

PATENT PRIOR ART AND POSSESSION

TIMOTHY R. HOLBROOK*

ABSTRACT

Prior art in patent law defines the set of materials that the United States Patent and Trademark Office (USPTO) and courts use to determine whether the invention claimed in a patent is new and non-obvious. One would think that, as a central, crucial component of patent law, prior art would be thoroughly theorized and doctrinally coherent. Nothing could be further from the truth. The prior art provisions represent an ad hoc codification of various policies and doctrines that arose in the courts.

This Article provides coherency to this morass. It posits a prior art system that draws upon property law's conception of possession. Possession operates when an actor asserts dominion over a resource or object in a way that communicates that assertion to third parties.

In this way, public availability becomes the key lodestar to prior art. In the prior art context, the possession framework would divide prior art into two categories: prior art generated by third parties and prior art generated by the patent applicant herself. The former would require clear demonstration of publicly available information, suggesting that current law is wrong. As for the latter, a possession approach could treat inventor-generated material in the same way as third-party prior art. Alternatively we could take a strict statute of

* Vice Provost for Faculty Affairs and Asa Griggs Candler Professor of Law, Emory University. My thanks for comments from Scott Boone, Yaniv Heled, Cynthia Ho, Mark Janis, Dmitry Karshedt, Mark Lemley, Joe Miller, Nicole Morris, David Oedel, Sean Seymore, Liza Vertinsky, and Ramsi Woodcock. I presented earlier versions of this project at faculty workshops at Temple University Beasley School of Law and Tulane University Law School; the Georgia Intellectual Property Scholars Workshop, the Emory/University of Georgia Law Schools Joint Faculty Workshop, and the 2016 Vanderbilt Patent Roundtable. My thanks for comments from those participants. © 2018 Timothy R. Holbrook.

limitations approach to inventor-created uses and commercialization efforts, barring a patent if the inventor simply delays too long in filing her application, regardless of the public accessibility. Sadly, the status quo is an inconsistent blend of both. Finally, some forms of “secret prior art” should be addressed through administrative procedures.

The Article then assesses the advantages and disadvantages of such a prior art system, concluding that the benefits outweigh any disadvantages. It then also explores how patent law has done heavy lifting in the context of possession and public accessibility that property law has not. Patent law has more rigorously explored the appropriate audience for receiving the communications of possession. Property law stands to learn from patent law in this regard.

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INTRODUCTION

Patent law is a difficult and intimidating class for most law students. The mix of technology, law, and economics can seem daunting.¹ Some concepts may make intuitive sense, at least at a high level of generality. For example, the requirement that an invention must be new, or novel, makes sense because we do not want to award patents for things that have already been created.² Similarly, the requirement that an invention must be more than a trivial advance in the state of the art, in other words, non-obvious,³ is also easy to grasp, at least until the class jumps into the weeds of the doctrine.⁴ Both novelty and nonobviousness are relative, however. An assessment of those criteria requires a comparison between the invention as claimed in the patent and the “prior art,” the set of information generally known to the hypothetical person having ordinary skill in the art (PHOSITA).⁵

The definition of prior art is one area in which students usually stumble.⁶ The statutory provisions are complex and have been altered dramatically in the last few years. Under the Patent Act of 1952, prior art was defined by 35 U.S.C. § 102, which was, frankly, a mess.⁷ There was no rational structure to its provisions; it was merely a codification of previous judicial decisions arbitrarily listed in no particular order.⁸ Prior art under the 1952 Patent Act was devoid of any broader theoretical architecture that informed the

1. The difficulty should not discourage students, even those without technical backgrounds, from taking a patent law or intellectual property course. *See generally* Timothy R. Holbrook, *Patents for Poets*, 52 ST. LOUIS U. L.J. 795 (2008).

2. 35 U.S.C. § 102 (2012). *See generally* Sean B. Seymore, *Rethinking Novelty in Patent Law*, 60 DUKE L.J. 919, 930 (2011) (“A bedrock principle of patent law is that a patent cannot issue if it would remove technology that is already in the public domain. The corollary is that inventions ‘must be *new*, that is, bestowed for the first time upon the public by the patentee.’” (citations omitted) (quoting 1 WILLIAM C. ROBINSON, *THE LAW OF PATENTS FOR USEFUL INVENTIONS* 305 (Boston, Little, Brown & Co. ed., 1890)).

3. 35 U.S.C. § 103.

4. *See* Holbrook, *supra* note 1, at 797-800.

5. *See* Timothy R. Holbrook, *Patent Anticipation and Obviousness as Possession*, 65 EMORY L.J. 987, 990-95 (2016).

6. *See* Holbrook, *supra* note 1, at 798.

7. *See id.*

8. *See id.*

section.⁹ Given the lack of a theory, unsurprisingly many of the provisions overlap, creating considerable confusion.¹⁰

Section 102 was amended significantly with the adoption of the America Invents Act (AIA) in 2011.¹¹ The AIA shifted the U.S. patent system from one that awarded patents to the “first-to-invent” to one where the patent goes to the “first inventor to file” a patent application on the invention.¹² This move brought us closer to the rest of the world as, before the AIA, the United States was the only country to award patents to the first-to-invent.¹³ The AIA’s section 102 provides a clearer analytical structure, though it remains complex.¹⁴ Additionally, while much of the language in section 102 has an antecedent basis in the 1952 Patent Act,¹⁵ there remains considerable debate about the scope of the various provisions.¹⁶ Given that Congress imported much of the language in the AIA from the 1952 Patent Act,¹⁷ these terms also represent an ad hoc compilation of

9. *See id.*

10. *See id.*

11. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 3(b)(1), 125 Stat. 284, 285-87 (2011) (codified as amended in scattered sections of 35 U.S.C.).

12. *Id.* § 3, 125 Stat. at 285.

13. JANICE M. MUELLER, PATENT LAW 950 (5th ed. 2016).

14. *See* 35 U.S.C. § 102 (2012).

15. *See* Mark A. Lemley, *Does “Public Use” Mean the Same Thing It Did Last Year?*, 93 TEX. L. REV. 1119, 1135 (2015).

16. *See* *Helsinn Healthcare S.A. v. Dr. Reddy’s Labs. Ltd.*, No. 11-3962 (MLC), 2016 WL 832089, at *51 (D.N.J. Mar. 3, 2016) (“[T]he post-AIA on-sale bar also requires that the sale or offer for sale make the claimed invention available to the public.”), *rev’d sub nom.* *Helsinn Healthcare S.A. v. Teva Pharm. USA, Inc.*, 855 F.3d 1356 (Fed. Cir. 2017), *cert. granted*, 138 S. Ct. 2678 (2018). Compare Lemley, *supra* note 16, at 1135 (“Congress did not change the basic language establishing the core categories of prior art.”), and Robert P. Merges, *Priority and Novelty Under the AIA*, 27 BERKELEY TECH. L.J. 1023, 1035 (2012) (“In terms of the AIA, this means that an inventor’s non-informing public use or sale is a ‘disclosure’ under AIA § 102(a), by virtue of the facts that (1) the phrases ‘public use’ and ‘on sale’ in AIA § 102(a) implicitly incorporate prior case law, including prior cases on an inventor’s own non-informing uses; and (2) ‘disclosure’ in AIA § 102(b) means ‘any legitimate prior art reference under AIA § 102(a),’ which includes ‘public use’ and ‘on sale’ and therefore an inventor’s own non-informing public use prior art.”), with Robert A. Armitage, *Understanding the America Invents Act and Its Implications for Patenting*, 40 AIPLA Q.J. 1, 54 (2012) (“The overarching requirement for a disclosure to be ‘available to the public’ has been placed into new § 102(a)(1) in a manner making it virtually impossible to read it other than as an express repudiation of the *Metallizing Engineering* doctrine.”).

17. *See* Lemley, *supra* note 15, at 1135.

previous judicial decisions.¹⁸ As such, there still is no true theory of what constitutes prior art in patent law.

This state of affairs is problematic. The doctrines implementing these statutory provisions continue to evolve through case law with little theory to guide their development.¹⁹ This Article offers a theoretical construct that can unify the prior art categories and offer important insights into their current and future development. Drawing on the concept of “possession” from property law,²⁰ this Article suggests that prior art should be considered information known either to the broader general public, when talking about prior art generated by third parties, or to the particular patent applicant. By asking “who possessed the information,” various policies and concerns become clear. Indeed, the AIA embraces aspects of this approach: it excludes from prior art information generated by the applicant within one year of her application filing, whereas third-party prior art is not given this grace period.²¹

The concept of “possession” is central to, and pervasive throughout, property law.²² The first to take possession of, or occupy, a wild animal²³ or abandoned property²⁴ is the owner of the item. The first to take possession of lost property is the “finder” and is thus a bailee with an interest superior to all except for the true owner.²⁵ One who occupies and uses another’s land can become the true owner through adverse possession.²⁶

18. *See id.* at 1134-35.

19. *See id.*

20. *See infra* notes 123-29 and accompanying text.

21. 35 U.S.C. § 102(b)(1) (2012).

22. *See generally* Carol M. Rose, *Possession as the Origin of Property*, 52 U. CHI. L. REV. 73, 74 (1985) (“For the common law, *possession* or ‘occupancy’ is the origin of property.”).

23. *See* *Pierson v. Post*, 3 Cai. 175, 176-77 (N.Y. Sup. Ct. 1805).

24. *See* *Treasure Salvors, Inc. v. Unidentified Wrecked & Abandoned Sailing Vessel*, 640 F.2d 560, 571 (5th Cir. 1981) (“As a general rule, under the law of finds, a finder acquires title to lost or abandoned property by ‘occupancy’, i.e. by taking possession of the property and exercising dominion and control over it.”).

25. *See In re Savarino*, 1 F. Supp. 331, 334 (S.D.N.Y. 1932) (“[T]he law has been settled that the finder of a chattel becomes what may, perhaps, be aptly called a fortuitous bailee thereof with such a property therein as enables him to keep it against all the world except its rightful owner, and to defend it against all others with every remedy which is available to a bailee.”).

26. *See, e.g., Jake’s Granite Supplies, L.L.C. v. Beaver (In re Jake’s Granite Supplies, L.L.C.)* 442 B.R. 694, 699 (D. Ariz. 2010) (“Under Arizona law, a party claiming title, or in this case compensation, for real property by adverse possession must show that his or her

Carol Rose views possession in these contexts as a form of speech: someone who is claiming the object is telling others that the object is hers.²⁷ Others have explored how possession acts as a statement to third parties about ownership over the item at issue, which is important given the in rem nature of property rights.²⁸

These conceptions of possession also operate within patent law.²⁹ A necessary prerequisite to either the first to invent or first inventor to file regimes is that inventors possess the relevant inventions, as demonstrated through their patent application.³⁰ The patent statute requires that applicants sufficiently disclose their inventions to demonstrate that the applicants possessed their inventions as of the filing date³¹ and to ensure that others in the relevant technological field can make and use the claimed inventions without undue experimentation.³² The extent of the disclosure also can impact the scope of the rights afforded under the patent, both literally³³ and under the doctrine of equivalents.³⁴ Indeed, given that the patent system awards new property rights on a daily basis, allocating rights to the winner of the patent race, possession has even more salience in patent than in property law.³⁵

Patent law is different than other forms of property, however, in that merely winning the possession race against other competing

possession was exclusive, actual, open and notorious, hostile, under a claim of right, and continuous for the statutory period of ten years.”).

27. Rose, *supra* note 22, at 78-79.

28. *See generally* Holbrook, *supra* note 5, at 996-1006 (reviewing possession theory and its application to patent law).

29. *See id.*

30. *Cf.* Lisa Larrimore Ouellette, Pierson, *Peer Review and Patent Law*, 69 VAND. L. REV. 1825, 1831 (2016).

31. 35 U.S.C. § 112(a) (2012); *see* Ariad Pharm., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc).

32. § 112(a); *see In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988).

33. *See* The Incandescent Lamp Patent, 159 U.S. 465, 472 (1895); Timothy R. Holbrook, *Possession in Patent Law*, 59 SMU L. REV. 123, 157-68 (2006).

34. *See* Timothy R. Holbrook, *Equivalency and Patent Law's Possession Paradox*, 23 HARV. J.L. & TECH. 1 (2009). The doctrine of equivalents allows the patent to cover methods or devices that, while not literally the same as what the patent claims, is nevertheless insubstantially different in relevant part. *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 727 (2002) (“[A] patent protects its holder against efforts of copyists to evade liability for infringement by making only insubstantial changes to a patented invention.”).

35. *See* Holbrook, *supra* note 5, at 1005.

inventors is insufficient to get a patent.³⁶ The applicant also has to “win the race” against what is already known.³⁷ Patent applicants must show not only that they are the first to possess the invention by being the first to invent (under the 1952 Patent Act) or the first to file (under the AIA), but also that they are the first to possess the invention *ever*, relative to what is publicly known within the relevant field of technology.³⁸

Elsewhere I have explored how the use of possession informs the doctrines of anticipation and obviousness, positively and normatively.³⁹ In essence, both of these doctrines require the applicant to demonstrate that the public was not yet in possession of the claimed invention.⁴⁰ The doctrines of novelty and obviousness, therefore, delineate the “thing” that is the subject of possession, the invention.⁴¹

Possession goes beyond simply the “thing,” both in the property and patent contexts. To constitute possession, the possessor’s acts must communicate the exercise of dominion to third parties by some public act.⁴² Prior art in patent law—the set of materials against which the novelty and nonobviousness are assessed—also generally requires some level of public accessibility.⁴³ The possession lens therefore provides “a theoretical basis for investigating what [information] should count as ‘prior art.’”⁴⁴ In other words, novelty and obviousness are concerned with the sufficiency of the possession. Prior art doctrines, on the other hand, relate to the communicative function: the communicative act must be sufficiently public to be considered an act of possession, regardless of whether the prior art sufficiently discloses the invention.⁴⁵ The statutory provision

36. *See id.* at 1005-06.

37. *See id.*

38. *See id.*

39. *See id.* at 1005.

40. *Id.* at 994 (“Another way to think about novelty and non-obviousness, therefore, is to say that, to get a patent, the invention cannot already be within the possession of the public.”).

41. *See id.* at 1006.

42. *See id.* at 989.

43. *See id.* at 1010-11.

44. *See id.* at 995 n.31.

45. *See id.* at 1010-11.

governing prior art under both the 1952 Patent Act and America Invents Act is 35 U.S.C. § 102.⁴⁶

This Article offers a novel exploration of the prior art provisions of both patent acts and advances a new theoretical perspective on prior art, based on the concept of “possession.” This piece is particularly timely because the United States Patent and Trademark Office (USPTO) and the courts are confronting the new prior art provisions of the AIA.⁴⁷ As we transition from the 1952 Patent Act’s ad hoc definitions of prior art, as confusingly enumerated in 35 U.S.C. § 102,⁴⁸ to the AIA’s new, more logical, and yet more complex structure,⁴⁹ this Article’s interrogation of prior art is timely and important. It serves to answer some lingering questions about the scope and purpose of section 102 of the 1952 Patent Act while offering insight and potential answers to the issues that will be forthcoming under the AIA section 102.

Until recently, few scholars have considered the role of possession as it applies to intellectual property law.⁵⁰ Indeed, some have questioned its applicability.⁵¹ This piece continues my ongoing project of exploring the role of possession in patent law and how the ideas surrounding possession in the property context can inform patent law and doctrine. In my first article, I primarily looked at the role of the patent disclosure in demonstrating that an applicant had possession of the relevant invention.⁵² In the second article, I further elaborated the manner in which “possession” operates as a lever for tailoring the scope of patent protection, particularly when a device accused of infringing is not the same as the claimed invention but is trivially different, or, in patent parlance, is an equivalent.⁵³ The third explored the doctrines of anticipation and obviousness as relating to actual and constructive possession, respectively.⁵⁴

46. 35 U.S.C. § 102 (2012).

47. See *supra* notes 15-19 and accompanying text.

48. 35 U.S.C. § 102 (2006), amended by 35 U.S.C. § 102 (2012).

49. 35 U.S.C. § 102 (2012).

50. See, e.g., Ouellette, *supra* note 30, at 1826; Deepa Varadarajan, *Trade Secret Precautions, Possession, and Notice*, 68 HASTINGS L.J. 357, 361 (2017).

51. See *infra* Part IV.B.

52. See Holbrook, *supra* note 33, at 146.

53. See Holbrook, *supra* note 34, at 36-45.

54. See Holbrook, *supra* note 5, at 987-88, 994-95.

This Article builds on this earlier work by using the concept of possession to unify the various prior art doctrines and offer prescriptive insights as to current and future doctrine. Surprisingly, little academic attention has been paid to determining what set of materials is appropriate for determining whether an invention is novel or nonobvious.⁵⁵ Such oversight is surprising given that, to assess novelty and nonobviousness, the fact finder must necessarily determine what prior art is relevant.⁵⁶ The literature may have overlooked this dynamic in large part because, unlike much of patent law, what constitutes “prior art” is mandated by section 102 of the Patent Act.⁵⁷

Such abdication is inappropriate. While the statute does list various categories of prior art, the language of section 102 remains vague, requiring judicial interpretation to add flesh to the provisions.⁵⁸ Also, the hodgepodge nature of the statutory provisions suggests that something is amiss: there has not been a comprehensive consideration of what *should* constitute prior art and whether the present statutory schemes satisfy any perceived needs.

The Article proceeds as follows. Part I provides an overview of the statutory provisions that govern prior art both under the 1952 Patent Act and the AIA. Part II provides an overview of property’s conception of possession and explores its application in the patent context, particularly with respect to prior art. Part III then interrogates the prior art provisions and doctrines using the lens of possession. It breaks prior art into three broad categories: third-party generated prior art; inventor-generated prior art; and miscellaneous

55. Commentators have paid some attention to specific prior art issues, such as the on-sale bar. See David W. Carstens & Craig Allen Nard, *Conception and the “On Sale” Bar*, 34 WM. & MARY L. REV. 393 (1993); Timothy R. Holbrook, *The More Things Change, the More They Stay the Same: Implications of Pfaff v. Wells Electronics, Inc. and the Quest for Predictability in the On-Sale Bar*, 15 BERKELEY TECH. L.J. 933, 933, 938-39 (2000); Stephen Bruce Lindholm, Comment, *Revisiting Pfaff and the On-Sale Bar*, 15 ALB. L.J. SCI. & TECH. 213, 215 (2004). Regarding the geographic limits on certain forms of prior art in the United States, see Margo A. Bagley, *Patently Unconstitutional: The Geographical Limitation on Prior Art in a Small World*, 87 MINN. L. REV. 679, 679-86 (2003). For a discussion of inherent anticipation by the prior art, see Dan L. Burk & Mark A. Lemley, *Inherency*, 47 WM. & MARY L. REV. 371 (2005); Janice M. Mueller & Donald S. Chisum, *Enabling Patent Law’s Inherent Anticipation Doctrine*, 45 HOUS. L. REV. 1101 (2008).

56. See *supra* note 5 and accompanying text.

57. 35 U.S.C. § 102 (2012).

58. See, e.g., *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 57, 60-61, 63-64 (1998).

forms of prior art that do not readily fit into either of those categories. Part IV then aggregates the lessons of Part III to describe a prior art regime that would be consistent with possession principles, and then evaluates whether society would actually want such an approach. Part V then assesses the current property literature on possession and offers lessons that property could learn from patent law. In particular, patent law has wrestled with the issue of whether the communicative act has been sufficiently public to the relevant audience in a way that the courts in the property context have not. Patent law's PHOSITA construct demonstrates the importance of the audience in any theory of possession. A conclusion follows.

I. THE MORASS THAT IS PRIOR ART DOCTRINE

Defining what constitutes "prior art" is a critical aspect of the gatekeeping function performed by the USPTO and the federal courts, ensuring that patents are awarded for only merit-worthy inventions.⁵⁹ Novelty and nonobviousness are necessarily relative: the invention must be compared to what came before it.⁶⁰ Prior art provides this basis of comparison.⁶¹ Given the centrality of prior art, one would expect the law to be clear and straightforward.

Such intuition would be wrong. Under the 1952 Patent Act, the statutory provision governing the definition of prior art is an ad hoc codification of prior case law with no clear structural or policy design.⁶² The AIA, in contrast, offers a more refined structure to prior art, although its primary provisions were copied verbatim from one provision of the 1952 Patent Act.⁶³

Indeed, further complicating matters is the fact that we currently have two patent systems in the United States. While the AIA's prior

59. Randall Erickson, *What is Prior Art?*, ERICKSON L. GRP., PC, <http://www.ericksonlawgroup.com/law/patents/patentfaq/what-is-prior-art/> [<https://perma.cc/WR89-88B7>].

60. See §§ 102(a), 103.

61. See *id.* §§ 102(a), 103.

62. See *supra* notes 6-10 and accompanying text.

63. The types of prior art under section 102(a) of the AIA are the same as those of section 102(b) of the 1952 Patent Act, with the addition of the language "otherwise available to the public." Compare 35 U.S.C. § 102(b) (2006), with 35 U.S.C. § 102(a) (2012).

art provisions came into force in March 2013,⁶⁴ any application filed before the AIA's effective date is governed by the 1952 Patent Act.⁶⁵ Thus, until at least 2033 (i.e., twenty years from the date of those applications filed immediately before the transition to the AIA), the United States will have patents governed by both the 1952 Patent Act and the AIA.⁶⁶ Interpretations of the 1952 Act's prior art provisions will continue, meaning they will be dynamic.⁶⁷ And the courts have just begun to consider the meaning of the AIA.⁶⁸ Affording any sort of theoretical coherence to this situation is highly desirable.

This Part will first explore section 102 under the 1952 Patent Act and then will explain the operation of the AIA section 102. Next, it turns to consideration of how, in theory, prior art should be measuring whether the invention has been created already in the sense that the applicant or inventor is in possession of the invention. It explores how this metric should be defined, drawing on ideas of enablement and reduction to practice. It then turns this framework onto both Acts to offer insight into these provisions.

A. *The Kitchen Sink of the 1952 Patent Act's Section 102*

Section 102 of the 1952 Patent Act is, to be kind, unruly. It contains seven subsections that reflect a compilation of different rules and timing provisions that define whether certain acts constitute prior art.⁶⁹ For example, even though the United States was generally a "first-to-invent" regime under the 1952 Patent Act,⁷⁰ other provisions—called statutory bars—are instead tied to the filing date of a patent application and not the date of invention.⁷¹ Even the first-to-invent and statutory bar provisions are dispersed in

64. See U.S. PATENT & TRADEMARK OFFICE, MANUAL OF PATENT EXAMINING PROCEDURE § 2151 (9th ed., rev. 2018), <https://www.uspto.gov/web/offices/pac/mpep/mpep-2100.pdf> [<https://perma.cc/Q5XY-S449>].

65. See *id.* § 2159.01.

66. The term of a patent is twenty years from the filing date. See 35 U.S.C. § 154(a)(2) (2012).

67. See *supra* notes 6-10 and accompanying text.

68. See, e.g., *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2136 (2016).

69. See *Holbrook*, *supra* note 33, at 151; see also 35 U.S.C. § 102 (2006).

70. See § 102(a), (g) (tying availability of a patent to the date of invention).

71. See *id.* § 102(b), (d) (tying availability of a patent to the filing date).

different subsections.⁷² Sections 102(a), (e), (f), and (g) are all first-to-invent provisions, while sections 102(b) and (d) are statutory bars.⁷³ One might think that Congress would have organized the section into two distinct parts—the first-to-invent provisions in one part and the statutory bars in another—but Congress failed to do so.⁷⁴

The nature of the first-to-invent provisions and the statutory bars also means that the *performers* of the various acts differ. For the first-to-invent provisions, only activities by third parties could qualify as prior art: it would be impossible for the inventor to disclose the invention in some way before she invented it.⁷⁵ In contrast, the statutory bars, such as those in section 102(b), apply to activities by both third parties and the inventor herself.⁷⁶ Finally, section 102(d), which deals with delays by an inventor in filing in the United States after filing abroad, applies only to the inventor herself.⁷⁷

72. *See id.* § 102(a), (b), (d)-(g).

73. *See id.*

74. Although not relevant to this discussion, § 102 also had different territorial restrictions based on the nature of the activity. *See id.* § 102(a)-(b), (f). *See* Timothy R. Holbrook, *Territoriality Waning? Patent Infringement for Offering in the United States to Sell an Invention Abroad*, 37 U.C. DAVIS L. REV. 701, 709-11 (2004) (discussing various provisions of § 102 that implicate foreign activity). The AIA eliminated these territorial restrictions. Printed publications and patents counted as prior art regardless of where in the world they were located, whereas public uses and on-sale activity were limited to acts within the United States. *Compare* § 102(a)-(b) (noting relevance of patents and printed publications “in this or a foreign country”), *with* § 102(f) (lacking any territorial distinction or limitation). *See* 35 U.S.C. § 102(a) (2012).

75. Absent time travel.

76. *See* 35 U.S.C. § 102(b) (2006).

77. *See id.* § 102(d).

The below chart summarizes the various provisions of section 102⁷⁸:

Section	Activity Constituting Prior Art	Trigger date(s)	Third party, inventor, or both
102(a)	Patent; printed publication; known or used by others	Invention date	Third party
102(b)	Patent; printed publication; public use; on-sale	Critical date	Both
102(c)	Abandonment	Unclear	Inventor
102(d)	Foreign filing > 12 months before U.S. filing, and foreign patent issues before U.S. filing	Critical date/filing date	Inventor
102(e)(1)	Application filed before (1) invention date; and (2) application published	Invention date	Third party
102(e)(2)	Application filed before (1) invention date; and (2) patent issued	Invention date	Third party
102(f)	Enabling communication from inventor to applicant	Invention date	Third party
102(g)(2)	Other first-to-invent (first to conceive) and either first to reduce to practice or second to reduce to conception but with diligence; cannot abandon, suppress, or conceal	Invention date	Third party

78. *Id.* § 102. Section 102(c) appears to be a vestigial provision that suggests an inventor can lose the patent prior to filing an application even in circumstances where a statutory bar does not apply. *See* 2A DONALD S. CHISUM, CHISUM ON PATENTS § 6.03 (2018). The provision has been rarely applied, and the AIA eliminated this form of prior art. *Id.*

This ad hoc collection of statutory provisions generally reflects a codification of earlier case law.⁷⁹ As one can see, section 102 of the 1952 Patent Act lacks a coherent structure.

B. The AIA's Alterations to the Statutory Definition of Prior Art

When Congress adopted the AIA in 2011, it significantly reworked the way the United States's patent system operates. Instead of awarding patents primarily to the first to invent,⁸⁰ the first inventor to file a patent application generally will get the patent under the AIA.⁸¹ This change brought United States's patent law more closely into alignment with all other countries in the world, who have long awarded the patent to the first to file.⁸² United States law still diverges from other patent systems, however, because the later applicant may yet obtain the patent if the earlier applicant obtained the invention from the later applicant: one cannot steal the invention, win the race to the patent office, and get the patent.⁸³ In this scenario, the first applicant is not truly an inventor.

This change to a first-inventor-to-file system necessitated a change to the definitions of prior art. The AIA overhauled section 102, making it generally more coherent, albeit more complex, than the provisions in the 1952 Patent Act. Section 102(a) of the AIA provides the default definition of prior art.⁸⁴ Section 102(a)(1) defines as prior art any patent or printed publication that discloses the invention, a public use of the invention, or an offer to sell the

79. See *Shaw v. Cooper*, 32 U.S. 292, 315 (1833) (disqualifying inventions used in foreign countries from receiving a U.S. patent); *Collins v. Emerson*, 82 F.2d 197, 201 (1st Cir. 1936) (classifying disclosure of the invention in a printed publication more than two years prior as prior art); *Kear v. Roder*, 115 F.2d 810, 818 (C.C.P.A. 1940) (making disclosure of an invention in a printed publication within the United States or any foreign jurisdiction more than one year prior to the patent application an absolute bar to issuing the patent).

80. As discussed *supra*, the statutory bars at times will preclude a patent for someone, even if they are the first to invent. See 35 U.S.C. § 102(b) (2006); *supra* note 76 and accompanying text. Additionally, the second to invent can be awarded the patent if the first to invent abandoned, suppressed, or concealed the invention. 35 U.S.C. § 102(g).

81. See 35 U.S.C. § 102(a) (2012).

82. See Timothy R. Holbrook, *The Treaty Power and the Patent Clause: Are There Limits on the United States' Ability to Harmonize?*, 22 CARDOZO ARTS & ENT. L.J. 1, 6 (2004).

83. See § 102(b).

84. *Id.* § 102(a).

invention, so long the activity occurs before the filing date.⁸⁵ These four provisions come directly from the statutory bars of section 102(b) of the 1952 Patent Act.⁸⁶ Section 102(a)(1) adds a fifth category, where the invention is “otherwise available to the public.”⁸⁷ Unlike the 1952 Patent Act, there is no per se grace period within the definition of prior art.⁸⁸

Section 102(a)(2) relates to the first-to-file aspect of the system.⁸⁹ It notes that an earlier filed patent application qualifies as prior art, so long as the application is published or the patent issues.⁹⁰ This language tracks section 102(e) of the 1952 Patent Act, although it changes the trigger date from the invention date to the filing date.⁹¹

Under the AIA, section 102(b) defines the *exceptions* to the default definitions of prior art offered in section 102(a).⁹² Certain disclosures that qualify under section 102(a) will not actually be prior art if they fall within the delineated exceptions.⁹³ In parallel fashion, section 102(b)(1) defines the exceptions to section 102(a)(1), and section 102(b)(2) creates the exceptions to section 102(a)(2).⁹⁴

Section 102(b)(1) has two subsections, (A) and (B).⁹⁵ The former excludes from prior art any “disclosure ... made by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor” made “1 year or less” from the filing date.⁹⁶ In this way, the AIA works very similarly to the 1952 Patent Act for disclosures that have their genesis with the inventors.⁹⁷ Section 102(b)(1)(A) gives the inventor a one-year grace period to file an application when any potentially invalidating disclosure under section 102(a)(1) is made.⁹⁸

85. *Id.* § 102(a)(1).

86. *See* 35 U.S.C. § 102(b) (2006).

87. 35 U.S.C. § 102(a)(1) (2012).

88. *Compare* 35 U.S.C. § 102(b) (2006), *with* 35 U.S.C. § 102(a)(1) (2012).

89. *See* 35 U.S.C. § 102(a)(2) (2012).

90. *See id.*

91. *Compare id.*, *with* 35 U.S.C. § 102(e) (2006).

92. 35 U.S.C. § 102(b) (2012).

93. *See id.*

94. *See id.*

95. *Id.* § 102(b)(1)(A)-(B).

96. *Id.* § 102(b)(1)(A).

97. *Compare id.* § 102, *with* 35 U.S.C. § 102 (2006).

98. *See* 35 U.S.C. § 102(b)(1)(A) (2012).

Section 102(b)(1)(B) works somewhat differently. This provision excludes as prior art disclosures made by third parties if “the subject matter disclosed had, before such disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor” within one year of the filing date.⁹⁹ This somewhat odd provision—one that makes United States law unique (again) in the world—effectively allows an inventor to antedate third-party prior art if the inventor had previously disclosed the invention publicly before the prior art reference, or if a third party who took the invention from the inventor disclosed it before the reference.¹⁰⁰ Section 102(b)(1)(B) effectively makes the United States system a “first-inventor-to-file-or-disclose” regime. This opportunity to antedate a third party reference, however, is limited to one year: if the inventor publicly discloses the invention more than a year before filing an application, then that disclosure will serve as prior art under section 102(a)(1).¹⁰¹

Section 102(b)(2) creates exceptions to the first-to-file rule delineated under section 102(a)(2).¹⁰² Section 102(b)(2)(A) excludes an earlier filed patent application if “the subject matter disclosed was obtained directly or indirectly from the inventor or a joint inventor.”¹⁰³ This provision is similar to section 102(f) of the 1952 Patent Act, which precluded patent protection if the applicant had taken the idea, or, in patent parlance, derived the invention, from another inventor.¹⁰⁴ This provision goes to the “first-inventor-to-file” aspect of the AIA by excluding the earlier filed patent application

99. *Id.* § 102(b)(1)(B).

100. *See id.*

101. *See generally* KIMBERLY A. MOORE ET AL., PATENT LITIGATION AND STRATEGY 678-84 (5th ed. 2018) (offering various examples of how earlier disclosures by an applicant would antedate other references, but could still be used to invalidate the patent if published more than a year before the filing date).

102. § 102(b)(2).

103. *Id.* § 102(b)(2)(A).

104. 35 U.S.C. § 102(f) (2006) (denying a patent if the applicant “did not himself invent the subject matter sought to be patented.”). Of course, it differs because the act of derivation removes the earlier filed application as prior art, but it does not define derivation as a form of prior art. *Compare id.*, with 35 U.S.C. 102(b)(2)(A) (2012).

as prior art against the second filer if the first filer “stole” the invention.¹⁰⁵

Section 102(b)(2)(B) operates similarly to the “first-to-invent-or-disclose” dynamic discussed for section 102(b)(1)(B).¹⁰⁶ An earlier filed patent will not qualify as prior art if, prior to the filing date of the earlier application, the invention was “publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor.”¹⁰⁷ So, an inventor can antedate an earlier filed application if she shows that she publicly disclosed the invention beforehand.¹⁰⁸ Although section 102(b)(2)(B) does not have a one-year time limit,¹⁰⁹ any disclosure by the inventor more than a year prior to her filing date would serve as prior art under section 102(a)(1).¹¹⁰ So, even though the earlier filed patent would not be prior art against her application, her own disclosure would be.¹¹¹

Finally, section 102(b)(2)(C) excludes an earlier filed application if “the subject matter disclosed and the claimed invention, not later than the effective filing date of the claimed invention, were owned by the same person or subject to an obligation of assignment to the same person.”¹¹² For example, suppose I file an application, and it turns out that another inventor at my employer, Emory University, submitted an application on the same subject matter before I did. If we both are obligated to assign the patent to Emory, then the earlier application will not count as prior art against me.

This provision is an expansion of what existed under the 1952 Patent Act. Under that act, 35 U.S.C. § 103(c) excluded certain forms of prior art “where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.”¹¹³ This provision applied only to prior art for obvious-

105. See 35 U.S.C. § 102(b)(1) (2012).

106. See *id.* § 102(b)(1)(B), (b)(2)(B).

107. *Id.* § 102(b)(2)(B).

108. See *id.*

109. *Id.*

110. See *id.* § 102(a)(1).

111. MOORE ET AL., *supra* note 101, at 678-84.

112. § 102(b)(2)(C).

113. 35 U.S.C. § 103(c)(1) (2006).

ness purposes, however.¹¹⁴ By creating an exclusion as to all prior art, the AIA expanded the reach of this exclusion to both anticipation and obviousness.¹¹⁵

The statutory provisions under both the 1952 Patent Act and the AIA defining prior art remain complex. The skeletal statutory language of the 1952 Patent Act has resulted in considerable judicial gloss not apparent from the statute itself.¹¹⁶ The AIA took that language directly from the 1952 Patent Act but provided no guidance.¹¹⁷ As such, considering prior art through the theoretical frame of possession is timely as the courts begin to determine the extent to which the AIA departs from, or merely incorporates, the pre-AIA case law.

The AIA structure distinguishes acts by the inventor from those of third parties. In some regards, this distinction makes sense. The inventor is in full control of any disclosures of the invention as well as the filing of the application. We may want to create obligations on, and opportunities for, inventors in terms of developing and disclosing the invention. In contrast, inventors likely are not privy to the knowledge of third parties until it becomes publicly available.¹¹⁸ Thus, the nature of the prior art depends on who created it, which can impact how we view the act of possession. Inventors, as the lowest cost avoider in these circumstances, may have additional burdens in terms of promptly filing their patent application.¹¹⁹

The requirement for public accessibility maps onto property law's conception of possession, where a claimant must perform some sort of communicative act to third parties to stake their claim over some item.¹²⁰ The next Part explores the theoretical construction of possession and how it relates to patent law.

114. *Id.*

115. *See* 35 U.S.C. § 102(b)(2)(C) (2012).

116. *See* *Gerner v. Moog Indus., Inc.*, 383 F.2d 56, 58-59 (8th Cir. 1967) (holding that a patent for shock absorber component could constitute prior art for an application for a different use of that component, like a steering column); *Rohr Aircraft Corp. v. Rubber Teck, Inc.*, 266 F.2d 613, 618 (9th Cir. 1959) (addressing how much improvement over a prior invention is enough to call something an invention distinct from prior art to be patentable).

117. *See* § 102; *supra* note 17 and accompanying text.

118. *See* § 102(b).

119. *See, e.g., supra* note 80-81.

120. *See* *Ghen v. Rich*, 8 F. 159, 160 (D. Mass. 1881) (stating that killing a whale and leaving marks of "appropriation" was enough to establish a claim of ownership).

II. POSSESSION, PROPERTY, AND PATENTS

Patent lawyers and litigators routinely talk about prior art as subject matter that is in the “public domain.”¹²¹ Such generalization masks the complexity of the statutory regime, as well as the ambiguities in what is considered public. The requirement for some sort of “publicness” for most forms of prior art invites comparison to property law’s conceptions of possession.¹²²

Possession has been central to real and personal property since the time of the Romans.¹²³ Some commentators view it as the origin of property.¹²⁴ Possession acts as a way of demarcating what items are generally owned among competing claimants.¹²⁵ Given the in rem nature of property, any claim of property must be communicated to third parties, who may be strangers to the claimant.¹²⁶ Mere intent—a mental state—alone is insufficient.¹²⁷

As Carol Rose has noted, possession is “a kind of communication, and the original claim to the property looks like a kind of speech, with the audience composed of all others who might be interested in claiming the object in question.”¹²⁸ Henry Smith similarly recognized the salience that possession has for coordinating interests among competing claimants: “[P]ossession is the basic module, in the sense of a regime connecting persons to objects for purposes of rights availing against others.”¹²⁹ Possession in the property context

121. See, e.g., *Schering Corp. v. Geneva Pharm., Inc.*, 339 F.3d 1373, 1379 (Fed. Cir. 2003).

122. See *infra* Part III.

123. See Thomas J. McSweeney, *Property Before Property: Romanizing the English Law of Land*, 60 BUFF. L. REV. 1139, 1160 (2012); see also Yun-Chien Chang, *Introduction, to LAW AND ECONOMICS OF POSSESSION* 1, 1, 4 (Yun-Chien Chang ed., 2015) (“Possession is a two-thousand-year old institution.”).

124. See Richard A. Epstein, *Possession as the Root of Title*, 13 GA. L. REV. 1221, 1221 (1979) (discussing property rights and exclusive possession); Thomas W. Merrill, *Ownership and Possession*, in *LAW AND ECONOMICS OF POSSESSION*, *supra* note 123, at 9, 12 (noting that common law systems “exhibit a tendency to treat possession and ownership at least implicitly as interchangeable concepts”); Rose, *supra* note 22, at 75.

125. See *Ghen*, 8 F. at 160-61.

126. See Varadarajan, *supra* note 50, at 382.

127. *Id.* (“Intent alone will not do. Because of the notice or signaling function of possession, the claimant must engage in affirmative, observable acts with regard to the resource.”).

128. Rose, *supra* note 22, at 78-79.

129. Henry E. Smith, *The Elements of Possession*, in *LAW AND ECONOMICS OF POSSESSION*, *supra* note 123, at 65, 80.

therefore requires communication to third parties—the relevant public.

The case law bears this observation out. The classic case of *Pierson v. Post*, a dispute over a fox pelt, hinged on who first “possess[ed]” the wild fox.¹³⁰ The court was split between two theories. The majority adopted a rule that would award the fox (or any wild animal) to the first person to physically possess the fox, to trap the fox, or to mortally wound the fox while in pursuit; mere pursuit alone was insufficient.¹³¹ The dissent would have awarded the fox to the hunter who had a “reasonable prospect ... of taking” the animal.¹³² The majority rule provided the requisite communication to third parties: clear acts demarcating the animal as someone else’s.¹³³ The dissent’s rule, however, would have created considerable ambiguity as to what constituted a “reasonable prospect ... of taking,” which would have depended on factors that may not have been perceptible to third parties.¹³⁴ The *Pierson* story is also not a “labor-reward” story, where the property right goes to the person whose exertion justifies the property award: Pierson was the “saucy intruder” who jumped in at the last minute to kill the fox and take it away.¹³⁵ The act of possession is a clear statement to third parties; it is not meant to reward effort.¹³⁶

Haslem v. Lockwood is to similar effect, although it sounds in labor theory as well, in contrast with *Pierson*.¹³⁷ In *Haslem*, a dis-

130. 3 Cai. 175, 176-77 (N.Y. Sup. Ct. 1805).

131. *Id.* at 179. Technically the latter two conditions are dicta because Pierson actually killed the fox and carried it away. *Id.* at 178 (“The foregoing authorities are decisive to show that mere pursuit gave Post no legal right to the fox, but that he became the property of Pierson, who intercepted and killed him.” (emphasis added)).

132. *Id.* at 182 (Livingston, J., dissenting) (“[P]roperty in animals *ferae naturae* may be acquired without bodily touch or manucaption, provided the pursuer be within reach, or have a reasonable prospect (which certainly existed here) of taking, what he has thus discovered an intention of converting to his own use.”).

133. *Id.* at 178 (majority opinion).

134. *Id.* at 182 (Livingston, J., dissenting); see Rose, *supra* note 22, at 76-77 (“The problem with assigning ‘possession’ prior to the kill is, of course, that we need a principle to tell us when to assign it. Shall we assign it when the hunt begins? When the hunter assembles his dogs for the hunt? When the hunter buys his dogs?”).

135. *Pierson*, 3 Cai. at 181 (Livingston, J., dissenting) (describing Pierson as “a saucy intruder, who had not shared in the honours or labours of the chase”).

136. Rose, *supra* note 22, at 77 (“The clear-act principle suggests that the common law defines acts of possession as some kind of *statement*.”).

137. 37 Conn. 500, 506 (1871).

pute arose over the ownership of manure.¹³⁸ The plaintiff swept up the abandoned droppings of a third party into “heaps” but left them; the defendant then came and took the manure away.¹³⁹ The plaintiff ultimately prevailed as the manure had become his property.¹⁴⁰ Although the decision resonates with aspects of Lockean labor theory,¹⁴¹ it is also important to the reasoning that, by putting the manure into piles, the plaintiff had altered the manure’s natural state.¹⁴² A third party could observe this change in the manure’s state and should recognize that someone else has claimed the manure as his property.¹⁴³ The manure did not naturally land in the heaps, sending a sufficient signal of possession to the public that someone was asserting dominion over it.¹⁴⁴ Thus, under property law, possession requires an act that communicates to the public that the party is exerting its dominion over the item.¹⁴⁵ It is a form of public notice.

Possession in the property context thus has two necessary elements. First, there must be some item over which a party is asserting dominion.¹⁴⁶ Second, the party must act in a way to

138. *Id.* at 505.

139. *Id.*

140. *Id.* at 507.

141. *Id.* at 506 (“[T]he plaintiff had changed its original condition and greatly enhanced its value by his labor.”).

142. *Id.* at 507; see also Richard Keck & Damon Goode, *Of Misappropriated Manure Heaps, Rude Robots and Broken Promises: The (D)evolving Law of Database Protection*, 57 BUS. LAW. 513, 514-15 (2001); Theodore J. Westbrook, *Comment, Owned: Finding a Place for Virtual World Property Rights*, 2006 MICH. ST. L. REV. 779, 792-94 (“A common theme present in these cases is that one who has expended labor in the acquisition of a good is entitled to it over one who has expended little or no labor in its acquisition.”).

143. *Haslem*, 37 Conn. at 507.

144. Carol M. Rose, *The Law Is Nine-Tenths of Possession: An Adage Turned on Its Head*, in *LAW AND ECONOMICS OF POSSESSION*, *supra* note 123, at 40, 50 (“Evidently, the piled-up status of the manure was supposed to be a sufficient signal of the plaintiff’s claim.”); Richard A. Posner, *Savigny, Holmes, and the Law and Economics of Possession*, 86 VA. L. REV. 535, 561-62 (2000) (“He took possession of it by raking it into heaps, and the heaps were adequate notice to third parties, such as the defendant, that the manure was (no longer) abandoned.”); Varadarajan, *supra* note 50, at 382-83; see also Tsu-Man Peter Tu, Note, *Computer Software Copyright Infringement*, 25 SETON HALL L. REV. 412, 440 n.144 (1994) (“This Lockean labor theory of property is age-old. [See, e.g., *Haslem*, 37 Conn. at 506-07] (holding that a plaintiff who raked manure into heaps has property rights in manure because he greatly increased its value by his labor). It is, however, nevertheless inadequate.”).

145. See *infra* note 147 and accompanying text.

146. See Merrill, *supra* note 124, at 11 (“For these nineteenth-century commentators, possession refers to a particular relationship between a person and a thing.”); Rose, *supra* note

communicate this exercise of control to third parties.¹⁴⁷ When these elements are satisfied, then a tangible object is said to be in the possession of the particular party.¹⁴⁸

The first condition—the thing—refers to a physical object.¹⁴⁹ As a result, some commentators have suggested that possession does not operate in the world of intangibles, such as with patents and other forms of intellectual or intangible property.¹⁵⁰ These commentators are focused only on one particular aspect of patent law: the patent itself.¹⁵¹

These critiques are not persuasive as they fail to consider the full panoply of issues within the realm of patent law. To begin with, they ignore the importance of patent law's disclosure obligations, which act to demonstrate that the inventor was in possession of the invention as claimed.¹⁵² The disclosure describes the invention and, as a public document, communicates to the world what the inventor has claimed.¹⁵³ These critiques also ignore the various predicate acts required to obtain a patent that can operate like possession. Indeed, Carol Rose acknowledges that the concept of possession has salience with respect to the act of invention.¹⁵⁴ Because conception is a key aspect of determining the act of invention, possession necessarily implicates prior art and the “winner” of the patent race. Moreover,

144, at 50 (noting that there must be a “thing claimed”).

147. Merrill, *supra* note 124, at 11 (noting that for possession, one must “behav[e] in such a way that others recognize that he or she intends to maintain control over the thing”); Rose, *supra* note 144, at 50 (“[L]egal possession consists of signals—signals that the claimant intends to do something (though it is not clear what) with the thing claimed.”); Rose, *supra* note 22, at 78-79; *see also* Smith, *supra* note 129, at 81 (“Possession law, like all law, is a form of communication.”).

148. *See supra* note 147.

149. *See, e.g.*, Merrill, *supra* note 124, at 25.

150. *See id.* (“Possession is limited to tangible objects, that is, things that have physical dimensions.... [O]ne cannot possess intangible rights, such as future interests, security interests, intellectual property rights, bank account balances, or shares of stock in a corporation.”).

151. *See, e.g., id.*

152. Holbrook, *supra* note 33, at 127; *see Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc) (“In other words, the test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.”).

153. Holbrook, *supra* note 5, at 987, 990.

154. Rose, *supra* note 144, at 44 (“*De facto* possession without more says nothing about how the possessor got the property, whereas for legal title, that issue is exceedingly important if not essential. Does a property claim arise from some version of first or original possession, like discovery or invention?”).

additional literature shows that people can feel as if they possess intangibles.¹⁵⁵ As such, the application of possession theory to intangibles—and thus to patent law—is possible and, indeed, appropriate.

In fact, third-party prior art, at a general level, tracks the requirements of possession strikingly well. First, the prior art must disclose the invention in whole or in part,¹⁵⁶ which corresponds to the “thing” to be possessed in the tangible property context.¹⁵⁷ The requirements of novelty and nonobviousness can be explained through conceptions of possession.¹⁵⁸ Anticipation requires an enabling disclosure, which demonstrates that the prior art, and thus the public, was in possession of the invention.¹⁵⁹ Similarly, an invention is obvious when the public is effectively, or constructively, in possession of the claimed invention because the person having ordinary skill in the art could readily make the claimed invention based on the aggregate knowledge in the art.¹⁶⁰ These doctrines govern the first aspect of possession: identifying the “thing” that someone is attempting to possess.

The focus in this Article is on the second aspect of possession: the requirement for communication to the public. The lodestar of third-party prior art has been public accessibility, such that the public must have been able to find the art generally, even if finding it would be difficult.¹⁶¹ Thus, the prior art must be able to communicate the content of its disclosure to the PHOSITA, our proxy for the public.¹⁶² The requirement for public accessibility thus tracks directly onto possession’s communication requirement. The following Part explores the concept of possession and how it can inform our under-

155. See Daphna Lewinsohn-Zamir, *What Behavioral Studies Can Teach Jurists About Possession and Vice Versa*, in *LAW AND ECONOMICS OF POSSESSION*, *supra* note 123, at 128, 130-35 (noting the endowment effect for intangible things and arguing that “behavioral studies cast doubt on the assumption that ‘possession’ necessarily requires a significant physical component.”).

156. See *supra* notes 31-32 and accompanying text.

157. See *supra* notes 149-50 and accompanying text.

158. See generally Holbrook, *supra* note 5, at 1006-12 (describing the relationship between patent anticipation and possession).

159. Seymore, *supra* note 2, at 931-32.

160. See Holbrook, *supra* note 5, at 1029.

161. See *id.*

162. For a brief discussion of the role of the PHOSITA see *infra* notes 480-94 and accompanying text.

standing of prior art, offering descriptive and prescriptive insights into current doctrine.

III. PATENT PRIOR ART AND POSSESSION

Assessments of both novelty and nonobviousness require a basis of comparison. The basis of that comparison is the prior art, which, at least with respect to third-party activities, is limited to publicly available information.¹⁶³ Of course, that need not be the case. An invention's novelty and nonobviousness could be absolute: one would not get a patent (or an extant patent would be invalid) if the invention or obvious variants had been created before the relevant time of comparison, regardless of whether that information was publicly available. Trade secrets,¹⁶⁴ for example, would be able to invalidate a patent, regardless of who possessed the secret and whether it was publicly available. While finding such secret prior art might be difficult as a practical matter, one could envision such a system. But we have never had such a prior art regime.¹⁶⁵

Prior art generally takes two forms: a tangible embodiment of the claimed invention, or a written disclosure of it.¹⁶⁶ Under the former type of prior art, the creation of the physical instantiation of the invention demonstrates possession.¹⁶⁷ Under the latter, which includes earlier patents, printed publications, and sales of the invention based on a written description of the invention, the reference must individually provide an enabling disclosure in order to anticipate the invention or, in combination with other references, render the invention obvious.¹⁶⁸ The enablement requirement acts as the lever for demonstrating possession: the disclosure must show how to make the claimed invention.¹⁶⁹

163. I address inventor-generated prior art and the somewhat hybrid derivation proceedings in Parts III.B and III.C, *infra*.

164. For a brief discussion of trade secrecy, see *infra* text accompanying notes 488-92.

165. See Holbrook, *supra* note 5, at 1011.

166. See *infra* notes 195-96 and accompanying text.

167. See *infra* notes 201-04 and accompanying text.

168. See *infra* notes 256-60 and accompanying text.

169. See generally Holbrook, *supra* note 5, at 990-1001 (explaining the connection between patent law and possession).

The AIA created another category of prior art when the invention was “otherwise available to the public.”¹⁷⁰ This Part will also explore that vague catch-all provision and examine what might be reasonable to include as that sort of prior art, such as oral disclosures.¹⁷¹ For all forms of prior art, the reference must be accessible to the public, which is consistent with the requirements of possession theory.¹⁷² Part IV will review the different types of third-party prior art and demonstrate how consistent they are with possession concepts.

To further explore how prior art comports—or fails to comport—with conceptions of possession, the Article divides prior art into three categories. The first is prior art created by third parties.¹⁷³ In other words, this is information generated by someone other than the patent applicant or patent holder. Within this first category are two subcategories: activities where a third party has physically created the invention,¹⁷⁴ and activities where the third party discloses the invention in written form.¹⁷⁵

The second category is prior art generated by the applicant or patent holder herself.¹⁷⁶ In this context, something the inventor has created will preclude the patent. The category of applicant-generated prior art is also subdivided into tangible creations and written descriptions of the invention.

I make this initial split between third-party and inventor prior art for two reasons. Under the 1952 Patent Act, various doctrines have evolved that treat third-party prior art differently from that of the inventor.¹⁷⁷ The AIA formalized the distinction between third-party prior art and inventor prior art by creating a grace period only for inventor prior art.¹⁷⁸ In other words, inventor-generated activity

170. 35 U.S.C. § 102(a)(1) (2012).

171. *See infra* Part III.A.3.

172. *See supra* notes 22-35 and accompanying text.

173. *See infra* Part III.A.

174. *See infra* Part III.A.1.

175. *See infra* Part III.A.2.

176. *See infra* Part III.B.

177. *See infra* notes 311-18 and accompanying text; *see also* Holbrook, *supra* note 33, at 155 (exploring this dynamic).

178. *See* 35 U.S.C. § 102(b)(1) (2012).

does not qualify as prior art if it arises within the year before the inventor files her application.¹⁷⁹

The third category of prior art covers what some have deemed as forms of “secret” prior art: information that is not necessarily available to the public at the relevant date.¹⁸⁰ I place in this category earlier filed patent applications¹⁸¹ and acts of derivation,¹⁸² which occur when the applicant obtained the invention from someone else. Because these acts are not necessarily public, they pose a challenge for a purely possession-based system of prior art.¹⁸³ I consider these three categories, and the various forms of prior art that fall within them, below.

A. Prior Art Generated by Someone Other than the Patent Applicant

Both the 1952 Patent Act and the AIA define as prior art activities by third parties that publicly disclose the invention, precluding an applicant from obtaining a patent.¹⁸⁴ Prior art takes two general forms—physical instantiations of the invention and written descriptions of the invention in a publication of some sort. This Section discusses each of those sets of prior art using the lens of possession.

1. Physical Creations of the Invention Must Be Publicly Accessible

Under both the 1952 Patent Act and the AIA, physical creations of the invention can qualify for prior art if two conditions are met.¹⁸⁵ The first requirement relates to timing: the creation must take place before the relevant date as defined by the statute. For the 1952 Patent Act, depending on the provision at issue, the relevant date

179. *See id.*

180. *See infra* note 408 and accompanying text.

181. *See infra* Part III.C.2.

182. *See infra* Part III.C.1.

183. Recall the public notice aspect of possession. *See, e.g., supra* notes 126-29 and accompanying text.

184. *See* § 102(b)(1); 35 U.S.C. § 102 (2006).

185. *See* 35 U.S.C. § 102(a)-(b) (2012); 35 U.S.C. § 102(a)-(b) (2006).

would be either the applicant's invention date¹⁸⁶ or the date one year prior to the applicant's filing date, known as the critical date.¹⁸⁷ Second, for these acts to qualify as prior art, there must be some sort of public accessibility to the creation as well.¹⁸⁸ This Part describes these various prior art provisions and explores them from a possession-based perspective.

a. A Prior Invention Under the 1952 Patent Act

The epitome of the “first-to-invent” system under the 1952 Patent Act is found in 35 U.S.C. § 102(g)(2).¹⁸⁹ This provision's relationship to possession at a general level is straightforward: if someone else possessed the invention before the patent applicant, then no patent should be allowed.¹⁹⁰ To show that someone was a prior inventor, the earlier actor has to demonstrate two things: that she had the complete idea of the invention, and that she memorialized that idea physically or in writing.¹⁹¹ The former requirement, the complete idea of the invention, is known in patent parlance as conception.¹⁹² Conception is the complete mental idea of the invention, and thus conception exists entirely in the mind of the inventor.¹⁹³ The second aspect of invention—memorializing the invention in some way—is

186. 35 U.S.C. § 102(a) (2006).

187. *Id.* § 102(b).

188. *Id.* § 102(a)-(b).

189. *Id.* § 102(g)(2). Section 102(g)(1) of the 1952 Patent Act is similar to § 102(g)(2), but it is limited to interferences, proceedings used to determine who, among competing inventors, should receive the patent. *Id.* § 102(g)(1). This provision is not truly a prior art provision because it deals only with awarding priority and not assessing novelty or nonobviousness. The primary purpose of this provision was to afford applicants the opportunity to rely upon their foreign inventive acts in proving the invention date. *See infra* note 412. Before Congress amended this provision to create the two distinct provisions of § 102(g)(1) and § 102(g)(2), only inventive acts within the United States could be used to prove priority. *See* 35 U.S.C. § 102(g) (1952).

190. *See* 35 U.S.C. § 102(g)(2) (2006).

191. *See id.*

192. *See* *Coleman v. Dines*, 754 F.2d 353, 359 (Fed. Cir. 1985) (“It is settled that in establishing conception a party must show possession of every feature recited in the count, and that every limitation of the count must have been known to the inventor at the time of the alleged conception.”).

193. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1376 (Fed. Cir. 1986) (“Conception is the ‘formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention.’” (quoting 1 ROBINSON ON PATENTS 532 (1890))).

known as reduction to practice.¹⁹⁴ The creator can build a functional version of the invention, known as an actual reduction to practice.¹⁹⁵ Alternatively, an inventor can file a patent application, even if she has not built a working version of the invention, so long as the application sufficiently discloses how to make and use the claimed invention, known as a constructive reduction to practice.¹⁹⁶

Under the 1952 Patent Act, the first to invent is the person who (1) is the first to conceive of the invention and (2) is either the first to reduce the invention to practice or, if not the first, is diligent in doing so.¹⁹⁷ The most important aspect of the inventive act, therefore, is that of conception.¹⁹⁸ The first to conceive but second to reduce to practice can win the patent race and thus be deemed the first to invent.¹⁹⁹ Indeed, “[c]onception defines the legally operative moment of invention under § 102(g).”²⁰⁰

The acts of conception and reduction to practice cannot be made in secret, however. If someone wants to be deemed the first to invent, she cannot abandon, suppress, or conceal the invention.²⁰¹ If the inventor keeps the invention hidden from the world, she is no longer deemed the first to invent; a subsequent inventor would then be entitled to the patent.²⁰²

This disqualification epitomizes possession theory. Creating the invention—the “thing” under the first requirement for possession—is insufficient without an act that communicates the invention to the public in some manner.²⁰³ Concealing or abandoning the

194. *See id.*

195. *Id.* (“Actual reduction to practice requires that the claimed invention work for its intended purpose.”).

196. *Id.* (“[C]onstructive reduction to practice occurs when a patent application on the claimed invention is filed.”).

197. 35 U.S.C. § 102(g) (2006); *see also* *Brown v. Barbacid*, 436 F.3d 1376, 1378 (Fed. Cir. 2006) (“The party that is first to conceive the invention in interference, if last to reduce the invention to practice, is entitled to the patent based on prior conception if, as first to conceive, he exercised reasonable diligence from a time before the other party’s conception date to his own reduction to practice date.”).

198. *See Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 60 (1998) (“The primary meaning of the word ‘invention’ in the Patent Act unquestionably refers to the inventor’s conception rather than to a physical embodiment of that idea.”).

199. *See Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1577 (Fed. Cir. 1996).

200. *See Invitrogen Corp. v. Clontech Labs., Inc.*, 429 F.3d 1052, 1063 (Fed. Cir. 2005).

201. § 102(g)(2).

202. *See id.*

203. *See supra* notes 125-29, 147-48 and accompanying text.

invention results in the loss of the status of first to invent because, in one sense, the inventor did not satisfy the conditions of possession.²⁰⁴ The first-to-invent aspects of § 102(g) map quite precisely onto the requirements of possession as a descriptive matter.²⁰⁵

b. Public Use and Possession

A physical creation of an invention by a third party can also qualify as prior art outside of the section 102(g) context.²⁰⁶ The 1952 Patent Act precluded a patent if the invention was known or used by someone other than the applicant before the applicant's invention date or was used publicly more than a year before the applicant's filing date.²⁰⁷ Under the AIA, third-party public uses of the invention are prior art if they arise before the filing date.²⁰⁸

For these forms of prior art, there is a tangible item that is the basis of the act of possession, a physical instantiation of the invention by the third party. These forms of prior art also reflect possession's requirement of communication to third parties,²⁰⁹ although with some complications. At the extremes, patent law has been consistent with possession in this regard: truly public uses of the invention qualify as prior art, while secret uses of the invention do not.²¹⁰ To be in public use, the invention must be accessible to the public,²¹¹ which maps well onto possession theory.²¹² For example,

204. See § 102(g).

205. See *id.*

206. See *id.* § 102(a)-(b).

207. *Id.*; cf. Elec. Storage Battery Co. v. Shimadzu, 307 U.S. 5, 19 (1939) (finding public use bar applying to independent third party activity). An invention can be on-sale under section 102(b) of the 1952 Patent Act and section 102(a) of the AIA even if the invention has not been physically reduced to practice. See Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 63 (1998). I take up disclosures of the invention via description and written materials in the next subsection.

208. 35 U.S.C. § 102(a) (2012). The Federal Circuit has applied the *Pfaff* test to this provision, which means that an invention can be on-sale absent a physical embodiment, so long as there is a sufficient description of the invention to permit a skilled artisan to make the invention. See generally Helsinn Healthcare S.A. v. Teva Pharm. USA, Inc., 855 F.3d 1356 (Fed. Cir. 2017) (applying *Pfaff* standard to the AIA), *cert. granted*, 138 S. Ct. 2678 (2018). Unlike the 1952 Patent Act, the AIA provides a one-year grace period only for public uses and sales activity that originate with the inventor. See 35 U.S.C. § 102(b)(1) (2012).

209. See *supra* notes 125-29, 147-48 and accompanying text.

210. See *infra* notes 211-17.

211. An invention is in public use if it was accessible to the public or commercially

letting guests at a party use the invention is a classic public use.²¹³ The rule is fairly harsh. A single public use of the invention, even if to only one other person, can trigger the bar.²¹⁴

Secret uses of an invention by a third party do not qualify as prior art.²¹⁵ To qualify as a secret, generally the third party had to act affirmatively to keep the invention secret, such as by using confidentiality agreements or taking other steps to withhold the invention from the public.²¹⁶ Excluding secret uses from the prior art is consistent with possession theory; the user is seeking to avoid communicating information about the invention to the public. When a party takes affirmative steps to withhold something from the public, it cannot be said to satisfy the communication aspect of

exploited. *See Invitrogen Corp. v. Biocrest Mfg., L.P.*, 424 F.3d 1374, 1380 (Fed. Cir. 2005).

212. *See supra* notes 125-29, 146-51 and accompanying text.

213. *See, e.g., Beachcombers Int'l, Inc. v. WildeWood Creative Prods., Inc.*, 31 F.3d 1154, 1160 (Fed. Cir. 1994) (allowing party guests to use patented kaleidoscope is invalidating public use).

214. *Elec. Storage Battery Co. v. Shimadzu*, 307 U.S. 5, 20 (1939) (noting “a single use for profit, not purposely hidden” can qualify as an invalidating public use); *Egbert v. Lippmann*, 104 U.S. 333, 336 (1881) (“The use of a great number may tend to strengthen the proof, but one well-defined case of such use is just as effectual to annul the patent as many.”).

215. *See Dey, L.P. v. Sunovion Pharm., Inc.*, 715 F.3d 1351, 1355 (Fed. Cir. 2013) (“[S]ecret or confidential third-party uses do not invalidate later-filed patents.”); *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1550 (Fed. Cir. 1983) (“There is no reason or statutory basis, however, on which Budd’s and Cropper’s secret commercialization of a process, if established, could be held a bar to the grant of a patent to Gore on that process.... As between a prior inventor who benefits from a process by selling its product but suppresses, conceals, or otherwise keeps the process from the public, and a later inventor who promptly files a patent application from which the public will gain a disclosure of the process, the law favors the latter.”); *Del Mar Eng’g Labs. v. United States*, 524 F.2d 1178, 1182 (Ct. Cl. 1975); *Nat’l Graphics, Inc. v. Brax Ltd.*, 151 F. Supp. 3d 903, 908 (E.D. Wis. 2015) (“Travel Tags’ confidential prior use was not an invalidating public use under § 102(b).”), *on reconsideration in part*, No. 12-C-1119, 2016 WL 843304 (E.D. Wis. Mar. 1, 2016).

216. *Dey*, 715 F.3d at 1355 (“For that reason, we have applied section 102(b) to invalidate a patent based on third-party use when the third party ‘made no attempt to maintain confidentiality or to deliberately evade disclosure,’ made no ‘discernible effort to maintain the [invention] as confidential,’ or ‘made no efforts to conceal the device or keep anything about it secret.’” (internal citations omitted)); *W.L. Gore*, 721 F.2d at 1549; *cf. Egbert v. Lippmann*, 104 U.S. 333, 336 (1881) (noting use may be public if made “without limitation or restriction, or injunction of secrecy”); *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1335 (Fed. Cir. 2005) (“Wei made no attempt to maintain confidentiality or to deliberately evade disclosure. Wei’s activities may erect a third party public use bar.”).

possession theory.²¹⁷ The public is not in possession of the claimed invention if the invention is not communicated.

Tougher legal and possession issues arise in other factual contexts, however. The publicness of these uses is not truly binary. Instead, many uses of the invention by third parties lie somewhere on a continuum of public accessibility that fall between the extremes of clearly public and clearly secret uses.²¹⁸ These scenarios arise when there is a use by a third party, but the invention itself is occluded in some way from the public.²¹⁹ The use is not secret in the sense of being kept confidential, but the use itself does not reveal the invention to the public.²²⁰ For example, imagine a patented lens for a photocopier.²²¹ Someone using the machine likely would not realize the invention is contained therein, but nevertheless they would be using the invention.²²² The courts generally have provided a capacious definition of what constitutes public use.²²³

Should such noninforming uses be considered prior art from a possession viewpoint? Historically, such uses have qualified as public uses. The Supreme Court held expressly that such uses

217. *Dey*, 715 F.3d at 1359 (“And here, a reasonable jury could conclude that if members of the public are not informed of, and cannot readily discern, the claimed features of the invention in the allegedly invalidating prior art, the public *has not been put in possession* of those features.” (emphasis added)).

218. See Charles F. Pigott, Jr., *The Concepts of Public Sale and Use*, 49 J. PAT. OFF. SOC’Y 399, 400 (1967) (“In many instances where a machine is used publicly, the patented invention relates to an internal component which is hidden inside the machine and cannot be seen by the public. Nevertheless, if the machine itself is in public use, then all parts thereof whether or not hidden from view are also deemed to be in public use.”).

219. See *id.*

220. See *id.*

221. See, e.g., U.S. Patent No. 3,436,145 (“Focusing Lens Pair Combined with Photocopying Objective”).

222. See Holbrook, *supra* note 5, at 1011.

223. The D.C. Circuit, prior to the creation of the Federal Circuit, described the scope of the public use bar in this fashion:

The statutory term “public use” has been given an extraordinarily broad meaning.... Thus, the fact that there is but one user, or the invention is given without profit, or that it is hidden from the general public’s eye, would seem to be immaterial. Nor need the user even realize he is using the invention. It is immaterial that the use was without the inventor’s consent, or that the use was due to factors not his fault and beyond his control. It may be fair to conclude that public use exists where the invention is used by, or exposed to, anyone other than the inventor or persons under an obligation of secrecy to the inventor.

Watson v. Allen, 254 F.2d 342, 345 (D.C. Cir. 1958).

qualify as prior art in *Egbert v. Lippman*.²²⁴ The invention in *Egbert* was a novel corset spring.²²⁵ As the invention was worn in undergarments, it generally was not visible to the public.²²⁶ Nevertheless, the Court viewed this use to be public,²²⁷ invalidating the patent in the case.²²⁸

Egbert and its progeny²²⁹ are inconsistent with the communication requirement of possession. As noted by the dissent in *Egbert*, the use of the invention was clearly not known to the general public: “If the little steel spring inserted in a single pair of corsets, and used by only one woman, covered by her outer-clothing, and in a position always withheld from public observation, is a *public* use of that piece of steel, I am at a loss to know the line between a private and a public use.”²³⁰ Through a possession lens, noninforming uses do not demonstrate sufficient communication of the invention to the public. From this perspective, *Egbert* is wrongly decided. For third-party public uses, possession theory suggests that third party noninforming uses should not qualify as prior art. Possession theory requires some affirmative communicative act,²³¹ not merely passive activity in hopes that someone notices. For third-party noninforming uses, the general public is not aware of the invention.²³² Thus, a truly possession-based conception of public use would shift patent law to exclude noninforming uses as prior art. The important line to be drawn would no longer be between secret and noninforming uses, but instead between informing and noninforming uses, with only the former constituting prior art.

224. 104 U.S. 333, 337 (1881).

225. *Id.* at 335.

226. *Id.* at 336.

227. *Id.* at 337.

228. *Id.* at 337-38.

229. See *Pronova Biopharma Norge AS v. Teva Pharm. USA, Inc.*, 549 F. App'x 934, 940 (Fed. Cir. 2013); *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 424 F.3d 1374, 1382 (Fed. Cir. 2005); *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1335 (Fed. Cir. 2005).

230. *Egbert*, 104 U.S. at 339 (Miller, J., dissenting).

231. See *supra* note 147 and accompanying text.

232. See *supra* notes 215-17 and accompanying text.

c. On-Sale Activity by Third Parties as Prior Art

In contrast to prior uses (at least with respect to informing uses), the law surrounding the on-sale forms of prior art weaves a more complicated tale from a possession perspective. To qualify as prior art, first, an invention must be the subject of a formal commercial offer for sale²³³ and be ready for patenting.²³⁴ An invention can be ready for patenting under two circumstances: when the invention has been reduced to practice, or when a party has prepared diagrams and written descriptions of the invention sufficient to permit one of skill in the art to make the claimed invention.²³⁵ In this fashion, sales-based prior art is a natural bridge between the in-kind and written forms of prior art.

The on-sale bar is harsh. Just as a single public use can render a claimed invention invalid, so can a single offer to sell a single unit of the invention preclude patentability under the on-sale bar.²³⁶ Moreover, a mere offer to sell the invention can trigger the bar; the sale need not be consummated to preclude a patent.²³⁷ Public sales of an invention, such as at a car dealership, would qualify as invalidating sales activity.²³⁸

233. *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 67 (1998). Subsequent to *Pfaff*, the Federal Circuit clarified that a formal commercial offer to sell, as defined by contract law principles, is required for the on-sale bar to apply. See *Rotec Indus., Inc. v. Mitsubishi Int'l Corp.*, 215 F.3d 1246, 1255 (Fed. Cir. 2000) (“As a result, we conclude that the meaning of ‘offer to sell’ is to be interpreted according to its ordinary meaning in contract law, as revealed by traditional sources of authority.”). For criticisms of the requirement for a formal commercial offer for sale based on contract law principles, see Timothy R. Holbrook, *Liability for the “Threat of a Sale”: Assessing Patent Infringement for Offering to Sell an Invention and Implications for the On-Sale Patentability Bar and Other Forms of Infringement*, 43 SANTA CLARA L. REV. 751, 783-84 (2003); Mark D. Janis & Timothy R. Holbrook, *Patent Law’s Audience*, 97 MINN. L. REV. 72, 124-25 (2012); Lucas S. Osborn, *The Leaky Common Law: An “Offer to Sell” As a Policy Tool in Patent Law and Beyond*, 53 SANTA CLARA L. REV. 143, 176 (2013).

234. *Pfaff*, 525 U.S. at 67-68.

235. *Id.*

236. See, e.g., *In re Theis*, 610 F.2d 786, 791 (C.C.P.A. 1979); see also MUELLER, *supra* note 13, at 264.

237. *Grp. One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 1048 (Fed. Cir. 2001) (“Only an offer which rises to the level of a commercial offer for sale, one which the other party could make into a binding contract by simple acceptance (assuming consideration), constitutes an offer for sale under [the on-sale bar].”).

238. See, e.g., *Evans Cooling Sys., Inc. v. Gen. Motors Corp.*, 125 F.3d 1448, 1452 (Fed. Cir. 1997).

The history as to secret sales, though, is a bit more complex than that of secret uses.²³⁹ Indeed, one could argue that, by definition, an offer to sell necessarily implicates the broader public because the offer is between two distinct parties.²⁴⁰ As a result, there is a certain “publicness” to any offer to sell. Nevertheless, courts generally have viewed purely confidential third-party sales activity as not qualifying as prior art.²⁴¹ One of the policies underlying the on-sale bar is the “policy against removing inventions from the public which the public has justifiably come to believe are freely available to all as a consequence of prolonged sales activity.”²⁴² Secret sales would not trigger this public reliance.

The exclusion of confidential sales by third parties maps onto possession theory quite well. The requirement for communication to third parties arises because of the *in rem* nature of property.²⁴³ The communication, therefore, should be to strangers, not merely to a party with whom one is transacting. As such, possession theory supports the current law that secret offers to sell the invention by persons other than the applicant should not qualify as prior art. It would also suggest that sales need to be nonconfidential, and revelatory to a broader public, to constitute prior art.

d. Lessons for Physically-Based Prior Art from Possession Theory

As the previous discussion demonstrates, possession provides important descriptive and prescriptive insights into third-party

239. See generally *MDS Assocs. v. United States*, 37 Fed. Cl. 611, 632-33 (1997) (exploring history of the on-sale bar and secret third-party sales), *aff'd*, 135 F.3d 778 (Fed. Cir. 1998).

240. Cf. *Egbert v. Lippman*, 104 U.S. 333, 336 (1881) (“We remark, secondly, that, whether the use of an invention is public or private does not necessarily depend upon the number of persons to whom its use is known. If an inventor, having made his device, gives or sells it to another, to be used by the donee or vendee, without limitation or restriction, or injunction of secrecy, and it is so used, such use is public, even though the use and knowledge of the use may be confined to one person.”).

241. See, e.g., *MDS Assocs.*, 37 Fed. Cl. at 633.

242. *UMC Elecs. Co. v. United States*, 816 F.2d 647, 652 (Fed. Cir. 1987), *overruled by Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55 (1998); see also *Pfaff*, 525 U.S. at 65 (“The patent laws therefore seek both to protect the *public’s right to retain knowledge already in the public domain* and the inventor’s right to control whether and when he may patent his invention.” (emphasis added)).

243. See *supra* notes 126-27 and accompanying text.

prior art created by physical instantiations of the invention. Possession suggests that uses must be public, so that “non-informing” uses would not qualify as prior art.²⁴⁴ Similarly, secret sales activity would also not qualify as prior art.²⁴⁵

An additional dynamic that possession theory implicates is the experimental use negation of prior art. Generally, if the physical embodiment has been created for experimental purposes, it will not count as prior art, at least with respect to activity by the patent applicant.²⁴⁶ It is not clear whether the doctrine applies to the use or sales of the claimed invention by independent inventors, i.e., third-parties unrelated to the inventor.

The policy underlying the experimental use negation of public use as it relates to the inventor is clear: inventors should be given the chance to perfect their invention in order to file a proper patent application.²⁴⁷ Otherwise, inventors would be forced to file premature applications to avoid the bar. As the Supreme Court noted, “[t]he use of an invention by the inventor himself, *or of any other person under his direction*, by way of experiment, and in order to bring the invention to perfection, has never been regarded as such a use.”²⁴⁸ The emphasis on a third party being under the direction of the inventor begs the question of whether independent third-party experimentation can negate the public use bar.

These policy concerns are not present in the third party context: the third party generally has not filed a patent application, so the concern is no longer present. Thus the question remains whether experimentation by a third party can negate the public use and on bars as to that third party’s activities.²⁴⁹ Some courts have concluded that the experimental use negation is inapplicable to third party activities.²⁵⁰ Others, however, have applied the negation to

244. See *supra* Part III.A.1.b.

245. See *supra* Part III.A.1.c.

246. See *Elizabeth v. Pavement Co.*, 97 U.S. 126, 134 (1877); *Electromotive Div. of Gen. Motors Corp. v. Transp. Sys. Div. of Gen. Elec. Co.*, 417 F.3d 1203, 1210 (Fed. Cir. 2005) (discussing experimental use in the on-sale bar context); *Lough v. Brunswick Corp.*, 86 F.3d 1113, 1121 (Fed. Cir. 1996) (discussing experimental use in the public use context).

247. See *infra* notes 365-66.

248. *Elizabeth*, 97 U.S. at 134 (emphasis added).

249. See *Pigott*, *supra* note 218, at 419 (arguing for a distinction between inventor and third party experimental use).

250. See *Magnetics, Inc. v. Arnold Eng’g Co.*, 438 F.2d 72, 74 (7th Cir. 1971) (per curiam);

third party activities.²⁵¹ The earlier doctrine of “failed experimentation,” where the earlier independent inventor’s efforts failed, would seem to support applying the experimental use doctrine to third party activities because courts did not deem failed experimentation as invalidating.²⁵² The Federal Circuit has yet to confront this question squarely, leaving it open. There is dicta in two Federal Circuit opinions, however, that suggests the court will reject independent third party experimentation as a negation of the statutory bars.²⁵³

Mistop, Inc. v. Aerofin Corp., 298 F. Supp. 2d 224, 230 (D. Conn. 2003) (“The inventor’s lack of control or direction over the use is given great weight in the analysis; there can be no experimental use when the testing is not done for the benefit of the inventor.”); Dow Chem. Co. v. Mee Indus., 264 F. Supp. 2d 1018, 1038 n.29 (M.D. Fla. 2002) (“The experimental negation of the on-sale bar, however, applies only to the inventor or someone under the inventor’s direction.”), *aff’d in part, vacated in part, rev’d in part sub nom.* Dow Chem. Co. v. Mee Indus., Inc., 341 F.3d 1370 (Fed. Cir. 2003); Code Alarm, Inc. v. Directed Elecs., Inc., 919 F. Supp. 259, 263-64 (E.D. Mich. 1996) (experimental use limited to inventor or inventor-controlled experimentation); Moxness Prods. Inc. v. Xomed Inc., No. 86-100-CIV-J-14, 1988 WL 281579, at *5 (M.D. Fla. July 21, 1988) (“Only the inventor, and not ‘another’ person, would be warranted in asserting the experimental use exception.”), *aff’d in part, rev’d in part*, 891 F.2d 890 (Fed. Cir. 1989); Pennwalt Corp. v. Akzona Inc., 570 F. Supp. 1097, 1108 (D. Del. 1983) (“The law is clear that the experimental use exception to the public use and on sale bar of § 102(b) applies to experiments of the inventor or persons under his control, not to third parties.”), *aff’d*, 740 F.2d 1573 (Fed. Cir. 1984).

251. *See* Mfg. Research Corp. v. Graybar Elec. Co., 679 F.2d 1355, 1362 (11th Cir. 1982) (assuming third party experimental use could negate public use bar); *Watson v. Allen*, 254 F.2d 342, 347 (D.C. Cir. 1958). *See generally* CHISUM, *supra* note 78, § 6.02 (characterizing *Watson* as holding “that the experimental nature of use by a third-party precluded application of the statutory bar without considering the difference between use by the inventor and use by a third-party”).

252. *See, e.g.*, *Parkhurst v. Kinsman*, 18 F. Cas. 1198, 1201 (C.C.S.D.N.Y. 1849) (“Crude and imperfect experiments, equivocal in their results, and then given up for years, cannot be permitted to prevail against an original inventor, who has perfected his improvement and obtained his patent.”), *aff’d*, 59 U.S. 289 (1855). *See generally* Mark D. Janis, *Mr. Nicolson’s Cane*, 59 ARIZ. L. REV. 647, 674-75 (2017) (discussing cases in which abandoned experimentation did not invalidate a later patent and their implications for the experimental use negation).

253. *See* *Baxter Int’l, Inc. v. COBE Labs., Inc.*, 88 F.3d 1054, 1060-61 (Fed. Cir. 1996) (“[P]ublic testing before the critical date by a third party for his own unique purposes of an invention previously reduced to practice and obtained from someone other than the patentee, when such testing is independent of and not controlled by the patentee, is an invalidating public use, not an experimental use.”); *In re Hamilton*, 882 F.2d 1576, 1581 (Fed. Cir. 1989) (citing *Magnetics* favorably and noting that “[t]he experimental use doctrine operates in the inventor’s favor to allow the inventor to refine his invention or to assess its value relative to the time and expense of prosecuting a patent application. If it is not the inventor or someone under his control or ‘surveillance’ who does these things, there appears to us no reason why he should be entitled to rely upon them to avoid the statute.”).

One could argue that experimentation by independent inventors should not negate invalidating public uses or offers to sell. The policy interest in ensuring that an inventor has reduced the invention to practice prior to filing a patent application²⁵⁴ does not apply to third parties, who have not applied for a patent. Thus any use or sale could be viewed as prior art, regardless of whether the purpose was to experiment. So long as the acts were publicly accessible, the information about the invention—experimental or not—has entered the public domain.

Possession theory, however, suggests that such experimentation should not qualify as invalidating prior art. It cannot be said that the public is in possession of the invention, regardless of how public the activity, if it is unknown whether the invention actually works at that time.²⁵⁵ This is true even for third-party activity. Thus, even though the policies underlying the experimental use negation differ for third party activity, this analysis suggests that they, too, should negate a potentially invalidating offer to sale or public use. In essence, the “thing” is missing from the possession analysis because the public would not know whether the invention actually works.

2. “Paper” Disclosures of the Invention by Third Parties: Earlier Patents, Printed Publications, and Other Written Disclosures

Patents and printed publications by third parties represent the least controversial form of prior art. For printed publications, a third party has disclosed the invention to the broader public in a manner that must be publicly accessible.²⁵⁶ The term has evolved to

254. See *supra* text accompanying note 253.

255. Cf. *Many v. Jagger*, 16 F. Cas. 677, 682 (C.C.N.D.N.Y. 1848) (noting that conceiving of a new invention “alone is of no benefit to mankind, and is not worthy of the patronage of government. The new idea must be reduced to some practical use before it can become the subject of a patent, or be set up and relied on to defeat a patent.”).

256. *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006) (“Whether a given reference is a ‘printed publication’ depends on whether it was ‘publicly accessible’ during the prior period.”); *In re Klopfenstein*, 380 F.3d 1345, 1348 (Fed. Cir. 2004) (“[T]he key inquiry is whether or not a reference has been made ‘publicly accessible.’”); *In re Cronyn*, 890 F.2d 1158, 1160 (Fed. Cir. 1989) (stating that a printed publication must be “sufficiently accessible to the public interested in the art”).

include new forms of media, such as online publications²⁵⁷ and videos.²⁵⁸

Similarly, patenting the invention by someone else discloses the invention to the public.²⁵⁹ One of the key inquiries as to whether foreign forms of intellectual property qualify as “patented” under the 1952 Patent Act and the AIA is whether the intellectual property discloses the invention to the public.²⁶⁰ The requirement for public accessibility for these forms of prior art demonstrate the act of communication to others, as required by possession theory.

One could question whether the present law is *too* lenient in terms of the public accessibility requirement. The law is not terribly strict: the Federal Circuit has found a single indexed thesis in a German library to be sufficiently publicly accessible to qualify as a printed publication.²⁶¹ In contrast, the court held that three student theses were not printed publications because they were not indexed at the relevant library.²⁶² According to the Federal Circuit, “the three student theses were not accessible to the public because they had not been either cataloged or indexed in a meaningful way.”²⁶³ The PHOSITA is assumed, therefore, to be able to search every library in the world, in every language, to find the reference so long as it is indexed. The PHOSITA in this way seems more impressive than a Google search!

This capacious approach to the public accessibility requirement comports with possession theory. Possession in the property context has never required actual communication; rather, it is the potential that an interested party could receive the communication from the

257. *See, e.g.*, *Voter Verified, Inc. v. Election Sys. & Software, Inc.*, 698 F.3d 1374, 1380 (Fed. Cir. 2012).

258. *See, e.g.*, *Medtronic, Inc. v. Barry*, 891 F.3d 1368, 1379 (Fed. Cir. 2018).

259. *See supra* notes 31-32 and accompanying text (noting the disclosure requirements for patent application). *See generally* Sean B. Seymore, *The “Printed Publication” Bar After Klopfenstein: Has the Federal Circuit Changed the Way Professors Should Talk About Science?*, 40 AKRON L. REV. 493, 501 (2007).

260. *In re Carlson*, 983 F.2d 1032, 1037 (Fed. Cir. 1992), *as revised on reh’g* (Feb. 1, 1993) (noting requirement “that the patent be ‘available to the public’”); *In re Ekenstam*, 256 F.2d 321, 325 (C.C.P.A. 1958) (“[T]he word ‘patented’ as used in 35 U.S.C. § 102(a) and (b) is limited to patents which are available to the public.”).

261. *In re Hall*, 781 F.2d 897, 897 (Fed. Cir. 1986).

262. *In re Cronyn*, 890 F.2d 1158, 1161 (Fed. Cir. 1989).

263. *Id.*

claimant that she is asserting dominion over the item.²⁶⁴ So, while communication and public accessibility are key, patent law does not impose a particularly robust communication requirement, consistent with property law.²⁶⁵

3. *Otherwise Available to the Public*

The AIA has created a new, fifth category of prior art. If the invention was “otherwise available to the public,” beyond patents, printed publications, public uses, or sales activity, then the inventor will be unable to obtain a patent.²⁶⁶ It remains unclear what types of prior art will qualify under this catch-all provision.²⁶⁷ One type of disclosure that likely falls into this category—in contrast to the 1952 Patent Act—is oral disclosure of the invention.²⁶⁸ Such disclosures are prior art in other countries.²⁶⁹ Verbal disclosures create issues of proof: unless they have been recorded or there is some other form of corroboration, there could be uncertainty as to the content of any such disclosure. Nevertheless, the new category would seem to contemplate oral disclosures.²⁷⁰

This provision presents the issue of how available to the public must the disclosure be in order to qualify as prior art. The ideas of public accessibility under the 1952 Patent Act should inform this analysis.²⁷¹ Something far less than widespread public awareness of

264. See *supra* note 147 and accompanying text.

265. Cf. *GoPro, Inc. v. Contour IP Holding LLC*, No. 2017-1894, 2018 WL 3596007, at *3-5 (Fed. Cir. July 27, 2018) (holding catalog at trade show to be printed publication even if relevant audience may not have been there); *Jazz Pharm., Inc. v. Amneal Pharm., LLC*, 895 F.3d 1347 (Fed. Cir. 2018) (meeting materials posted online deemed printed publication).

266. 35 U.S.C. § 102(a)(1) (2012).

267. See U.S. PATENT & TRADEMARK OFFICE, *supra* note 64, § 2152.02(e) (listing a variety of situations that may fall under this provision).

268. See *id.* § 2128.01 (“An oral presentation at a scientific meeting or a demonstration at a trade show may be prior art under 35 U.S.C. 102 (a)(1)’s provision: ‘otherwise available to the public.’”); *id.* § 2152.02(e) (“Even if a document or other disclosure is not a printed publication, or a transaction is not a sale, either may be prior art under the ‘otherwise available to the public’ provision.”).

269. Amy Nelson, *Obviousness or Inventive Step as Applied to Nucleic Acid Molecules: A Global Perspective*, 6 N.C. J.L. & TECH. 1, 15-16 (2004).

270. See *supra* notes 267-68 and accompanying text.

271. See U.S. PATENT & TRADEMARK OFFICE, *supra* note 64, § 2152.02(e) (“This ‘catch all’ provision permits decision makers to focus on whether the disclosure was ‘available to the public,’ rather than on the means by which the claimed invention became available to the

the oral statement should suffice.²⁷² From a possession perspective, the disclosure could be to a relatively localized audience, so long as it is not secret.²⁷³ Possession in the property context does not require widespread communication beyond the item at issue; it need only be accessible to the relevant public in the area.²⁷⁴ Similarly, the public communication aspect of this new provision seemingly would not require widespread publication.²⁷⁵ Instead, accessibility to the interested public—akin to current printed publications—would seem appropriate.

B. Inventor-Specific Prior Art—Possession or Statute of Limitations?

In patent law, the inventor's own acts can destroy her ability to obtain a patent. This is the case under the statutory bars of the 1952 Patent Act²⁷⁶ and for all prior art (subject to the one year grace period) under the AIA.²⁷⁷ If the inventor is in possession of the invention and is, in some sense, withholding the invention from the public by delaying the filing of her application, should that information nevertheless be used against her? This is not a new refrain. It strikes to the core of many of the prior art doctrines, particularly public uses of which the public is not aware²⁷⁸ and secret offers to sell the invention.²⁷⁹ Possession theory can offer new insights into these ongoing, vexing issues.

public.”).

272. *See id.*

273. *See id.* (citing, as an example, “a poster display ... disseminated at a scientific meeting”).

274. *See infra* Part III.B.1.

275. *See supra* notes 272-74 and accompanying text.

276. *See* 35 U.S.C. § 102(a)-(d), (g) (2006).

277. *See* 35 U.S.C. § 102(a)(1), (b)(1) (2012).

278. *See supra* Part III.A.1.b.

279. *See supra* Part III.A.1.c.

1. *How Possession Creates Consequences for Owners in Property Law*

In property law, there are areas where actors attempting to possess items may forfeit the property or never take possession due to their own behavior. In these contexts, the purported owner has information unavailable to third parties, yet the owner either loses the ownership interest or never becomes the owner. As to the former, we allow owners to abandon personal property. When someone relinquishes all interest in the property, it becomes “unowned” and becomes the property of the first person to take possession of it.²⁸⁰ Of course, that second-comer may have no idea that the original owner has abandoned it. One of the complexities of the various doctrines of lost and found property is that they depend on the mental state of the owner, who by definition is not present.²⁸¹ Thus, property law does create consequences for property owners acting with knowledge known only to them.²⁸²

Similarly, property law precludes ownership for adverse possessors if they fail to satisfy all the requisite conditions. The adverse possessor must exclusively use the property in a manner similar to the surrounding property.²⁸³ Moreover, the use must be open and notorious, which necessitates some level of communication and notice to others, particularly the owner of the property.²⁸⁴ Failure to satisfy these conditions means that the occupier cannot obtain the property through adverse possession even if the statute of limitations has run.²⁸⁵ In this context, the failure to communicate the adverse possessor’s occupation adequately to the true owner results in the adverse possessor failing to obtain ownership of the property.²⁸⁶ This differs, of course, from the acts of an inventor

280. *See* *Ritz v. Selma United Methodist Church*, 467 N.W.2d 266, 269 (Iowa 1991) (“Abandoned property is that to which the owner has voluntarily relinquished all right, title, and interest with the intention of terminating his ownership. The finder who reduces abandoned property to possession acquires absolute title as against the former owner.” (citation omitted)).

281. *See id.*

282. *See id.*

283. *See, e.g., Ray v. Beacon Hudson Mountain Corp.*, 666 N.E.2d 532, 536 (N.Y. 1996) (noting that improvements to land constituted exclusive use and occupation).

284. *JESSE DUKEMINIER ET AL.*, *PROPERTY* 148-49 (8th ed. 2014).

285. *Id.* at 148.

286. *See id.* at 148-49.

precluding a patent.²⁸⁷ But they are similar—both require the occupier to perform certain acts completely within her control.²⁸⁸ A failure to make these acts sufficiently public, for example, results in no adverse possession.²⁸⁹ It is unsurprising, therefore, that we treat an inventor differently—and potentially more harshly—if they fail to bring the invention to the public in a certain period of time when compared with third party activities.²⁹⁰

2. *Inventor-Generated Prior Art—Public Knowledge or Statute of Limitations Punishment?*

In the property context, typically a party's act of possession communicates to third parties that the item is someone's property.²⁹¹ Generally, the possessor's activity is not used against her.²⁹² Patent law is different, however, in that the inventor's own acts can qualify as prior art to demonstrate that the public was in possession of the invention.²⁹³ Drawing on earlier cases, the inventor is said to have abandoned the invention to the public in some sense.²⁹⁴ Thus, instead of demonstrating possession against the world, the inventor's acts instead communicate to the public that the invention is free to be used.²⁹⁵

It makes sense that the inventor can forfeit her right to a patent on the invention through her own acts. She is in the best position to control the filing of a patent application: she knows when the invention is ready for patenting, can control her public uses and commercialization activities, and can determine when to file the application.

The question to be explored is how possession—and the need for communication—fits into this context, if at all. The concern with inventor-based prior art, therefore, is less about the nature of the

287. Cf. 35 U.S.C. § 102(a)(1), (b) (2012); 35 U.S.C. § 102(b) (2006).

288. See *DUKEMINIER ET AL.*, *supra* note 284, at 148-49.

289. See *id.*

290. See *infra* Part III.B.4.

291. See *supra* note 147 and accompanying text.

292. See *DUKEMINIER ET AL.*, *supra* note 284, at 148-49.

293. See 35 U.S.C. § 102(a)(1), (b) (2012).

294. See, e.g., *Egbert v. Lippmann*, 104 U.S. 333, 337-38 (1881).

295. See *id.*

act—a tangible embodiment of the invention or a written disclosure—but instead whether we should treat applicants differently than third parties because the applicants are in possession and control of the information regarding the invention. Because they are in control of the disclosure of such information and the timing of any patent applications, inventors are in a position to arbitrage the patent system.

Under section 102(b) of the 1952 Patent Act, the inventor's own patents, printed publications, public uses, and on-sale bar activity could be used against her if they occurred prior to the critical date.²⁹⁶ These statutory bars under the 1952 Patent Act and earlier patent acts effected a check on potential abuses in a true first-to-invent system. If the first person to invent always received the patent, then the inventor could commercialize or use the invention for years while still being entitled to file a patent application because she was the first to invent. The statutory bars capped this potential abuse by giving the inventor a fixed period—one year under the 1952 Patent Act—to take such actions before filing an application.²⁹⁷ These statutory grace periods, however, applied to both inventor and third-party activity under the 1952 Patent Act.²⁹⁸

In contrast, the AIA affords a one-year grace period only for acts by the inventor.²⁹⁹ Third-party activities now serve as prior art so long as they are sufficiently publicly available prior to the application's filing date; there is no grace period.³⁰⁰ The AIA, therefore, has embraced the third-party/inventor distinction formally and structurally.³⁰¹ The following Section discusses the various forms of inventor-generated prior art and how possession theory informs the doctrines underlying such prior art.

296. 35 U.S.C. § 102(b) (2006).

297. *Id.*

298. *See id.*

299. 35 U.S.C. § 102(b)(1) (2012).

300. *See id.* § 102(b).

301. *See id.* § 102(a)-(b)(1).

3. *Patents and Printed Publications*

Both the 1952 Patent Act³⁰² and the AIA³⁰³ define patents and printed publications as forms of prior art. From a possession viewpoint, these provisions are both uncontroversial. These forms of prior art satisfy the “public communication” aspect of possession theory.³⁰⁴ To qualify as prior art, these forms must generally be publicly available.³⁰⁵ Patents, of course, generally are published when issued.³⁰⁶ Printed publications by the inventor must generally be publicly accessible, just as third-party publications must be.³⁰⁷

Moreover, because this information generally comes from the inventor,³⁰⁸ the information-forcing aspect of these provisions comes into play. We do not want inventors to disclose the invention and then delay filing patent applications. Instead, the patent system is designed to encourage prompt disclosures of inventions through the patent application process. Such bars also serve to protect the public. If the inventor has disclosed the invention in a printed publication or in a different patent, then the public may come to view that information as freely available.³⁰⁹ The inventor should not be able to effectively snatch this information back out of the hands of the public after the grace period ends.³¹⁰

In many regards, these forms of applicant-generated prior art do not feel terribly different than third-party art. Perhaps, in close cases of whether the disclosure was public, one could draw the line for an inventor’s own printed publications against the inventor more capaciously than third-party disclosures: if in doubt, consider the inventor’s disclosure to be an invalidating public disclosure. The inventor is in a position to control the disclosure of the invention to the public as well as the filing of the patent application. Such control creates an incentive for the inventor to keep the invention

302. 35 U.S.C. § 102(a)-(b), (d)-(e) (2006).

303. 35 U.S.C. § 102(a)(1) (2012).

304. *See supra* note 147 and accompanying text.

305. 35 U.S.C. § 102(a)-(b).

306. *See id.* § 153.

307. *See id.* § 102(a); *In re Hall*, 781 F.2d 897, 899 (Fed. Cir. 1986).

308. *See supra* notes 31-32 and accompanying text (noting that applicants must disclose inventions).

309. *See supra* Part III.B.2.

310. *See supra* Part III.B.2.

from the public's view, permitting her to game the system: by keeping the disclosure out of the public domain, she delays the start of her one year grace period, allowing her to delay her filing if needed. Generally, however, these provisions are fairly uncontroversial.

4. *Uses and Sales Activity*

Public use doctrine under the 1952 Patent Act has created a bifurcated approach to public uses by third parties and the inventor.³¹¹ As discussed above, secret uses of an invention by third parties do not qualify as prior art.³¹² The law is a bit messier for secret uses by the inventor.³¹³

The courts have held that some secret uses by inventors do not qualify as prior art.³¹⁴ But the courts have concluded that other secret uses by an inventor *do* qualify as invalidating public uses, even when such a use by a third party would not. In *Metallizing Engineering Co. v. Kenyon Bearing & Auto Parts Co.*, the patent owner had secretly used the patented process to produce a product that it sold.³¹⁵ Although the use of the process was secret, Judge Learned Hand nevertheless concluded that, due to the commercialization of the product of the process, the use of the process qualified as an invalidating public use.³¹⁶ The same activity by a third party, however, would not qualify as prior art.³¹⁷ The Federal Circuit has adopted this rule.³¹⁸ Thus, the same language in the statute has come to mean different things, depending on whether an applicant or a third party engaged in the same activity.

The *Metallizing* rule has not been without controversy.³¹⁹ In that context, the invention itself—generally a method—remains un-

311. See *supra* Part III.A.1.b.

312. See *supra* notes 215-17 and accompanying text.

313. See *infra* notes 329-34 and accompanying text.

314. See, e.g., *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 424 F.3d 1374, 1383 (Fed. Cir. 2005).

315. 153 F.2d 516, 517-18 (2d Cir. 1946).

316. *Id.* at 520.

317. *Merges, supra* note 16, at 1034-35 (“The cases on non-informing public use and sale have distinguished between the inventor’s own activity and the activities of third parties. An inventor’s own non-informing use is prior art, whereas a third party’s is not.”).

318. See, e.g., *Kinzenbaw v. Deere & Co.*, 741 F.2d 383, 390 (Fed. Cir. 1984).

319. See Dmitry Karshedt, *Did Learned Hand Get It Wrong?: The Questionable Patent Forfeiture Rule of Metallizing Engineering*, 57 VILL. L. REV. 261, 268-69 (2012).

known to the public at large.³²⁰ There is no communication of the details of the invention; the only public act is the selling of the product.³²¹ But the product does not communicate the invention itself to the public.³²² Thus, this variation of secret uses is also inconsistent with possession theory.³²³

One of the largest debates in patent law today is whether *Metallizing* survived Congress's passage of the AIA.³²⁴ The first four forms of prior art defined in section 102(a) of the AIA are verbatim to those found in section 102(b) of 1952 Patent Act: a patent is precluded if the claimed invention was "patented, described in a printed publication, ... in public use, [or] on sale."³²⁵ Given the identical language in the AIA, one would logically believe that Congress simply imported the case law interpreting those terms into the AIA without modification.³²⁶

There is one important difference between section 102(a)(1) of the AIA and section 102(b) of the 1952 Patent Act: the addition of a fifth form of prior art, "otherwise available to the public."³²⁷ This language is the hook upon which those arguing that the AIA changed the law have hung their hats.³²⁸ Adding weight to their argumentation is that two key proponents of this view were involved in drafting and passing the AIA.³²⁹ The USPTO itself issued examination

320. See *Metallizing*, 153 F.2d at 517-18.

321. See *id.*

322. See *id.*

323. Compare *id.*, with *supra* note 147 and accompanying text.

324. See sources cited *supra* note 16.

325. 35 U.S.C. § 102(a)(1) (2012); 35 U.S.C. § 102(b) (2006) (precluding patent if the invention "was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country"). The AIA removed the geographic limitations mentioned in Section 102(b) of the 1952 Patent Act. See § 102(a)(1) (2012); see also Armitage, *supra* note 16, at 49 ("Under the AIA, thus, the new § 102(a)(1) can be viewed as having pre-AIA § 102(b) as its statutory origin."); Lemley, *supra* note 15, at 1125.

326. This is a settled principle of statutory interpretation. See *Sekhar v. United States*, 133 S. Ct. 2720, 2724 (2013); *Microsoft Corp. v. I4I Ltd. P'ship*, 564 U.S. 91, 102 (2011); *Neder v. United States*, 527 U.S. 1, 21 (1999).

327. Compare 35 U.S.C. § 102(a)(1) (2012), with 35 U.S.C. § 102(b) (2006).

328. See Armitage, *supra* note 16, at 53 ("The terms 'in public use or on sale' have been further modified and qualified by a new phrase that reads in its entirety: 'in public use, on sale, or otherwise available to the public.'" (quoting 35 U.S.C. § 102(a)(1) (2012))); Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part I of II*, 21 FED. CIR. B.J. 435, 471-72 (2012).

329. Lemley, *supra* note 15, at 1120 ("Because two of these commentators, Bob Armitage and Joe Matal, were involved in the drafting of the AIA, this argument has carried substantial

guidelines adopting the view that the AIA changed the law as to secret sales and uses.³³⁰ These guidelines do not have the “force and effect of law,” and the courts are free to disagree with the USPTO’s views.³³¹

The prior art provisions of the AIA went into force in March 2013.³³² The courts, therefore, are only now beginning to interpret these provisions. The first district court to encounter the issue of secret sales sided with these commentators’ and the USPTO’s view. In *Helsinn Healthcare S.A. v. Dr. Reddy’s Laboratories Ltd.*, the district court

conclude[d] that § 102(a)(1) requires a public sale or offer for sale of the claimed invention. The new requirement that the on-sale bar apply to public sales comports with the plain language meaning of the amended section, the USPTO’s interpretation of the amendment, the AIA Committee Report, and Congress’s overarching goal to modernize and streamline the United States patent system.³³³

Others, however, have argued that the “otherwise available to the public” language is a thin textual basis for jettisoning decades of judicial interpretations of these terms.³³⁴

On appeal, the Federal Circuit disagreed with the district court’s reasoning and decided the case on different, narrower grounds.³³⁵ Judge O’Malley, however, agreed with those who believe the AIA did not change the law.³³⁶ The issue remains unresolved to date, although

weight.”).

330. Examination Guidelines for Implementing the First Inventor to File Provisions of the Leahy-Smith America Invents Act, 78 Fed. Reg. 11,059, 11,062, 11,075 (Feb. 14, 2013) (codified at 37 C.F.R. pt. 1).

331. *Id.* at 11,059.

332. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 3(n)(1), 125 Stat. 284, 293 (2011) (noting that the AIA prior art provisions come into effect eighteen months after enactment).

333. No. 11-3962 (MLC), 2016 WL 832089, at *45 (D.N.J. Mar. 3, 2016), *rev’d sub nom.*, *Helsinn Healthcare S.A. v. Teva Pharm. USA, Inc.*, 855 F.3d 1356 (Fed. Cir. 2017), *cert. granted*, 138 S. Ct. 2678 (2018).

334. Lemley, *supra* note 15, at 1127-28.

335. *Helsinn Healthcare*, 855 F.3d at 1368-69, 1375 (“We decline the invitation by the parties to decide this case more broadly than necessary.”), *cert. granted*, 138 S. Ct. 2678 (2018).

336. *See* Order Denying Petition for Rehearing En Banc at 1, *Helsinn Healthcare S.A. v.*

though the Supreme Court recently granted certiorari to hear the case in its 2018-19 term.³³⁷

This Article offers a novel perspective on this debate. A possession-based approach to inventor-based uses and sales would suggest the need for general public availability. It would thus support the reformer's view of the AIA, primarily because the earlier cases, such as *Egbert*, were wrongly decided from a possession perspective.³³⁸ Patent law thus went down this path by starting on the wrong foot.

But the answer is not that simple. Because these sales and uses are by the inventor—not a third party—there are reasons to treat such information differently. By taking these steps, one could view the inventor as having abandoned her ability to seek patent protection simply by trying to game the patent system.³³⁹ If we are truly concerned with incentivizing the inventor to disclose her invention promptly by filing an application, then the public versus secret line may be wrong.

Instead, perhaps all inventor activity—even if secret—could be deemed prior art to best effectuate our interest in the patent system. In other words, inventors would face a strict statute of limitations for any commercial use or sales of the invention regardless of whether those acts were public. One could envision an absolute rule, stronger than that of *Metallizing*,³⁴⁰ where even commercialization of the secret process is not required. Any use—secret or otherwise—would be invalidating. Cases such as *Invitrogen Corp. v. Biocrest Manufacturing, L.P.*, finding no public use bar because the applicant's use of the invention was secret,³⁴¹ are wrong under the statute of limitations view. Such uses would serve to invalidate the patent. In contrast, under this approach the holding of *Egbert*³⁴² would be correct: noninforming uses would be deemed invalidating.

Teva Pharm. USA, Inc., 855 F.3d 1356 (Fed. Cir. 2017) (Nos. 2016-1284, 2016-1787), 2018 WL 1583031, at *1 (O'Malley, J., concurring).

337. See *Helsinn Healthcare S.A. v. Teva Pharm.*, 138 S. Ct. 2678, 2678 (2018).

338. See *supra* notes 213-14 and accompanying text.

339. *Elizabeth v. Pavement Co.*, 97 U.S. 126, 137 (1877) ("It is sometimes said that an inventor acquires an undue advantage over the public by delaying to take out a patent, inasmuch as he thereby preserves the monopoly to himself for a longer period than is allowed by the policy of the law.")

340. See *Metallizing Eng'g Co. v. Kenyon Bearing & Auto Parts Co.*, 153 F.2d 516, 520 (2d Cir. 1946).

341. 424 F.3d 1374, 1383 (Fed. Cir. 2005).

342. *Egbert v. Lippmann*, 104 U.S. 333, 337 (1881).

The inventor was in possession of the claimed invention, yet failed to promptly file a patent application when she had the power to do so. Whether it is public would be irrelevant.

Such an approach is analogous to adverse possession, in particular the “sleeping” views of adverse possession. Under sleeping theory, the property owner effectively forfeits her right to the property by failing to adequately monitor the property to evict the adverse possessor.³⁴³ Given all of the requirements of adverse possession designed to provide the true owner with notice of the adverse possessor’s presence,³⁴⁴ the sleeping theory posits the owner “no longer deserve[s] to hold title.”³⁴⁵

One can also envision an earning theory³⁴⁶ aspect to this approach. The party secretly using or commercializing the invention will be unable to obtain a patent, but third parties who have both engaged in the necessary inventive activity *and* who have brought the invention to the public through a patent application will be rewarded. These parties could be deemed to have earned the patent, and the secret activities by the earlier inventor cannot be used against the earning inventor.³⁴⁷ The patent, therefore, goes to the more deserving inventor.

343. See *DUKEMINIER ET AL.*, *supra* note 284, at 148-49 (describing earning and sleeping theories of adverse possession); Jeffrey Evans Stake, *The Uneasy Case for Adverse Possession*, 89 GEO. L.J. 2419, 2434-35 (2001) (discussing sleeping theory of adverse possession).

344. See *DUKEMINIER ET AL.*, *supra* note 284, at 148 (listing notice-based requirements for adverse possession, such as exclusive possession and a use that is open and notorious).

345. Stake, *supra* note 343, at 2435.

346. See *DUKEMINIER ET AL.*, *supra* note 284, at 148.

347. A similar dynamic is what led to the passage of the First Inventor Defense Act of 1999. Pub. L. No. 106-113, 113 Stat. 1501A-555 (codified at 35 U.S.C. § 273 (2012)). Prior to the Federal Circuit’s decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998), conventional wisdom was that business methods were not patentable. Many business methods were used as trade secrets as a result. Once the Federal Circuit green-lighted business method patents in *State Street*, however, many inventors could not obtain patent protection under *Metallizing* because they had secretly used the process for commercial purposes. See *State Street*, 149 F.3d at 1375; *Metallizing Eng’g Co. v. Kenyon Bearing & Auto Parts Co.*, 153 F.2d 516, 520 (2d Cir. 1946). Third parties, however, were now free to patent such business methods, and the earlier secret use would not constitute prior art against them. See *State Street*, 149 F.3d at 1375, 1377; *Merges*, *supra* note 16, at 1034-35. This dynamic meant that the earlier inventor could now be deemed an infringer. The First Inventor Defense Act created a narrow form of prior user rights that would immunize such parties from liability. See § 4302(b)(1), 113 Stat. at 1501A-556. The AIA expanded the First Inventor Defense Act into a broader prior user rights provision. See 35 U.S.C. § 273(a) (2012).

This analogy is not perfect, of course. Adverse possession results in a current property owner losing title to her property in favor of a trespasser.³⁴⁸ In the patent context, there has yet to be an award of a property right. The secret user or seller of the invention would forfeit the ability to obtain a future property right. But the reasoning nevertheless is attractive because the inventor secretly using or commercializing the invention is the lowest cost avoider. As between the secret inventor and either the public or a subsequent inventor who brings the invention to the public, we should favor the latter two. The secret user could have filed an application within the statutory grace period but failed to do so. As a result, that inventor forfeits the ability to get a patent.

Such an absolute novelty approach for inventors' secret uses and sales would require some important limitations and policing. For example, we actually hope that inventors take time to perform research to ensure that the invention actually works.³⁴⁹ Indeed, it can take an inventor a considerable amount of time to ascertain whether her invention will work for its intended purpose. As a result, the experimental use negation of such uses as prior art would be quite important.³⁵⁰ From a possession viewpoint, the inventor cannot be deemed in possession of the invention yet if she does not know whether it will work.

Additionally, the strict novelty approach could result in third parties obtaining patent protection over the inventor's creation, while the inventor herself would be unable to obtain a patent.³⁵¹ The earlier inventor could thus become an infringer. If such a state of affairs is deemed inequitable, then the patent system would have to ensure a robust form of prior user rights for the earlier inventor.³⁵² Nevertheless, one could easily envision a regime where secret uses

348. *DUKEMINIER ET AL.*, *supra* note 284, at 148.

349. *See Lough v. Brunswick Corp.*, 86 F.3d 1113, 1120 (Fed. Cir. 1996) ("This doctrine is based on the underlying policy of providing an inventor time to determine if the invention is suitable for its intended purpose, in effect, to reduce the invention to practice.").

350. *Elizabeth v. Pavement Co.*, 97 U.S. 126, 137 (1877) (excusing a public use "when the delay is occasioned by a *bona fide* effort to bring [the] invention to perfection, or to ascertain whether it will answer the purpose intended."); *see also Janis*, *supra* note 252, at 649-50 ("[T]he public's interest [is] in blocking inventors from improperly extending the patent term, while also allowing inventors time to perfect their inventions.").

351. *See supra* notes 346-47 and accompanying text.

352. *See* 35 U.S.C. § 273 (2012); *cf. Samson Vermont, Independent Invention as a Defense to Patent Infringement*, 105 MICH. L. REV. 475 (2006).

and commercialization by the inventor could preclude her ability to get a patent, regardless of whether such activity were public.³⁵³

This review of possession-based conceptions of inventor-generated prior art leads to three possible approaches. One would be to use the same approach as for third-party prior art, requiring that the prior art be publicly accessible.³⁵⁴ Under this approach, there would be no distinction between third-party and inventor generated prior art. The second approach would be the strict statute of limitations approach: the inventor is precluded from obtaining the patent if they engage in commercial or secret uses for too long of a period (generally one year).³⁵⁵ Secret uses and sales would be invalidating along with public ones. The third option would be the status quo, which is a hybrid approach. Noninforming uses, which are not generally available to the public, would count.³⁵⁶ Moreover, secret uses that result in public commercialization are considered prior art under *Metallizing*,³⁵⁷ whereas other secret uses do not qualify. Under the 1952 Patent Act, courts have carved out distinctions between inventor and third-party prior art in the face of the same statutory language.³⁵⁸ Thus, the status quo is inconsistent from the perspective of statutory interpretation and incoherent in terms of theory. Therefore, it may be preferable to treat inventor prior art identically to third-party prior art or to create a strict statute of limitations approach.³⁵⁹

C. The Odd Categories: Derivation and Earlier Filed Patent Applications

There are two forms of prior art that do not track possession theory particularly well. The first category of prior art under the 1952 Patent Act are acts of derivation, where the applicant took the

353. There could be an evidentiary issue of actually discovering such secret uses.

354. See *supra* notes 256-58 and accompanying text.

355. See, e.g., 35 U.S.C. § 102(b)(1) (2012).

356. See *supra* notes 224-34 and accompanying text.

357. See *Metallizing Eng'g Co. v. Kenyon Bearing & Auto Parts*, 153 F.2d 516, 520 (2d Cir. 1946).

358. See *supra* notes 215-16.

359. I evaluate these approaches *infra* Part IV. I ultimately advocate for the consistent approach because it makes all prior art on level ground and because the statute does not support a pure statute of limitations approach.

invention from a third party, the true inventor.³⁶⁰ Derivation requires only a communication from the true inventor to the applicant, but such communication may be secret.³⁶¹ From a possession perspective, there is an act of communication, but, contrary to possession theory, the communication is not necessarily accessible to a broader audience.³⁶² The AIA technically eliminated derivation as a form of prior art, but it does afford protection against such appropriation by disqualifying certain forms of prior art that have their genesis with the true inventor.³⁶³ The AIA also creates a new proceeding, the derivation procedure, that will award the patent to the true inventor even if she is not the first to file.³⁶⁴

The second type of prior art is patent applications filed before the relevant date, the date of invention for the 1952 Patent Act and the filing date for the AIA. These earlier applications qualify as prior art only if they eventually come to public light by being published or issued as patents.³⁶⁵ Yet these applications are effective as prior art as of their filing date.³⁶⁶ These applications therefore are secret and unknowable as of the effective prior art date. There is not a contemporaneous communication with the broader public.

This Part explores these forms of prior art and their ill-fit to possession conceptions given their secrecy aspects.

1. Derivation Provisions—What Happens When Someone Steals the Idea?

Both the 1952 Patent Act and the AIA protect inventors against third parties taking their inventions and obtaining patent protection on them.³⁶⁷ This “theft” of the idea is known as derivation. Under the 1952 Patent Act, this makes sense: one cannot be said to be the

360. 35 U.S.C. § 102(f) (2006).

361. *See infra* notes 388-90 and accompanying text.

362. *See infra* notes 391-95 and accompanying text.

363. 35 U.S.C. § 102(b)(1)(A)-(2)(B) (2012) (excluding disclosures made by someone who “obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor”).

364. 35 U.S.C. § 135 (2012).

365. *Id.* § 102(a)(2); 35 U.S.C. § 102(e)(1)-(2) (2006).

366. 35 U.S.C. § 102(a)(2), (d) (2012); 35 U.S.C. § 102(e)(1)-(2) (2006).

367. 35 U.S.C. § 102(f) (2006).

first to invent if she obtained the idea from another.³⁶⁸ This prohibition is codified in 35 U.S.C. § 102(f).³⁶⁹ The text of that provision is a bit thin, merely noting that one cannot get a patent if “he did not himself invent the subject matter sought to be patented.”³⁷⁰ The courts have made clear that, for derivation to arise, there must be a communication between the first inventor and the deriver that is sufficient to enable one of ordinary skill in the art to make the claimed invention.³⁷¹ The requirement of an enabling communication is consistent with a possession-based view of novelty and nonobviousness because it shows that the third party was the first to possess the invention, not the applicant.³⁷² Also essential and consistent with possession theory is the need for communication: there has been an express, enabling communication to the deriver of the invention.³⁷³

The problem for possession theory, however, is that these communications can be confidential between the two parties. They need not be publicly accessible in order to invalidate the patent. In this sense, the necessary communicative act to third parties may not be present.³⁷⁴ Actually, if the communications were public, they might qualify as some other form of prior art, such as a printed publication.³⁷⁵ Because derivative prior art can be confidential, nonpublic communication, such acts of communication do not fall squarely within the classic possession paradigm.³⁷⁶

The AIA technically eliminates section 102(f) as a form of prior art.³⁷⁷ Instead, the AIA excludes as prior art materials that came directly or indirectly from the inventor so that such disclosures cannot be used to invalidate the true inventor’s patent or application.³⁷⁸ The AIA also provides for derivation proceedings in court

368. *Id.*

369. *Id.*

370. *Id.*

371. *See, e.g.,* Brand v. Miller, 487 F.3d 862, 870 (Fed. Cir. 2007).

372. *See supra* notes 158-60 and accompanying text.

373. *See supra* note 147 and accompanying text.

374. *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1401-02 (Fed. Cir. 1997) (“[Section 102(f)] does not pertain only to public knowledge, but also applies to private communications between the inventor and another which may never become public.”).

375. *See* 35 U.S.C. § 102(a) (2012).

376. *See supra* note 147 and accompanying text.

377. MUELLER, *supra* note 13, at 289.

378. § 102(b)(1)-(2)(B).

and at the USPTO that permit the first inventor to get the patent even if she was not the first to file.³⁷⁹ The derivation exclusions are why the AIA is viewed as a “first-inventor-to-file” system, not a true first-to-file one.³⁸⁰ Moreover, Professor Mark Janis and I have argued that the derivation protection saves the AIA from a constitutional challenge based on awarding the patent to someone who is not truly an inventor under the Patent Clause.³⁸¹

The AIA derivation provisions remain ambiguous and under-explored. The AIA permits a patent holder to bring a suit in district court if another patentee derived the claimed invention.³⁸² Similarly, a patent applicant can challenge an earlier filed application on the basis that the earlier applicant derived the invention in a derivation proceeding.³⁸³ These provisions replaced the comparable provisions in the 1952 Patent Act that dealt with interferences, proceedings in which the USPTO determined who was the first to invent and thus entitled to the patent among competing claimants.³⁸⁴

Interestingly, the AIA never defines the term “derived.” The 1952 Patent Act never used the term expressly, but section 102(f) was generally known as the derivation provision.³⁸⁵ Absent an express definition in the AIA, Congress apparently intended to import the 1952 Patent Act’s definition into the AIA.³⁸⁶ Thus, to prove derivation, a challenger would likely need to prove the complete conception of the invention and an enabling communication to the accused deriver.³⁸⁷

379. *See id.* § 135(a)(1).

380. *See id.*

381. *See, e.g.*, Letter from Timothy R. Holbrook & Mark D. Janis to the Honorable Lamar Smith, Chairman, House Comm. on the Judiciary, at 3-4 (June 13, 2011), <https://www.autm.net/AUTMMain/media/About/Documents/holbrookjanisletter.pdf> [<https://perma.cc/39CM-BAVM>].

382. 35 U.S.C. § 291(a) (2012).

383. *Id.* § 135(a)(1).

384. 35 U.S.C. § 135 (2006).

385. *See, e.g.*, *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1401 (Fed. Cir. 1997) (describing section 102(f) as “a derivation provision, which provides that one may not obtain a patent on that which is obtained from someone else whose possession of the subject matter is inherently ‘prior’”).

386. *See supra* note 17 and accompanying text.

387. *See* 35 U.S.C. § 135 (2012).

The AIA does afford a broader view of derivation in its prior art provisions.³⁸⁸ The AIA excludes as prior art any disclosure in section 102(a) where someone “obtained the subject matter disclosed directly or indirectly” from the true inventor.³⁸⁹ Derivation under the 1952 Patent Act contemplates *direct* communication between the true inventor and the deriver. How, then, does one *indirectly* obtain the subject matter? The prior art exclusions seemingly expand the concept of derivation beyond the 1952 Patent Act’s definition.³⁹⁰

The question will arise, of course, as to the *degree* of indirectness, in a manner akin to proximate cause. Possession theory suggests that derivation by indirect communication should be narrowly construed. The communication in the property context is generally quite direct, arising from particular acts of the party asserting dominion over a thing.³⁹¹ To provide notice to third parties, the communication would generally be directed to the potential third parties curious as to who is asserting an interest over the resource at issue.³⁹² It would be odd to think that such notice-providing communication could arise when one party communicated the resource to someone else via some “telephone” game chain of events.³⁹³ Possession generally requires fairly direct communication from the possessor to third parties.³⁹⁴ Here, indirect communication could present difficult issues, such as who is the true inventor. Moreover, many forms of indirect communication may qualify as other forms of prior art if they are sufficiently public. The requirement for a communication suggests that the message between the true inventor and the deriver should be fairly direct. Nevertheless, acts of derivation do not fit nicely into the possession paradigm because

388. By eliminating section 102(f) as a form of prior art, the AIA has likely created some odd gaps in protection. See Joshua D. Sarnoff, *Derivation and Prior Art Problems with the New Patent Act*, 2011 PATENTLY-O PAT. L.J. 12, 19-20.

389. § 102(b)(1)(A)-(2)(B).

390. 35 U.S.C. § 102(f) (2006).

391. See *supra* note 147 and accompanying text.

392. See *supra* note 147 and accompanying text.

393. See *The Telephone Game*, ICEBREAKER IDEAS (July 21, 2015), <https://icebreakerideas.com/telephone-game/> [<https://perma.cc/8SHG-BQ66>].

394. See *supra* note 128-36 and accompanying text.

the communication between the two parties need not be public to qualify.³⁹⁵

2. *Earlier Filed Patent Applications as Prior Art*

Under both the 1952 Patent Act and the AIA, an earlier patent application serves as prior art, so long as it predates the invention date or filing date, respectively, and is published or issues as a patent.³⁹⁶ Section 102(e) of the 1952 Patent Act reflected Congress's codification³⁹⁷ of the Supreme Court decision in *Alexander Milburn Co. v. Davis-Bournonville Co.* that allowed an earlier patent application to serve as prior art if filed prior to the invention date, so long as that patent eventually issued.³⁹⁸ The rationale is that, in an ideal world, the application would issue as a patent the moment the application was filed, if deserving.³⁹⁹ In reality, examination of the application takes time. According to the Supreme Court, delays at the USPTO should not justify the awarding of a patent to a second inventor.⁴⁰⁰ Once the United States began publishing patent applications, Congress amended the statute to make publication a trigger for the provision as well.⁴⁰¹

The AIA extends this dynamic to the first-to-file context. Instead of being tied to the invention date, the AIA precludes a patent on the same invention or obvious variant thereof if someone else files an application first, so long as that application eventually becomes

395. See *supra* note 374.

396. 35 U.S.C. § 102(a)(1) (2012); 35 U.S.C. § 102(e) (2006).

397. See *Hazeltine Research, Inc. v. Brenner*, 382 U.S. 252, 255 (1965) (“In its revision of the patent laws in 1952, Congress showed its approval of the holding in *Milburn* by adopting 35 U.S.C. § 102(e).”).

398. 270 U.S. 390, 400-02 (1926) (holding patent application qualifies as a reference as of its filing date for purposes of assessing novelty). *Hazeltine* extended the reasoning to the context of non-obviousness. See 382 U.S. at 255-56 (“The basic reasoning upon which the Court decided the *Milburn* case applies equally well here. When Wallace filed his application, he had done what he could to add his disclosures to the prior art. The rest was up to the Patent Office. Had the Patent Office acted faster, had it issued Wallace’s patent two months earlier, there would have been no question here.”).

399. See *Alexander Milburn*, 270 U.S. at 401 (“The delays of the patent office ought not to cut down the effect of what has been done.”).

400. *Id.*

401. Sean A. Passino et al., *Foreign-Filed PCT Applications: An Asymmetrical Patent-Defeating Effect*, 85 J. PAT. & TRADEMARK OFF. SOC’Y 874, 875 (2003).

public through publication or issuance.⁴⁰² The same reasoning applies: delays at the USPTO should not result in two parties getting a patent on essentially the same invention.⁴⁰³

These provisions are consistent with each Act's respective awarding of the patent to the first to invent or first to file. One cannot be said to be the first to invent if someone filed an application on identical or obvious subject matter before the invention date of a competing applicant, and one cannot be the first to file if, in fact, she is the second.

These provisions do not map well onto a possession-based view of prior art. Possession theory requires open communication to third parties.⁴⁰⁴ Of course, these provisions do require an act of publication, either through the application being published or the patent issuing.⁴⁰⁵ As such, calling either the 1952 Patent Act a true "first to invent" or the AIA a pure "first to file" regime is inaccurate. Under both statutes, the act of filing does not disqualify the subsequent inventor or filer; there must also be an act of publication.⁴⁰⁶

The problem, however, is that the effective date as prior art under these provisions is the filing date, not the date when the information is communicated to the public.⁴⁰⁷ It has a *nunc pro tunc* effect. Some have called these provisions "secret prior art" because the information is not available to the public as of the invention or filing date.⁴⁰⁸ In terms of possession theory, these patents and applications should be deemed prior art only as of their publication date—the date they communicate information to the public.⁴⁰⁹ The relation back to the application's filing date creates an issue in terms of the communicative requirement of possession theory.

These provisions are concerned with preserving the integrity of the first-to-invent and first-to-file systems under the 1952 Patent Act and the AIA, respectively. If these provisions did not exist, then

402. 35 U.S.C. § 102(a)(2) (2012).

403. *Cf. supra* notes 399-400.

404. *See supra* note 147 and accompanying text.

405. 35 U.S.C. § 102(a) (2012); 35 U.S.C. § 102(e) (2006).

406. *See* 35 U.S.C. § 102(a) (2012); 35 U.S.C. § 102(e) (2006).

407. 35 U.S.C. § 102(d) (2012).

408. *In re Wertheim*, 646 F.2d 527, 537 (C.C.P.A. 1981) ("In other words, we will extend the 'secret prior art' doctrine of *Milburn* and *Hazeltine* only as far as we are required to do so by the logic of those cases.")

409. *See supra* note 147 and accompanying text.

multiple patents might issue on identical or similar inventions. One option to deal with this scenario, consistent with possession theory, would be to relegate these provisions for use only in proceedings within the USPTO.⁴¹⁰ These provisions would be unavailable in litigation to invalidate the patent as forms of prior art.⁴¹¹

Such an approach is not unprecedented. Congress embraced a similar administrative versus litigation dichotomy in 35 U.S.C. § 102(g)(1). This provision allows an inventor to use overseas inventive activity to demonstrate that she was the first to invent.⁴¹² Historically, only inventive activity within the United States could be used to prove that someone was the first to invent. Section 102(g)(1) modified this rule, but only partially.⁴¹³ Under sections 102(g)(1) and 104, foreign activity can be used in administrative proceedings at the USPTO in disputes over who should receive the patent.⁴¹⁴

However, such foreign activity cannot be used in litigation to invalidate a patent. For example, if someone could prove she was the first to invent in Hungary, she would win the interference battle among competing patent applicants by relying on her activity in Hungary. That activity, however, could not be used to invalidate a patent in litigation; only inventive acts in the United States could be used as prior art.

A similar approach can also be seen with respect to derivation under the AIA. Derivation is no longer a form of prior art.⁴¹⁵ Instead, under the AIA, issues of derivation are dealt with through proced-

410. See generally § 135 (detailing the process for derivation proceedings in the office).

411. But see Sean B. Seymore, *When Patents Claim Preexisting Knowledge*, 50 U.C. DAVIS L. REV. 1965, 1982 (2017) (“It is hard to understand why manuscripts should be treated differently than patent documents. I urge that they should not; manuscripts should be effective as prior art as of their submission date as long as the manuscript eventually publishes.”).

412. See 35 U.S.C. § 102(g)(1) (2006) (referencing 35 U.S.C. § 104 (2006)). Section 104 of the 1952 Patent Act allowed the use of foreign inventive activity in countries that are signatories to the North American Free Trade Agreement (NAFTA) and members of the World Trade Organization (WTO) for the purposes of interferences under section 102(g)(1). *Id.* § 104; see also MUELLER, *supra* note 13, at 294 (“[Section 104] permits the use of evidence of inventive activity ... that occurred on or after December 8, 1993, in countries that are signatories to [NAFTA] ... and on or after January 1, 1996, in countries that are members of the [WTO].”).

413. See *supra* note 412 and accompanying text.

414. See *supra* note 412 and accompanying text.

415. See *supra* notes 377-79 and accompanying text.

ings at the USPTO or in the courts.⁴¹⁶ Derivative acts are no longer available in litigation, however, as a form a prior art that could invalidate a patent.⁴¹⁷ One could readily envision a similar function for the provisions dealing with earlier filed patent applications.

* * *

Both acts of derivation and earlier filed patent applications do not fit well into a definition of prior art that utilizes a possession-paradigm. Neither may be available at the time of invention or filing, thus not satisfying the communicative function necessary for an act of possession.⁴¹⁸ Indeed, both of these forms of prior art are more concerned with protecting the integrity of the patent filing system as opposed to assessing the publicly known state of the art.

Both of these concerning forms of prior art could be limited to use within the administrative processes of the USPTO.⁴¹⁹ In other words, earlier filed patent applications could be used to deny patents to subsequent filers, particularly in a first-to-file regime, or to applicants who stole the idea. Indeed, derivation only operates through exclusions now; it is not technically a form of prior art.⁴²⁰ Thus, a possession-based system of prior art could accommodate these concerns in a narrower fashion at the USPTO and perhaps specialized court proceedings. They would not be deemed prior art in the classic sense, however, and could not be used to invalidate a patent in subsequent litigation.

IV. WHAT WOULD A TRUE POSSESSION-BASED PRIOR ART REGIME LOOK LIKE ... AND WOULD WE WANT IT?

As a result of the above analysis, we can easily envision a possession-based prior art regime that diverges from the approaches in the 1952 Patent Act and the AIA. A truly possession-based approach would mean that third-party forms of prior art would need

416. See 35 U.S.C. § 135 (2012).

417. See *supra* notes 377-80 and accompanying text.

418. See *supra* note 147 and accompanying text.

419. See *generally* 35 U.S.C. § 135 (detailing the process for derivation proceedings in the office).

420. See *supra* notes 377-79 and accompanying text.

to be publicly accessible.⁴²¹ In terms of printed publications, one could quibble with the current law, arguing that its view of public accessibility is too capacious. Nevertheless, little if any change would need to be made doctrinally for those forms of prior art. In contrast, public uses and sales activity would also have to be publicly accessible, meaning that noninforming public uses and secret sales would not qualify as prior art. Thus, the possession-based approach offers support for those advocating for change under the AIA for a public accessibility requirement.⁴²²

As for inventor-generated prior art, the definition of prior art depends on the policy choice of forcing the inventor to disclose her invention sooner rather than later.⁴²³ If one were to take a robust, statute of limitations view of inventor-based prior art, one could advocate for the rejection of any sort of public accessibility requirement. I do not go so far. Minimally, such an approach is inconsistent with the clear language of both statutes. Moreover, if we consider the inventor's activity to be potential prior art against other parties, then we may prefer to have symmetry in obligations. The system would consistently and uniformly treat all prior art in the same fashion, requiring public accessibility, regardless of the source of the information. The important line to draw in both circumstances would be between public and noninforming uses, not the current line between noninforming and secret uses.⁴²⁴ Secret sales would also not qualify as prior art, lending support to interpreting the AIA in this fashion, but only if we were to revisit the seminal Supreme Court cases from the 1952 Patent Act.

The "secret" prior art—derivation and earlier filed applications⁴²⁵—could be eliminated as prior art for litigation purposes. Instead, they would be limited to the USPTO's administrative

421. See *supra* notes 123-29 and accompanying text.

422. To be clear, I disagree with the arguments made by the parties in support of such a change. Congress used the same terms in the AIA as are found in the 1952 Patent Act. See *supra* note 63 and accompanying text. By using those terms, Congress seemingly intended to incorporate the case law interpreting those provisions into the AIA. See *supra* notes 324-26 and accompanying text. Thus, I think the AIA has not changed the law as a matter of statutory interpretation. That said, my analysis, while taking me down an uncomfortable path, suggests that earlier judicial decisions like *Egbert* and *Metallizing* were wrongly decided.

423. See *supra* notes 215-17.

424. See *supra* text accompanying notes 215-17.

425. See *supra* Parts III.C.1 and III.C.2.

proceedings in order to preserve the first-to-invent⁴²⁶ and first-to-file⁴²⁷ regimes of the respective statutes. There is a risk, of course, that the USPTO could miss some of these activities, resulting in the issuance of duplicative patents. But various post-grant administrative procedures could be used to fill any gaps that arise during the application process.⁴²⁸

A. Advantages of a Possession-Based Prior Art System

Is this a regime we would really want? The advantage of a possession-based system is that it would create theoretical and doctrinal consistency across prior art definitions. One could more readily assess whether something should qualify as prior art or not. In the close cases, the possession account of prior art offers guideposts for determining whether some source of information should qualify as prior art. There would also be a greater focus on public accessibility and search costs.⁴²⁹

The possession-based system consequently results in a more search-cost focused prior art system. A reference would only qualify as prior art if it were publicly available in ways that would avoid surprise outcomes in litigation.⁴³⁰ Generally, forms of prior art that would be effectively impossible to find absent the power of discovery would no longer qualify.⁴³¹ The universe of prior art would be more readily ascertainable. The possession framework should thus reduce the costs and risks of prior art searching, enhancing certainty for patent applicants.

For a potential patent applicant, such enhanced certainty would be advantageous. She would be more confident that she had discovered all the possible invalidating references, and could have more certainty in ascertaining whether to file the application and anticipating potential obstacles she might face navigating the USPTO prosecution process. And, if the patent issues, she is less likely to lose the patent based on prior art that generally would

426. See 35 U.S.C. § 102(a), (e)-(g) (2006).

427. See 35 U.S.C. § 102(a)(2) (2012).

428. See, e.g., *supra* notes 415-16 and accompanying text.

429. See *supra* text accompanying notes 327-38.

430. See *supra* Parts III.A.1.d-A.3.

431. See *supra* text accompanying note 161.

have been difficult, if not impossible, to uncover outside of the litigation context. Similarly, those evaluating existing patents for clearance purposes would have a better sense of their likelihood of invalidating the patent. Search costs should be reduced, which generally should lead to a more efficient patent system.

Finally, the various forms of “secret prior art”⁴³² would be eliminated, removing a potentially unforeseen landmine to an inventor’s application. Instead, concerns with derivation and earlier filed patent applications would be handled within the USPTO through administrative procedures.⁴³³ This approach is already present in the AIA, with derivation no longer serving as a form of prior art.⁴³⁴ Instead issues of derivation are addressed through derivation proceedings.⁴³⁵ For derivative acts and earlier filed applications, the USPTO would police the system, particularly to ensure that the first inventor to file is awarded the patent. Such applications could not be used in litigation, however. Instead, these issues would have to be resolved in Inter Partes Review (IPR) or Post Grant Review (PGR) proceedings.⁴³⁶

B. Potential Objections to Possession-Based Prior Art

Of course, persons could raise a variety of objections to such a system based on potential collateral consequences arising in such a regime. The possession approach requires a greater emphasis on the public availability of a given reference.⁴³⁷ Because certain activities, such as secret sales and noninforming public uses, would no longer qualify as prior,⁴³⁸ the universe of prior art would necessarily be reduced.

432. See *supra* note 408 and accompanying text.

433. See *supra* note 379 and accompanying text.

434. See *supra* notes 377-81 and accompanying text.

435. See generally 35 U.S.C. § 135 (2012) (outlining the process for derivation proceedings).

436. See generally *Inter Partes Review*, USPTO (July 17, 2014), <https://www.uspto.gov/patents-application-process/appealing-patent-decisions/trials/inter-partes-review> [<https://perma.cc/GG4R-WXX7>] (describing Inter Partes Review); *Post Grant Review*, USPTO (July 17, 2017), <https://www.uspto.gov/patents-application-process/appealing-patent-decisions/trials/post-grant-review> [<https://perma.cc/3FDD-LB9A>] (describing Post Grant Review).

437. See *supra* notes 123-29 and accompanying text.

438. See *supra* text accompanying notes 244-45.

The shrinkage of prior art could result in two outcomes in the margins. First, in the face of less prior art, more patents may issue and survive validity challenges. The examiner during the application process would have less material to reject applications as lacking novelty or as being obvious. It would be conceivable, therefore, that more patents could issue. If there is a belief that there are too many patents issuing, particularly of suspect quality, then this could be deemed problematic.⁴³⁹

Second and relatedly, patent applicants may be able to obtain patents of broader scope. A key constraint on the scope of a patent is the prior art because the patent clearly cannot ensnare the prior art.⁴⁴⁰ With less prior art, a patent applicant may be able to claim more broadly with less fear of running into the prior art. Marginally enhanced patent scope could be of concern if one believes that patents should generally be of narrow scope.⁴⁴¹ Of course, from the perspective of prospect and commercialization theory, broader patent scope may be laudable.⁴⁴² Under these theories, patent holders should be afforded broad patent protection to coordinate subsequent improvements on the technology and to control its commercialization.⁴⁴³ They would also have more power to coordinate downstream improvements in the invention.⁴⁴⁴ The resulting broadening of patent scope may be an outcome to a possession-based prior art system, though whether that is normatively attractive depends on what priors a given commentator may have about the patent system.

439. See, e.g., Michael D. Frakes & Melissa F. Wasserman, *Decreasing the Patent Office's Incentives to Grant Invalid Patents*, BROOKINGS: THE HAMILTON PROJECT 3 (Dec. 2017), http://www.hamiltonproject.org/assets/files/decreasing_patent_office_incentives_grant_invalid_patents.pdf [<https://perma.cc/4E8K-UAHA>]; Richard A. Posner, *Why There Are Too Many Patents in America*, ATLANTIC (July 12, 2012), <https://www.theatlantic.com/business/archive/2012/07/why-there-are-too-many-patents-in-america/259725/> [<https://perma.cc/WBA4-HHVX>].

440. See *Wilson Sporting Goods Co. v. David Geoffrey & Assocs.*, 904 F.2d 677, 684 (Fed. Cir. 1990) (“[A] patentee should not be able to obtain, under the doctrine of equivalents, coverage which he could not lawfully have obtained from the PTO by literal claims.”).

441. See, e.g., Thomas Chen, Note, *Patent Claim Construction: An Appeal for Chevron Deference*, 94 VA. L. REV. 1165, 1201-02 (2008).

442. See F. Scott Kieff, *Property Rights and Property Rules for Commercializing Inventions*, 85 MINN. L. REV. 697, 753 (2001); Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265, 266 (1977).

443. See Kieff, *supra* note 442, at 753; Kitch, *supra* note 442, at 266.

444. See Kieff, *supra* note 442, at 720, 722 n.113, 726; Kitch, *supra* note 442, at 276.

Finally, and likely the biggest objection to the possession paradigm, would be the loss of the various policies that underlie current doctrines.⁴⁴⁵ To embrace a robust, possession-based approach risks undermining those policies. Requiring public accessibility could permit inventors to game the system by retaining aspects of their invention from the public view while still utilizing and commercializing them. *Egbert* is an example of such a dynamic.⁴⁴⁶ The incentive to encourage inventors to promptly file their applications would be undermined, unless of course a strict statute of limitations period were utilized in lieu of the class possession approach. Moreover, as recognized in *Egbert*, there could simply be certain classes of inventions for which public use might simply be impossible, allowing considerable arbitrage of the patent system.⁴⁴⁷ The possession approach would alter the doctrines that have evolved to deal with such concerns.

C. Conclusion—A Possession-Based Approach Seems More Attractive

Concerns with a possession-based approach are legitimate. We would forfeit certain aspects of current doctrine that are based on certain policy interests. However, the extent to which such arbitrage happens is not clear.⁴⁴⁸ Indeed, it assumes that many innovators are familiar with how the patent system operates.⁴⁴⁹ It also runs counter to a concern that patentees actually have incentives to file patent applications *too early*.⁴⁵⁰ To engage in such arbitrage, an applicant necessarily would delay filing an application in order to exploit the invention for a period of time before filing, effectively extending the term of the subsequent patent.⁴⁵¹ Yet many commentators have bemoaned the opposite dynamic: inventors are filing applications

445. See, e.g., *supra* Part III.A.1.d.

446. See *Egbert v. Lippmann*, 104 U.S. 333, 336-37 (1881).

447. *Id.* at 336.

448. See, e.g., *supra* Part III.A.1.d.

449. See *Janis & Holbrook*, *supra* note 233, at 74.

450. See *infra* note 452 and accompanying text.

451. *Ferag AG v. Quipp Inc.*, 45 F.3d 1562, 1567-68 (Fed. Cir. 1995) (“[T]he overriding focus of section 102(b) is preventing inventors from reaping the benefits of the patent system beyond the statutory term.”); see also *Holbrook*, *supra* note 55, at 944 (noting the on-sale bar is concerned with “effectively extending the patent term”).

prematurely on underdeveloped or unproven inventions.⁴⁵² It may actually be advantageous to put the brakes on such filings.⁴⁵³ As such, the concerns of such game-playing may be overblown. Delaying applications could actually be advantageous.

The possession-based system would create coherency that the law is currently lacking.⁴⁵⁴ With a proper framework, hopefully courts delineate lines of precedent that facilitate greater understanding of what constitutes prior art. More optimistically, persons performing prior art searches in anticipation of filing patent applications or assessing the patent landscape before entering into a particular venture will have clearer, hopefully simpler rules for assessing patentability. Given the potential for lesser search costs and greater coherency,⁴⁵⁵ a possession-based system seems quite laudable.

V. WHAT DOES POSSESSION IN THE PATENT LAW CONTEXT ADD TO THE PROPERTY-BASED POSSESSION LITERATURE?

The above discussion reveals an aspect of possession with which the property literature has not fully engaged: the sufficiency of the act of communication. In other words, how “public” does the act need to be? In many of the canonical examples—fox hunting,⁴⁵⁶ manure gathering⁴⁵⁷—the acts are quite public such that the sufficiency of the communication was generally not at issue.

Or so it may seem. In *Pierson v. Post*, the determinative holding is that Pierson won because he killed the fox.⁴⁵⁸ Possession is clear.⁴⁵⁹ But the broader discussion of what acts would be sufficient at least pose issues of the sufficiency of the act to communicate possession to other parties.⁴⁶⁰ For example, the court concluded that

452. See Christopher A. Cotropia, *The Folly of Early Filing in Patent Law*, 61 HASTINGS L.J. 65, 67, 69 (2009); Timothy R. Holbrook, *Patent Disclosures and Time*, 69 VAND. L. REV. 1459, 1487, 1499 (2016); Mark A. Lemley, *Ready for Patenting*, 96 B.U. L. REV. 1171, 1173 (2016); Jacob S. Sherkow, *Patent Law's Reproducibility Paradox*, 66 DUKE L.J. 845, 868-69 (2017).

453. See Cotropia, *supra* note 452, at 69-70.

454. See *supra* Part I.A; see also *supra* text accompanying notes 358-59.

455. See *supra* note 429 and accompanying text.

456. See *Pierson v. Post*, 3 Cai. 175, 177 (N.Y. Sup. Ct. 1805).

457. See *Haslem v. Lockwood*, 37 Conn. 500, 505 (1871).

458. *Pierson*, 3 Cai. at 178.

459. *Id.*

460. Cf. Smith, *supra* note 123, at 82 (“It may well be that hunters among themselves

trapping the animal or mortally wounding it while in pursuit were sufficient.⁴⁶¹ Finding a trapped animal would likely inform an ordinary person that someone has asserted dominion over the animal.⁴⁶²

The requirement for mortal wounding while in pursuit,⁴⁶³ though, poses different challenges. Both conditions may not be apparent to an ordinary observer. For example, how does someone encountering a wounded animal know whether the wound is mortal? An ordinary person likely could not discern the difference between a particularly bloody yet nonmortal wound and a mortal one. Similarly, the requirement for pursuit may entail assessments of how close is close enough in a hunting context. For this aspect of possession, the identity of the audience becomes important. The court may implicitly have had an “expert” audience in mind—other hunters.⁴⁶⁴ But, if that was truly the case, then perhaps the dissent’s view should have prevailed: either leave it to the hunters to decide under their own customs, or award the fox to the person having a reasonable prospect of taking it.⁴⁶⁵ Hunters may be able to make that assessment more readily than ordinary persons.⁴⁶⁶ Seemingly, pursuit alone would have been sufficient within the norms of the hunting community.⁴⁶⁷

This issue of sufficiency is contingent on whom we believe to be the relevant audience. As Henry Smith has explained, “[p]ossession law, like all law, is a form of communication and as such faces a trade-off: one can communicate in an intensive way with a more intimate audience or in a less information-dense way with a more extensive audience.”⁴⁶⁸ For some acts of possession, the appropriate audience likely is the general public. *Pierson v. Post*, though, sug-

might recognize rights of one in hot pursuit of a fox. The question is whether nonhunters should be held to know this.”).

461. *Pierson*, 3 Cai. at 178.

462. Anyone except Kramer from *Seinfeld*. See *Seinfeld: The Hamptons*, IMDB, <https://www.imdb.com/title/tt0697707/> [<https://perma.cc/3LTG-JT9D>].

463. See *Pierson*, 3 Cai. at 178-79.

464. Cf. Jeanne C. Fromer & Mark A. Lemley, *The Audience in Intellectual Property Infringement*, 112 MICH. L. REV. 1251, 1263 (2014) (observing that patent claims are addressed to an “expert” audience).

465. *Pierson*, 3 Cai. at 180 (Livingston, J., dissenting).

466. *Id.*

467. See *id.*

468. Smith, *supra* note 123, at 81.

gests the audience may be a more select group of interested parties—other hunters.⁴⁶⁹

While *Pierson* and *Haslem* do not wrestle with the issue of the sufficiency of the communication to the audience,⁴⁷⁰ this concern is more readily addressed in the literature⁴⁷¹ and in other cases, particularly those involving the importation of norms and conventions into formal law.⁴⁷² This dynamic is seen more explicitly in the various whaling cases.⁴⁷³

Consider *Ghen v. Rich*, involving the ownership of a deceased fin-back whale that washed ashore on Cape Cod.⁴⁷⁴ Because fin-back whales sank when harpooned and killed, a norm developed on Cape Cod where persons who found the whale carcass would contact persons in Provincetown so that the owner could collect the whale.⁴⁷⁵ The owner would often compensate the finder as well.⁴⁷⁶ In violation of this norm, Ellis found the whale and attempted to sell it.⁴⁷⁷ Although it seems Ellis may have been aware of this convention—and he ultimately lost⁴⁷⁸—one can easily envision a scenario where a finder is unaware of the convention. In other words, the finder is not part of the audience and thus does not understand the communication of possession.

As Thomas Merrill has noted,

In many cases, the relevant communicative act is self-evident.... Often this will be an act that easily is understood as such a signal, such as an employee locking the door when leaving. Other symbolic acts, like draping a coat over the back of a seat in the theater, require some cultural knowledge. Consequently, the

469. See *Pierson*, 3 Cai. at 180-81.

470. See *supra* text accompanying notes 130-45, 458-67.

471. See, e.g., *infra* note 493.

472. See *infra* notes 473-79 and accompanying text.

473. See *Swift v. Gifford*, 23 F. Cas. 558, 559 (D. Mass. 1872); *Bartlett v. Budd*, 2 F. Cas. 966, 966 (D. Mass. 1868); *Taber v. Jenny*, 23 F. Cas. 605, 606 (D. Mass. 1856).

474. 8 F. 159, 160 (D. Mass. 1881).

475. *Id.* at 159-60.

476. *Id.* at 160.

477. *Id.*

478. *Id.* (“Neither the respondent nor Ellis knew the whale had been killed by the libellant, but they knew or might have known, if they had wished, that it had been shot and killed with a bomb-lance, by some person engaged in this species of business.”).

precise actions that signal an intention to establish or remain in possession will turn on local custom, at least to some degree.⁴⁷⁹

The audience, therefore, matters.

In this regard, patent law may have a leg up on property law. Patent law has long embraced a construct to deal with this audience issue: the person having ordinary skill in the art (PHOSITA).⁴⁸⁰ As patent law's "reasonable person," the PHOSITA provides the lens for many important doctrines, such as claim construction, the doctrine of equivalents, and whether something qualifies as prior art.⁴⁸¹ The PHOSITA can act as a bridge between formal legal rules and the relevant audience for patent law.⁴⁸²

The PHOSITA construct seems appropriate for published documents, as the accessibility of such documents should depend on a knowledgeable artisan performing a literature search. We would expect someone with technical facilities who is engaging in innovation to be familiar with the literature in her field.⁴⁸³ In measuring whether a given patent or prior art reference would generally be publicly accessible, the PHOSITA provides a helpful heuristic.⁴⁸⁴ She would be aware of a variety of resources that a member of the general public may not.⁴⁸⁵

But what about tangible forms of prior art, such as public uses and sales? The PHOSITA may not be the right frame. She may not

479. Merrill, *supra* note 123, at 16.

480. See generally Rebecca S. Eisenberg, *Obvious to Whom? Evaluating Inventions from the Perspective of PHOSITA*, 19 BERKELEY TECH. L.J. 885 (2004) (discussing the role of the PHOSITA in the obviousness analysis); Timothy R. Holbrook, *Patents, Presumptions, and Public Notice*, 86 IND. L.J. 779, 781 (2011) (discussing the role of the PHOSITA in patent litigation); Greg Reilly, *Rethinking the PHOSITA in Patent Litigation*, 48 LOY. U. CHI. L.J. 501 (2016).

481. See Holbrook, *supra* note 34, at 10-11, 23, 24, 28.

482. Janis & Holbrook, *supra* note 233, at 96.

483. See, e.g., *GoPro, Inc. v. Contour IP Holding LLC*, No. 2017-1894, 2018 WL 3596007, at *4 (Fed. Cir. July 27, 2018) ("[A]lthough the general public at large may not have been aware of the trade show, dealers of POV cameras would encompass the relevant audience such that a person ordinarily skilled and interested in POV action cameras, exercising reasonable diligence, should have been aware of the show."); *Jazz Pharm., Inc. v. Amneal Pharm., LLC*, 895 F.3d 1347, 1358 (Fed. Cir. 2018) ("Whether the disseminated material is addressed to or of interest to persons of ordinary skill is also relevant to the public accessibility inquiry.").

484. Janis & Holbrook, *supra* note 233, at 90, 96.

485. See Reilly, *supra* note 480, at 509.

know of others' commercial activities, or whether some event constituted a public attempt at commercializing an invention.⁴⁸⁶ Instead, it may be more appropriate to use the perspective of the reasonable competitor, another construct that has appeared in U.S. patent law.⁴⁸⁷ A competitor might have a better sense of market activities, as opposed to a technologist who may not be concerned with the commercial or public activity of potential competitors.

To inform the reasonable competitor construct, patent law may want to turn to trade secrecy. Information can only qualify for trade secrecy protection if it is truly a secret.⁴⁸⁸ In other words, the information cannot be generally known or readily ascertainable.⁴⁸⁹ Such an assessment necessarily entails a consideration of the appropriate audience: to whom is the information generally known or ascertainable? Generally, the appropriate audience is not the general public.⁴⁹⁰ But, in a competitive industry, various market players likely have an idea of what is known across the industry.⁴⁹¹ The reasonable competitor is aware of events within the market and has some level of technical sophistication to monitor tangible forms of prior art.⁴⁹² Patent law could likely be better informed by a greater engagement with the law of trade secrecy in this regard.

Regardless, one can see that patent law has taken the issue of audience seriously. Elsewhere, a coauthor and I have suggested that proper constructs such as the PHOSITA can be used as a bridging heuristic to deal with issues of complexity and proximity when it comes to the law and its intended audience.⁴⁹³ Property law stands

486. See Eisenberg, *supra* note 480, at 893.

487. See, e.g., *Sextant Avionique, S.A. v. Analog Devices, Inc.*, 172 F.3d 817, 826-27 (Fed. Cir. 1999).

488. See *Enter. Leasing Co. of Phx. v. Ehmke*, 3 P.3d 1064, 1068 (Ariz. Ct. App. 1999).

489. UNIF. TRADE SECRETS ACT § 1(4)(i) (AM. BAR ASS'N 1986) [hereinafter UTSA]; RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 cmt. f (AM. LAW INST. 1995).

490. UTSA § 1 cmt. ("The language 'not being generally known to and not being readily ascertainable by proper means by other persons' does not require that information be generally known to the public for trade secret rights to be lost.")

491. *Id.* ("If the principal persons who can obtain economic benefit from information are aware of it, there is no trade secret. A method of casting metal, for example, may be unknown to the general public but readily known within the foundry industry."); see, e.g., *Enter. Leasing Co. of Phx.*, 3 P.3d at 1069.

492. See *Janis & Holbrook*, *supra* note 233, at 103-04.

493. See *id.* at 77-84; see also Timothy R. Holbrook & Mark D. Janis, *Patent-Eligible Processes: An Audience Perspective*, 17 VAND. J. ENT. & TECH. L. 349, 358-63 (2015).

to gain much from recognizing the doctrinal and theoretical work that has been done in this regard within patent law.⁴⁹⁴

CONCLUSION

Understanding what constitutes prior art has long been a vexing problem for law students and practitioners. This Article has offered a theoretical construction of prior art that would create greater consistency and coherency to the doctrine. By using the conception of possession from property law, one can see the importance of public accessibility in defining what constitutes prior art as part of the validity analysis. Even though possession in the property context is a contested proposition, reliance on principles rooted in possession promises to reduce search costs and generate more certainty within the law.

This analysis is even more crucial as the courts begin to engage with the AIA. Even though, as a statutory construction matter, I believe that the AIA did not significantly alter the common law that has developed to define prior art, it could create an appropriate occasion for revisiting some of that precedent by the Supreme Court and the Federal Circuit. At a minimum, this Article details the importance of audience in assessing prior art. It thus engages, and elaborates, on the communicative function of patent law in a way that should inform the broader debates in property law about possession.

494. See generally Fromer & Lemley, *supra* note 464 (discussing the role of audiences in IP law).