this case, therefore, the royalty that Intel paid respondent likely is more indicative of the enormous costs that Intel had sunk into its chip architecture

⁸ Of course, in many cases a technology company cannot design around a patent claim—such as when doing so would prevent the company from making new products compatible with existing ones, or with an industry standard that permits interaction with the products of other manufacturers.

than the actual inventive contributions of the patents that respondent had purchased. And the enhancing effect of those sunk costs on the value of respondent's infringement claim would be magnified exponentially, not diminished, if respondent were allowed to pursue its strategy of working its way down the manufacturing chain through to the ultimate users of every product that incorporates the infringing component.

Here, for example, the fact that petitioners' principal supplier, Intel, has now entered into a license agreement with respondent rather than designing its microprocessors to avoid respondent's patents, puts enormous pressure on petitioner to accede to a license. And the payment that could be exacted from petitioners would reflect not just the value of the invention, but their sunk costs in their own products and the impracticality of designing around Intel's components (including all of the technology that those components incorporate).

Indeed, at least one of the original defendants to this action (like petitioners, a manufacturer of components including Intel chips) who previously settled with respondent has entered into an arrangement with respondent that is substantially similar to that forced upon Intel. Amicus Dell Inc. has received a "notice letter" from that settling defendant that, like the letter that petitioners received from Intel (J.A. 143-44), states that the settling defendant has paid (another) royalty to respondent but warns that the "license" it obtained does not extend to subsequent purchasers of its components such as amici.⁹

In other words, if this Court upholds the court of appeals' revised exhaustion doctrine, amici Dell Inc.

⁹ We have offered to lodge this letter with the Clerk.

and Hewlett-Packard Co. will find themselves bargaining with respondent over the third royalty payment on the same articles. The prior royalties paid by the defendants in this case and by Intel will provide no protection to amici—if Intel’s license does not insulate petitioners against respondent’s royalty claim, the “licenses” granted to entities in petitioners’ position similarly will have no value for downstream firms such as amici. However, respondent’s bargaining power with respect to amici will be enhanced because it will be able to leverage the costs that amici have sunk into designing products around Intel technology in general and the components manufactured by the defendants in this case in particular. The reality is that amici would be forced to pay a third duplicative royalty, not a fictional “fair proportional share” of the total royalty due to LGE.

Furthermore, there is no reason to think that this process would stop with amici. Under the Federal Circuit’s opinion, respondent could require amici to accept a limited license and then proceed to extract another layer of royalties from retailers and end-users who purchase amici’s computers. With appropriate contracting, and perhaps even without notice to consumers, the opinion below would allow respondent to extract an annual licensing fee on every computer with Intel microprocessors inside.

In short, the notion that underlies the Federal Circuit’s doctrine of “intent based” patent exhaustion—that there will be a series of negotiations during which each entity that owns or uses the invention throughout the manufacturing process (and, thereafter, uses a “finished” product containing the invention) will pay its fair share of the royalty due to the patent owner—is simply false. Instead, the regime established by the Federal Circuit allows a

clever patent owner to extract substantially increased royalties each time that an article practicing its patent changes hands by exploiting the costs that downstream firms and users have sunk into the technology of their upstream suppliers.

2. The effect of the Federal Circuit’s rule is even more draconian in the case of patents alleged to be infringed by products and services that comply with voluntarily-adopted industry standards—a claim that typically is not advanced until after the standard is adopted. *E.g.*, FTC REPORT, Ch. 2, at 22.¹⁰ In that context, ***every entity that either produces an article in compliance with the standard or uses such an article*** would be obliged to pay royalties to avoid an infringement action, even if the initial manufacturer of the article had entered into a license agreement, as long as the patent owner imposed a condition on that agreement. The multiplication of infringement liability that would result is staggering.

And this phenomenon is certain to be exacerbated by the recent development of “[a]n industry * * * in which firms use patents not as a basis for

¹⁰ These claims are asserted with considerable frequency. *E.g.*, Matt Hines, *Graphics Patent Suit Targets Dell, Others*, CNET News.com (Apr. 23, 2004) (available at <http://tinyurl.com/ae73h>) (describing a series of over 30 lawsuits claiming infringement for use of the JPEG digital image standard); Glen Fest, *Patently Unaware*, Bank Technology News, at 28 (April 2006) (available at <http://tinyurl.com/yxrdhv>) (describing over 70 infringement claims asserted against financial institutions for use of federally-mandated remote check imaging and processing technology); Peter Judge, *Wi-Fi world under threat from Symbol patent: Wireless vendor to seek license fees from all Wi-Fi equipment vendors*, Techworld.com (Sep. 23, 2004) (available at <http://tinyurl.com/gjt2s>) (describing company’s claim that the Wi-Fi communication standard infringes its patent).

producing and selling goods but, instead, primarily for obtaining licensing fees.” *eBay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1842 (2006) (Kennedy, J., concurring); see also FTC REPORT, Ch. 2, at 31 (discussing significant growth of “patent litigation firms,” entities that “buy patents from other companies (particularly bankrupt ones) not to practice but to assert against others” in infringement actions). “For these firms, [typical patent remedies] can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent.” *Ibid.*¹¹

3. It is no answer that a manufacturer can choose to contest the patent claim rather than pay the royalty. Patent infringement claims are easy to assert, but difficult to disprove. Especially in the technology context, the validity of a patent—as well as its legitimate boundaries—sometimes may be difficult to determine, which allows the assertion of extremely tenuous claims. *E.g.*, James Bessen & Michael J. Meurer, *Lessons for Patent Policy from Empirical Research on Patent Litigation*, 9 LEWIS & CLARK L. REV. 1, 16 (2005) (“[C]ourt errors are difficult to avoid in patent litigation, because claim interpretation is complex and it is difficult for fact-finders to assess evidence of infringement. Thus, a deserving defendant may face a significant risk of liability.”).

Moreover, patent-infringement litigation is unusually expensive. According to a recent survey, the cost of litigating a patent-infringement case with less than \$1 million at risk was approximately \$350,000

¹¹ Patent litigation firms typically do not assert infringement claims until the target of the claim has brought a product to market so that they can maximize the value of the infringement claim. Mark A. Lemley & Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 B.U. L. REV. 63, 69 (2004).

through discovery and \$600,000 through trial and appeal; the median cost of participating in a case involving between \$1 million and \$25 million at risk was approximately \$1.25 million through discovery and \$2.5 million through trial and appeal. When more than \$25 million is at risk, the median cost was approximately \$3 million through discovery and \$5 million through trial and appeal. Am. Intellectual Prop. Law Ass'n, REPORT OF THE ECONOMIC SURVEY 25 (2007).

Aside from the substantial litigation costs, the magnitude and unpredictability of a potential judgment makes the trial of an infringement case a daunting prospect. Since 2000, the median amount of damages awarded in patent cases following a bench trial has been \$1.9 million. See PriceWaterhouseCoopers, 2006 PATENT AND TRADEMARK DAMAGES STUDY 3. Trial before a jury is even riskier: during the same period, the median jury award was \$8 million—more than four times the median bench award. Of course, the costs of litigation will appear even more prohibitive when the target of an infringement claim has purchased the article in question from a firm that already has paid the patent holder a royalty, which may be interpreted as conceding that its product infringes the patent.

These outcomes are not sensible patent policy. This Court always has been clear that “the promotion of the progress of science and the useful arts is the ‘main object’ [of the patent system]; reward of inventors is secondary and merely a means to that end.” *Masonite*, 316 U.S. at 278 (quoting *Pennock v. Dialogue*, 27 U.S. (2 Pet.) 1, 19 (1829) (citations omitted)). Allowing the patent owner to multiply its recovery by extracting a new, duplicative royalty at each stage of ownership—based not on the value of

the invention but on the target's sunk costs and prospective litigation expenses—does not promote the progress of science and the useful arts and thus does not serve the purposes of the patent system.

Rather, the only “benefit” of the Federal Circuit’s regime is to enhance patent owners’ ability to exploit the threat of litigation and other transaction costs to obtain excessive royalties. Justice Kennedy recognized this threat in his concurring opinion in *eBay*, observing that legal rules often “can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent.” 126 S. Ct. at 1842. The sole effect of the novel legal rule adopted by the Federal Circuit is to facilitate that illegitimate conduct.

This Court should reaffirm its settled patent exhaustion jurisprudence and thereby preclude the revision of patent law to impose what amounts to a technology tax at every level of the manufacturing process.

C. Patent Owners Can Enforce Conditions On A Sale Through Contract Law, And Should Not Be Given The Added Coercive Power Of Patent Law.

The patent exhaustion doctrine does not restrict a patent owner’s ability to contract. Patent owners remain free to place conditions on the sale of patented articles, but those conditions “must stand on the same footing * * * as like stipulations with respect to unpatented commodities.” *Univis Lens*, 316 U.S. at 251; see also *Keeler*, 157 U.S. at 666 (whether a patent owner can impose conditions on the post-sale use and enjoyment of a patented article is “a question of contract, and not [a question] under the inherent meaning and effect of the patent laws”). The

distinction between enforcing a condition under contract law and patent law is not a mere formality; it has significant legal consequences and for this reason as well the Federal Circuit erred by transforming the exhaustion doctrine into a rule of contract interpretation.

First, patent law would allow the patent owner to enforce conditions such as those asserted by respondent in the absence of contractual privity. The patent owner could prevent downstream owners from using the article even though it was not in privity with those owners. As petitioners note (Pet. Br. 46-49), the Federal Circuit has authorized a generally prohibited form of property: servitudes that run with chattels. That confers an enormous new benefit on patent owners. We already have discussed (at 14-19) that by bringing separate infringement actions against each successive owner in a manufacturing chain, a patent owner can expand significantly the power of its patent—a strategy that would allow it to extract a greater total royalty than it otherwise could and at the same time impede the progress of the useful arts.

Second, recourse to the patent laws allows a patent owner to invoke the significant threat of an injunction when enforcing a downstream condition. See 35 U.S.C. § 283. As Justice Kennedy recently stated, “an injunction, and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent.” *eBay*, 126 S. Ct. at 1842 (Kennedy, J., concurring). Particularly when, as here, “the patented invention is but a small component of the product the companies seek to produce,” the threat of an injunction that

affects the entire product can create “undue leverage in negotiations.” *Ibid.*

Third, enforcement of a condition under the patent laws carries the threat of increased damages and attorneys’ fees if there is a finding of willful infringement. See 35 U.S.C. §§ 284 & 285. The practical risk of such a finding could well be greater in situations in which an upstream owner of the article already has paid the patent owner a royalty, which may be interpreted as conceding that its product infringes the patent. A downstream owner might worry that the fact-finder in an infringement action would be influenced by the existence of the upstream licensing agreement, concluding that the downstream user had clear notice of infringement. The leverage that this concern gives to the patent owner will only increase as it works its way down the manufacturing and distribution chains, acquiring more license agreements.

Fourth, by allowing the patent owner to impose downstream conditions under the protection of the patent law, the Federal Circuit’s rule may authorize anticompetitive conduct that otherwise would be prohibited by the antitrust laws. As the Solicitor General pointed out, “[t]he Federal Circuit’s approach also has the potential to erode downstream competition by permitting patentees to avoid antitrust scrutiny of restrictions on the use and resale of products embodying their inventions.” U.S. Cert. Am Br. 18.

There is no reason that patent owners should be afforded these excess abilities, over and above those available to every other contracting party, when enforcing a downstream condition on the sale of an article.

II. THERE IS NO EXCEPTION TO THE EXHAUSTION DOCTRINE FOR METHOD CLAIMS ASSOCIATED WITH A PATENTED ARTICLE.

Patents may include “apparatus” claims, that describe the technical components necessary to create certain functionality, and “method” claims, that describe the use of those components to achieve that functionality. “It is commonplace that the claims defining some inventions can by competent draftsmanship be directed to either a method or an apparatus.” *Bandag, Inc. v. Al Bolser’s Tire Stores, Inc.*, 750 F.2d 903, 922 (Fed. Cir. 1984). Respondent’s patents contain both apparatus and method claims.

The Federal Circuit erroneously held that none of respondent’s claims, apparatus or method, were exhausted here because the sales of the patented articles were conditional. But the court’s statement that the sale of a patented article can *never* exhaust a method claim in the patent relating to that article (Pet. App. 6a) is just as inconsistent with this Court’s jurisprudence and would have the very same adverse practical effects. It therefore should be explicitly rejected by this Court.

Under the Federal Circuit’s rule, every patentee could entirely avoid the patent exhaustion doctrine simply by adding to the patent application a method claim describing the intended use of the article described in the apparatus claim. The patent owner could then pursue the multiple-royalty-extraction strategy described above by selling the patented article—obtaining a royalty payment from the first purchaser (or the licensed manufacturer)—and then requiring subsequent purchasers of the patented article to obtain a license for practicing the method claim. (Although the first sale might exhaust the ap-

paratus claim, it could never—according to the Federal Circuit—exhaust the method claim.) The patent owner thus would be able to obtain a second, third, and forth royalty for the very same inventive contribution. That strategy would create the same unjustified transaction costs as the Federal Circuit’s eviscerated patent exhaustion doctrine and, like the Federal Circuit’s regime, would serve no purpose under the patent laws.

To prevent this absurd result, the Court should adopt the common-sense rule that the exhaustion of an apparatus claim upon the first authorized sale of a patented article also exhausts any method claim that describes the intended use and enjoyment of that apparatus claim.¹² That rule, consistent with this Court’s patent exhaustion jurisprudence, would

¹² The decisions cited by the Federal Circuit to support its categorical exclusion of all method claims from the exhaustion doctrine in fact are more consistent with the rule that we propose. In one case, the plaintiff owned a patent that described a method of refinishing tires but had no apparatus claims related to the equipment used to carry out that method. *Bandag*, 750 F.2d at 923-24. Accordingly, the method claim represented an independent inventive contribution for which the plaintiff had not yet received its full royalty (it did not simply describe the intended use and enjoyment of an exhausted apparatus claim). In the other case, the plaintiff owned a patent that covered certain window components and a patent that covered a method for turning window components into a finished window. *Glass Equip. Dev., Inc. v. Besten, Inc.*, 174 F.3d 1337, 1339-40 (Fed. Cir. 1999). For years, the infringing party purchased the plaintiff’s components and used them to create finished windows through a *non-infringing* method. *Ibid.* In other words, the plaintiff’s method claim did not simply describe the intended use and enjoyment of the exhausted apparatus claims in its window components; it described a novel and independently inventive method of creating a window (entitling the patentee to a second royalty for that separate inventive contribution).

ensure that patent owners receive a fair royalty for their inventive contribution (but not a duplicative royalty for the same invention under different claim categories) while providing simplicity to the patent system and certainty for owners of patented articles.

CONCLUSION

The judgment of the court of appeals should be reversed.

Respectfully submitted.

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