In the

Supreme Court of the United States

IMPRESSION PRODUCTS, INC.,

Petitioner,

v.

LEXMARK INTERNATIONAL, INC.,

Respondent.

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

BRIEF OF AMICUS CURIAE INTELLECTUAL PROPERTY OWNERS ASSOCIATION IN SUPPORT OF RESPONDENT

KEVIN H. RHODES

President
STEVEN W. MILLER

Chair Amicus Brief Committee
INTELLECTUAL PROPERTY
OWNERS ASSOCIATION
1501 M Street, NW, Suite 1150
Washington, DC 20005
(202) 507-4500

ROBERT M. ISACKSON

Counsel of Record

WILLIAM D. COSTON

JOSHUA C. CUMBY

VENABLE LLP

575 Seventh Street, NW

Washington, DC 20004

(202) 344-4000

rmisackson@venable.com

Counsel for Amicus Curiae

February 22, 2017

271413



COUNSEL PRESS (800) 274-3321 • (800) 359-6859

TABLE OF CONTENTS

	Pa	ge
TABL	LE OF CONTENTS	. i
TABL	E OF CITED AUTHORITIES	iv
INTE	REST OF AMICUS CURIAE	.1
STAT	EMENT	.2
SUMN	MARY OF ARGUMENT	.4
ARGU	JMENT	.7
I.	This Court's <i>Quanta</i> decision does not render all forms of conditional sales or licenses of patented products unlawful, nor should it	
	B. Talking Pictures established the enforceability of sales and license provisions that restrict the use of patented items	13

$Table\ of\ Contents$

Page		
t a of	The Mallinckrodt decision and the decision below reflect a straightforward application of Talking Pictures	
enta	Talking Pictures was distinguished and reaffirmed in this Court's Quanta decision	
rule	is Court's decision in <i>Kirtsaeng</i> does apply to patents and did not overrule <i>zz Photo</i>	
ally sale	The policies that underlie patent exhaustion differ fundamentally from those defining the first-sale doctrine in copyright law	
the	This Court's decision in <i>Kirtsaeng</i> relied primarily on a proper statutory construction of section 109 of the Copyright Act	
ling	The <i>Kirtsaeng</i> decision does not mention patents or rely on any cases dealing with patent exhaustion	
ence able	Both this Court's and the Federal Circuit's international-exhaustion jurisprudence are well-established and fully applicable to the facts at issue	

iii

$Table\ of\ Contents$

	Page
CONCLUSION	32
APPENDIX	1a

TABLE OF CITED AUTHORITIES

Page
CASES
Adams v. Burke, 84 U.S. (17 Wall.) 453 (1873) 8-9
Bauer & Cie v. O'Donnell, 229 U.S. 1 (1913)
Bobbs-Merrill Co. v. Straus, 210 U.S. 339 (1908)
Boesch v. Graff, 133 U.S. 697 (1890)30
Fuji Photo Film Co., Ltd. v. Jazz Photo Corp., 394 F.3d 1368 (Fed. Cir. 2005)
Fujifilm Corp. v. Benun, 605 F.3d 1366 (Fed. Cir. 2010)
General Talking Pictures Corp. v. W. Elec. Co., 304 U.S. 175, affirmed on reh'g, 305 U.S. 124 (1938)passim
Hilton v. S. Carolina Pub. Railways Comm'n, 502 U.S. 197 (1991)11-12
Jazz Photo Corp. v. Int'l Trade Comm'n, 264 F.3d 1094 (Fed. Cir. 2001) passim

Cited Authorities

Page
Keeler v. Standard Folding Bed Co., 157 U.S. 659 (1895)
Kimble v. Marvel Entm't, LLC, 135 S. Ct. 2401 (2015)12
Kirtsaeng v. John Wiley & Sons, Inc., 133 S. Ct. 1351 (2013)passim
Lexmark Int'l, Inc. v. Impression Prod., Inc., 785 F.3d 565 (Fed. Cir. 2015)
Lexmark Int'l, Inc. v. Impression Prod., Inc., 816 F.3d 721 (Fed. Cir. 2016) (en banc)
Lexmark Int'l, Inc. v. Ink Techs. Printer Supplies, LLC, 9 F. Supp. 3d 830 (S.D. Ohio 2014)
Lexmark Int'l, Inc. v. Ink Techs. Printer Supplies, LLC, No. 1:10-CV-564, 2014 WL 1276133 (S.D. Ohio Mar. 27, 2014)
LG Elecs., Inc. v. Bizcom Elecs., Inc., 453 F.3d 1364 (Fed. Cir. 2006)
Mallinckrodt, Inc. v. Medipart, Inc., 976 F.2d 700 (Fed. Cir. 1992) passim

$Cited\ Authorities$

Page	e
Mitchell v. Hawley, 83 U.S. (16 Wall.) 544 (1872)	9
Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502 (1917)15	5
Ninestar Tech. Co., Ltd. v. Int'l Trade Comm'n, 667 F.3d 1373 (Fed. Cir. 2012)	С
Payne v. Tennessee, 501 U.S. 808 (1991)	2
Quanta Comput., Inc. v. LG Elecs., Inc., 553 U.S. 617 (2008)passim	\imath
Quill Corp. v. N. Dakota, 504 U.S. 298 (1992)	2
Reiter v. Sonotone Corp., 442 U.S. 330 (1979)22	2
Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417 (1984)	9
United States v. Univis Lens Co., 316 U.S. 241 (1942)19	9

vii

$Cited\ Authorities$

Page	
STATUTES	
35 U.S.C. § 271(a)	
35 U.S.C. § 271(g)	
35 U.S.C. § 295	
17 U.S.C. § 109	
17 U.S.C. § 109(a)	
Leahy–Smith America Invents Act, Pub. L. 112–29, 125 Stat. 284 (2011)	
OTHER AUTHORITIES	
Brief of United States as <i>Amici Curiae</i> , <i>Impression</i> Prod., Inc. v. Lexmark Int'l, Inc., No. 15-118925	
U.S. Department of Justice and Federal Trade Commission, Antitrust Guidelines for the Licensing of Intellectual Property § 2.3 (1995)	
Supreme Court Rule 37.6	
IIS Const art I 88 cl 8	

INTEREST OF AMICUS CURIAE

Amicus curiae Intellectual Property Owners Association (IPO) is a trade association representing companies and individuals that own and license intellectual property rights in all industries and fields of technology. IPO's membership includes more than 200 companies and more than 12.000 individuals involved in the association either through their companies or as inventor, author, executive, law firm, or attorney members. Many IPO members are involved in the licensing and sale of patented products and services, whether as patent owners, licensors, licensees, or users, and will benefit from clarification of the rights of patent owners and licensors to impose conditions on purchasers, licensees, and users of patented products and services. Founded in 1972, IPO represents the interests of all owners of intellectual property. IPO regularly represents the interests of its members before Congress and government entities and has filed amicus curiae briefs in this Court and other courts on significant issues of intellectual property law. The members of the IPO Board of Directors which approved the filing of this brief are listed in the Appendix.²

^{1.} Consistent with Supreme Court Rule 37.6, no counsel for a party authored this brief in whole or in part, and no party or counsel for a party made a monetary contribution intended to fund the preparation or submission of this brief. Counsel for all parties have consented to the filing of this brief.

^{2.} IPO procedures require approval of positions in briefs by a two-thirds majority of directors present and voting.

STATEMENT

- 1. Respondent Lexmark International, Inc. (Lexmark) makes and sells toner cartridges both in the United States and abroad. Its cartridges are covered by a number of Lexmark's U.S. patents. All of the cartridges sold in the U.S. and some sold abroad were subject to an express single-use/no-resale restriction. Petitioner Impression Products, Inc. (Impression) acquired spent cartridges that had been sold by Lexmark both in the United States and abroad intending to reuse and resell the cartridges in the United States without Lexmark's authorization and contrary to the express single-use/no-resale restriction.
- 2. Lexmark sued Impression for patent infringement. Impression moved to dismiss Lexmark's suit, arguing that (1) the single-use/no-resale restriction is invalid under this Court's decision in *Quanta Comput., Inc. v. LG Elecs., Inc.,* 553 U.S. 617 (2008); and (2) Lexmark's patent rights were exhausted as to the cartridges sold abroad under this Court's decision in *Kirtsaeng v. John Wiley & Sons, Inc.,* 133 S. Ct. 1351 (2013).
- 3. The district court granted Impression's motion to dismiss on conditional-sale grounds, concluding that "the relevant caselaw does not reflect an endorsement by the Supreme Court of post-sale use restrictions once goods are placed into the ordinary stream of commerce" and that "[u]nder Quanta,... post-sale use restrictions do not prevent patent rights from being exhausted given that the initial sales were authorized and unrestricted." Lexmark Int'l, Inc. v. Ink Techs.

Printer Supplies, LLC, No. 1:10-CV-564, 2014 WL 1276133, at *6 (S.D. Ohio Mar. 27, 2014).

- 4. The district court denied Impression's international-exhaustion motion to dismiss, finding that *Kirtsaeng* was not inconsistent with the Federal Circuit's decision in *Jazz Photo Corp. v. Int'l Trade Comm'n*, 264 F.3d 1094 (Fed. Cir. 2001), and refusing to apply *Kirtsaeng* to a case involving a patent, rather than a copyright. *Lexmark Int'l, Inc. v. Ink Techs. Printer Supplies, LLC*, 9 F. Supp. 3d 830, 834-38 (S.D. Ohio 2014).
- 5. On appeal and after a hearing before a single panel, the Federal Circuit ordered that the appeal be heard en banc. Lexmark Int'l, Inc. v. Impression Prod., Inc., 785 F.3d 565 (Fed. Cir. 2015). The court also requested that the parties file new briefs addressing two questions:
 - a. "In light of *Quanta*..., should this court overrule *Mallinckrodt*, *Inc. v. Medipart*, *Inc.*, 976 F.2d 700 (Fed. Cir. 1992), to the extent it ruled that a sale of a patented article, when the sale is made under a restriction that is otherwise lawful and within the scope of the patent grant, does not give rise to patent exhaustion?"
 - b. "In light of *Kirtsaeng* . . ., should this court overrule *Jazz Photo* . . ., to the extent it ruled that a sale of a patented item outside the United States never gives rise to United States patent exhaustion?"

A substantial majority of the Federal Circuit judges (10-2) answered both questions in the negative. The court first affirmed its holding in Mallinckrodt "that a patentee, when selling a patented article subject to a single-use/no-resale restriction that is lawful and clearly communicated to the purchaser, does not by that sale give the buyer, or downstream buyers, the resale/reuse authority that has been expressly denied." Lexmark Int'l, Inc. v. Impression Prod., Inc., 816 F.3d 721, 726 (Fed. Cir. 2016) (en banc). It then affirmed its holding in Jazz Photo, "that a U.S. patentee, merely by selling or authorizing the sale of a U.S.-patented article abroad, does not authorize the buyer to import the article and sell and use it in the United States, which are infringing acts in the absence of patentee-conferred authority." Id. at 727.

SUMMARY OF ARGUMENT

On December 2, 2016, this Court granted the petition for a *writ of certiorari* to decide two independent questions:

- 1. Whether a "conditional sale" that transfers title to the patented item while specifying post-sale restrictions on the article's use or resale avoids application of the patent exhaustion doctrine and therefore permits the enforcement of such post-sale restrictions through the patent law's infringement remedy.
- 2. Whether, in light of this Court's holding in *Kirtsaeng* that the common law doctrine barring restraints on alienation that is the basis of the

exhaustion doctrine "makes no geographical distinctions," a sale of a patented article—authorized by the U.S. patentee—that takes place outside of the United States exhausts the U.S. patent rights in that article.

Question 1. As to Question 1, IPO submits that this Court's ruling in *Quanta*, which distinguished and reaffirmed *General Talking Pictures Corp. v. W. Elec. Co.*, 304 U.S. 175, affirmed on reh'g, 305 U.S. 124 (1938), does not render unlawful all forms of conditional sales of patented products. Nor should it. Post-sale restrictions on a patented article's use or resale do not invoke application of the patent exhaustion doctrine. In *Quanta* this Court distinguished *Talking Pictures*, observing that in the latter case the provision restricting uses to those permitted by the patent owner was found in the license itself, whereas in *Quanta* the license authorizing the sale of patented chips made by the licensee was unconditional. 553 U.S. at 636-37.

When it rendered its decision in *Quanta*, this Court was aware of the Federal Circuit's *Mallinckrodt* decision and the reliance placed on that decision by patent owners. Although this Court reversed the Federal Circuit's conclusion in *Quanta* as to exhaustion, the complete absence of any mention of *Mallinckrodt* – particularly when combined with the Court's reaffirmation of *Talking Pictures* – should be viewed as affirmation that properly crafted restrictions in sales contracts and license agreements on fields-of-use, customers, resale, and the like are to be upheld as long as they do not exceed the lawful scope of the patent. This outcome is important to IPO and its members, as they have long relied on their ability to have lawful restrictions "run with the patent."

A ruling otherwise would, incongruously and illogically, treat differently conditional sales by a licensee and those by a patent owner-licensor. When proper notice is given to the purchaser of patented goods whose use or resale is restricted by the patent owner (or its licensee), it would be irrational to reach different results depending on whether the sale was made by the patent owner or by its licensee or whether the restraint is initially imposed in a license or in a sales agreement. Indeed, it would be counterintuitive for a licensee, who takes by license limited rights from the patent owner, to have more power than the patent owner to control the downstream use of the patented product or process. As long as the customer consents to the restriction at the time of the transaction, there is neither unfairness nor impracticality in enforcing such restrictions on the use or resale of patented items.

Question 2. Question 2 is independent of Question 1, and the answer to the first does not implicate, much less compel, the answer to the second. As to Question 2, IPO submits that the copyright exhaustion ruling in *Kirtsaeng* on its own terms does not apply in patent cases. The Copyright Act provides explicit direction for exhaustion which is contrary to that provided in the Patent Act and the policy considerations for patent rights differ substantially from those for copyright works. Therefore, the existing and clearly established jurisprudence governing international exhaustion reflected in the Federal Circuit's *Jazz Photo* ruling and its progeny should not be disturbed.

In *Kirtsaeng*, this Court had ample opportunity to equate patent policy and copyright policy had it intended to do so, and the absence of any mention of patents is an

indication that this Court viewed the two bodies of law as distinct. It was appropriate for this Court to confine its focus to copyright law alone, because many of the policy considerations that underlie copyright exhaustion differ substantially from those underlying patent exhaustion. Moreover, the *Kirtsaeng* decision itself is grounded primarily in the statutory language of section 109 of the Copyright Act, 17 U.S.C. § 109, which was based on considerations unique to copyright law, whereas the doctrine of patent exhaustion is purely a creature of decisional law developed in patent cases. IPO does not believe that the Federal Circuit's decisions in Jazz Photo and its progeny should be modified with respect to whether sales by the patent owner in foreign countries exhaust U.S. patent rights. Again, this outcome is important to IPO and its members, as they have relied on the rule that sales abroad are legally different under the patent laws than sales in the United States.

ARGUMENT

This Court has long recognized that conditions on the sale or licensing of patented products are valid and enforceable, as long as those conditions are otherwise lawful and consistent with the scope of the patent protection for those products. This Court has also independently recognized that sales abroad of patented products and services do not exhaust patent protection. The Court should not change course on either issue. To the contrary, the Court should reaffirm the principles set forth in *Jazz Photo* and *Mallinckrodt* and affirm the decision below.

I. This Court's *Quanta* decision does not render all forms of conditional sales or licenses of patented products unlawful, nor should it.

The validity and enforceability of conditional sales and licenses has long been recognized by both this Court and the Federal Circuit. Just eight years ago, in *Quanta*, this Court reaffirmed this longstanding rule established in *Talking Pictures*. The Federal Circuit faithfully applied that rule in both its *Mallinckrodt* decision and the decision below. For these reasons, the rule should be affirmed once again, as should the Federal Circuit's decision in this case.

A. The policies underlying reasonable limitations on use and resale in sales contracts and licensing agreements are sound and well-settled, and long-standing practices in the pharmaceutical, agricultural, and technology industries relying on such limitations weigh heavily against a break from this Court's precedents recognizing their validity.

The legitimacy of imposing reasonable restrictions on the use and sale of patented products has a sound statutory basis. 35 U.S.C. \S 271(a)³ recites separately the specific rights that are included in the statutory bundle of patent rights – *i.e.*, the rights to exclude others from making, using, offering to sell, selling, and importing the patented invention.⁴ The only practical way to ensure

^{3.} The relevant portion of \S 271(a) essentially codified section 4884 of the Revised Statutes, which defined infringement at the time of *Talking Pictures*.

^{4.} This Court has long recognized the implications of these separate recitations of rights. See, for example, *Adams v. Burke*,

the separability of these rights is to allow patent owners the freedom to sell and license those rights separately without risk of losing the remaining rights. This freedom to separate out and even subdivide restraints on use and sale was recognized well before *Talking Pictures*, and has provided the conceptual foundation for many types of sales and license restrictions, including now-classic fields-of-use and territorial limitations. And it is long-established and well-settled law that a patentee is not required to convey all of its rights in a patent – every "stick" in its "bundle" of property interests – in a single transaction. *Adams v. Burke*, 84 U.S. (17 Wall.) 453, 456 (1873).

The freedom to contract works both ways; not only is the patentee given the flexibility to sell or license some,

⁸⁴ U.S. (17 Wall.) 453, 456 (1873), in which this Court noted that "[t]he right to manufacture, the right to sell, and the right to use are each substantive rights, and may be granted or conferred separately by the patentee."

^{5.} E.g., Bauer & Cie v. O'Donnell, 229 U.S. 1, 15 (1913) ("Thus, there are several substantive rights, and each is the subject of subdivision, so that one person may be permitted to make, but neither to sell nor use, the patented thing. To another may be conveyed the right to sell, but within a limited area, or for a particular use, while to another the patentee may grant only the right to make and use, or to use only for specific purposes."); Mitchell v. Hawley, 83 U.S. (16 Wall.) 544, 548 (1872) (affirming a finding of infringement by one who purchased a patented machine from a licensee that had the right to make and use but did not have the right to sell the machine during the term of the patent, this Court distinguished the situation before it, where the patent owner had clearly restricted the right of a licensee to sell machines, from one "where the sale is absolute, and without any conditions" and the buyer would therefore be free to treat the machine as his or her "private individual property.").

all, or none of its patent rights (consistent with the *quid* pro quo of public disclosure of the invention in exchange for a time-limited power to exclude competition), but a purchaser has the flexibility to pay for only those rights it needs or intends to use. And allowing a patentee to exercise control over end products incorporating patented technology by imposing restrictions on, for example, quality or re-sale, protects the consuming public and the patentee's reputation.

Restrictions on downstream conveyances of patent rights are beneficial and procompetitive, because they allow a patent owner to license or to sell a new technology selectively to individual entities most likely to succeed within a specified field-of-use, territory, or customer population. Downstream restrictions also allow the patent owner to create incentives for potential users to invest time and resources in the development of their assigned markets, rather than elsewhere. Reasonable restrictions on downstream users sometimes provide the incentive for patent owners to grant rights that otherwise might not be possible – for example in situations when the patent owner intends to commercialize its own invention within one market segment but is willing to allow others to exploit the invention in other segments. This, of course, was the precise situation in Talking Pictures. See 304 U.S. at 179. Without an enforceable restriction, a rational patent owner faced with the need to compete with its own licensees or their customers might well decide not to sell or license at all. The procompetitive benefits of conditional conveyances are noted in "Antitrust Guidelines for the Licensing of Intellectual Property," promulgated jointly by the Department of Justice and the Federal Trade Commission in 1995:

Field-of-use, territorial, and other limitations on intellectual property licenses may serve procompetitive ends by allowing the licensor to exploit its property as efficiently and effectively as possible. These various forms of exclusivity can be used to give a licensee an incentive to invest in the commercialization and distribution of products embodying the licensed intellectual property and to develop additional applications for the licensed property.

U.S. Department of Justice and Federal Trade Commission, Antitrust Guidelines for the Licensing of Intellectual Property § 2.3 (1995).

A departure from well-settled rules that allow patentees, under the patent laws, to limit use and resale in sales contracts and licensing agreements particularly frustrates long-standing practices in many industries, including the pharmaceutical, agricultural, and technology industries. Overturning such a longstanding precedent would have a serious detrimental effect on the many thousands of licenses in place that govern many aspects of business. For decades, IPO and its members have relied on their ability to have lawful restrictions "run with the patent." Such restrictions allow patentees to charge differential prices based on use, which decreases costs; encourages development of new products and technologies; and provides access to users who could not afford to pay for unlimited-use rights. As this Court recognizes, such reliance interests are particularly relevant in deciding whether to depart from precedent because "[a]dherence to precedent promotes stability, predictability, and respect for judicial authority." Hilton v. S. Carolina

Pub. Railways Comm'n, 502 U.S. 197, 202 (1991) see also Kimble v. Marvel Entm't, LLC, 135 S. Ct. 2401, 2410 (2015) (declining to overrule a decision that "has governed licensing agreements for more than half a century" and noting that the decision enjoys a "superpowered form of stare decisis" because it was based on an interpretation of the patent laws and lay "at the intersection of two areas of law: property (patents) and contracts (licensing agreements)" in which "considerations favoring stare decisis are 'at their acme" because "parties are especially likely to rely on such precedents when ordering their affairs.") (quoting Payne v. Tennessee, 501 U.S. 808, 828 (1991)); Quill Corp. v. N. Dakota, 504 U.S. 298, 316 (1992) (industry's reliance justifies adherence to precedent).

Consistent with industry standards and sound economics, for example, Lexmark offered cartridges subject to its no-reuse/no-resale restriction at a discount, and if a purchaser wished to reuse or resell Lexmark's patented cartridges, it was obligated to pay a premium to do so. A rule invalidating Lexmark's restriction for purposes of patent exhaustion, however, eliminates the utility and commercial practicality of this distinction, either increasing the costs of cartridges across the board or decreasing the incentive to innovate and create better cartridges because Lexmark might never recoup the costs of that innovation. And the inefficient effects of such a rule would not be confined to the printer cartridge industry. Patent protection is a key incentive for innovation in numerous fields. Permitting otherwise lawful restrictions on sales and licenses ensures that patentees can recover their costs. And such restrictions allow patent owners to provide access to a variety of buyers and licensees through differential pricing in different markets.

B. Talking Pictures established the enforceability of sales and license provisions that restrict the use of patented items.

This Court's 1938 ruling in *Talking Pictures* provides a solid foundation for the Federal Circuit's ruling in both *Mallinckrodt* and its decision below in this case. As noted in Section C, below, *Talking Pictures* was expressly acknowledged and reaffirmed in this Court's *Quanta* decision.

The patents at issue in *Talking Pictures* covered sound amplifiers and were licensed by the patent owner to multiple licensees, with each one allowed to pursue a specified field-of-use. The license restriction relevant to this Court's decision provided that the licensee was not allowed to sell amplifiers for commercial, as opposed to private, uses. 304 U.S. at 180-82; on reh'g, 305 U.S. at 125-27. The defendant theatre operator, which had purchased its sound system from an entity licensed to sell only for amateur radio applications, argued that the license restriction was not enforceable and that the patent exhaustion doctrine allowed unrestricted use of amplifiers that had been manufactured by a licensee under the patent and sold "in the ordinary channels of trade" for full consideration. *Id*.

This Court held otherwise, ruling that the amplifiers at issue had not been made and sold "under the patent," because the field-of-use restriction limited the scope of the seller's license to do so. *Id.* This Court stated that:

Unquestionably, the owner of a patent may grant licenses to manufacture, use, or sell upon conditions not inconsistent with the scope of the monopoly. There is here no attempt on the part of the patent owner to extend the scope of the monopoly beyond that contemplated by the patent statute.

304 U.S. at 181 (citations omitted). Both the seller and the theater operator were found to infringe the patent, notwithstanding the license agreement:

The [licensee] could not convey to [the theatre operator] what both knew it was not authorized to sell. By knowingly making the sales to [the theatre operator] outside the scope of its license, the [licensee] infringed the patents embodied in the amplifiers. [The theatre operator], having with knowledge of the facts bought at sales constituting infringement, did itself infringe the patents embodied in the amplifiers when it leased them for use as talking picture equipment in theaters.

Id. at 181-82 (citations omitted).⁶

^{6.} Another issue certified by the Court in *Talking Pictures* was the adequacy of a label license restriction as the basis for holding the theatre operator liable for infringement, along with the licensee. There was no dispute that the theatre operator knew of the license restriction and knew that the sale by the licensee was outside the scope of the seller's license. Therefore, this Court declined to decide whether the "license notice" included with each sale of sound equipment would have been adequate, standing alone, to make the customer liable for infringement. "As petitioner at the time it bought the amplifiers knew that the sales constituted infringement of the patents embodied in them, petitioner's second question, as to effect of the license notice, need not be considered." 304 U.S. at 182.

The dissent by Justice Black, *id.* at 183, *et seq.*, on reh'g, 305 U.S. at 128, et seq., would have precluded patent owners from imposing any restrictions at all on the uses to which a licensed article could be put after it was sold. In his view, a strict application of the exhaustion doctrine would have trumped any procompetitive benefits that might result from restrictive licensing. Citing Keeler v. Standard Folding Bed Co., 157 U.S. 659 (1895), Bauer & Cie v. O'Donnell, 229 U.S. 1 (1913), and Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502 (1917), the dissent argued that, even though restrictions on use of patented products were common in patent licenses, such restrictions should not be allowed to support patent infringement claims against products sold by licensees. 305 U.S. at 185-86.

In rejecting this view, the majority in *Talking Pictures* necessarily reaffirmed a foundational principle of patent law – a patent owner is permitted to impose reasonable restrictions on downstream purchasers of its patented products with respect to uses that they are permitted to make. The continued viability of that rule has never been revisited nor seriously questioned by this Court.

C. The *Mallinckrodt* decision and the decision below reflect a straightforward application of *Talking Pictures*.

In *Mallinckrodt*, the Federal Circuit analyzed the exhaustion doctrine in the context of a patented "nebulizer" sold to hospitals and used for allowing patients to inhale a radioactive or therapeutic material for diagnostic or therapeutic purposes. The district court granted summary judgment assuming the following facts:

1) plaintiff Mallinckrodt sold the nebulizer with a "single use only" label restriction attached to the device itself and had included a copy of the notice with packaging materials for the device; 2) the hospital to which the device was sold, despite knowledge that Mallinckrodt intended through its terms of sale to prohibit multiple uses of the device, nevertheless sent used devices to defendant Medipart for sterilization and reloading with the diagnostic material; and 3) like the hospital, Medipart was also aware of the use restriction imposed by Mallinckrodt. 976 F.2d at 701-02.

The district court granted summary judgment for the defendant as to patent infringement, ruling as a matter of law that the patent exhaustion doctrine nullified any effect of the label restriction on the hospital's right to reuse the nebulizer. The district court also entered an injunction against Mallinckrodt's sending of a revised notice.

The Federal Circuit reversed the injunction and remanded for further consideration of the question of patent exhaustion. Relying principally on this Court's decision in *Talking Pictures*, the Federal Circuit held that the exhaustion doctrine could not be applied to defeat infringement without first determining whether Mallinckrodt's efforts to control the reuse of its devices were binding under the patent laws, as a restriction on use similar to the one approved by the Supreme Court:

We conclude that the district court erred in holding that the restriction on reuse was, as a matter of law, unenforceable under the patent law. If the sale of the [nebulizer] was validly conditioned under the applicable law such as the law governing sales and licenses, and if the restriction on reuse was within the scope of the patent grant or otherwise justified, then violation of the restriction may be remedied by action for patent infringement.

976 F.2d at 709. Similarly, in its decision below, the Federal Circuit concluded – "as [it] did in *Mallinckrodt* and subsequent decisions" – that "[a] sale made under a clearly communicated, otherwise-lawful restriction as to post-sale use or resale does not confer on the buyer and a subsequent purchaser the 'authority' to engage in the use or resale that the restriction precludes." 816 F.3d at 735.

The important question is not whether the restriction is imposed in a sales agreement between a patentee and a direct purchaser or indirectly through a license agreement, but whether the restriction itself runs contrary to some legal policy found in patent law, antitrust law, or principles of equity. A restriction on the use or resale by a purchaser of patented products represents an exception to the exhaustion doctrine that is dependent upon proper notice to the restricted purchaser. The ability to satisfy this condition is the same whether imposed directly by the patent owner in a sales agreement or through a license provision. Likewise, the impact on the market for consumption of the patented product is not dependent on whether the restraint is imposed directly by a patent owner or indirectly through a license agreement. To the extent such a provision serves a beneficial or procompetitive purpose and is otherwise lawful, the effect will be similar in both cases.

The *Mallinckrodt* court also observed that drawing a purely formalistic line between restrictions on customers

of the patent owner and customers of its licensees would be pointless, because it could easily be avoided. 976 F.2d at 705. This is clearly the case. For example, a patent owner that might otherwise sell directly to customers and impose use or resale restrictions as a condition of the sale could easily create a separate corporate entity to become a licensee-seller and accomplish the same result by indirection. IPO submits that there is nothing to be gained by engaging in formalistic distinctions of this type and consequent make-work.

D. Talking Pictures was distinguished and reaffirmed in this Court's Quanta decision.

In Quanta, this Court held that unconditional sales of microprocessors and chipsets (chips) by Intel Corporation, a licensee under the LGE patents at issue, had exhausted the relevant LGE patent rights and that LGE therefore had no right to pursue infringement claims against Quanta Computer and other Intel customers that combined the licensed chips with other components to create and sell computers. The LGE-Intel license agreement itself did not limit the customers to which Intel could sell its chips nor did it limit the uses to which Intel's customers could put the products. The license agreement did contain a provision stating that no license was being extended to any of Intel's customers. A separate contract between Intel and LGE required Intel to inform purchasers of its chips that they might need a separate license from LGE to combine Intel chips with non-Intel parts, and insofar as the record shows, Intel complied with that provision. 553 U.S. at 621-24.7

^{7.} The agreement also stated that the doctrine of patent exhaustion was fully applicable. As noted by this Court:

LGE brought infringement suits against Quanta and other Intel customers based on patents covering the combination of Intel's chips with other non-Intel components. The district court granted summary judgment based on the exhaustion doctrine, which the Federal Circuit reversed. The Federal Circuit analyzed the exhaustion question as a one of implied license. Finding no implied license running from LGE to Intel's customers, the court held that there was no exhaustion of LGE's patent rights in light of the language of the license and particularly the side agreement between Intel and LGE. LG Elecs., Inc. v. Bizcom Elecs., Inc., 453 F.3d 1364, 1369-70 (Fed. Cir. 2006). The Federal Circuit relied specifically on its prior ruling in Mallinckrodt and on this Court's decision in Talking Pictures to reach that conclusion.

In reversing, this Court reviewed the history of the exhaustion doctrine and particularly its applicability to the specific situation before the Court in which the licensed chips sold by Intel were not specifically covered by the system patents being asserted against Quanta and others. This Court relied on *United States v. Univis Lens Co.*, 316 U.S. 241 (1942), to hold, first, that the exhaustion doctrine does not depend on the existence of an implied license, but

The License Agreement purports not to alter the usual rules of patent exhaustion, however, providing that, "[n]otwithstanding anything to the contrary contained in this Agreement, the parties agree that nothing herein shall in any way limit or alter the effect of patent exhaustion that would otherwise apply when a party hereto sells any of its Licensed Products."

⁵⁵³ U.S. at 623 (quoting Petitioners' Brief).

operates as a limitation on the patent right itself. 553 U.S. at 626-27. Second, this Court held that exhaustion applies as much to method patents as to apparatus patents. *Id.* at 628-30. Third, this Court held that even though the chips sold by Intel were not expressly covered by the patent claims being asserted against Intel's customers, exhaustion would nevertheless apply because the only use for the chips was to incorporate them into the systems accused of infringement. *Id.* at 630-35.

More directly germane to the issues before the Federal Circuit in this case, LGE cited *Talking Pictures* to argue that its license to Intel, combined with their contemporaneous side contract, imposed limits on the extent to which Intel's customers could use and resell the products sold by Intel. More specifically, LGE argued that incorporation of Intel's chips into computers without a separate license was prohibited by the terms of its license to Intel. *Id.* at 636-37. This Court disagreed, ruling that *Talking Pictures* was inapplicable, because the license agreement was not conditional and allowed Intel to make unrestricted sales of its chips to anyone. This Court explained its conclusion as follows:

LGE overlooks important aspects of the structure of the Intel-LGE transaction. Nothing in the **License Agreement** restricts Intel's right to sell its microprocessors and chipsets to purchasers who intend to combine them with non-Intel parts.... To be sure, LGE did require Intel to give notice to its customers, including Quanta, that LGE had not licensed those customers to practice its patents. But neither party contends that Intel breached the

agreement in that respect. In any event, the provision requiring notice to Quanta appeared only in [a side agreement], and LGE does not suggest that a breach of that agreement would constitute a breach of the License Agreement. Hence, Intel's authority to sell its products embodying the LGE Patents was not conditioned on the notice or on Quanta's decision to abide by LGE's directions in that notice.... [E]xhaustion turns only on Intel's own license to sell products practicing the LGE Patents.

Id. (citation omitted, emphasis supplied).

This Court did not suggest that it was overruling the *Talking Pictures* case or limiting it in any way. Far from it, this Court used it as a yardstick and accepted the continuing viability of *Talking Pictures* as a precedent allowing the imposition of reasonable restrictions on use and resale of patented products by customers with respect to fields-of-use, territories, market segments, and the like when such restrictions are agreed upon in a sales or license agreement.

This Court's decision in *Quanta* does not mention the Federal Circuit's decision in *Mallinckrodt* at all, nor, given the disposition that this Court made of the conditional sales argument by LGE, was there any need for it to do so. Accordingly, there is no basis in the *Quanta* opinion for believing that this Court intended to overrule *Mallinckrodt sub silentio* or that it should do so today by reversing the Federal Circuit's decision below. Thus, the Federal Circuit's decision should be affirmed.

II. This Court's decision in *Kirtsaeng* does not apply to patents and did not overrule *Jazz Photo*.

Separate and apart from the question whether postsale restrictions on a patented article's use or resale are enforceable through a suit for patent infringement, this Court should decide that the copyright exhaustion ruling in *Kirtsaeng* does not apply in patent cases. As a matter of statutory interpretation, policy, and settled precedent, *Kirtsaeng*, which held that the first-sale doctrine applies to copies of a copyrighted work lawfully made abroad, simply does not apply to the sale abroad of goods covered by a U.S. patent.

A. The policies that underlie patent exhaustion differ fundamentally from those defining the first-sale doctrine in copyright law.

For a variety of reasons, patented inventions are less likely than are books, sculpture, paintings, photographs, software, and other objects of copyright protection to trigger the policy considerations relied on in *Kirtsaeng* that require a geographically unlimited exhaustion rule for copyrights. Patent rights, unlike copyrights, do not come into being automatically, but must be granted specifically for each country in which they exist, usually after extensive scrutiny of the putative inventor's innovation by the issuing authority. Patent rights also can vary depending on whether the innovation rises to satisfy

^{8.} As this Court has noted, although public policy, trade policy, and consumer protection "are not unimportant considerations, [] they are [] considerations more properly addressed to Congress than to this Court." *Reiter v. Sonotone Corp.*, 442 U.S. 330, 345 (1979).

patent eligible subject matter, a standard that varies in different countries, and the scope of patent rights may differ with respect to the same invention, so that what is protected in the United States might not be elsewhere. And unlike the rights granted to copyright holders, Congress spoke with a different voice in that the Patent Act specifically grants U.S. patent holders the right to exclude unauthorized imports of patented goods into the United States. See 35 U.S.C. §§ 271(a) ("whoever without authority ... imports into the United States"), 271(g) (same), 295 (same).

Likewise, the settled nature of expectations differs widely between the two forms of protection. One of the reasons cited by this Court for its *Kirtsaeng* ruling was that owners of works protected by copyrights had, for decades, assumed that there were no geographical limits on their rights to use or display those works. 133 S. Ct. at 1366. No comparable showing as to patented articles is apparent from the record here, the statute says otherwise, and in light of the case law discussed in Section D, below, the reverse is more likely the case today.

A departure from *Jazz Photo*'s rule and this Court's patent exhaustion precedents also would be inconsistent with public policy. Refusing to recognize international exhaustion encourages U.S. patent owners to innovate by permitting them to recover their investments in innovation through sales of patented products and services in the U.S.

^{9.} Whereas copyright protection is relatively easy to obtain everywhere, patent protection is easy to obtain in some countries, harder to obtain in other countries, and wholly unavailable for some classes of inventions.

Patentees often supply their patented pharmaceutical, agricultural, and medical products to developing nations at discounts, in part because, under *Jazz Photo*, those products cannot be imported into the United States and resold without the patentees' authorization. Patent owners receive incremental revenue from such foreign sales, presumably at lower rates that the foreign markets can afford, but these sales nevertheless subsidize innovation in the developing world, which in turn stimulates innovation in the U.S. Thus, a rule of non-exhaustion creates a virtuous cycle by "promot[ing] the Progress of Science and useful Arts," U.S. Const. art. I, § 8, cl. 8, and foreign commerce.

If foreign sales necessarily exhaust patents, however, patentees cannot recoup their investments in innovation and will either charge full price for their products in all instances or choose not to offer them in those parts of the world arguably most in need of them. Recognizing international patent exhaustion undercuts the incentive to innovate and market patented articles abroad, stifling foreign commerce and its benefits in both the developed and developing world. Should this Court reverse the Federal Circuit and overrule Jazz Photo, for example, Lexmark may choose either to charge full price for its cartridges, regardless of whether a purchaser intends to reuse or resell them, or not to sell its cartridges abroad. Similarly, a pharmaceutical company, confronted with this momentous change in the law, may either increase the price of its products everywhere or choose to sell them only where it has the benefit of the new, circumscribed patent exhaustion rule. In either case, purchasers in developing countries will either pay more for products they need or be deprived of them altogether.

Importation into the United States of products sold abroad whose patent protection has necessarily been exhausted also undermines patentees' ability to protect the public from health, safety, and quality risks associated with post-sale handling of the products. Recognizing international patent exhaustion absolves foreign buyers of any obligation to maintain the quality of patented products they intend to import into the United States for resale, an absolution that has the potential not only to harm the public, but to unfairly tarnish the reputation of the patentee. A purchaser of Lexmark's cartridges in a foreign country, for example, would have no obligation under patent law to make sure those cartridges worked properly if imported and sold in the United States, should this Court determine that patent exhaustion applies internationally. And although faulty cartridges might not pose as significant a public health risk as, say, faulty pharmaceuticals, their impairment would discredit Lexmark. Thus, applying *Kirtsaeng's* rule to patents is potentially dangerous.

In its brief in support of the Petition, the United States suggests that some of the trade agreements to which the United States is a party indicate that patent owners must expressly condition against exhaustion. See Brief of United States at 18-20. Yet the United States acknowledges that Congress has "enacted laws approving free trade agreements that commit the United States to preserve 'the exclusive right of the patent owner to prevent importation of a patented product' notwithstanding a foreign sale of that product," and that it "has left intact the statutes approving the prior free trade agreements and has not altered U.S. law relating to international exhaustion." Id. at 19 (emphasis supplied). IPO submits

that the second statement is particularly relevant given the recent enactment of the Leahy–Smith America Invents Act (AIA), Pub. L. 112–29, 125 Stat. 284 (2011). Unlike Congress's amendment of the Copyright Act in 1976 – an amendment that underlay this Court's decision in *Kirtsaeng* – Congress undertook an overhaul of the Patent Act in the AIA that notably omitted any change to the law of patent exhaustion.

B. This Court's decision in *Kirtsaeng* relied primarily on a proper statutory construction of section 109 of the Copyright Act.

This Court's ruling in *Kirtsaeng* rests almost entirely on the construction of the phrase "lawfully made under this title" found in section 109(a) of the Copyright Act, 17 U.S.C. § 109(a), a statutory provision added to the Act in 1978 to clarify the reach of the first-sale doctrine with respect to copyrighted works. In *Kirtsaeng*, the copyright owner printed and sold books outside the United States. The first inside page contained, along with notice of the publisher's U.S. copyright, a statement that the books were not authorized for resale in the U.S. Notwithstanding this admonition, Kirtsaeng purchased some of the books in Thailand and resold them in the U.S., thereby precipitating a copyright suit by the publisher. 133 S. Ct. 1351, 1356-57.

In defense of his actions, Kirtsaeng argued that he had lawfully purchased the books from the publisher and that, once sold, section 109 of the Copyright Act extinguished the publisher's right to control resale of the books. The publisher argued that because the sale of a book outside the U.S. was not subject to its U.S. copyright, there could be no exhaustion arising from such sale. *Id*.

Based on a detailed and extensive inquiry into the origins of section 109 and its relationship with other provisions in the Copyright Act, most notably sections 106(3) and 602(a)(1), this Court concluded that section 109 was not subject to the same geographical limitations as the publisher's right to assert infringement of its U.S. copyright. This Court's analysis focused principally on the language of section 109 itself, noting that whether a foreign sale was "lawfully made under" title 17 was the central question, *i.e.*, whether the phrase contemplated only sales in the U.S. or should be construed more broadly. *Id.* at 1357-58.

To discern the meaning of section 109, this Court relied on established principles of statutory construction, finding no congressional intent to limit first sale protection on a geographical basis and raising a number of practical problems – "horribles" as some of the briefings called them – that would come into play if there were such a limitation. *Id.* at 1365-66. Without universal exhaustion arising from the first sale by the copyright owner, this Court envisioned many difficult questions that could arise. *Id.*

C. The *Kirtsaeng* decision does not mention patents or rely on any cases dealing with patent exhaustion.

Importantly, this Court's decision in *Kirtsaeng* does not mention patents, patent policy, or patent law. Nor does the decision rely on any patent exhaustion cases for its rationale. This absence of even a single reference to patents in addressing the copyright exhaustion issue

does not appear to be an oversight. ¹⁰ The decision contains 22 separate citations to this Court's seminal ruling in *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339 (1908), wherein a common law version of the "first-sale doctrine" for copyrighted works was first established. In *Bobbs-Merrill*, a publishing house sued a retailer claiming that sales of a copyrighted book for less than the minimum price printed inside the cover was copyright infringement. To support this restriction on the resale price of its books, the publisher relied on legal precedents that gave patent owners the right to control the price at which a licensee could sell products manufactured under a patent license. Ruling against the publisher, this Court rejected the argument that rules applicable to patents should apply

As the text of the Constitution makes plain, it is Congress that has been assigned the task of defining the scope of the limited monopoly that should be granted to authors or to inventors in order to give the public appropriate access to their work product. Because this task involves a difficult balance between the interests of authors and inventors in the control and exploitation of their writings and discoveries on the one hand, and society's competing interest in the free flow of ideas, information, and commerce on the other hand, our patent and copyright statutes have been amended repeatedly.

^{10.} Cf. Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 439 (1984) (considering contributory infringement, this Court noted that "[t]here is no precedent in the law of copyright for the imposition of vicarious liability on such a theory. The closest analogy is provided by the patent law cases to which it is appropriate to refer because of the historic kinship between patent law and copyright law.") Any kinship however, does not mandate slavish application of copyright principles to patent law. As the Sony Court acknowledged, and the Quanta Court did not refute:

automatically to copyrights, citing "wide differences between the right of multiplying and vending copies of a production protected by the copyright statute and the rights secured to an inventor under the patent statute." *Id.* at 342-46. Given this unambiguous rejection of patent law principles as relevant to copyright exhaustion in the *Bobbs-Merrill* case, it is unlikely indeed that the *Kirtsaeng* Court intended – *sub silentio* – for its decision to be *a fortiori* applicable to patent cases.¹¹

D. Both this Court's and the Federal Circuit's international-exhaustion jurisprudence are well-established and fully applicable to the facts at issue.

The Federal Circuit has held, consistently and explicitly, that exhaustion of U.S. patent rights does not occur as to goods sold by the patent owner in a foreign country. The Federal Circuit considered that question directly in *Jazz Photo*, wherein it stated:

To invoke the protection of the first sale doctrine, the authorized first sale must have occurred under the United States patent. Our [exhaustion] decision applies only to [products] for which the United States patent right has been exhausted by first sale in the

^{11.} See Sony, 464 U.S. at 442 ("We recognize there are substantial differences between the patent and copyright laws."), 491 ("Despite their common constitutional source, see U.S. Const., Art. I, § 8, cl. 8, patent and copyright protections have not developed in a parallel fashion, and this Court in copyright cases in the past has borrowed patent concepts only sparingly." (Blackmun, J., dissenting) (citing Bobbs-Merrill Co. v. Straus, 210 U.S. 339, 345–346 (1908)).

United States. Imported [products] of solely foreign provenance are not immunized from infringement.

264 F.3d at 1105 (citation omitted).

If there were any doubt about the scope of that ruling, it was eliminated in *Fuji Photo Film Co., Ltd. v. Jazz Photo Corp.*, 394 F.3d 1368 (Fed. Cir. 2005), wherein the Federal Circuit stated unequivocally that its reliance in the earlier *Jazz Photo* case on the Supreme Court's 1890 ruling in *Boesch v. Graff*, 133 U.S. 697 (1890), was not limited to situations in which the foreign sale was by someone other than the patent owner:

Jazz . . . does not escape application of the exhaustion principles because Fuji or its licensees authorized the international first sales of these [products]. The patentee's authorization of an international first sale does not affect exhaustion of that patentee's rights in the United States.

394 F.3d at 1376.

Following this Court's decision in *Quanta*, the Federal Circuit reaffirmed those earlier rulings, noting that "neither the facts nor the law in *Quanta Computer* concerned the issue of importation into the United States of a product not made or sold **under a United States patent**." *Ninestar Tech. Co., Ltd. v. Int'l Trade Comm'n*, 667 F.3d 1373, 1378 (Fed. Cir. 2012) (emphasis supplied) (affirming a civil penalty for violation of an ITC cease and desist order by a Chinese infringer) *accord Fujifilm Corp. v. Benun*, 605 F.3d 1366 (Fed. Cir. 2010) (affirming a damage award for unlawful importation).

Further, the bundle of rights specifically set forth in the Patent Act includes the right of the patent owner to exclude imports of the patented invention. See 35 U.S.C. §§ 271(a), 271(g) (imposing liability for, among other things, importing into the U.S. the product of a patented process), 295 (creating a presumption that an imported product is made by a patented process given certain findings). This is a key right granted by Congress to patentees to prevent buyers of products outside of the United States, including those buyers who make purchases from the patentee, from importing those goods into the United States. In fact, a patentee often will license its technology in a defined country or geography to certain licensees with the assurance that those goods will not be imported into the United States since the US patent will not be exhausted. This is similar to the geographical use restrictions within the United States permitted by this Court in the Talking *Pictures.* These types of licenses are procompetitive and allow the licensor to exploit its property as efficiently and effectively as possible in particular countries or geographies.

Nothing in the *Kirtsaeng* opinion states that this Court intended it to upend this well-established precedent. The *Kirtsaeng* opinion neither compels nor suggests that its holding applies to patent law, which would disrupt the long-settled expectation that the sale of products in a foreign country, whether by the patent owner or someone else and whether or not the sale is made pursuant to a foreign counterpart of a United States patent, does not exhaust any United States patent rights. As the Federal Circuit found below, *Kirtsaeng* is thus inapplicable here, and the rule that sales abroad are legally different than sales in the United States, upon which IPO and its members rely, should be affirmed.

CONCLUSION

For the reasons set forth herein, this Court's own precedent in *Talking Pictures* still applies. The Patent Act and the policies behind patent rights dictate patent exhaustion and the ability of patent owners to place restrictions on use and resale of their property. The Copyright Act is inapposite.

Patent rights are limited territorially by the nationality of the issuing agency, and sales outside the U.S. cannot exhaust U.S. patent rights as a matter of law.

IPO urges this Court to affirm the decision below and preserve freedom to contract to the maximum extent possible. That holding will provide the parties to sales and license contracts maximum flexibility to arrive at commercially feasible and procompetitive arrangements.

Respectfully submitted,

KEVIN H. RHODES

President

STEVEN W. MILLER

Chair Amicus Brief Committee

INTELLECTUAL PROPERTY

OWNERS ASSOCIATION
1501 M Street, NW, Suite 1150

Washington, DC 20005
(202) 507-4500

ROBERT M. ISACKSON

Counsel of Record

WILLIAM D. COSTON

JOSHUA C. CUMBY

VENABLE LLP

575 Seventh Street, NW

Washington, DC 20004

(202) 344-4000

rmisackson@venable.com

Counsel for Amicus Curiae

February 22, 2017



APPENDIX¹

Members of the Board of Directors Intellectual Property Owners Association

Scott Barker Scott M. Frank Micron Technology, Inc. AT&T

Edward Blocker Darryl P. Frickey
Koninklijke Philips N.V. Dow Chemical Co.

Amelia Buharin Creighton Frommer
Intellectual Ventures, RELX Group
LLC

Gary C. Ganzi
Karen Cochran Evoqua Water
Shell International B.V. Technologies LLC

John D. Conway Krish Gupta Sanofi Dell Technologies

William J. Coughlin Henry Hadad
Ford Global Technologies Bristol-Myers Squibb Co.

LLC Heath Hoglund
Buckmaster de Wolf Dolby Laboratories

General Electric Co.

Anthony DiBartolomeo

Philip S. Johnson

Johnson & Johnson

SAP SE

Louis Foreman
Enventys

Thomas R. Kingsbury
Bridgestone Americas,
Inc.

^{1.} IPO procedures require approval of positions in briefs by a two-thirds majority of directors present and voting.

Appendix

William Krovatin Merck & Co Inc.

Mark Lauroesch Intellectual Property Owners Association

Peter Y. Lee
Thermo Fisher Scientific
Inc.

Elizabeth Ann Lester Equifax Inc.

Allen Lo Google Inc.

Timothy Loomis Qualcomm, Inc.

Thomas P. McBride Monsanto Co.

Elizabeth McCarthy Avaya

Todd Messal Boston Scientific Corp.

Steven W. Miller Procter & Gamble Co.

Micky Minhas Microsoft Corp.

Lorie Ann Morgan Gilead Sciences, Inc. Theodore Naccarella InterDigital Holdings, Inc.

Douglas K. Norman Eli Lilly and Co.

Richard F. Phillips Exxon Mobil Corp.

Dana Rao Adobe Systems Inc.

Kevin Rhodes
3M Innovative Properties
Co.

Curtis Rose Hewlett Packard Enterprise

Paik Saber Medtronic, Inc.

Matthew Sarboraria Oracle Corporation

Manny W. Schecter IBM Corp.

Steven J. Shapiro Pitney Bowes Inc.

Jessica M. Sinnott DuPont

Dennis C. Skarvan Caterpillar Inc.

Appendix

Daniel Staudt Siemens

Brian Suffredini United Technologies Corp.

James J. Trussell BP America, Inc.

Roy F. Waldron Pfizer Inc.

BJ Watrous Apple Inc.

Stuart Watt Amgen, Inc.

Mike Young Roche, Inc.