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COMMERCIALIZING PROPERTY RIGHTS IN INVENTIONS: LESSONS FOR MODERN PATENT THEORY FROM CLASSIC PATENT DOCTRINE

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I. Introduction

In 1859, Abraham Lincoln famously observed that the "patent system . . . secured to the inventor, for a limited time, the exclusive use of his invention; and thereby added the fuel of interest to the fire of genius, in the discovery and production of new and useful things." Lincoln understood this point all too well, as he remains the only U.S. President to have obtained a patent (which was still in force at the time he gave this speech). Today, scholars and lawyers often quote this passage from Lincoln's 1859 speech as a poetic exemplar of the long-standing policy justification for the patent system—it promotes inventive activity and progress of the useful arts by "add[ing] the fuel of interest to the fire of genius."

Yet this invocation of President Lincoln's justification for the patent system also reflects a deep ambivalence within modern patent theory about the function of the patent system. While repeatedly quoting the latter portion of Lincoln's statement about the patent system spurring on inventive activity, modern scholars always redact the all-important first clause in which Lincoln

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¹ Abraham Lincoln, *Second Lecture on Discoveries and Inventions* (Feb. 11, 1859), *in* 3 THE COLLECTED WORKS OF ABRAHAM LINCOLN 356, 363 (Roy P. Basler ed., 1953).

² See Patent No. 6,469 ("Buoying Vessels over Shoals") (issued May 22, 1849).

³ See, e.g., Jessica Silby, The Mythical Beginnings of Intellectual Property, 15 Geo. Mason L. Rev. 319, 330 n.69 (2008); Christopher A. Harkins, Fending Off Paper Patents and Patent Trolls: A Novel "Cold Fusion" Defense Because Changing Times Demand It, 17 Alb. L.J. Sci. & Tech. 407, 407 (2007); Shubha Ghosh, Patents and the Regulatory State: Rethinking the Patent Bargain Metaphor after Eldred, 19 Berkeley Tech. L.J. 1315, 1328 (2004); Christopher Sprigman, Reform(aliz)ing Copyright, 57 Stan. L. Rev. 485, 533 (2004); Margo A. Bagley, Patent First, Ask Questions Later: Morality and Biotechnology in Patent Law, 45 Wm. & Mary L. Rev. 469, 536 (2003); Gerald J. Mossinghoff, Post-Grant Review of Patents: Enhancing the Quality of the Fuel of Interest, 85 J. Pat. & Trademark Off. Soc'y 231, 231 (2003); Jay I. Alexander, Cabining the Doctrine of Equivalents in Festo: A Historical Perspective on the Relationship Between the Doctrines of Equivalents and Prosecution History Estoppel, 51 Am. U. L. Rev. 553, 554 (2002); Lisa A. Dolak, Declaratory Judgment Jurisdiction in Patent Cases: Restoring the Balance Between the Patentee and the Accused Infringer, 38 B.C. L. Rev. 903, 904 n.13 (1997).

observed that patents "secured to the inventor . . . the exclusive use of his invention." In fact, given Lincoln's syntax, it is clear that he believed that it is the legal guaranty of "exclusive use" that adds "thereby" the "fuel of interest to the fire of genius." In other words, Lincoln believed it was commercialization that spurred inventive activity—the "exclusive use" of a patented product in the marketplace—and not merely the grant of the patent right itself. Modern scholars turn Lincoln's inspired justification for the patent system on its head, transforming his advocacy for the commercialization theory of patents into an early statement of the now-dominant theory of patent law, the reward theory.

The translation of historical texts into modern policy parlance is nothing new within patent law scholarship,⁷ and one might be inclined to conclude that this is simply another instance of "law office history"—the selective use of historical sources to support the reward theory of patent policy.⁸ Yet there is nothing that indicates that this is an intentional misrepresentation of Lincoln's speech on the value of the modern patent system. Instead, the conversion of Lincoln's words—with, or more often without, the revealing ellipses⁹—seems to reflect merely an innocuous correction to anachronistic patent doctrine. That is, Lincoln believed

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⁴ See supra note 3 (citing sources that commit this omission).

⁵ Lincoln, *supra* note 1 (the "fuel of interest" follows as a conclusion from his observation about the security in "exclusive use").

⁶ See F. Scott Kieff, *IP Transactions: On the Theory & Practice of Commercializing Innovation*, 42 Hous. L. Rev. 727, 732 (2005) (recognizing that "[t]he bulk of law and economics literature on U.S. IP regimes focuses on a reward theory of patents"); Mark A. Lemley, *Ex Ante Versus Ex Post Justifications for Intellectual Property*, 71 U. CHI. L. Rev. 129, 30 (2004) (characterizing the reward theory as the "standard economic explanation for intellectual property in the United States").

⁷ See generally Adam Mossoff, Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context, 92 CORNELL L. Rev. 953 (2007).

⁸ Larry D. Kramer, *When Lawyers Do History*, 72 GEO. WASH. L. REV. 387, 389-94 (2003) (complaining about the bad historiography of lawyers, who produce "law office history" intended only "to generate data and interpretations that are of use in resolving modern legal controversies") (citations omitted).

⁹ See supra note 3 (citing sources that convert the above statement without use of ellipses). See also Joseph Scott Miller, Fire of Genius Blog, at http://www.thefireofgenius.com (redacting "exclusive use" and using ellipses in quoting Lincoln's famous statement from his 1859 speech) (last visited April 29, 2008).

that patents secured the "exclusive use" of a patent, whereas it is basic patent theory today that patents secure only the right to exclude. 10

As revealed in this subtle but important change to Lincoln's speech on patents, modern patent theory has altered the positive definition of patent rights, fostering a formalism within patent law that has sown indeterminacy within the commercialization doctrines securing this "exclusive use" of patents in the marketplace. To be clear, my thesis here is not that modern patent theory is incorrect in its positive definition of patent rights; to the contrary, such a thesis would require substantial conceptual and normative exegesis that goes far beyond the scope of this relatively short article. My thesis here is far more limited in its scope: The positive account of patents as securing only the right to exclude does not necessarily provide positive guidance to courts in adjudicating a patentee's commercialization rights.

In proving this thesis, this Article will frame its analysis around three positive models that describe the methods by which a property-owner commercializes his legal interests and thus enjoys "the fruits of his honest labour and industry." This positive framework is important because it elucidates the fundamental conceptual features of classic patent doctrine, to which the Supreme Court in recent years has repeatedly professed fealty. ¹² In particular, these three models

¹⁰ See, e.g., 35 U.S.C. § 154(a) (defining the legal entitlement in a patent as comprising only "the right to exclude others from making, using, offering for sale, or selling the invention"); Dawson Chem. Co. v. Rohm & Haas Co., 448 U.S. 176, 215 (1980) (recognizing "the long-settled view that the essence of a patent grant is the right to exclude others from profiting by the patented invention"); 5-16 CHISUM ON PATENTS § 16.02[1] (2006) ("Basically, a patent grants to the patentee and his assigns the right to *exclude* others from making, using, and selling the invention. It does not grant the affirmative right to make, use or sell.").

¹¹ Vanhorne's Lessee v. Dorrance, 2 U.S. (2 Dall.) 304, 310 (1795) (Patterson, J.) ("[T]he right of acquiring and possessing property, and having it protected, is one of the natural, inherent, and unalienable rights of man. . . . No man would become a member of a community, in which he could not enjoy the fruits of his honest labour and industry.").

industry.").

12 See, e.g., KSR Intern. Co. v. Teleflex Inc., 127 S. Ct. 1727, 1734 (2007) (recognizing that modern nonobviousness doctrine follows "the logic of the earlier decision in *Hotchkiss v. Greenwood*, 11 How. 248 (1851), and its progeny"); Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 738 (2002) (affirming the doctrine of prosecution history estoppel in patent law given, in part, how courts construed this equitable defense in the nineteenth century); Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17, 26 n.3 (1997)

explicate how nineteenth-century courts developed the legal doctrines that ensured effective commercialization of property rights in inventions—securing the "exclusive use" of inventions in the marketplace and thus "add[ing] the fuel of interest to the fire of genius." ¹³ As Chief Justice Roberts explained in eBay v. MercExchange, "historical practice[s]" in patent law set the positive baseline when "it comes to discerning and applying" any hoary patent doctrines today. 14

More important, these three commercialization models also illustrate how the Federal Circuit has created indeterminacy within these important commercialization doctrines today. Given the limited scope of this Article's thesis, it will similarly limit its analysis to an important case within modern patent jurisprudence that reveals this indeterminacy: the Federal Circuit's 2001 opinion in Jazz Photo Corp. v. International Trade Commission. 15 The principal issue in Jazz Photo was the distinction between repair versus reconstruction by an end-user given the exhaustion of patent rights after the unrestricted sale of a patented product in the marketplace. In discussing this distinction between an end-user's acceptable repair and the impermissible reconstruction, the Federal Circuit followed basic, black-letter patent doctrine. In fact, many patent law casebooks discuss this case or cite to it for precisely this issue. 16

Jazz Photo also handed down another holding that had far-more reaching consequences: unrestricted sales of a patented product in foreign jurisdictions do not exhaust patent rights.¹⁷ This secondary holding was not only novel, it was reached with virtually no discussion or analysis whatsoever, taking up only a single paragraph in an opinion that spanned many pages. 18

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⁽maintaining that nineteenth-century court decisions creating the doctrine of equivalents are controlling today despite the litigant's argument that Congress's enactment of the 1952 Patent Act impliedly repealed these decisions).

¹³ Lincoln, *supra* note 1, at 363.

¹⁴ eBay v. MercExchange, 547 U.S. 388, 394-95 (2006) (Roberts, C.J., concurring).

¹⁵ 264 F.3d 1094 (Fed. Cir. 2001).

¹⁶ See, e.g., Adelman et al. casebook [get cite]; Robert P. Merges & John F. Duffy, Patent Law and POLICY 914 (4th ed. 2007).

¹⁷ *Jazz Photo*, 264 F.3d at 1105. ¹⁸ *Id*.

Moreover, this holding was not dicta, as it had a real-world impact: Although the assignee lost the decision in *Jazz Photo*, it was able to pursue its infringement claims on the basis of this secondary holding and ultimately obtained a favorable decision several years later. Yet when the Federal Circuit later confirmed in this follow-on decision that the *Jazz Photo* court "expressly limited first sales under the exhaustion doctrine to those occurring within the United States," it provided no additional explanation as to why this novel holding was justified. 21

For this reason, *Jazz Photo* deserves attention because it provides insight into the degree to which modern patent theory is potentially indeterminate as a conceptual matter in defining the scope of a patentee's commercialization rights. It is not an accident that *Jazz Photo* was a case of first impression, as conceptual errors are typically revealed in such cases. Here, the Federal Circuit essentially defaulted to first principles in deciding a case on which it had no substantive guidance from pre-existing case law, such as the venerable repair versus reconstruction doctrine similarly discussed in the same opinion.²² In returning to first principles, modern patent theory informed the Federal Circuit that a patent comprises only the right to exclude, and the court therefore adopted a highly formalistic approach to enforcing this right to exclude. Again, the point here is not that *Jazz Photo* is right or wrong in its holding on international patent

¹⁹ See Fuji Photo Film Co. v. Jazz Photo Corp., 394 F.3d 1368 (Fed. Cir. 2005).

²⁰ *Id.* at 1376 (reaffirming *Jazz Photo* holding with no additional analysis).

²¹ See, e.g., Rebecca S. Eisenberg, The Role of the FDA in Innovation Policy, 13 MICH. TELECOMM. & TECH L. REV. 345, 362-63 (2007) ("The U.S. Court of Appeals for the Federal Circuit once observed in passing, with no acknowledgment of controversy, that under U.S. patent law the first sale doctrine only applies if there has been a sale in the United States."); Daniel R. Cahoy, Patent Fences and Constitutional Fence Posts: Property Barriers to Pharmaceutical Importation, 15 FORDHAM INTELL. PROP. MEDIA & ENT. L. J. 623, 663 (2005) ("An intriguing aspect of Judge Newman's opinion in Jazz Photo is that she articulated the national exhaustion rule with such brevity."); Michelle Vockrodt, Patent Exhaustion and Foreign Sales: An Analysis and Application of the Jazz Photo Decision, 33 AIPLA Q. J. 189, 193-94 (2005) ("The Jazz Photo decision was the first time the Federal Circuit had addressed the issue of international patent exhaustion. In announcing its rule, however, the panel did not elaborate on its reasoning except to cite Boesch v. Graff, a Supreme Court case from 1890.").

²² *Jazz Photo*, 264 F.3d at 1102-04.

exhaustion—there are perhaps legitimate policy reasons for this secondary holding²³—but rather that modern patent theory makes possible such pedantic decisions about commercialization rights as a result of how it defines the positive content of patent rights.

In three parts, this Article will explain how *Jazz Photo* reveals a potentially fundamental indeterminacy within modern patent theory concerning commercialization rights within patent law. First, it will discuss three commercialization models that explain how courts have long-secured the rights of use and disposition of property in inventions. These models further reveal how nineteenth-century courts drew upon the conceptual framework of commercialization of real estate to craft similar legal doctrines governing the commercialization of patents. Second, it will discuss *Jazz Photo*, explaining the two holdings in this case, and how the court's secondary holding that there is no patent exhaustion for unrestricted international sales was both unprecedented and unexplained. This part will also show how *Jazz Photo* rejected the three commercialization models and created an unusual fourth model for how a patentee may alienate and control its property interests in the marketplace. Third, this Article will conclude with some observations about the role of commercialization within patent doctrine, and what historical doctrines, like patent exhaustion, may teach modern patent theory about how commercialization concerns may be built into patent doctrine in a way that provides substantive guidance to courts.

II. Three Models of Commercializing Property Rights

In order to understand the indeterminacy produced by modern patent theory with respect to commercialization rights, one must situate it within a positive account of how patent jurisprudence has defined commercialization rights generally. As a purely conceptual matter, one

²³ See Cahoy, supra note 21, at 663-64 (discussing several policy reasons supporting the Jazz Photo decision). But see Daniel Erlikhman, Note, Jazz Photo and the Doctrine of Patent Exhaustion: Implications to TRIPS and International Harmonization of Patent Protection, 25 HASTINGS COMM. & ENT. L.J. 307, 337 (2003) (criticizing Jazz Photo as "ill-advised, given the international efforts to harmonize patent protection and open borders to free movement of commercial goods").

can model three different doctrinal approaches that explain how property-owners, whether of real estate or inventions, might deploy their legal rights in the marketplace. Significantly, these three models are not just theory: They reflect historic real property doctrine, and nineteenth-century courts incorporated these real property doctrines into patent law on the basis of the classification of patents as property.²⁴

In the first commercialization scenario, a patentee might keep its fee interest in its property, choosing to manufacture and sell outright the patented products resulting from its "title."²⁵ This is perhaps the easiest case of commercialization, as the patentee does not convey any property interest in the patent to others; rather, the patentee alienates in fee unconditionally the products resulting from the patent, profiting thereby from the use of its property interest in much the same way that a farmer sells apples from his orchard or the wheat sown from his field.²⁶ As a court observed in 1862, the patent statutes ensure that "inventors shall exclusively enjoy, for a limited season, the fruits of their inventions" by "authorizing them alone to manufacture, sell, or practice what they have invented."²⁷

A corollary of the first commercialization case is when a property-owner conveys its entire fee interest to a third-party, and thus a patentee might sell its property outright. In such a case, the third-party now owns the title in the patent and can do whatever it wants with its property, such as use the patent in the manufacture of products or engage in further conveyances

²⁴ See Adam Mossoff, Patents as Constitutional Private Property: The Historical Protection of Patents under the Takings Clause, 87 B.U. L. REV. 689, 718-19 (2008); Mossoff, supra note 7, at 992-98.

²⁵ See, e.g., Birdsall v. McDonald, 3 F. Cas. 441, 444 (C.C.N.D. Ohio 1874) (No. 1,434) (observing that "[i]nventors are a meritorious class of men" and that "[t]heir patents are their title deeds"); Earth Closet Co. v. Fenner, 8 F. Cas. 261, 263 (C.C.D.R.I. 1871) (No. 4,249) (explaining that a "patent is prima facie proof of title"); Evans v. Kremer, 8 F. Cas. 874, 875 (C.C.D. Pa. 1816) (No. 4,565) (explaining that a plaintiff-patentee must "be prepared to maintain his title, in relation to the question of original discovery")

²⁶ See Hovey v. Henry, 12 F. Cas. 603, 604 (C.C.D. Mass. 1846) (No. 6,742) (observing that "[a]n inventor holds a property in his invention by as good a title as the farmer holds his farm and flock").

²⁷ Clark Patent Steam & Fire Regulator Co. v. Copeland, 5 F. Cas. 987, 988 (C.C.S.D.N.Y. 1862) (No. 2,866).

of the property interests (see cases two and three below). ²⁸ Following common law doctrine governing estates in land, ²⁹ nineteenth-century courts identified an outright conveyance of title in a patent to a third-party as an "assignment," ³⁰ and this usage continues to this day. ³¹ Ultimately, for purposes of commercialization of property interests, the difference between a patentee and an assignee is a distinction without a difference, as in both situations the owner of title in the patent is the person profiting from the unconditional sale of products in the marketplace.

In the second commercialization case, a property owner may convey to a third-party a lesser estate interest carved out of the original title, such as creating a tenancy in term of years and retaining a reversionary interest.³² Thus, a patentee may convey a limited right either to use the patented invention³³ or to sell the invention in a particular city or state.³⁴ As one federal court observed in 1874, "[i]t is clear that the patentee may grant the right to use within any specified place, town, city or district, and he may make such right of use exclusive; and I deem it no less

²⁸ See, e.g., Lowell v. Lewis, 15 F. Cas. 1018 (C.C.D. Mass. 1817) (No. 8,568) (both plaintiff and defendant were manufacturing patented pumps as assignees of separate patents).

²⁹ See BLACKSTONE, 2 COMMENTARIES *326-27 ("An assignment is properly a transfer, or making over to another, of the right one has in *any* estate, but it is usually applied to an estate for life or years. . . . [I]n assignments he parts with the whole property, and the assignee stands to all intents and purposes in the place of the assignor.").

³⁰ See, e.g., Moore v. Marsh, 74 U.S. (7 Wall.) 515, 520 (1868) ("An assignee is one who holds, by a valid assignment in writing, the whole interest of a patent, or any undivided part of such whole interest, throughout the United States.");

³¹ See, e.g., Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1551 (Fed. Cir. 1995) ("A conveyance of legal title by the patentee is an assignment and vests the assignee with title in the patent, and a right to sue infringers.").

infringers.").

32 For instance, *O* may convey Blackacre "to *A* for 20 years." This conveyance creates a term of years leasehold estate in *A*, and *O* has a reversion. Conveyances like this constitute the bread-and-butter of real estate transactional practice, and are the primary reason why so many 1Ls each year consider their Property course to be an extremely painful experience.

^{33°} See, e.g., McClurg v. Kingsland, 42 U.S. (1 How.) 202, 206 (1843) (referring to a patent conveyance as "an express license or grant . . . giving the defendants a right to the continued use of the invention"); Heaton-Peninsular Button-Fastener Co. v. Eureka Specialty Co., 77 F. 288, 290 (6th Cir. 1896) ("All alienations of a mere right to use the invention operate only as licenses."); Gamewell Fire-Alarm Telegraph Co. v. City of Brooklyn, 14 F. 255, 256 (C.C.N.Y. 1882) (dismissing a licensee's lawsuit as going beyond the scope of the limited rights of use and sale granted to it by the patentee).

³⁴ Farrington v. Gregory, 8 F. Cas. 1088, 1089 (C.C.E.D. Mich. 1870) (No. 4,688) (noting that the license in this case contained a geographic restriction that limited the licensee's "right to use and sell machines in Calhoun and Kalamazoo counties, in the state of Michigan").

clear that he may limit the right to manufacture for such use."³⁵ Within nineteenth-century patent jurisprudence, courts held that patentees had the right to carve out such lesser interests through conveyances to third-parties precisely because patents were defined as "property."³⁶ In fact, courts identified a patentee's conveyance of such a limited interest in its property as a "license,"³⁷ continuing to import into patent law the doctrine and terminology of real property.³⁸

In this second commercialization case, therefore, a patentee conveys only a portion of its use or alienation interests, retaining a reversionary interest that gives the patentee the right to sue the licensee to enforce the property rights retained by the patentee. As one court stated in 1857: "It the licensee uses the patented invention beyond the limits of the license or grant, or in a way not authorized by the license or grant, then there has been a violation of a right secured to the patentee under a law of the United States giving to him the exclusive right to use the thing patented,"³⁹ Accordingly, if a licensee uses a patented invention beyond the terms of the interest conveyed to it by the patentee, it is liable for infringement for the same reason that an owner of a life estate is liable for devaluing land under waste doctrine⁴⁰ or the owner of an

³⁵ Dorsey Revolving Harvester Rake Co. v. Bradley Mfg. Co., 7 F. Cas. 946, 947 (C.C.N.D.N.Y. 1874) (No. 4,015).

³⁶ An anonymous essay published in the *Federal Cases* reporter at 3 F. Cas. 85, following Belding v. Turner, 3 F. Cas. 84 (C.C.D. Conn. 1871) (No. 1,243), explicitly drew the connection between the classification of patents as an "incorporeal chattel" or "personal estate" and the right to alienate this legal interest. This essay distinguished American patents from English patents on precisely these terms, as English patents were a mere "grant by the crown" and thus "inalienable unless power to that effect is given by the crown." 3 F. Cas. at 85.

³⁷ See, e.g., Suydam v. Day, 23 F. Cas. 473, 473 (C.C.N.Y. 1845) (No. 13,654) (distinguishing between "an assignee of a patent [who] must be regarded as acquiring his title to it, with a right of action in his own name," and "an interest in only a part of each patent, to wit, a license to use"); Whittemore v. Cutter, 29 F. Cas. 1120, 1120-21 (C.C.D. Mass. 1813) (No. 17,600) (Story, Circuit Justice) (recognizing in this case that there was "no assignment of the patent right" and thus "[t]he instrument could only operate as a covenant or license for the exclusive use of the patent right in certain local districts").

³⁸ See 2 James Kent, Commentaries on American Law 452-53 (George Comstock ed., 11th ed. 1866) (explaining that "a license is an authority to do a particular act, or series of acts, upon another's land, without possessing any estate therein")

⁵⁹ Goodyear v. Union India Rubber Co., 10 F. Cas. 726, 727 (C.C.S.D.N.Y. 1857) (No. 5,586).

⁴⁰ See generally POWELL ON REAL PROPERTY §§56.01-56.12 (Michael A. Wolf gen. ed. 2005).

easement who expands the right of way is liable for trespassing on the larger estate. 41 As a positive doctrinal matter, the patentee retains an interest in the property, what courts would identify as a reversionary interest in the context of real property, and it is this retained property interest that permits the patentee to sue its licensee for infringement.

Lastly, in the third commercialization case, a property-owner may convey an estate interest, either a lesser estate or the entire "exclusive title," but create in the conveyance instrument express words of limitation that impose either a restrictive covenant or a defeasible condition restricting the use of the property interest purchased by the third-party. When a property-owner creates a restrictive covenant, and the covenant meets the legal requirements for enforcement either at law or in equity, 43 the covenant shall "run with the land" and the original property-owner may thus sue any "heirs, successors and assigns" for breach of the use restriction. 44 Similarly, a defeasible condition created through words of limitation permits a property-owner to sue to retake property upon breach of the use restriction. 45

In the nineteenth century, courts incorporated into patent law the right to impose use restrictions that had been secured to landowners through the enforcement of restrictive covenants and defeasible estates. 46 Accordingly, patentees were able to impose a whole litany of

⁴¹ See Brown v. Voss, 715 P.2d 514, 518 (Wash. 1986) (Dore, J., dissenting) (noting that "any extension of the use of an easement to benefit a nondominant estate constitutes misuse of the easement," and thereby "is a trespass").

42 Johnson v. M'Intosh. 21 U.S. (8 Wheat.) 543, 574 (1823).

⁴³ See generally William B. Stoebuck, Running Covenants: An Analytical Primer, 52 WASH. L. REV. 861

⁴⁴ Neponsit Property Owners' Ass'n, Inc. v. Emigrant Industrial Savings Bank, 15 N.E.2d 793, 795 (N.Y. 1938) (quoting from a restrictive covenant that the court ultimately enforces against successors-in-interest).

⁴⁵ For instance, O may convey Blackacre "to A and her heirs as long as alcohol is never sold or consumed on Blackacre." This conveyance creates a fee simple determinable in A, and O has a possibility of reverter in the estate. O's future interest means that the estate will automatically revert back to him if the use restriction is breached by A or any of her heirs, successors or assigns. See JOSEPH W. SINGER, INTRODUCTION TO PROPERTY 295 (2001).

⁴⁶ See, e.g., Heaton-Peninsular Button-Fastener Co., 77 F. at 290 (recognizing under the terms of the license that "[t]he buyer of the machine undoubtedly obtains the title to the materials embodying the invention, subject to a reverter in case of violation of the conditions of the sale"); American Cotton Tie Supply Co. v. Bullard, 1 F. Cas. 625, 629 (C.C.N.Y. 1879) (No. 294) (recognizing that patented products may be sold in which "a

restrictions on the use of the property interest they conveyed to a licensee. For instance, a patentee could restrict a licensee in terms of the total quantity of patented products manufactured or sold, ⁴⁷ the manner in which the patented product may be used, ⁴⁸ the territorial scope in which the patented product may be used or sold, ⁴⁹ and even the price that the licensee could charge in the marketplace. ⁵⁰ Notably, the interest retained by the patentee in this third commercialization cases was even greater than in second commercialization case, because the patentee could sue for infringement not only for a breach of the estate interest, but also for breach of any additional use restrictions imposed on the activities of the licensee, such as selling outside of the sales territory set forth in the license agreement.

Congress and courts in the nineteenth century permitted patentees to impose additional restrictive conditions on the interests they were creating in the conveyances of their patented property. In so doing, they continued to import from real property law the conceptual framework for designing the doctrinal requirements for such use restrictions, such as requiring recordation⁵¹ and requiring reasonable notice for end-users when patentees attempted to extend restrictions to

restriction may easily be attached, or where a license to use only may be sold, unaccompanied with any title or accompanied with a restricted title").

⁴⁷ See, e.g., CHARLES SLACK, NOBLE OBSESSION: CHARLES GOODYEAR, THOMAS HANCOCK, AND THE RACE TO UNLOCK THE GREATEST INDUSTRIAL SECRET OF THE NINETEENTH CENTURY ____ (2003) (describing quantity, territorial and field-of-use restrictions that Goodyear imposed on licensees of his patent for vulcanized rubber).

⁴⁸ See, e.g., American Cotton-Tie Co. v. Simmons, 106 U.S. 89 (1882) (enforcing license restriction prohibiting re-use of a patented cotton-bale tie, on which the patented products were stamped "License to use once only"); Providence Rubber Co. v. Goodyear, 76 U.S. (9 Wall.) 788, 799-800 (1869) (enforcing against the defendants the express sale and use restrictions imposed in a license); Chaffee v. Boston Belting Co., 63 U.S. (22 How.) 217, 220 (1859) (recognizing by "the terms of the instrument" created by Goodyear in this case that "it was understood that the right and license so conveyed was to apply to any and all articles substituted for leather, metal, and other substances, in the use or manufacture of machines or machinery").

⁴⁹ See, e.g., Farrington v. Gregory, 8 F. Cas. 1088, 1089 (C.C.E.D. Mich. 1870) (No. 4,688) (noting that license contained geographic restriction that limited the licensee's "right to use and sell machines in Calhoun and Kalamazoo counties, in the state of Michigan").

⁵⁰ See, e.g., E. Bement & Sons v. Nat'l Harrow Co., 186 U.S. 70 (1902).

⁵¹ See, e.g., Patent Act of 1836, ch. 357, § 11, 5 Stat. at 121 (requiring an assignment to be "recorded in the Patent Office within three months from the execution thereof"); Patent Act of 1793, § 4, ch. 11, 1 Stat. at 322 (requiring an assignee to "record[] said assignment, in the office of the Secretary of State").

downstream market activities.⁵² By the end of the nineteenth century, it was well-settled patent doctrine that patentees could retain both a reversionary interest, as well as an additional property interest secured through a restrictive covenant imposed on a licensee, in commercializing their property interests in their inventions.⁵³

In sum, nineteenth-century courts imported from real property three conceptual frameworks that produced sound doctrine securing commercialization rights in patent law. In 1902, the Supreme Court roughly summarized these three commercialization models as follows: "An owner of a patent has the right to sell it or to keep it; to manufacture the article himself or to license others to manufacture it; to sell such article himself or to authorize others to sell it." The Federal Circuit ostensibly follows this classic commercialization doctrine, declaring that "express conditions accompanying the sale or license of a patented product are generally upheld." Yet, apart from such abstract declarations of fidelity to long-standing commercialization doctrine, the Federal Circuit's commercialization jurisprudence does not in practice reliably conform to the three classic commercialization models. In fact, the Federal Circuit has created a new fourth model of commercialization. Before we can assess why this

⁵² See Heaton-Peninsular Button-Fastener Co., 77 F. at 291 (recognizing that a licensee and its wholesaler are both liable to a license restriction because the "jobber buys and sells subject to the restriction, and both have notice of the conditional character of the sale, and of the restriction on the use"); American Cotton Tie Supply Co., 1 F. Cas. at 629 ("[W]here pins, nails, screws, or buckles are sold, if some of them are sold with a restricted and some with an unrestricted title, there are no means of identification which enable the purchaser, after they have passed into the market and common use, to distinguish the articles licensed or restricted in their use from those absolutely sold. In the case of articles of that description, the patentee may fairly be presumed to have received his royalty when he parted with the possession of the articles and allowed them to go into common and general use."); cf. Adams v. Burke, 84 U.S. 453 (1873) ("Whatever, therefore, may be the rule when patentees subdivide territorially their patents, as to the exclusive right to make or to sell within a limited territory, . . . when they are once lawfully made and sold, there is no restriction on their use to be implied for the benefit of the patentee or his assignees or licensees.").

licensees.").

53 See Mitchell v. Hawley, 83 U.S. 544, 548 (1872) (noting proposition in patent law that "[p]urchasers of the exclusive privilege of making or vending the patented machine hold the whole or a portion of the franchise which the patent secures, depending upon the nature of the conveyance").

⁵⁴ E. Bement & Sons, 186 U.S. at 88-89.

⁵⁵ B. Braun Med., Inc. v. Abbott Lab., 124 F.3d 1419, 1426 (Fed. Cir. 1997). *See also* Hewlett-Packard Co. v. Repeat-O-Type Stencil Mfg. Corp., Inc., 123 F.3d 1445, 1455 (1997) ("When a patentee sells a device without condition, it parts with the right to enforce any patent that the parties might reasonably have contemplated would interfere with the use of the purchased device.").

happened and what it portends, we must first understand what happened in the doctrine, and to grasp this, we must now turn to the cases in which the Federal Circuit has departed from classic commercialization doctrine.

III. The Federal Circuit's Fourth Model of Commercialization: Jazz Photo v. ITC

The Federal Circuit's commercialization jurisprudence reflects a conceptual indeterminacy within patent law, which is illustrated dramatically in its 2001 decision in *Jazz Photo Corp. v. International Trade Commission*. ⁵⁶ Before we can assess what *Jazz Photo* might teach us about the function of commercialization doctrines within modern patent theory, we must first establish what happened in this case. This is necessary, because, as noted in the Introduction, the primary holding dealt with the legal distinction between repair versus reconstruction following a patentee's exhaustion of its rights in a patented product sold in the marketplace. Judge Newman's opinion in *Jazz Photo* dealt only peripherally with international exhaustion, which was when she departed from the three commercialization models. Even more frustrating Judge Newman discussed the international exhaustion issue and came to her conclusion within a single paragraph. Yet, despite this perfunctory discussion, the "court's holding on national exhaustion is unmistakable": there is no international patent exhaustion. ⁵⁷ Here, we will explore how the *Jazz Photo* court reached this decision, and how this decision creates a novel fourth model of commercialization of property rights in a patented invention.

A. The Who, What and Why of Jazz Photo v. ITC

The provenance of the Federal Circuit's decision in *Jazz Photo* was a bit unlike most patent infringement lawsuits. The case began normally for most patent lawsuits: Fuji Photo Film Co. sued twenty-seven defendants, including Jazz Photo Corp., for infringing fifteen patents on

⁵⁶ 264 F.3d 1094 (Fed. Cir. 2001).

⁵⁷ Cameron Hutchison & Moin A. Yahya, *Infringement and the International Reach of U.S. Patent Law*, 17 FeD. CIR. B.J. 241, 268 (2008).

"lens-fitted film packages" (LFFP), or "single-use cameras" in the vernacular. However, Fuji chose to file its action with the International Trade Commission (ITC), as the gravamen of its complaint against the defendants was that they were acquiring previously used LFFP cameras, reconstructing them overseas, and then importing the LFFP cameras for resale in the United States. The ITC ruled in favor of Fuji, and issued an injunction prohibiting the importation of any refurbished LFFP cameras that violated Fuji's patents. Jazz Photo and two other defendants (collectively, "Jazz Photo") appealed the ITC's order to the Federal Circuit, contesting the ITC's underlying judgment that they were infringing Fuji's patents.

Judge Newman's opinion, reversing the ITC's order in favor of Jazz Photo, is a bit difficult to untangle, as it assesses Jazz Photo's appeal along two different axes of analysis with respect to multiple patents on LFFP cameras: First, whether Jazz Photo's actions constituted repair or reconstruction of a patented product previously sold in the marketplace, and second, whether Fuji exhausted its rights with the first sale of its patented products. For our purposes here, I will only briefly summarize the first issue to lay the groundwork for understanding why the Federal Circuit ultimately reached the second issue on international patent exhaustion.

With respect to Fuji's product patents covering the LFFP cameras, Judge Newman concluded that only one of Fuji's product patents, Patent No. 4,884,087 ('087 patent), contained a claim directed to "a film roll of unexposed film," which covered Jazz Photo's activities of replacing the film in the used LFFP camera. However, Jazz Photo's replacing the film roll constituted only replacing parts "having a shorter life than is available from the combination as a

⁵⁸ Jazz Photo and the other defendants acquired previously used and discarded LFFP cameras, broke open the internal plastic camera, installed new film, reset the film counter, replaced the flash battery, resealed the plastic camera, and then put on a new cardboard cover so that it appeared as new. *Jazz Photo*, 264 F.3d at 1101.

⁵⁹ Fuji also claimed that the defendants infringed its process patents, to which Judge Newman applied her exhaustion/repair and nonexhaustion conclusions, *id.* at 1108-09, but for ease of reference here, this paper will refer to only the product patents.

⁶⁰ *Id.* at 1106-07.

whole,"⁶¹ which was an activity that was similar to the "repair" of patented products deemed permissible under long-standing case law.⁶² Thus, with respect to the '087 patent, Judge Newman concluded that Jazz Photo's replacement of the film was "characteristic of repair, not reconstruction,"⁶³ and therefore a permissible re-use of the LFFP camera.

With respect to Fuji's other product patents on the LFFP cameras, Judge Newman concluded that there was no replacement of parts covered by the patent claims, as these patents were directed to particular structural components of the cameras, such as the pushbutton for taking pictures. Since these components were unaffected by Jazz Photo's replacement of the film rolls and similar reuse activities, Judge Newman concluded: "If the claimed component is not replaced, but simply reused, this component is neither repaired nor reconstructed." From the perspective of these other product patents, she characterized Jazz Photo's activities as "refurbishment," a legally neutral re-use of a patented product by a purchaser that falls within neither of the domains of repair or reconstruction.

Jazz Photo was not out of the infringement woods just yet, because Judge Newman's conclusions that its activities constituted permissible repair or refurbishment raised the further issue of whether Fuji imposed a license restriction prohibiting any re-use of the LFFP cameras. Such a restrictive covenant, if imposed on the first purchasers of the LFFP cameras, would legally prohibit what might otherwise be permissible activity, such as repair or refurbishment. In other words, Fuji may have retained some property interest in the initial conveyance, and thereby reserved the right to control post-sale uses of the cameras in downstream markets. If Fuji did not

⁶¹ *Id.* at 1107.

⁶² See id. at 1102-04 (discussing case law on permissible "repair" versus impermissible "reconstruction").

⁶⁴ *Id.* (discussing claim 1 of Patent No. 5,361,111).

⁶⁵ See supra note 58 (describing Jazz Photo's refurbishment activities on the LFFP cameras).

⁶⁶ *Id*.

⁶⁷ *Id.* at 1098 n.1.

impose such restrictions, then it "exhausted" its right to control the re-use of the LFFP cameras.⁶⁸ If it did, then it could still prohibit Jazz Photo from engaging in its otherwise lawful activities of repair and refurbishment in re-using the LFFP cameras.⁶⁹

Fuji argued, unsurprisingly, that it did impose such restrictions against re-use of the LFFP cameras in language that it printed on the covers of the LFFP cameras sold to consumers.

Judge Newman rejected these contentions, observing that the package "statements are instructions and warnings of risk, not mutual promises or a condition placed upon the sale."

Although Fuji intended the LFFP cameras to be only single-use cameras, it did not impose any license restrictions on the reuse or resale of the patented products that signaled this intent to purchasers of the LFFP cameras.

It thus seemed that the Federal Circuit was going to conclude that Fuji exhausted its rights to control the reuse and resale of the LFFP cameras, regardless of whether such activities constituted repair or refurbishment. But Judge Newman then took the unprecedented step of distinguishing between domestic and international sales of Fuji's patented products. By itself, this was not necessarily a problematic step in judicial decision-making: Fuji raised the issue of exhaustion (or, more precisely, the lack thereof), and the underlying facts of the case indicated that some unrestricted sales occurred within the U.S. and some did not. Accordingly, the Federal Circuit could have used this case as an opportunity to address the nettling policy issues

⁶⁸ *Id.* at 1105 ("The unrestricted sale of a patented article, by or with the authority of the patentee, 'exhausts' the patentee's right to control further sale and use of that article by enforcing the patent under which it was first sold.").

⁶⁹ See, e.g., Anton/Bauer, Inc. v. PAG, Ltd., 329 F.3d 1343, 1349 (Fed. Cir. 2003) (noting that the exhaustion doctrine is predicated solely on the "unrestricted sale of a patented article"); Monsanto Co. v. Scruggs, 342 F. Supp. 2d 584, 598-99 (N.D. Miss. 2004) (finding exhaustion doctrine inapposite where patentee "never made an unrestricted sale of its seed technology"); Pioneer Hi-Bred Int'l, Inc. v. Ottawa Plant Food, Inc., 283 F. Supp. 2d 1018, 1032-34 (N.D. Iowa 2003) (finding exhaustion doctrine inapposite due to express sale restrictions on the reuse of patented seeds).

⁷⁰ *Jazz Photo*, 264 F.3d at 1107.

⁷¹ *Id.* at 1108.

⁷² *Id.* at 1108.

implicated in whether there should be an international patent exhaustion doctrine, such as arbitrage in international trade, the enforcement of TRIPS and other international trade agreements, and the domestic enforcement of patent rights.

Unfortunately, it did not. In a single paragraph consisting of its first and only analysis of the issue of international patent exhaustion, Judge Newman concluded that patent exhaustion is limited to only domestic unrestricted sales of patented products. Although a bit long for recitation in an article, this paragraph bears quoting in full given its importance:

Fuji states that some of the imported LFFP cameras originated and were sold only overseas, but are included in the refurbished importations by some of the respondents. The record supports this statement, which does not appear to be disputed. United States patent rights are not exhausted by products of foreign provenance. To invoke the protection of the first sale doctrine, the authorized first sale must have occurred under the United States patent. *See Boesch v. Graff*, 133 U.S. 697, 701-03 (1890) (a lawful foreign purchase does not obviate the need for license from the United States patentee before importation into and sale in the United States). Our decision applies only to LFFPs for which the United States patent right has been exhausted by first sale in the United States. Imported LFFPs of solely foreign provenance are not immunized from infringement of United States patents by the nature of their refurbishment.

If there were any doubts as to the significance of this single paragraph, they were erased in 2005 when the Federal Circuit decided *Fuji Photo Film Co. v. Jazz Photo Corp.*, ⁷³ affirming a district court's infringement decision against Jazz Photo on the basis of the imported LFFP cameras that originated from these unrestricted, albeit unexhausted, international sales. ⁷⁴ Adding no analysis beyond citing an additional case to that of *Boesch*, the *Fuji Photo* court simply reiterated and applied the holding of *Jazz Photo*: "The patentee's authorization of an international first sale does not affect exhaustion of that patentee's rights in the United States." Significantly, one also

⁷³ 394 F.3d 1368 (Fed. Cir. 2005).

⁷⁴ *Id.* at 1376-77.

⁷⁵ *Id.* at 1376. Notably, Jazz Photo did raise the issue that "this court's explanation of the application of exhaustion to foreign sales decided a matter of first impression not clearly foreshadowed," which it used to argue that the holding should at least be given only prospective effect. *Id.* at 1077. The Federal Circuit refused to address

learns in *Fuji Photo* that Judge Newman *sua sponte* addressed the issue of international patent exhaustion, as the issue "was not even raised by Fuji in the ITC or [before] the Federal Circuit" in the earlier *Jazz Photo* case.⁷⁶

But what of the Supreme Court's 1890 decision in *Boesch v. Graff*, on which both *Jazz Photo* and *Fuji Film* relied in holding that there is no international patent exhaustion? The *Boesch* case is not squarely on point with the patent exhaustion issue raised in *Jazz Photo*, and thus it is not controlling precedent. The *Boesch* Court addressed the issue of whether a product purchased lawfully in Germany under a German patent permitted the purchaser to import and sell the product within the U.S. without permission of the U.S. patentee.⁷⁷ Unlike in *Jazz Photo*, the *Boesch* defendants argued that they were immune from liability because they had lawfully purchased the patented product in a foreign jurisdiction under the authority of a foreign patent.⁷⁸ The *Boesch* Court rejected this defense, concluding that "[t]he sale of articles in the United States under a United States patent cannot be controlled by foreign [patent] laws."⁷⁹

In *Jazz Photo*, there was no question whether a foreign patent immunized Jazz Photo's activities. The only question in *Jazz Photo* was whether the unrestricted sale in a foreign jurisdiction by a U.S. patent-owner exhausted its rights to enforce its U.S. patent rights. In fact, following *Boesch*, it was unclear whether there was an international patent exhaustion rule, and early-twentieth-century federal courts split over the issue with no definitive resolution. ⁸⁰ Thus, *Boesch* was not determinative in *Jazz Photo*, as there were dispositive differences in the nature of

Jazz Photo's argument on this issue, claiming that "Jazz in effect waived this argument by failing to raise it in a form that requested or required a decision from the district court." *Id*.

⁷⁶ *Id.* (quoting argument by Jazz Photo).

⁷⁷ Boesch v. Graff, 133 U.S. 697, 702 (1890).

⁷⁸ *Id.* at 701.

⁷⁹ *Id.* at 703.

⁸⁰ Compare Curtiss Aeroplane & Motor Corp. v. United Aircraft Eng'g Corp., 266 F. 71 (2d Cir. 1920) (unrestricted foreign sale exhausted patentee's rights) with Daimler Mfg. Co. v. Conklin, 170 F. 70 (2d Cir. 1909) (unrestricted foreign sale did not exhaust patentee's rights).

the "lawful foreign purchase" at issue in the two cases. Moreover, it was a long-standing controversy within American patent law whether there was a doctrine of international patent exhaustion. Lastly, other U.S. intellectual property regimes, such as copyright, had already adopted an international exhaustion rule. Given the lack of controlling precedent from the Supreme Court, the conflicting decisions in the federal appellate courts, and a definitive decision in favor of international exhaustion in copyright law, judicial decision-making norms would seem to have militated in favor of a court providing at least some analysis or explanation as to why it reached its decision on this novel issue in patent law. With two separate opportunities to do so over the span of four years—in *Jazz Photo* and *Fuji Film*—the Federal Circuit chose otherwise.

In sum, the *Jazz Photo* court *sua sponte* handed down a novel, substantive rule concerning the unrestricted sale of patented products by a patent-owner in foreign jurisdictions—unrestricted sales in foreign jurisdictions did not exhaust a patent-owner's rights under the U.S. patent. To emphasize again, the issue here is not whether *Jazz Photo* was correct or not in its decision; unfortunately, the Federal Circuit did not give any insight as to why it thought it ill-advised to adopt an international exhaustion rule in patent law, and thus we lack any basis within the four corners of the opinion in *Jazz Photo*, as well as within the subsequent opinion in *Fuji Film*, to assess the Federal Circuit's reasons for adopting this rule. It is for this reason that *Jazz*

⁸¹ Jazz Photo, 264 F.3d at 1105 (quoting Judge Newman's inapt characterization of the Boesch holding).

by U.S. patentees on foreign wholesalers against importing patented articles into the U.S. "were customary." Dickerson v. Matheson, 57 F. 524, 526 (2d Cir. 1893). Such express restraints likely were customary because the law was long unsettled whether unrestricted conveyances abroad exhausted a patentee's right to enforce the exclusive right secured under the Patent Act within the U.S. In the nineteenth century, the Supreme Court had ruled only that an unrestricted *domestic* sale exhausted a patentee's rights. *See* Bloomer v. McQuewan, 55 U.S. (14 How.) 539 (1852) (upholding domestic patent exhaustion rule).

⁸³ See William W. Fisher III, When Should We Permit Differential Pricing of Information?, 55 UCLA L. REV. 1, 16-17 (2007) (discussing international exhaustion of copyrights and the unsettled doctrine in patent law both before and after *Jazz Photo*).

Photo serves as en exemplar of my thesis. It was the *Jazz Photo* court's methodological approach to resolving a novel issue concerning the commercialization of patent rights for which it deserves special attention. It is in this respect that *Jazz Photo* provides insight into the potential indeterminacy of modern patent theory when it comes to the adjudication of patentees' commercialization rights.

B. Jazz Photo and a Fourth Model of Commercializing Patent Rights

As is clear from the prior section, *Jazz Photo* has added a fourth model for conceptualizing how a patentee may commercialize its property interests in the marketplace: A patentee may retain a reversionary interest following an outright unrestricted sale of patented product in the marketplace. Fuji Film, as the assignee for the patents on the LFFP cameras, manufactured and sold these patented products through outright, unrestricted commercial transactions. As such, in selling its patented property outright, Fuji chose the first commercialization model: It retained its title in the assigned patent and manufactured and sold its patented products (the LFFP cameras) in the marketplace. As the *Jazz Photo* court recognized, Fuji imposed no words of limitation or express restrictions on purchasers of the LFFP cameras that signaled to purchasers that they were acquiring anything less than the equivalent of a full fee interest in their cameras.⁸⁴

Within commercialization doctrine in patent law, Fuji conveyed its property interests outright, profiting from its patent only through each one-time sale of the products it lawfully produced and sold under its property right. As the Supreme Court recognized in the early twentieth century: "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

⁸⁴ *Jazz Photo*, 264 F.3d at 1108.

after his purchase. It has passed beyond the scope of the patentee's rights."⁸⁵ Yet the Federal Circuit did not hold Fuji or its market participants to the terms of the commercialization doctrine under which Fuji profited by the sale of its property. Recognizing that Fuji did exhaust its rights in the LFFP cameras conveyed in domestic sales—applying the first commercialization model to Fuji's domestic sales—the Federal Circuit ultimately concluded that Fuji somehow retained an exclusive property interest following the exact same unrestricted sales of the same cameras in foreign jurisdictions.

In sum, Fuji sold its fee interest outright in each patented LFFP camera, and the Federal Circuit permitted Fuji to revoke this fee interest, and thereby created ex post in Fuji a retained property interest in the form of a defeasible condition or a restrictive covenant. In other words, the Federal Circuit permitted an assignee that chose ex ante to profit from its property under the first commercialization model to then switch ex post to the third commercialization model. In so doing, the Federal Circuit created in *Jazz Photo* a fourth commercialization model—an amalgam of the first and third models in which a patentee initially sells its patented products outright and then later claims a retained property interest in the form of a defeasible condition or restrictive covenant that permits it to sue a downstream owner for infringement.

IV. Commercialization Doctrine in Patent Law: Lessons for Modern Patent Theory

It is tempting to dismiss *Jazz Photo* as merely a single outlier within a substantial sea of modern case law that hews closely to the three models for commercializing one's property interests. This is an understandable reaction to *Jazz Photo* because the commercialization of patented property remains firmly grounded in both the modern patent statutes and case law. The 1952 Patent Act re-codified the provisions in the earlier patent statutes that secured a patentee's

⁸⁵ United States v. General Electric, 272 U.S. 476, 489 (1927) (citing substantial nineteenth-century case law supporting this proposition).

right to convey its rights to third-parties. ⁸⁶ Moreover, the Federal Circuit and other federal courts ostensibly follow the historical case law that created the three commercialization models.

In 1992, the Federal Circuit announced its commitment to the commercialization patent doctrines reaching back two centuries in its famous decision in Mallinckrodt, Inc. v. Medipart, Inc. 87 There, the Federal Circuit declared "[t]hat a restrictive license is legal seems clear."88 quoting the Supreme Court's 1939 decision in General Talking Pictures Corporation. v. Western Electric Company. 89 For its part, the General Talking Pictures Court was simply restating the basic thrust of classic commercialization jurisprudence, expressly citing one of the principal nineteenth-century cases that created the three commercialization models described in Part Two. 90 In fact, a federal appeals court in 1939 succinctly summarized the status of commercialization doctrine in patent law: "In general, a patentee may grant licenses to whom he wants, and restrict the license as to time, territory, and purpose."91 Fifty years later, another federal court again nicely captured the essence of the three models for commercializing property rights in inventions, noting that the "unilateral right to license, exclusively or otherwise, or to refuse to license at all, reflects the essence of the statutory patent monopoly."92 Thus, at worst, Jazz Photo is simply wrong. At best, the Federal Circuit simply made a mistake in failing to enunciate in this one case the reasons for its decision and thereby made it appear as if it is incorrectly creating a novel fourth commercialization model.

⁸⁶ See 35 U.S.C. § 261(b) ("the applicant, patentee, or his assigns or legal representatives may . . . grant and convey an exclusive right under his application for patent, or patents, to the whole or any specified part of the United States").

⁸⁷ 976 F.2d 700 (1992).

⁸⁸ Id. at 704 (quoting General Talking Pictures Corp. v. Western Elect. Co., 305 U.S. 124, 127 (1939)).

⁸⁹ 305 U.S. 124, 127 (1939).

⁹⁰ *Id.* at 127 (citing Mitchell v.Hawley, 83 U.S. 544 (1872)).

⁹¹ American Lecithin Co. v. Warfield Co., 105 F.2d 207, 212 (7th Cir. 1939) (citations omitted).

⁹² United States v. Telectronics Proprietary, Ltd., 607 F. Supp. 753 (D. Colo. 1983).

As a preliminary matter, such a dismissal of *Jazz Photo* is too hasty, as the Federal Circuit has made it clear that it does not believe that *Jazz Photo* is an outlier. Judge Newman's opinion was joined by the other two judges on the panel, Judges Michel and Gajarsa. Moreover, *Fuji Film* reaffirmed *Jazz Photo*'s holding concerning international patent exhaustion with another unanimous panel (Judges Rader, Clevenger and Linn). Thus, at least six judges on the Federal Circuit, representing fifty-percent of the total sitting judges on the court, support *Jazz Photo*'s secondary holding that there is no patent exhaustion following the unrestricted international sale of patented products.

But there are more substantive reasons for highlighting *Jazz Photo* as an exemplar of a formalist methodology within patent law that is creating indeterminacy in the commercialization of patents in the marketplace. As noted earlier, the Federal Circuit *sua sponte* addressed the issue of international patent exhaustion in *Jazz Photo* as a matter of first impression. ⁹³ In such a case, the court returns to first principles in order to properly frame the novel issue and to situate it within the relevant positive and normative framework. It is with respect to this methodological approach that *Jazz Photo* is important for what it potentially reveals about modern patent theory.

As a result of Judge Newman's decision in *Jazz Photo*, "the Federal Circuit adopted a *clear rule* of territorial exhaustion." Given that this was a matter of first impression, despite *Jazz Photo*'s inaccurate allusion to *Boesch* as controlling precedent, why was the Federal Circuit so interested in adopting a clear rule on international patent exhaustion? Notably, this was not the first time the Federal Circuit chose to adopt a "clear rule" in patent jurisprudence that lacked

⁹³ See supra notes 76-82 and accompanying text.

⁹⁴ Daniel Erlikhman, Note, *Jazz Photo and the Doctrine of Patent Exhaustion: Implications to TRIPS and International Harmonization of Patent Protection*, 25 HASTINGS COMM. & ENT L.J. 307, 313 (2003) (emphasis added).

either support in prior precedent, or, worse, effectively overruled long-standing case law. ⁹⁵ Nor was it the last. ⁹⁶ As one commentator recently remarked: "The Federal Circuit increasingly has articulated rules of law to promote certainty, at the expense of fairness." ⁹⁷ Why is the Federal Circuit doing this?

Lawyers and commentators proffer several reasons for the Federal Circuit's positive commitment to clear rules (and its attendant normative commitment to certainty). One explanation is that the Federal Circuit has experienced a patent-specific version of agency capture, although in this case it is a specialized patent court that has been captured by the special interests of the patent bar favoring strong patent rights. Another suggestion is that the Federal Circuit is aggrandizing its power as the sole appeals court hearing patent law appeals. Such explanations may be true, but they also unnecessarily impugn the motives of federal judges,

⁹⁵ See KSR Intern. Co. v. Teleflex Inc., 127 S. Ct. 1727 (2007) (rejecting Federal Circuit's "rigid" rule-like approach to nonobviousness inquiries as incompatible with the standards-based nature of the doctrine); Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 738 (2002) (rejecting Federal Circuit's "absolute bar" rule for prosecution history estoppel as incompatible with the equitable nature of the doctrine); Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17, 26 n.3 (1997) (rejecting de facto repudiation of doctrine of equivalents by Federal Circuit given concerns about certainty in claim construction and infringement actions).

⁹⁶ See IpVenture, Inc. v. Prostar Computer Inc., 503 F.3d 1324 (Fed. Cir. 2007) (refusing to apply California contract law in construing an employee-assignment agreement, and instead applying its own judicially created rule of requiring "hereby . . . grant/assign" as a formal legal requirement for contractually assigning patent rights). The Federal Circuit's formalism in contract cases is nothing new. See Christopher M. Kaiser, Note, Take It or Leave It: Monsanto v. McFarling, Bowers v. Baystate Technologies, and the Federal Circuit's Formalistic Approach to Contracts of Adhesion, 80 CHI.-KENT L. REV. 487 (2005) (surveying and critiquing the Federal Circuit's formalistic approach in contract cases, which is justified as providing greater predictability and certainty).

⁹⁷ Timothy R. Holbrook, *The Supreme Court's Complicity in Federal Circuit Formalism*, 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 1, 1 (2003); *see also* Arti K. Rai, *Engaging Facts and Policy: A Multi-Institutional Approach to Patent System Reform*, 103 COLUM. L. REV. 1035, 1040 (2003) ("[T]he Federal Circuit has substituted formalist decisionmaking for the fact-specific, policy-oriented analysis that is required by the open-ended language of the patent statute.").

⁹⁸ See John R. Thomas, Formalism at the Federal Circuit, 52 Am. U. L. REV. 771, 792-94 (2003) (discussing how the Federal Circuit's "jurisprudence increasingly reflects a trend towards adjudicative rule formalism," which is explained in part as a response to the "lawyers [who] draft the exclusionary rules that are patent claims").

⁹⁹ See Holbrook, supra note 97, at 5 ("The Federal Circuit has promoted an agenda favoring the creation of bright-line legal rules which arguably aggrandize power at the appellate level and which create unfairness to various parties for the sake of certainty in the law."); Rai, supra note 97, at 1057-64 (claiming that the Federal Circuit has engaged in "arrogation" in creating bright-line legal rules requiring de novo review of all aspects of lower court decisions); see also Phillips v. AWH Corp., 415 F.3d 1303, 1330 (Fed. Cir. 2005) (en banc) (Mayer, J., dissenting) (accusing the Federal Circuit of having "focused inappropriate power in this court" resulting from a "quest to elevate our own importance").

interposing into doctrinal and policy analysis the difficult task of inferring bad subjective states of mind.

An additional explanation may provide a less personal and subjective assessment of what is happening in *Jazz Photo* and in other cases in which the Federal Circuit has shown a proclivity for "clear rules" (and for the policy of certainty). One contributing factor that no one has assessed is the role that modern patent theory may be playing in the formalistic jurisprudence of the Federal Circuit. More specifically, the positive account of patents as securing only a right to exclude may be a basic underlying factor in the formalistic decision-making represented by *Jazz Photo*, as the conceptual framework adopted by a court constrains what it sees as the appropriate doctrinal inputs in deciding a particular case.

At first blush, this may sound strange, because the Federal Circuit ostensibly follows the long-standing judicial protection of patentee's commercialization rights. However, the Federal Circuit's foundational commercialization decision in 1992 in *Mallinckrodt* reflects an important conceptual shift between the historical and modern case law. In place of the nineteenth-century courts' reliance on real property doctrines and the protection of the rights of use and disposition, the Federal Circuit reconceptualized the commercialization models solely in terms of the right to exclude: "The enforceability of restrictions on the use of patented goods derives from the patent grant, which is in classical terms of property: the right to exclude. This right to exclude may be waived in whole or in part." This reconceptualization of the commercialization doctrines went unnoticed among patent lawyers and scholars, as it conforms to the accepted definition of patents today as securing only a negative right to exclude. However, *Mallinckrodt*'s change in the

¹⁰⁰ See supra notes 55, 88-89 and accompanying text.

¹⁰¹ Mallinckrodt, Inc., 976 F.2d at 703 (citation omitted).

¹⁰² See supra note 10.

positive definition of the legal right secured by the commercialization doctrines, while seemingly insignificant, was in fact of great import.

The Federal Circuit's positive redefinition of the legal rights secured by the three commercialization models shifted the doctrinal focus to a singular focus on the right to exclude. This is important insofar as the right to exclude is a purely formal, negative right that admits of no conditional doctrinal applications in a case-by-case basis. Thus, for instance, trespass is the doctrine enforcing the right to exclude in land, and trespass is a highly formalistic legal doctrine that provides absolute certainty in all cases as to whether one's property interest in a parcel of land has been breached. Given that patents are defined as securing a right to exclude, patent infringement is often analogized to trespass. Patent claims are similarly analogized to the metes and bounds of real property—the bright-line threshold that triggers absolute liability for trespass. Thus, it is little surprise that the Federal Circuit talks often of the need for legal rules

¹⁰³ Cf. Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 436 (1982) (justifying a categorical rule that a breach of the right to exclude by a "permanent physical occupation of property" is a compensable taking on the ground that it "avoids otherwise difficult line-drawing problems").

¹⁰⁴ See King Instruments Corp. v. Pergo, 65 F.3d 941, 947 (Fed. Cir. 1995) ("An act of infringement . . . trespasses on [a patentee's] right to exclude."); Markman v. Westview Instruments, Inc., 52 F.3d 967, 997 (Fed. Cir. 1995) (Mayer, J., concurring) (noting that "a patent may be thought of as a form of deed which sets out the metes and bounds of the property the inventor owns for the term and puts the world on notice to avoid trespass"); Frank H. Easterbrook, *Intellectual Property is Still Property*, 13 HARV. J. L. & PUB. POL'Y 108, 109 (1990) ("Patents give a right to exclude, just as the law of trespass does with real property.").

¹⁰⁵ See ROBERT P. MERGES & JOHN F. DUFFY, PATENT LAW AND POLICY 25 (3d ed. 2002) (noting that "innumerable cases analogize claims to the 'metes and bounds' of a real property deed").

in patent law that provide certainty to patentees and the public, 106 as do patent scholars as well. 107

This then provides a possible insight into how *Jazz Photo* came to its novel result in creating a fourth commercialization model never before seen in over two hundred years of patent doctrine securing patent-owner's rights in the marketplace. When the Federal Circuit returns to its first principles to address a novel issue in patent law, the positive framework within which it considers the issue is one that orients the court toward the necessity for bright-line, formalistic, absolute doctrinal rules to secure the singular right secured in a patent—the right to exclude. *Mallinckrodt* reveals that the court considers even commercialization issues through the prism of the right to exclude. ¹⁰⁸ Accordingly, *Jazz Photo* employed a formalistic approach to crafting a new legal rule for a novel situation dealing with an assignee's unrestricted sales of its patented products in foreign jurisdiction. The result was a single paragraph creating a new bright-line rule—no exhaustion—and similarly perfunctory consideration of the issue when the court returned back to the same issue four years later in *Fuji Film*.

¹⁰⁶ See, e.g., Phillips v. AWH Corp., 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc) (recognizing the need for "reasonable certainty and predictability" in claim construction rules); Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 234 F.3d 558, 578 (Fed. Cir. 2000) (en banc) (justifying adoption of absolute rule in prosecution history estoppel given the "certainty and predictability such a bar produces"), vacated 535 U.S. 722 (2002); Cyber Corp. v. FAS Tech., Inc., 138 F.3d 1448, 1475 (1998) (justifying treating claim construction as a matter of law given the "early certainty about the meaning of a patent claim"); Litton Sys., Inv. v. Honeywell, Inc., 87 F.3d 1559, 1580 (Fed. Cir 1996) (Bryson, J., concurring in part and dissenting in part) ("Patent counselors should be able to advise their clients The consequences of advice that turns out to be incorrect can be devastating, and the costs of uncertainty—unjustified caution or the devotion of vast resources to the sterile enterprise of litigation—can be similarly destructive.").

¹⁰⁷ See, e.g., MICHAEL J. MEURER & JAMES E. BESSEN, PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK 46-72 (2008) (discussing fundamental function of certainty in property regimes, including the patent system); Michael J. Meurer & Craig A. Nard, Patent Policy Adrift in a Sea of Anecdote: A Reply to Lichtman, 93 GEO. L.J. 2033, 2035 (2005) (noting "the standard view in law and economics that fuzzy property rights frustrate investment decisions and impede transactions"); Joseph Scott Miller, Enhancing Patent Disclosure for Faithful Claim Construction, 9 LEWIS & CLARK L. REV. 177, 195 (2005) ("Both due process norms and the economic analysis of property law support the view that claim scope should be predictable.").

¹⁰⁸ See supra note 101 and accompanying text.

Of course, we do not know with absolute certainty why Judge Newman sua sponte crafted the secondary holding in Jazz Photo on international patent exhaustion, because she did not explain her reasons. She did not even cite to any of the Federal Circuit's own case law on patent exhaustion, such as Mallinckrodt. And that is exactly the point of this Article: Modern patent theory makes such formalistic decision-making seem appropriate, because the positive theory defines patents in terms of the purely formal right to exclude. If trespass of real property is the well-accepted analogy for framing patent infringement, and trespass is a property-rule regime par excellence, 109 then the Federal Circuit will frame its decision-making processes in novel cases in which it is unconstrained by controlling precedent in terms of formal legal rules securing the similarly formal right to exclude. Thus, any conclusion which secures this right to exclude with absolute formal certainty is in conformity with the basic positive structure of the patent system, at least according to the patent theory guiding the Federal Circuit today.

For this reason, the substantive analyses of Jazz Photo—defending or criticizing its decision on international patent exhaustion 110—miss the more fundamental point. (Of course, they miss this more fundamental point because they share the basic positive premise with the Federal Circuit that patents secure only a right to exclude. 111 These scholarly exegeses elide the all-important methodological question: Why would Judge Newman and five other judges on the Federal Circuit consider a one-paragraph discussion of a novel and contested issue to be a valid exercise of judicial decision-making?

This Article maintains that Judge Newman's opinion in Jazz Photo is an exemplar of fundamental formalism in modern patent theory, which has infected commercialization doctrine

¹⁰⁹ SINGER, supra note 45, at 27-28 (describing the objective rule-like features of a trespass action and its remedies).

110 See supra notes 21-23 and accompanying text.

¹¹¹ See supra note 10 and accompanying text.

with indeterminacy. To be clear, the point is not that *Jazz Photo* is substantively right or wrong, but rather that the methodology of modern patent theory, derived from defining patents as securing only a right to exclude, orients judges toward handing down bright-line rules whose sole justification is absolute certainty in the enforcement of this exclusive right. Moreover, the point is not that every commercialization case is going to be infected with the same excessively formalistic methodology adopted in *Jazz Photo*. In cases in which prior case law is squarely on point, such as with single-use restrictions, courts are constrained by black-letter doctrine and will reach the same result as dictated by one of the earlier three commercialization models. ¹¹² In this respect, the nature of international patent exhaustion as an issue of first impression in *Jazz Photo* was important, as novel cases are the most illustrative examples of how the positive conceptual content of a legal entitlement can impose subtle blinders on judges, leading them to results they see as absolutely necessary, but only because they have created for themselves a myopic doctrinal perspective.

Lastly, it bears emphasizing that there is nothing intrinsic in modern patent theory that requires it to be indeterminate in commercialization cases. There are at least two possible ways that modern patent theory could resolve this indeterminacy on its own terms. First, since the right to exclude does not contain its own positive limits defining how it might be deployed in particular cases—beyond tilting judges toward adopting absolute, bright-line, formalistic rules—the indeterminacy may be resolved by developing an exogenous normative theory to guide the

¹¹² See, e.g., Monsanto Co. v. Parr, __ F. Supp. 2d __ (N.D. Ind. 2008) (finding defendant liable for inducing infringement in cleaning patented seeds for reuse, which violated a single-use restriction imposed on farmer in the first-sale of the patented seeds).

enforcement and limitation of the right to exclude in particular commercialization cases. (This is no less true for enforcing the right to exclude in land than it is for patents.)¹¹³

Unlike most areas of law, patent law seems uniquely situated to adopt this particular solution, as there is broad normative agreement within modern patent theory: patents are justified according to economic theory. Modern patent theory thus presents lawyers and judges today with a unified descriptive and policy framework for the American patent system: A patent comprises only the right to exclude and economic analysis is the means by which courts and scholars evaluate how this right to exclude should function to "promote the Progress of . . . useful Arts." Of course, the devil is in the details, and patent scholars strongly diverge over the appropriate metrics for assessing the economic goals of the patent system. 116

Commercialization is one of the many examples of this policy divergence in patent law. As observed in the Introduction, it is unsurprising that most patent scholars today translate Lincoln's commercialization justification for patents into the reward policy, because the commercialization of patent rights is a highly controversial subject within the economic analysis of patents.¹¹⁷ In fact, the role of commercialization within patent law proper is one of the

¹¹³ Compare State v. Shack, 277 A.2d 369, 372 (N.J. 1971) (refusing to enforce landowner's right to exclude given complex web of social relations defining the "human values" by which the right to exclude is "limited") with Jacque v. Steenberg Homes, Inc., 563 N.W.2d 154, 160 (Wis. 1997) (enforcing "a strong interest in excluding trespassers" even if damage is nominal given need to protect "integrity of the legal system" and to preclude "resort to 'self-help' remedies").

preclude "resort to 'self-help' remedies").

114 See, e.g., Dan L. Burk & Mark A. Lemley, Patent Policy Levers, 89 VA. L. REV. 1575, 1597 (2003) (recognizing that "courts and commentators widely agree that the basic purpose of patent law is utilitarian"); F. Scott Kieff, Property Rights and Property Rules for Commercializing Inventions, 85 MINN. L. REV. 697, 697 (2001) ("The foundation for the American patent system is purely economic.").

¹¹⁵ U.S. CONST. art. I, § 8.

¹¹⁶ See Burk & Lemley, supra note 114, at 1597-99 (observing that "[a]greement on basic utilitarian goals has not, however, translated into agreement on how to implement them").

Compare Mark A. Lemley, Ex Ante Versus Ex Post Justifications for Intellectual Property, 71 U. CHI. L. REV. 129 (2004) (criticizing commercialization theory in favor of reward theory) with F. Scott Kieff, Property Rights and Property Rules for Commercializing Inventions, 85 MINN. L. REV. 697 (2001) (advocating commercialization theory).

principal points of divergence among scholars today. ¹¹⁸ Unfortunately, commercialization theory lacks wide-spread support within patent scholarship, and the dominant reward theory simply discounts commercialization as the necessary evil by which the patent system incentivizes inventive activity: It is the dangling carrot by which self-interested inventors are forced to disclose their inventions and thereby expand the public domain. ¹¹⁹ Moreover, even amongst those scholars who believe that commercialization is central to the incentive structure of the patent system, many shunt commercialization issues to legal doctrines external to patent law, ¹²⁰ and disagreement remains as to the relevant metrics to be used in particular cases. ¹²¹

Interestingly, the Federal Circuit ignores the current scholarly debates over economic policy. 122 Perhaps the court does not wish to wade into disputed theoretical territory, but this is largely irrelevant when it comes to its decisions, because it still embraces the positive definition of patents as securing only a right to exclude. Accordingly, the court repeatedly defaults in its decision-making to the core positive right—the right to exclude—and the basic policy inherent in

¹¹⁸ See, e.g., Mark F. Grady & Jay I. Alexander, *Patent Law and Rent Dissipation*, 78 VA. L. REV. 305, 310 (1992) ("Two economic theories dominate the study of patent law: the more traditional reward theory, and the newer prospect theory as developed by Edmund Kitch.").

¹¹⁹ See J.E.M. Ag. Supply, Inc. v. Pioneer Hi-Bred Int'1, 534 U.S. 124, 142 (2001) ("The disclosure required by the Patent Act is the quid pro quo of the right to exclude."); Rebecca S. Eisenberg, *Patents and the Progress of Science: Exclusive Rights and Experimental Use*, 56 U. CHI. L. REV. 1017, 1037 (1989) (explaining that the reward theory "assume[s] that the patent monopoly has already served its social function of promoting invention and disclosure as soon as the patent issues, and that enforcement of the patent thereafter is simply the regrettable price that society must pay in order to live up to its end of the bargain"); Paul J. Heald, *A Transaction Costs Theory of Patent Law*, 66 OHIO ST. L. J. 473, 506 (2005) ("The traditional normative defense of patent law asserts that the public benefits of increased inventiveness, innovation, and disclosure of information offset the monopoly costs imposed by holders of exclusive rights."); *cf.* Mark A. Lemley, *Should Patent Infringement Requirement Proof of Copying*, 105 MICH. L. REV. 1525, 1530 (2007) (noting that from the perspective of the reward theory, "IP is a necessary evil").

¹²⁰ See, e.g., F. Scott Kieff & Troy A. Paredes, *The Basics Matter: At The Periphery of Intellectual Property Law*, 73 GEO. WASH. L. REV. 174, 198 (2004) ("[I]t is inappropriate to suggest that some uses of a patent are not within its scope, since patents only give a right to exclude. The right to use is derived from sources external to IP law.").

to IP law.").

121 Compare Kieff, supra note 114 (transaction costs) with Henry E. Smith, Intellectual Property as Property: Delineating Entitlements in Information, 116 YALE L.J. 1742 (2007) (information costs).

¹²² See Craig Allen Nard, Toward a Cautious Approach to Obeisance: The Role of Scholarship in Federal Circuit Patent Law Jurisprudence, 39 HOUS. L. REV. 667, 673-74 (2002) (observing that modern "empirical and economic scholarship... with a few notable exceptions, has largely been absent from the patent opinions of the Federal Circuit").

the enforcement of this formal right—certainty. The result is indeterminacy in the commercialization cases in which the right to exclude does not necessarily fit conceptually within the three classic commercialization models that inform the pre-existing doctrine, such as when the *Jazz Photo* court apparently decided that a clear rule providing certainty was preferable in the enforcement of the right to exclude in a novel exhaustion case. Nonetheless, if courts and scholars could coalesce around a single normative framework to guide the adjudication of the right to exclude when used positively in the commercialization of a patented invention, this would provide greater determinacy in the legal protection of patented innovation today.

A second way to resolve this indeterminacy is to develop commercialization doctrine within a conceptual framework that builds into the doctrine its own positive default presumption (as well as its own normative justification 123). But this would only be reinventing the wheel, because this is exactly what was achieved with the three commercialization models. In developing these three models, historical patent case law incorporated from real property the same legal security in the "exclusive use" of one's property interests in the marketplace. In this way, historical patent doctrines can teach modern patent theory about how sound doctrine can be fashioned in a way that effectively secures patent-owners' rights, especially their all-important right to secure the fruits of their inventive labors by profiting from the use or disposition of their property in the marketplace.

¹²³ The existence and validity of a normative principle internalized within doctrine to guide its adjudication is beyond the scope of this paper, which addresses only the existence of the positive doctrine and its background conceptual framework (i.e., the four models of commercialization). However, the original three commercialization models did build into the resulting commercialization doctrine a normative presumption that guided the courts in justifying their creation of the licensing rules: Courts employed a normative default presumption of maximum liberty in the use of one's property, which disaggregated decision-making concerning the uses of property to the entitlement-owners, as owners are in the best position to know how to dispose of new inventions as commercial innovation. *See* E. Bement & Sons v. Nat'l Harrow Co., 186 U.S. 70, 91 (1902) (observing that "the general rule is absolute freedom in the use or sale of rights under the patent laws of the United States").

The commercialization doctrines in patent law—which are now collectively referred to as "patent exhaustion" doctrine—functioned so well for so long because they secured to patentees their property rights based on a broader conception of property as securing the exclusive rights to use and dispose of one's possessions. 124 Thus, Lincoln's emphasis on "exclusive use" as the primary right that incentivized inventors to become patentees, ¹²⁵ and the hoary statutes and court decisions emphasis on the "substantive rights" secured to patentees—the "right to manufacture, the right to sell, and the right to use." ¹²⁶ In nineteenth-century commercialization cases, patentees exercised the classic property rights of use and disposition, or what all pre-1952 patent statutes referred to as "the exclusive right to make, use, and vend the said invention or discovery." 127 It was on the basis of this conceptual similarity between the legal interests secured in both land and patents that nineteenth-century courts were able to incorporate into patent law the commercialization doctrines already securing to landowners the free use and alienation of their property. 128

The resulting commercialization case law in patent jurisprudence reflected an internal positive limit that courts took from real property doctrine and expressly designed into the patent system: "[T]he general rule is absolute freedom in the use or sale of rights under the patent laws

¹²⁴ See, e.g., McKeon v. Bisbee, 9 Cal. 137, 143 (1858) ("Property is the exclusive right of possessing, enjoying, and disposing of a thing."); Wynehamer v. People, 13 N.Y. 378, 433 (1856) ("Property is the right of any person to possess, use, enjoy, and dispose of a thing."); WILLIAM BLACKSTONE, 1 COMMENTARIES *138 ("The third absolute right... is that of property: which consists in the free use, enjoyment, and disposal of all his acquisitions ").

¹²⁵ Lincoln, *supra* note 1, at 363.

¹²⁶ Adams v. Burke, 84 U.S. 453, 456 (1873).

¹²⁷ Patent Act of 1870, ch. 230, § 22, 16 Stat. 198, 201 (repealed 1952); see also Patent Act of 1836, ch. 357, § 11, 5 Stat. 117, 121 (repealed 1870) (providing that "every patent shall be assignable in law" and that this "conveyance of the exclusive right under any patent, to make and use, and to grant to others to make and use, the thing patented" must be recorded in the Patent Office); Patent Act of 1793, ch. 11, § 1, 1 Stat. 318, 321 (repealed 1836) (providing that a patent secures "the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention or discovery"); Patent Act of 1790, ch. 7, § 1, 1 Stat. 109, 110 (repealed 1793) (providing that a patent secures "the sole and exclusive right and liberty of making, constructing, using and vending to others to be used, the said invention or discovery")

128 See supra Part II.

of the United States," ¹²⁹ but this freedom must be exercised in the form of express restrictions provided in recorded instruments that gave notice to purchasers and their heirs, successors, or assigns. ¹³⁰ If a landowner wishes to grant a license, an easement, a fee simple defeasible, or a fee simple with restrictive covenants, the grantor has to do so explicitly. Otherwise, the grantee may reasonably conclude that it is acquiring the unfettered exclusive rights to use and dispose of its newly acquired possession, and courts enforced such conveyances as creating a fee simple interest in the grantee.

On the basis of the same definition of patents as property, nineteenth-century courts designed into the patent system the exact same doctrinal requirements they used in defining the same rights in land:

[T]he general rule is that if a patentee made a structure embodying his invention, and *unconditionally make a sale of it*, the buyer acquires the right to use the machine *without restrictions*, and, when such machine is lawfully made and unconditionally sold, no restriction upon its use will be implied in favor of the patentee. ¹³¹

Patentees knew that if they wished to convey anything less than "complete title" in a patented product—if they wished to adopt anything other than the first model of commercialization—then they had to impose express restrictions in the license or sale. ¹³² In other words, as a positive matter, they had to impose defeasible conditions or restrictive covenants that reflected commercialization models two or three. More important, the market participants who engaged in

¹²⁹ E. Bement & Sons v. Nat'l Harrow Co., 186 U.S. 70, 91 (1902).

¹³⁰ See supra notes 51-52 and accompanying text.

Heaton-Peninsular Button-Fastener Co. v. Eureka Specialty Co., 77 F. 288, 290 (6th Cir. 1896) (emphases added). *See also* Mitchell v. Hawley, 83 U.S. 544, 548 (1872) ("Complete title to the implement or machine purchased becomes vested in the vendee by the sale and purchase, . . . [and] when it rightfully passes from the patentee to the purchaser, [it] ceases to be within the limits of the monopoly.).

¹³² Mitchell v. Hawley, 83 U.S. 544, 548 (1872) ("Complete title to the implement or machine purchased becomes vested in the vendee by the sale and purchase, . . . [and] when it rightfully passes from the patentee to the purchaser, [it] ceases to be within the limits of the monopoly.").

commercial transactions with patentees knew that an "unrestricted purchase and sale" of a "patented article" meant that they owned the product as "an ordinary article of commerce." ¹³³

In this respect, modern patent theory can learn important lessons from sound doctrine that was crafted by courts in a time when commercialization was deemed central to the proper functioning of a patent system, but on very different positive grounds than today. This does not mean that the modern definition of patents as securing only the right to exclude is invalid, although this positive account of patents is rooted in a widespread misunderstanding of the nature of use rights in property. 134 This definition is nonetheless firmly set in the modern statutes and patent practice, and thus this topic is far beyond the limited scope of this paper. For purposes of our analysis here, it is enough to realize that the American patent system once fostered a fundamental commercialization policy that was given life through judicially created doctrines that secured to patentees and their assignees their rights of use and disposition in the marketplace.

V. Conclusion

In seeking to rediscover commercialization as a fundamental policy of the American patent system, scholars and judges might learn how such a policy first animated patent doctrines under the first four iterations of the patent statutes in 1790, 1793, 1836 and 1870. In this earlier era, Congress and courts deemed commercialization of patents to be fundamental to the functioning of the patent system. The reason was that, in Lincoln's words, the "exclusive use" of patents in the marketplace was what "added the fuel of interest to the fire of genius." 135

¹³³ American Cotton Tie Supply Co. v. Bullard, 1 F. Cas. 625, 628 (C.C.N.Y. 1879) (No. 294).

¹³⁴ See Adam Mossoff, Patents as Property: Rethinking the Exclusive Right(s) in Patent Law (unpublished manuscript 2008). 135 Lincoln, supra note 1, at 363.

Within the theoretical constraints set by modern patent theory, scholars and judges miss this important insight, because this is viewed today as a historically anachronistic definition of patents. Patents do not secure exclusive rights of use and disposition; patents secure only the right to exclude. Regardless of whether this positive definition of patents is correct, it subtly tilts Federal Circuit jurisprudence toward a rarefied formalism within patent law that has produced a proclivity for bright-line rules justified by a policy concern of certainty. Of course, rule-based regimes and the concerns about certainty have their place—most notably within trespass and infringement doctrines—but they lack conceptual fit when it comes to commercialization doctrines, which are conditional and case-sensitive. The result, as typified by decisions like *Jazz Photo*, is indeterminacy in commercialization doctrines, in which the Federal Circuit adopts absolute bright-line rules enforcing the right to exclude.

Of course, modern patent theory, such as the reward and commercialization theories, is capable of incorporating the normative consequences of commercialization rights. The important point here is that the right to exclude has conceptually blinded the first forays into the economic analysis of patents by excluding as a positive matter the core commercialization rights—the rights of use and disposition—from the evaluation of the functioning policies in the patent system. Unsurprisingly, this is not a problem that is unique to patent law, as Professors Thomas Merrill and Henry Smith have similarly critiqued the modern economic analysis of property as having "blinded itself to certain features of property regimes—features that are important and cannot be accounted for on any other terms." Historical patent doctrine points the way to rediscovering the fundamental commercialization policy within patent law, and in rethinking whether modern patent theory provides the best positive theoretical account for this policy today.

¹³⁶ Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L.J. 357, 398 (2001).

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