



School of Law

PATENTS AS PROPERTY: CONCEPTUALIZING THE EXCLUSIVE RIGHT(S) IN PATENT LAW

**Adam Mossoff,
George Mason University School of Law**

**George Mason University Law and Economics
Research Paper Series**

08-49

This paper can be downloaded without charge from the Social Science
Research Network at http://ssrn.com/abstract_id=1239182

Working Draft
Please do not distribute or quote without permission of the author.

PATENTS AS PROPERTY: CONCEPTUALIZING THE EXCLUSIVE RIGHT(S) IN PATENT LAW

Adam Mossoff*

The conventional wisdom is that the definition of patents as property has been long settled—patents secure only a right to exclude. In exploring the intellectual history of American patent law, this Article reveals that this claim is profoundly mistaken. For much of its history, Congress and courts defined a patent in the same conceptual terms as property in land and chattels, as securing the exclusive rights of possession, use and disposition. Nineteenth-century courts explicitly used this substantive conception of patents to create many longstanding doctrines in the American patent system, such as the conveyance default rules now known as patent exhaustion doctrine. Significantly, the Supreme Court has invoked such historical doctrine in reversing the Court of Appeals for the Federal Circuit in its many recent patent law decisions.

For this reason, the conceptual break between modern and historical patent doctrine is not simply a matter of philosophical inquiry. Today, scholars and courts believe that patents must secure only a right to exclude as a matter of logical necessity, dismissing the historical statutes and case law as confusion or dicta. Yet, they do not realize that their definition of patents as property is a uniquely modern conception, which follows directly from the legal realists' property theory in land. In identifying this intellectual history for the first time, this Article reveals how the legal realists' theoretical work concerning real property has influenced twentieth-century patent doctrine, and how this may be an under-appreciated factor contributing to the increasingly tumultuous debates over patent doctrine.

* Associate Professor of Law, George Mason University School of Law; J.D., University of Chicago; M.A. (Philosophy), Columbia University; B.A. (Philosophy), University of Michigan. For many helpful comments and conversations during the gestation of this Article over the past couple years, thank you to Graeme Austin, Michael Carrier, Paul Heald, Mark Lemley, David McGowan, Robert Merges, Kali Murray, Christopher Newman, Frank Partnoy, Lisa Ramsey, Michael Rappaport, Henry Smith, Molly Van Houweling, Sam Vermont, and Darryl Wright. Thanks also to the many participants at workshops and conferences at the University of Arizona, UC-Berkeley, University of Chicago, University of Colorado - Boulder, George Mason University, University of San Diego, University of Texas at Austin (Philosophy Department), and Washington & Lee University. A special thank you to Eric Claeys, who provided substantial feedback and without whose input this Article would have suffered greatly.

I.	Introduction.....	1
II.	The Modern Conception of Patents as Property	7
	A. <i>Patents and the Right to Exclude</i>	8
	B. <i>The Justification for the Exclusion Concept of Patents</i>	11
	1. <i>Blocking Patents</i>	12
	2. <i>The Regulation of Patents by the Administrative State</i>	17
	C. <i>The Right to Exclude in the 1952 Patent Act: A Statutory Mandate?</i>	22
III.	Rediscovering Long Lost Relations: Property Theory and Patent Law	31
	A. <i>Use-Rights and Patent Licensing Doctrines in Early American Patent Law</i>	34
	B. <i>The Legal Realists’ Use of Patents in Reconceptualizing Property in Land</i>	46
	C. <i>The Genesis of the Exclusion Concept of Patents: Wesley Hohfeld’s Redefining Use-Rights as “Privileges”</i>	52
IV.	Some Preliminary Thoughts on the Role of Conceptual Property Theory in Patent Law ...	58
V.	Conclusion	68

I. INTRODUCTION

In the past two years, the Supreme Court has upended patent doctrine to a degree not seen since the mid-nineteenth century. The Court handed down opinions in six cases,¹ and Justice Stephen Breyer, joined by Justices John Stevens and David Souter, issued a dissenting opinion in a seventh case that was dismissed for being improvidently granted.² Not since 1853, when the Court decided eight patent cases,³ has the Court engaged so intensely with the working details of

¹ See *Quanta Comp., Inc. v. LG Elect., Inc.*, 128 S. Ct. 2109 (2008); *Microsoft Corp. v. AT&T Corp.*, 127 S. Ct. 1746 (2007); *KSR Intern. Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007); *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 166 (2007); *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006); *Indep. Ink, Inc. v. Illinois Tool Works, Inc.*, 547 U.S. 28 (2006).

² See *Lab. Corp. v. Metabolite Lab Inc.*, 73 U.S.L.W. 3298 (U.S. Oct. 31, 2005) (No. 04-607), *cert. dismissed*, 548 U.S. 124, 125-39 (2006) (Breyer, J., dissenting).

³ See *O’Reilly v. Morse*, 56 U.S. (15 How.) 62 (1853); *Smith v. Ely*, 56 U.S. (15 How.) 137 (1853); *Brooks v. Fiske*, 56 U.S. (15 How.) 212 (1853); *Corning v. Burden*, 56 U.S. (15 How.) 252 (1853); *Winans v. Denmead*, 56 U.S. (15 How.) 330 (1853); *Corning v. Troy Iron & Nail Factory*, 56 U.S. (15 How.) 451 (1853); *Livingston v. Woodworth*, 56 U.S. (15 How.) 546 (1853); *Seymour v. McCormick*, 57 (16 How.) 480 (1853).

the American patent system. Yet, throughout this tumult, the descriptive foundation of the patent system has remained unscathed. The status of patents is undisputed: patents are property.⁴

For many lawyers and scholars outside of patent law, this may sound surprising, because legal rights derived from constitutional provisions are typically the subject of substantial disagreement on both descriptive and normative grounds.⁵ Not so for constitutionally-based patents.⁶ Congress, treatise authors, courts and scholars agree that patents are a unique form of property that secures only a negative right to exclude others from an invention.⁷ The Supreme Court thus agrees with the Court of Appeals for the Federal Circuit, despite the recent string of reversals, that patents are property insofar as patents secure a right to exclude.⁸ Prominent patent scholars, such as Professors Mark Lemley and Scott Kieff, who take strongly opposing positions on patent policy⁹ (and repeatedly file competing amicus briefs¹⁰) agree that patents are property insofar as they secure a right to exclude.¹¹ The conventional wisdom is that the definition of

⁴ See, e.g., 35 U.S.C. § 261 (“[P]atents shall have the attributes of personal property.”); *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 730 (2002) (“The [patent] monopoly is a property right.”); *Florida Prepaid Postsecondary Educ. Expense Bd. v. College Sav. Bank*, 527 U.S. 627, 642 (1999) (“Patents . . . have long been considered a species of property.”).

⁵ See, e.g., *Boumediene v. Bush*, 128 S. Ct. 2229 (2008) (habeas corpus); *District of Columbia v. Heller*, 128 S. Ct. 2783 (2008) (second amendment); *Kelo v. City of New London*, 545 U.S. 469 (2005) (takings clause); *Camps Newfound/Owatanna, Inc. v. Town of Harrison*, 520 U.S. 564 (1997) (dormant commerce clause); *Lamb’s Chapel v. Center Moriches Union Free Sch. Dist.*, 508 U.S. 384 (1993) (establishment clause).

⁶ See U.S. CONST. art. I, § 8 (“The Congress shall have Power To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”).

⁷ See *infra* Part I.

⁸ Compare *Dawson Chem. Co. v. Rohm & Haas Co.*, 448 U.S. 176, 215 (1980) (observing that it is “the long-settled view that the essence of a patent grant is the right to exclude others from profiting by the patented invention”) with *Carl Schenck, A.G. v. Nortron Corp.*, 713 F.2d 782, 786 n.3 (Fed. Cir. 1983) (“The patent right is but the right to exclude others, the very definition of ‘property.’”).

⁹ Compare F. Scott Kieff, *Property Rights and Property Rules for Commercializing Inventions*, 85 MINN. L. REV. 697 (2001) (advancing commercialization theory of patent law) with 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).

¹⁰ See, e.g., Brief of Various Law & Economics Professors as Amici Curiae in Support of Respondent, *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006) (No. 05-130); Brief Amici Curiae of 52 Intellectual Property Professors in Support of Petitioners, *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006) (No. 05-130).

¹¹ Compare Mark A. Lemley, *Reconceiving Patents in the Age of Venture Capital*, 4 J. SMALL & EMERGING BUS. L. 137, 139 (2000) (observing that “the patent law model we have is quite simple: the government issues you a

patents as property is settled—patents secure only a right to exclude—and thus disagreement occurs over only the messy normative details of how best to deploy this exclusive right in patent doctrine.¹²

This uniformity of opinion within the patent law community has perhaps obscured the fact that this “exclusion concept of patents” is ultimately deficient in defining patents as a unique species of property. Contrary to the claims of courts, lawyers and scholars, defining patents in terms of the right to exclude is not distinctive to patent law. It derives from a theory of property in land that was first promulgated within American law by the legal realists in the early twentieth century.¹³ The legal realists revolutionized American property theory by redefining real property as comprising a right to exclude,¹⁴ which soon became the standard definition of legal entitlements in land.¹⁵ In reflexively adopting the legal realists’ exclusion concept of property in land, patent scholars and lawyers have similarly redefined the conceptual foundations of American patent law.¹⁶

This brings into sharp focus the salience of what might seem to be merely esoteric philosophical or conceptual theory. Much of modern American patent law comprises doctrines

patent; the patent gives you the right to exclude”) with F. Scott Kieff & Troy A. Paredes, *The Basics Matter: At The Periphery of Intellectual Property Law*, 73 GEO. WASH. L. REV. 174, 198 (2004) (claiming that “patents only give a right to exclude”).

¹² Cf. Dan L. Burk & Mark A. Lemley, *Patent Policy Levers*, 89 VA. L. REV. 1575, 1597-99 (2003) (recognizing that “courts and commentators widely agree that the basic purpose of patent law is utilitarian,” but that this “[a]greement on basic utilitarian goals has not, however, translated into agreement on how to implement them”).

¹³ See *infra* Part III.B.

¹⁴ See Adam Mossoff, *What is Property? Putting the Pieces Back Together*, 45 ARIZ. L. REV. 371, 375 (2003) (identifying this as the “exclusion theory of property”).

¹⁵ See *infra* note 196 and accompanying text.

¹⁶ See, e.g., Mark A. Lemley & Philip J. Weiser, *Should Property or Liability Rules Govern Information?*, 85 TEX. L. REV. 783, 783 (2007) (predicating their normative economic analysis on the assumption that the “foundational notion of property law is that ‘the right to exclude’ is the essence of a true property right”); Hon. Pauline Newman, *Legal and Economic Theory of Patent Law* (July 21, 1994), printed in DONALD S. CHISUM ET AL., PRINCIPLES OF PATENT LAW 76, 77 (3d ed. 2004) (“The essence of the concept of property is the right to exclude others from its possession and enjoyment.”); *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983) (recognizing that “a patent is a form of property right, and the right to exclude recognized in a patent is but the essence of the concept of property”).

first created by courts in the nineteenth century,¹⁷ an era in which patents were defined as securing exclusive rights of possession, use and disposition.¹⁸ This definition informed the patent doctrines created by the courts at that time,¹⁹ and the continued enforcement of these hoary doctrines by modern courts raises tensions within modern patent jurisprudence that are often concealed by the conventional wisdom represented in the exclusion concept of patents. In repeatedly reversing the Federal Circuit, for instance, the Supreme Court consistently professes fealty to the conceptual features of “longstanding doctrine” in patent law.²⁰ As Chief Justice John Roberts explained in the Court’s recent decision in *eBay v. MercExchange*, “historical practice” sets the baseline for construing patent doctrine, because “[w]hen it comes to discerning and applying those standards, in this area as others, ‘a page of history is worth a volume of logic.’”²¹

Within the opinions invoking such longstanding historical doctrine, though, the difference between the exclusion concept of patents and the more substantive conceptual content of nineteenth-century patent doctrines has gone unacknowledged. The Court is not alone in this regard. Patent scholars similarly assume that foundational conceptual issues in patent law are

¹⁷ Patent lawyers are familiar with the fact that almost all black-letter patent doctrine consists of judicial glosses on the patent statutes. *See, e.g.*, *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988) (recognizing that “[t]he term ‘undue experimentation does not appear in the [patent] statute, but it is well established” as the governing enablement test); *Hotchkiss v. Greenwood*, 52 U.S. (11 How.) 248 (1851) (creating nonobviousness requirement in patent law in construing the term “invention” in the patent statutes).

¹⁸ *See infra* notes 77-78 and accompanying text.

¹⁹ *See* Part III.A.

²⁰ *Quanta Comp.*, 128 S. Ct. at 2115 (citing nineteenth-century case law); *see also KSR Intern. Co.*, 127 S. Ct. at 1734 (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.*, 535 U.S. at 738 (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) (maintaining that nineteenth-century court decisions creating the doctrine of equivalents are controlling today).

²¹ *eBay*, 547 U.S. at 394-95 (Roberts, C.J., concurring) (quoting *New York Trust Co. v. Eisner*, 256 U.S. 345, 349 (1921) (Holmes, J.)).

resolved, and thus they focus exclusively on the normative analysis of patents.²² But conceptual issues remain very much in play, albeit influencing doctrine and policy analysis implicitly, within the nineteenth-century patent doctrines that are the focus of so many of the recent cases decided by the Supreme Court. The tumult in patent law has been caused by both normative and conceptual conflicts within modern patent jurisprudence.

As such, this Article proposes a modest challenge to patent scholars and jurists to reconsider both the substance and significance of the conceptual analysis of patents as property. As Judge Timothy Dyk recently reminded his fellow jurists on the Federal Circuit: “Patent law is not an island separated from the main body of American jurisprudence.”²³ In identifying the source of the exclusion concept of patents in the legal realists’ tangible property theory, as well as highlighting the deficiencies of this modern conceptual theory in explaining patent law practices and doctrines, this Article seeks to confirm Judge Dyk’s insight with respect to the role of conceptual property theory in patent law.

In three parts, this Article will advance its thesis that the exclusion concept of patents does not adequately define patents as a unique species of property and that this is a long-unacknowledged Achilles heel in modern patent jurisprudence. First, it will explain the exclusion concept of patents and evaluate its supporting doctrinal and statutory arguments. Unfortunately, this conception of patents as property is predicated on mistaken doctrinal distinctions between

²² See, e.g., Burk & Lemley, *supra* note 12, at 1596-99 (noting how there remains “[f]undamental disagreement” between various normative theories of patents); Kieff, *supra* note 9, at 718 (“The creation of a property right to exclude others from partaking in the benefits of commercialization efforts is consistent with the basic thesis of Demsetz that property rights emerge when it becomes economically efficient to internalize benefits and costs.”); Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J. L. & ECON. 265, 265 (1977) (proposing as a matter of normative economic analysis to “reintegrate[] the patent institution with the general theory of property rights”); Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1033 (2005) (“The rhetoric and economic theory of real property are increasingly dominating the discourse and conclusions of the very different world of intellectual property.”); Craig A. Nard, *Certainty, Fence Building, and the Useful Arts*, 74 IND. L. J. 759 (1999) (applying normative economic analysis to explain why patents are enforced as “property rule entitlements”).

²³ *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GMBH v. Dana Corp.*, 383 F.3d 1337, 1351 (Fed. Cir. 2004) (en banc) (Dyk, J., concurring in part and dissenting in part).

real property and patented inventions, and, as revealed in some of the recent Supreme Court patent decisions, the patent statutes are beset with internal conflicts concerning the conceptual content of patents as property. Given the absence of a compelling doctrinal or statutory account for the exclusion concept of patents, the Article will then address how this descriptive account of patents came about by examining the intellectual history of American property theory. It will explain how the exclusion concept of patents arose as a result of the legal realists' radical reconceptualization of property in land at the turn of the twentieth century. Significantly, it will discuss how the legal realists used patents in arguing for an exclusion concept of property in land, and it will show how this revolution in property theory in the early twentieth century led patent lawyers to later mistakenly accept the legal realists' characterization of property as securing only the right to exclude. Finally, the Article will conclude with some thoughts as to why conceptual property theory matters in patent law, as illustrated in some of the recent Supreme Court decisions, such as *Quanta Computer v. LG Electronics*.²⁴

Although modern legal disputes are not all reducible to conceptual confusions or accidents in the intellectual history of legal doctrine, it would be hasty to dismiss such analyses as irrelevant to the evolution of modern patent doctrine. The conceptual content of a legal entitlement guides courts in shaping the legal rules that further delineate or extend the protection of the law. When this legal entitlement does not necessarily account for the actions a property owner may undertake, the result may be doctrinal disarray, especially when that legal entitlement is now defined differently from when its doctrines were first created by either Congress or courts. As Wesley Hohfeld taught the legal profession almost a century ago, the conceptual analysis of legal entitlements is important because it can “aid in the understanding and in the

²⁴ 128 S. Ct. 2109 (2008).

solution of practical, every-day problems of the law.”²⁵ Patents are no exception, and the recent tumult within patent doctrine suggests that it is time to reconsider whether the conceptual status of patents as property has been an unobserved factor at work within this doctrinal turmoil.

II. THE MODERN CONCEPTION OF PATENTS AS PROPERTY

Before assessing the intellectual origins of the exclusion concept of patents and its influence on modern patent doctrine, it is necessary to first consider how courts and scholars conceptualize patents as legal rights. Of course, it is beyond cavil that patents are property rights. The oft-stated reason seems deceptively simple: patents secure only the right to exclude. Thus, the syllogism that establishes that patents are property is relatively straightforward: If patents are defined solely by the right to exclude, and the Supreme Court has declared the right to exclude to be “one of the most essential sticks in the bundle of rights that are commonly characterized as property,”²⁶ then patents are property.

Notably, the Supreme Court claimed that property was defined by the “essential stick[]” of the right to exclude in a takings case involving tangible property rights, not patents. This is prima facie evidence that the exclusion concept of patents follows the same conceptual contours as the exclusion concept of property in land.²⁷ This initial observation is further supported by the Court’s follow-on use of similar language in its more recent intellectual property decisions, in which it has referred to the right to exclude as the “hallmark” of a property entitlement.²⁸ Ultimately, Part Two will establish this correlation as causation, but before such intellectual

²⁵ Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16, 20 (1913).

²⁶ *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979).

²⁷ See, e.g., Felix S. Cohen, *Dialogue on Private Property*, 9 RUTGERS L. REV. 357, 370-71 (1954) (analyzing “property” as a legal entitlement that is essentially defined by the “right to exclude”); Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 754 (1998) (“[P]roperty means the right to exclude others from valuable resources, no more and no less.”).

²⁸ See, e.g., *College Sav. Bank v. Florida Prepaid Postsecondary Educ. Expense Bd.*, 527 U.S. 666, 673 (1999) (“The hallmark of a protected property interest is the right to exclude others.”).

influences can be identified in the historical record, it is necessary to establish that the exclusion concept of patents is the foundation of modern patent jurisprudence and to assess the evidence for this proposition.

A. *Patents and the Right to Exclude*

The Federal Circuit has stated bluntly that it is “elementary” that “a patent grants only the right to exclude others and confers no right on its holder to make, use, or sell” the invention,²⁹ and it confirms that it is elementary by repeatedly restating this definition with no further analysis or validation.³⁰ Scholars agree. The leading patent treatise, authored by Donald Chisum, states that “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.”³¹ Patent law casebooks all teach students this basic conceptual point,³² as do intellectual property hornbooks.³³ Academic scholarship is rife with restatements of the exclusion concept of patents.³⁴

²⁹ *Bio-Tech. Gen. Corp. v. Genentech, Inc.*, 80 F.3d 1553, 1559 (Fed. Cir. 1996).

³⁰ *See, e.g.*, *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (2005) (en banc) (“It is a ‘bedrock principle’ of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.”); *Intergraph Corp. v. Intel Corp.*, 195 F.3d 1346, 1356 (Fed. Cir. 1999) (noting that “the patent grant is a legal right to exclude, not a commercial product in a competitive market”); *Carl Schenck, A.G. v. Nortron Corp.*, 713 F.2d 782, 786 n.3 (Fed. Cir. 1983) (“The patent right is but the right to exclude others, the very definition of ‘property.’”); *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983) (recognizing that “a patent is a form of property right, and the right to exclude recognized in a patent is but the essence of the concept of property”).

³¹ 5-16 CHISUM ON PATENTS § 16.02[1] (2006).

³² *See, e.g.*, MARTIN J. ADELMAN ET AL., CASES AND MATERIALS ON PATENT LAW 1 (1998) (“[A]t essence the patent system offers the inventor a relatively simple bargain: disclosure of a technological advance in exchange for the right to exclude others from employing it.”) CHISUM ET AL., *supra* note 16, at 4 (“[A] patent gives an inventor the *right to exclude*. A patent does not give the inventor the positive right to make, use, or sell the invention.”); ROBERT P. MERGES & JOHN F. DUFFY, PATENT LAW AND POLICY 48 (3d ed. 2002) (“Unlike other forms of property, however, a patent includes *only* the right to exclude *and nothing else*. Patent rights are wholly *negative* rights—rights to stop others from use—not positive rights to use the invention.”); KIMBERLY A. MOORE ET AL., PATENT LITIGATION AND STRATEGY 3 (2d ed. 2003) (noting that “a patent confers the right to exclude”); *cf.* THOMAS W. MERRILL & HENRY E. SMITH, PROPERTY 163 (2007) (“The holder of a patent has the right to exclude others from the patented invention But nothing in the patent gives the patentee the affirmative right to *use* the invention.”).

³³ *See, e.g.*, DONALD S. CHISUM & MICHAEL A. JACOBS, UNDERSTANDING INTELLECTUAL PROPERTY LAW 2-216 (1992) (“A patent grants only the right to *exclude* others, not an affirmative right to make, use or sell an invention.”); 1 JOHN GLADSTONE MILLS III ET AL., PATENT LAW BASICS § 1:4 (2d ed. 2006) (explaining that the

As with almost all conceptual claims about legal rights, the definition of patents in terms of the right to exclude is quite useful for patent lawyers, who must repeatedly disabuse their clients of the notion that they can do whatever they want with their inventions simply because they have secured a patent.³⁵ For academics and judges, it is also a valuable heuristic for differentiating modern patents from their historical ancestors, as early English patent grants imposed a duty of manufacture on patentees whereas a modern American patentee may do nothing with its property except sue others for infringement.³⁶ Moreover, the exclusion concept of patents establishes a convenient conceptual framework for the normative economic analysis of

patent statutes secure only “the fundamental right of exclusivity in the subject matter of the invention”); SHELDON W. HALPERN ET AL., *FUNDAMENTALS OF UNITED STATES INTELLECTUAL PROPERTY LAW* 252 (1999) (stating that “the patent grant does not give the patentee the right to make, use, sell, offer for sale, or import, but rather it provides a *right to exclude*”); JANICE M. MUELLER, *AN INTRODUCTION TO PATENT LAW* 14 (2d ed. 2006) (“Importantly, this property right [in a patent] is a *negative* right; i.e., a right to exclude others from making, using, selling, offering to sell, or importing the patented invention in the United States during the term of the patent.”); ROGER E. SCHECHTER & JOHN R. THOMAS, *PRINCIPLES OF PATENT LAW* 4 (2004) (“Patents confer the right to exclude others from making, using, selling, offering to sell, and importing the protected invention.”).

³⁴ See, e.g., John R. Allison & Mark A. Lemley, *The (Unnoticed) Demise of the Doctrine of Equivalents*, 59 *STAN. L. REV.* 955, 958 n.10 (2007) (stating that “the patent right is a negative one—the right to exclude others from making, using, selling, offering to sell, or importing the patented invention.”); Dan L. Burk & Mark A. Lemley, *Patent Policy Levers*, 89 *VA. L. REV.* 1575, 1665 (2003) (noting that “the patent right to exclude has been regarded as a nearly absolute property rule”); Christopher A. Cotropia, *Patent Law Viewed Through An Evidentiary Lens: The “Suggestion Test” As A Rule of Evidence*, 2006 *BYU L. REV.* 1517, 1523 (“At the core of the United States patent system is the right to exclude.”); Richard A. Epstein, *The Constitutional Protection of Trade Secrets Under the Takings Clause*, 71 *U. CHI. L. REV.* 57, 57 (2004) (“Patents grant the right to exclude only to individuals who disclose their information.”); Rebecca S. Eisenberg, *Intellectual Property at the Public-Private Divide: The Case of Large-Scale cDNA Sequencing*, 3 *U. CHI. L. SCH. ROUNDTABLE* 557, 562 (1996) (“A patent gives an inventor the right to exclude others from making, using, and selling the invention for a limited term”); Shubha Ghosh, *Exclusivity—The Roadblock to Democracy?*, 50 *ST. LOUIS U. L. J.* 799, 806 (2006) (“Patents, for example, grant a strong right to exclude in exchange for complete disclosure of the invention to the public.”); Kieff & Paredes, *supra* note 11, at 198 (noting that “patents only give a right to exclude” and that any “right to use is derived from sources external to IP law”); Robert P. Merges & Richard R. Nelson, *On the Complex Economics of a Patent Scope*, 90 *COLUM. L. REV.* 839, 861 n.96 (1990) (noting that “a patent grant is a right to exclude, not an affirmative right to practice an invention”).

³⁵ See, e.g., Gavin T. Bogle & Elizabeth R. Wyeth, *An In-House Perspective on the Preparation for Litigation in the Biotechnology Industry*, 760 *PLI/PAT.* 509, 511 (2003) (“When trying to explain the role of patents to clients, I often recite the adage ‘patents are merely the right to sue.’ This explanation is usually necessary to clarify confusion between freedom to operate issues and the right to exclude conferred by our own patents.”); Eric R. Benson, *Intellectual Property Law*, *VT. B.J. & L. DIG.* 42 (Dec. 1994) (observing that “a patent gives the inventor only the right to exclude others” and that this is “[o]ne of the most fundamental aspects of patent law [that] often escapes the inventor,” which is that a “patent does not grant to an inventor any right to manufacture, use or sell their invention, because such a manufacture, use or sale may itself infringe upon someone else’s patent”).

³⁶ See *infra* notes 219-233 and accompanying text.

patents within the now-familiar Calabresi-Melamed distinction between legal remedies—property rules (injunctions) versus liability rules (damages).³⁷

Yet the exclusion concept of patents does more than provide prudential guidance in either client counseling or normative legal analysis. Most important, the exclusion concept of patents purports to conceptually differentiate this species of property from tangible property rights, such as land.³⁸ Judge Giles S. Rich provided his students at Columbia Law School with a paradigmatic explanation of this conceptual distinction between the legal rights secured to inventors and landowners:

The right to exclude, without the right to use, is somewhat peculiar to patent law In contrast [to patents], the property right in real property (*e.g.*, land) or personal property (*e.g.*, a car or computer) is a right to use that carries with it a logically subordinate right to exclude. That right to exclude exists to ensure the owner’s full enjoyment of the right to use.³⁹

Judge Rich’s conceptual (or what economists call “positive”) distinction between patents and tangible property was not an exercise in academic fancy. He was an extremely influential proponent of the exclusion concept of patents, having served as a young patent lawyer on the legislative committee that drafted the 1952 Patent Act,⁴⁰ and then later as a judge on the Court of

³⁷ See, *e.g.*, Roger D. Blair & Thomas F. Cotter, *An Economic Analysis of Damages Rules in Intellectual Property Law*, 39 WM. & MARY L. REV. 1585, 1589 (1998) (noting that there is a “substantial body of work devoted to the issue of whether intellectual property rights should be protected by what Calabresi and Melamed referred to in their famous article as ‘property rules’ or ‘liability rules,’” and that many “economic analysts of law conclude[e] that protection under a property-rule regime is preferable”); Robert P. Merges, *Of Property Rules, Coase, and Intellectual Property*, 94 COLUM. L. REV. 2655, 2673 (1994) (discussing property rules/liability rules schema as an example of “the application of property rights theory to intellectual property”); *Smith Int’l Inc. v. Hughes Tool Co.*, 718 F.2d 1573, 1581 (Fed. Cir. 1983) (“The very nature of the patent right is the right to exclude others. Once the patentee’s patents have been held valid and infringed, . . . [t]he infringer should not be allowed to continue his infringement in the face of such a holding.”).

³⁸ See, *e.g.*, Lemley, *supra* note 22, at 1031-32 (arguing that intellectual property is “a unique form of legal protection” and not “simply a species of real property”).

³⁹ CHISUM ET. AL, *supra* note 32, at 5 (quoting Judge Rich’s lecture notes from a patent law course he taught at Columbia Law School).

⁴⁰ See Giles S. Rich, *Congressional Intent—Or, Who Wrote the Patent Act?*, in PATENT PROCUREMENT AND EXPLOITATION 67-69 (Southwestern Legal Found. ed., 1963) (discussing composition of the drafting committee for the bill that became the 1952 Patent Act, which included Messrs. Ashton, Federico, Rich, and Rose).

Appeals for the Federal Circuit.⁴¹ As a lawyer, legislative draftsman, and judge, his oft-cited writings⁴² best represent the ubiquitous endorsement of the exclusion concept of patents within modern patent jurisprudence.

B. *The Justification for the Exclusion Concept of Patents*

Since the exclusion concept of patents is deemed so elementary and fundamental, this perhaps accounts for the somewhat surprisingly under-theorized status of patents as property. The treatment of this important conceptual issue in modern treatises and casebooks is negligible, spanning usually only a few pages, at best.⁴³ In these brief exegeses, scholars and jurists have consistently invoked two doctrinal scenarios as necessary evidence for the definition of patents in terms of only a negative right to exclude: (1) blocking patents, and (2) regulation of patents by the administrative state. In other words, patents are conceptually differentiated from land, not due to any supposed categorical imperative about the alleged uniqueness of propertized inventions, but because of seemingly important doctrinal differences between the enforcement of tangible and intangible property entitlements.⁴⁴ Such an empirical orientation in patent law is laudable—embracing the inherent functional concerns of the law rather than erecting purely abstract Platonic structures—but it remains to be seen whether such doctrinal examples do serve as necessary and sufficient proofs for the exclusion concept of patents.

⁴¹ See CHISUM ET. AL, *supra* note 16, at 24.

⁴² See, e.g., Giles S. Rich, *The Relation Between Patent Practices and the Anti-Monopoly Laws*, 14 FED. CIR. B.J. 21, 25-32 (2004) (explaining how and why patents secure only the right to exclude); *Arachnid, Inc. v. Merit Indust., Inc.*, 939 F.2d 1574, 1578 (Fed. Cir. 1991) (Rich, J.) (“At the outset, we note that although the act of invention itself vests an inventor with a common law or ‘natural’ right to make, use and sell his or her invention absent conflicting patent rights in others . . . , a patent on that invention is something more. A patent in effect enlarges the natural right, adding to it the right to exclude others from making, using or selling the patented invention.”).

⁴³ See *supra* note 33 (citing sources).

⁴⁴ See, e.g., Edward C. Walterscheid, *Divergent Evolution of the Patent Power and the Copyright Power*, 9 MARQ. INTELL. PROP. L. REV. 307, 330 (2005) (“The reason the [patent] right is treated as a negative one to exclude rather than a positive one is that the positive right may in certain circumstances be subject to legal restriction.”).

1. *Blocking Patents*

The first doctrinal example regularly invoked as evidence of the validity of the exclusion concept of patents is the phenomena of blocking patents. A blocking patent exists when two separate patents cover aspects of the same invention, and thus each patentee can exercise her right to exclude the other patentee from using her respective contribution to this invention. A typical example of a blocking patent scenario is as follows:

A obtains a patent on a new product, such as a new drug. Several years later, *B* discovers a new process for using *A*'s drug, and this discovery constitutes a patentable invention itself (the process is novel, nonobvious and has utility). The resulting two patents held by *A* and *B* cover overlapping aspects of the same invention: (i) the drug and (ii) a particular process for using the drug. *A* can thus exercise her right to exclude *B* from *using* her patented drug in commercially exploiting his new process, regardless of *B*'s inventive act in discovering a new use for *A*'s drug. In this situation, *A* has a "blocking patent," because she can block *B*'s use of his own patented process. (Concomitantly, *B* can also exclude *A* from using his process, but *A* has the greater scope of exclusivity here, because she has a prior claim in the product, which she can continue to use as long as she avoids *B*'s patented process.)

Such situations are quite common, as inventive activity often builds on earlier innovation, and thus prior inventors are able to exclude follow-on commercial applications of their inventions.⁴⁵

Scholars, however, do not invoke the blocking patent phenomena simply because of its omnipresence in real-world practice; rather, they maintain that blocking patents provide insight into the conceptual nature of the right to exclude secured by a patent.

⁴⁵ See, e.g., *Prima Tek II, L.L.C. v. A-Roo Co.*, 222 F.3d 1372, 1379 (Fed. Cir. 2000) ("A 'blocking patent' is an earlier patent that must be licensed in order to practice a later patent. This often occurs, for instance, between a pioneer patent and an improvement patent."); *Advanced Cardiovascular Sys., Inc. v. Medtronic, Inc.*, 81 F. Supp. 2d 978, 989 (N.D. Cal. 1999) ("Under the principles of improvement patents, the examiner was entitled to allow a patent whose claims were an improvement over a previously patented design, even if the older design might block the new design from being practiced.").

Among the many all-too-brief references to blocking patents,⁴⁶ Professor Robert Merges best explains that the exclusion concept of patents is “necessitated by the existence of blocking patents,” because otherwise an overlapping patent would necessarily result in an illegitimate restriction of another property owner’s “affirmative right to actually carry into practice a particular invention.”⁴⁷ To wit, if a patentee has right to use a patented invention, then a blocking patent, which is another valid patent that can exclude such use, would necessarily entail an infringement of this use-right. The Patent & Trademark Office would be in the impossible situation of granting a valid patent that necessarily infringed another patent by its mere issuance.

⁴⁶ See, e.g., 5-16 CHISUM ON PATENTS § 16.02[1][a] (explaining under section heading “rights conferred” that patents secure only the right to exclude and then discussing blocking patents as illustration); CHISUM & JACOBS, *supra* note 33, at 2-216-17 (referencing blocking patents as “example” that proves that a “patent grants only the right to exclude others”); Thomas F. Cotter, *Conflicting Interests in Trade Secret Law*, 48 FLA. L. REV. 591, 591 (1996) (discussing blocking patents as evidence that “a patent only allows one to exclude others from making, using, or selling one’s patented invention, however, and does not create an affirmative right to make, use, or sell the invention oneself”); Kieff, *supra* note 9, at 719 n.102 (discussing blocking patents as example of how “the patent right is only the right to exclude—and confers no affirmative right to use”); ROBERT P. MERGES ET AL., *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 114 (3d ed. 2003) (discussing blocking patents as evidence of how the “exclusionary right is in a sense a negative right”); MERGES & DUFFY, *supra* note 32, at 48 (discussing blocking patents as evidence for the proposition that “a patent includes *only* the right to exclude *and nothing else*”); MUELLER, *supra* note 33, at 15-16 (discussing blocking patents as exemplifying the exclusion concept of patents); Allen C. Nunnally, *Intellectual Property Perspectives in Pharmoeconomics*, 46 JURIMETRICS 249, 250 n.3 (2006) (discussing blocking patent scenario as evidence that patents secure “only the right to exclude”); A. Samuel Oddi, *The Tragicomedy of the Public Domain in Intellectual Property Law*, 25 HASTINGS COMM. & ENT. L. J. 1, 40 (2002) (highlighting the blocking patent scenario as evidence of how “the grant of a patent encompasses only the ‘positive’ right to exclude others and not what may be called the ‘strong version of the positive right’ to exploit the claimed invention”); Gary Pulsinelli, *Share and Share Alike: Increasing Access to Government-Funded Inventions Under the Bayh-Dole Act*, 7 MINN. J.L. SCI. & TECH. 393, 414 (2006) (“The positive right/negative right distinction comes into play with blocking patents.”); SCHECHTER & THOMAS, *supra* note 33, at 4-5 (explaining that patents secure only a right to exclude and then discussing blocking patents to “illustrate this principle”); see also Mark A. Lemley, *Anticompetitive Settlement of Intellectual Property Disputes*, 87 MINN. L. REV. 1719, 1726-27 (2003) (recognizing that blocking patents reflect a situation “in which each party would have the right to exclude the other from the market if the competing patents are held valid”); Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989 (1997) (discussing generally the role and function of blocking patents); Joseph Scott Miller, *Building a Better Bounty: Litigation-State Rewards for Defeating Patents*, 19 BERKELEY TECH. L.J. 667, 692-94 (2004) (discussing how patentees may block each other’s commercial development of a product via the “right to exclude”).

⁴⁷ Robert P. Merges, *One Hundred Years of Solicitude: Intellectual Property Law 1900-2000*, 88 CAL. L. REV. 2187, 2222 (2000); see also Robert P. Merges, *Intellectual Bargaining Rights and Bargaining Breakdown: The Case of Blocking Patents*, 62 TENN. L. REV. 75 (1994) (discussing blocking patent scenario and its function in patent law); Merges & Nelson, *supra* note 34, at 861 n.96 (observing that “a subservient patent can prevent a dominant patent holder from practicing the particular improved feature claimed in the subservient patent because a patent grant is a right to exclude, not an affirmative right to practice an invention”).

The law does not countenance such contradictions.⁴⁸ Thus, it seems logically inescapable that the conceptual content of a patent necessarily comprises a negative right to exclude.

A central premise in the blocking patent example is that there is no parallel to it in the realm of tangible property, which is why blocking patents are cited as evidence of the conceptual uniqueness of patents as property. Although this premise usually goes unstated, Professor John Duffy makes clear that this is the primary function of the blocking patent example, as he uses blocking patents to explicitly contrast the “bundle of rights” secured in real property, subsuming the “positive rights of possession and enjoyment,” from what he refers to as “the negative right of exclusion” in a patent.⁴⁹ Professor Duffy concludes: “The formulation of the patent right in purely negative terms facilitates the granting of multiple overlapping or ‘blocking patents,’ each with the power to exclude the other.”⁵⁰ Accordingly, it seems that the exclusion concept of patents is the only conceivable way in which to define patents as property, and this is proven by the allegedly unique phenomena of blocking patents.

Is it true that there is no analogous exclusive restriction of use-rights by owners of tangible property? The answer is no, as there are numerous circumstances in tangible property doctrine in which property owners exclude other property owners in the exercise of shared use-rights in the same subject matter. One finds competing use-rights between landowners in servitudes and nuisance cases, but the most salient and directly analogous example is water law.

Before we look at how owners of water rights exercise exclusive use-rights in shared water flow, however, it is important to first understand the scope and purpose of this observation. What follows is not a thorough and extensive analysis of water law, which is an extremely

⁴⁸ See *Mastoras v. Hildreth*, 263 F. 571, 575 (9th Cir. 1920) (noting that a patent covering an inventive aspect of subject matter already under a patent does not infringe this earlier patent).

⁴⁹ John F. Duffy, *Rethinking the Prospect Theory of Patents*, 71 U. CHI. L. REV. 439, 456 (2004).

⁵⁰ *Id.*

complex legal regime that seeks to resolve incompatible claims to the use of a fluid resource that shares some “public good” characteristics with intellectual property. In fact, such similarities probably explain why one finds sporadic references to water law in modern intellectual property scholarship.⁵¹ As with these references, the presentation here does not provide a comprehensive doctrinal comparison between water law and patent law, nor is such an assessment even possible in a brief subsection. The purpose of this comparison has only a specific, limited function: It highlights that blocking patents are insufficient evidence for the exclusion concept of patents. If the point of the blocking patent example is to reveal with precision the crucial conceptual distinction between patents and tangible property rights, then the existence of a similar doctrinal phenomenon in tangible property law calls into question the explanatory force of the blocking patent argument. Water law is this tangible property doctrine par excellence.

Property rights in water are defined by two differing legal regimes: riparian and first appropriation.⁵² Regardless of which one governs a water resource, however, water rights are a real property interest,⁵³ and, even more significantly, water rights comprise only an exclusive right to use a water flow (a usufruct).⁵⁴ Thus, the principal conflicts in water law, especially in

⁵¹ See, e.g., Richard A. Epstein, *Intellectual Property: Old Boundaries and New Frontiers*, 76 *INDIANA L.J.* 803, 805 (2001); Henry E. Smith, *Intellectual Property as Property: Delineating Entitlements in Information*, 116 *YALE L.J.* 1742, 1744 (2007).

⁵² See *Colorado v. New Mexico*, 459 U.S. 176, 179 n.4 (1982) (describing riparian and first appropriation systems of water law and their principal points of differences).

⁵³ See *State v. Superior Court of Riverside County*, 78 Cal. App. 4th 1019, 1025 (2000) (noting under both riparian and first appropriation regimes, “a water right has been considered an interest in real property”); see also *Hargrave v. Cook*, 108 Cal. 72, 77 (1895) (A landowner’s riparian “rights are not easements, nor appurtenances to his holding. They are not the rights acquired by appropriation or by prescriptive use. They are attached to the soil, and pass with it.”); *Gardner v. Village of Newburgh*, 2 Johns Ch. 162, 165 (N.Y. Ch. 1816) (Kent, Chancellor) (“A right to a stream of water is as sacred as a right to the soil over which it flows. It is a part of the freehold, of which no man can be disseised ‘but by lawful judgment of his peers, or by due process of law.’”).

⁵⁴ See *Colorado*, 459 U.S. at 179 n.4 (noting that in a first appropriation system, water “rights do not depend on land ownership and are acquired and maintained by actual use”); *Durly v. Adam*, 102 Ill. 177(1882) (recognizing in riparian system that an “owner of land over which a stream of water flows, has, as incident to his ownership of the land, a property right in the flow of the water,” but this right is only “a usufruct in the water while it passes”); *Koch v. Aupperle*, 274 Neb. 52 (2007) (“Riparian rights extend only to the use of the water, not to its ownership; a riparian right is thus said to be usufruct only.”).

riparian systems, are between separate owners with contested claims to the use of the same body of water, such as landowners on opposite banks of a river or at different locations along a stream.

A survey of such riparian conflicts reveals striking factual and doctrinal similarities with blocking patents. As a preliminary matter, each situation involves overlapping property claims to the same subject matter: In a riparian context, aspects of the same water flow in a river or stream,⁵⁵ and in patent law, aspects of the same invention.⁵⁶ The doctrinal claims are strikingly similar as well. As with the two opposing patentees in a blocking patent situation, quarreling riparian owners each have a legitimate property claim to this contested water flow.⁵⁷ Significantly, as in patent law, riparian owners are not required to actively use their claimed water to retain their claim to their use-rights to the water flow, which ultimately permits them to exclude unauthorized uses by other riparian owners that impinge on these use-rights.⁵⁸ Lastly, as in patent law, a plaintiff riparian owner enforces its use-right against a defendant by obtaining

⁵⁵ See *People v. Platt*, 17 Johns. 195 (N.Y. Sup. 1819) (quoting Lord Hale, *De Jure Maris Et Brachionum Ejusdem*) (“Fresh rivers . . . belong to the owners of the soil adjacent, so that the owners of one side have, of common right, the propriety of the soil, and, consequently, the right of fishing *usque ad filum aquæ*, and the owners of the other side, the right of soil or ownership and fishing unto the *filum aquæ* on their side.”).

⁵⁶ See *Cantrell v. Wallick*, 117 U.S. 689, 694 (1886) (“Two patents may both be valid when the second is an improvement on the first, in which event, if the second includes the first, neither of the two patentees can lawfully use the invention of the other without the other’s consent.”).

⁵⁷ See, e.g., *Koch*, 274 Neb. at 52 (noting as one of the most significant “maxims” of riparian doctrine that “[a]ll riparian proprietors have an equal and correlative right to use the waters of an abutting stream”) (quoting Richard S. Harnsberger & Norman W. Thorson, *Nebraska Water Law & Administration* 24 (1984)). Cf. *Lavery v. Arnold*, 58 P. 524, 524 (Or. 1899) (“The complaint alleges that plaintiff’s predecessor in interest made a prior appropriation of the waters of said creek in 1883, and that in 1890 the defendant unlawfully diverted the waters thereof, to plaintiff’s damage, etc.”).

⁵⁸ See, e.g., *Colorado*, 459 U.S. at 179 n.4 (“Riparian rights . . . originate from land ownership and remain vested even if unexercised.”); *Bathgate v. Irvine*, 58 P. 442, 444 (Cal. 1899) (“Nor can the nonuser of the water by the upper riparian owner of land be invoked to strengthen the claim of appropriation or prescription by the lower riparian owner under like circumstances.”); *Koch*, 274 Neb. at 52 (acknowledging long-standing maxim that “disuse neither destroys nor qualifies” a riparian right) (quoting RICHARD S. HARNBERGER & NORMAN W. THORSON, *NEBRASKA WATER LAW & ADMINISTRATION* 25 (1984)); *Sowles v. Minot*, 73 A. 1025, 1029 (Vt. 1909) (noting that the mere nonuse of a property right in water was insufficient by itself to consider the water right abandoned); *In re Deadman Creek Drainage Basin in Spokane County*, 694 P.2d 1071, 1074 (Wash. 1985) (“Under the common law, mere disuse of riparian rights did not destroy or suspend their existence.”); *Peake v. Harris*, 48 Cal. App. 363, 381 (1920) (“The decisions are unanimous to the effect that each of such [riparian] owners has the right to the reasonable use of the stream on his own land and that this right is neither gained by use nor lost by disuse, but constitutes a part and parcel of the land and of the ownership thereof.”).

the only remedy that protects its exclusive use of its property—an injunction prohibiting the unauthorized use of the water flow.⁵⁹

This admittedly brief survey of a riparian conflict reveals that conflicting claims over the use of similar subject matter, in which the remedy sought is an injunction enforcing a right of exclusion, is not unique in patent law relative to tangible property. Even more significant for our purposes, the exclusion exercised by riparian owners is based on a single, unitary right—the right to use the water. Yet patent scholars and jurists maintain that such a use-right must be nonexistent if exclusion of blocking uses is even conceivable in patent law. This suggests that modern patent scholars and jurists have misunderstood the nature of the substantive use-rights in tangible property entitlements, but that is not the point of this discussion here (this will be addressed in Part Three). Rather, the riparian conflict reveals that the blocking patent phenomenon is insufficient evidence to prove the necessity of the exclusion concept of patents.

2. *The Regulation of Patents by the Administrative State*

Patent scholars also invoke a second example in tandem with blocking patents in support of the exclusion concept of patents: The regulation of patents by the administrative state. Unlike with the blocking patent example, however, this “regulatory state argument” is far less sophisticated in its legal details. Professors Robert Merges, Mark Lemley and Peter Menell restate the regulatory state argument in its usual succinct formulation: “A patent does not grant an affirmative right to do anything; patented pharmaceuticals, for instance, must still pass regulatory review at the Food and Drug Administration to be sold legally.”⁶⁰ In sum, scholars

⁵⁹ See, e.g., *Peake*, 48 Cal. App. At 382 (noting rule that a downstream riparian owner may “enjoin” an upstream owner if he can prove “unreasonable use to his injury”); *Dumont v. Kellogg*, 29 Mich. 420, [page] (1874) (Cooley, J.) (applying riparian rule that “no proprietor has the right to use the water to the prejudice of the proprietors below him, without the consent of the proprietors below him”).

⁶⁰ MERGES ET AL., *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE*, *supra* note 32, at 114. For additional variations of this brief argument in academic scholarship, see, for example, CHISUM & JACOBS, *supra* note 33, at 2-216; F. Scott Kieff, *Patents for Environmentalists*, 9 WASH. U. J.L. & POL’Y 307, 308 (2002); Pulsinelli,

and jurists maintain that the exclusion concept of patents must be valid given a state agency's regulatory restrictions on the use and disposition of a patented invention.

As a preliminary matter, it is striking how the scope of the regulatory state argument seems almost self-consciously limited to patents, because it has an unintended, but necessary, implication: According to its premises, it delegitimizes regulations of all tangible property rights. This logical corollary of the regulatory state argument follows from its unstated formalistic premise; that is, there is an either-or choice in patent law, either use-rights *or* use restrictions by regulatory agencies. The regulatory state argument assumes that there cannot be both. If patentees have use-rights in their property, this means that the Food and Drug Administration's restrictions on the uses of pharmaceutical patents, as well as the innumerable regulations of other patented inventions by the government, must necessarily infringe these use-rights. If such regulations are valid, this means that they do not infringe any right of the patentee; thus the patent does not secure any substantive use-right. The regulatory state argument offers only one logically permissible choice: the right to exclude and regulations *or* use-rights and no regulations.

When this either-or premise is identified, however, it is apparent that the regulatory state argument is made without any regard for its logical implications for tangible property rights. Patent scholars acknowledge that tangible property rights, such as land, secure the full "bundle"

supra note 46, at 413; David B. Resnik, *DNA Patents and Human Dignity*, 29 J.L. MED. & ETHICS 152, 153 (2001); SCHECHTER & THOMAS, *supra* note 33, at 4.

The Federal Circuit has repeated the regulatory state argument. *See* Prima Tek III, L.L.C. v. A-Roo Co, 222 F.3d 1379, 1379 (Fed. Cir. 2000) ("A patent represents the right to exclude . . . [and] may be subject to further limitations such as governmental restrictions or 'blocking' patents"); *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 703 (1992) ("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.").

Congressmen have also invoked the regulatory state argument, as evidenced by the legislative history to the Hatch-Waxman Act, which provided a safe harbor from infringement for generic drug manufacturers. *See* H.R.Rep. No. 857, 98th Cong., 2d Sess., pt. 2, at 8-9 (1984) ("The patent holder retains the right to exclude others from the major commercial marketplace during the life of the patent. Thus, the nature of the [legislation's] interference with the rights of the patent holder is not substantial.").

of rights of use or possession.⁶¹ Yet tangible property rights are heavily regulated by federal, state and local governments—something all first-year law students learn when they study rent control, zoning and many other state regulations that restrict how landowners may use their property.⁶² If the either-or premise of the regulatory state argument is applied to the acknowledged use-rights secured in real property, as well as in chattels, water, and minerals, then either these ubiquitous regulations are necessarily invalid,⁶³ or tangible property is defined only by a right to exclude, which defeats the point of the exclusion concept of patents to differentiate the legal entitlements secured in inventions from land.

This dilemma results from the regulatory state argument eliding an important descriptive fact about all property entitlements, whether tangible or intangible: Property rights have substantive content that is distinct from a public regulatory regime that may impose additional restrictions or other legal constraints on that property interest. When public regulatory regimes are adopted in place of pre-existing private-ordering mechanisms for securing or controlling property interests, the public regulation of the property interest may take one of two approaches, as best illustrated in the context of real property law. On the one hand, a public regulation may track the original goals of the pre-existing private-ordering mechanisms. Title recordation requirements, for instance, replaced the feudal ceremonial requirement of “enfoeffment of livery

⁶¹ See *supra* notes 39, 47, 49 and accompanying text

⁶² See, e.g., *Yee v. City of Escondido*, 503 U.S. 519 (1992) (rent control is valid regulation of property use); *Jones v. Alfred H. Mayer Co.*, 392 U.S. 409 (1968) (legislation prohibiting discriminatory uses of property is valid); *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926) (zoning is valid regulation of property use).

⁶³ Many patent scholars reject this proposition, as they implicitly indicate that regulations are generally legitimate as a descriptive matter. See, e.g., Rebecca S. Eisenberg, *The Shifting Functional Balance of Patents and Drug Regulation*, 20 HEALTH AFFAIRS 119 (2001) (advocating use of the FDA’s data-exclusivity regulations as a substitute for patents); Robert P. Merges, *Intellectual Property in Higher Life Forms: The Patent System and Controversial Technologies*, 47 MD. L. REV. 1051, 1064 (1988) (observing that “a powerful FDA has far-reaching powers to regulate drugs and medical devices”).

of seisin” precisely because this public regulation was better at proving a valid chain of title.⁶⁴ An official legal deed recorded in a central governmental office better achieved the evidentiary function of proving ownership than finding witnesses to testify to a symbolic conveyance of a clod of dirt and a twig.⁶⁵ Another example is zoning, which may restrict land use in place of private-ordering mechanisms, such as nuisance actions or restrictive covenants.⁶⁶

On the other hand, a public regulation may impose on a property owner a different set of substantive restrictions that achieve normative goals that are distinct from those already at work within the pre-existing set of property entitlements. In such a situation, property owners are now subject to two sets of legal regimes—a public regulatory regime and a private property regime—and each regime represents differing substantive requirements for the use of the property. For instance, a riparian owner is subjected to the usual private constraints by other property owners who might be negatively impacted by the riparian owner’s use of its property, such as a trespass action,⁶⁷ but a riparian owner’s use of its property is also subject to environmental regulations promulgated by federal and state agencies.⁶⁸ These environmental regulations impose restrictions on riparian owners on the basis of a distinct normative principle—the protection of water

⁶⁴ *Cf.* *Riddle v. Harmon*, 162 Cal. Rptr. 530, 534 (Cal. Ct. App. 1980) (“We discard the archaic rule that one cannot enfeoff oneself . . . because it rests on a common law notion whose reason for existence vanished at about the time that grant deeds and title companies replaced colorful dirt clod ceremonies as the way to transfer title to real property.”).

⁶⁵ *See* Richard A. Epstein, *Notice and Freedom of Contract in the Law of Servitudes*, 55 S. CAL. L. REV. 1353, 1356-57 (1982) (observing that there is an “enormous reduction in uncertainty that recordation offers every participant within the system” because “[a]ctual notice typically is provided by, and properly may be inferred from, proper recordation”).

⁶⁶ *See Ambler Realty Co.*, 272 U.S. at 387-88 (justifying zoning on the grounds that this public-ordering regime preempted “offensive trades, industries, and structures likely to create nuisances,” and thus the “scope of the [zoning] power” was defined by the pre-existing common law “maxim ‘sic utere tuo ut alienum non laedas’”).

⁶⁷ *See supra* notes 55-59 and accompanying text.

⁶⁸ *See* 1 H. FARNHAM, LAW OF WATERS AND WATER RIGHTS § 63, at 284 (1904) (observing that rights of riparian owner “are always subordinate to the public rights, and the state may regulate their exercise in the interest of the public”); *United States v. Riverside Bayview Homes*, 474 U.S. 121 (1985) (holding that the Corps of Army Engineers may regulate the use of wetlands under the authority delegated to it by the Clean Water Act); *Just v. Marinette County*, 201 N.W.2d 761 (Wis. 1972) (affirming validity of regulation of water and wetland by state and local ordinances). *Cf.* *New Jersey v. Delaware*, 128 S. Ct. 1410, 1421 (2008) (“In the ordinary case, the State that grants riparian rights is also the State that has regulatory authority over the exercise of those rights.”).

resources independent from any specific or immediate harm imposed on any other property owner. In such a situation, riparian owners are accountable to two overlapping bodies of law with differing, and potentially inconsistent, goals. But it is a non sequitur to conclude that, when a public regulation abrogates pre-existing common law rights, those common law rights never had any independent substantive content of their own.

This is, however, the implicit premise of the regulatory state argument. It maintains that the Food and Drug Administration's (FDA) regulation of pharmaceutical patents necessarily evidences that there must be no use-rights in patents simply because the FDA restricts how a patentee may use its property in the marketplace. But the FDA restricts pharmaceutical patents no more or no less than the EPA restricts riparian rights. Courts and riparian scholars are not declaring the non-existence of the sole use-right (usufruct) that constitutes a riparian interest given EPA restrictions, nor must they do so. Admittedly, patent law differs from riparian rights insofar as the former is grounded in federal statute and the latter arose from the common law, but this distinction in doctrinal provenance does not matter for the purposes of this conceptual analysis. As confirmed by statute and case law, the American patent system has long drawn on the conceptual framework of property law to define the substantive content of patent rights.⁶⁹

Nor is there any logical mandate that public regulations necessarily prove as a descriptive matter the non-existence of conflicting private rights. In fact, much of modern constitutional law addressing property rights reflects an attempt to balance competing public regulatory regimes and private property regimes.⁷⁰ Although scholars and jurists debate the normative legitimacy of

⁶⁹ See *infra* Part II.A.

⁷⁰ See, e.g., *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978) (recognizing “ad hoc” and “case sensitive” multi-prong inquiry for determining when police power regulations trigger compensation under the Takings Clause); *Marsh v. Alabama*, 326 U.S. 501, 509 (1926) (balancing rights to freedom of press and religion against a property owner’s right to exclude trespassers).

such doctrines,⁷¹ the fact that this scholarship (and case law) are cognizable at all confirms the conceptual point that conflicting legal regimes may coexist with respect to a particular property entitlement. Conflicting public and private legal regimes do not present courts with an either-or alternative as to the conceptual validity of one or the other, and public regulatory regimes do not wipe out the conceptual content of competing private-ordering mechanisms.

As with blocking patents, the regulatory state argument fails to account for the logical implications of how it applies to tangible property interests in land, chattels, or water. The regulatory state argument fails precisely because it asserts as a central premise an either-or alternative between public regulation or private-ordering mechanisms that is more fitting for the normative analysis of the legitimacy of such options, but not a conceptual analysis of the substantive content of either a property entitlement or its regulation. This does not mean, of course, that patents and land cannot be differentiated from each other—the exclusion concept of patents may still be valid—but the regulatory state argument does not establish this truth.

C. *The Right to Exclude in the 1952 Patent Act: A Statutory Mandate?*

There is more to the validation of the exclusion concept of patents than appealing to blocking patents and the regulatory state argument. Perhaps there is an easier explanation for the universal assent to the exclusion concept of patents today: This conception of patents as property is firmly rooted in the patent statutes that govern the American patent system. Section 154 of the 1952 Patent Act specifically defines a patent as securing “the right to exclude others from making, using, offering for sale, or selling the invention.”⁷² In fact, scholars and courts typically

⁷¹ Compare RICHARD A. EPSTEIN, HOW PROGRESSIVES REWROTE THE CONSTITUTION (2007) with STEPHEN BREYER, ACTIVE LIBERTY (2006).

⁷² 35 U.S.C. § 154(a) (emphasis added); see also 35 U.S.C. § 271(a) (providing that “whoever without authority makes, uses, offers to sell, or sells any patented invention . . . infringes the patent”).

cite § 154 in their various restatements of the exclusion concept of patents.⁷³ Such clear statutory language leaves no room for ambiguity as to the legal entitlement secured by a patent—the right to exclude, nothing more, nothing less.

This “easy answer,” though, is not explanatory. To appeal to the patent statutes as the reason why the exclusion concept of patents is dominant today begs the question that Congress’s codification of the exclusion concept of patents in § 154 was sensible. In other words, it simply changes the focal point of the inquiry from modern scholarship and court decisions to Congress, assuming that Congress’s reasons for adopting this definition were legitimate.

The legislative history of the 1952 Patent Act, and its contemporaneous scholarship, confirms that the easy answer indeed begs the question on this important conceptual issue. Some of the drafters of the 1952 Patent Act discussed § 154 in only general terms, indicating that it clarified the nature of the right secured by a patent.⁷⁴ However, when scholars at the time further explained what they meant by “clarification,” they invoked the same argument used today to explain the exclusion concept of patents: the blocking patent scenario.⁷⁵ If blocking patents are insufficient in proving the validity of the exclusion concept of patents,⁷⁶ then appealing to a statutory provision originally justified by this same argument simply restates the same faulty logic in different terms.

⁷³ See generally *supra* notes 29-34 and accompanying text.

⁷⁴ See, e.g., P.J. Federico, *Commentary on the New Patent Act*, 75 J. PAT. & TRADEMARK OFF. SOC’Y 161, 201-02 (1993).

⁷⁵ See, e.g., L. James Harris, *Some Aspects of the Underlying Legislative Intent of the Patent Act of 1952*, 23 GEO. WASH. L. REV. 658, 682 n.113 (1954) (explaining § 154 by noting that blocking patents require that “the owner of a subservient patent could not exploit the invention without license from the owner of the dominant patent”); Stefan A. Riesenfeld, *The New United States Patent Act in the Light of Comparative Law*, 36 J. PAT. OFF. SOC’Y 406, 430 (1954) (noting that the new patent statutes makes clear that a dominant patentee may block a subservient patentee from using an invention); Bruce B. Krost, *Peculiarities of Patents as Property*, 34 J. PAT. OFF. SOC’Y 9, 20 (1952) (explaining that a patent grants only “rights of exclusion,” as evidenced by the fact that “[o]ne’s commercial activities will be subject to the superior rights of the owner of any unexpired patent having dominating claims”).

⁷⁶ See *supra* Part II.B.1.

This concern is particularly pressing when one realizes that § 154 changed the earlier statutory definitions of patents as property rights. The first four iterations of the patent statutes—adopted in 1790, 1793, 1836 and 1870—all defined patents as property rights in substantive terms, as securing the same rights to possession, use and disposition traditionally associated with tangible property entitlements.⁷⁷ Nineteenth-century courts followed Congress’s definition of patents as property, securing to patentees their “substantive rights,” including the “right to manufacture, the right to sell, and the right to use” their inventions.⁷⁸

Undoubtedly, there were some nineteenth-century jurists, such as Chief Justice Roger Taney, who believed in the exclusion concept of patents. Such jurists, however, had to ignore the express terms of the patent statutes in force at that time, and Chief Justice Taney had no problem in doing so. In his 1852 decision in *Bloomer v. McQuewan*, for instance, Taney rewrote the 1836 Patent Act into the terms later adopted in § 154 of the 1952 Patent Act, declaring that the “patent . . . consists altogether in the right to exclude” and that “[t]his is all that [an inventor] obtains by the patent.”⁷⁹ Similar to the concerns expressed by historians about Taney’s infamous decision in *Dred Scott*,⁸⁰ one patent law historian has characterized the *Bloomer* decision as an “extraordinary holding which appeared on its face so contradictory to the statutory language.”⁸¹

⁷⁷ See Patent Act of 1870, ch. 230, § 22, 16 Stat. 198, 201 (repealed 1952) (providing that “every patent shall contain . . . a grant to the patentee, his heirs or assigns, for the term of seventeen years, of the exclusive right to make, use, and vend the said invention or discovery throughout the United States and the Territories thereof”); 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”).

⁷⁸ *Adams v. Burke*, 84 U.S. 453, 456 (1873).

⁷⁹ *Bloomer v. McQuewan*, 55 U.S. (14 How.) 539, 549 (1852).

⁸⁰ See, e.g., DAVID P. CURRIE, *THE CONSTITUTION IN THE SUPREME COURT: THE FIRST HUNDRED YEARS 1789-1888*, at 264 (1985) (describing Taney’s opinion in *Dred Scott* as a trifecta of “bad policy,” “bad judicial politics” and “bad law”); Jason H. Silverman, *The Odd Couple of American Legal History*, 10 GREEN BAG 2d 511,

Beyond his willingness to rewrite the patent statutes in *Bloomer*, Taney’s embrace of the exclusion concept of patents was idiosyncratic even amongst his fellow jurists. Unfortunately, Taney “made no attempt whatever [in *Bloomer*] to explain the basis for this extraordinary holding,”⁸² but there is a colorable argument that Taney engaged in such judicial legislation due to his belief that patents were special monopoly “franchises” granted by the federal government.⁸³ Given Taney’s fervent commitment to Jacksonian Democracy, he saw no difference between the statutes that granted an exclusive right in an invention and the statutes that granted an exclusive right in a bridge or other beneficiary of government largesse—both represented franchises doled out by state fiat.⁸⁴ Contrary to Taney’s view of patents as franchise monopolies, many of his fellow antebellum jurists, including Justice Joseph Story and Chief Justice John Marshall, conceived of patents as civil rights securing fundamental property rights.⁸⁵

Modern courts and scholars unintentionally confirm the minority status of Taney’s views by consistently citing his *Bloomer* dictum as the sole historical support for the proposition that the exclusion concept of patents is long-settled within American patent law.⁸⁶ Even more surprising, Donald Chisum’s famous patent treatise flips historical precedent on its head,

523 (2006) (book review) (“Taney’s opinion in *Dred Scott* remains one of the most reviled judicial decisions in American history and virtually all scholars have condemned it as an example of the dangers of judicial activism.”).

⁸¹ Walterscheid, *supra* note 44, at 330.

⁸² Walterscheid, *supra* note 44, at 330.

⁸³ *Bloomer*, 55 U.S. at 549.

⁸⁴ See Adam Mossoff, *Who Cares What Thomas Jefferson Thought About Patents?*, 92 CORNELL L. REV. 953, 1000 (2007) (discussing Taney’s judicial treatment of patents within the context of his inherent suspicion of all government grants of exclusive rights, such as corporate charters, franchises and patents); *see id.* at 966 (noting Taney’s commitment to Jacksonian Democracy).

⁸⁵ See generally *id.* (discussing the dominant conception of patents in the early American Republic as property rights justified as “privileges” (civil rights) by natural rights philosophy).

⁸⁶ See, e.g., *United States v. Line Material Co.*, 333 U.S. 287, 316 (1948); *United Shoe Machinery Co. v. United States*, 258 U.S. 451, 463 (1922); *Markman v. Westview Instruments, Inc.*, 52 F.3d 957, 978 (Fed. Cir. 1995) (en banc); 5 CHISUM ON PATENTS § 16.02[1]; Merges, *supra* note 47, at 2222; Rich, *supra* note 42, at 27. Cf. Brief for the United States as Amicus Curiae on Cert Petition at 8, *Quanta Computer, Inc. v. LG Electronics, Inc.*, No. 06-937 (cert granted on Sep. 25, 2007) (quoting dicta in Taney’s opinion in *Bloomer v. McQuewan* as the proper definition of the patent right in historical discussion of first sale doctrine).

claiming that Taney’s *Bloomer* dictum was in fact the law in 1852.⁸⁷ Dispelling any doubts about this historical anachronism, Chisum refers to the numerous nineteenth-century court decisions that followed the substantive definition of patents set forth in the statutes in force at that time as engaging in “occasional lapses in dictum.”⁸⁸ The Federal Circuit also dismisses the substantive definition of patent rights in earlier statutes and court opinions as simply “confusion.”⁸⁹

One might rightly point out that these earlier patent statutes have been repealed, and thus what might have been dictum in the nineteenth century has become the law today: Section 154 establishes the clear statutory mandate of the exclusion concept of patents.⁹⁰ This simply raises the further question of whether the 1952 Patent Act is consistent in embracing the exclusion concept of patents, because § 154 is but one provision of a lengthy and complex statutory framework, and it is “a fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme.”⁹¹ Applying this longstanding canon of statutory construction,⁹² it appears that the 1952 Patent Act is inconsistent in its embrace of the exclusion concept of patents.

The provision of the 1952 Patent Act that raises potential difficulty is § 261, which, among other things, codifies the case law reaching back to the early American Republic that

⁸⁷ 5 CHISUM ON PATENTS § 16.02[1].

⁸⁸ *Id.*

⁸⁹ King Instruments Corp. v. Perego, 65 F.3d 941, 949 (Fed. Cir. 1995).

⁹⁰ See, e.g., Merges, *supra* note 47, at 2222-23 (discussing adoption of exclusion concept of patents in 1952 Patent Act relative to earlier patent statutes and their judicial construction); Stefan A. Riesenfeld, *The New American Patent Act in the Light of Comparative Law: Part II*, 102 U. PA. L. REV. 723, 746-47 (1954) (recognizing that the exclusion concept of patents was announced by Taney in “deviation from the language of the old law, [but that it] has now found confirmation by the statutory terms” in the 1952 Patent Act).

⁹¹ *Davis v. Mich. Dept. of Treasury*, 489 U.S. 803, 809 (1989); see also *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 132-33 (2000) (using canon stated in *Davis* in invalidating regulation of tobacco that was based on the FDA’s out-of-context construction of certain provisions of its organic statute).

⁹² See *United States v. Heirs of Boisdore*, 49 U.S. (8 How.) 113, 122 (1849) (“In expounding a statute, we must not be guided by a single sentence or member of a sentence, but look to the provisions of the whole law, and to its object and policy.”).

patents are property rights (as opposed to merely personal privileges).⁹³ Unfortunately, there is scant legislative history on § 261. The Judiciary Committee’s official report, for example, did not mention it when the bill was introduced in the House for a vote,⁹⁴ and most commentators did not spend much time discussing this provision beyond describing its contents.⁹⁵

Nonetheless, among the scattered references, scholars and commentators are uniform in their view that § 261 ratified the overwhelming nineteenth-century case law defining patents as property. In fact, the few commentators who did discuss § 261 expressed only two concerns about this provision: First, in making this express declaration about the property status of patents, it seemed to imply that this was a change from the prior treatment of patents. Of course, all agreed there was no such change.⁹⁶ Second, patents had historically been defined by courts as sharing attributes of both real and personal property, and there was some concern that the identification of patents as only “personal property” in § 261 would also inadvertently signal a change from how courts previously protected these important incorporeal property rights.⁹⁷ The most extensive statement in the secondary literature confirms the codifying function of this provision: “The Supreme Court had recognized long ago that ‘[t]he privilege granted by letters patents are plainly an instance of an incorporeal kind of personal property.’ The new act now expressly provides that patents shall have the attributes of personal property.”⁹⁸

⁹³ See 35 U.S.C. § 261 (“[P]atents shall have the attributes of personal property.”). See generally Mossoff, *supra* note 84 (detailing how early American courts, legislatures and legal scholars defined patents as fundamental property rights justified by natural rights philosophy).

⁹⁴ See generally H.R. 1928 (1952).

⁹⁵ See, e.g., Federico, *supra* note 74, at 211.

⁹⁶ See H.R. Rep. 82-3760, at 212 (Statement of James Archer) (explaining that § 154(a) “seems to imply that in some degree patents are not personal property,” which “is certainly contrary to the general conception and to the holdings of courts up to this point”).

⁹⁷ See H.R. Rep. 3760, at 79 (1951) (Statement of Capt. Robillard) (“Although patents have always been recognized as property, they have not been recognized as personal property but as having attributes of several kinds of property. . . . It is not considered desirable to discard over a century of law relating to patent property and replace it with the rules of personal property.”).

⁹⁸ Riesenfeld, *supra* note 75, at 429-30 (quoting *De la Vergne Machine Co. v. Featherstone*, 147 U.S. 209, 222 (1893)).

The question presented by § 261 is whether the codification of this long-standing conception of patents as property reaching back to the antebellum era also captured the substantive conception of property reflected in the earlier patent statutes and developed by the courts at that time. The answer seems to be yes, or at least there's a colorable argument to this effect, because § 261 does more than ratify the judicial classification of patents as property. This provision also re-codifies the earlier statutory language that patentees have the right to dispose of their property (via assignment or license).⁹⁹ This is significant, because the right of disposition reflected one of the core property rights in the nineteenth century—it was part of the “integrated” package of possession, use and disposition rights that were secured by this type of legal entitlement.¹⁰⁰ To this day, courts continue to enforce such substantive rights as essential to the protection of a property right.¹⁰¹ Nineteenth-century courts also believed that the disposition of patents was a necessary corollary of classifying patents as property entitlements.¹⁰²

Congress significantly chose to place both the historically-based disposition and property provisions in the same section of the 1952 Patent Act: Section 261. In expressly re-codifying this nineteenth-century jurisprudence in § 261—securing rights of use and disposition on the basis of recognizing patents as property—the 1952 Patent Act is arguably inconsistent as to the concept of property it has adopted in modern patent law. The conflict between § 261 and § 154 means

⁹⁹ See 35 U.S.C. § 261 (providing that patentees can alienate their property in whatever quantum); see also *supra* note 77 (quoting all four of the earlier patent statutes as securing rights to “vend” or “grant” the patent).

¹⁰⁰ See *infra* Part III.A.

¹⁰¹ See, e.g., *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1002 (1983) (defining a trade secret as a “property right” because trade secrets are, among other things, assignable); *Shelley v. Kraemer*, 334 U.S. 1, 10 (1948) (observing that “among the civil rights intended to be protected from discriminatory state action by the Fourteenth Amendment are the rights to acquire, enjoy, own and dispose of property”); *Moore v. Regents of the Univ. of Cal.*, 793 P.2d 479, 492 (Cal. 1991) (holding that a health statute that restricted the use and alienation of tissue “eliminates so many of the rights ordinarily attached to property that one cannot simply assume that what is left amounts to ‘property’ or ‘ownership’”); *White v. Brown*, 559 S.W.2d 938, 940 (Tenn. 1977) (recognizing hoary maxim that “the free alienation of property [is] one of the most significant incidents of fee ownership”); *Hecht v. Superior Court*, 20 Cal. Rptr. 2d 275, 283 (Ct. App. 1993) (holding, in part, that a man has a property right in his sperm because he has “decision making authority as to the use of his sperm for reproduction,” and this control over its use and disposition is an “interest [that] is sufficient to constitute ‘property’”).

¹⁰² See *infra* notes 145-148 and accompanying text.

that it is by no means obvious that the 1952 Patent Act clearly and plainly mandates the exclusion concept of patents. To construe the 1952 Patent Act as unequivocally mandating the exclusion concept of patents impermissibly focuses on § 154 without regard for the structure of the Act as a whole, violating a basic canon of statutory construction.¹⁰³

In further support of this conclusion, the Supreme Court recently emphasized in *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*¹⁰⁴ that the 1952 Patent Act did not repeal nineteenth-century patent doctrines, unless it expressly stated that this was its purpose.¹⁰⁵ This is significant insofar as § 261 expressly re-codified the provisions from all of the earlier patent statutes, as well as the nineteenth-century case law, that patentees had the right to use and dispose of their property.¹⁰⁶ It was not the *Warner-Jenkinson* Court's intention to question the exclusion concept of patents, but its decision reveals a long-unrecognized tension within the 1952 Patent Act between its historically pregnant provisions and its modern provisions. *Warner-Jenkinson* concluded that it was improper to choose the modern provisions in the 1952 Patent Act simply because they are modern.

Even if one wishes to read the patent statutes more strictly and contrary to long-established judicial practice,¹⁰⁷ the easy statutory answer to the question about the validity of the exclusion concept of patents has been further undermined by the Supreme Court's decision in

¹⁰³ See *supra* notes 91-92 and accompanying text (identifying canon of statutory construction prohibiting myopic appeals to single statutory provisions).

¹⁰⁴ 520 U.S. 17 (1996).

¹⁰⁵ See *Warner-Jenkinson Co.*, 520 U.S. at 26. An example of such an express repeal in the 1952 Patent Act is in § 103, which contains a sentence that specifically negates an earlier Supreme Court decision. See *Graham v. John Deere*, 383 U.S. 1, 15 (1966) ("It also seems apparent that Congress intended by the last sentence of §103 to abolish the test it believed this Court announced in the controversial phrase 'flash of creative genius,' used in *Cuno Corp. v. Automatic Devices Corp.*, 314 U.S. 84 (1941)).

¹⁰⁶ See *infra* Part II.A.

¹⁰⁷ See Mossoff, *supra* note 84, at 998-1009 (detailing expansive construction of early patent statutes by antebellum courts); see also *Diamond v. Diehr*, 450 U.S. 175, 181-84 (1981) (adopting expansive construction of patent statutes to affirm computer programs as patentable subject matter).

2006 in *eBay v. MercExchange*.¹⁰⁸ In *eBay*, the Court concluded that it is best to follow long-standing, historical practices in resolving explicitly conflicting provisions of the 1952 Patent Act.¹⁰⁹ Even more significant for our purposes, the statutory conflict at issue in *eBay* is directly analogous to the tension highlighted here between § 261 and § 154.

On the one hand, there were seemingly clear and unambiguous provisions of the 1952 Patent Act stating that the patent secures only the right to exclude and that infringers are liable for breaching this right to exclude.¹¹⁰ The statutory mandate seemed clear that the only proper remedy for patent infringement is an injunction—the classic property remedy.¹¹¹ As the *eBay* Court noted: “According to the Court of Appeals [for the Federal Circuit], this statutory right to exclude alone justifies its general rule in favor of permanent injunctive relief.”¹¹² On the other hand, another provision of the 1952 Patent Act provided that courts “may grant injunctions in accordance with the principles of equity” on a finding of infringement.¹¹³ This appeared to inject traditional notions of equitable discretion into a court’s determining whether an injunction should issue against an infringer. More important, this provision seemed to sanction a court denying what many believe is the only remedy for a breach of a right to exclude: an injunction.¹¹⁴

¹⁰⁸ 547 U.S. 388 (2006).

¹⁰⁹ *Id.* at 390-93.

¹¹⁰ See 35 U.S.C. § 154 (stating that a patent secures only “the right to exclude others from making, using, offering for sale, or selling the invention”); 35 U.S.C. § 271 (providing that “whoever without authority makes, uses, offers to sell, or sells any patented invention . . . infringes the patent”).

¹¹¹ See Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972) (setting forth the now-famous property rule (injunction) and liability rule (damages) distinction).

¹¹² *Id.* at 392.

¹¹³ 35 U.S.C. § 283.

¹¹⁴ See, e.g., F. Scott Kieff, *IP Transactions: On the Theory and Practice of Commercializing Innovation*, 42 HOUS. L. REV. 727, 744 (2005) (“Concerning IP law, the commercialization theory discussed earlier shows how important it is to have IP subject matter protected by a property right backed up by a property rule. It is the credible threat of an injunction that allows IP to serve as a coordination beacon around which all the potential complementary users of the asset it protects can gather.”).

In resolving this conflict within the 1952 Patent Act, the *eBay* Court concluded that the “long tradition of equity practice” within patent law should prevail.¹¹⁵ The Court held that “injunctive relief . . . must be exercised consistent with *traditional principles* of equity, in patent disputes no less than in other cases governed by such standards.”¹¹⁶ Again, the *eBay* Court did not concern itself with the validity of the exclusion concept of patents, but as with its *Warner-Jenkinson* decision ten years earlier, the Court unintentionally undermined attempts by scholars and lawyers at validating the exclusion concept of patents by citing solely to the exclusion provisions of the modern patent statutes. The Supreme Court repeatedly reminds the Federal Circuit and the patent law community that the American patent system is not solely a modern system, and that the patent statutes reflect both historical and modern influences.

In sum, the exclusion concept of patents is neither necessary nor sufficient in its definition of patents as property. It is no more necessitated by the 1952 Patent Act than it is by the blocking patent scenario or the regulatory state argument.¹¹⁷ As of yet, there is no valid reason why patents must be conceptualized differently from land or other tangible property interests, and so the question asked earlier in this section remains unanswered: Why did the patent community feel it necessary that Congress “clarify” the nature of the patent right in § 154? Is there perhaps a deeper explanation for the universal acclaim of the exclusion concept of patents today? The answer to this question will be explored in Part Three.

III. REDISCOVERING LONG LOST RELATIONS: PROPERTY THEORY AND PATENT LAW

American property theory offers an explanation for why the exclusion concept of patents reigns supreme today. Of course, particular legal issues are not all reducible to a single

¹¹⁵ *Id.* at 391 (quoting *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 320 (1982)).

¹¹⁶ *Id.* at 394 (emphasis added). This was emphasized in even more strident terms in Chief Justice Roberts’s concurrence, in which he maintained that nineteenth-century jurisprudence is determinative in defining the scope of patent rights today. *Id.* at 394-95 (Roberts, C.J., concurring).

¹¹⁷ *See supra* Part II.B.

theoretical explanation, but, as Professor Richard Epstein recently observed, theoretical accounts of intellectual property help “make sense of the [intellectual property] system in its basic outlines,” which then orients scholars and judges toward “a set of guidelines that should help us deal with the second-order questions of filling in the details of the system.”¹¹⁸ Professor Carol Rose has similarly observed that property theory both describes and justifies what it means to own something as a legal entitlement.¹¹⁹

Ultimately, the relevant legal actors—whether legislators, judges, or both—give property theory its doctrinal traction in using it to create, modify, or eliminate the legal entitlements to which citizens may claim protection.¹²⁰ For this reason, Professor Epstein concludes, “[i]t is a mistake to dismiss these general arguments as hopelessly abstract or even wish-washy.”¹²¹ Some of the doctrinal influences of the exclusion concept of patents will be explored in Part Four, but before this impact can be assessed, it is necessary to understand how the exclusion concept of patents arose despite the absence of a sound explanation of its validity.

Until recently, patent scholars and lawyers were not engaged in the theoretical debates over property rights. As a result, they are unaware of the fundamental role that patents played in

¹¹⁸ Epstein, *supra* note 51, at 827.

¹¹⁹ See Carol M. Rose, *Possession as the Origin of Property*, 52 U. CHI. L. REV. 73, 73 (1985) (noting that “[t]he law tells us what steps we must follow to obtain ownership of things, but we need a theory that tells us why these steps should do the job”).

¹²⁰ See, e.g., *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 127-28 (1978) (relying on Frank Michelman’s scholarship in adopting “investment-backed expectations” as one of the legal tests in regulatory takings doctrine); *Goldberg v. Kelly*, 397 U.S. 254, 262 (1970) (relying on Charles Reich’s scholarship in extending constitutional protections to welfare entitlements as “property” under the Due Process Clause); *Pierson v. Post*, 3 Cai. R. 175 (N.Y. Sup. Ct. 1805) (relying on natural rights and natural law theories in justifying legal rule for claiming property in wild animals); 41 ANNALS OF CONG. 934 (1824) (Rep. Daniel Webster) (proposing legislation extending patent protection to foreign citizens on the basis that “the right of the inventor is a high property; it is the fruit of his mind—it belongs to him more than any other property . . . and he ought to be protected in the enjoyment of it”); 41 ANNALS OF CONG. 936 (1824) (Rep. Buchanan) (agreeing that the patent statutes should “protect the just rights of patentees” by securing “the property which an inventor has in that which is the product of his own genius,” but rejecting Webster’s proposed legislation for other policy reasons); Mossoff, *supra* note 14, at 377 (discussing how property theories “are important because they have had, and will continue to have, a significant impact on the definition and application of our legal rules concerning property”).

¹²¹ Epstein, *supra* note 51, at 827.

the redefinition of property in land in the early twentieth century by the legal realists. They are not alone in this theoretical and historical lacuna. Scholars who specialize in real property and land-use regulation have also not recognized the degree to which Wesley Hohfeld, Felix Cohen, and others, relied on patents and other intellectual property entitlements in redefining property in land as securing only the right to exclude.¹²² Ultimately, this broader “exclusion concept of property”¹²³ in land fed back into patent doctrine, as patent lawyers and jurists in the mid-twentieth century learned this realist property theory in law school and in scholarship and reflexively applied it to their understanding of patents as property.¹²⁴ Since these edifying cross-currents of intellectual influence between the exclusion concept of property and the exclusion concept of patents have never been discussed before, this Part is devoted to uncovering this important historical connection between tangible property theory and patent law.

This intellectual history will be explored in several steps. First, this Part will briefly explain how early American property theory defined patents in terms of the substantive rights of possession, use and disposition, and how nineteenth-century courts used this theory to create core aspects of American patent law, such as defining and securing conveyance rights in what is now known as the patent exhaustion doctrine. Second, it will explain how this early property theory was toppled by the legal realists at the turn of the twentieth century. In their work on property, the legal realists were concerned only with land, but, as will be shown, they relied on patents as key evidence for their arguments that the exclusion concept of property is the only valid definition of property entitlements in land. This Part will then conclude with an explanation

¹²² See *infra* Part III.B.

¹²³ See Mossoff, *supra* note 14, at 375. In this earlier work, the Author referred to this conception of property as the “exclusion theory of property.” It is now identified as the “exclusion concept of property” to better emphasize that this is a descriptive or positive account of property, not a normative justification for property.

¹²⁴ See *id.* at 414 (nothing that “the exclusion theorists have sought to rescue intellectual property in much the same way that they have defended the traditional concept of property,” as they maintain that “intellectual property shares with the [tangible property] concept the essential right to exclude”).

of how the legal realists' revolution in real property eventually came full circle, as twentieth-century patent scholars and lawyers unconsciously adopted the legal realists' exclusion concept of property in land and applied it to patent law. The lesson to be learned is that the conceptual analysis of rights, whether property rights, patent rights, or any other rights, are not merely the domain of the philosopher, but that lawyers, jurists, and legal scholars apply these fundamental conceptual frameworks in crafting real-world legal doctrine.

A. *Use-Rights and Patent Licensing Doctrines in Early American Patent Law*

A brief sketch of the intellectual history of early American property theory is necessary to revive this now-forgotten intellectual context, because it was this historical context within which nineteenth-century legislatures and courts defined patent entitlements as property rights. This historical context is also important insofar as the Supreme Court consistently claims fealty to the substantive content of historical patent doctrine, citing nineteenth-century patent case law as determinative precedent in many of its recent patent law decisions.¹²⁵ Such citations underscore the Court's uncontroversial observation in 1999 that "[p]atents . . . have long been considered a species of property."¹²⁶

This observation is confirmed by all of the pre-twentieth-century patent statutes, which defined patents as securing, in the words of the 1790 Patent Act, the "exclusive right and liberty

¹²⁵ See, e.g., *Quanta Comp., Inc. v. LG Elect., Inc.*, 128 S. Ct. 2109, 2115 (2008) (citing nineteenth-century case law as necessary for understanding "the longstanding doctrine of patent exhaustion"); *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"); *eBay v. MercExchange*, 547 U.S. 388, 394-95 (2006) (Roberts, C.J., concurring) (observing that "historical practice" sets the positive baseline when "it comes to discerning and applying" such patent doctrines today); *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) (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).

¹²⁶ *Florida Prepaid Postsecondary Educ. Expense Bd. v. College Sav. Bank*, 527 U.S. 627, 642 (1999)

of making, constructing, using and vending” an invention.¹²⁷ Today, scholars and jurists do not read such language as defining patents as property rights.¹²⁸ In the eighteenth and nineteenth centuries, however, this statutory definition reflected a hoary concept of property—a political and legal right that comprised the rights of possession, use and disposition.¹²⁹ At that time, these substantive rights comprised the essential conceptual content of property, as these were the constituent elements—especially the right to use—from which this moral, political and legal right arose.¹³⁰ As the father of natural rights theory, Hugo Grotius, declared, “liberty in regard to actions is equivalent to *dominion* in material things,”¹³¹ a principle that Locke followed in his own “mixing labor” account of property.¹³² Thus the now-familiar legal definition of property: “Property is the exclusive right of possessing, enjoying, and disposing of a thing.”¹³³ In 1856, the

¹²⁷ Patent Act of 1790, ch. 7, § 1, 1 Stat. 109, 110 (repealed 1793); *see also supra* notes 77-78 and accompanying text (quoting similar language in patent statutes adopted in 1793, 1836 and 1870, and in court opinions).

¹²⁸ *See infra* notes 232-234 and accompanying text.

¹²⁹ *See* 1 WILLIAM BLACKSTONE, COMMENTARIES *134 (“The third absolute right . . . is that of property: which consists in the free use, enjoyment, and disposal of all his acquisitions . . .”); JOHN LOCKE, TWO TREATISES OF GOVERNMENT § 123, at 350 (Peter Laslett ed., 1988) (1690) (claiming that people enter into civil society “for the mutual *Preservation* of their Lives, Liberties and Estates, which I call by the general Name, *Property*”); *see also* James Madison, *Property*, NATIONAL GAZETTE (Mar. 29, 1792), *reprinted in* WRITINGS 515 (Jack N. Rakove ed., 1999) (arguing that a person has “property in the free use of his faculties and free choice of the objects on which to employ them”).

¹³⁰ *See, e.g.,* 2 BLACKSTONE COMMENTARIES *4 (noting that the common use “doctrine [is] well illustrated by Cicero, who compares the world to a great theatre, which is common to the public, and yet the place which any man has taken is for the time his own”); HUGO GROTIUS, DE JURE BELLI AC PACIS LIBRI TRES II.2.ii.1, at 69 (William Whewell trans., 1853) (1625) (quoting Cicero’s theater analogy and concluding that the state of nature is similar “to the theater, which though it be common, yet when a man has taken any place, it is his”); HUGO GROTIUS, DE JURE PRAEDAE COMMENTARIUS 228 (G.L. Williams & W.H. Zeydel trans., 1964) (quoting the Roman Stoic, Seneca, that in the beginning “all the way was open; The *use* of all things was a *common* right”); SAMUEL PUFENDORF, DE JURE NATURAE ET GENTIUM 548 (C.H. Oldfather & W.A. Oldfather trans., 1934) (1672) (noting that a “common theatre is erected by the State for the use of its citizens. But if one citizen rather than another is to secure a seat for a performance, from which he cannot rightfully be removed by another, there is need of a corporal act, that is, of his occupying the seat.”).

¹³¹ RICHARD TUCK, NATURAL RIGHTS THEORIES: THEIR ORIGIN AND DEVELOPMENT 60 (1979) (quoting Hugo Grotius, *De Jure Praedae Commentarius*).

¹³² *See* JOHN LOCKE, TWO TREATISES OF GOVERNMENT § 27, at 287 (Peter Laslett ed., 1988) (1690). Locke explains, for instance, that in gathering acorns “[t]he *labour* that was mine, removing them out of the common state they were in, hath *fixed* my *Property* in them.” *Id.* at 289.

¹³³ *McKeon v. Bisbee*, 9 Cal. 137, 142 (1858). *See also* *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.”); *City of Denver v. Bayer*, 2 P. 6, 6-7 (Colo. 1883) (“Property, in its broader and more appropriate sense, is not alone the chattel or the land itself, but the right to freely possess,

New York Court of Appeals explained: “Property is the right of any person to possess, use, enjoy and dispose of a thing. . . . A man may be deprived of his property in a chattel, therefore, without its being seized or physically destroyed, or taken from his possession.”¹³⁴

The central rights of possession and use provided a conceptual framework for early American courts in which they grounded the normative principle that the law should secure to a property owner the “fruits of one’s labors.”¹³⁵ Justice David Brewer invoked this conceptual foundation and its attendant normative principle when he argued that “[p]roperty is as certainly destroyed when the use that which is the subject of property is taken away for that which gives value to property, is its capacity for use.”¹³⁶ Informed by a conception of property as referring to the exclusive rights of possession, use, and disposition, courts relied heavily on the normative labor-desert principle throughout early American property law, and used it often to justify protecting new species of intellectual property, such as trade secrets and trademarks.¹³⁷

The central importance of these substantive property rights are best illustrated in the licensing doctrines developed by nineteenth-century courts, who sought to secure to patentees

use, and alienate the same.”); *Eaton v. Boston C. & M. R.R.*, 51 N.H. 504, 511 (1872) (“Property is the right of any person to possess, use, enjoy, and dispose of a thing.”).

¹³⁴ *Wynehamer v. People*, 13 N.Y. 378, 433 (1856).

¹³⁵ *See, e.g., Vanhorne’s Lessee*, 2 U.S. (2 Dall.) at 310 (“No man would become a member of a community, in which he could not enjoy the fruits of his honest labour and industry.”); *Hawes v. Gage*, 11 F. Cas. 867, 867 (C.C.S.D.N.Y. 1871) (No. 6,237) (noting that a patent is “property” because it secures for an inventor the right to “enjoy the fruits of his invention”); *Clark Patent Steam & Fire Regulator Co. v. Copeland*, 5 F. Cas. 987, 988 (C.C.S.D.N.Y. 1862) (No. 2,866) (explaining that “Congress has wisely provided by law that inventors shall exclusively enjoy, for a limited season, the fruits of their inventions”); *Amoskeag Mfg. Co. v. Spear*, 2 Sand. Ch. 599, 606 (N.Y. Sup. Ct. 1849) (explaining that if a plaintiff is denied an injunction in a trademark infringement case, “the [trademark] owner is robbed of the fruits of the reputation that he had successfully labored to earn”).

¹³⁶ Hon. D.J. Brewer, *Protection of Private Property From Public Attack* (1891), reprinted in 10 GREEN BAG 2d 495, 501 (2007); *see also Pumpelly v. Green Bay & Miss. Canal Co.*, 80 U.S. 166, 179 (1871) (recognizing that “there are numerous authorities to sustain the doctrine that a serious interruption to the common and necessary use of property may be . . . equivalent to the taking of it”); *Austin v. Murray*, 16 Pick. 121, 126 (Mass. 1834) (“A by-law for the total restraint of one’s [property] right, is void; as if a man be barred of the use of his land.”); *In re Jacobs*, 98 N.Y. 98, 105 (1885) (“Property . . . has no value unless it can be used. Its capability for enjoyment and adaptability to some use are essential characteristics and attributes without which property cannot be conceived.”).

¹³⁷ *See Mossoff, supra* note 14, at 413-24 (discussing evolution of trade secret and trademark doctrines in nineteenth century); *see also Mossoff, supra* note 84 (discussing influence of natural rights philosophy in defining basic patent doctrines in the early American Republic).

their essential rights of use and disposition of their property. As two prominent nineteenth-century commentators on property explained, a “right of property which arises from possession must therefore be a transmissible right.”¹³⁸ Accordingly, Justice Joseph Story wrote in 1824 for a unanimous Supreme Court that the patent statutes secured to an inventor “the absolute enjoyment and possession” in an invention “which is of very great value.”¹³⁹ Writing for another unanimous Court just nine years later, Justice John McLean stated the point even more succinctly: The law secured to a patentee “for a limited period the profits arising from the sale of the thing invented.”¹⁴⁰

Under the influence of the exclusion concept of patents, modern scholars and courts have dismissed these judicial statements as “confusion” or “dicta,”¹⁴¹ but this is an anachronistic reading of the historical record. The federal courts were following the express language of the patent statutes in force at that time, which, in accord with the then-dominant concept of property, defined patents as property in terms of the essential rights of possession, use and disposition. In addressing an 1823 dispute concerning the distribution of an estate, the Pennsylvania Supreme Court observed that “property, without the power of use and disposition, is an empty sound.”¹⁴² As property, patents deserved the same legal security in their rights of use and disposition. Accordingly, a federal court instructed a jury in an 1862 patent infringement trial that “Congress has wisely provided by law 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

¹³⁸ F. POLLOCK & R.S. WRIGHT, AN ESSAY ON POSSESSION IN THE COMMON LAW 93 (Elibron Classics 2005) (1888).

¹³⁹ Ex parte Wood, 22 U.S. at 608.

¹⁴⁰ Shaw v. Cooper, 32 U.S. (7 Pet.) 292, 320 (1833) (emphasis added).

¹⁴¹ See *supra* notes 88-89 and accompanying text.

¹⁴² Appeal of Flintham, 11 Serg. & Rawle 16 (Pa. 1823).

have invented.”¹⁴³ A decade later, another court observed that “the rights conferred by the patent law, being property, have the incidents of property, and are capable of being transmitted by descent or devise, or assigned by grant.”¹⁴⁴

The essential protection of the rights of use and disposition in patented inventions is further illustrated in an anonymous brief essay published in the *Federal Cases* reporter.¹⁴⁵ This essay contrasted the personal privileges in English patents from the property rights in American patents, and, unsurprisingly, the principal difference was the right of disposition. English patents were a mere “grant by the crown” and thus “inalienable unless power to that effect is given by the crown.”¹⁴⁶ American patents, however, were “defined as an incorporeal chattel, which the patent impresses with all the characteristics of personal estate,” including the right to dispose of this incorporeal property.¹⁴⁷ As another antebellum federal court noted, “assignees [of a patent] become the owners of the discovery, with perfect title,” and thus “[p]atent interests are not distinguishable, in this respect, from other kinds of property.”¹⁴⁸

It is unsurprising then that the phrase “intellectual property” was first used in an 1845 patent case in which Justice Levi Woodbury, riding circuit, instructed a jury that patents protect the same rights of use and disposition as do property rights in land and chattels:

[A] liberal construction is to be given a patent, and inventors sustained . . . and only in this way can we protect intellectual property, the labors of the mind, [which are] production and interests as much as a man’s own, and as much as the fruit of his honest industry, as the wheat he cultivates or the flocks he rears.¹⁴⁹

¹⁴³ Clark Patent Steam & Fire Regulator Co. v. Copeland, 5 F. Cas. 987, 988 (C.C.S.D.N.Y. 1862) (No. 2,866).

¹⁴⁴ Carew v. Boston Elastic Fabric Co., 5 F. Cas. 56, 57 (C.C.D. Mass. 1871) (No. 2,398).

¹⁴⁵ See 3 F. Cas. at 85 (following Belding v. Turner, 3 F. Cas. 84 (C.C.D. Conn. 1871) (No. 1,243)).

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ Carr v. Rice, 5 F. Cas. 140, 146 (C.C.S.D.N.Y. 1856) (No. 2,440).

¹⁴⁹ Davoll v. Brown, 7 F. Cas. 197, 199 (C.C.D. Mass. 1845) (No. 3,662). See Adam Mossoff, *Patents as Constitutional Private Property: The Historical Protection of Patents Under the Takings Clause*, 87 B.U. L. REV. 689, 719 n.160 (2007) (discussing how the *Davoll* case is the first use of the phrase “intellectual property”).

In accord with the dominant conception of patents as property,¹⁵⁰ Justice Woodbury went on to explain that patentees were not monopolists, as “the design [of the patent system] is to encourage genius in advancing the arts, through science and ingenuity, by protecting its productions of what did not before exist.”¹⁵¹ In this way, an inventor was encouraged to exercise his inventive labors in creating a new invention, and then the law secured “the fruit of his honest industry” by protecting the sale of his patented invention in the same way the law protected the wheat or flock that the farmer intends to sell at market.¹⁵²

Early American courts recognized the conceptual linkage between patents and land in more than just their descriptive and normative rhetoric. They created patent doctrines that secured to patentees their rights of use and disposition, and, in doing so, adopted real property concepts from the common law—assignment and license—to identify how a patentee may exercise its right of disposition.¹⁵³ Since the inception of the federal patent system in 1790, courts have employed these real property concepts to classify the exact quantum of interest conveyed by a patentee to a third party.¹⁵⁴ To this day, the Federal Circuit follows this

¹⁵⁰ See Mossoff, *supra* note 84, at 989-1009 (discussing substantial theoretical, conceptual and doctrinal connections between patents and real property law in antebellum court decisions and legislation).

¹⁵¹ *Davoll*, 7 F. Cas. at 199.

¹⁵² *Id.*

¹⁵³ 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”); *Ernst v. Conditt*, 390 S.W.2d 703 (Tenn. Ct. App. 1964) (recognizing the “general rule as to the distinction between an assignment of a lease and a sublease is an assignment conveys the whole term, leaving no interest nor reversionary interest in the grantor or assignor”); see generally JOHN W. BRUCE & JAMES W. ELY, JR., THE LAW OF EASEMENTS AND LICENSES IN LAND (rev. ed. 1995).

¹⁵⁴ See, e.g., *Littlefield v. Perry*, 88 U.S. 205, 223 (1874) (“A mere licensee cannot sue strangers who infringe. In such case redress is obtained through or in the name of the patentee or his assignee.”); *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.”); *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”); *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 there is “no assignment of the patent right” in the patentee’s conveyance, 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”).

longstanding judicial practice of referring to a patentee’s right of disposition in terms of either an “assignment” or “license,”¹⁵⁵ albeit without understanding the provenance of this usage in common law real property doctrine.

Antebellum courts were not alone in looking to the common law to define the nascent patent doctrines that secured to patentees their rights of use and disposition. In its first patent statutes, Congress created writing and recordation requirements for patent conveyances,¹⁵⁶ adopting a legal norm from real property that ensured proper notice of conveyances and of any use restrictions imposed by a grantor in a conveyance instrument.¹⁵⁷ In fact, courts have long regarded notice as an essential requirement in determining whether contractual covenants that impose use restrictions against a grantee will be converted into property interests that “run with the land” to successors or assigns.¹⁵⁸ In this regard, the recordation requirements in the patent statutes were significant, because patents, as intellectual property rights, lack the rivalrous physical activity that can signal ownership of land to third-parties.¹⁵⁹ In mandating that conveyances of patent rights be written and that these instruments be recorded with the federal government,¹⁶⁰ Congress expressly adopted common law rules governing land conveyances in

¹⁵⁵ 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.”); *In re Cybernetic Services, Inc.*, 252 F.3d 1039, 1052 (9th Cir. 2001) (noting that “a security interest in a patent that does not involve a transfer of the rights of ownership is a ‘mere license’”).

¹⁵⁶ See 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”).

¹⁵⁷ See Richard A. Epstein, *Covenants and Constitutions*, 73 CORNELL L. REV. 906, 909 (1988) (noting that “[w]ith recordation [of covenants governing the use of real property], the problem of notice disappears in all but the most unusual case”); Molly Shaffer Van Houweling, *The New Servitudes*, 96 GEORGETOWN L. J. 885 (2008) (discussing notice requirements in real property, personal property and IP).

¹⁵⁸ See JOSEPH WILLIAM SINGER, INTRODUCTION TO PROPERTY 231-34 (2001) (discussing notice requirement in restrictive covenant doctrine).

¹⁵⁹ See, e.g., *Sanborn v. McLean*, 206 N.W. 496 (Mich. 1925) (holding that a purchaser is accountable to constructive notice of restrictive covenants governing a planned residential development that contains similarly improved lots); *Fain v. Garthright*, 5 Ga. 6 (1848) (noting that “if a grantee enter under a deed not executed in conformity to law, believing the title to be good, his possession is adverse”).

¹⁶⁰ See, e.g., *Moore*, 74 U.S. at 521 (“Grants, as well as assignments, must be in writing, and they must convey the exclusive right, under the patent, to make and use, and vend to others to be used, the thing patented . . .

designing the legal framework in which patentees exercised their own rights of use and disposition.

Nineteenth-century courts took seriously the notice requirement that was implemented through the writing and recordation provisions enacted by Congress.¹⁶¹ They did so because patents are property—securing, in the words of a unanimous Supreme Court in 1870, “the exclusive right and liberty to make and use and vend to others to be used their own inventions.”¹⁶² Also, just as the Federal Circuit continues to use the terms “assignment” and “license” without realizing that these are common law concepts from real property doctrine,¹⁶³ Congress reenacted the recordation requirement in the 1952 Patent Act.¹⁶⁴ Further revealing the unconscious influence of common law real property doctrine in modern patent law, Congress placed the recordation requirement in § 261—the same section in which it expressly stated that patents are property!

In addition to adopting real property rhetoric, concepts and notice requirements in patent law, nineteenth-century courts exercised substantial discretion in framing the specific doctrines that implemented the broad statutory declarations that a patent secured the right to use and

.”); *Herbert v. Adams*, 12 F. Cas. 1, 1 (C.C.D. Mass. 1825) (No. 6,394) (Story, Circuit Justice) (recognizing that “after an assignment is recorded, the assignee stands in the place of the original inventor, both as to right and responsibility”).

¹⁶¹ *See* *Heaton-Peninsular Button-Fastener Co. v. Eureka Specialty Co.*, 77 F. 288, 290, 291 (6th Cir. 1896) (holding 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. v. Bullard*, 1 F. Cas. 625, 629 (C.C.N.Y. 1879) (No. 294) (“[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.”)

¹⁶² *Seymour v. Osborne*, 78 U.S. (11 Wall.) 516, 533 (1870).

¹⁶³ *See supra* note 154 and accompanying text.

¹⁶⁴ *See* 35 U.S.C. § 261.

dispose of an invention. In so doing, courts developed patent doctrines on par with existing common law doctrines that already secured to landowners their right to control the downstream use of their property by third-parties.¹⁶⁵ In patent law, such doctrines protected patentees in imposing a litany of manufacturing, sale, and use restrictions on their licensees.¹⁶⁶ Such license restrictions were deemed to be conceptually and doctrinally identical to a landowner's imposition of a use restriction in conveying a limited "title" to a third-party.¹⁶⁷

In 1857, for example, Judge Ingersoll explained in a dispute involving a patent on vulcanized rubber obtained by Charles Goodyear, the eponymous source of the tire company:

If [a] 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 patented¹⁶⁸

Several years earlier, Charles Goodyear was embroiled in another patent licensing dispute in which the conveyance instrument contained clauses that resulted in restrictions on international

¹⁶⁵ See *infra* notes 174-185 and accompanying text.

¹⁶⁶ See, e.g., *E. Bement & Sons v. Nat'l Harrow Co.*, 186 U.S. 70, 88-19 (1902) (upholding sale price restriction in license on basis of nineteenth-century case law affirming a patentee's rights to do same); *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" written by the patentee 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"); *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"); *Blanchard v. Sprague*, 3 F. Cas. 640, 642 (C.C.D. Mass. 1859) (No. 1,516) (Clifford, Circuit Justice); *Day v. Union India-Rubber Co.*, 7 F. Cas. 271, 276 (C.C.S.D.N.Y. 1856) (No. 3,691).

¹⁶⁷ See *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.*, 1 F. Cas. at 629 (recognizing that patented products may be sold in which "a 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"); *Cf. Mountain Brow Lodge No. 82, Independent Order of Odd Fellows v. Toscano*, 257 Cal. App. 2d 22, 26 (1967) (recognizing long-standing common law distinction between valid defeasible fee simples that restricted land use, such as a fee simple subject to condition subsequent, and an invalid restraint on alienation).

¹⁶⁸ *Goodyear v. Union India Rubber Co.*, 10 F. Cas. 726, 727 (C.C.S.D.N.Y. 1857) (No. 5,586) (emphasis added).

commercial activities that are commonly seen today.¹⁶⁹ In these cases, courts upheld without comment the various use and sale restrictions imposed by Goodyear and other patentees on their licensees. By 1874, Justice Woodruff, riding circuit, could safely declare that “[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 clear that he may limit the right to manufacture for such use.”¹⁷⁰

It is important to recognize that the rights of use and disposition did more than provide nineteenth-century courts with a descriptive framework to explain why patentees could engage in restrictive licensing practices. The concept of property that comprised these substantive rights also explained why courts created the doctrinal limits that prevented patentees from abusing their property entitlements. As the Supreme Court stated in its 1852 decision in *Bloomer v. McQuewan*, when a patentee sells a product covered by its patent without restriction, the product “passes to the hands of the purchaser, [and thus] it is no longer within the limits of the [patent] monopoly.”¹⁷¹ Or, in the words of a lower federal court in 1843, the patented “product, so soon as it is sold, mingles with the common mass of property, and is only subject to the general laws of property.”¹⁷² To wit, an outright, unrestricted conveyance of a patented product *exhausts* the patentee’s claims over its further use by the purchaser.

¹⁶⁹ See *Day v. Candee*, 7 F. Cas. 280, 284 (C.C.D. Conn. 1853) (No. 3,676). Here, Charles Goodyear contracted with an inventor, Edwin Chaffee, to obtain patents in “foreign countries for his, Goodyear’s benefit,” but “the right was reserved to Chaffee, notwithstanding the assignment, . . . to use the extended patent in any business which he might carry on” in the U.S. *Id.*

¹⁷⁰ *Dorsey Revolving Harvester Rake Co. v. Bradley Mfg. Co.*, 7 F. Cas. 946, 947 (C.C.N.D.N.Y. 1874) (No. 4,015). In this case, Justice Woodruff was faced with a patent infringement action involving the sale of patented goods in a foreign country in violation of a license agreement. Justice Woodruff explained the law as follows: “I know of no reason, in law or in equity, why, if [the patentee] gives to another a right to make, or to make and sell, he is not at full liberty to retain to himself the advantage and profit of competing in foreign markets, by retaining the exclusive right to make and sell for export or use in other countries.” *Id.*

¹⁷¹ *Bloomer*, 55 U.S. (14 How.) at 549.

¹⁷² *Boyd v. Brown*, 3 F. Cas. 1095, 1096 (C.C.D. Ohio 1843) (No. 1,747).

Although the *Bloomer* Court’s creation of the exhaustion doctrine was initially framed in terms of limiting the patent “monopoly,”¹⁷³ the subsequent evolution of this important nineteenth-century doctrine reflected the courts’ understanding that patents were conceptually equivalent to common law property entitlements in land. In a conveyance of real property, for instance, if a deed does not contain a habendum clause with words of limitation, then common law courts created a default rule that the interest conveyed is a fee simple absolute. Thus, a conveyance “to A” creates a fee simple absolute in Blackacre, but a conveyance “to A so long as she does not use alcohol on Blackacre” creates a fee simple determinable with a future interest in the grantor (a “possibility of reverter”). The rights to use and dispose of one’s property meant that one had the freedom to restrict uses by successors-in-interest—within the constraints imposed by either public policy or the police power¹⁷⁴—but such restrictions had to be expressly adopted by the property owner and clearly conveyed to the purchaser. Lacking such express restrictions, courts rejected landowners’ attempts to enforce alleged restrictive covenants and other servitudes given the lack of notice to successors-in-interest.¹⁷⁵ The default rule in real property law was that, absent any express terms limiting an estate interest conveyed to a third-party, a subsequent property-owner had the same rights to possess, use and dispose of property as the original owner.

In accord with this default rule governing conveyances of land, nineteenth-century courts concluded that, if a patentee did not impose any express, written restrictions in a license, then the

¹⁷³ *Bloomer*, 55 U.S. (14 How.) at 549.

¹⁷⁴ *See, e.g., E. Bement & Sons*, 186 U.S. at 90-91 (discussing police power and common carrier restrictions on conveyances of patent rights); *Patterson v. Kentucky*, 97 U.S. 501, 505 (1878) (holding that “the right conferred upon the patentee and his assigns to use and vend the corporeal thing or article, brought into existence by the application of the patented discovery, must be exercised in subordination to the police regulations which the State [had] established by the statute”).

¹⁷⁵ *See supra* note 158 and accompanying text.

conveyance was absolute in terms of the property right received by the purchaser.¹⁷⁶ In 1861, for instance, Circuit Justice Robert Grier explained that, “unless he bind himself by covenants to restrict his right of making and vending certain articles” under a patent, “[e]very person who pays the patentee for a license to use his process becomes the owner of the product, and may sell it to whom he pleases, or apply it to any purpose.”¹⁷⁷ A few years later, the Supreme Court held that, if a patentee failed to use restrictive covenants in a conveyance instrument, then a licensee or end-user received “an absolute and unrestricted right to use” the patented invention.¹⁷⁸ Since ownership means “full dominion over property,” the Court explained, the absence of restrictive covenants or external legal restraints meant that a property-owner had a full right to use and dispose of one’s possessions—land, chattels or patented inventions.¹⁷⁹ The shades of influence of common law property rights in land on nineteenth-century patent doctrine are unmistakable.¹⁸⁰

¹⁷⁶ See *Mitchell v. Hawley*, 83 U.S. 544, 548 (1872) (noting default rule 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”).

¹⁷⁷ *Washing Mach. Co. v. Earle*, 29 F. Cas. 332, 334 (C.C.E.D. Pa. 1861) (No. 17,219) (emphasis added); see also *E. Bement & Sons v. Nat’l Harrow Co.*, 186 U.S. 70, 91 (1902) (“[T]he general rule is absolute freedom in the use or sale of rights under the patent laws of the United States. . . . with few exceptions, . . . any conditions which are not in their very nature illegal . . . , [and] imposed by the patentee and agreed to by the licensee for the right to manufacture or use or sell the article, will be upheld by the courts.”); *Mitchell v. Hawley*, 83 U.S. 544, 547 (1872) (“[A] patentee, when he has himself constructed a machine and sold it without any conditions, or authorized another to construct, sell, and deliver it, or to construct and use and operate it, without any conditions, and the consideration has been paid to him for the thing patented, the rule is well established that the patentee must be understood to have parted to that extent with all his exclusive right, and that he ceases to have any interest whatever in the patented machine so sold and delivered or authorized to be constructed and operated.”); *Featherstone v. Ormonde Cycle Co.*, 53 F. 110, 111 (C.C.S.D.N.Y. 1892) (“It is well settled that the unrestricted sale of a patented article by the owner of the patent conveys to the purchaser the right of unrestricted ownership.”); *Holiday v. Mattheson*, 24 F. 185, (C.C.S.D.N.Y. 1885) (explaining that “[w]hen the [patent] owner sells an article, without any reservation respecting its use, . . . the purchaser acquires the whole right of the vendor in the thing sold”).

¹⁷⁸ *Bloomer v. Millinger*, 68 U.S. (1 Wall.) 340, 350 (1863).

¹⁷⁹ *Id.* (“When the [assignee] had purchased the right to construct the machines and operate them during the lifetime of the patent as then existing, and had actually constructed the machines under such authority, and put them in operation, he had then acquired full dominion over the property of the machines, and an absolute and unrestricted right to use and operate them until they were worn out.”).

¹⁸⁰ See 2 BLACKSTONE, COMMENTARIES *2 (“There is nothing which so generally strikes the imagination, and engages the affections of mankind, as the right of property; or that sole and despotic *dominion* which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe.”) (emphasis added); see also Mossoff, *supra* note 149, at 719 (discussing how “it was common for

Patent exhaustion doctrine was thus built on a conceptual foundation that maintained that all property-owners—patentees, licensees and end-users—had the right to use and dispose of their property, barring “explicit and unequivocal restrictions as to the time, or place, or manner of using the [patented] article.”¹⁸¹ This was the default rule designed into nineteenth-century legal doctrine governing both land and intellectual property rights. Without notice of an express restriction imposed by a grantor, courts refused to enforce restrictive covenants in land¹⁸² or against patent licensees,¹⁸³ and they similarly prevented patentees from pursuing infringement claims against innocent downstream purchasers who had no notice of a breached restriction by a licensee.¹⁸⁴ On the basis of the definition of patents as property, nineteenth-century courts and legislatures crafted a legal default rule that secured to inventors strong licensing rights, guaranteeing that “a patentee may grant licenses to whom he wants, and restrict the license as to time, territory, and purpose.”¹⁸⁵

B. *The Legal Realists’ Use of Patents in Reconceptualizing Property in Land*

The historical fountainhead of exhaustion doctrine—the definition of patents as property in the same conceptual terms as land and other property entitlements—is now lost to scholars and courts because of their embrace of the exclusion concept of patents. Surprisingly, though, the provenance of the exclusion concept of patents is found, not in patent law, but in the legal

nineteenth-century courts to draw doctrinal and policy connections between traditional, tangible property rights and patents”).

¹⁸¹ *Curtiss Aeroplane & Motor Corp. v. United Aircraft Eng’g Corp.*, 266 F. 71, 77 (2d Cir. 1920) (explaining historical treatment of patent exhaustion doctrine).

¹⁸² *See supra* note 158 and accompanying text.

¹⁸³ *See supra* notes 159-162 and accompanying text.

¹⁸⁴ In rejecting an infringement claim against an end-user by a disgruntled patentee, Justice Grier spelled out the doctrinal implications of the liberty secured in use-rights in the integrated theory of property: “If his licensees do not perform their agreements, his remedy is by action against them on his covenants, and not by recourse to a chancellor to restrain third persons who have purchased [the patented product] from using it, when it is theirs, for any purpose they please.” *Washing Mach. Co.*, 29 F. Cas. at 334. *See also* *Adams v. Burke*, 84 U.S. 453, 456 (1873) (rejecting patentee’s infringement claim against a purchaser who breached a use restriction imposed on the licensee who sold the patented product the third parties).

¹⁸⁵ *American Lecithin Co. v. Warfield Co.*, 105 F.2d 207, 212 (7th Cir. 1939) (citations to nineteenth-century case law omitted).

realists’ reconceptualization of property in land. Scholars recognize that the legal realists revolutionized the law at the turn of the twentieth century,¹⁸⁶ especially property law.¹⁸⁷ Inspired by Wesley Hohfeld’s reconceptualization of legal rights into analytically distinct “jural relations,”¹⁸⁸ the legal realists redefined real property as comprising only a set of “social relationships.”¹⁸⁹ Thus all first-year law students now learn that property is merely a “bundle of rights”¹⁹⁰ or, alternatively, a “bundle of sticks.”¹⁹¹

The problem was that the legal realists succeeded in fragmenting the earlier “unitary conception of ownership into a more shadowy ‘bundle of rights,’” which ultimately

¹⁸⁶ See, e.g., AMERICAN LEGAL REALISM (William W. Fisher III et al. eds., 1993); LAWRENCE M. FRIEDMAN, A HISTORY OF AMERICAN LAW 688-89 (2d ed. 1985); Brian Leiter, *American Legal Realism*, in THE BLACKWELL GUIDE TO THE PHILOSOPHY OF LAW AND LEGAL THEORY 50 (Martin P. Golding & William A. Edmundson eds., 2005).

¹⁸⁷ See GREGORY S. ALEXANDER, COMMODITY & PROPRIETY: COMPETING VISIONS OF PROPERTY IN AMERICAN LEGAL THOUGHT, 1776-1970, at 311-51 (1997); Eric R. Claeys, *Takings, Regulations, and Natural Property Rights*, 88 CORNELL L. REV. 1549, 1604-44 (2003); Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L.J. 357, 364-66 (2001); Adam Mossoff, *What Is Property? Putting the Pieces Back Together*, 45 ARIZ. L. REV. 371 (2003).

¹⁸⁸ Hohfeld, *supra* note 25, at 28-33.

¹⁸⁹ Cohen, *supra* note 27, at 361-63; see also RESTATEMENT (FIRST) OF PROPERTY ch. 1, introductory cmt. (1936) (stating that “[t]he word ‘property’ is used in this Restatement to denote legal relations between persons with respect to a thing”); 1 RICHARD T. ELY, PROPERTY AND CONTRACT IN THEIR RELATION TO THE DISTRIBUTION OF WEALTH 96 (1914) (“The essence of property is in the relations among men arising out of their relations to a thing.”); Wallace H. Hamilton & Irene Till, *Property*, in 12 ENCYCLOPAEDIA OF THE SOCIAL SCIENCES 528, 528 (Edwin R.A. Seligman & Alvin Johnson eds., 1934) (defining “property” as “a euphonious collocation of letters which serves as a general term for the miscellany of equities that persons hold in the commonwealth”); Wesley A. Hohfeld, *Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 26 YALE L.J. 710, 743 (1917) (explaining that “the supposed single right *in rem* [in property] . . . really involves as many separate and distinct ‘right-duty’ relations as there are persons subject to a duty”).

¹⁹⁰ See *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979) (referring to “the bundle of rights that are commonly characterized as property”); BRUCE A. ACKERMAN, PRIVATE PROPERTY AND THE CONSTITUTION 26-29 (1977) (discussing the “scientific” analysis of property as a “bundle” of rights); BENJAMIN N. CARDOZO, THE PARADOXES OF LEGAL SCIENCE 129 (1928) (“The bundle of power and privileges to which we give the name of ownership is not constant through the ages. The faggots must be put together and rebound from time to time.”); JOHN G. SPRANKLING, UNDERSTANDING PROPERTY LAW 4 (2007) (recognizing that it is common to describe property as a “bundle of rights”).

¹⁹¹ Gerald Korngold & Andrew P. Morris, *Introduction*, in PROPERTY STORIES 1 (Gerald Korngold & Andrew P. Morris eds., 2004); see also *United States v. Craft*, 122 S. Ct. 1414, 1418 (2002) (“A common idiom describes property as a ‘bundle of sticks’—a collection of individual rights which, in certain combinations, constitute property.”); STEPHEN R. MUNZER, A THEORY OF PROPERTY 16-17 (1990) (discussing the “sophisticated conception” of property as a “bundle of ‘sticks’” or a set of “legal relations . . . among persons or other entities with respect to things”).

“disintegrated” property.¹⁹² As legal realist, Arthur Corbin, observed: “Our concept of property has shifted [P]roperty’ has ceased to describe any *res*, or object, of sense, at all, and has become merely a bundle of legal relations.”¹⁹³ If property was to remain a viable and determinate legal concept within the legal realists’ social conception of legal rights, then the legal realists had to, in Felix Cohen’s words, “get rid of the confusion of nominalism.”¹⁹⁴ Cohen and other legal realists thus saw that property did have an “essential” characteristic—the “right to exclude others from doing something.”¹⁹⁵ Although the legal realists are widely recognized for propagating the nominalist “bundle” metaphor, they also deserve attribution for the positivist exclusion concept of property, which is the dominant concept of property today.¹⁹⁶

The connection between the legal realist’s property theory and patent law is found buried in the often-overlooked details of this well-known summary of the transformation of American legal thought at the turn of the twentieth century. Of course, the realists were not concerned with patent theory or doctrine; rather, they were concerned only with reconceptualizing property

¹⁹² Thomas C. Grey, *The Disintegration of Property*, in NOMOS XXII: PROPERTY 69, 69 (J. Roland Pennock & John W. Chapman eds., 1980); see also Michael A. Heller, *The Boundaries of Private Property*, 108 YALE L. J. 1163, 1193 (1999) (“While the modern bundle-of-legal relations metaphor reflects well the possibility of complex relational fragmentation, it gives a weak sense of the ‘thingness’ of private property.”); Jeanne L. Schroeder, *Chix Nix Bundle-O-Stix: A Feminist Critique of the Disaggregation of Property*, 93 MICH. L. REV. 239, 239 (1994) (“Property was dead The coroner, Wesley Newcomb Hohfeld, revealed that the unity, tangibility, and objectivity of property perceived by our ancestors was a phantom. Property is, in fact, merely a ‘bundle of sticks.’”).

¹⁹³ Arthur L. Corbin, *Taxation of Seats on the Stock Exchange*, 31 YALE L.J. 429, 429 (1922).

¹⁹⁴ Cohen, *supra* note 27, at 378 (critiquing earlier realist nominalist definition of property in terms of social relations).

¹⁹⁵ Cohen, *supra* note 27, at 370–71; see also *International News Service v. Associated Press*, 248 U.S. 215, 250 (1918) (Brandeis, J., dissenting) (“An essential element of individual property is the legal right to exclude others from enjoying it.”); *Id.* at 250 (Holmes, J., dissenting) (asserting that “[p]roperty depends upon exclusion by law from interference”); Morris R. Cohen, *Property and Sovereignty*, 13 CORNELL L. Q. 8, 9 (1927) (explaining that “the essence of private property is always the right to exclude others”); Hohfeld, *supra* note 189, at 745 (arguing that the right to exclude is the only claim-right constituting the *in rem* jural relation known as “property”).

¹⁹⁶ See, e.g., *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979) (claiming that the right to exclude is “one of the most essential sticks in the bundle of rights that are commonly characterized as property”); *Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd.*, 527 U.S. 666, 673 (1999) (“The hallmark of a protected property interest is the right to exclude others.”); see also *Jacque v. Steenberg Homes, Inc.*, 563 N.W.2d 154, 160 (Wis. 1997) (noting that “the right to exclude others” is the essential right constituting property).

rights in land.¹⁹⁷ But their reconceptualization of real property relied on patents as exemplars of the exclusion concept of property generally. In this respect, the rise of the exclusion concept of patents later in the twentieth century brings full circle a revolution in property theory that began at the turn of century with Hohfeld's reconceptualization of property in land.

Within Hohfeld's schema of legal relations, "property" was reducible to a fundamental "multital right, or claim (right in rem)" that corresponded to a necessary duty on the part of citizens to respect this right.¹⁹⁸ Hohfeld thus concluded that there was only one claim right that was necessarily inherent in all forms of property: the claim against the world that other people are *excluded* from land or some other resource, i.e., the world has a duty not to interfere with the claimed property.¹⁹⁹ All other "legal privileges," to use Hohfeld's terminology for the rights of use and disposition, represented only "limits [on this right to exclude as] fixed by law on grounds of social and economic policy."²⁰⁰ In other words, what were once considered to be necessary, essential rights constituting property—the rights of possession, use and disposition—were now conceptualized as only external legal limitations imposed on the single (claim) right constituting property—the right to exclude.

In advancing this new definition of property rights in land, Hohfeld and the legal realists who employed his conceptual framework repeatedly used patents to argue for their conceptual reconstruction of the nature of real property. In his own work on property, Hohfeld quoted a prominent nineteenth-century treatise that defined property in land in terms of how "the owner may use or dispose of [it] in any manner he pleases within the limits prescribed by the terms of

¹⁹⁷ See Merrill & Smith, *supra* note 187, at 365 (recognizing that "the motivation behind the realists' fascination with the bundle-of-rights conception was mainly political," because the realists sought "to undermine the notion that property is a natural right, and thereby smooth the way for activist state intervention in regulating and redistributing property").

¹⁹⁸ Hohfeld, *supra* note 189, at 745.

¹⁹⁹ *Id.* at 746.

²⁰⁰ *Id.*

his right.”²⁰¹ Hohfeld found this earlier concept of property to be entirely unsatisfactory.²⁰² It was incoherent, he explained, because defining property in terms of rights of use or disposition “would exclude not only many rights *in rem*, or multital rights, relating to persons, but also those constituting elements of *patent interests*, copyright interests, etc.”²⁰³ Following in Hohfeld’s footsteps, Morris Cohen argued that incorporeal entitlements, such as “franchises, patents, good will, etc.,” proved that “the essence of private property is always the right to exclude.”²⁰⁴ By the nineteen fifties, Morris Cohen’s son, Felix Cohen, further refined his father’s and Hohfeld’s arguments concerning property, writing that intangibility, such as the absence of color, shape and other physical characteristics in the subject matter of a property entitlement, established with conceptual clarity that property is simply the “right to exclude.”²⁰⁵ Cohen believed this was best exemplified by a “patent on a chemical process.”²⁰⁶

It is perhaps more surprising to learn that these arguments in favor of the exclusion concept of property were presaged decades earlier by Justice Oliver W. Holmes. In *The Common Law*, Justice Holmes described the exclusion concept of property in a chattel (a book) in terms that are remarkably similar to those used today by patent scholars to describe the allegedly unique exclusion concept of patents:

The law does not enable me to use or abuse this book which lies before me. That is a physical power which I have without the aid of the law. What the law does is simply to prevent the other men to a greater or less extent from interfering with my use or abuse.²⁰⁷

²⁰¹ Hohfeld, *supra* note 189, at 724 (quoting STEPHEN MARTIN LEAKE, *LAW OF PROPERTY IN LAND* 2 (1874)).

²⁰² Hohfeld, *supra* note 189, at 725.

²⁰³ *Id.* (“patent interests” emphasis added).

²⁰⁴ Morris Cohen, *supra* note 195, at 45 (citing “franchises, patents, good will, etc.” as proof that property is only a “right always against one or more individuals”).

²⁰⁵ Felix Cohen, *supra* note 27, at 360-71. Felix Cohen further explain that the best summary of “property in terms of a simple label” was as follows: “To the world: Keep off X unless you have my permission, which I may grant or withhold. Signed: Private Citizen. Endorsed: The state.” *Id.* at 374.

²⁰⁶ *Id.*

²⁰⁷ OLIVER W. HOLMES, JR., *THE COMMON LAW* 220 (1881).

On the basis of his distinction between physical and legal power, Holmes concluded that “ownership” of land or chattels means only that an owner is “protected in excluding other people from interference. The owner is allowed to exclude all, and is accountable to no one.”²⁰⁸ Holmes also agreed with Hohfeld and the Cohens that patents were a prime example of how the state may grant a property right—the right to exclude—to anyone in anything.²⁰⁹

More than a century later, patent scholars and jurists now define patents in the exact same terms as Hohfeld, the Cohens and Justice Holmes described tangible property rights—the law provides an inventor with a right to exclude.²¹⁰ Yet patent scholars mistakenly believe that the exclusion concept of patents is a unique conceptual account of property in inventions. They do not realize that the exclusion concept of patents is very much the intellectual progeny of the exclusion concept of property.

It bears emphasizing that Holmes, Hohfeld and the legal realists were not advocating an exclusion concept of patents; to the contrary, they were advancing a general theory about property in land and other tangible goods, and they were simply using patents as a means to advance their conclusions. In fact, in their groundbreaking scholarship on property, Hohfeld and the Cohens specifically addressed only property in land. But their reconceptualization of tangible property into a nominalist set of socially contingent privileges that attached to a central right to exclude was not, and could not be, limited to only land and chattels. Patents are a species of property, and thus the legal realists’ conceptual work in real property ultimately impacted patent theory and doctrine.

²⁰⁸ *Id.* at 246.

²⁰⁹ *Id.* at 245. (claiming that the right to exclude “may be given by the legislature to [any] persons, [f]or instance, a patentee . . .”).

²¹⁰ *See supra* Part II.A.

C. *The Genesis of the Exclusion Concept of Patents: Wesley Hohfeld’s Redefining Use-Rights as “Privileges”*

In the years following the revolution of legal realism in American law, patent scholars and jurists applied the exclusion concept in property to patents. The result is the ubiquitous exclusion concept of patents. In sum, they maintain that patents secure only the right to exclude—this is the single “claim right” secured under the patent that creates the correlative duty in others to not manufacture, use, or sell a patented invention.²¹¹ But how did this occur? The key to understanding how the legal realists’ concept of property in land came to be applied to patents is found in Wesley Hohfeld’s redefinition of the rights of use and disposition into “privileges.”

In arguing that property comprised only a right of exclude, Hohfeld was not insouciant about the fact that this legal entitlement had long referred to what scholars and jurists had identified as a set of essential rights, such as the rights of possession, use, and disposition. Thus, Hohfeld acknowledged that when one says that “A is a fee-simple owner of Blackacre,” this means more than just a claim right to exclude other people; rather, as Hohfeld explained, “A has an indefinite number of legal privileges of entering on the land, using the land, harming the land, etc., that is, within limits fixed by law on grounds of social and economic policy”²¹² The set of substantive rights that the earlier concept of property defined as essential characteristics of property²¹³ were now recast as affirmative grants of personal “privileges” that were incidental to the claim-right of exclusion that identified something as “property” under the law.²¹⁴ What

²¹¹ See *supra* Part II.A.

²¹² Hohfeld, *supra* note 189, at 746.

²¹³ See *supra* Part III.A.

²¹⁴ See Hohfeld, *supra* note 189, at 723 (discussing a negative easement as an example of the existence of multiple *in personam* “legal privileges of controlling and using the land”).

courts once referred to as the right to use one's property,²¹⁵ for instance, Hohfeld and the legal realists now characterized as a positive grant of *privilege* by the government,²¹⁶ such as a judicial order of an easement by necessity for a dominant tenement, a statutory limit on building height in a zoning regime, or any other government-backed "negation of a duty to stay off" an owner's land.²¹⁷ As Hohfeld explained, such restrictions define the range of positive obligations imposed on a landowner's exercise of its right to exclude "within limits fixed by law on grounds of social and economic policy."²¹⁸

In reconceptualizing use-rights from negative rights of liberty of action into socially-contingent, positive grants of "privileges" by the government, Hohfeld and the legal realists unintentionally set the stage for the exclusion concept of patents. The Hohfeldian analytical framework enthralled patent scholars and lawyers given the unique provenance of patents at common law. Beginning in the late sixteenth century, Queen Elizabeth adopted a policy of granting manufacturing monopolies to industrialists and tradesmen in order to promote the economic development of the realm.²¹⁹ Such grants issued through a royal legal device known as

²¹⁵ See *supra* notes 131-136 and accompanying text.

²¹⁶ See, e.g., Walter Wheeler Cook, *Ownership and Possession*, in 11 ENCYCLOPAEDIA OF THE SOCIAL SCIENCES 521, 522 (Edwin R.A. Seligman & Alvin Johnson eds., 1934) ("The aggregate of claims, privileges, powers and immunities of a Roman owner who had dominium was described in somewhat absolute terms as the *privilege* of using, diminishing or completely consuming it.") (emphasis added); Robert L. Hale, *Rate Making and the Revision of the Property Concept*, 22 COLUM. L. REV. 209, 214 (1922) (defining the "right of ownership in a manufacturing plant, to use Hohfeld's terms, [as] a *privilege* to operate the plant, plus a *privilege* not to operate it, plus a *right* to keep others from operating it, plus a *power* to acquire all of the rights of ownership in the products").

²¹⁷ Hohfeld, *supra* note 25, at 32. Hohfeld does acknowledge that legal privileges or "rights in personam . . . may occasionally be negative," *supra* note 288, at 725, but it is clear that he believes that legal privileges in property must be *positively* created legal obligations, either by express contract or law. This is consistent with Hohfeld's discussion of privilege as "liberty," *supra* note 25, at 38-44, by which he means a *legally created* negation or imposition of a duty on others, such as in expressly defined "privileged communications" under libel law or in the "privilege against self-incrimination" under the Fifth Amendment. *Id.* at 39. See *id.* ("It would therefore be a non sequitor to conclude from the mere existence of such liberties that 'third parties,' are under a duty not to interfere, etc.").

²¹⁸ Hohfeld, *supra* note 189, at 746.

²¹⁹ See generally Adam Mossoff, *Rethinking the Development of Patents: An Intellectual History, 1550-1800*, 52 HASTINGS L.J. 1255, 1259 (2001) ("The crown's prerogative to issue letters patent was a central tool in bestowing privileges upon individuals in the furtherance of royal policies.").

a “letter patent” (which explains the modern convention of labeling the legal protection of an invention as a patent).²²⁰

Although both are identified as “patents,” one of the primary differences between these sixteenth-century royal manufacturing monopolies and the eighteenth-century property rights in inventions was that the former imposed on its recipient an affirmative duty to practice the trade.²²¹ It is easy to see why this was a requirement of the early letters patent: The purpose of granting these manufacturing monopolies was to introduce new trades and products into the English realm, and this goal was not achieved if the newly minted monopolist did not set up shop in England and began employing apprentices and selling products. Thus, the *quid pro quo* for receiving a manufacturing monopoly under the Crown’s power to dispense letters patent was the patentee’s promise to work the subject matter of the grant. If he did not work the trade, then he lost his patent.²²²

By the late eighteenth century, courts had altered the *quid pro quo* of the patent from an affirmative duty to work the patented manufacture to disclosure of the invention in the patent document.²²³ It was well established by 1790, the year in which Congress enacted the first Patent Act, that there was no legal requirement that a patentee work his invention.²²⁴ Similar to an

²²⁰ *Id.*

²²¹ *Id.* at 1261.

²²² *See, e.g., id.* at 1277-78 (describing legal challenge to a patent in the 1670s based in part on the failure of the patentee having established the trade in England); *id.* at 1279-80 (describing several patents in 1670s-1690s that were voided by the Crown given the failure of the patentee in working the patent).

²²³ *See id.* at 1291-93 (discussing Mansfield’s famous jury instructions in *Liardet v. Johnson* (1778), which established disclosure of the invention in the specification as the consideration offered by the inventor in exchange for receiving the patent).

²²⁴ *See* Patent Act of 1790, ch. 7, 1 Stat. 109 (repealed 1793). In this first patent statute, Congress followed the precedent established by Lord Mansfield in *Liardet v. Johnson*, *see supra* note 223, requiring only that the inventor provide adequate disclosure in a specification. *See* Patent Act of 1790, § 2, 1 Stat. at 110-11.

owner of land, an American patentee was at liberty to do nothing with his invention but sue other people to prevent them from “trespassing” on his rights.²²⁵

When this historical development is combined with Hohfeld’s reframing of use-rights as privileges, it becomes evident why patent scholars and jurists today reject any use-rights in patent law. In such phrases as “use-rights,” they hear the echoes of the antiquated privileges granted by the English Crown—a positive duty to work the invention or manufacture. The Hohfeldian syllogism thus seems undeniable: If use-rights are privileges, and patent privileges represented affirmative duties to practice the subject matter of the patent grant, then to admit such privileges in patents today is to impose positive or affirmative obligations on patentees.²²⁶ The syllogism seems even more compelling when one realizes that Hohfeld specifically defined a “privilege” as a positive grant by the government that limited the ways in which the right to exclude could be used by the property-owner.²²⁷ The degree to which Hohfeld’s conception of a “privilege” has influenced modern patent jurisprudence is best revealed in how patent scholars now refer to the rights to make, use or sell an invention as “affirmative”²²⁸ or “positive”²²⁹ rights.

Given this intellectual history, it seems virtually self-evident to modern patent scholars and jurists that patents necessarily secure only the right to exclude. When they read historical references to use-rights in nineteenth-century patent statutes and case law, they do not realize that this represents a different theory of property.²³⁰ Instead, they maintain that the development

²²⁵ See Mossoff, *supra* note 84, at 993 (identifying nineteenth-century case law in which patent infringers were accused of committing “trespass”).

²²⁶ Cf. Isaiah Berlin, *Two Concepts of Liberty*, in *FOUR ESSAYS ON LIBERTY* 118-72 (1969) (analyzing the distinction between “negative” and “positive” conceptions of rights).

²²⁷ See *supra* note 214-218 and accompanying text.

²²⁸ See *supra* notes 31-32, 47 and accompanying text.

²²⁹ See *supra* notes 32, 49 and accompanying text.

²³⁰ Cf. Michael Kent Curtis, *Historical Linguistics, Inkblots, and Life after Death: The Privileges or Immunities of Citizens of the United States*, 78 N.C. L. REV. 1071, 1093 (2000) (“In 1913, Professor Wesley

from a royal privilege in a manufacturing monopoly to a right to exclude in an invention reflected an equally important conceptual development in which patents were burned pure of antiquated feudal service duties to the Crown.²³¹ Three prominent patent scholars and a Federal Circuit judge recently observed, for instance, that “[t]o the extent that a patent right comprises the right to exclude others, not all colonial grants should be considered patent grants” simply because the colonial statutes secured to inventors the rights to make, construct and sell their inventions.²³² Other scholars and jurists have similarly dismissed historical patent law references to the rights of use and disposition as representing only “confusion” or “dictum.”²³³ In the modern Hohfeldian era, in which use-rights have been redefined as “privileges,” it seems almost unnecessary to point out that patents do not secure privileges—positively granted use-rights.²³⁴ To the contrary, goes the conventional wisdom, patents secure only a negative right to exclude.

The fundamental connection between the exclusion concept of property and the exclusion concept of patents is further revealed in the identical ways in which Hohfeld and modern patent scholars have critiqued earlier theories of property and patents. In his work on property, Hohfeld censured the nineteenth-century legal scholar, John Austin, for having “confused legal privileges with legal rights.”²³⁵ According to Hohfeld, Austin referred to both exclusion and use as “rights,” and thus Austin “confusedly” conflated the claim right of exclusion with the privileges

Newcomb Hohfeld published an influential article suggesting that important theoretical and legal distinctions should be made between rights, privileges, and immunities. . . . It would be anachronistic to assume that people in the nineteenth century used the words ‘rights,’ ‘privileges,’ and ‘immunities’ exactly as Hohfeld later suggested they should.”)

²³¹ See, e.g., OSCAR A. GEIER, *PATENTS, TRADE MARKS AND COPYRIGHTS: LAW AND PRACTICE* 6 (5th ed. 1930) (claiming that “[o]ut of a long struggle in the English Courts prior to the institution of our present system of patents, the idea was gradually evolved of the contract theory of a patent,” in which “the inventor . . . agrees to disclose his invention to the public and in return the government grants him the right to exclude others”).

²³² ADELMAN, *supra* note 32, at 14.

²³³ See *supra* notes 88-89 and accompanying text.

²³⁴ See, e.g., Michael A. Carrier, *Refusals to License Intellectual Property after Trinko*, 55 DEPAUL L. REV. 1191, 1206-07 (2006) (A patentee may “determine that its product will not be commercially successful. Such a determination would be . . . consistent with the right to exclude (not use) underlying the IP laws.”).

²³⁵ Hohfeld, *supra* note 189, at 748-49 (emphasis added). Here Hohfeld is critiquing John Austin’s *Lectures on Jurisprudence*. See 1 JOHN AUSTIN, *LECTURES ON JURISPRUDENCE* (Robert Campbell ed., 3d ed. 1869) (1832).

comprising the set of positive use and possession grants by the state that supplement or limit this claim right.²³⁶ Today, the Federal Circuit similarly accuses earlier Congresses and courts of sowing “confusion” when these earlier authorities spoke of use-rights in patent law.²³⁷

These identical charges of “confusion” are not happenstance. These parallel polemics reflect the degree to which modern patent lawyers and scholars have unconsciously adopted the Hohfeldian exclusion concept of property in land in defining patents as property.²³⁸ This is obscured today only because patent scholars and lawyers continue to mistakenly believe that property in land was left untouched by the conceptual work of Hohfeld and the legal realists. As a result, they continue to use real property as a foil in explaining how a patents is a unique property right insofar as it secures only a single claim right—the right to exclude.²³⁹ They have not realized that this property theory—the exclusion concept of property—was first applied to land, not patents. In fact, as discussed above, Hohfeld and the legal realists used patents as their primary doctrinal examples in proving the exclusion concept of property in land.

As the legal realists succeeded in redefining the nature of property entitlements writ large, generations of law students, lawyers, jurists and scholars applied the bundle and exclusion concepts to patents. The result was an exponentially growing body of scholarship throughout the twentieth century, defending and advancing the exclusion concept of patents.²⁴⁰ The pinnacle of

²³⁶ Hohfeld, *supra* note 189, at 749 (stating that “Austin uses the term ‘right’ indiscriminately and confusedly to indicated both those jural relations that are legal rights, or claims, and those that are legal privileges”).

²³⁷ See *supra* note 89 and accompanying text.

²³⁸ Further reflecting this long-unidentified Hohfeldian influence on modern patent law, a recently published hornbook relies on the 1936 First Restatement of Property for its definition of a “right” as securing only exclusion, apparently not realizing that the First Restatement explicitly adopted Hohfeld’s conceptual framework of right, privilege, power, immunity in conceptualizing property. See MUELLER, *supra* note 33, at 15 n.28.

²³⁹ See *supra* notes 39, 49-50 and accompanying text.

²⁴⁰ See, e.g., LEON H. AMDUR, PATENT FUNDAMENTALS 53 (1948) (“A patentee is merely given the right to *exclude others* from making, using or selling that which is covered by a patent. This is a ‘negative’ or prohibitive right as distinguished from a positive or absolute right.”); OTTO RAYMOND BARNETT, PATENT PROPERTY AND THE ANTI-MONOPOLY LAWS 33 (1943) (claiming that the “patent laws specify how . . . the inventor may, by grant of a patent, secure the right to exclude all others from practicing his patented invention during the life of the patent”); GEORGE E. FOLK, PATENTS AND INDUSTRIAL PROGRESS 11 (2d ed. 1942) (“[T]he right to make, use and vend does

this development was the codification of the exclusion concept of patents in select portions of the 1952 Patent Act,²⁴¹ and the appeal to blocking patents and regulatory restrictions on patents as allegedly irrefutable evidence that patents cannot as a matter of logic secure any “positive” rights of use or disposition.²⁴² As a matter of intellectual history, the exclusion concept of patents represents the final doctrinal synthesis of a broader theoretical shift in early twentieth-century American property theory. By 1952, patents came full circle from serving as only evidence for how land and chattels secured only a right to exclude to ultimately being defined in terms of exclusion itself.

IV. SOME PRELIMINARY THOUGHTS ON THE ROLE OF CONCEPTUAL PROPERTY THEORY IN PATENT LAW

Property theory does not explain every detail of the patent system, but identifying the role that it has played in the design of the American patent system is not idle speculation. Such theoretical inquiries may not seem to be immediately relevant to the everyday work of the lawyer or judge, but the analysis of the conceptual content of legal entitlements does have practical import. Normative assessments of the policies justifying particular patent doctrines are beyond the scope of this Article’s thesis, which establishes only the conceptual claim that the exclusion concept of patents insufficiently accounts for patents as property given its mistaken doctrinal and conceptual claims about the nature of property entitlements. Nonetheless, it is important to conclude with some observations of how the conceptual weaknesses of the exclusion concept

not arise from the patent, and the patent does not add anything in this respect. What it does is to grant the patentee the right to *exclude* everyone else from making, using, or vending the invention except with the permission of the patentee.”); FRANK Y. GLADNEY, RESTRAINTS OF TRADE IN PATENTED ARTICLES 18 (1910) (describing the “patent law right” as solely the right to “exclude others from making, using and selling” the patented invention); GEIER, *supra* note 231, at 5-6 (“While the patent states on its face that the exclusive right to make, use or sell is granted, this in reality is not the case, but what really is granted is the right to exclude others from making, using or selling.”); Thomas Reed Powell, *The Nature of a Patent Right*, 17 COLUM. L. REV. 663, 665 (1917) (“What the patent gives is the right to exclude others from making, using and vending the invention.”).

²⁴¹ See *supra* Part II.C.

²⁴² See *supra* Part II.B.

may impact patent law, although evaluating the normative implications of this insight can be fully addressed only through careful analysis of individual patent doctrines.

As a general matter, the conceptual analysis of the content of a legal entitlement creates the descriptive framework within which legislators, judges and lawyers work. In embracing the exclusion concept of patents, judges and scholars assume that this is the only possible conceptual foundation for their policy prescriptions in patent law. Of course, theory must necessarily abstract from certain details,²⁴³ and thus economics and concerns about innovation in science and technology certainly play a fundamental role in the creation and evolution of the legal rules defining and protecting patented inventions as property. Nonetheless, economists must use legal entitlements as basic units of analysis, and thus how one conceptualizes such legal rights can constrain what one sees as the appropriate descriptive and normative inputs that go into a coherent and comprehensive account of a legal doctrine.²⁴⁴ As the legal realists reminded us, normative assessments of the law are “empty without objective description of the causes and consequences of legal decisions.”²⁴⁵

This suggests two reasons to care about conceptual property theory and the role that it may play in modern patent doctrine. The first is doctrinal. The conceptual account of a legal entitlement guides courts in creating the specific doctrines necessary to secure the different elements of this entitlement. In 1824, for instance, Justice Joseph Story, one of the principal architects of the American patent system,²⁴⁶ observed that the “inventor has . . . a property in his inventions; a property which is often of very great value, and of which the law intended to give

²⁴³ See Merrill & Smith, *supra* note 187, at 398.

²⁴⁴ See generally *id.* (identifying how economists have defined “property” has directed their normative assessments of how these entitlements should be legally protected).

²⁴⁵ Felix S. Cohen, *Transcendental Nonsense and the Functional Approach*, 35 COLUM. L. REV. 809, 849 (1935).

²⁴⁶ See Frank D. Prager, *The Influence of Mr. Justice Story on American Patent Law*, 5 AM. J. LEGAL HIST. 254, 254 (1961) (noting that it is “often said that Story is one of the architects of American patent law”).

him the absolute *enjoyment* and *possession*.”²⁴⁷ To our modern eyes, this may sound like a confused account of the property rights secured by a patent,²⁴⁸ but in the nineteenth century, this was a pedestrian statement that merely recounted a concept of property that informed the legal enforcement of all property entitlements at that time.²⁴⁹

On the basis of defining patents in the same conceptual terms as real property or chattels—securing rights of possession, use and disposition—Justice Story and other nineteenth-century jurists created some of the unique legal doctrines in the American patent system. These included, among others, the default rules governing the commercialization of patented inventions,²⁵⁰ liberal canons for construing both patents and the patent statutes,²⁵¹ and the protection of patents as constitutional private property under the Takings Clause.²⁵² These nineteenth-century patent doctrines were informed by, and found support in, a conceptual account of patents as property on par with land and other tangible property entitlements.²⁵³ This unique American approach to defining patents as property rights, as opposed to defining them merely as special grants of personal privilege,²⁵⁴ confirms that the relationship between conceptual property theory and patent doctrine is neither hypothetical nor tenuous.

²⁴⁷ Ex parte Wood, 22 U.S. (9 Wheat.) 603, 608 (1824) (emphases added).

²⁴⁸ See *supra* note 89 and accompanying text.

²⁴⁹ See *supra* Part III.A.

²⁵⁰ See *supra* Part III.A.

²⁵¹ See Mossoff, *supra* note 84, at 998-1001 (discussing how courts expressly imported liberal interpretative canons from real property law into patent law).

²⁵² See generally Mossoff, *supra* note 149 (discussing long-forgotten case law in which courts enthusiastically protected patents as constitutional private property under the Takings Clause).

²⁵³ Given that the conceptual account of patents has changed since these doctrines were first created and enforced by nineteenth-century courts, it is intriguing that all three of these doctrines are now the subject of substantial discord within patent law. See, e.g., *Quanta Computer Inc v. LG Elect., Inc.*, 128 S. Ct. 2109 (2008) (holding that exhaustion doctrine is a per se rule that eliminates all patent rights in a sale of a patented invention); *Zoltek v. United States*, 442 F.3d 1345 (Fed. Cir. 2006) (per curiam), *rehearing en banc denied*, 464 F.3d 1335 (Fed. Cir. 2006) (holding that patents are not constitutional private property secured under the Takings Clause); Doug Lichtman & Mark A. Lemley, *Rethinking Patent Law’s Presumption of Validity*, 60 Stan. L. Rev. 45 (2007) (arguing that the liberal interpretative canons favoring patentees be eliminated or modified).

²⁵⁴ See generally Mossoff, *supra* note 84; B. ZORINA KHAN, *THE DEMOCRATIZATION OF INVENTION: PATENTS AND COPYRIGHTS IN AMERICAN ECONOMIC DEVELOPMENT, 1790-1920* (2005).

Is there a similar relationship today between conceptual property theory and patent doctrine? Given the canonical status of the exclusion concept of patents and the resulting priority given to the normative analysis of patent doctrine, it is harder to identify any such causal relationship. Simply put, there is less in-depth descriptive analysis within court decisions and scholarship about the conceptual content of patents as property entitlements.²⁵⁵ But it would be anomalous if the role of conceptual property theory within patent law was merely a historical artifact of the nineteenth century. In fact, there is some evidence that the conceptual account of patents as property was very much an issue of debate and discussion up through the heyday of legal realism in the nineteen thirties. At that time, at least one patent lawyer observed that the increasing difficulties in navigating the patent-antitrust nexus was in part a problem of how courts conceptually framed the legal entitlements secured in a patent.²⁵⁶

As in the nineteen thirties, there is substantial tumult within patent law today, and there is within this doctrinal upheaval an intriguing indication that conceptual property theory continues to influence patent jurisprudence, albeit implicitly. In its recent return to patent law, the Supreme Court has been highly critical of what it has perceived as the Federal Circuit's unprecedented formalism. The Supreme Court reversed the Federal Circuit's "categorical" approach in issuing injunctions against infringers,²⁵⁷ and it reversed the Federal Circuit's rule-like "rigid approach" in applying the patentability test that an invention be nonobvious.²⁵⁸ Several years earlier, the Supreme Court twice reversed the Federal Circuit's attempts at abrogating the doctrine of equivalents, which is a standards-based infringement doctrine that the Federal Circuit regarded

²⁵⁵ See *supra* notes 43-44 and accompanying text.

²⁵⁶ See Alfred McCormack, *Restrictive Patent Licenses and Restraint of Trade*, 31 COLUM. L. REV. 743, 743 (1931) ("The efforts of the courts to define the rights secured by a patent, where the patentee by a conditional license imposes some economic restraint on his licensee, have given rise to a considerable difference in opinion and much discussion.").

²⁵⁷ *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 394 (2006).

²⁵⁸ *KSR Intern. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739 (2007).

as infecting patent law with unacceptable indeterminacy.²⁵⁹ In these and other cases, the Court has reasoned that the Federal Circuit’s formalistic jurisprudence contradicted longstanding historical precedent in patent law, which justified its reversal.²⁶⁰

Yet the Supreme Court has also been charged with being unduly formalistic in its own patent jurisprudence, as evidenced by its most recent decision in *Quanta Computer v. LG Electronics*.²⁶¹ Here, the Supreme Court claimed to be following nineteenth-century case law on patent exhaustion,²⁶² which, as discussed in Part Three, comprised the same default rules as had been applied to real property conveyances. These legal rules provided patentees with the freedom to impose conditions or otherwise limit the property interest they conveyed to third-parties.²⁶³ As summarized in an early twentieth-century exhaustion quoted with approval in the *Quanta* decision: “[T]he right to vend is exhausted by a single, *unconditional* sale, the article sold being thereby carried outside the monopoly of the patent law and rendered free of every restriction which the vendor may attempt to put upon it.”²⁶⁴ But the *Quanta* Court reframed this “longstanding doctrine” as imposing a per se rule on patentees and their licensees, holding that “the initial authorized sale of a patented item terminates *all* patent rights to that item.”²⁶⁵

²⁵⁹ See *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 738-39 (2002) (scolding the Federal Circuit for having “ignored” Supreme Court precedent on the doctrine of equivalents in crafting a new “absolute bar” rule as part of the equivalents analysis); *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 26 n.3 (1997) (rejecting the de facto abrogation of doctrine of equivalents given the Federal Circuit’s overriding concerns about certainty in claim construction and infringement actions).

²⁶⁰ See *KSR Intern. Co.*, 127 S. Ct. at 1739; *eBay*, 547 U.S. at 393-94; *Festo Corp.*, 535 at 738-39; *Warner-Jenkinson Co.*, 520 U.S. at 26.

²⁶¹ 128 S. Ct. 2109 (2008).

²⁶² *Id.* at 2115 (citing *Bloomer v. McQuewan*, 14 How. 539, 549 (1853); *Bloomer v. Millinger*, 1 Wall. 340, 352 (1864); *Adams v. Burke*, 17 Wall. 453, 455 (1873)).

²⁶³ See *supra* Part III.A.

²⁶⁴ *Id.* at 2116 (quoting *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 516 (1917)) (emphasis added).

²⁶⁵ *Id.* at 2115 (emphasis added); *id.* at 2122 (“The authorized sale of an article that substantially embodies a patent exhausts the patent holder’s rights and prevents the patent holder from invoking patent law to control postsale use of the article.”).

Given that the *Quanta* Court claimed to be following “longstanding doctrine,” the contradiction between the nineteenth-century default rule and the *Quanta* Court’s per se rule is remarkable. If a sale exhausts all patent rights, then a patent-owner’s use of restrictive covenants or words of limitation in a conveyance instrument to limit the property interest conveyed to a third-party does not change this fact. This conflict has not gone unnoticed, as patent scholars quickly observed after the decision was handed down that the Court was either creating “inconsistent precedent”²⁶⁶ or “crafting new precedent.”²⁶⁷ Another scholar called the *Quanta* Court to task for its new per se exhaustion rule, concluding that “Justice Thomas’s opinion is a pure exercise in idle formalism.”²⁶⁸

These charges and countercharges of formalism in the recent patent law debates are an intriguing indicator of how conceptual property theory may still be at work within patent doctrine, given that all sides embrace the exclusion concept of patents. Recalling that the content of a legal entitlement creates a conceptual framework within which courts craft legal doctrines to secure the various elements of this entitlement, it is significant that the right to exclude is a purely formal, negative right. This creates a conceptual framework that lends itself to the enforcement of this right by rules, not standards.²⁶⁹ Property scholars have long understood this conceptual point, because trespass doctrine, which enforces a landowner’s right to exclude,²⁷⁰

²⁶⁶ Christopher Holman, *Quanta and its Impact on Biotechnology*, available at <http://holmansbiotechblog.blogspot.com/2008/06/quanta-and-its-impact-on-biotechnology.html> (last visited July 1, 2008). *But see* David McGowan, *Reading Quanta Narrowly*, available at <http://www.patentlyo.com/patent/2008/07/reading-quanta.html> (last visited July 29, 2008).

²⁶⁷ Shubha Ghosh, *The Quandry of Quanta: Thoughts on the Supreme Court Decision One Week Later*, available at http://lawprofessors.typepad.com/antitrustprof_blog/2008/06/the-quandry-of.html (last visited July 1, 2008).

²⁶⁸ *See* Richard A. Epstein, *The Disintegration of Intellectual Property*, at 42 (manuscript on file with author).

²⁶⁹ *Cf.* *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 436 (1982) (justifying a per se 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”).

²⁷⁰ *See* *Jacque v. Steenberg Homes, Inc.*, 563 N.W.2d 154, 159-60 (Wis. 1997) (discussing how trespass secures a landowner’s “right to exclude others”).

constitutes a formal per se rule determining with absolute precision in all cases whether one's property interest in a parcel of land has been breached.²⁷¹ Since patents are now defined solely by the right to exclude, it is unsurprising that patent infringement is often analogized to trespass.²⁷² Accordingly, patent claims are similarly analogized to the metes and bounds of real property—the bright-line threshold that triggers absolute liability for trespass.²⁷³ The pervasive use of trespass analogies in patent scholarship and case law reflects an elegant conceptual coherence between this real property doctrine and the exclusion concept of patents.²⁷⁴ Thus, it is little surprise that the Federal Circuit talks often of the need for bright-line rules in patent law that provide ex ante certainty to patentees and the public.²⁷⁵

It is striking that the exclusion concept of patents correlates with the jurisprudential malady that all sides of the recent patent law debates are accused of committing—formalism. This correlation stands as an intriguing indicator of how conceptual property theory may still be at work underneath the roiling normative debates over modern patent doctrine, continuing to

²⁷¹ See, e.g., Carol M. Rose, *Crystals and Mud in Property Law*, 40 STAN. L. REV. 577, 593-94 (1988) (discussing the normative economic analysis of trespass as a “clear, crystalline rule”); Henry E. Smith, *Property and Property Rules*, 79 N.Y.U. L. REV. 1719, 1767-68 (2004) (distinguishing the “[b]road, bright-line rules of trespass” from the “law of negligence and parts of nuisance law,” in which “uses do need to be individually delineated and evaluated . . . through standards”).

²⁷² 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”).

²⁷³ 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”).

²⁷⁴ See 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.”).

²⁷⁵ 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.”).

influence courts in the same ways that it influenced the historical evolution of these same doctrines.²⁷⁶ Of course, correlation is not necessarily causation, and further analysis of the cases and doctrines is necessary to establish with empirical precision the descriptive and normative issues that are determinative in these cases. But this requires first recognizing that the exclusion concept of patents is as relevant to understanding potential problems in modern patent doctrine as is normative analysis, and, unfortunately, this first step has thus far been dismissed by scholars and courts as simply “confusion.”²⁷⁷

In assessing the degree to which the exclusion concept of patents is contributing to the current turmoil in patent doctrine, it is important to recognize that conceptual analysis is not exclusive of economic or other forms of analysis. Since property theory does not determine results in all cases, its insights are complementary to other descriptive and normative analyses, such as the concerns already identified in scholarship about the Federal Circuit’s self-aggrandizement or its capture by special interests.²⁷⁸ In fact, the definition of a property entitlement in terms of the right to exclude may not produce formalism as a matter of logical necessity.²⁷⁹ Such finer details, though, are beyond the scope of the preliminary analysis here, which establishes only the analytically prior premise that the exclusion concept of patents correlates with potential problems in modern patent law—a correlation deserving of further study by scholars and courts.

²⁷⁶ See *supra* note 253 and accompanying text.

²⁷⁷ *King Instruments Corp. v. Perego*, 65 F.3d 941, 949 (Fed. Cir. 1995).

²⁷⁸ See, e.g., Timothy R. Holbrook, *The Supreme Court’s Complicity in Federal Circuit Formalism*, 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 1, 5 (2003) (“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.”); 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”).

²⁷⁹ See Eric R. Claeys, *Property 101: Is Property a Thing or a Bundle?* (unpublished manuscript on file with author) (arguing that the right to exclude is sufficiently plastic such that it permits competing methods of adjudication, including formal rules and granular standards).

The second reason why the exclusion concept of patents may be important in patent doctrine is that mistaken conceptual theory can frustrate clear normative analysis, such that scholarship and court decisions become incapable of focusing on the relevant descriptive or policy issues that necessarily inform legal doctrine. Lawyers, jurists, and scholars who misunderstand the conceptual structure of the longstanding doctrines with which they work may substantially change the law, ironically, while believing in good faith they are making the law conform better with its alleged foundational legal principles.²⁸⁰ If lawyers and jurists want to change patent doctrine, they may do so, but they need to be candid, especially with patentees, that they are making these changes. Otherwise, they risk disrupting what the Supreme Court recently referred to as “the legitimate expectations of inventors in their property”²⁸¹ (a not-too-subtle reference to takings doctrine under the Fifth Amendment).²⁸²

More important, they must justify these changes with conceptual and normative arguments that each earns its own keep. Law and economics, for instance, has long claimed as its principal theoretical strength its ability to offer a comprehensive, internally consistent descriptive account of the structure of the Anglo-American legal system.²⁸³ And it rightly recognizes that this descriptive account of doctrine is analytically distinct from a normative account, and that

²⁸⁰ See, e.g., Kieff, *supra* note 9, at 697 (“The foundation for the American patent system is purely economic.”); cf. Burk & Lemley, *supra* note 34, at 1597 (“While there have been a few theories of patent law based in moral right, reward, or distributive justice, they are hard to take seriously as explanations for the actual scope of patent law.”).

²⁸¹ *Festo Corp.*, 535 U.S. at 739.

²⁸² See Mossoff, *supra* note 149, at 693-95 (discussing how the *Festo* Court was using well-known concepts from takings doctrine in this case).

²⁸³ See, e.g., RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 25 (6th ed. 2003) (claiming that “the common law is best (not perfectly) explained as a system for maximizing the wealth of society”); William M. Landes & Richard A. Posner, *The Positive Economic Theory of Tort Law*, 15 GA. L. REV. 851 (1981) (discussing the “positive theory” of law and economics, which consists of descriptive analysis of past cases and doctrine); Alex Y. Seita, *Common Myths in the Economic Analysis of Law*, 1989 B.Y.U. L. REV. 993, 995-96 (1989) (noting that “a flood of legal scholarship has applied economic analysis across a broad range of noncommercial legal areas such as adjudication, civil rights, criminal law, and labor law”).

each must stand on its own two feet.²⁸⁴ Given the widespread acceptance of the exclusion concept of patents, scholars and courts have focused only on the normative aspects of the modern doctrinal debates, assuming the validity of their necessary conceptual priors.²⁸⁵ This assumption may no longer be tenable, as the exclusion concept of patents needs to be validated on its own conceptual terms. Scholars and courts may thus be bootstrapping the validity of the descriptive claim that patents secure only a right to exclude by their normative analyses of patent doctrines, which begs the question, since these normative analyses occur within a conceptual framework that determines in part the relevant inputs and outputs of such analyses.

These two insights about the value of conceptual property theory in patent law do not suggest that the right to exclude is irrelevant to patent law—this right certainly accounts for the all-too-important infringement doctrines available to a patentee.²⁸⁶ The function of these two insights is more limited in their scope: They simply reinforce this Article’s thesis that the exclusion concept of patents is analytically weak in explaining the structure of the American patent system. This conceptual infirmity is important because it may be exerting an unacknowledged influence in the increasingly turbulent debates over patent doctrine and policy.

It is also important to realize that conceptual property theory is by no means the exclusive cause of misplaced formalism or other potential problems in patent law. This Article’s thesis is not reductionist. It maintains only that the conceptual content of legal entitlements, such as

²⁸⁴ See DAVID D. FRIEDMAN, LAW’S ORDER 16 (2000) (“The [positive] Posner thesis that the common law is efficient leads naturally to the . . . most controversial part of law and economics: using economic analysis to decide what the law should be.”); Richard A. Posner, *Some Uses and Abuses of Economics in Law*, 46 U. CHI. L. REV. 281, 285 (1979) (“The distinction between positive and normative, between explaining the world as it is and trying to change it to make it better, is basic to understanding the law-and-economics movement.”).

²⁸⁵ See *supra* note 22 and accompanying text.

²⁸⁶ See, e.g., *King Instruments Corp. v. Pergo*, 65 F.3d 941, 947 (Fed. Cir. 1995) (“An act of infringement . . . trespasses on this right to exclude.”); *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 997 (Fed. Cir. 1995) (en banc) (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”); MERGES & DUFFY, *supra* note 32, at 25 (noting that “innumerable cases analogize claims to the ‘metes and bounds’ of a real property deed”).

patents, is relevant in defining the doctrinal framework in which these entitlements are deemed appropriate according to the normative metrics employed by courts and scholars. In the same way that Wesley Hohfeld's conceptual analysis of legal entitlements heavily influenced the evolution of modern American property law,²⁸⁷ the same may be said of patent law. This influence is deserving of further study in patent scholarship.

V. CONCLUSION

Almost a century ago, Wesley Hohfeld famously warned the legal profession that the absence of conceptual clarity in our legal entitlements can cause confusion and indeterminacy in the law.²⁸⁸ Hohfeld's conceptual analysis of legal entitlements, especially of property, established that the descriptive content of a legal entitlement can influence the ways in which courts and scholars define and justify the legal rules that protect these entitlements.²⁸⁹ Of course, conceptual theory does not necessarily decide particular cases, but it can impose descriptive blinders on courts and scholars that subtly tilt their seemingly more salient normative analyses of legal doctrine.

Patents are no exception to the fundamental role of conceptual analysis in legal doctrine. The widespread acceptance of the exclusion concept of patents has resulted in a prioritizing of normative analysis in both patent scholarship and court decisions, but this takes place within a

²⁸⁷ See Denise R. Johnson, *Reflections on the Bundle of Rights*, 32 VT. L. REV. 247, 251-57 (2007) (describing Hohfeld's "now-famous" work in establishing the bundle conception in property theory, which "is essential to an economic analysis of property"); Merrill & Smith, *supra* note 187, at 365 (recognizing that Hohfeld "provided the intellectual justification" for the bundle metaphor, and that "[d]ifferent writers influenced by realism took the metaphor to different extremes").

²⁸⁸ See Hohfeld, *supra* note 189, at 770 (explaining that "correct analysis . . . is . . . essential to the clear apprehension of the important teleological aspects of the various jural problems involved").

²⁸⁹ See, e.g., Ronald Dworkin, *Hart and the Concepts of Law*, 119 HARV. L. REV. F. 95 (2006) ("Wesley Newcomb Hohfeld's 1919 book *Fundamental Legal Conceptions* laid out the important logical distinctions on which [H.L.A.] Hart's account rested, and many other earlier legal philosophers—including, most notably, Hans Kelsen—also stressed the importance of the systematic organization of a legal system."); G. Edward White, *The American Law Institute and the Triumph of Modernist Jurisprudence*, 15 LAW & HIST. REV. 1, 26 (1997) (noting that "as both a jurisprudential and a cultural figure Hohfeld was an important presence in the [] founding" of the American Law Institute).

conceptual framework that helps shape this important discourse. In this respect, the exclusion concept of patents may have conceptually blinded the first forays into the economic analysis of patents by excluding on conceptual grounds certain property rights from the normative evaluation of the patent system.²⁹⁰

The unacknowledged role of conceptual theory within legal doctrine is not unique to patent law. Professors Thomas Merrill and Henry Smith have recently critiqued the normative 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,”²⁹¹ and Professor Smith has carried this argument into intellectual property theory.²⁹² However, they are doing so from within the framework of the legal realists’ exclusion concept of property.²⁹³ It is time to reconsider whether the exclusion concept of patents is analytically flawed and whether it may have blinded modern patent jurisprudence to important conceptual and normative features of the American patent system.

²⁹⁰ See, e.g., Kieff & Paredes, *supra* note 11, at 198 (arguing that “patents only give a right to exclude” and thus any “right to use is derived from sources external to IP law”).

²⁹¹ Merrill & Smith, *supra* note 187, at 398.

²⁹² See Smith, *supra* note 51, at 1742 (“It is here that exclusion has its strong point in its use of modularity as a method of managing complexity. Because of these advantages of property rights in dealing with complexity, the case against (or for) intellectual property rights cannot be derived from economic reasoning alone—as the emphasis on the nonrivalness of information or on incentives sometimes implies.”).

²⁹³ See *id.*; Merrill, *supra* note 27, at 730 (“[T]he right to exclude others is more than just ‘one of the most essential’ constituents of property—it is the *sine qua non*.”).