

UC Irvine
UC Irvine Law Review

Title

Exhaustion Cannot Stifle Innovation: A Limitation on the “First Sale” Doctrine

Permalink

<https://escholarship.org/uc/item/2g12197t>

Journal

UC Irvine Law Review , 5(5)

ISSN

2327-4514

Author

Roth, Joseph L.

Publication Date

2015-12-01

Exhaustion Cannot Stifle Innovation: A Limitation on the “First Sale” Doctrine

Joseph L. Roth*

The Constitution encourages innovation. The Intellectual Property Clause empowers Congress to promote science by granting exclusive rights to patent owners. Everyone benefits, at least in theory, from such an arrangement. The public benefits because inventors have an incentive to create new technologies that the public then acquires once the patent term expires. Inventors benefit during the patent term by excluding the public from (or more likely, selling and leasing the rights to) their inventions. Early on, however, the Supreme Court set an important limitation on the right to exclude. The Court recognized that purchasers have a property interest in the articles they purchase, even if patented. The Court determined that this property interest divests the patent owner’s interest in those articles. This limitation—known as the “first sale” doctrine—strives to strike a balance between the rights of patent and personal property owners. Essentially, purchasers obtain full rights to their purchased articles while the patent owner retains control over unsold articles. But patent owners have long attempted to circumvent the first-sale doctrine. One technique involves selling patented articles with express “use restrictions” that purport to limit the ways that a purchaser may legally use the article. Scholars have debated whether use restrictions are enforceable. Most believe that the Supreme Court’s jurisprudence prohibits such restrictions. Others—including the Federal Circuit—have held such restrictions to be permissible. This Note explains that the question is not so black and white. Rather, courts must look ad hoc at the purpose behind the restriction. If the restriction simply helps the patent owner to compete in the market, then the restriction is unenforceable. But if the restriction is intertwined with the invention—in other words, if the nature of the invention warrants the restriction—then the restriction is enforceable. Otherwise, the patent owner would not have the

* J.D., University of California, Irvine School of Law. Many thanks to Professor Dan Burk for his invaluable support throughout the drafting of this Note. Further thanks to Professors Shauhin Taleh, Ezra Ross, and Christopher Leslie for their constant mentorship throughout my law school career. Finally, I reserve the greatest thanks for my wife, Katherine, whose unyielding support allowed me to reach this milestone and many others.

incentive to create the invention in the first place. The “first sale” doctrine cannot stifle innovation.

Introduction	1233
I. Overview of the First-Sale Doctrine	1239
A. Early Beginnings	1239
1. <i>Bloomer v. McQueenan</i>	1240
2. <i>Adams v. Burke</i>	1241
B. The Rise of the Conditional-Sale Theory—and the Logic Behind It	1243
1. Origins of the Conditional-Sale Theory— <i>Mitchell v. Hawley</i>	1244
2. The Zenith— <i>Henry v. A.B. Dick</i>	1246
II. The Arrival of the Single-Royalty Theory	1248
A. The Demise of the Conditional-Sale Theory	1248
1. Chipping Away— <i>Bauer & Cie v. O'Donnell</i>	1250
2. <i>A.B. Dick's</i> Downfall—Motion Picture Patents	1250
B. The Single-Royalty Theory—the Purchase Price Is the Entire Reward	1252
1. Rights	1253
2. Efficiency	1254
3. The Power of the Court	1255
C. A Modern Application— <i>Quanta v. LGE</i>	1256
III. The Single-Royalty Theory Cannot Stifle Innovation	1258
A. The Single-Royalty Theory Must Yield Under Proper Circumstances	1259
1. Determining the Proper Reward Requires an <i>Ad Hoc</i> Analysis	1259
2. The Purchase Price Encourages Innovation in Most Cases	1260
3. The Nature of the Invention May Warrant Use Restrictions	1260
a. Use Restrictions that Protect the Public	1261
b. Use Restrictions that Prevent Destruction of the Patent ..	1262
c. The Court Will Scrutinize the Patent Owner's Intentions	1264
B. An Exception—Restrictions on Licensees	1264
1. The “Reward” Drives Both Lines of Cases	1264
2. Restrictions on Licensees Must Be Justified	1265
C. The Federal Circuit's Jurisprudence	1267
1. <i>Mallinckrodt's</i> Reasoning Is Not Supported by Law	1268
2. <i>Mallinckrodt's</i> Holding Was Correct—It Protected Public Safety	1270
Conclusion	1271

INTRODUCTION

Imagine that a patent owner, Amy, has a patent on a novel type of bicycle. Amy makes and sells such bicycles to customers for \$300 each. But because each bicycle lasts many years, Amy has struggled to maintain a steady customer flow. To increase business, Amy decides to only sell bicycles to customers who agree to dispose of the bicycle after one year. Customers now must buy a new bicycle each year. As an incentive, Amy drops the sale price to \$200.

In this case, Amy has attempted to place a “use restriction”—i.e., an enforceable condition¹—on the bicycle. In theory, Amy would be happy to raise the price and eliminate the restriction. She knows that customers would prefer to purchase bicycles without restrictions, and if she had enough customers, she would not need the restriction. But she simply does not have enough customers. In other words, the market controls whether the restriction exists.

Now instead, consider Thomas, the owner of a patent on 3-D glasses. Thomas plans to sell the 3-D glasses to movie theaters. But, during the testing phase, some moviegoers develop vicious eye infections. Thomas determines the 3-D glasses—which become contaminated after an initial use—are causing these infections. He decides to sell the glasses only to theaters that agree to dispose of the glasses after a single use.²

Like Amy, Thomas has also placed a use restriction on the patented article. However, unlike Amy’s bicycle sales, the *nature* of the 3-D glasses—rather than the market—controls.³ Thomas’ restriction protects the public health. Unlike Amy,

1. See Thomas Arno, Comment, *Use Restrictions and the Retention of Property Interests in Chattels Through Intellectual Property Rights*, 31 SAN DIEGO L. REV. 279, 282 (1994) (“The term ‘use restriction’ refers to an enforceable obligation on the part of an owner of an item to use it in a particular way.”). Although a use restriction may be placed in a contract, see Vincent Chiappetta, *Patent Exhaustion: What’s It Good for?*, 51 SANTA CLARA L. REV. 1087, 1118 (2011), simply providing purchasers with notice is sufficient, *Henry v. A.B. Dick Co.*, 224 U.S. 1, 26 (1912), *overruled in part by Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502 (1917). In most cases, the patent owner affixes a label—called a “notice”—to the sold items, informing purchasers of the restriction. Arno, *supra*, at 283 n.21. Such notice eliminates the possibility that innocent purchasers will be liable for patent infringement. See *infra* notes 143–44 and accompanying text.

2. This example is based on *Marks v. Polaroid Corp.*, 237 F.2d 428 (1st Cir. 1956). Polaroid owned patents on a type of polarizer and sold 3-D glasses that practiced those patents. *Id.* at 429, 436. To prevent eye infections, Polaroid prohibited reuse of the glasses. *Id.* The First Circuit held the District Court did not abuse its discretion in enforcing the prohibition. *Id.* at 437. As discussed in Section III.A.3.a, *infra*, this use restriction is enforceable.

3. Of course, in reality, the patent owner may have monetary incentives as well. The single-use restriction on the 3-D glasses would allow the patent owner to sell more glasses. The mere potential for market expansion, however, is not dispositive. The Supreme Court has made clear it will look to the “substance and realities of the transaction” to determine whether a condition was intended to “secur[e] . . . that exclusive right . . . which is granted through the patent law, or whether, under color of such a purpose, it is . . . an effort to profitably extend the scope of its patent.” *Straus v. Victor Talking Mach. Co.*, 243 U.S. 490, 497–98 (1917). In *Marks*, the District Court noted the use restriction “guaranteed an expansion of Polaroid’s business,” but found that Polaroid had properly raised “countervailing public policy considerations.” *Marks*, 237 F.2d at 436–37.

Thomas cannot justify removing the restriction simply by raising the purchase price.⁴

Finally, consider a patent on genetically modified soybeans. Frank, the patent owner, sells to farmers, who use the beans to grow herbicide-resistant crops. The crops themselves yield more soybeans, but Frank prohibits farmers from planting any second-generation beans. He contends that without the restriction, the patent would become worthless after a single sale: no farmer would purchase soybeans if she could just grow the beans instead.⁵

The market undoubtedly influences this use restriction⁶ (Frank wants customers to continue to buy soybeans). But unlike Amy's bicycle sales, here, a single sale would destroy Frank's ability to make *any* future sales. Farmers could just grow the beans themselves. In other words, the *nature* of the invention—rather than the market—justifies the restriction.

Overall, the market controls the restriction in the first example; the nature of the invention controls in the latter examples. In each case, if a purchaser disregards the use restriction, can the patent owner sue for patent infringement?⁷ As discussed below, the first restriction is unenforceable, but the latter two should be enforced.

This answer turns on the scope of the patent “first sale” doctrine.⁸ Under the doctrine, the first authorized sale of a patented article “exhausts”—or eliminates—the patent owner's right to control the use of that particular article.⁹ The patent owner, through the first sale, has received her full “reward” as to that article, and

4. There are multiple reasons why a patent owner would care about the public health (aside from basic morality). The owner needs to protect its brand name and also shield itself against potential infringement suits. In *Marks*, Polaroid acknowledged that it feared liability. *Id.* at 436.

5. This example is taken from the facts of *Bowman v. Monsanto Co.*, 133 S. Ct. 1761 (2013).

6. In the actual *Bowman* case, the Court determined that petitioner Bowman had improperly *made*, rather than *used*, the patented invention. *Id.* at 1766. The first-sale doctrine only enables a purchaser to use or sell the purchased articles; the purchaser may not construct a new invention. *Id.* The Court, by ruling that Bowman had not *used* the invention improperly, thus avoided the question of whether the use restriction would have been enforceable. However, it would not be difficult to imagine that, in the future, a similar set of facts will arise where the purchaser has used, rather than made, the invention. In that scenario, the Court will be faced with the very question it managed to avoid in *Bowman*.

7. It appears possible that, regardless, the patent owner could always sue for breach of contract. *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 637 n.7 (2008) (stating the Court “express[es] no opinion on whether contract damages might be available” for use restriction violations). This question is beyond the scope of this Note. It is clear, however, that a contract suit is generally not an adequate substitute for a patent infringement suit. An infringement suit allows for treble damages and attorney's fees, and is more likely to warrant injunctive relief. Erin Julia Daida Austin, Note, *Reconciling the Patent Exhaustion and Conditional Sale Doctrines in Light of Quanta Computer v. LG Electronics*, 30 CARDOZO L. REV. 2947, 2950–51 (2009). Further, a breach of contract suit requires privity of contract, and is subject to heightened antitrust scrutiny. *Id.* at 2949, 2951.

8. The “first sale” doctrine is also called the “exhaustion” doctrine. *Static Control Components, Inc. v. Lexmark Int'l, Inc.*, 615 F. Supp. 2d 575, 578 (E.D. Ky. 2009). Scholars have noted, however, that the term “exhaustion” is technically incorrect, as it implies that the patent right is used up, while in reality, the patent owner only loses the ability to control the specific articles sold. Chiappetta, *supra* note 1, at 1087 n.2. I prefer to use the term “first sale,” although I occasionally use the term “exhaustion” where more grammatically appropriate.

9. *Quanta*, 553 U.S. at 625.

should not be allowed to “double dip” by receiving further post-sale compensation.¹⁰

But may a patent owner sell the patented article with express use restrictions? The Federal Circuit in *Mallinckrodt v. Medipart* found such restrictions enforceable.¹¹ The court held that—because such restrictions are *freely bargained for*—the restrictions are permissible so long as they appropriately represent the patent owner’s reward.¹² For example, Amy the bicycle owner could sell bicycles for \$300, but due to the restriction, had to drop the price to \$200, presumably to prevent consumers from buying restrictionless bicycles elsewhere. In such a case, *Mallinckrodt* would say that Amy is not “double dipping,” but rather is simply receiving a single, bargained-for reward. Under this “conditional sale” theory,¹³ the restrictions in all three examples above are enforceable.

The Supreme Court may have felt differently. In *Quanta Computer v. LG Electronics*,¹⁴ the Supreme Court threw doubt on the continued viability of *Mallinckrodt* and has caused scholars¹⁵ and courts¹⁶ alike to hold that *Quanta* has overruled *Mallinckrodt* implicitly.¹⁷ The Court stated broadly that an “initial

10. Eric J. Rogers, *The Inexhaustible Right to Exclude Reproduction Doctrine*, 14 COLUM. SCI. & TECH. L. REV. 389, 443 (2013) (explaining that the first-sale doctrine serves to prevent “double-dipping”); see also *Adams v. Burke*, 84 U.S. (17 Wall.) 453, 456 (1873).

11. *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 709 (Fed. Cir. 1992).

12. *Id.* at 704–05, 708 (stating that “private parties retain the freedom to contract concerning conditions of sale,” so long as the conditions are “reasonably within the reward which the patentee . . . is entitled to secure” (citation omitted)). *Mallinckrodt* interprets a restriction to be within the patent owner’s reward so long as the “subject matter [is] within the scope of the patent claims.” *Id.* at 708. As discussed in Section III.C, *infra*, it is this interpretation—rather than the overall holding—of *Mallinckrodt* that is misguided.

13. Austin, *supra* note 7, at 2948. Some scholars refer to this theory as the “*Mallinckrodt* doctrine.” Rogers, *supra* note 10, at 409.

14. *Quanta*, 553 U.S. 617.

15. E.g., Daryl Lim, *Self-Replicating Technologies and the Challenge for the Patent and Antitrust Laws*, 32 CARDOZO ARTS & ENT. L.J. 131, 200 (2013) (“The correct view seems to be that a post-sale condition cannot continue to haunt subsequent purchases . . .”); Alfred C. Server & William J. Casey, *Contract-Based Post-Sale Restrictions on Patented Products Following Quanta*, 64 HASTINGS L.J. 561, 597 (2013) (“Based on a review of . . . *Quanta*, we conclude[] that *Mallinckrodt* has been overruled.”).

16. E.g., *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) (“*Mallinckrodt* was overruled by *Quanta* sub silentio.”), *reh’g granted* *Lexmark Int’l, Inc. v. Impression Prods., Inc.*, 785 F.3d 565 (Fed. Cir. 2015); *Static Control Components, Inc. v. Lexmark Int’l, Inc.*, 615 F. Supp. 2d 575, 578 (E.D. Ky. 2009) (“After reviewing *Quanta*, *Mallinckrodt*, and the parties’ arguments, this Court is persuaded that *Quanta* overruled *Mallinckrodt* sub silentio.”).

17. The *Quanta* opinion made no mention of *Mallinckrodt*. See generally *Quanta*, 553 U.S. 617. This silence makes it unclear just what the Justices thought about *Mallinckrodt*. Some scholars say it doesn’t matter. They argue that *Quanta* is wholly irreconcilable with *Mallinckrodt*. See *supra* note 15. They also note, correctly, that in a separate part of the opinion, *Quanta* implicitly overruled part of *Bandag v. Al Bolser’s Tire Stores*, another Federal Circuit case. Harold C. Wegner, *Post-Quanta, Post-Sale Patentee Controls*, 7 J. MARSHALL REV. INTELL. PROP. L. 682, 687 (2008). The argument is that, clearly, the *Quanta* Justices were more than happy to quietly overrule cases that day. This Note contends, however, that the Court’s silence evidenced its intention to leave part of *Mallinckrodt* untouched. See *infra* Section III.C.2. On April 14, 2015, the Federal Circuit announced it would go en banc to determine whether to overrule *Mallinckrodt* in light of *Quanta*. *Lexmark*, 785 F.3d 565. As this Note goes to press, the en banc decision

authorized sale of a patented item terminates all patent rights to that item”¹⁸ and declined to enforce a freely bargained-for use restriction.¹⁹ The *Quanta* decision gave support to the “single royalty” theory: the idea that the initial purchase price is the entire reward.²⁰ Under the single-royalty theory, all three restrictions above are unenforceable.

But the single-royalty theory has problems. First, why didn’t *Quanta* expressly overrule *Mallinckrodt*?²¹ In fact, as discussed below, the Supreme Court, throughout much of its jurisprudence, appears to decide patent exhaustion cases narrowly on the facts.²² Why does the Court not provide a bright-line rule, stating that patent owners cannot use conditions to circumvent exhaustion?

Second, if the “single-royalty” theory were the bright-line rule, patent owners could simply circumvent that rule. As discussed below, longstanding precedent provides that a patent owner may *license* a patented article with restrictions.²³ In other words, if a licensee sells the article in violation of those restrictions, the patent owner may sue the purchaser for patent infringement.²⁴ The problem is that a patent owner

is still forthcoming. As this Note explains, *Mallinckrodt*’s reasoning conflicts with Supreme Court jurisprudence stretching back to the early twentieth century. *See infra* Section III.C.1. Thus, if the Supreme Court were considering the issue, most of *Mallinckrodt* should be overruled. However, the Court’s opinion in *Quanta*, as explained below, is consistent with *Mallinckrodt*. *See infra* Section III.C.2. Here, the issue before the Federal Circuit is whether it should overrule *Mallinckrodt* “in light of *Quanta*.” *Lexmark*, 785 F.3d at 566. In other words, if the Federal Circuit is to overrule *Mallinckrodt*, then *Quanta* should have added something to the Supreme Court’s jurisprudence that warrants that result. This is something *Quanta* does not do. For this reason, the Federal Circuit should not overrule *Mallinckrodt*. For this Note’s purposes, regardless of whether the Federal Circuit overrules *Mallinckrodt*, the Supreme Court’s jurisprudence will remain the same—use restrictions are unenforceable unless necessary to foster innovation. *See infra* Section III.

18. *Quanta*, 553 U.S. at 625.

19. *Id.* at 638; *see also* F. Scott Kieff, *Quanta v. LG Electronics: Frustrating Patent Deals by Taking Contracting Options off the Table?*, 2007–08 CATO SUP. CT. REV. 315, 316 (2008) (“[*Quanta* involved] a sophisticated seller and a sophisticated buyer, with subsequent downstream sales from the initial buyer to additional sophisticated buyers (where all relevant parties well understood the express terms of the relevant contract).”).

20. *See* Chiappetta, *supra* note 1, at 1123.

21. Robert W. Gomulkiewicz, *The Federal Circuit’s Licensing Law Jurisprudence: Its Nature and Influence*, 84 WASH. L. REV. 199, 236 (2009) (“Notably, the Supreme Court did not overrule *Mallinckrodt* even though it was strongly urged to do so by the U.S. Solicitor General and others.”). Professor Gomulkiewicz finds that “[i]nstead, by [this] approach, the *Quanta Computer* decision quietly affirmed *Mallinckrodt* and its progeny.” *Id.* at 237.

22. *See, e.g.*, Chiappetta, *supra* note 1, at 1101, 1104 (explaining that the Court’s analysis has frequently “go[ne] beyond that required if exhaustion prevented all patent enforcement of post-sale restrictions”); Gomulkiewicz, *supra* note 21, at 237 (explaining that *Quanta* could be read as turning narrowly on the facts).

23. *See infra* Section III.B. As explained below, this Note contends that the law regarding licensee restrictions and purchaser restrictions are actually two sides of the same coin. *See infra* Section III.B.1. The same rule applies to both: such restrictions are permissible only to the extent necessary to encourage innovation. *See infra* Section III.B.1. Patent owners will not be able to circumvent the first-sale doctrine simply by using licensee restrictions.

24. *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 304 U.S. 175, 181, 183 (1938). As noted below, the purchaser must have notice of the licensee’s restriction. *Id.* at 180–81; *see also infra* notes 143–44 and accompanying text.

seeking to restrict a purchaser could use a licensee as a “middleman.” For example, say Amy the bicycle owner hires Bob the bicycle maker to make and sell Amy’s bicycles. Amy tells Bob, “By the way, you don’t have the authority to sell bicycles to people who want to use the bicycles for over a year.”²⁵ Bob is a licensee; therefore, under the bright-line rule, a purchaser who uses such a bicycle for over a year would be a patent infringer.²⁶ It seems unlikely that the Court would create a rule that hinges on whether or not the transaction involves a licensee.

Third, and most importantly, what would happen if application of the single-royalty theory would hinder innovation? The Constitution empowers Congress to “promote the . . . useful Arts,”²⁷ and the Court has made clear that the patent owner’s “reward” is *the sole means* of promoting such innovation.²⁸ What if a scenario arises where the “reward” cannot be obtained through a single royalty? The Court would then be at a quandary: How could the Court promote innovation but also adhere to the single-royalty theory?²⁹

This Note first argues that the single-royalty theory—and not the conditional-sale theory—controls most cases. A patent owner has control of the purchase price; she should increase that price to a level adequate to receive her reward. She cannot rely on use restrictions. If her invention is important, her reward will be great; if not, her reward will be smaller. Under this analysis, the initial bicycle restriction discussed above is unenforceable.

This Note contends, however, that if, due to the nature of the invention, the patent owner cannot eliminate the need for the use restrictions *through raising the purchase price*—then, and only then, does the conditional-sale theory apply. As the 3-D glasses and soybean examples demonstrate, in some cases use restrictions may be necessary to protect the public health or a patent’s vitality. These goals cannot be met simply by increasing the purchase price. If such conditions were unenforceable, then inventors would be unlikely to invest in their inventions, and innovation would be stifled. The 3-D glasses and soybean restrictions, therefore, are enforceable.

25. This example is similar to the facts of *Mitchell v. Hawley*. *Mitchell v. Hawley*, 83 U.S. (16 Wall.) 544 (1872). In *Mitchell*, the patent owner prohibited his licensee from selling patented article for use after a certain date. *Id.* at 545. The licensee sold an article in violation of the restriction, and the Court found that the purchaser’s use after the applicable date constituted patent infringement. *Id.* at 546. Other commentators have also recognized a patent owner’s potential ability to circumvent the first-sale doctrine in this manner. See Austin, *supra* note 7, at 2972–73.

26. See *supra* note 24 and accompanying text.

27. U.S. CONST. art. I, § 8, cl. 8. I generally refer to this process of promoting the useful arts as “fostering innovation.”

28. See *United States v. Masonite Corp.*, 316 U.S. 265, 278 (1942).

29. To understand this dilemma, we must define the patent owner’s “reward.” Many patent scholars agree that the reward is the *minimum incentive* required to promote innovation. See Harry First, *Controlling the Intellectual Property Grab: Protect Innovation, Not Innovators*, 38 RUTGERS L.J. 365, 376 (2007). The Court has said that the size of the incentive will depend on the importance of the invention. *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 513 (1917). This incentive, however, will clearly vary depending on the specific facts at issue. The Court, therefore, must carefully review the facts and must ensure that innovation is always fostered. For a more detailed discussion, see Section III.A.1, *infra*.

This contention justifies the Court's hesitancy to establish a bright-line rule. In fact, a bright-line rule would be contrary to the Court's jurisprudence. The Court has stated that with regard to first-sale cases, it will rule *ad hoc*—no further than it must.³⁰ The Court has also required that the patent owner receive “all the consideration” for the article's use,³¹ and has declared that the Patent Act must “be fairly or even liberally construed.”³² Moreover, the Court has expressly stated: “The test has been whether . . . it may fairly be said that the patentee has received his reward for the use of the article”³³—an *ad hoc* consideration.

This contention also explains why the Court treats restrictions on purchasers and licensees differently. For purchasers, only rarely—as seen in the 3-D glasses and soybean examples—is a use restriction necessary to secure an adequate reward. But for licensees, for a variety of reasons, a broader range of restrictions is necessary.³⁴ Nevertheless, a patent owner must still justify a restriction on a licensee; i.e., a court will inquire as to whether the patent owner truly needs the restriction.³⁵ In other words, Amy the bicycle owner cannot restrict Bob the bicycle maker's sales unless she has a valid reason for doing so. She cannot use the licensee/purchaser distinction to circumvent the first-sale doctrine.

Section I discusses the origins and purposes of the first-sale doctrine. Section I also depicts the rise of, and the rationale behind, the conditional-sale theory in the early twentieth century. Section II discusses the subsequent demise of the conditional-sale theory and the rise of the single-royalty theory. This Section makes clear that—even prior to *Quanta—Mallinckrodt's* reasoning conflicted with Supreme Court precedent. Section III demonstrates that the Court has not completely closed the door on the conditional-sale theory. Rather, the patent owner must always receive a reward necessary to foster innovation. Thus, if a patent owner demonstrates that the initial purchase price cannot serve as an adequate reward, then a court must uphold a necessary use restriction.

30. *Adams v. Burke*, 84 U.S. (17 Wall.) 453, 455 (1873) (stating the Court must “decide in each case no more than what is directly in issue”); *see also* *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1769 (2013) (“Our holding today is limited—addressing the situation before us . . .”).

31. *See, e.g., Adams*, 84 U.S. (17 Wall.) at 456 (emphasis added); *General Talking Pictures Corp. v. W. Elec. Co.*, 305 U.S. 175, 177 (1938) (“full consideration”).

32. *Bauer & Cie v. O'Donnell*, 229 U.S. 1, 10 (1913). Strict application of the royalty theory would not be a liberal construction of the Patent Act. The *ad hoc* analysis proposed here ensures that patent owners receive a full reward, but also stay within the limits intended by Congress.

33. *Masonite*, 316 U.S. at 278.

34. *See infra* Section III.B. This same logic also explains why the first-sale doctrine does not permit a purchaser to “make” a new copy of a patented article. If a purchaser could make more copies of the invention, then the patent owner would have great trouble excluding others from that invention. *Bowman*, 133 S. Ct. at 1766. In other words, the patent owner would not have received an adequate reward sufficient to foster innovation. *See id.* (“[T]he purpose of the patent law is fulfilled . . . when the patentee has received his reward . . .” (alteration in original) (citation omitted)).

35. *See infra* Section III.B.

I. OVERVIEW OF THE FIRST-SALE DOCTRINE

A. Early Beginnings

The Patent Clause of the U.S. Constitution empowers Congress “[t]o promote the . . . useful Arts,” by providing inventors with “the exclusive Right” to their discoveries for a limited time period.³⁶ In 1790, Congress passed the first patent statute, which became one of the nation’s very first laws.³⁷ Aside from some early procedural changes, the basic structure of the American patent system has been constant throughout history.³⁸

From the very beginning, the right to exclude others³⁹ has been a core feature of patent law.⁴⁰ This exclusive right encourages inventors to invest in the research and development of their inventions.⁴¹ Presently, the statute empowers the patent owner to prevent others from making, using, selling, offering to sell, or importing a patented invention.⁴² The patent owner may sue infringers⁴³ and may receive damages or an injunction to remedy the infringing conduct.⁴⁴

The “first sale” doctrine provides a complete defense to patent infringement.⁴⁵ Under the first-sale doctrine, the first authorized sale of a patented article terminates the patent owner’s exclusive right to “use” or to “sell” the article sold.⁴⁶ As a result, the purchaser may use, sell, or dispose of the article as he pleases, without fear of infringement.⁴⁷ To this day, the doctrine is entirely judge-made—there is not, and never has been, a first-sale patent statute.⁴⁸

36. U.S. CONST. art. I, § 8, cl. 8.

37. DAN L. BURK & MARK A. LEMLEY, *THE PATENT CRISIS AND HOW THE COURTS CAN SOLVE IT* 21 (2009).

38. *Id.*; see also Dan L. Burk & Mark A. Lemley, *Is Patent Law Technology-Specific?*, 17 *BERKELEY TECH. L.J.* 1155, 1159 (2002) (“While the nature of the patent system went through some rather dramatic changes in the first fifty years of the Republic . . . by 1836 the essential features of modern patent law were in place. Despite periodic revisions . . . the basic structure of the patent system has remained unchanged for 165 years.” (footnote omitted)).

39. The Supreme Court has referred to patent owners’ rights as “the exclusive right to make and use their patented inventions.” *Mitchell v. Hawley*, 83 U.S. (16 Wall.) 544, 546 (1872). But the term “exclusive right” is a bit misleading. The reality is that a patent “confers no affirmative right,” but rather, “confer[s] only the right to exclude others.” BURK & LEMLEY, *supra* note 37, at 16; see also 35 U.S.C. § 154(a)(1) (2012) (“the right to exclude others”).

40. See BURK & LEMLEY, *supra* note 37, at 37.

41. *United States v. Masonite Corp.*, 316 U.S. 265, 278 (1942); BURK & LEMLEY, *supra* note 37, at 37 (“There is virtually unanimous agreement that the purpose of the patent system is to promote innovation by granting exclusive rights to encourage invention.”).

42. 35 U.S.C. § 154(a)(1).

43. *Id.* § 281.

44. *Id.* §§ 283–284.

45. *ExcelStor Tech., Inc. v. Papst Licensing GMBH & Co. KG*, 541 F.3d 1373, 1376 (Fed. Cir. 2008).

46. *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1766 (2013). Importantly, however, the doctrine does not exhaust the patent owner’s right to prevent others from “making” the item. *Id.*

47. See *id.*

48. Chiappetta, *supra* note 1, at 1088 n.3. Interestingly, Congress has codified the first-sale doctrine in the copyright context. 17 U.S.C. § 109(a) (2012). A discussion of why Congress has codified

1. *Bloomer v. McQuewan*

Courts and scholars⁴⁹ generally trace the first-sale doctrine to the mid-nineteenth-century case of *Bloomer v. McQuewan*.⁵⁰ The Court's rationale in *Bloomer* lies at the core of the modern first-sale doctrine.⁵¹ Quite simply, because a purchaser has a right to use his purchased articles, the Court will limit the patent owner's ability to control the purchaser's post-sale use.⁵²

In *Bloomer*, petitioner Bloomer, a successor in interest to the famous Woodworth planing machine patent,⁵³ sued to enjoin McQuewan, a licensee, as well as other licensees, from using the planing machines during the seven-year patent extension provided by Congress in 1845.⁵⁴ McQuewan had purchased the right to make and use a limited number of planing machines,⁵⁵ but Bloomer argued that such rights did not extend to the 1845 patent extension.⁵⁶

The Court ruled for McQuewan.⁵⁷ The Court held that "when the machine passes to the hands of the purchaser, it is no longer within the limits of the [patent] monopoly."⁵⁸ The machine "becomes [the purchaser's] private, individual

the doctrine for copyright law, but not patent law, is beyond the scope of this Note. It will suffice to say that the Copyright Act has a unique legislative history and that copyright "must address the significant free speech issues" not present in the patent context. *See* Chiappetta, *supra* note 1, at 1087 n.1 (citation omitted).

49. *See* *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 625 (2008) (citing *Bloomer*); Server & Casey, *supra* note 15, at 564 ("*Bloomer v. McQuewan* is generally acknowledged as the Court's first application of the patent exhaustion doctrine" (footnote omitted)).

50. *Bloomer v. McQuewan*, 55 U.S. (14 How.) 539 (1852). Professor Mark Janis has rightfully noted, however, that "glimmers of the exhaustion doctrine can be detected" in the earlier case of *Wilson v. Rousseau*. Mark D. Janis, *A Tale of the Apocryphal Axe: Repair, Reconstruction, and the Implied License in Intellectual Property Law*, 58 MD. L. REV. 423, 432 (1999). *Rousseau* involved whether licensees could use the patent during the patent extension of 1836. *Wilson v. Rousseau*, 45 U.S. (4 How.) 646, 669 (1846). The Court held they could, *id.* at 684, as the statutory language provided the extension "shall extend to assignees and grantees . . . to use the thing patented," *id.* at 677 (emphasis omitted). But the Court's reasoning lies at the core of the first-sale doctrine: "[I]f the construction [were otherwise] . . . the common use [would be] arrested . . . [a result] never contemplated by Congress." *Id.* at 684; *see also* Janis, *supra*, at 433.

51. *See* *Quanta*, 553 U.S. at 625 (finding modern support for the doctrine in *Bloomer*).

52. *Id.* (citing *Bloomer*, 55 U.S. (14 How.) at 549).

53. Professor Janis explains that the Woodworth patent "dominated the marketplace," leading to over one thousand licenses and over a dozen Supreme Court cases. Janis, *supra* note 50, at 429.

54. *Bloomer*, 55 U.S. (14 How.) at 539–40, 547. In 1836, Congress granted a seven-year patent extension to any patent owner who could properly demonstrate that he had not received sufficient compensation for the development costs of his patent. Patent Act of 1836, ch. 306, § 18, 5 Stat. 117, 124–25. This patent extension expressly applied to grantees, hence the holding of *Wilson v. Rousseau*. *See supra* note 50. In 1845, Congress extended the patent term for an additional seven years. *Bloomer*, 55 U.S. (14 How.) at 547. Because this second extension did not expressly include grantees, *id.* at 542, the Court in *Bloomer* could not rely on the statutory language, and instead established the first-sale doctrine, *id.* at 551–52.

55. *Id.* at 548.

56. *Id.* at 542, 548.

57. *Id.* at 551–52.

58. *Id.* at 549.

property,” and therefore, McQuewan and the other licensees “must be entitled to continue the use” of the machines.⁵⁹

Bloomer is important in demonstrating that the Court does not hold intellectual property rights in a higher regard than traditional property rights. Rather, the Court will treat intellectual property similar to any other form of personal property.⁶⁰ And the Court has traditionally been reluctant to allow servitudes in personal property.⁶¹ Servitudes hinder the free use and alienability of personal property,⁶² which in turn restrain commerce and free competition.⁶³ *Bloomer* thus represents a policy decision by the Court not to allow intellectual property to diminish the rights of personal property owners.

2. *Adams v. Burke*

Adams v. Burke—arguably the most fundamental case in understanding the Court’s jurisprudence—greatly elaborates on the first-sale doctrine.⁶⁴ *Adams* stands for the proposition that, for exhaustion to occur, a patent owner must have received full compensation.⁶⁵ Such compensation, in general, is received through an initial, authorized sale.⁶⁶ However, *Adams* is clear that application of the first-sale doctrine requires *ad hoc* consideration, due to the important pecuniary and policy interests at stake.⁶⁷

In 1863, Merrill & Horner received a patent on an improvement in coffin lids.⁶⁸ Merrill & Horner assigned Lockhart & Seelye the exclusive rights to the patent

59. *Id.* at 550–51. Interestingly, the majority could have discussed the conditional-sale theory, discussed in Section I.B., *infra*, but did not. The majority considered whether a purchaser for value has full rights to a purchased article. *Id.* at 549. But McQuewan’s purchase actually included a use restriction. The contract expressly permitted usage only until 1842—the duration of the patent prior to the 1845 patent extension. *Id.* at 555 (McLean, J., dissenting). However, the Court did not discuss the use restriction. Because the patent, absent the 1845 extension, would have expired in 1842, the purchaser would have expected to retain use of the articles even after the contract’s 1842 expiration. *Id.* at 556 (“[I]t is answered, that the assignee expected to run his machine after the termination of the contract on which the exclusive right would end and become vested in the public.”). In other words, the Court did not view the contractual restriction in this case as something that the parties had bargained for.

60. See *United States v. Am. Bell Tel. Co.*, 128 U.S. 315, 370 (1888) (stating “[t]his is property,” in reference to the patent right); Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1031 (2005) (“Congress, the courts, and commentators increasingly treat intellectual property . . . as a good in and of itself.”).

61. Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1, 18 & n.68 (2000).

62. Amelia Smith Rinehart, *Contracting Patents: A Modern Patent Exhaustion Doctrine*, 23 HARV. J.L. & TECH. 483, 484, 492 (2010).

63. Gerald R. Gibbons, *Field Restrictions in Patent Transactions: Economic Discrimination and Restraint of Competition*, 66 COLUM. L. REV. 423, 431 (1966).

64. *Adams v. Burke*, 84 U.S. (17 Wall.) 453 (1873).

65. *Id.* at 456.

66. *Id.* (noting that, “in the essential nature of things,” the sale of a machine is considered full consideration).

67. *Id.* at 455.

68. *Id.* at 453–54.

within ten miles of the city of Boston.⁶⁹ Merrill & Horner then assigned the remainder—i.e., exclusive rights *outside* ten miles of Boston—to Adams.⁷⁰ Adams sued Burke, an undertaker, who had purchased the invention from Lockhart & Seelye, but had then used it in Adams' territory seventeen miles from Boston.⁷¹

The Court began its opinion by expressly noting that it was ruling *ad hoc*. The Court explained that “[t]he vast pecuniary results involved in such cases, as well as the public interest, admonish us to proceed with care, and to decide in each case no more than what is directly in issue.”⁷²

The Court then ruled that the patent rights were exhausted under the first-sale doctrine.⁷³ The Court declared that “in the essential nature of things,” when the patent owner—or a person having her rights—sells the invention, she receives “all the royalty or consideration” for the sold item.⁷⁴ And having received her full consideration, the patent owner “parts with the right to restrict [the item’s] use.”⁷⁵ The Court acknowledged that the assignee—Lockhart & Seelye—was not authorized to sell the coffins outside ten miles of Boston.⁷⁶ But the Court held that neither the patent statute nor the contract allowed the Court to imply this limitation onto Burke⁷⁷—Burke was under no express restriction.⁷⁸

Adams v. Burke establishes four important points that were not expressed in *Bloomer*. First, while *Bloomer* emphasizes the Court’s reluctance to allow servitudes in personal property, *Adams* explains an alternative reason for the doctrine: a patent owner should not be permitted to “double dip,” i.e., collect more than her fair reward.⁷⁹ *Adams* is clear, however, that the patent owner must receive *full consideration* to have received her reward.⁸⁰ The Court explained that, “in the essential nature of things”—i.e., in the usual scenario where the price demanded is sufficient to compensate the patent owner⁸¹—the patent owner receives full consideration simply in selling the item.⁸²

Second, *Adams* explains that restrictions cannot be implied from the circumstances. Even if Burke had discovered the Lockhart & Seelye restriction, Burke could still use the lids as he pleased; after all, he was under no express

69. *Id.* at 454.

70. *Id.*

71. *See id.*

72. *Id.* at 455.

73. *Id.* at 457.

74. *Id.* at 456.

75. *Id.*

76. *Id.*

77. *Id.* at 456–57.

78. *Id.* at 455.

79. *Id.* at 456; *see also* Rogers, *supra* note 10, at 443 (noting that “patent royalty double-dipping” is what “the principle of patent exhaustion serves to prevent”).

80. *Adams*, 84 U.S. (17 Wall.) at 456.

81. *See* Chiappetta, *supra* note 1, at 1094.

82. *Adams*, 84 U.S. (17 Wall.) at 456.

restriction.⁸³ While servitudes in real property typically require either (i) actual, (ii) implied, or (iii) constructive notice,⁸⁴ *Adams* makes clear that, in the patent context, implied notice is not sufficient.⁸⁵ Of course, *Adams* does not tell us whether *actual* notice would have been sufficient—but it does leave open that possibility. Third, *Adams* explains that exhaustion can only occur through an authorized sale, i.e., a sale made by the patent owner or someone having her rights.⁸⁶ This rule prevents the sale of stolen or counterfeit items from triggering the doctrine.⁸⁷

Last, and most importantly, *Adams* establishes that the first-sale doctrine requires *ad hoc* consideration.⁸⁸ The pecuniary interests at stake and the public interest deserve such a case-by-case consideration.⁸⁹ By using the language “in the essential nature of things,”⁹⁰ the Court directly leaves open the possibility that special cases might arise that warrant a different result than the one in *Adams*.

Overall, *Adams v. Burke* establishes the core tenets of the first-sale doctrine: that the first authorized sale generally exhausts a patent owner’s rights to the items sold. *Adams* is considered the foundational case upon which future cases rely.⁹¹

B. *The Rise of the Conditional-Sale Theory—and the Logic Behind It*

The conditional-sale theory—i.e., the notion that post-sale use restrictions are enforceable—first developed in the late nineteenth century with the Supreme Court’s decision in *Mitchell v. Hawley*.⁹² Soon after, in the early twentieth century, the Court in *Henry v. A.B. Dick Co.* expressly enforced such restrictions—the high point in the doctrine’s jurisprudence.⁹³ The Court engaged in a detailed analysis of the doctrine and cogently explained its rationale.⁹⁴

Ultimately, in 1917, the Supreme Court in *Motion Picture Patents* overruled *A.B. Dick*.⁹⁵ However, it is important to recognize that *Motion* overruled *A.B. Dick* for

83. *Id.* at 455.

84. Chiappetta, *supra* note 1, at 1126.

85. *Adams*, 84 U.S. (17 Wall.) at 457. Further, constructive notice will not suffice, as records are not generally created for sales of patented items. Chiappetta, *supra* note 1, at 1127.

86. *Adams*, 84 U.S. (17 Wall.) at 456. *Adams*, however, was not the first case to set forth this rule. *E.g.*, *Chaffee v. Bos. Belting Co.*, 63 U.S. (22 How.) 217, 224 (1859) (first-sale doctrine did not apply without authorized sale).

87. *See Chaffee*, 63 U.S. (22 How.) at 224 (“[Purchasers must] ha[ve] a title to [the patented article], and [be] rightfully in the use of it under that title . . .”).

88. *Adams*, 84 U.S. (17 Wall.) at 455.

89. *Id.*

90. *Id.* at 456.

91. *See United States v. Gen. Elec. Co.*, 272 U.S. 476, 493–94 (1926) (describing the Court’s more recent cases involving post-sale use restrictions as an “application of the principle of *Adams v. Burke*”).

92. *Mitchell v. Hawley*, 83 U.S. (16 Wall.) 544, 547 (1872).

93. *Henry v. A.B. Dick Co.*, 224 U.S. 1, 49 (1912), *overruled in part* by *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502 (1917).

94. *Id.* at 23–49.

95. *Motion*, 243 U.S. at 518.

specific statutory reasons,⁹⁶ and thus did not eliminate the conditional-sale theory in its entirety. In fact, *Motion* respected *A.B. Dick*'s reasoning, but found such reasoning inconsistent with Congress's intentions.⁹⁷ *A.B. Dick*, therefore, is crucial in understanding the Court's modern jurisprudence.

From a policy perspective, the conditional-sale theory champions the ability of parties to contract.⁹⁸ Voluntary transactions are said to be economically efficient so long as the parties have notice of all conditions.⁹⁹ In these transactions, the parties will negotiate a price that reflects the value of the conferred use rights.¹⁰⁰ As a result, the purchaser is more likely to be willing to purchase the item.¹⁰¹ For example, a purchaser may prefer to purchase an item with restrictions because, without restrictions, the price may be substantially higher.¹⁰² If the first-sale doctrine prevents patent owners from implementing use restrictions, then fewer purchasers may be able to purchase patented items.

1. *Origins of the Conditional-Sale Theory*—*Mitchell v. Hawley*

In *Mitchell v. Hawley*, the Court first described the conditional-sale theory.¹⁰³ *Mitchell* did not actually involve a conditional sale, as the restriction was not on a purchaser, but a licensee.¹⁰⁴ But *Mitchell* is important in that it expressly sets up the conditional-sale theory in dictum; this language has never been expressly challenged or criticized by the Court.¹⁰⁵

Mitchell involved a patent owner, Taylor, who received a patent in 1853 on an improvement in machinery for felting hats.¹⁰⁶ In 1860, Taylor granted a license to Bayley, granting Bayley the exclusive right to make and use the invention in Massachusetts and New Hampshire as well as to license others to use the invention.¹⁰⁷ Taylor's patent originally was to expire in 1867.¹⁰⁸ Taylor expressly

96. *Id.* at 515–16; *see also infra* Section II.A.2.

97. *Motion*, 243 U.S. at 516 (calling *A.B. Dick*'s reasoning a "plausible argument").

98. *See* Chiappetta, *supra* note 1, at 1119.

99. *See* Arno, *supra* note 1, at 282.

100. *B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1426 (Fed. Cir. 1997).

101. Mark R. Patterson, *Must Licenses Be Contracts? Consent and Notice in Intellectual Property*, 40 FLA. ST. L. REV. 105, 157 (2012).

102. *See id.*

103. *Mitchell v. Hawley*, 83 U.S. (16 Wall.) 544, 547 (1872).

104. *Id.* at 549.

105. However, almost by definition, the dictum in *Mitchell* must be considered greatly limited as a result of the partial overruling of *A.B. Dick*. This is especially true considering that *A.B. Dick* extensively relied on the pertinent language in *Mitchell*. *Henry v. A.B. Dick Co.*, 224 U.S. 1, 19–22 (1912), *overruled in part by* *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502 (1917). Notably, the recent *Quanta* decision makes no mention of *Mitchell*, which supports the idea that *Mitchell*'s holding has been circumscribed. The fate of *Mitchell* is identical to the fate of *A.B. Dick*—circumscribed, but still applicable.

106. *Mitchell*, 83 U.S. (16 Wall.) at 548.

107. *Id.* at 545.

108. *Id.*

provided, in the license, that Bayley would not license any rights that would extend beyond 1867.¹⁰⁹

In 1864, Bayley licensed to Mitchell the right to use four felting machines.¹¹⁰ But this license to Mitchell was unrestricted in time, contrary to the terms of the license between Taylor and Bayley.¹¹¹ Taylor’s patent was ultimately extended beyond 1867, and respondent Hawley obtained the rights to the patent in Massachusetts.¹¹² Hawley sued Mitchell for patent infringement.¹¹³

The Court ruled for Hawley.¹¹⁴ The Court declared, “*Nemo dat quod non habet*” (no one may give what he does not have).¹¹⁵ Specifically, because Bayley had no right to license the invention after 1867, Bayley could not convey such a right to Mitchell.¹¹⁶ Interestingly, the Court stated that “[n]otice to the purchaser in such a case is not required, as the law imposes the risk upon the purchaser.”¹¹⁷ The Court noted that “[c]ertain exceptions undoubtedly exist to th[is] rule, but none of them have any application to this case” because the purchaser was on notice of the restriction.¹¹⁸

In dictum, the Court made two things clear. First, patent owners may place conditions on sales to purchasers. Second, exhaustion only applies to unconditional sales.

Patented implements or machines sold to be used in the ordinary pursuits

109. *Id.* This restriction appears similar to the restriction in *Bloomer*. Cf. *Bloomer v. McQuewan*, 55 U.S. (14 How.) 539, 555 (1852) (McLean, J., dissenting). In both instances, the patent owner arranged for a contract to expire on the same date that the patent expired. And both times, Congress extended the patent, and the patent owners wanted their rights back. In *Bloomer*, the dissent contended that a patent extension was foreseeable. *Id.* at 556. To the dissent, the contract’s termination date clearly evidenced a use restriction that had been freely negotiated. *Id.* (“[W]hen he entered into the contract he knew, or is presumed to have known, that the patent might be extended . . . by special act, and if he desired an interest under the renewed patent, he should have provided for it in his contract.”). Justice McLean concluded the patent owner had been cheated. *Id.* (“[I]t would seem to be unjust that, under a contract to run the machine less than ten years, he should be entitled to run it sixteen years.”). But the *Bloomer* majority assumed that the parties had not foreseen the patent extension. *See id.* at 556 (discussing the majority’s position that “the assignee expected to run his machine after the termination of the contract on which the exclusive right would end and become vested in the public”). In other words, the majority assumed that the patent owner had been paid in full. And as such, we do not know what the result would have been had the use restriction been considered seriously. In *Mitchell*, the Court could have ignored the question, just like it did in *Bloomer*. But instead, the Court expressly stated in dictum that a patent owner’s conditions have legal significance. *Mitchell*, 83 U.S. (16 Wall.) at 548.

110. *Id.* at 546.

111. *Id.*

112. *Id.*

113. *Id.*

114. *Id.* at 551.

115. *Id.* at 550.

116. *Id.*

117. *Id.*

118. *Id.* The Court did not state, or even hint at, what these exceptions might be. The subsequent case of *Henry v. A.B. Dick*, however, makes clear that, where the sale is authorized, a purchaser must receive notice of all conditions. *Henry v. A.B. Dick Co.*, 224 U.S. 1, 26 (1912), *overruled in part by* *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502 (1917).

of life become the private individual property of the purchasers . . . Sales of the kind may be made by the patentee with or without conditions, as in other cases, but where the sale is absolute, and without any conditions, [the patent owner's right is exhausted].¹¹⁹

This language leaves little doubt that patent owners are permitted to place conditions on sold articles. However, the Court did not explain the reasoning behind the conditional-sale theory, and it did not discuss the limits of the theory. It was not until nearly forty years later that the Court squarely answered these questions.

2. *The Zenith*—Henry v. A.B. Dick

In *Henry v. A.B. Dick*, the Supreme Court, for the first time, explained and interpreted the conditional-sale theory. The Court gave the theory broad—nearly limitless—scope, holding that any use restriction could be enforced so long as the purchaser had received notice.¹²⁰

As discussed in Section II, *A.B. Dick* was ultimately overruled and the scope of its doctrine considerably narrowed. However, as explained in Section III, the core of the *A.B. Dick* decision remains good law—namely, that use restrictions, in some circumstances, are enforceable and that purchasers must have notice of those restrictions to be held liable.

In *A.B. Dick*, complainant A.B. Dick owned a patent on a “stencil-duplicating machine known as the ‘Rotary Mimeograph.’”¹²¹ A.B. Dick sold one such mimeograph to Christina Skou, and affixed a notice stating that the mimeograph could only be used with paper, ink, and other supplies made by A.B. Dick.¹²² Sidney Henry of the Henry Company (an ink manufacturer) sold ink to Ms. Skou even though Henry had knowledge of A.B. Dick’s license agreement.¹²³ A.B. Dick sued Henry for patent infringement.¹²⁴

The Court ruled in favor of A.B. Dick, stating that any “reasonable stipulation, not inherently violative of some substantive law, imposed by a patentee as part of a sale of a patented machine, would be . . . valid and enforceable.”¹²⁵ The Court, in a

119. *Mitchell*, 83 U.S. (16 Wall.) at 548.

120. *A.B. Dick*, 224 U.S. at 39, 49.

121. *Id.* at 11.

122. *Id.* at 39, 49. This type of use restriction is called a “tying” restriction: the use of an unpatented item is “tied” to the use of a patented item. After *Motion Picture Patents* overruled *A.B. Dick*, tying restrictions became unlawful per se, under a separate patent doctrine called the “misuse” doctrine. The rationale was that a patent owner, by implementing a tying restriction, “misused” the patent because the owner gained control over unpatented items. Recently, in 1988, Congress amended 35 U.S.C. § 271(d), mandating that tying restrictions are not per se unlawful, but rather are lawful restrictions unless the patent owner has market power and the restrictions have anticompetitive effects. Act of Nov. 19, 1988, tit. II, Pub. No. 100-703, § 201, 102 Stat. 4674. The Court’s holding in *A.B. Dick* affected both the misuse doctrine and the first-sale doctrine. See *infra* text accompanying notes 149-53.

123. *A.B. Dick*, 224 U.S. at 11 (majority opinion); *id.* at 51 (White, J., dissenting).

124. *Id.* at 14 (majority opinion).

125. *Id.* at 31.

lengthy opinion, provided three distinct reasons for this result.¹²⁶ First, the Court noted that the use of a patented machine is often more valuable to the patent owner than the mere value of the machine, and therefore the patent owner has a right to restrict such use.¹²⁷ For support, the Court cited to circuit courts and English cases that had expressly recognized the patent owner’s ability to create use restrictions.¹²⁸ The Court heavily cited the dictum in *Mitchell v. Hawley* as well.¹²⁹

Second, the Court justified use restrictions by noting that a patent owner has the ability to restrict the use of the patent entirely by choosing to sell to no one.¹³⁰ As Professor Hovenkamp explains, a use restriction is a type of output reduction.¹³¹ Because a patent owner has the ability to limit output all the way down to zero, it makes sense to allow the patent owner to reduce output to some point more than zero, but less than one hundred.¹³² *A.B. Dick* did not have to let *anyone* use its mimeographs, so it certainly could allow customers to use the mimeographs for limited purposes.¹³³

Third, the Court considered why *Bobbs-Merrill v. Straus*,¹³⁴ a copyright case, was not controlling.¹³⁵ *Bobbs-Merrill* involved a “resale” restriction—the copyright owner of a novel sought to prohibit purchasers from reselling the novel for less than one dollar.¹³⁶ *Bobbs-Merrill* found the restriction unenforceable, holding that Congress did not intend to allow copyright owners to control future sales.¹³⁷ *Bobbs-Merrill* distinguished the earlier case of *E. Bement & Sons*—a contract case involving a restriction against a patent licensee¹³⁸—on the notion that applying patent law to

126. *Id.* at 23–49. Before the Court even arrived at the question of use restrictions, it first had to respond to Henry’s contention that the matter was outside the Court’s jurisdiction. *Id.* at 13–14. The Court found it had jurisdiction, as “some right or privilege will be defeated by one construction [of the patent laws], [but] sustained by another [construction] of those laws[.]” *Id.* at 16. Enforcement of use restrictions, therefore, is a federal question—this holding of *A.B. Dick* has never been challenged by the Court.

127. *Id.* at 25 (“[T]he mere value of a patented machine is often, as is proved to be in this case, insignificant in comparison with the value of its use” (quoting *Porter Needle Co. v. Nat’l Needle Co.*, 17 F. 536 (D. Mass. 1883))).

128. *Id.* at 37–43.

129. *Id.* at 19–22. In addition, the Court cited to a leading treatise for the proposition that “any person having the right to sell may at the time of sale restrict the use of his vendee.” *Id.* at 24 (quoting 2 WILLIAM C. ROBINSON, *THE LAW OF PATENTS FOR USEFUL INVENTIONS* § 824 (Boston, Little, Brown & Co. 1890)).

130. *Id.* at 32. The ability of a patent owner to withhold use of her invention entirely had previously been determined by the Court. *Cont’l Paper Bag Co. v. E. Paper Bag Co.*, 210 U.S. 405, 429 (1908).

131. Herbert Hovenkamp, *Post-Sale Restraints and Competitive Harm: The First Sale Doctrine in Perspective*, 66 N.Y.U. ANN. SURV. AM. L. 487, 529 (2011).

132. *Id.* at 529–30.

133. *See A.B. Dick*, 224 U.S. at 32.

134. *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339 (1908).

135. *A.B. Dick*, 224 U.S. at 43–45.

136. *Bobbs-Merrill*, 210 U.S. at 341.

137. *Id.* at 350–51.

138. *Id.* at 345.

copyright law might “greatly embarrass the consideration of a [future patent] case.”¹³⁹

The Court in *A.B. Dick* determined that this “[future patent] case” was, in fact, the present case. The Court explained that *Bobbs-Merrill* had rightly distinguished *Bement*, as patent law is very different than copyright law.¹⁴⁰ Specifically, the patent statute grants the exclusive right to make, sell, and *use* the patented item; by contrast, the copyright statute grants the exclusive right to make and sell the copyrighted work, but not to use it.¹⁴¹ The Court concluded, for this reason, that *Bobbs-Merrill* did not control the present case.¹⁴²

As a final matter, the Court established the requirement that a purchaser “must have notice” of the use restriction for it to be enforceable.¹⁴³ The Court explained that a purchaser “has a right to assume, in the absence of knowledge, that the seller passes an unconditional title to the machine, with no limitations upon the use.”¹⁴⁴ This holding is critical in that it ensures that innocent purchasers will not be held liable for patent infringement. Such protection is a major theme of the law of servitudes. Property law generally permits servitudes in real property—but not in personal property—because purchasers are much better able to identify servitudes in real property than in personal property. In other words, purchasers should not be caught unawares. Here, by requiring notice, the Court justified allowing servitudes in patented personal property.

Overall, it appears clear that the conditional-sale theory had reached its zenith by 1912. *Adams v. Burke* had implied that use restrictions might be enforceable. *Mitchell v. Hawley* had said so in dictum. And *A.B. Dick* then expressly, and in depth, explained why courts should enforce use restrictions. Not surprisingly, the Court’s subsequent overruling of *A.B. Dick* greatly limited the conditional-sale theory. But, as discussed below in Section II, the Court overruled *A.B. Dick* for one specific reason: Congress did not intend for patent owners to implement use restrictions for personal gain.¹⁴⁵ This reason is critically important. With this reason in mind, Section III then explains that certain use restrictions would not violate Congress’s intent.¹⁴⁶ These use restrictions are enforceable, notwithstanding the demise of the *A.B. Dick* era.

II. THE ARRIVAL OF THE SINGLE-ROYALTY THEORY

A. *The Demise of the Conditional-Sale Theory*

The conditional-sale theory had reached its height in 1912. The theory was

139. *Id.*

140. *A.B. Dick*, 224 U.S. at 45–47.

141. *Id.* at 46.

142. *Id.*

143. *Id.* at 26.

144. *Id.*

145. *See infra* Section II.A.2.

146. *See infra* Section III.A.

supported by the Supreme Court’s earlier jurisprudence, and the rationale behind it was cogent. However, just a mere year later in *Bauer & Cie v. O’Donnell*, the Supreme Court began to chip away at the theory, holding that restrictions on the right to “sell” were unenforceable.¹⁴⁷ In 1917, the Court in *Motion Picture Patents* extended this holding to restrictions on “use” and expressly overruled *Henry v. A.B. Dick*.¹⁴⁸

Some scholars, however, have attempted to save the conditional-sale theory. They argue that *A.B. Dick* was only overruled under the doctrine of “patent misuse.”¹⁴⁹ Specifically, *A.B. Dick* had permitted use restrictions called “tying” restrictions.¹⁵⁰ *Motion* also involved tying restrictions, and *Bauer* involved resale restrictions.¹⁵¹ These sorts of restrictions, for many years after *Motion*, would be held by the Court to be per se patent misuse.¹⁵²

The argument is that because *A.B. Dick*, *Bauer*, and *Motion* all turned on patent misuse, *A.B. Dick* must therefore still be good law to the extent that a patent owner does not implement use restrictions to further patent misuse. In other words, use restrictions that are properly within the patent’s scope are enforceable. The Federal Circuit in particular—beginning with *Mallinckrodt*—appears to have adopted this reasoning.¹⁵³

However, this argument fails for two reasons. First, it is clear that *Motion* overruled *A.B. Dick*, not only on misuse grounds, but also because the Court found the conditional-sale theory inconsistent with the will of Congress.¹⁵⁴ In fact, *Motion* expressly stated that its ruling would affect “the extent to which a patentee . . . [may] prescribe . . . the conditions of [a patented article’s] use.”¹⁵⁵ In other words, *Motion* intended to limit the conditional-sale theory.

Second, the Court’s explanation of the first-sale doctrine in subsequent cases cannot be aligned with the conditional-sale theory. The Court in multiple cases, most recently in *Quanta v. LG Electronics*, uses strong language that evidences the demise of the conditional-sale theory.¹⁵⁶ That language strongly supports the rise of

147. *Bauer & Cie v. O’Donnell*, 229 U.S. 1, 16–18 (1913).

148. *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 516, 518 (1917).

149. See, e.g., Yina Dong, Note, *A Patent Exhaustion Exposition: Situating Quanta v. LGE in the Context of Supreme Court Jurisprudence*, 2010 STAN. TECH. L. REV. N2, ¶ 48 (2010); see also Gomulkiewicz, *supra* note 21, at 228 (finding that conditions are enforceable, but are subject to the misuse doctrine); Austin, *supra* note 7, at 2980 (finding that “beyond the antitrust and patent misuse laws” parties have the freedom to contract).

150. See *supra* notes 149–50 and accompanying text.

151. *Motion*, 243 U.S. at 506; *Bauer*, 229 U.S. at 8.

152. Dong, *supra* note 149, ¶ 38; see also *supra* notes 149–50 and accompanying text.

153. See *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 708 (Fed. Cir. 1992).

154. *Motion*, 243 U.S. at 516.

155. *Id.* at 509.

156. *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 625–26 (2008) (“Although the Court permitted postsale restrictions on the use of a patented article in *Henry v. A.B. Dick Co.*, 224 U.S. 1 (1912), that decision was short lived.” (footnote omitted)); *United States v. Univis Lens Co.*, 316 U.S. 241, 251 (1942) (“[T]he patentee has received his reward for the use of his invention by the sale of the article, and . . . once that purpose is realized the patent law affords no basis for restraining the use and enjoyment of the thing sold.”); *Bos. Store of Chi. v. Am. Graphophone Co.*, 246 U.S. 8, 25 (1918)

the “single royalty” theory—the idea that a patent owner must receive her entire reward through the initial sale.

1. *Chipping Away*—*Bauer & Cie v. O’Donnell*

In *Bauer & Cie v. O’Donnell*, complainant Bauer & Cie (Bauer) owned a patent on the vitamin Sanatogen, which it provided to its agent Hehmeyer through a license.¹⁵⁷ The license allowed Hehmeyer to set the price at which purchasers could resell purchased Sanatogen.¹⁵⁸ When defendant O’Donnell purchased and sold Sanatogen for less than the provided resale price, Bauer sued O’Donnell.¹⁵⁹

The Court ruled for O’Donnell.¹⁶⁰ The Court stated that “care should be taken not to extend by judicial construction the rights and privileges which it was the purpose of Congress to bestow.”¹⁶¹ Citing *Bobbs-Merrill*, the Court noted that “[t]he sale of a patented article is not essentially different from the sale of a book.”¹⁶² Like in *Bobbs-Merrill*, the Court determined that fixing the resale price would go “beyond [the statute’s] fair meaning and secure privileges not intended to be covered by the act of Congress.”¹⁶³

Bauer makes clear that once a purchaser “has paid to the [patentee] the full price asked for the article sold,” the patent owner cannot then seek to control future sales; doing so would go beyond Congress’s intentions.¹⁶⁴ Although the Court distinguished *A.B. Dick*—noting that, unlike the present case, the sale in *A.B. Dick* transferred only a “qualified title,” it set the stage to overrule *A.B. Dick* four years later.¹⁶⁵

2. *A.B. Dick’s Downfall*—*Motion Picture Patents*

Motion Picture Patents involved a patent on a mechanism for showing motion pictures.¹⁶⁶ The patent owner granted a licensee the right to make and sell the

(“[O]ne who had sold a patented machine and received the price . . . could not, by qualifying restrictions as to use, keep under the patent monopoly a subject to which the monopoly no longer applied.”). Professor Chiappetta notes that many of the Court’s exhaustion statements are technically dicta, but explains that these statements are necessary to understand “the full operation of the doctrine.” Chiappetta, *supra* note 1, at 1107 n.105.

157. *Bauer & Cie v. O’Donnell*, 229 U.S. 1, 8 (1913).

158. *Id.*

159. *Id.* at 9.

160. *Id.* at 18.

161. *Id.* at 10.

162. *Id.* at 13.

163. *Id.* at 12.

164. *Id.* at 11.

165. *Id.* at 15. Of course, this finding—that sales with restrictions on use convey only a qualified title—cannot be used to save the conditional-sale theory. *Bauer* preceded *Motion*, and therefore, had to distinguish itself from *A.B. Dick*. *Bauer* did so by finding a difference between restrictions on “sell” and restrictions on “use.” *Id.* But *Motion* expressly holds that use restrictions are “precisely the same” as resale restrictions. *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 516 (1917).

166. *Motion*, 243 U.S. at 505.

invention.¹⁶⁷ Under this license, the licensee had to notify any purchasers that (1) the invention could only be used to show the patent owner’s motion pictures (i.e., a tying restriction) and (2) the purchaser needed to contact the patent owner to discover “other terms to be . . . complied with by the user.”¹⁶⁸ The defendants violated the terms of the notice, and the patent owner sued for patent infringement.¹⁶⁹

The Court ruled for the defendants.¹⁷⁰ The Court first made clear that its holding would affect both (a) the conditional-sale theory and (b) the misuse doctrine:

It is obvious that in this case we have presented anew the inquiry, which is arising with increasing frequency in recent years, as to the extent to which a patentee or his assignee is authorized by our patent laws to prescribe by notice attached to a patented machine [(a)] the conditions of its use *and* [(b)] the supplies which must be used in the operation of it, under pain of infringement of the patent.¹⁷¹

The Court resolved these issues by analyzing “three rules [of statutory interpretation] long established by this court, applicable to the patent law.”¹⁷² The Court used the first two rules to find the tying restriction impermissible under the doctrine of patent misuse.¹⁷³ The third rule, however, directly implicated the conditional-sale theory.

This third rule involved Congress’s rationale behind the Patent Act. The Court explained that the “primary purpose of our patent laws is not the creation of private fortunes for the owners of patents,” but is rather “to promote the progress of science and useful arts.”¹⁷⁴ The Court accepted that patent owners should be “fairly, even liberally treated,” but urged that Congress primarily intended to use the patent owner’s “reward,” to foster innovation.¹⁷⁵

The Court acknowledged that *A.B. Dick’s* major justification for the conditional-sale theory—that the ability to restrict *all* use warrants, *a fortiori*, the ability to restrict *some* use—was a “plausible argument.”¹⁷⁶ But the Court said: “The

167. *Id.* at 506.

168. *Id.* Per the license, these “other terms” were solely regarding royalty payment. *Id.* The Court had previously held that violation of royalty terms do not warrant an infringement suit. *Henry v. A.B. Dick Co.*, 224 U.S. 1, 16 (1912), *overruled in part by Motion*, 243 U.S. 502. But the Court refers to these terms as “terms not stated in the notice,” *Motion*, 243 U.S. at 509, without mention of royalties. The Court’s wording thus appears to treat this provision as one warranting an infringement suit.

169. *Motion*, 243 U.S. at 507.

170. *Id.* at 519.

171. *Id.* at 509 (emphasis added). *Motion*, of course, did not expressly use the phrase “misuse doctrine” because that doctrine did not exist yet. Rather, *Motion* is credited for establishing the misuse doctrine. *Princo Corp. v. Int’l Trade Comm’n*, 616 F.3d 1318, 1326 (Fed. Cir. 2010) (“The doctrine of patent misuse . . . beg[an] with the 1917 decision in *Motion Picture Patents*. . . .” (citation omitted)).

172. *Motion*, 243 U.S. at 510.

173. *See id.* at 510–11.

174. *Id.* at 511 (quoting U.S. CONST. art. I, § 8, cl. 8).

175. *See id.*

176. *Id.* at 516. In other words, the Court acknowledged that *A.B. Dick’s* reasoning was sound.

defect in this thinking springs from the substituting of inference and argument for the language of the statute”¹⁷⁷ The Court, citing *Bauer*, then said that the “statutory authority to grant the exclusive right to ‘use’ a patented machine is not greater, indeed it is *precisely the same*, as the authority to grant the exclusive right to ‘vend.’”¹⁷⁸ In other words, while *Bauer* held that “sell” restrictions went beyond Congress’s intentions, *Motion* now extended that holding to “use” restrictions.

The Court then concluded: “It is obvious that . . . *Henry v. [A.B.] Dick Co.* must be regarded as overruled.”¹⁷⁹ This holding makes clear that the conditional-sale theory—at least in its original form as expressed in *A.B. Dick*—is at an end. Conditional sales, in general, are simply inconsistent with Congress’s intentions: the Patent Act was not designed to enhance patent owners’ fortunes.¹⁸⁰

However, as discussed in Section III, the Court did not completely eliminate the conditional-sale theory. *Motion* placed significant weight on the fact that the patent owner’s reward must serve to innovate science, noting that the patent owner must be “fairly, even liberally, treated.”¹⁸¹ And *Motion*, at bottom, was concerned with the intent of Congress. It appears fairly clear, then, that a use condition *required* for scientific innovation would survive the Court’s scrutiny.¹⁸²

B. *The Single-Royalty Theory—the Purchase Price Is the Entire Reward.*

The single-royalty theory arose from the ashes of the conditional-sale theory. After *Motion*, patent owners could no longer implement use restrictions to receive their reward. As a result, these owners had to receive their entire reward for a patented item through its purchase price—i.e., a single royalty. Under this “single royalty” theory, payment of the purchase price exhausts the patent owner’s rights to the article sold.¹⁸³

One criticism of the single-royalty theory is that the theory limits the patent owner’s reward by removing the ability of the parties to contract.¹⁸⁴ For example, this Note’s Introduction depicted a bicycle patent owner who struggled to make

177. *Id.* at 514.

178. *Id.* at 516 (emphasis added).

179. *Id.* at 518 (citation omitted).

180. Last, the Court then moved on to discuss the license’s second provision: that the purchaser was bound by “other terms” not stated in the license. *Id.* The Court discussed the public interest. It noted that *Motion* had already received over \$200,000 through the patent. *Id.* Any further restriction would grant “such a potential power for evil over an industry which must be recognized as an important element in the amusement life of the nation.” *Id.* at 519. Such a restriction would be “gravely injurious to th[e] public interest, which we have seen is more a favorite of the law than is the promotion of private fortunes.” *Id.* This *ad hoc* analysis—comparing the patentee’s reward to the public interest—lies at the core of the first-sale doctrine. See *infra* Section III.A.1.

181. *Motion*, 243 U.S. at 511.

182. See *infra* Section III.

183. Chiappetta, *supra* note 1, at 1123.

184. *Id.* at 1104.

sales without implementing a use restriction.¹⁸⁵ To the patent owner, the use restriction was just as important as, if not more important than, the purchase price.

The Court has made clear, however, that patent owners are not receiving less than their fair reward.¹⁸⁶ Rather, the purchase price *is* the value of their reward. In other words, the Court defines “reward” as the value received through the purchase price—and not the full value that the patent owner could potentially receive via use restrictions. In the bicycle example, the Court would say that if the patent owner cannot make sufficient sales, then too bad—she deserves a smaller reward.

The Court most clearly expresses the single-royalty ideology in *Motion*:

[The single-royalty theory] is the fair as well as the statutory measure of [the patent owner’s] reward for his contribution to the public stock of knowledge. If his discovery is an important one his reward under such a construction of the law will be large, as experience has abundantly proved, and if it be unimportant he should not be permitted by legal devices to impose an unjust charge upon the public in return for the use of it.¹⁸⁷

The single-royalty theory thus provides adequate reward for a patent owner’s contribution to society. The Court believes that such a result is not only supported by the patent statute, but is also the “fair” result.¹⁸⁸ But as discussed in the Introduction, the single-royalty theory removes a patent owner’s ability to freely negotiate and price discriminate.¹⁸⁹ From a policy perspective, is the single-royalty theory the preferable result?

As discussed below, there are significant policy justifications for the single-royalty theory that strongly support the theory’s application in almost all cases. These policy arguments can be divided into arguments regarding (1) rights, (2) efficiency, and (3) the power of the Court. The first two categories focus on why the single-royalty theory is the preferred result. The third category demonstrates that, regardless, any change must be implemented by Congress, not the Court.

1. Rights

The single-royalty theory protects the rights of the purchaser. While it is true—as critics argue—that use restrictions are often freely bargained for, this “freely bargained for” justification stands on a slippery slope. The justification assumes that the purchaser has received a lower purchase price in exchange for accepting the use restriction. In other words, the assumption is that if the purchase price = X value, then the value of the use restrictions plus the new, lower purchase price also = X value.

But that is not always the case. Say, for example, a patent owner develops a novel invention that will sell for X value, but not more. Say also that purchasers

185. See *supra* Introduction.

186. *Motion*, 243 U.S. at 513.

187. *Id.*

188. *Id.*

189. See *supra* Introduction.

cannot easily obtain the invention from other sources. In such a case, the patent owner would be incentivized to tack on a few use restrictions for good measure, in an attempt to enlarge her reward. Essentially, the use restrictions plus the purchase price = *more* than X value.

The reality is that, while some purchasers would be able to bargain down the purchase price, others likely would not. This reality is particularly true considering that any use restriction would “run with the article”—remaining in effect as the item moved from person to person over time.¹⁹⁰ The first-sale doctrine thus protects purchasers who do not have the ability to bargain.

Further, the patent owner, in theory, still receives an adequate reward. If we assume that the patent owner lowered the purchase price to justify the use restriction, then logically, she should be able to raise the price and remove the restriction. Further, as noted above, the patent owner may still utilize use restrictions; she will just need to receive her damages under a breach of contract suit.¹⁹¹ The single-royalty theory thus protects purchasers while still meeting the needs of patent owners.

2. *Efficiency*

The single-royalty theory also encourages the influx of goods into the open market, which encourages innovation and prevents waste. Allowing patent owners to create servitudes in personal property would create artificial scarcity, which in turn, would raise prices to supracompetitive levels.¹⁹²

For example, imagine that a prospective purchaser wishes to buy a patented article without any servitudes. The purchaser likely could not obtain such an article from another consumer because any existing servitudes would run with the article.¹⁹³ Rather, the purchaser would need to purchase it directly from the patent owner. The patent owner would likely be able to charge a high price because the purchaser could not easily obtain the article elsewhere. The article has been sold for more than it is worth.

Servitudes in personal property would also serve to hinder innovation.¹⁹⁴ “User innovation”—that is, a purchaser’s ability to himself invent—requires that the purchaser be allowed to manipulate and experiment with the articles around

190. See Chiappetta, *supra* note 1, at 1126. As discussed above, however, all patent owner must take measures to ensure that all subsequent purchasers have notice of the restriction. *Henry v. A.B. Dick Co.*, 224 U.S. 1, 26 (1912), *overruled in part by Motion*, 243 U.S. 502.

191. See Austin, *supra* note 7.

192. Douglas Fretty, Note, *Both a License and a Sale: How to Reconcile Self-Replicating Technology with Patent Exhaustion*, 5 J. BUS. ENTREPRENEURSHIP & L. 1, 14 (2011).

193. See Chiappetta, *supra* note 1, at 1126.

194. See Ariel Katz, *The First Sale Doctrine and the Economics of Post-Sale Restraints*, 2014 BYU L. REV. 55, 114–15.

him.¹⁹⁵ Requiring permission to use patented articles in certain ways would hinder such innovation; free use is efficient use.¹⁹⁶

Finally, use restrictions encourage waste. As Professor Chiappetta notes, because purchasers will often have trouble reselling the burdened item, they are likely to dispose of it instead.¹⁹⁷ For example, in the bicycle example in this Note's introduction,¹⁹⁸ purchasers were precluded from using sold bicycles after one year. After a year, the purchasers would need to dispose of the still-working bicycle—an inefficient use of a working article. Eliminating servitudes promotes efficiency.

3. *The Power of the Court*

As demonstrated above, there are compelling policy justifications for the single-royalty theory. However, it is undeniable that patent owners who strongly value use restrictions are harmed. If we feel that patent owners deserve better, should change be implemented through Congress or through the Court? The answer is almost certainly through Congress. The Constitution directly empowers Congress to grant patent owners with exclusive rights in order to encourage innovation.

Congress, and not the Court, controls the extent of the patent owner's exclusive rights. The Court has absolutely no power to grant more rights than bestowed by Congress. This is true even if policy justifications support increasing that patent owner's rights. The Court is limited to enforcing the will of Congress, which as we have seen, requires no more than ensuring that innovation is fostered to benefit the public interest.¹⁹⁹

In *Boston Store v. American Graphophone Co.*, the Court expressly noted that the Court could not reach beyond the will of Congress to benefit patent owners.²⁰⁰ The facts were very similar to those in *Bauer v. O'Donnell*.²⁰¹ The complainant owned a patent and attempted to control the price at which purchasers could resell the sold patented articles.²⁰² The Boston Store agreed to the provided resale provision but failed to abide by it.²⁰³

In the resulting infringement lawsuit, the complainant urged the Supreme Court that the single-royalty theory should not apply. The complainant stressed that

195. *Id.* at 114.

196. *See id.* at 115.

197. Chiappetta, *supra* note 1, at 1128.

198. *See supra* Introduction.

199. *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 511 (1917).

200. *See Bos. Store of Chi. v. Am. Graphophone Co.*, 246 U.S. 8, 26 (1918).

201. *See supra* Section II.A.1.

202. *Bos. Store*, 246 U.S. at 18–19.

203. *Id.* at 19–20.

it valued the resale restriction much more highly than the gross consideration price.²⁰⁴ This intent, the complainant argued, should resolve the case in its favor.²⁰⁵

The Court ruled for defendant Boston Store.²⁰⁶ The Court used particularly strong language, making very clear that the single-royalty theory had usurped the conditional-sale theory: “[O]ne who ha[s] sold a patented machine and received the price . . . c[an] not, by qualifying restrictions as to use, keep [that machine] under the patent monopoly”²⁰⁷ This holding constitutes “the fundamental ground upon which, as we have seen, the decided cases must rest.”²⁰⁸

The Court then directly addressed the complainant’s argument that the use restrictions were of substantial value. The Court acknowledged its ruling could potentially cause “grave disaster . . . to the holders of patent rights.”²⁰⁹ But the Court bluntly concluded: “[T]he remedy . . . is to be found, not in an attempt judicially to correct doctrines which by reiterated decisions have become conclusively fixed, but in invoking the curative power of legislation.”²¹⁰

In other words, the Court in *Bauer* and *Motion* had clearly defined Congress’s intent, and the Court in *Graphophone* was unable to deviate from that intent. The abovementioned rights and efficiency arguments, therefore, are of little practical interest to the Court. Rather, such issues must be addressed by Congress.²¹¹

C. *A Modern Application*—*Quanta v. LGE*

The Supreme Court’s most recent application of the single-royalty theory came in the 2008 decision of *Quanta v. LG Electronics*.²¹² Before this point in time, the

204. *Id.* at 10. The Boston Store had also received “dealers’ discounts” in exchange for accepting the license’s terms. *Id.* at 18.

205. *See id.* at 10.

206. *Id.* at 27.

207. *Id.* at 25.

208. *Id.*

209. *Id.* at 25–26.

210. *Id.* at 26.

211. Further, it is important to note that Congress’s intentions in this area did not change with the implementation of the 1952 Patent Act. As Justice Black noted in his concurrence in *Arm Manufacturing Co. v. Convertible Top Replacement Co.*:

[J]ust before the [1952 patent] bill was passed in the Senate, Senator Saltonstall asked on the floor, “Does the bill change the law in any way or only codify the present patent laws?” Senator McCarran, Chairman of the Judiciary Committee which had been in charge of the bill for the Senate, replied, “It codifies the present patent laws.”

365 U.S. 336, 347 n.2 (1961) (Black, J., concurring) (quoting 98 CONG. REC. 9323 (1952)). At oral argument in *Quanta*, Justice Ginsburg asked the Deputy Solicitor General whether there was “a reason why Congress codified th[e] [first-sale doctrine] in the Copyright Act, but not in the Patent Act?” Transcript of Oral Argument at 17–18, *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617 (2008) (No. 06-937). The government responded—and the Court did not question its response—that “[Congress] did not attempt in any way to override or change the effect of the first sale doctrine.” *Id.* at 18. The same is true of the 2011 America Invents Act. Leahy-Smith America Invents Act of 2011, Pub. L. No. 112-29, 125 Stat. 284.

212. *Quanta*, 553 U.S. 617. The Supreme Court came close, but did not address the issue, in *Bowman v. Monsanto Co.*, 133 S. Ct. 1761 (2013).

Court had not directly addressed the first-sale doctrine in over half a century.²¹³ By holding that exhaustion occurs at the time of the first authorized, *initial* sale²¹⁴—notwithstanding any use restrictions—the Court reaffirmed the single-royalty theory.²¹⁵

Respondent LG Electronics (LGE) owned a portfolio of computer technology patents.²¹⁶ Three of these patents involved methods of operating a computer system.²¹⁷ LGE licensed this portfolio to Intel Corporation (Intel).²¹⁸ Under the license, Intel received broad rights to “make, use, [and] sell” the LGE patents.²¹⁹ Intel, in turn, sold microprocessors and chipsets that practiced LGE’s patents to defendant Quanta.²²⁰

However, Intel’s license also specified that no license was granted “to any third party” to combine licensed products with non-LGE or non-Intel components (rather, the purchaser would need to obtain a separate license for those other components).²²¹ Further, in a separate “Master Agreement,” Intel agreed to notify all third-party purchasers of this prohibition; and indeed, Intel properly notified Quanta.²²² But Quanta disregarded this notice by combining the licensed products with nonlicensed components, and LGE sued Quanta for patent infringement.²²³

213. The Court had last discussed the exhaustion doctrine directly in 1942. *E.g.*, *United States v. Masonite Corp.*, 316 U.S. 265 (1942); *United States v. Univis Lens Co.*, 316 U.S. 241 (1942).

214. *Quanta*, 553 U.S. at 621.

215. *Quanta* also addressed two other aspects of the first-sale doctrine that, although matters of vast importance, go beyond the scope of this Note. First, the Court for the first time held that patented *methods* could be exhausted; previously, the Court had only applied the doctrine to patented products. *Id.* at 629–30. Second, the Court held that the first sale of an essential *component* of a patented item exhausted the patent owner’s rights to the entire item. *Id.* at 634–35. (citing *Univis*, 316 U.S. at 250–51). Interestingly, the Court’s ruling on method patents was the only novel holding in *Quanta*. The holdings regarding components and use restrictions had already been firmly established in *Univis*, 316 U.S. 241, and *Motion Picture Patents*, 243 U.S. 502, respectively.

216. *Id.* at 621.

217. U.S. Patent No. 4,939,641 disclosed a system for ensuring that random access memory (RAM) and cache memory are updated together, eliminating the problem of “stale” data. *Id.* at 622. U.S. Patent No. 5,379,379 disclosed a novel method of processing “write” and “read” requests to and from RAM that allows for fast, yet still accurate, processing. *Id.* U.S. Patent No. 5,077,733 disclosed a method allowing for more efficient data traffic to occur via the bus connecting the computer’s microprocessor to a chipset. *Id.* at 622–23.

218. *Id.* at 623.

219. *Id.*

220. *Id.* at 623–24.

221. *Id.* at 623.

222. *Id.* at 624.

223. *Id.* Proponents of the conditional-sale theory have argued that *Quanta* has no effect on the first-sale doctrine simply because the license agreement there was poorly written. Austin, *supra* note 7, at 2970–71. Specifically, the license agreement noted that “nothing herein shall in any way limit or alter the effect of patent exhaustion.” *Quanta*, 553 U.S. at 623. And the Master Agreement stated that “a breach of this Agreement shall have no effect on . . . the Patent license.” *Id.* at 624. Some scholars suggest that, because *Quanta* did not involve an enforceable use restriction, the conditional-sale theory is still viable. See Gomulkiewicz, *supra* note 21, at 237; Austin, *supra* note 7, at 2970. However, this argument fails, as simply distinguishing *Quanta* cannot save the conditional-sale theory. As this Note has demonstrated, that doctrine met its demise ninety years earlier in *Motion Picture Patents*, 243 U.S. 502. See *supra* Section II.A.

The Court ruled for Quanta.²²⁴ The Court noted that *Henry v. A.B. Dick* had permitted use restrictions, but stated that “that decision was short lived.”²²⁵ Citing *Motion Picture Patents*, the Court reiterated that the Patent Act was designed “to promote the progress of science and useful arts,” and “not the creation of private fortunes.”²²⁶

Turning to the facts, the Court noted that Intel had properly notified Quanta of the use restriction, and had received broad rights to make, use, and sell the patent—that is, an authorized sale had occurred.²²⁷ The Court concluded that this “authorized sale . . . exhausts the patent holder’s rights and prevents the patent holder from invoking patent law to control post-sale use of the article.”²²⁸

In sum, the Supreme Court has made clear that the single-royalty theory is the law. In fact, district courts have concluded that the conditional-sale theory has been abolished.²²⁹ The strong language in *Motion*, *Graphophone*, and *Quanta* supports this conclusion.²³⁰ But as discussed below, these cases all involve patent owners implementing use restrictions to help themselves in the market (i.e., to enhance their private fortunes). Section III discusses that, in limited circumstances, use restrictions are necessary to promote innovation and the public interest, and therefore, fall within the intentions of Congress. This conclusion is consistent with the Court’s first-sale jurisprudence.

III. THE SINGLE-ROYALTY THEORY CANNOT STIFLE INNOVATION

As detailed above, the Supreme Court’s application of the first-sale doctrine strongly supports the application of the single-royalty theory. But the Court did not create a bright-line rule with no exceptions. Rather, the single-royalty theory yields under the appropriate circumstances because, as first explained by *Motion Picture Patents*, Congress’s intentions are dispositive.

Section III.A below explains that the single-royalty theory is not a bright-line, “no exceptions” rule. Rather, the Court’s jurisprudence mandates an *ad hoc* analysis, ensuring that the patent owner’s reward sufficiently fosters innovation. This Section details this Note’s conclusion: that if a use restriction is *necessary* for innovation (not simply tied to the market economy), then the use restriction must be enforced. Section III.B demonstrates that the Court has already found instances where exceptions are warranted, namely, in cases involving restrictions on licensees.

224. *Quanta*, 553 U.S. at 638.

225. *Id.* at 625–26.

226. *Id.* at 626 (quoting *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 511 (1917)).

227. *Id.* at 636 (rebutting LGE’s argument that the sale was not authorized and that Quanta therefore could not purchase what Intel was not authorized to sell).

228. *Id.* at 638.

229. *See, e.g.*, *Static Control Components, Inc. v. Lexmark Int’l, Inc.*, 615 F. Supp. 2d 575, 585–86 (E.D. Ky. 2009) (“After reviewing *Quanta*, *Mallinckrodt*, and the parties arguments, this Court is persuaded that *Quanta* overruled *Mallinckrodt sub silentio*.”).

230. *See supra* note 156.

Section III.C critiques the Federal Circuit’s *Mallinckrodt* decision, but concludes that the court’s holding—although not its reasoning—survives this *ad hoc* analysis.

A. *The Single-Royalty Theory Must Yield Under Proper Circumstances*

As we have seen, the Supreme Court has made clear that a patent owner generally receives her entire reward through the purchase price of the sold article. To allow the patent owner to place restrictions on the article’s use would enhance her reward beyond the intentions of Congress. This the Court cannot allow.

But, on the other hand, the Court has also made clear that the patent owner must receive a full reward.²³¹ This reward must be sufficient to encourage future patent owners to put time and effort into developing future inventions.²³² It must encourage innovation.

A court, therefore, must always consider whether condemning a use restriction would stifle innovation. In most cases, it does not, so the single-royalty theory applies. But it does do so in limited circumstances, as detailed below. In such circumstances, the Court *must* uphold such restrictions.

1. *Determining the Proper Reward Requires an Ad Hoc Analysis*

Scholars agree that the U.S. patent system is designed to promote innovation through granting exclusive rights as a reward.²³³ The traditional view is that this reward should “give as little protection as possible consistent with encouraging innovation.”²³⁴ But how much reward should be given before this minimum incentive is reached?

There is no bright line answer to this question. As Professors Dan Burk and Mark Lemley note: “Different industries vary greatly in how they approach innovation, the cost of innovation, and the importance of innovation to continued growth. For innovation, one size definitely does not fit all.”²³⁵ Courts must thus determine the size of the reward case-by-case, looking at factors such as the type of creation and the nature of the industry.²³⁶

Further, scholars note that any reward involves an equivalent burden on society. The patent owner’s exclusive rights inhibit competition, so a large reward yields a large public burden, albeit temporarily.²³⁷ As a result, courts also need to

231. *United States v. Masonite Corp.*, 316 U.S. 265, 278 (1941) (stating the test as whether the patent owner has received her reward).

232. *Id.* at 278 (noting that the patent owner’s reward is the means by which innovation is fostered).

233. BURK & LEMLEY, *supra* note 37, at 37 (“There is virtually unanimous agreement that the purpose of the patent system is to promote innovation by granting exclusive rights to encourage invention.”).

234. Lemley, *supra* note 60, at 1031. No more protection is appropriate, considering that the patent owner’s exclusive rights come at the expense of the public. *See id.*

235. BURK & LEMLEY, *supra* note 37, at 38.

236. *See* Lemley, *supra* note 60, at 1066.

237. *See id.* at 1031.

determine, case-by-case, where the proper balance lies between the inventor's benefit and societal harm.²³⁸

Therefore, determining the reward needed to foster innovation requires an *ad hoc* analysis. The Court will look at the nature of the invention, the nature of the industry, and the harm to the public. In doing so, the Court will strive to grant the minimal level of reward that will successfully foster innovation.

2. *The Purchase Price Encourages Innovation in Most Cases*

The prospect of selling an invention for monetary compensation will foster innovation in nearly all circumstances. In fact, the Court in *Adams v. Burke* found this to be true “in the essential nature of things”—that is, in ordinary circumstances.²³⁹ This language establishes a strong presumption against enforcing use restrictions, because the purchase price is a sufficient reward.

“[T]he essential nature of things” occurs where the purchase price can represent the article's value. The nature of the article does not require the patent owner to implement restrictions in order to sell the article. Rather, whether or not the invention sells depends on the market.²⁴⁰ In this light, the single-royalty theory does not stifle innovation. Patent owners will strive to create patentable, marketable inventions. They know that if they create a useful, popular invention, then they will reap a great reward.

The Supreme Court's jurisprudence has revolved around this “essential nature of things” category. In this respect, the Court has seen patent owners try to implement use restrictions to better position themselves in the market. These patent owners seek to gain a competitive edge that they would not have had without those restrictions. Such restrictions are unenforceable.

But not all scenarios fall within the “essential nature of things.” Sometimes, the nature of the invention may warrant use restrictions. At bottom, in all cases, the test is not simply whether the patent owner has received the purchase price. Rather, “[t]he test [is] whether or not there has been such a disposition of the article that it may fairly be said that the patentee has received his reward for the use of the article.”²⁴¹ As seen above, receiving the purchase price generally satisfies this test. However, exceptions exist.

3. *The Nature of the Invention May Warrant Use Restrictions*

Use restrictions should be enforced where the nature of the invention justifies the restriction. As discussed above, the exclusive right granted by Congress must provide the minimal level of protection required to foster innovation. The Court

238. *See id.* at 1032.

239. *Adams v. Burke*, 84 U.S. 453, 456 (1873).

240. *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 513 (1917) (“If [the patent owner's] discovery is an important one his reward . . . will be large . . .”).

241. *United States v. Masonite Corp.*, 316 U.S. 265, 278 (1942).

will seek—*ad hoc*—to strike an appropriate balance by considering not only the benefit to the inventor, but also the resulting harm to society.

In striking this balance, the Court will consider the totality of the circumstances, including the nature of the invention and the nature of the industry.²⁴² In most cases, the purchase price is a sufficient reward. Therefore, in general, the Court should assume that any use restrictions are an attempt to enhance the patent owner’s position in the market. The burden should then fall on the patent owner to explain why this is not the case.

To prevail, the patent owner must successfully explain that her use restrictions are warranted due to the nature of the invention rather than the market. To do so, the patent owner will need to demonstrate that simply raising the purchase price will not remove the need for the use restrictions. In other words, the patent owner must show that the use restrictions are inextricably intertwined with the nature of the invention or industry. In other words, the purchase price is not able to equal the reward. The nature must be such that removing the use restrictions would stifle innovation.

In such scenarios, the use restrictions must be upheld. The case-by-case nature of this question makes it difficult to predict exactly what scenarios warrant this result. However, existing case law has depicted two such scenarios: (1) where the use restrictions are necessary to prevent the invention from harming the public, and (2) where the use restrictions are necessary to prevent the patent from losing all value entirely.²⁴³

a. Use Restrictions that Protect the Public

Protecting the public surely warrants the enforcement of use restrictions. To take an extreme example, suppose an invention has two potential uses: Use A and Use B. Use A is the invention’s intended use—a valuable, marketable use that can be enjoyed by the public. Use B, on the other hand, causes widespread environmental or biological damage that greatly harms the public. The patent owner requires purchasers to sign a contract that they will use the invention only for Use A—and not for Use B—and requires them to provide an identical contract to any subsequent purchaser. A purchaser violates the contract, and the owner sues for patent infringement.

The case is appealed to the Supreme Court. The defendant argues that per the Court’s holding in *Motion Picture Patents* and *Quanta*, the plaintiff cannot seek to enhance her reward, as the Patent Act is not intended to secure private fortunes. The plaintiff counters that she is not extending her reward, but is simply protecting the public through the use restriction. She argues that the nature of her invention

242. See *supra* Section III.A.1.

243. Further, as discussed in Section III.B., *infra*, the Court has established an exception for use restrictions on licensees, rather than purchasers.

could potentially harm the public. She needs to protect the public; she cannot warrant removing the use restriction simply by raising the purchase price.

After hearing both sides, the Court considers how it will ensure that the patent owner receives a reward just large enough to foster innovation, but no larger. It considers what is the appropriate balance between the exclusive right granted and the resulting harm to the public. The Court realizes that, unlike most cases, the use restriction here actually *benefits* the public. Further, the Court concludes that, if the patent owner cannot prohibit Use B, then future patent owners in the industry may not be incentivized to create similar inventions.

The Court in this case should rule for the plaintiff. The use restriction is enforceable because it is a result of the nature of the invention, rather than the market. The restriction is necessary to protect the public and foster innovation.

b. Use Restrictions that Prevent Destruction of the Patent

The right to exclude is a core tenet of patent law.²⁴⁴ Intellectual property—an intangible good—is “non-rivalrous”: consumption by one individual does not prevent simultaneous consumption by another individual.²⁴⁵ Without patent law, anyone could freely use such nonrivalrous property.²⁴⁶ The right to exclude thus provides inventors with an incentive to invent.²⁴⁷ The public will not be able to use inventions for free, but will need to pay for that right.²⁴⁸

In general, the first-sale doctrine does not hinder this incentive. A patent owner cannot control the disposition of a sold article, but she certainly can control the disposition of articles that have not been sold. She plans to sell many articles. With this in mind, future patent owners have a strong incentive to invent.

But suppose the patent owner, absent a use restriction, would be unable to sell multiple articles. Suppose that the nature of her invention is such that, after a single sale, consumers will never need to purchase additional articles. In such a case, the first-sale doctrine would completely swallow the right to exclude. The patent would be worthless, and innovation would be stifled.

At oral argument in *Quanta*, Justice Kennedy nicely summed up this scenario with the following question to LGE’s attorney: “Are there cases where some downstream restrictions on use might be necessary to prevent the patent from becoming worthless, i.e., in the biological area for replication of seeds in agriculture

244. See BURK & LEMLEY, *supra* note 37, at 37.

245. Harry First, *Controlling the Intellectual Property Grab: Protect Innovation, Not Innovators*, 38 RUTGERS L.J. 365, 369 (2007) (“[T]he inventions and expressions that intellectual property law protects are non-rivalrous in consumption . . .”); see also BURK & LEMLEY, *supra* note 37, at 7 (“[I]nvention is a ‘public good’ because it is expensive to invent but cheap to copy those inventions.”).

246. Anyone could use intellectual property because it is intangible. For example, if an inventor discovers a novel method of making a chair, once the public learns of the method, then anyone could use it themselves. Patent law makes this property exclusive.

247. BURK & LEMLEY, *supra* note 37, at 37.

248. See 35 U.S.C. § 284 (2012) (noting that the damages for patent infringement may in no circumstances be “less than a reasonable royalty for the use made of the invention by the infringer”).

and so forth?”²⁴⁹ Although LGE’s attorney did not directly answer—and the facts of *Quanta* did not implicate—the question, Justice Kennedy’s question directly details a scenario where use restrictions would indeed be enforceable.

The Court came close to answering this question in *Bowman v. Monsanto*—the third scenario depicted in this Note’s introduction. In *Bowman*, respondent Monsanto sold genetically modified soybeans to farmers, which yielded herbicide-resistant crops.²⁵⁰ These crops themselves yielded more soybeans, but Monsanto prohibited the planting of any second-generation beans.²⁵¹ The rationale was that if farmers could grow their own soybeans, then after a single sale, farmers would never need to purchase beans from Monsanto.²⁵²

Petitioner Bowman replanted second-generation seeds, and Monsanto sued for patent infringement.²⁵³ The Court, however, did not answer whether the use restriction was enforceable. It held that—by utilizing second-generation seeds—Bowman had improperly *made*, rather than used, the patented invention.²⁵⁴ The exclusive right to “make” can never be exhausted.²⁵⁵ As a result, the Court did not need to address Justice Kennedy’s question in *Quanta*.

After *Bowman*, one potential response to Justice Kennedy’s question could be a flat “no.” That argument would note that *Bowman* determined that seed replication is impermissible reconstruction, not use. The argument would conclude that Justice Kennedy’s question is moot because it simply describes a scenario that, in reality, can never occur.

But this argument fails because it only considers present-day technology. It would not be difficult to imagine that, in the future, a similar scenario could arise where it is clear that the purchaser has used, rather than made, the invention. Perhaps, for example, the DNA of the initial seed could be extracted and then injected into other seeds, which would themselves gain the desired herbicide-resistant qualities. And the Court has made clear that “[a] rule that unanticipated inventions are without protection would conflict with the core concept of the patent law that anticipation undermines patentability.”²⁵⁶

Just because such a case has not arisen yet does not detract from the fact that, when such a case arises in the future, patent owners will need use restrictions to prevent their patents from becoming worthless. Without such restrictions, innovation would be stifled. As Justice Roberts stated at oral argument in *Bowman*:

249. Transcript of Oral Argument at 15–16, *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617 (2008) (No. 06-937).

250. *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1764 (2013).

251. *Id.* Monsanto notified purchasers of this restriction via a “bag tag” notice that was provided with the soybeans. *See* Rogers, *supra* note 10, at 421.

252. *Monsanto Co. v. Bowman*, 686 F. Supp. 2d 834, 837 (S.D. Ind. 2009) (explaining Monsanto’s argument), *aff’d*, 657 F.3d 1341 (Fed. Cir. 2011), *aff’d*, 133 S. Ct. 1761 (2013).

253. *Bowman*, 133 S. Ct. at 1765.

254. *Id.* at 1766.

255. *Id.*

256. *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int’l, Inc.*, 534 U.S. 124, 135 (2001).

“Why in the world would anybody spend any money to try to improve the seed if as soon as they sold the first one anybody could grow more and have as many of those seeds as they want?”²⁵⁷

c. The Court Will Scrutinize the Patent Owner’s Intentions

As the above scenarios demonstrate, use restrictions are enforceable in limited circumstances. However, even if a patent owner demonstrates that her invention warrants such restrictions, she must also convince the Court that the restrictions are not simply a pretext designed to increase market power. What should the Court do, for example, if a use restriction protects the public health, but also leads to monetary gain?

As before, the Court will need to engage in an *ad hoc* analysis to determine the patent owner’s intentions. The Court has made clear it will look to the “substances and realities of the transaction” to determine whether a restriction was intended to “secur[e] . . . that exclusive right . . . which is granted through the patent law, or whether, under color of such a purpose, it is . . . an effort to profitably extend the scope of its patent.”²⁵⁸ If the restriction appears truly necessary to secure innovation, the Court will allow it; if not, then the restriction is unenforceable.²⁵⁹

B. An Exception—Restrictions on Licensees

1. The “Reward” Drives Both Lines of Cases

The Supreme Court has made a distinction between licensees and purchasers.²⁶⁰ The Court typically permits a patent owner to restrict a licensee, but not a purchaser.²⁶¹ Some scholars believe that this distinction exists because different lines of case law govern each restriction. While the single-royalty theory governs restrictions on purchasers,²⁶² a different law controls restrictions on licensees. The scholars note that only an *authorized* sale can implicate the first-sale doctrine.²⁶³ So, therefore, if a licensee did not adhere to a restriction, then no first sale had occurred.

One problem with the above reasoning is that it makes the first-sale doctrine too easy to circumvent. Some fear that patent owners will simply begin calling their purchasers “licensees.”²⁶⁴ However, the Court has addressed this concern, saying

257. Transcript of Oral Argument at 3, *Bowman v. Monsanto Co.*, 133 S. Ct. 1761 (2013) (No. 11-796).

258. *Straus v. Victor Talking Mach. Co.*, 243 U.S. 490, 497–98 (1916).

259. *Id.* Also, in some cases, the Court may enforce restrictions only to the extent necessary. *See infra* note 322.

260. *United States v. Gen. Elec. Co.*, 272 U.S. 476, 489–90 (1926).

261. *Id.*

262. *See supra* Section II.

263. *Server & Casey*, *supra* note 15, at 582 (noting that restrictions on licensees do not trigger exhaustion because the resulting sales are unauthorized).

264. *Id.* (noting that the Federal Circuit in *Mallinckrodt* relied on this argument in its holding).

that it knows to look carefully at any agreement to determine whether it is a purchase or really a license.²⁶⁵ Therefore, instead, some commentators more correctly fear that patent owners will use licensees as unnecessary “middlemen,” with the intention to restrict purchasers.²⁶⁶ It seems odd that the Court would have two lines of cases that are readily confused.

The answer must be that there are not really two lines of cases. True, the first sale must be authorized. But, as discussed below, some restrictions on licensees are unenforceable, even if the licensee adheres to them. This is because a single concept—the patent owner’s reward—governs restrictions on both licensees and purchasers. The Court multiple times has expressly said that it only tolerates restrictions on licensees where the restriction is within the patent owner’s reward.²⁶⁷ The Court has explained that, in the usual case, a licensee with unrestricted access might hinder the patent owner from making her own sales.²⁶⁸ And the first-sale doctrine has always protected the patent owner with respect to articles not yet sold. Therefore, in general, restrictions on licensees are necessary for the patent owner to receive her reward.

The Court’s reliance on the patent owner’s reward is important. It explains why licensees are treated differently than purchasers. It reveals that, in both instances, the “reward” drives the Court’s analysis. With this understanding, patent owners will be unlikely to improperly circumvent the first-sale doctrine. A patent owner will not be able to use a licensee as a “middleman” to bind purchasers because the Court, as always, will analyze whether the restriction is within the patent owner’s reward.

2. *Restrictions on Licensees Must Be Justified*

The case law involving restrictions on licensees makes clear that the restrictions must be within the scope of the patent owner’s reward. Not all types of restrictions get through. The Court typically will only enforce restrictions on licenses where the licensee manufactures the articles, or whether the type of license is common in the industry.

In *United States v. General Electric Co.*, the Court set forth the law governing restrictions on licensees.²⁶⁹ General Electric Company (GE) owned three patents involving the making of electric lamps.²⁷⁰ The U.S. Government sued under antitrust law, claiming in part that GE was unlawfully restraining trade through GE’s license agreements. GE would enter into agreements with licensees, and the license terms provided that GE would be allowed to control the price at which the patented articles were sold.

265. See *infra* notes 288–90 and accompanying text.

266. See Austin, *supra* note 7, at 2972–73.

267. See *infra* Section III.B.2.

268. *United States v. Gen. Elec. Co.*, 272 U.S. 476, 490 (1926).

269. *Id.*

270. *Id.* at 480–81.

The Court acknowledged that, against purchasers, use restrictions are typically unenforceable: “It is well settled . . . that where a patentee makes the patented article and sells it, he can exercise no future control over what the purchaser may wish to do with the article after his purchase.”²⁷¹ But the Court stated that “the question is a different one” when considering “what a patentee who grants a license . . . to make and vend . . . may do in limiting the licensee.”²⁷²

The Court then ruled that use restrictions on licensees are enforceable “provided the conditions of sale are normally and reasonably adapted to secure pecuniary reward for the patentee’s monopoly.”²⁷³ The Court explained that the price at which a licensee sells a patent article affects the patent owner’s ability to sell other patented articles.²⁷⁴ GE had thus acted “entirely reasonabl[y]” to control the licensee’s sale price.²⁷⁵

A similar result occurred in *General Talking Pictures v. Western Electric Co.*²⁷⁶ The American Telephone & Telegraph Company owned patents on vacuum tube amplifiers.²⁷⁷ The technology was useful in both commercial theaters as well as in private radio.²⁷⁸ The American Transformer Company had a nonexclusive license to sell the amplifiers for private use only.²⁷⁹ But it sold the amplifiers to a purchaser—the petitioner—with both parties knowing the purchaser would use it in the commercial field.²⁸⁰

The Court found the purchaser liable, as the restriction on the licensee was enforceable, and the purchaser had notice.²⁸¹ The Court concluded that the restriction on the licensee was within the patent owner’s reward.²⁸² The Court subsequently affirmed that reasoning by stating:

The patentee may grant a license upon any condition the performance of which is reasonably within the [patent owner’s] reward The restriction here imposed is of that character. . . . [I]t is common practice where a patented invention is applicable to different uses . . . [to] restrict[] to one or more of the several fields of use²⁸³

The Court upheld the restriction as a result.²⁸⁴

271. *Id.* at 489. Later in the opinion, the Court strongly endorsed the general application of the single-royalty theory by noting that “a patentee may not attach . . . a condition running with the article in the hands of purchasers.” *Id.* at 494.

272. *Id.* at 489.

273. *Id.* at 490.

274. *Id.*

275. *Id.*

276. *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 304 U.S. 175, 181 (1938).

277. *Id.* at 176, 179.

278. *Id.* at 179.

279. *Id.*

280. *Id.* at 180.

281. *Id.* at 180, 183.

282. *Id.* at 181.

283. *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 305 U.S. 124, 127 (1938).

284. *Id.*

In some instances, however, the Court has found that restrictions on licensees are unenforceable. For example, in *Straus v. Victor Talking Machine Co.*, the Court found that an alleged license was actually a sale to a purchaser.²⁸⁵ Among other things, the patent owner required immediate payment of full consideration and did not keep itself closely informed of the product’s disposition.²⁸⁶ The Court found that the patent owner was simply trying to mask an impermissible use restriction under the licensee exception.²⁸⁷

Also, the Court has refused to enforce restrictions on licensees that are too broad. In *Standard Sanitary v. United States*, the Court found that the purpose of the licensee restriction—control of the enamel iron industry—“clearly . . . transcended what was necessary to protect the use of the patent.”²⁸⁸ Similarly, in *United States v. Masonite Corp.*, the Court found that the restrictions on licensees impermissibly attempted to restrain competition in the hardboard industry.²⁸⁹ The *Masonite* Court explained that “[i]n the *General Electric* case, the Court thought that the purpose . . . was to secure to the patentee . . . a reward for his invention. We cannot agree that that is true here.”²⁹⁰

It therefore appears clear that the cases involving restrictions on licensees stem from the same reasoning as restrictions on purchasers. In both cases, the Court will ensure that the patent owner is not inflating her reward. But restrictions are always permitted when necessary to secure that reward.

C. The Federal Circuit’s Jurisprudence

Despite the Supreme Court’s strong presumption in favor of the single-royalty theory, the Federal Circuit has developed its own jurisprudence that favors the conditional-sale theory. Beginning with the court’s decision in *Mallinckrodt v. Medipart*,²⁹¹ the Federal Circuit has made clear that use restrictions are generally enforceable. The Federal Circuit’s 2010 decision in *Princo v. International Trade Commission* makes clear that the court has adhered to its own jurisprudence even after the Supreme Court’s 2008 *Quanta* decision.²⁹²

The Federal Circuit’s failure to align itself with Supreme Court decisions is troubling. The Federal Circuit was created in part to provide predictable, uniform

285. See *Straus v. Victor Talking Mach. Co.*, 243 U.S. 490, 498, 500 (1916) (finding that the alleged license was “a disguised attempt to control the prices of its machines after they have been sold and paid for”).

286. *Id.* at 498–99. By contrast, in *General Electric*, the licensee paid no money until the item was sold. *General Electric*, 272 U.S. at 484.

287. See *Straus*, 243 U.S. at 500.

288. *Standard Sanitary Mfg. Co. v. United States*, 226 U.S. 20, 48 (1912).

289. *United States v. Masonite Corp.*, 316 U.S. 265, 280–81 (1942).

290. *Id.* at 280.

291. *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700 (Fed. Cir. 1992).

292. *Princo Corp. v. Int’l Trade Comm’n*, 616 F.3d 1318, 1328 (Fed. Cir. 2010) (continuing to apply *Mallinckrodt* in spite of *Quanta*). As noted above, as this Note goes to press, the en banc Federal Circuit is considering overruling *Mallinckrodt* in light of *Quanta*. *Supra* note 17.

results in the area of patent law.²⁹³ Some scholars argue that the Federal Circuit's jurisprudence has done anything but that; rather, the Circuit has caused confusion and uncertainty.²⁹⁴ In recent years, the Supreme Court has begun hearing more patent cases than ever before, almost always reversing the Federal Circuit.²⁹⁵

The *Mallinckrodt* decision is a good example of the confusion the Federal Circuit has caused. Below, this Note first discusses why the court's reasoning is inconsistent with the Supreme Court's jurisprudence, even prior to *Quanta*. Then, this Note explains that, although *Mallinckrodt's* reasoning is misguided, the facts of *Mallinckrodt* support the ultimate holding under Supreme Court jurisprudence. This is why *Quanta* did not overrule *Mallinckrodt* and made no mention of *Mitchell v. Hawley*.

1. *Mallinckrodt's Reasoning Is Not Supported by Law*

Mallinckrodt involved a patented medical device that used radioactive mist to diagnose whether a patient had lung disease.²⁹⁶ A nebulizer would generate the radioactive material, the patient would inhale the material via a mouthpiece, and whatever the patient exhaled would be trapped and analyzed by the device.²⁹⁷ Plaintiff *Mallinckrodt* made and sold these devices to hospitals with a "single use" notification affixed to the packaging.²⁹⁸ The hospitals were instructed to dispose of the device in a radiation-shielded container after the first use.²⁹⁹

But the hospitals ignored *Mallinckrodt's* notice; they instead shipped the devices to defendant *Medipart* to be refurbished.³⁰⁰ *Medipart* would attempt to sterilize the devices and would then send them back to the hospitals.³⁰¹ *Mallinckrodt* sued *Medipart* for patent infringement.³⁰² *Medipart* argued that, under the Supreme Court's decisions in *Bauer* and *Motion Picture Patents*, the conditional-sale theory had met its demise.³⁰³ *Mallinckrodt* countered that conditional sales are permissible and

293. Wegner, *supra* note 17, at 686 ("When the Federal Circuit was established in 1982, it was done so seemingly with a mandate for the new court to create a uniform body of patent law for the United States.").

294. Gomulkiewicz, *supra* note 21, at 201 (highlighting the discontent that some scholars have with the Federal Circuit).

295. Gretchen S. Sween, *Who's Your Daddy? A Psychoanalytic Exegesis of the Supreme Court's Recent Patent Jurisprudence*, 7 NW. J. TECH. & INTELL. PROP. 204, 204 (2008–2009) (calling the last decade a "flurry of reversals").

296. *Mallinckrodt*, 976 F.2d at 701.

297. *Id.* at 702.

298. *Id.*

299. *Id.*

300. *Id.*

301. *Id.* Specifically, *Medipart* exposed the devices to "at least 2.5 megarads of gamma radiation"; however, *Medipart* did not test the devices afterward for biological activity or radioactivity. *Id.*

302. *Id.*

303. *Id.* at 703.

that further, the nature of the invention implicated the health and safety of the public.³⁰⁴

The Federal Circuit ruled for *Mallinckrodt* under the conditional-sale theory.³⁰⁵ The court held that *Bauer* and *Motion* were simply instances of patent misuse, and that “not all restrictions on the use of patented goods are unenforceable.”³⁰⁶ Citing *General Electric*, the court noted that restrictions on licensees are permitted where the restriction reasonably secures the patent owner’s reward.³⁰⁷ The court acknowledged that *General Electric* involved a restriction on a licensee—and not a purchaser—but said that “neither law, public policy, nor logic” warranted making this distinction.³⁰⁸ The court noted that a licensee versus purchaser distinction would be easy to circumvent with better contract drafting and that the law cannot turn on “formalistic line drawing.”³⁰⁹

The Court held: “Unless the [use] condition violates some other law or policy . . . private parties retain the freedom to contract concerning conditions of sale.”³¹⁰ In the patent context, so long as the restriction is “reasonably within the patent grant,” it properly secures the patent owner’s reward under *General Electric*.³¹¹ With this holding, the Federal Circuit revived the conditional-sale theory from the grave.

The flaw in the Federal Circuit’s reasoning is twofold. First, the Federal Circuit distinguishes *Bauer* and *Motion Picture Patents* on the ground that those cases involved patent misuse.³¹² But as detailed in Section II.A, those cases clearly turn on the Court’s determination that post-sale control by the patent owner goes beyond Congress’s intentions.³¹³ *Mallinckrodt* looks at the Court’s holding but ignores the Court’s reasoning.

Second, the Federal Circuit is incorrect that there is no basis in law for making a distinction between restrictions on licensees and restrictions on purchasers. As noted in Section III.B, *General Electric* clearly held that “the question is a different one” when dealing with restrictions on licensees.³¹⁴ Further, the Court’s *ad hoc* analysis prevents the cases from turning on “formalistic line drawing.”³¹⁵ The Court will look to the “substances and realities” of the transaction to discern whether the

304. *Id.*

305. *Id.* at 709.

306. *Id.* at 703.

307. *Id.* at 704–05 (quoting *United States v. Gen. Elec. Co.*, 272 U.S. 476, 489 (1926)).

308. *Id.* at 705.

309. *Id.*

310. *Id.* at 708.

311. *See id.* The Federal Circuit in *B. Braun Medical, Inc. v. Abbott Laboratories*, 124 F.3d 1419, 1426 (Fed. Cir. 1997), elaborates that whether a restriction is within the patent grant turns on “whether, by imposing the condition, the patentee has ‘impermissibly broadened the “physical or temporal scope” of the patent grant with anticompetitive effect.’”

312. *Mallinckrodt*, 976 F.2d at 704.

313. *See supra* Section II.A.

314. *United States v. Gen. Elec. Co.*, 272 U.S. 476, 489 (1926); *see also supra* Section III.B.

315. Such line drawing was the court’s fear in *Mallinckrodt*, 976 F.2d at 708.

patent owner has attempted to disguise a purchaser restriction as a licensee restriction.³¹⁶ Overall, the Federal Circuit's reasoning is inconsistent with the Supreme Court's jurisprudence.

2. *Mallinckrodt's Holding Was Correct—It Protected Public Safety*

As discussed above, *Mallinckrodt's* reasoning is inconsistent with the first-sale doctrine and the Supreme Court's holding in *Quanta*. Further, the Supreme Court in *Quanta* reversed the Federal Circuit, which had relied on *Mallinckrodt's* reasoning.³¹⁷ The big question, then, is why did *Quanta* not overrule *Mallinckrodt*?

The answer is likely that *Quanta* did not want to completely shut the door on the conditional-sale theory. As noted in Section III.A.3 above, certain scenarios require the application of the conditional-sale theory.³¹⁸ One such scenario is when the use restriction is necessary to protect the health of the public.

Had *Quanta* flatly overruled *Mallinckrodt*, *Quanta* would have overturned a holding that was very likely correct. *Mallinckrodt* involved a medical device that generated a radioactive mist inhaled by patients for the diagnosis of lung disease.³¹⁹ The patients would then exhale directly into the device.³²⁰ Although Medipart attempted to sterilize the devices, it did not test for residual biological activity or radioactivity.³²¹ *Mallinckrodt* expressly argued that the “single use” restriction was required to protect the public health.

Should *Mallinckrodt* have been required to simply hope that patients would not get sick after reusing the refurbished medical devices? From this perspective, the single use restriction appears necessary to secure innovation. *Mallinckrodt* will not likely be incentivized to make nebulizers if patients will get sick and sue *Mallinckrodt*. This use restriction does not harm the public; it benefits the public. Of course, the Court will need to look at all the circumstances to ensure that *Mallinckrodt* does not have improper intentions.³²² But the facts in this case (i.e.,

316. *Straus v. Victor Talking Mach. Co.*, 243 U.S. 490, 497–98 (1916).

317. *LG Elecs., Inc. v. Bizcom Elecs., Inc.*, 453 F.3d 1364, 1370 (Fed. Cir. 2006), *rev'd sub nom.* *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617 (2008).

318. *See supra* Section III.A.3.

319. *Mallinckrodt*, 976 F.2d at 702.

320. *Id.*

321. *Id.*

322. *See Straus v. Victor Talking Mach. Co.*, 243 U.S. 490, 497–98 (1916). Further, the Court may enforce the use restrictions to the extent that they protect the public health. In *Ethyl Gasoline Corp. v. United States*, 309 U.S. 436, 445–46 (1939), the government sought to enjoin Ethyl Gasoline from enforcing license provisions involving the sale of patented gasoline additives to oil refiners. The license contained multiple clauses, one of which required the oil refiners—as well as any subsequent purchasers—to conform to the health regulations set by the Surgeon General. *Id.* at 447. The Court engaged in an *ad hoc* analysis, holding that the license as a whole sought to “control conduct by the licensee not embraced in the patent monopoly.” *Id.* at 456. However, the Court expressly stated that the health provisions “are not interfered with by the decree.” *Id.* at 459–60. The Court thus demonstrated its willingness to enforce certain restrictions, but not others, based on whether the restriction was meant to protect the public health.

Notably, at oral argument in *Lexmark*, Judge Newman appeared to support this Note's contention

the nature of the patented invention) appear to warrant the use restriction. *Quanta* did not want to upset precedent that protects the public health.

CONCLUSION

The first-sale doctrine strives to strike the appropriate balance between the rights of patent owners and the rights of personal property owners. The first authorized sale exhausts the patent owner’s ability to control the further disposition of the sold article. As a result, personal property owners have complete control over purchased articles. Allowing such control promotes competition and ensures that the sold articles may be used in the most efficient way possible. At the same time, the patent owner retains the right to exclude others from using patented articles not yet sold.

The Court has not provided a bright-line rule as to whether express use restrictions on patented articles are enforceable. In most cases, however, the single-royalty theory appears to control, prohibiting patent owners from implementing such restrictions on purchasers. The rationale is that use restrictions hinder the purchaser’s rights and improperly inflate the patent owner’s reward. However, in certain scenarios where the *nature* of the invention warrants the use restrictions, it appears likely that such restrictions are enforceable. For example, if the use restrictions are necessary to protect the public health, or to prevent the destruction of the patent, then the Court will uphold those restrictions. In such cases, the restrictions do not improperly inflate the patent owner’s reward. Rather, the restrictions are necessary to foster innovation—a central requirement of the patent statute. Overall, the Court will engage in an *ad hoc* analysis to ensure that innovation is fostered without unduly harming the public or inflating the patent owner’s reward. The first-sale doctrine cannot stifle innovation.

that an *ad hoc* approach is necessary to protect the public health. Recording of Oral Argument at 19:16–20:03, *Lexmark Int’l, Inc. v. Impression Prods., Inc.*, No. 14-1617 (Fed. Cir. Oct. 2, 2015) (“What’s so troublesome about these cases—you get wrapped up in generalizations [In] *Mallinckrodt*, the restriction on reuse was for a product, a nebulizer, which, in use, gets filled with pneumococcus and other deadly bacteria and viruses So, the producer says: ‘You can’t reuse this. You’ll kill everybody.’ And yet, here we are, saying that’s not allowed Don’t we have to allow our evolution of the law to recognize the complexities of practice?”).

