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Patent Exhaustion Connects Common Law to Equity: Impression Products, Inc. v. Lexmark International, Inc.

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PATENT EXHAUSTION CONNECTS COMMON LAW TO EQUITY:
IMPRESSION PRODUCTS, INC. V. LEXMARK INTERNATIONAL,
INC.

KUMIKO KITAOKA*

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I. INTRODUCTION

On May 30, 2017, the U.S. Supreme Court reversed an *en banc* Federal Circuit decision in a high-profile patent case, *Impression Products, Inc. v. Lexmark International, Inc.*¹ Following *Life Technologies Corp. v. Promega Corp.*,² *SCA Hygiene Products Aktiebolag v. First Quality Baby Products, LLC*,³ and *TC Heartland LLC v. Kraft Foods Group Brands LLC*,⁴ the

1. *Impression Prods., Inc. v. Lexmark Int’l, Inc.*, 137 S. Ct. 1523, 1528 (2017), *rev’g* 816 F.3d 721 (Fed. Cir. 2016).

2. *Life Tech. Corp. v. Promega Corp.*, 137 S. Ct. 734, 743 (2017) (indirect infringement), *rev’g* 773 F.3d 1338 (Fed. Cir. 2014).

3. *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 967 (2017) (laches defense), *vacating in part* 807 F.3d 1311 (Fed. Cir. 2015).

4. *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1520-21 (2017) (venue of patent infringement actions), *rev’g In re TC Heartland LLC*, 821 F.3d 1338 (Fed. Cir. 2016).

decision is the fourth Supreme Court decision in the 2017 term that reversed the Federal Circuit judgment.

In *Impression Products*, the Federal Circuit refused to apply patent exhaustion, a judiciary-made doctrine, which terminates a patent owner's rights over sold or otherwise disposed of items,⁵ to products sold abroad.⁶ In addition, the Federal Circuit held that the patent owner could preserve the rights to exclude buyers of sold products from reusing or reselling them, through clearly communicated, otherwise-lawful "single-use/no-resale" restrictions.⁷ The Federal Circuit's conclusion in *Impression Products* was nothing new because the Federal Circuit had previously held that patent exhaustion is not triggered by foreign sales in *Jazz Photo Corp. v. International Trade Commission*,⁸ and that post-sale restrictions can prevent patent exhaustion in *Mallinckrodt, Inc. v. Medipart, Inc.*⁹

The Federal Circuit decision gathered considerable attention from legal professionals because they had different opinions about whether *Kirtsaeng v. John Wiley & Sons, Inc.* had overruled *Jazz Photo*,¹⁰ and whether *Quanta Computer, Inc. v. LG Electronics, Inc.* had overruled *Mallinckrodt*.¹¹ In *Kirtsaeng*, the Supreme Court applied copyright exhaustion to books sold abroad.¹² Thus, some expected that the Federal Circuit would overrule *Jazz*

5. See, e.g., *Bloomer v. McQuewan*, 55 U.S. 539, 549–50 (1852) (judicial recognition of patent exhaustion).

6. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 760–62, 774 (en banc) (Fed. Cir. 2016), cert. granted, 137 S. Ct. 546 (2016), rev'd, 137 S. Ct. 1523 (2017).

7. *Id.* at 753, 760.

8. See *id.* at 754–56 (discussing *Jazz Photo Corp. v. ITC*, 264 F.3d 1094 (Fed. Cir. 2001), overruled by *Impression Prods.*, 137 S. Ct. 1523).

9. See *id.* at 735–39, 752–53 (discussing *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 709 (Fed. Cir. 1992), overruled by *Impression Prods.*, 137 S. Ct. 1523).

10. *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 539–45 (2013). For the discussion of *Kirtsaeng*'s precedential value in relation to *Jazz Photo*, see *San Disk Corp. v. Round Rock Research LLC*, No. C 11-5243 RS, 2014 U.S. Dist. LEXIS 81290, at *14 (N.D. Cal. June 13, 2014); see also *LG Elecs., Inc. v. Hitachi, Ltd.*, 655 F. Supp. 2d 1036 (N.D. Cal. March 13, 2009); *Static Control Components v. Lexmark Int'l*, 615 F. Supp. 2d 575, 585–88 (E.D. Ky. 2009), *aff'd*, 697 F.3d 387 (6th Cir. 2012), *aff'd*, 134 S. Ct. 1377 (2014). But see *Robert Bosch LLC v. Trico Prods. Corp.*, No. 12 C 437, 2014 U.S. Dist. LEXIS 69902, at *7–8 (N.D. Ill. May 21, 2014) (following *Jazz Photo*'s rule).

11. *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 625–26 (2008). For the discussion of *Quanta*'s ruling in relation to *Mallinckrodt*, see *Ergowerx Int'l, LLC v. Maxell Corp. of Am.*, 18 F. Supp. 3d 430, 448 (S.D.N.Y. 2014) (concluding that *Quanta* overturned the conditional sales doctrine); see also *Civil Action at *22, Lexmark Int'l, Inc. v. Ink Techs. Printer Supplies, LLC*, 9 F. Supp. 3d 830 (S.D. Ohio 2014) (No. 1: 10-CV-564), 2014 U.S. Dist. LEXIS 41045, rev'd, *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721 (Fed. Cir. 2016), rev'd, 137 S. Ct. 1523 (2017); Alfred C. Server & William J. Casey, *Contract-Based Post-Sale Restrictions on Patented Products Following Quanta*, 64 HASTINGS L.J. 561, 596 (2013).

12. *Kirtsaeng*, 568 U.S. at 538–45.

Photo and adopt international patent exhaustion.¹³ Similarly, *Quanta*'s broad application of patent exhaustion caused uncertainty about the validity of post-sale restrictions including the single-use/no-resale restriction imposed by *Lexmark International, Inc.* ("Lexmark").¹⁴

Moreover, *Impression Products* was closely followed by business leaders because the Supreme Court's adoption of international patent exhaustion might require restructuring of the U.S. economy, shifts in the international trade, and changes in people's lives.¹⁵ Without international patent exhaustion, a U.S. patent owner may, not only seek monetary damages from importers of patented products but also seize products at the national border even if the patent owner sold the imported products or permitted their sales in foreign countries.

International patent exhaustion will affect interests of patent-holding companies that have sold cheaply-priced products abroad under the assumption that the products will not be brought into the United States for resale.¹⁶ In a commonly-called international price discrimination, companies sell their products at different prices in different countries depending on the market condition and the intellectual property protection.¹⁷ International patent exhaustion will likely cause influx of foreign-sold products and reduce the prices of many products in the U.S. market.¹⁸ Innovative technology companies and brand pharmaceuticals expressed concerns that their research and development would be sacrificed through reduced earnings.¹⁹

13. See *Impression Prods.*, 816 F.3d at 786–88 (Dyk, J., dissenting); see also Scott W. Doyle, et al., *Lexmark Is Much Ado About Nothing — For Now*, LAW360 (Feb. 18, 2016, 9:59 AM), <https://www.law360.com/articles/760145?scroll=1>.

14. See *Impression Prods.*, 816 F.3d at 779–83 (Dyk, J., dissenting).

15. See 35 U.S.C. § 271(a) (2012) (patent infringement); see also 19 U.S.C. § 1337 (2012) (exclusion of infringing products by the customs officials).

16. See Daniel J. Hemel & Lisa Larrimore Ouellette, *Trade and Tradeoffs: The Case of International Patent Exhaustion*, 116 COLUM. L. REV. SIDEBAR 17, 20–26 (2016); see also John A. Rothchild, *Exhausting Extraterritoriality*, 51 SANTA CLARA L. REV. 1187, 1188 (2011).

17. Richard M. Andrade, *The Parallel Importation of Unauthorized Genuine Goods: Analysis and Observations of the Gray Market*, 14 U. PA. J. INT'L BUS. L. 409, 415 (1993).

18. Tech companies, including Google Inc., Quanta Computer Inc., and Texas Instruments Inc., urged the Federal Circuit to loosen reuse restrictions for overseas sales because supply chains for products like smartphones can include hundreds of suppliers and sub-manufacturers based all over the world. Scott Graham, *Supreme Court Dives into Patent Exhaustion with Printer Cartridges*, NAT. L.J. (Dec. 5, 2016), <http://www.law.com/nationallawjournal/almID/1202773928257/?sreturn=20170926175203>.

19. See Brief for Am. Intell. Prop. Ass'n as Amici Curiae Supporting Neither Party, *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523 (2017) (No. 15-1189), 2017 U.S. S. Ct. Briefs LEXIS 285; see also Brief for Pharm. Res. & Mfrs. Of Am. as Amici Curiae Supporting Respondent, *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523 (2017) (No. 15-1189), 2017 U.S. S. Ct. Briefs LEXIS 738; Brief for Biotech. Innovation Org. & Croplife Int'l as Amici Curiae Supporting Respondent, *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523 (2017) (No. 15-1189), 2017 U.S. S. Ct. Briefs LEXIS 644.).

Chief Justice Roberts delivered the opinion of the Supreme Court.²⁰ Reversing the Federal Circuit decision, the Court stated that the common law prohibition against restraints on the use and sale of products has provided the foundation of patent exhaustion.²¹ It held that the post-sale restriction should not provide a ground for denial of patent exhaustion,²² and that patent exhaustion should apply to foreign sales.²³ Justice Ginsburg dissented in part and concurred in part, and wrote that foreign sales should not cause exhaustion of U.S. patent rights.²⁴

With a purpose to elaborate the recognition of international patent exhaustion in *Impression Products*, and explain why the Federal Circuit “got off on the wrong foot,”²⁵ this paper reviews the primary and secondary authorities that discussed the common law prohibition against servitudes on personal property and the equitable servitudes, and explains what exactly the exhaustion doctrine has been, as established by case law, and investigates its relationship to the common law servitude rule and the newly-developed equitable servitudes.²⁶ Part II starts with introduction of *Impression Products*, followed by an explanation of the common law prohibition against servitudes on personal property, copyright exhaustion, and patent exhaustion. Part III proposes and explains a two-step test for the determination on patent exhaustion: the first inquiry pertains to the need for the protection of third-party acquirers of goods to ensure the certainty of trade and the alienability of personal property; and the second part determines whether and how public interests such as the maintenance of competition and the promotion of science and useful arts would be affected by denial or application of patent exhaustion. In conclusion, it explains that the proposed two-step test will lead to the same conclusion that the Supreme Court reached in *Impression Products*.

20. *Impression Prods., Inc. v. Lexmark Int’l, Inc.*, 137 S. Ct. 1523, 1523 (2017).

21. *Id.* at 1531–33.

22. *Id.* at 1530.

23. *Id.* at 1535–36.

24. *Id.* at 1538–39 (Ginsburg, J., dissenting concerning international patent exhaustion).

25. *Id.* at 1533.

26. The word “restraint” is hereinafter used to mean any limitation of a person’s freedom, such as a contractual obligation upon a buyer or a licensee and a restriction that results from presence of intellectual property rights.

II. BACKGROUND

A. *Brief Summary of Impression Products*

1. Facts and Procedural Highlights: Imported Modified Single-Use Printer Cartridges

The plaintiff, Lexmark, is a major producer of laser printers and toner cartridges for its laser printers.²⁷ Lexmark developed microchips for both the toner cartridges and the printers so that Lexmark printers would reject any toner cartridges not containing a matching microchip.²⁸ In addition, Lexmark carried out a price discrimination program for printer cartridges.²⁹ The “Regular Cartridge” was offered at full price, in which case, the buyer was not subject to any sale terms restricting reuse or resale of the cartridge.³⁰ The “Program Cartridge” was offered at a discount of roughly twenty percent, subject to the single-use/no-resale restriction.³¹ Buyers of the Program Cartridge could only return them to Lexmark.³² The defendant, Impression Products, Inc. (“Impression Products”) acquired used Program Cartridges in the United States and foreign countries after a third party had replaced their chips and refilled their toners.³³ Impression Products imported the refilled Program Cartridges and the Regular Cartridges and sold them without Lexmark’s authorization.³⁴

Lexmark owns U.S. patents covering its printer cartridges.³⁵ Lexmark discovered Impression Products’ activities and sued Impression Products for patent infringement.³⁶ Impression Products moved to dismiss Lexmark’s claims on the grounds that Lexmark’s U.S. patents were exhausted by foreign sales of the imported cartridges and that Lexmark’s single-use/no-resale restriction was invalid under patent law.³⁷

27. *Static Control Components, Inc. v. Lexmark Int’l, Inc.*, 697 F.3d 387, 394–95 (6th Cir. 2012).

28. *Id.* at 395.

29. *Lexmark Int’l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 727–28 (Fed. Cir. 2016).

30. *Id.* at 727.

31. *Id.* at 727–28.

32. *Id.*

33. *Id.* at 729.

34. *Id.*

35. *Id.* at 728.

36. *Id.* at 728.

37. *See Lexmark Int’l, Inc. v. Ink Techs. Printer Supplies, LLC*, 9 F. Supp. 3d 830, 831 (S.D. Ohio 2014); *see also* Civil Action at *3, *Lexmark Int’l, Inc. v. Ink Techs. Printer Supplies, LLC*, 9 F. Supp. 3d 830 (S.D. Ohio 2014) (No. 1: 10-CV-564), 2014 U.S. Dist. LEXIS 41045.

As to international patent exhaustion, the District Court for the Southern District of Ohio concluded that foreign sales did not exhaust U.S. patents.³⁸ The district court concluded that *Jazz Photo* was still good law and *Kirtsaeng* was not a relevant authority for the following reasons: *Kirtsaeng* was largely decided through interpretation of the Copyright Act; the Supreme Court did not discuss the issue of international patent exhaustion in *Kirtsaeng*; and patents are subject to the territoriality principle, which makes the concept of international exhaustion especially unsuitable to patents.³⁹

Conversely, the district court granted Impression Products' motion to dismiss based on the ground that single-use/no-resale restriction could not prevent patent exhaustion.⁴⁰ The court concluded that the Return Program was invalid as a post-sale restriction under *Quanta*.⁴¹ The court reasoned that a contrary holding would create uncertainties to a third-party purchaser who obtained the cartridge through an authorized foreign sale.⁴²

2. The Federal Circuit: Territoriality and Patentees' Freedom to Contract

With respect to the issue of international patent exhaustion, the Federal Circuit agreed with the district court.⁴³ The court concluded that international patent exhaustion should not apply to goods sold in a foreign country, even if the sale was authorized by a U.S. patent owner.⁴⁴

In refusing to recognize international patent exhaustion, the majority stated that patent rights are especially territorial and that foreign markets are not the predictable equivalent of the U.S. market in which patent holders have exclusivity.⁴⁵ According to the Federal Circuit opinion, a foreign sale was not reasonably viewed as the reward guaranteed by U.S. patent law because laws and regulations vary from country to country.⁴⁶ The Federal Circuit also reasoned that overruling *Jazz Photo* would disrupt industry

38. *Ink Techs. Printer Supplies*, 9 F. Supp. 3d at 832–35.

39. *Id.* at 832–38.

40. Civil Action at *23–24, *Ink Techs. Printer Supplies*, 9 F. Supp. 3d 830 (S.D. Ohio 2014) (No. 1:10-CV-564), 2014 U.S. Dist. LEXIS 41045.

41. *Id.* at *21–24.

42. *Id.* at *23–24.

43. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 762 (Fed. Cir. 2016).

44. *Id.* at 762–765.

45. *Id.* at 762–65 (citing *Boesch v. Graff*, 133 U.S. 697, 703 (1890)).

46. The court stated that the Patent Act must guarantee the patentees' ability to prevent buyers from bringing a patented article into the United States and selling or using it to satisfy a U.S.-market demand that the patentee could otherwise help satisfy at U.S.-market prices. *Id.*

practices.⁴⁷ The court concluded that *Kirtsaeng* is not a persuasive authority given that *Kirtsaeng* is derived from the common law disfavor toward restraints on the alienation of personal property.⁴⁸

On the issue of post-sale restriction, the majority disagreed with the district court and held that, by employing a post-sale use restriction, patent owners can successfully avoid patent exhaustion.⁴⁹ The court distinguished *Quanta* on the ground that the case did not involve a patentee's sale or a single-use/no-resale restriction.⁵⁰

In particular, the majority emphasized the language in Section 271 of the Patent Act "whoever without authority makes, uses, offers to sell, or sells any patented invention."⁵¹ The court concluded that the sales subject to the Return Program did not cause patent exhaustion because, when a patent owner expressly denies a buyer's ability to reuse or resale products, "authority" to use or sell is absent.⁵² In the majority's view, the common law prohibition against restraints on the alienation of personal property has become "background," and personal property is not free from restraints on the alienation or use.⁵³

Judge Dyk wrote that the Supreme Court had repeatedly held that imposition of post-sale restrictions cannot effectively overcome patent exhaustion, and that the unilateral imposition of geographical limitations to the buyers' use cannot be upheld.⁵⁴

47. *Id.* at 770–73.

48. *Id.* at 759.

49. *Id.* at 739, 742.

50. *Id.* at 737.

51. *Id.* at 726. 35 U.S.C. § 271(a) provides "[e]xcept as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent."

52. *Impression Prods.*, 816 F.3d at 730.

53. *Id.* at 751 ("Some of the numerous, distinct common-law jurisdictions, including Lord Coke's, have departed at various times from the background rule expressed by Lord Coke.").

54. *Id.* at 787 (Dyk, J., dissenting).

B. The Prohibition Against Servitudes on Chattels and Exhaustion of Intellectual Property Rights

1. The Alienability of Property and the Law of Servitudes

a. Rationales for the Common Law Prohibition against Servitudes

It has been “a fundamental tenet” of property law that property should be alienable.⁵⁵ Courts do not allow parties to impose restraints that would deter alienability of property.⁵⁶ As a result, in England and the United States, courts have simplified interests in land by removing substantive restraints on alienation.⁵⁷

As the modern economy gave rise to multiple conflicting interests over a single piece of property, more specifically crafted rules were desired to deal with diverse transactions.⁵⁸ The rules have been devised to allow owners of property to derive maximal benefits without unduly interfering with the ability of others to exercise their own entitlements.⁵⁹ Therefore, rules promoting certain systemic goals have been established.⁶⁰

In the United States, when an innocent third party purchases personal property from a thief or someone without authority to sell, the traditional rule has been that the innocent purchaser cannot obtain a valid title.⁶¹ To enhance the certainty of trade and the alienation of products, courts have protected innocent purchasers and treated possession as quasi-ownership of property.⁶² In a case that involved one family in South Carolina who had possessed historical documents from the Civil War era, the Fourth Circuit held that “actual possession is, prima facie, evidence of legal title in the possessor” to resolve impenetrable difficulties to locate title, promote stability, and protect settled expectations.⁶³

55. JOSEPH WILLIAM SINGER, INTRODUCTION TO PROPERTY 10 (2d ed. 2005).

56. *Id.* at 11; *see Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 538–39 (2013) (citing Lord Coke’s description of the common law disfavor of restraints on the alienation of chattels).

57. Joshua Getzler, *Transplantation and Mutation in Anglo-American Trust Law*, 10 THEORETICAL INQUIRIES IN L. 355, 356 (2009).

58. SINGER, *supra* note 55, at 12.

59. SINGER, *supra* note 55, at 12.

60. For example, rules against contracts that disregard human dignity, rules maintaining the functionality of markets, and antitrust regulations preserving other public interests are included. SINGER, *supra* note 55, at 12.

61. SINGER, *supra* note 55, at 809.

62. *Id.* at 16; *see also* *Herbert v. Mechs. Bldg. & Loan Ass’n of New Brunswick*, 17 N.J. Eq. 497, 499–500 (1864); 2 EDWARD COKE, THE SECOND PART OF THE INSTITUTES OF THE LAWS OF ENGLAND 713 (photo. reprint 1986) (1642).

63. *Willcox v. Stroup*, 467 F.3d 409, 412–14 (4th Cir. 2006) (citing EDWARD COKE, 1 COMMENTARY UPON LITTLETON 6. b. (photo. reprint 1986) (19th ed. 1832)). *But see* Solomon R.

Most of the industrialized countries have implemented a system to protect a bona fide purchaser of property.⁶⁴ Roman law, which favors a true owner, has survived in the United Kingdom, the United States, Russia, and Germany.⁶⁵ Roman law generally allowed an innocent party to perfect title through a process known as usucaption, a device similar to adverse possession.⁶⁶ The process of usucaption allowed a person who obtained title by a defective conveyance to perfect his title by holding property for a stipulated period.⁶⁷ On the other hand, Germanic law, which protects a good faith purchaser who bought goods from a non-owner seller in the open market (“market overt”), remained mostly effective in other parts of continental Europe.⁶⁸ Thus, U.S. courts have afforded a lesser degree of protection for a good faith purchaser compared with courts that have adopted the market overt theory.⁶⁹

In addition to the protection under common law, such as the quasi-ownership treatment of possession of personal property, the Uniform Commercial Code (“U.C.C.”) has provided an augmented safeguard for a good faith purchaser.⁷⁰ The U.C.C. has introduced *the buyer in the ordinary course of business* (“BOCB”) as a uniformly applicable protection of buyers.⁷¹ Through protection of a purchaser’s reasonable reliance on the

Guggenheim Found. v. Lubell, 77 N.Y.2d 311, 321 (N.Y. 1991) (holding that the burden of proving that goods was not stolen rests with a third-party purchaser).

64. See Derek Fincham, *Towards A Rigorous Standard for the Good Faith Acquisition of Antiquities*, 37 SYRACUSE J. INT’L L. & COM. 145, 206 n73. (2010); see, e.g., MINPŌ [Civil. Code.] 1896 art. 192 (Japan) (“[a] person who commences the possession of movables peacefully and openly by a transactional act acquires rights to exercise with respect to such movables immediately if she is in good faith and faultless.”).

65. Hab Wojciech Kowalski, *Purchase of a stolen work of art, Legal Convergence in THE ENLARGED EUROPE OF THE NEW MILLENNIUM* 89, 91–94 (Paul Torremans ed., 2000).

66. Saul Levmore, *Variety and Uniformity in the Treatment of the Good-Faith Purchaser*, 16 J. LEGAL STUD. 43, 65 (1987).

67. *Id.*

68. See Kowalski, *supra* note 65; see also Alan Schwartz & Robert E. Scott, *Rethinking the Laws of Good Faith Purchase*, 111 COLUM. L. REV. 1332, 1372–73 (2011) (stating that jurisdictions that have a system similar to the market overt include Brazil, Canada (Quebec), China, France, Germany, Israel, Italy, Japan, Mexico, and Spain).

69. See Peter M. Smith, *Valediction to Market Overt*, 41 AM. J. LEGAL HIST. 225, 225–26 (1997) (explaining that the market overt doctrine was known in colonial America, but ultimately came to be wholly rejected by the American courts).

70. See U.C.C. § 2-403(2) (AM. LAW INST. & UNIF. LAW COMM’N 1977); see also SINGER, *supra* note 55, at 809.

71. *Id.*

appearance of authority, the U.C.C. has enhanced the market reliability in the United States.⁷²

Both the presumption of possessors' good title to goods and the BOCB provision serve to facilitate alienation of personal property, and reflect the heightened need for the smooth and reliable commerce in personal property.⁷³

b. The Law of Servitudes

Servitudes are nonpossessory interests in property,⁷⁴ which bind successors in the ownership of property.⁷⁵ Related but different interests are a license and a leasehold. A license is a nonpossessory interest, as with a servitude,⁷⁶ but it is revocable and it does not bind successors.⁷⁷ Notably, if a licensee reasonably relies on a promise of a licensor and invests a significant amount of money, a license will become not freely revocable and even permits a licensee to exclude third-party infringers.⁷⁸ A leasehold is similar to a servitude because it binds a landlord's successors in interest and allows a tenant to use the subject matter of a leasehold.⁷⁹ However, it is different from a servitude because it is a possessory interest.⁸⁰ A leasehold is also distinguishable from a servitude because it lasts usually for a specific time period or an unspecified period with periodic rent payment.⁸¹

Initially, common law courts refused to enforce servitudes that bind future generations.⁸² Courts were reluctant to recognize servitudes out of concerns that, "because of their longevity, servitudes would adversely affect the value of the burdened parcels" and might affect marketability of property.⁸³ Additionally, allowing owners to disaggregate the sticks in the

72. *The Owner's Intent and the Negotiability of Chattels: A Critique of Section 2-403 of the Uniform Commercial Code*, 72 YALE L. J. 1205, 1206 (1963) (explaining that the Code broadened the entrusting doctrine).

73. Menachem Mautner, "The Eternal Triangles of the Law": *Toward A Theory of Priorities in Conflicts Involving Remote Parties*, 90 MICH. L. REV. 95, 106-09 (1991).

74. SINGER, *supra* note 55, at 181.

75. THOMAS W. MERRILL & HENRY E. SMITH, *PROPERTY: PRINCIPLES AND POLICIES* 983 (2d ed. 2012).

76. *Id.* at 184-86. Licenses may be deemed irrevocable and treated like an easement if a licensee invests substantially in reasonable reliance on the license.

77. 8 THOMPSON ON REAL PROPERTY, SECOND THOMAS EDITION § 64.02(a)-(b), at 2-4 (David A. Thomas ed., 2005).

78. *Id.* § 64.02(b) at 5.

79. *Id.* § 42.03(a) at 288.

80. *Id.* § 40.01 at 4.

81. SINGER, *supra* note 55, at 437.

82. MERRILL & SMITH, *supra* note 75, at 1026.

83. RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 3.1 cmt. a (AM. LAW INST. 2000).

bundle of ownership rights may create numerous encumbrances and hurt the marketability of property.⁸⁴

Since the beginning of the 20th century, large-scale urban and suburban developments have taken place and the use of servitudes has become a customary practice.⁸⁵ Therefore, a court of equity has recognized equitable servitudes as far as land is concerned, if the following requirements are met: the parties intend to create servitudes; the covenant touches and concerns the land; and there is notice to a successor in interest.⁸⁶

Given the need to achieve a rapid and larger volume of transaction in personal property, even the court of equity did not recognize servitudes with regards to personal property.⁸⁷ In England, courts reasoned that an agreement to pay royalties in exchange for a transfer of title is nothing but an executory contract, enforceable only at law.⁸⁸ To promote “the score of justice and mercantile convenience,” courts held that a purchaser of any right, in its nature transmissible (whether a right *in rem* or a right *in personam*), acquires a right free from all equities of which he had no notice at the time of its acquisition.⁸⁹ In parallel to real property servitudes, courts have refused to recognize servitudes on personal property, and have simplified the possible conflicting interests over personal property.⁹⁰

In the early 20th century, however, some lower courts held that restrictions upon the use and alienation of items imposed by intellectual property right owners amounted to an equitable servitude in favor of the owners’ goodwill and business as dominant tenements.⁹¹ One of the difficulties in finding a valid servitude on personal property is the

84. SINGER, *supra* note 55, at 184.

85. RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 3.1 cmt. a.

86. *See* Tulk v. Moxhay, (1848) 41 Eng. Rep. 1143; *see also* MERRILL & SMITH, *supra* note 75, at 1040.

87. *See* Molly Shaffer Van Houweling, *The New Servitudes*, 96 GEO. L.J. 885, 910, 925 (2008) (introducing Professor Zechariah Chafee’s observation of the general antipathy toward post-sale restraints on personal property, and explaining that the absence of a recording system may have been one of the reasons). *But see* Glen O. Robinson, *Personal Property Servitudes*, 71 U. CHI. L. REV. 1449, 1453 (2004) (stating that if restraints are valid for real property, they should be valid, *pari passu*, for personal property).

88. *E.g.*, *In re Waterson, Berlin & Snyder Co.*, 48 F.2d 704, 708 (2d Cir. 1931) (quoting *In Re Grant Richards* (1907) 2 Q.B. 33).

89. J. B. Ames, *Purchase for Value Without Notice*, 1 HARV. L. REV. 1, 4 (1887) (“Nor is it essential that the innocent purchaser obtain the entire legal interest in the property, either in quantity or duration. The purchaser of an aliquot part of the estate, the grantee for value of a rent charge, or the lessee for value, may keep the interest actually acquired from the fraudulent legal owner.”).

90. *See id.*; *see also* Getzler, *supra* note 57, at 38.

91. *See In re Waterson*, 48 F.2d at 707 (royalty payment in copyright); *see also* Nadell & Co. v. Grasso, 346 P.2d 505 (Cal. Dist. Ct. App. 1959) (restriction of label use to protect goodwill).

requirement of dominant tenement.⁹² In *Nadell & Co. v. Grasso*, the court concluded that the dominant tenement requirement is satisfied if there are protectable business interests such as goodwill.⁹³

Likely because of the dominant tenement requirement, most of the cases in which courts found servitudes on personal property were intellectual property cases.⁹⁴ The position for creating servitudes on personal property never gained popularity.⁹⁵

2. Intellectual Property and Equitable Servitudes

a. Technology License: A Perplexing and Mixed Entity

Intellectual property rights, such as patents and copyrights, are enforceable against any unauthorized third parties when they infringe the intellectual property owner's statutory rights.⁹⁶ To avoid liability, users and sellers of patented goods or copyrighted materials need to obtain a permission from the owner, usually in a form of a license agreement.⁹⁷

Generally, a license of a technology may be defined as a grant of permission to practice a patent.⁹⁸ In technology licensing, there are distinctive features that are not shared with a "license" of real property or personal property.⁹⁹ In one aspect, a licensor and a licensee stand in a relationship akin to the relationship between a tenant and a landlord: both of the parties bear ongoing contractual duties, the agreement lasts usually for a specific period of time, and the grant is generally not freely revocable unless agreed otherwise.¹⁰⁰ A licensee may even have a right to sublicense or sue

92. See MERRILL & SMITH, *supra* note 75; see also Zechariah Chafee, Jr., *Equitable Servitudes on Chattels*, 41 HARV. L. REV. 945 (1928) [hereinafter Chafee, *Equitable Servitudes*].

93. *Nadell & Co.*, 346 P.2d 509–10 (citing Professor Chafee's suggestion that the imposition of restraints upon the resale price or the use of products may create a proprietary interest in the products for the benefit of the licensor's business as a dominant tenement).

94. See SINGER, *supra* note 55, at 425–29; see also *In re Waterson*, 48 F.2d at 708.

95. *Am. Bell, Inc. v. Fed'n of Tel. Workers*, 736 F.2d 879, 887 (3d Cir. 1984) (stating that few courts embraced the concept).

96. See 35 U.S.C. § 271 (2012); see also 17 U.S.C. § 501 (2012).

97. ROBERT W. GOMULKIEWICZ ET AL., *LICENSING INTELLECTUAL PROPERTY: LAW AND APPLICATION* 4 (2008).

98. *Id.*

99. PATRICK D. O'REILLY & BRIAN D. KACEDON, *DRAFTING PATENT LICENSE AGREEMENTS* 21 (8th ed. 2015) (explaining that the definition of license under property law does not fit neatly to the technology license).

100. *Id.* at 197–312 (various types of obligations and rights of licensors and licensees), 367–75 (the term and termination of license agreements).

infringers.¹⁰¹ As such, the relationship between a licensor and a licensee resembles the tenant-landlord relationship to some extent.

More precisely, the relationship between a licensor and a licensee is affected and determined by the type of the license that has been granted. Exclusive technology licenses convey certain ownership interests over the technology, while nonexclusive licenses don't convey such interests.¹⁰² Because the Patent Act affords protection to a patentee by way of exclusion of competitors, a party who holds one or more of exclusionary rights has standing to sue.¹⁰³ Exclusive licensees may have substantially all rights under a patent and have standing to sue infringing parties.¹⁰⁴

The degree of variance in license arrangements is notable in other aspects as well. Intellectual property holders frequently sell a tangible medium in addition to granting a license to use information.¹⁰⁵ These agreements are hybrid in a sense that a licensee obtains not only information but also an ownership interest over the tangible medium.¹⁰⁶ The licensee may seek remedies under the U.C.C. if the contract is predominantly a sale.¹⁰⁷

b. Are Restrictions on Licensed Goods Servitudes?

Because it is fairly common to impose restrictions on the use and sale of copyrighted or patented products, Professor Van Houweling examined whether these restraints may be analogized to servitudes on personal property, and attempted to explain restraints on the use of software program within the framework of a servitude.¹⁰⁸ Professor Van Houweling concluded

101. *Id.* at 37–52, 81–85 (standing to sue).

102. Alice Haemmerli, *Why Doctrine Matters: Patent and Copyright Licensing and the Meaning of Ownership in Federal Context*, 30 COLUM. J.L. & ARTS 1, 45 (2006) (stating that an exclusive copyright license is a legal title in the copyright and an exclusive patent license is an equitable, beneficial ownership interest in the patent).

103. *WiAV Sols. LLC v. Motorola, Inc.*, 631 F.3d 1257, 1264–65 (Fed. Cir. 2010) (holding that an exclusive licensee in a specific field of use had standing to sue even though third parties had rights to sublicense for other uses), *reh'g en banc denied by* 2011 U.S. App. LEXIS 4442 (2011).

104. *See, e.g., Vaupel Textilmaschinen KG v. Meccanica Euro Italia S.P.A.*, 944 F.2d 870, 875 (Fed. Cir. 1991), *reh'g denied by* 1991 U.S. App. LEXIS 28620 (1991). *But see Waterman v. Mackenzie*, 138 U.S. 252, 255 (1891) (holding that a mere license gives the licensee no title in the patent, and no right to sue at law).

105. *See Andrew Rodau, Computer Software: Does Article 2 of the Uniform Commercial Code Apply?*, 35 EMORY L.J. 853, 918 (1986) (observing that an increasing number of jurisdictions have extended article 2 to non-sale transactions such as leases and bailments).

106. *See Stacy-Ann Elvy, Hybrid Transactions and the INTERNET of Things: Goods, Services, or Software?*, 74 WASH. & LEE L. REV. 77 (2017) (concluding that a functionality approach may be a preferred method for evaluating IOT hybrid transactions).

107. *Triangle Underwriters, Inc. v. Honeywell, Inc.*, 604 F.2d 737, 742–43 (2d Cir. 1979) (holding that the essence of the contract was for sale of goods).

108. Van Houweling, *supra* note 87, at 889–90.

that restraints in licensing agreements should be valid as servitudes if restraints are beneficial for future users and waive some of the unnecessary limitations on reuse that copyright law itself imposes against the world.¹⁰⁹ Professor Van Houweling's accounts are enlightening in suggesting that restraints in licensing agreements may be equated to servitudes on personal property depending on the terms of the agreements.

On the other hand, Professor Zechariah Chafee examined U.S. case law that discussed servitudes on personal property and wrote that "[t]he attempt to impose equitable servitudes by notices has fared just as badly as the method of subcontracts" and that price maintenance against sub-purchasers "has been decisively repudiated by the Supreme Court even when applied to the subject matter of statutory monopolies."¹¹⁰ According to Professor Chafee's accounts, equitable servitudes were rejected by courts, and antitrust law disallowed restrictions imposed by intellectual property owners.¹¹¹

As the subsequent discussion shows, the Supreme Court has developed the exhaustion doctrine and prevented post-sale restraints on articles imposed by intellectual property right holders.¹¹² Then, the crucial question to be answered is the test for exhaustion when an intellectual property owner imposes restraints on the use and alienation of products that contain information. As a judicially-made equitable defense, intellectual property exhaustion involves assessment of various factors that courts consider in order to promote systemic goals, such as rules against contracts that disregard human rights, rules maintaining the marketability of property, and maintenance of competition.¹¹³

Importantly, equity came into existence to supplement common law.¹¹⁴ The common law prohibition against restraints on the alienation of property, and the protections of bona fide purchasers, remain as fundamental principles.¹¹⁵ To preserve the sense of justice, especially when confronted with the borderless economy and the emergence of transactions with globally-structured intellectual property interests, courts have turned to a

109. *Id.* at 949.

110. Chafee, *Equitable Servitudes*, *supra* note 92, at 954–55.

111. *Id.*

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

113. *See infra* Part II Sections C and D.

114. William Hamilton Bryson, *Equity and Equitable Remedies*, in *ENCYCLOPEDIA OF AM. JUDICIAL SYS.* (Scribner 1987).

115. *See, e.g.*, *Motion Picture Patents*, 243 U.S. at 518; *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 538–40, (2013).

more qualified test that is suited for examination of multiple conflicting interests.¹¹⁶

c. The Source of Intellectual Property Exhaustion

Copyright and patent exhaustion have been created as an embodiment of the common law prohibition against servitudes, but at the same time, it has been associated with ad hoc considerations at equity.¹¹⁷ The first sale doctrine, copyright exhaustion, was recognized as an equitable defense in *Bobbs-Merrill Co. v. Straus*.¹¹⁸ The Supreme Court, expressing strong disfavor for restrictions on the future trade of sold books, affirmed the Second Circuit's decision, which stated that, "[a] court of equity, therefore, would not be justified in enforcing the provisions of the copyright law, merely to prevent a sale of a copyrighted article."¹¹⁹ In recognizing copyright exhaustion, the Supreme Court avoided unfair extension of the copyright holder's control and exploitation from sold books.¹²⁰ In patents, courts exercise more care in the balancing analysis than in copyright exhaustion, and confine patentees' monopoly rights within the scope essential to a reasonable reward.¹²¹ In *Bloomer v. McQuewan*, the Supreme Court considered possible prejudicial consequences to an owner and a user of a patented product, and the objective of the patent term extension, and concluded that the grantee should be allowed to use the product continuously after the extension.¹²²

In patent and copyright exhaustion, courts have interpreted the Copyright Act and the Patent Act in such a way that existence of intellectual property rights would not result in injustice.¹²³ In formulating a standard for intellectual property exhaustion, it would be helpful to understand how courts consulted equity principles and ruled on the validity of servitudes under property law, and examine their implications to the issue of intellectual

116. See *Kirtsaeng*, 568 U.S. at 541–44, 554–57.

117. For patent exhaustion, see *Adams v. Burke*, 84 U.S. 453, 456–57 (1873) (common law); see also *Wilson v. Rousseau*, 45 U.S. 646, 680 (1846) (equity); *Bloomer v. McQuewan*, 55 U.S. 539, 550 (1852) (equity). For copyright exhaustion, see *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339, 341 (1908) (common law and equity); see also *Harrison v. Maynard, Merrill & Co.*, 61 F. 689, 689–92 (2d Cir. 1894) (common law).

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

119. *Bobbs-Merrill Co. v. Straus*, 147 F. 15, 23 (2d Cir. 1906), *aff'd*, 210 U.S. 339.

120. *Bobbs-Merrill*, 210 U.S. at 349–51.

121. *E.g.*, *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 518 (1917).

122. *Bloomer*, 55 U.S. at 553 ("For it can hardly be maintained that Congress could lawfully deprive a citizen of the use of his property after he had purchased the absolute and unlimited right from the inventor").

123. See *Bobbs-Merrill*, 210 U.S. at 349–51; see also *Bloomer*, 55 U.S. at 550.

property exhaustion. Additionally, it is important to appreciate the variety among license agreements: exclusivity of the license; variance in the parties' obligations and rights; and the hybrid nature of license agreements.¹²⁴

One of the literatures that explain the modern law of servitudes is the American Law Institute's *Restatement (Third) of Property: Servitudes* (2000).¹²⁵ Section 3.1 summarizes the rules on the validity of servitudes. According to the comment entitled "Historical note and rationale," (1) a servitude that is arbitrary, spiteful, or capricious; (2) a servitude that unreasonably burdens a constitutional right; (3) a servitude that imposes an unreasonable restraint on the alienation; (4) a servitude that imposes restraints on the trade or competition; and (5) a servitude that is unconscionable, have been invalidated.¹²⁶ Courts have held these restraints invalid on the ground that they violate public policy, after examining factors such as the nature of restraints, the impacts on future generations, and the extent of adverse effects.¹²⁷ Because equity provides a relief from a decision made at law, equity is not a "literalistic system," and the "textual limits of laws" have not constrained equity.¹²⁸ In subsequent sections, cases that dealt with copyright exhaustion and patent exhaustion will be discussed using the factors that are relevant to the determination of the validity of restraints in the *Restatement (Third) of Property*.

C. Copyright Exhaustion: The Rise of Equity

1. Coupling the Alienability Principle with the Purpose of the Copyright Act

In early exhaustion decisions, the focus of copyright exhaustion was the common law prohibition against restraints on the alienation of personal property and protection of interests of third-party buyers.

Initially, courts simply applied the prohibition against servitudes on chattels in copyright exhaustion.¹²⁹ In *Harrison v. Maynard, Merrill & Co.*, the plaintiff's copyrighted books were salvaged after a fire in a storage facility and the plaintiff disposed of the damaged copies to a third party as paper stock.¹³⁰ In spite of the restriction on the use and sale of copies and the

124. See *supra* Section B.2.a.

125. RESTATEMENT (THIRD) OF PROP.: SERVITUDES (AM. LAW INST. 2000).

126. *Id.* § 3.1 cmt. a.

127. *Id.* § 3.1 cmt. d.

128. David A. Super, *A New New Property*, 113 COLUM. L. REV. 1773, 1852 (2013).

129. See, e.g., *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339, 350–51 (1908).

130. *Harrison v. Maynard, Merrill & Co.*, 61 F. 689, 689–91 (2d Cir. 1894).

lack of satisfactory remuneration to the copyright owner, the Second Circuit ruled in favor of the defendant secondhand book dealer, who obtained the copies from unspecified book dealers.¹³¹ The court concluded that the copyright owner could not have a remedy under copyright law because it parted with a title to the copy.¹³² Through copyright exhaustion, the court effectively balanced the copyright holder's economic interests with public interests, such as furtherance of the alienation of chattels.

Later court opinions followed the Second Circuit's ruling in *Harrison*.¹³³ The Seventh Circuit applied the first sale doctrine in *Doan v. American Book Co.*, and held that the purchasers of lawfully made copies have a right to rebind and re-cover them, amounting to a mere repair.¹³⁴ Noting that patent exhaustion applies to repaired goods, the court concluded that buyers of lawfully made copies have the right to repair as buyers of patented goods.¹³⁵

In *Bobbs-Merrill Co. v. Straus*,¹³⁶ the Supreme Court applied copyright exhaustion, and held that "a copyright owner cannot have a remedy under copyright law once the owner *parted with a title to the copy*."¹³⁷ Even though there was no statutory basis that conditioned the exercise of copyright upon the ownership of a copy, the Court linked the termination of a copyright owner's exclusive rights to the transfer of ownership interest in a copy.¹³⁸

In *Bobbs-Merrill*, the Supreme Court explained copyright exhaustion from several viewpoints.¹³⁹ As a primary concern, the Court stressed the importance of alienation of copyrighted books, or the Copyright Act's purpose to disseminate ideas.¹⁴⁰ Next, the Court considered a potential harm to third-party purchasers if a copyright owner could sue them for copyright

131. *Id.* at 691 ("Whenever he parts with that ownership, the ordinary incident of alienation attaches to the particular copy parted with in favor of the transferee, and he cannot be deprived of it.").

132. *Id.*

133. See *Kipling v. G.P. Putnam's Sons*, 120 F. 631, 634 (2d Cir. 1903); see also *Werckmeister v. Am. Lithographic Co.*, 134 F. 321, 329–30 (2d Cir. 1904); *Bobbs-Merrill Co. v. Straus*, 147 F. 15, 23 (2d Cir. 1906).

134. *Doan v. Am. Book Co.*, 105 F. 772, 776–78 (7th Cir. 1901).

135. *Id.* at 777.

136. *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339, 341 (1908).

137. See *Harrison v. Maynard, Merrill & Co.*, 61 F. 689, 691 (2d Cir. 1894).

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

139. *Id.* at 350–51.

140. *Id.*

infringement.¹⁴¹ Further, the Court considered competitive harm.¹⁴² Combining multiple public policy considerations, the Court concluded that there was a lawfully made and sold book.¹⁴³

In later cases, the Supreme Court examined whether copyright owners' certain economic interests are relevant to copyright exhaustion. In *United States v. Masonite Corp.*, the Supreme Court decided that remuneration to a right holder is not determinative to exhaustion.¹⁴⁴ In *Quality King Distributors, Inc. v. L'anza Research International, Inc.*, the Court refused to give weight to the right holder's interests in maintaining a price discrimination by prohibiting parallel imports.¹⁴⁵

Along with the Supreme Court precedents, the Third Circuit broadened the scope of exhaustion through the U.C.C.'s third-party protection.¹⁴⁶ In *Independent News Co. v. Williams*, Independent News Co. required retailers to return book covers of unsold books and prohibited the sale of coverless books. The defendant bought coverless comic books that had been delivered to waste dealers. The Third Circuit applied the BOCB provision and ruled in favor of the defendant.¹⁴⁷

The protection of third-party purchasers was expanded in other aspects as well. In copyright, a purchaser who wishes to defend him- or herself by the first sale doctrine must prove that there was a sale and the subject of the sale was a lawfully made copy.¹⁴⁸ Courts have flexibly interpreted these requirements and have found a sale of a lawfully made copy in spite of copyright owners' contention.¹⁴⁹

In the field of software licensing, the Ninth Circuit established a three-prong test for the determination of sale, and held that there was no sale in

141. *Id.* at 350 (“[T]he copyright statutes, while protecting the owner of the copyright in his right to multiply and sell his production, do not create the right to impose, by notice, such as is disclosed in this case, a limitation at which the book shall be sold at retail by future purchasers, with whom there is no privity of contract”).

142. *Id.* at 351.

143. *Id.*

144. *United States v. Masonite Corp.*, 316 U.S. 265, 278 (1942) (holding that the rights and welfare of the community must be effectually guarded in copyright law as much as in patent law).

145. *Quality King Distrib., Inc. v. L'anza Research Int'l, Inc.*, 523 U.S. 135, 138–39, 153 (1998).

146. *Indep. News Co. v. Williams*, 293 F.2d 510, 511–13, 517 (3d Cir. 1961) (“the ordinary incidents of alienation belonging alike to all property attach to the material object in the hands of the new owner; and that copy is no longer under the copyright law insofar as the purchaser's right is concerned.”).

147. *Id.*

148. 17 U.S.C. § 109(a) (2012).

149. A minor alteration of original copies does not exclude application of the first sale doctrine. *Paramount Pictures Corp. v. Video Broad. Sys., Inc.*, 724 F. Supp. 808, 821 (D. Kan. 1989).

*Vernor v. Autodesk, Inc.*¹⁵⁰ In *Adobe Systems v. Christenson*, the Ninth Circuit stated that an alleged infringer bears the initial burden to come forward with evidence of lawful acquisition of title to a genuine copy of software, but held that to the extent that a copyright holder claims that the alleged infringer could not acquire title because the software was never sold, only licensed, the copyright holder must establish such a license or the absence of a sale.¹⁵¹

These decisions demonstrate that copyright exhaustion has been broadly shaped in accordance with the common law prohibition against servitudes on chattels. In addition, courts have complemented the doctrine with public interest considerations, including the maintenance of a free market.

2. Equity and International Copyright Exhaustion in *Kirtsaeng*

Kirtsaeng v. John Wiley & Sons, Inc. established the rule that U.S. copyright holders' rights are exhausted after foreign sales.¹⁵² The Court reasoned that §109(a)'s language, its context, and the common law history of the first sale doctrine, taken together, favored a non-geographical interpretation.¹⁵³ The Court decided on international copyright exhaustion mostly relying on the common law prohibition against servitudes on personal property.¹⁵⁴

Additionally, *Kirtsaeng* demonstrated the importance of equity considerations in copyright exhaustion.¹⁵⁵ The facts of *Kirtsaeng* suggest that the exhaustion of the publisher's copyrights conformed to the relevant equity principles. In *Kirtsaeng*, John Wiley & Sons, Inc. ("Wiley"), a global publisher and owner of copyrights, used a foreign subsidiary to print and sell textbooks in Asian countries.¹⁵⁶ Copies of foreign editions contained a notice that buyers could use them only in countries outside the United States.¹⁵⁷

150. *Vernor v. Autodesk, Inc.*, 621 F.3d 1102, 1102–12 (9th Cir. 2010) ("three considerations that we may use to determine whether a software user is a licensee, rather than an owner of a copy. First, we consider whether the copyright owner specifies that a user is granted a license. Second, we consider whether the copyright owner significantly restricts the user's ability to transfer the software. Finally, we consider whether the copyright owner imposes notable use restrictions.").

151. *Adobe Sys. Inc. v. Christenson*, 809 F.3d 1071, 1079 (9th Cir. 2015).

152. *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 525, 538–45 (2013).

153. *Id.* at 520–51.

154. *Id.* at 521 ("[W]hen a statute covers an issue previously governed by the common law, we must presume that 'Congress intended to retain the substance of the common law.'").

155. *Id.* at 554–56.

156. *Id.* at 525–26.

157. *Id.* at 526.

Kirtsaeng asked his friends and family in Thailand to buy foreign edition textbooks and mail them to him so that he could sell them in the United States.¹⁵⁸

The illustrations in the *Restatement (Third) of Property* explain why the Court decided to apply international copyright exhaustion.¹⁵⁹ As to the constitutional right, if Kirtsaeng had been prohibited from reselling the textbooks in the United States, it would have unreasonably burdened Kirtsaeng's freedom to disseminate expressive materials. Such conclusion would have adversely affected content providers' freedom to serve content creators' freedom of expression as well.¹⁶⁰ By dismissing Wiley's claim, the Court protected Kirtsaeng's and other distributors' freedom to disseminate educational materials at an affordable price.¹⁶¹ Also, if individuals were barred from importing foreign-sold books into the United States or reselling them in the United States, the circulation of books would be unreasonably hindered.¹⁶² This would unduly restrain alienation of books and burden retailers engaging in transactions across the border.¹⁶³ In addition, a global publisher's maintenance of book prices may lead to a market control.¹⁶⁴ Thus, Wiley's price discrimination could be viewed as creating an unreasonable restraint on trade and competition.¹⁶⁵ The harm to the public caused by leaving the restraint in force would have been substantial, even if there had been potential benefits to Wiley.¹⁶⁶ The reasoning provided in *Kirtsaeng* indicates that the Court recognized these circumstances as favoring international copyright exhaustion.¹⁶⁷

The foregoing analysis suggests the convergence of the common law doctrine and the holistic examination at equity. The weight of equity considerations might increase in copyright cases in the age of new media and borderless economy.

158. *Id.* at 527.

159. RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 3.1 (AM. LAW INST. 2000).

160. *Kirtsaeng*, 568 U.S. at 555–56, (Kagan, J., concurring) (explaining that the Court was rightly concerned with the possible consequence to libraries, used-book dealers, technology companies, consumer-goods retailers, and museums).

161. RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 3.1(2) (burden on a fundamental constitutional right).

162. *Kirtsaeng*, 568 U.S. at 539 (“The ‘first sale’ doctrine also frees courts from the administrative burden of trying to enforce restrictions upon difficult-to-trace, readily movable goods.”).

163. RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 3.1(3) (restraint on alienation).

164. *Kirtsaeng*, 568 U.S. at 552–53. (stating that antitrust laws ordinarily forbid market divisions).

165. RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 3.1(4) (restraint on trade or competition).

166. *Kirtsaeng*, 568 U.S. at 524–26.

167. *Id.* at 552 (“no precedent suggesting a legal preference for interpretations of copyright statutes that would provide for market divisions.”).

D. Patent Exhaustion: A Device to Reach Equilibrium

Section C described the importance of unrestrained alienation of copyrighted items in copyright exhaustion and the modest but noticeable role of equity considerations. Overall, patent exhaustion has been applied in a more nuanced fashion. Courts have balanced conflicting public interests to decide on patent exhaustion: on the one hand, the alienation of products must be promoted and competition should be maintained; on the other hand, a patentee is entitled to a reward for the invention.¹⁶⁸ Thus, although the common law prohibition against servitudes on chattels has never been abolished, equity has been the centerpiece in the analysis of patent exhaustion.¹⁶⁹

1. Projecting the Alienability Principle into the Patent Act

Early patent exhaustion cases were decided in the same manner as copyright cases were handled. In *Bloomer v. McQuewan*, the Supreme Court concluded that a patent owner's legal right against buyers of patented products should be governed by property law once the patentee has departed with a title to the product.¹⁷⁰ The Court reasoned that when the product passed to the hands of a purchaser, it was no longer within the limits of a patent owner's monopoly.¹⁷¹ *Bloomer's* holding is axiomatic to patent exhaustion because the Supreme Court held that a patentee must seek a remedy only under property law.¹⁷² The Court disallowed the patentee's monopoly rights over sold goods even though the patentee did not expressly authorize the continuous use.¹⁷³

The relevance of the common law antipathy toward servitudes was further elucidated in *Adams v. Burke*.¹⁷⁴ The opinion also indicated that patent exhaustion is theoretically the same doctrine with copyright

168. Courts have attempted to determine what is the reasonable award for the patentee. See *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 518 (1917); see also *United States v. Unis Lens Co.*, 316 U.S. 241, 241–47 (1942).

169. See *Univis*, 316 U.S. at 241–47.

170. *Bloomer v. McQuewan*, 55 U.S. 539, 549–50 (1852) (“And when the machine passes to the hands of the purchaser, it is no longer within the limits of the monopoly. It passes outside of it, and is no longer under the protection of the act of Congress.”).

171. *Id.* at 547–50, 553–54.

172. *Id.* at 550 (stating that the user bought the article for the purpose of using it as long as it is fit for use and found to be profitable).

173. *Id.* at 548–50.

174. *Adams v. Burke*, 84 U.S. 453, 456 (1873) (“[W]hen the patentee, or the person having his rights, sells a machine or instrument whose sole value is in its use, he receives the consideration for its use and he parts with the right to restrict that use.”).

exhaustion and made a reference to the “lawfully made and sold” requirement of copyright exhaustion.¹⁷⁵

In *Adams*, the Supreme Court concluded that the purchaser from a partial right holder had an unrestricted right to use the patented coffins regardless of the seller’s geographically limited authority.¹⁷⁶ *Adams* included the examination of remuneration to the patentee in its patent exhaustion analysis,¹⁷⁷ although remuneration to a copyright owner is not stringently sought in copyright exhaustion analysis.¹⁷⁸ This has confused many litigants and spurred different interpretations of *Adams*. One interpretation is that exhaustion is not available unless a patentee has received satisfactory remuneration in exchange for the buyer’s right to “unrestricted” resale and use of goods.¹⁷⁹ Another interpretation is that remuneration is not dependent on the patentee’s subjective intent or actual authorization, but it is defined by considerations of public interests such as the Patent Act’s objective.¹⁸⁰

The Court reasoned that the sale was completed with payment for the coffin and the legal title to the coffin was transferred to the purchaser, therefore, the patentee’s rights were exhausted.¹⁸¹ Thus, the Court did not require “remuneration to a patentee” as a separate element of patent exhaustion, and only required a “lawfully made and sold” product.¹⁸²

Motion Picture Patents Co. v. Universal Film Manufacturing Co. clarified what *Adams* meant.¹⁸³ The licensing scheme of Motion Picture Patents Co. (“Motion Picture”) required (i) that machines should bear a plate indicating that the acquirer’s use was under a “license,”¹⁸⁴ (ii) that the machines should play only motion pictures containing the patented invention, and (iii) that the machines should be sold at a fixed price.¹⁸⁵

175. *Id.* at 457.

176. *Id.* at 456–57.

177. *Id.* at 456 (“[T]he patentee or his assignee having in the act of sale received all the royalty or consideration which he claims for the use of his invention in that particular machine or instrument, it is open to the use of the purchaser without further restriction on account of the monopoly of the patentees.”); *see also* *Kendall v. Winsor*, 62 U.S. 322, 329 (1859) (quoted in *United States v. Masonite Corp.*, 316 U.S. 265, 278 (1942)) (stating that the promotion of the progress of science and the useful arts is the main object and reward of inventors is secondary and merely a means to that end).

178. *Masonite Corp.*, 316 U.S. at 278 (holding that the rights and welfare of the community must be effectually guarded in copyright law as much as in patent law).

179. *See* *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 704–05, 709 (Fed. Cir. 1992); *see also* *Lexmark Int’l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 735–39, 752–53 (Fed. Cir. 2016).

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

181. *Adams v. Burke*, 84 U.S. 453, 456–57 (1873).

182. *Id.*

183. *Motion Picture Patents*, 243 U.S. at 518.

184. *Id.* at 506–08.

185. *Id.*

Motion Picture sued the defendants when the machine was used in violation of the imposed conditions.¹⁸⁶ The Court considered the patentee's contribution to the society, the proper reward to the patentee,¹⁸⁷ and the possible harm to third-party acquirers,¹⁸⁸ and concluded that the lawful sale of motion picture machines exhausted the patent.¹⁸⁹ Thus, the Court clarified that the reward to the patentee was only one of many factors in patent exhaustion.

Motion Picture Patents resolved the case largely by addressing the harm to public interests.¹⁹⁰ In particular, *Motion Picture Patents* emphasized the antitrust consideration, and showed that patent exhaustion prevents unjustifiable expansion of monopoly rights.¹⁹¹ Further included in the consideration was the playhouse's freedom of expression.¹⁹² The opinion considered public interests related to patent exhaustion: alienability of goods; maintenance of competition; the patentee's reward; and the purchaser playhouse's freedom of expression as indicated in the *Restatement (Third) of Property*.¹⁹³

In a case that presented similar facts to *Motion Picture Patents*, the Supreme Court concluded that the patentee's licensing scheme was merely a price fixing arrangement, and applied patent exhaustion.¹⁹⁴ The Court examined whether the license notice was a means designed in good faith to enable the plaintiff to make only reasonable and exclusive use of its invention, or a disguised attempt to control the price of its machines after they have been sold.¹⁹⁵ Because the plaintiff had received payment for the machines, the Court ruled in favor of the defendant.¹⁹⁶ *Straus v. Victor Talking Machine Co.* teaches us that the alienation principle at common law has merged with public interest analysis.¹⁹⁷

Equity has extended the scope of patent exhaustion to repaired goods and consumable goods.¹⁹⁸ For example, users of patented machines may

186. *Id.*

187. *Id.* at 518.

188. *Id.* at 508 (describing that forty-thousand machines were in use).

189. *Id.* at 519.

190. *Id.* at 518.

191. *Id.* at 511.

192. The court indicated that the restriction would give Motion Picture such a potential power for evil over an industry that serves for the amusement life of the nation. *Id.* at 519.

193. See *id.* at 506–19; RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 3.1 (AM. LAW INST. 2000).

194. *Straus v. Victor Talking Mach. Co.*, 243 U.S. 490, 496 (1917).

195. *Id.* at 498.

196. *Id.* at 501.

197. *Id.*

198. See *Wilson v. Rousseau*, 45 U.S. 646, 707 (1846).

repair them when needed, because there are public interests in preventing economic waste.¹⁹⁹ Also, sellers of unpatented toilet paper are not liable for infringement of claims directed to mechanisms by which toilet paper was served to users if the patentee authorized the sale of the paper dispenser.²⁰⁰

Against the foregoing line of decisions, *General Talking Pictures Corp. v. Western Electric Co.* did not apply patent exhaustion when a non-exclusive licensee infringed a patent, by selling products for commercial use without the patentee's permission, and the buyer was aware of the circumstances.²⁰¹ Unlike *Motion Picture Patents*, the manufacturer in *General Talking Pictures* sold products beyond the scope of its license, and the bad faith buyer actively participated in the infringement.²⁰² The denial of exhaustion was conformant with equity principles because (i) as to the reward to the patentee, the patentee would have lost a significant part of profits earned from the royalty payment of exclusive licensees if the manufacturer and the bad faith purchaser could have made sales;²⁰³ (ii) the purchaser did not deserve protection by patent exhaustion because it induced the manufacturer's infringement;²⁰⁴ and (iii) the patentee did not attempt to extend its monopoly right unreasonably.²⁰⁵ Thus, noting that the exclusive licensees and the patent owner should be able to exclude infringing activities by the non-exclusive licensee and the joint infringer, the Court held that the infringing sale did not constitute a lawful transfer of title to the goods.²⁰⁶

Accordingly, patent exhaustion has been formulated, along with copyright exhaustion, as a combination of equity considerations and the common law servitude rule.²⁰⁷ In patent exhaustion, the "lawfully made and sold" item requirement has been redefined through the analysis of public interests, including the preservation of a reasonable reward to a patentee.²⁰⁸

199. *Id.* ("The right to continue to use them will probably last . . . usually, with proper repairs, do service beyond that time").

200. *Morgan Envelope Co. v. Albany Perforated Wrapping Paper Co.*, 152 U.S. 425, 431 (1894).

201. *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 304 U.S. 175, 179–80 (1938).

202. *Id.* at 179–82.

203. *Id.*

204. *Id.*

205. *Id.*

206. *Id.*

207. *See supra* Part II. Section B.

208. *See Adams v. Burke*, 84 U.S. 453, 456–57 (1873); *see also Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 518 (1917).

2. The Development of Patent Exhaustion at Equity

Equity considerations will probably become more important in the analysis of modern patent disputes than in early patent exhaustion cases. Recently, patent exhaustion implicates a troubling issue such as patent thickets, the construction of sweeping patent portfolios by dominant companies.²⁰⁹ By acquiring a large “patent portfolio,” which contains numerous patents and claims over the entire field of technology, patent owners may exclude competitors from the market or force competitors to accept a license.²¹⁰ Patent exhaustion cases may present the need to redress the deleterious anticompetitive conducts by patent holding companies.²¹¹

It is not uncommon for inventors and patentees to apply for patents containing multiple claims with slightly different coverage so that they can exclude a wide array of operations by their competitors.²¹² In *United States v. Univis Lens Co.*, Univis Lens Company and Univis Corporation (“Univis”), the owners of patents, employed a licensing scheme, through which Univis sold lens blanks to licensees and the licensees agreed to sell them at prices fixed by Univis.²¹³ The sole use of lens blanks was for the licensees to make eyeglasses with multifocal lenses.²¹⁴ Some of Univis patents covered the final step of making multifocal lens glasses after grinding and finishing lens blanks.²¹⁵ Univis argued that if the licensed manufacturers sold lens blanks to an unlicensed finisher for completion of the lens blanks, the sale would constitute contributory infringement by the manufacturers.²¹⁶ On the other hand, the government argued that the grinding and polishing of the lens blanks did not involve a novel feature and that the statutory monopoly rights could not lawfully extend to a procedure that was not novel in and of itself even if the process was applied to make an article which embodied novel features of the invention.²¹⁷

Guided by the principles set forth in *Motion Picture Patents* and *Adams*, *Univis* considered the common law prohibition against restraints on the

209. *E.g.*, *United States v. Univis Lens Co.*, 316 U.S. 241, 241–47 (1942).

210. Kirti Gupta, *The Patent Policy Debate in the High-Tech World*, 9 J. COMPETITION L. & ECON. 827, 827–58 (2013).

211. *See, e.g.*, *Univis*, 316 U.S. at 252; *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 638 (2008).

212. Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1627–29 (2003).

213. *Univis*, 316 U.S. at 243–47.

214. *Id.* at 248–49.

215. *Id.* at 246–47.

216. *United States v. Univis Lens Co.*, 41 F. Supp. 258, 264–65 (S.D.N.Y. 1941).

217. *Id.*

alienation of personal property,²¹⁸ a reward to a patent owner,²¹⁹ and impacts to competition,²²⁰ and held that Univis' sale of the lens blank to the finisher constituted "a grant of license" to practice the final stage of the patented process.²²¹

Simultaneously, *Univis* advanced the exhaustion doctrine in a few aspects. Firstly, the Court did not preclude patent exhaustion although Univis had not received royalty in consideration for the use of the asserted process claim.²²² The Court made clear that examination of the reward to a patentee should not be formalistic, claim-based analysis.²²³ Secondly, to conclude that a product is lawfully made and sold, the Court articulated a more specific requirement in a situation like *Univis*,²²⁴ and held that if a sold product is only capable of practicing a patented method, and the product substantially embodies the patented method, the method patent is exhausted.²²⁵ Conceiving the new rule, the Court considered public interests such as the alienation of personal property, the reward to the patent owner, restraints on trade and competition, using a rationale that is similar to the rationale that underlies *Bloomer v. McQuewan*.²²⁶

The Supreme Court further extended the equity's reach in *Quanta Computer, Inc. v. LG Electronics, Inc.*, and held that patent exhaustion is available to a third-party acquirer with notice of post-sale restrictions.²²⁷ The Court concluded that the authorized sale of an article that substantially embodies a patent exhausts the patent rights.²²⁸ LG Electronics, Inc. ("LGE"), licensed Intel Corporation ("Intel") to make, use, sell, offer to sell, import or otherwise dispose of chipsets and microprocessors but imposed a restriction that prevented a buyer from using Intel parts in combination with non-Intel memory and buses in ways that practice the LGE patents.²²⁹

218. *Univis*, 316 U.S. at 252 ("Whether the licensee sells the patented article in its completed form or sells it before completion for the purpose of enabling the buyer to finish and sell it, he has equally parted with the article, and made it the vehicle for transferring to the buyer ownership of the invention with respect to that article.").

219. *Id.* at 251 (explaining that the reward received by the patentee was for the article and the invention which the article embodied).

220. *Id.* at 251-54.

221. *Id.*

222. *Id.* at 249-50.

223. *Id.* at 251-54.

224. *Id.*

225. *Id.*

226. *See id.*; *see also* *Bloomer v. McQuewan*, 55 U.S. 539, 550 (1852) (applying exhaustion and holding that a licensee could continue to use patented machines after the patent term extension).

227. *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 638 (2008).

228. *Id.*

229. *Id.* at 623.

Quanta Computer (“Quanta”), after receiving a notice of the restriction, manufactured computers by combining Intel and non-Intel components.²³⁰

Intel’s sale of products that substantially embodied patented features exhausted LGE’s patents covering Quanta’s products.²³¹ Along with *Univis*, the Court examined the facts at equity and found a lawfully made and sold product.²³² The Court concluded that, without patent exhaustion, public interests would be harmed by LGE’s attempt to end-run around exhaustion.²³³ Moreover, the Court applied exhaustion irrespective of the validity of the restraint.²³⁴ Unlike the invalidated tying arrangement in *Motion Picture Patents*,²³⁵ the prohibitions against combining Intel products with non-Intel products were not held outside the scope of LGE’s patents, and the Court did not examine whether such restraint was anticompetitive or patent misuse.²³⁶

In sum, patent exhaustion is not a different entity from copyright exhaustion because both have been developed through the common law prohibition against servitudes on chattels and equity principles.²³⁷ In patent exhaustion, the patentee’s receipt of reward for the invention has been one factor to support a “lawfully sold” item,²³⁸ and it can be found if the patentee has received what is reasonable for the invention, as determined by the public interest analysis.²³⁹

3. The Federal Circuit’s Reliance on *Mallinckrodt* and *Jazz Photo* in *Impression Products*

In *Impression Products*, the Federal Circuit concluded that the common law prohibition against restraints on the alienation of chattels had become

230. *Id.* at 623–24.

231. *Id.* at 631–33, 638 (quoting *United States v. Univis Lens Co.*, 316 U.S. 241, 250–51 (1942)).

232. *Id.* at 631–33.

233. *See id.* at 629–30 (warning the danger of allowing an end-run around exhaustion if method claims are excused from patent exhaustion).

234. *Id.* at 621.

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

236. *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 636–38 (2008) (patent exhaustion unrelated to the validity of a restraint).

237. As for copyright exhaustion, see *supra* Part II Section C. For patent exhaustion, see *Motion Picture Patents*, 243 U.S. at 506–08 (applying exhaustion despite the patentee’s restrictions on “license” to downstream purchasers of a machine from a licensee); *see also* *United States v. Univis Lens Co.*, 316 U.S. 241, 249–50 (1942) (implying a license to use the last step of a method claim upon sale of a machine that substantially embodied the claim).

238. *See Adams v. Burke*, 84 U.S. 453, 456–57 (1873); *see also Univis*, 316 U.S. at 249–50.

239. *See Adams*, 84 U.S. 453, 456–57 (1873); *see also* *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 518 (1917); *Kendall v. Winsor*, 62 U.S. 322, 327–28 (1859) (citing U.S. CONST. art. I, § 8, cl. 8).

the background of patent exhaustion and denied the application of international patent exhaustion.²⁴⁰ The Federal Circuit's description of the common law rule was inaccurate given the Supreme Court holdings that have closely followed the common law prohibition against servitudes.²⁴¹ For instance, the common law servitude rule was reconfirmed in *Univis*,²⁴² albeit not the precedential part of *Univis*.

Additionally, despite the Supreme Court's general disallowance of post-sale restrictions, the Federal Circuit held that post-sale restrictions were valid if the restrictions were reasonably within the reward for the invention in *Mallinckrodt, Inc. v. Medipart, Inc.*²⁴³

The Supreme Court has developed patent exhaustion in light of the common law servitude rule and has performed the multifactorial analysis in each case. In contrast, many of the Federal Circuit decisions emphasized the goal of securing a reward to a patentee²⁴⁴ and concluded that an "authorized sale" transfers to a buyer the ability to use and sell products in accordance with limitations set by a patent owner.²⁴⁵ On a few occasions, however, the Federal Circuit applied exhaustion in a more flexible manner so that the public policy concerns underlying the earlier precedents would not be disturbed.²⁴⁶ The Federal Circuit's general trend to deviate from the Supreme Court rulings can be appreciated in the following points.

a. Mallinckrodt and Post-Sale Restraints

In *Mallinckrodt, Inc. v. Medipart, Inc.*, the patent owner, Mallinckrodt, sold its patented medical device to hospitals with accompanied "single use only" notice.²⁴⁷ Mallinckrodt sued Medipart because hospitals sent the device to Medipart for servicing, which enabled the hospitals to use the device more than once.²⁴⁸ The Federal Circuit held that the post-sale

240. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 750-52 (Fed. Cir. 2016).

241. *See Univis*, 316 U.S. at 241, 252; *see also Quanta*, 553 U.S. at 638.

242. *See Univis*, 316 U.S. at 252.

243. *Cf. Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 701, 709 (Fed. Cir. 1992) with *Quanta*, 553 U.S. at 638, and *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 506-08 (1917).

244. *Mallinckrodt*, 976 F.2d at 702 (citing *United States v. General Elec. Co.*, 272 U.S. 476 (1992)), *overruled by Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1523 (2017).

245. *See, e.g., Impression Prods.*, 816 F.3d at 750-52 (requiring the buyer's authority to reuse and resell).

246. *See, e.g., LifeScan Scot., Ltd. v. Shasta Techs., LLC*, 734 F.3d 1361, 1374-75 (Fed. Cir. 2013) (relaxing the authority-to-sell requirement).

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

248. *Id.*

restrictions were valid and enforceable because the restrictions were reasonably within the reward which the patentee was entitled to.²⁴⁹

The Federal Circuit devised a test for patent exhaustion by borrowing a language that appeared in *United States v. General Electric Co.*²⁵⁰ However, the Federal Circuit did not clearly explain why *General Electric*'s reasoning, which was grounded on the agency theory, could be applied to sales in general.²⁵¹ Furthermore, in *Mallinckrodt and Princo Corp. v. International Trade Commission*, the Federal Circuit discussed patent exhaustion as if patent misuse were being discussed.²⁵²

Although both patent exhaustion and patent misuse concern competition policy, patent exhaustion is a distinct doctrine from patent misuse. In patent exhaustion, courts consider factors that are not included in patent misuse, such as the common law prohibition against the sale and use of personal property.²⁵³ The Federal Circuit should not have precluded patent exhaustion just merely because it did not find an illegal anticompetitive agreement.

Finally, *Mallinckrodt* was implicitly overruled by *Quanta*, which applied patent exhaustion even though the patentee imposed a post-sale restraint.²⁵⁴ As such, it was reasonably foreseeable, as Judge Dyk pointed out, that the Supreme Court would reverse the Federal Circuit's opinion regarding post-sale restraints in *Impression Products*.²⁵⁵

b. Jazz Photo and International Exhaustion

Jazz Photo, citing *Boesch v. Graff*,²⁵⁶ ruled that foreign sales do not exhaust U.S. patents.²⁵⁷ *Fuji Photo Film Co.* (“Fuji Film”) brought an action under Section 337 of the Tariff Act of 1930 against importers on the ground that importation of used “single-use” cameras that were refurbished for reuse

249. *Id.* at 704–05, 709.

250. *See id.* at 708 (explaining the applicability of the rule in *General Electric*). However, *see General Electric*, 272 U.S. at 488–90 (stating that the agreement was an agency-like contract and the imposition of restrictions should be valid) for the reasoning of *General Electric*.

251. *Mallinckrodt*, 976 F.2d at 708.

252. *See, e.g., Mallinckrodt*, 976 F.2d at 705–08 (discussing “legality” of the restrictions and misuse); *Princo Corp. v. Int’l Trade Comm’n*, 616 F.3d 1318, 1328 (Fed. Cir. 2010) (discussing patent misuse in the reasoning for patent exhaustion).

253. *See supra* Part II Sections D.1 and D.2.

254. *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 636–38 (2008).

255. *Lexmark Int’l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 779–83 (Fed. Cir. 2016) (Dyk, J., dissenting).

256. *Boesch v. Graff*, 133 U.S. 697, 703 (1890).

257. *Jazz Photo Corp. v. ITC*, 264 F.3d 1094, 1105 (Fed. Cir. 2001), *overruled by Impression Prods., Inc. v. Lexmark Int’l, Inc.*, 137 S. Ct. 1523, 1528 (2017).

in various overseas facilities constituted infringement of Fuji Film's patents.²⁵⁸ However, the Federal Circuit's reliance on *Boesch* was off the point given the difference in the facts of *Boesch* and *Jazz Photo*.²⁵⁹ In *Boesch*, the defendants purchased the patented burners in Germany from a person having the right to sell them in Germany by operation of German patent law.²⁶⁰ Thus, *Boesch*'s refusal to apply patent exhaustion was based on the unique fact that there was no sale or a title transfer from the patentee. In contrast, in *Jazz Photo*, the imported cameras were sold by Fuji Film.²⁶¹ Thus, *Boesch* cannot explain *Jazz Photo*'s denial of the adoption of international exhaustion.

As Part III explains, the Federal Circuit should have adopted international patent exhaustion in light of the above-outlined Supreme Court precedents.

4. The Supreme Court Opinion in *Impression Products*

In *Impression Products*, the Supreme Court officially announced the adoption of international patent exhaustion and reiterated that a patent owner may not impose post-sale restrictions to avoid patent exhaustion,²⁶² applying the common law servitude rule.²⁶³ Additionally, the Court clarified the scope of the doctrine with regards to "lawfully made and sold," by differentiating the grant of a license to practice a patent from the conveyance of a title to a sold item.²⁶⁴ At least conceptually, the opinion provided guidance on the requirements of patent exhaustion and stated that, when a licensee sells products with restrictions imposed by a licensor, the sale exhausts the licensor's patent rights.²⁶⁵ Further, the opinion suggested that a buyer from a limited license holder may be protected unless the buyer knowingly participated in the infringement.²⁶⁶

258. *Id.* at 1098.

259. *Id.* at 1105.

260. *Boesch*, 133 U.S. at 698–99.

261. *Jazz Photo*, 264 F.3d at 1102.

262. *Impression Prods.*, 137 S. Ct. at 1532–33.

263. *Id.* at 1531–32.

264. *Id.* at 1535–36 ("a license may require the licensee to impose a restriction on purchasers, like the license limiting the computer manufacturer to selling for non-commercial use by individuals.").

265. *Id.* at 1534–35 (explaining that a licensee's sale of a product with the licensor-set restriction exhausts the patent).

266. *Id.* at 1534.

a. Common Law Bars Restraints upon the Sale and Use of Personal Property as Lord Coke Described

The Supreme Court denounced the Federal Circuit’s dismissive view of the common law prohibition against servitudes on personal property.²⁶⁷ In the Federal Circuit’s view, unlike copyright exhaustion, Congress consciously left out patent exhaustion from the Patent Act,²⁶⁸ and the common law servitude rule became no more than “one common-law jurisdiction’s general judicial policy at one time toward anti-alienation restrictions.”²⁶⁹ In contrast, the Supreme Court emphasized the doctrinal equality between patent exhaustion and copyright exhaustion, and refused to isolate patent exhaustion from copyright exhaustion solely for the lack of statutory provision.²⁷⁰ Again, the Court quoted Lord Coke’s account on servitudes on personal property under English common law,²⁷¹ and held that, if a patent owner restricts the resale and use of an item after selling it, the restriction “is voide, because . . . it is against Trade and Traffique, and bargaining and contracting between man and man.”²⁷²

In short, the Court reiterated the point made in *Kirtsaeng*’s international copyright exhaustion.²⁷³ The common law servitude rule has been unmodified and has remained as a governing principle of patent and copyright exhaustion.²⁷⁴

b. The Authority Argument was Unsuccessful

While the Federal Circuit concluded that an express limitation on the authority of a seller can overcome presumption of the authority to sell goods, and excludes patent exhaustion,²⁷⁵ the Supreme Court explained that exhaustion doctrine is not a presumption about the authority of a seller that comes along with a sale, but that it is a limit on “the scope of the *patentee’s* rights.”²⁷⁶

In holding that a contractual limitation is not relevant to patent exhaustion, the opinion alluded to the fundamental difference between the

267. *Id.* at 1532.

268. *Lexmark Int’l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 765–67 (Fed. Cir. 2016).

269. *Impression Prods.*, 816 F.3d at 750–52.

270. *Impression Prods.*, 137 S. Ct. at 1532–33, 1536.

271. *Id.* at 1532.

272. *Id.* (citing 1 E. Coke, *Institutes of the Laws of England* § 360, p. 223 (1628)).

273. *Id.* at 1536.

274. *Id.* at 1531–33.

275. *Lexmark Int’l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 742–43 (Fed. Cir. 2016).

276. *Impression Prods.*, 137 S. Ct. at 1534.

implied license theory and patent exhaustion.²⁷⁷ The Supreme Court reiterated the essence of patent exhaustion established by previous decisions: patent exhaustion limits a patentee's right over sold products and safeguards important public interests, without regard to the restrictive terms in individual contracts.²⁷⁸

As explained in Part II Section B, the rules designed to protect innocent third parties have assisted courts in finding a buyer's valid title to personal property regardless of the limitations on sellers' authority to sell.²⁷⁹ Statutory third-party protections, such as the BOCB provision, have offered another important mechanism to facilitate commercial transactions of personal property.²⁸⁰

c. Protection of a Purchaser from a Limited License Holder

According to *Impression Products*, patentees cannot use a license to impose post-sale restraints on purchasers.²⁸¹ On the other hand, a patentee may bring a patent infringement action against a purchaser if the purchaser acquired an infringing product from a licensee with knowledge of patent infringement.²⁸²

The Supreme Court contrasted a "license" of a patent with a "sale" of a patented product and confirmed that a license does not cause patent exhaustion because it does not pass title to a product.²⁸³ Acknowledging that the central questions to be answered are what constitutes a "sale," and whether buyers can assert patent exhaustion when they have purchased goods that were sold or used beyond the licensee's "authority," the Court explained why *Motion Picture Patents* reached a different conclusion from *General Talking Pictures* even though both dealt with a purchaser from a limited-authority licensee.²⁸⁴ The Court indicated that the norm is patent exhaustion, as decided in *Motion Picture Patents*, and that *General Talking Pictures* is quite limited in scope.²⁸⁵

General Talking Pictures held that a patent owner can exclude a third-party purchaser from commercially leasing patented products if the

277. *See id.* at 1534–35; *supra* Part II Section D.2.

278. *See id.* at 1531–35; *supra* Part II Sections D.1, D.2.

279. *See supra* Part II Section B.

280. *See supra* Part II Section B.

281. *Impression Prods.*, 137 S. Ct. at 1534–35.

282. *Id.* at 1535.

283. *Id.* at 1534 (explaining why a patentee can impose restrictions in license agreements).

284. *Id.* at 1534–35.

285. *Id.*

purchaser has knowingly acquired the products from a non-exclusive licensee who is not authorized to sell them for commercial use.²⁸⁶ Unlike *Adams* and *Motion Picture Patents*, the licensee in *General Talking Pictures* lacked the authority to sell amplifiers for general commercial purpose, and the buyer had knowledge that the sale of amplifiers constituted patent infringement.²⁸⁷ On the other hand, in *Motion Picture Patents*, the Court concluded that the “sale” of machines exhausted the patent,²⁸⁸ although *Motion Picture* limited its licensee’s authority and provided notice.²⁸⁹ The Supreme Court categorized *General Talking Pictures* as an exception to patent exhaustion on the ground that the defendant in *General Talking Pictures* was a joint infringer.²⁹⁰ Thus, the Court determined that patent exhaustion is not available to a joint infringer, who “actively induces the infringement of a patent.”²⁹¹

Section 271(b)’s active inducement was interpreted in *Global-Tech Appliances, Inc. v. SEB S.A.*, where the Court held that active inducement requires a showing of the defendant’s “willful blindness” and it may be found when the defendant (1) subjectively believes that there is a high probability that a patent exists and that the defendant’s acts infringe that patent; and (2) takes deliberate actions to avoid learning about those facts.²⁹² Thus, the Court decided that *General Talking Pictures* is distinguishable from *Motion Picture Patents* because *General Talking Pictures* presented facts that supported these elements.

In contrast to *General Talking Pictures*, *Kirtsaeng* and *Quanta* protected a third-party purchaser who had knowledge of post-sale restrictions.²⁹³ Then, the denial of patent exhaustion in *General Talking Pictures* is not based on the purchaser’s ex post facto knowledge of the lack of authority in the seller, but the purchaser’s knowing inducement of the seller’s patent infringement.

286. *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 304 U.S. 175, 179–80 (1938).

287. *Id.* at 179–82.

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

289. *Id.* at 506–08.

290. *Impression Prods.*, 137 S. Ct. at 1535 (“*General Talking Pictures* involved a fundamentally different situation: There, a licensee “knowingly ma[de] . . . sales . . . outside the scope of its license. We treated the sale “as if no license whatsoever had been granted” by the patentee, which meant that the patentee could sue both the licensee and the purchaser—who knew about the breach—for infringement.”) (alteration in original) (citations omitted).

291. *Id.*; see also 35 U.S.C. § 271(b) (2012).

292. *Glob.-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 769–70 (2011).

293. See *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 636–37 (2008) (notice of the restriction about the use of sold products); see also *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 526–27 (2013) (notice of the geographical limitation).

d. Patentees' Interests in the Price Discrimination

As to the patentees' interests in obtaining a separate payment in the United States for a product sold abroad, the Court refused to give any weight.²⁹⁴ The Court considered injustice that arises from double recovery, and stated that a patentee might not be able to command a particular price or a reward for one item more than once.²⁹⁵ Because the Supreme Court previously rejected the same argument in *Kirtsaeng* and *Quality King Distributors, Inc. v. L'anza Research International, Inc.*, the conclusion was an expected one.²⁹⁶

e. Territoriality and Boesch

The Court concluded that the Federal Circuit's territoriality opinion could not be upheld.²⁹⁷ The Court rejected Lexmark's emphasis on the territoriality principle,²⁹⁸ and distinguished *Boesch v. Graff* for the absence of sale that was attributable to the patent owner.²⁹⁹ The Court held that the territoriality of a patent does not support the Federal Circuit conclusion because patent exhaustion is a matter of public policy, an equitable limitation placed after the patent was originally granted.³⁰⁰

III. ARGUMENT: WHAT SHOULD BE THE TEST IN PATENT EXHAUSTION?

Part II Section B showed that the Supreme Court has faithfully applied the common law disfavor for equitable servitudes on personal property. Even when personal property is the subject of intellectual property rights, the Court has not accepted post-sale restraints as a way to restrict the use and sale of the sold item. Sections C and D explained that the common law rule has effectively protected the freedom of buyers because courts have flexibly applied patent and copyright exhaustion, using the multifactorial public interest analysis.

294. *Impression Prods.*, 137 S. Ct. at 1536–38.

295. *Id.* at 1537.

296. See *Kirtsaeng*, 568 U.S. at 552–53; *Quality King Distribs., Inc. v. L'anza Research Int'l, Inc.*, 523 U.S. 135, 138–39, 153 (1998).

297. *Impression Prods.*, 137 S. Ct. at 1536–38 *overruling* *Jazz Photo Corp. v. Int'l. Trade Comm'n*, 264 F.3d 1094, 1105 (Fed. Cir. 2001).

298. *Id.* at 1536–37.

299. *Boesch v. Graff*, 133 U.S. 697, 702–03 (1890).

300. See *Impression Prods.*, 137 S. Ct. at 1536–37 (“Exhaustion is a separate limit on the patent grant”); see also *id.* at 1534 (“a limit on ‘the scope of the patentee’s rights.’”).

A. *The Proposal of a Two-Step Test*

In line with the Supreme Court's precedents on intellectual property exhaustion, I propose that the analysis of patent exhaustion should be divided into two levels: the first analysis concerns the common law prohibition against servitudes; and the second analysis is conducted using equity principles.

The first inquiry asks whether the case requires effective protection of third-party purchasers.³⁰¹ This question concerns the classic form of patent exhaustion, and examines the applicability of the common law prohibition against restraints on the use and alienation of chattels.³⁰² This stage is guided by the property law principles because whereabouts of an ownership interest to a particular item is at issue. Thus, courts will consider application of any statute that provides third-party purchaser protection with regards to title acquisition,³⁰³ such as presumption of good title in possessors of property. A sale to a third party may be found even if the agreement between parties is called license.³⁰⁴ The burden-shifting method employed in *Adobe Systems v. Christenson* may be used.³⁰⁵

At the next stage, courts should examine facts of the case using the relevant equity principles, and determine whether there is a lawfully made and sold copy for the application of patent exhaustion. Equity will scrutinize any harm to public interests, including competitive injury, restraints on the alienation of articles, interference with a constitutional right, and arbitrariness of enforcement.³⁰⁶

Most of the time, litigants disagree on whether the sold item was "lawfully made and sold."³⁰⁷ Courts have broadened the concept of "lawfully made and sold," for example, in the following aspects: (1) when a patentee imposes restraints on the sale or use of an item and an item is sold in violation of the restraints, the item can be still considered lawfully made and sold if the restraints are invalid as anticompetitive;³⁰⁸ (2) absence of royalty payments with regards to the asserted patents does not necessarily preclude a finding that a product is lawfully made and sold and the patentee has

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

302. *See Bloomer v. McQuewan*, 55 U.S. 539, 550 (1852).

303. *Indep. News Co. v. Williams*, 293 F.2d 510, 511–13, 517 (3d Cir. 1961).

304. *See Straus v. Victor Talking Mach. Co.*, 243 U.S. 490, 496 (1917); *see also Vernor v. Autodesk, Inc.*, 621 F.3d 1102, 1102–12 (9th Cir. 2010).

305. *Adobe Sys. Inc. v. Christenson*, 809 F.3d 1071, 1079 (9th Cir. 2015).

306. *See supra* Part II Section D.2.

307. *See supra* Part II Section D.

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

received a reward;³⁰⁹ (3) sales of products that substantially embody the patented invention satisfy the requirement for claims that are directed to the same invention.³¹⁰ If a patentee had an opportunity to receive an agreed-upon price or a reasonable return for the use of the invention, patent rights are exhausted.³¹¹

In addition, post-sale restrictions that unreasonably burden the alienation of products do not prevent patent exhaustion.³¹² *Adams* held that the seller's limited authority did not prevent application of patent exhaustion even when the sold coffin was used in areas beyond the seller's authorized area.³¹³ *Motion Picture Patents* and *Bloomer* similarly applied patent exhaustion in spite of the restrictions that limited the authority of a licensee.³¹⁴ *Impression Products* suggested that a buyer from a limited authority licensee may be protected unless the buyer has jointly infringed the patent.³¹⁵

On the other hand, patent rights are not exhausted, as decided in *General Talking Pictures* and *Boesch*, when a patentee has been deprived of an opportunity to receive a reasonable payment that is ordinarily obtainable, or when a third party acquired an item with knowledge of patent infringement.³¹⁶ When a third party has knowingly obtained goods from an infringing nonexclusive licensee who cannot sell goods for commercial use, the denial of patent exhaustion will not harm the alienation of property nor cause injury to competition.

Other factors have been proposed for inclusion into the analysis of patent exhaustion. For example, the presence of notice of a post-sale restriction has been proposed as one factor to be considered.³¹⁷ Professor Van Houweling compared personal property servitudes with real property servitudes and suggested that restrictions on personal property may be more enforceable in that they do not purport to extend into the future generations of chattel owners.³¹⁸ Professor Van Houweling wrote that when buyers are

309. See *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 621–23 (2008).

310. See *id.*

311. See *id.*; see also *United States v. Unis Lens Co.*, 316 U.S. 241, 251–54 (1942).

312. *Adams v. Burke*, 84 U.S. 453, 456–57 (1873).

313. *Id.*

314. See *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 518 (1917); see also *Bloomer v. McQuewan*, 55 U.S. 539, 550 (1852).

315. *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1534–35 (2017).

316. See *Boesch v. Graff*, 133 U.S. 697, 703 (1890); see also *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 304 U.S. 175, 179–80 (1938).

317. VAN HOUWELING, *supra* note 87, at 924.

318. *Id.*

on notice, judicial second-guessing of voluntary transaction is not necessary because social costs of servitudes such as harms to purchasers and competitive injury will not be significant given the availability of antitrust actions.³¹⁹

Notwithstanding the foregoing, several cases highlight a potential problem with the above approach that categorically allows imposition of restraints with notice.³²⁰ First, a notice on an item may be removable by third parties. Thus, even when there is a notice on an item, information costs may not be ignored. Second, the Supreme Court has provided an answer to this issue both in copyright law and in patent law. *Kirtsaeng* held that notice of the geographical limitations on the use of textbooks cannot preclude international copyright exhaustion.³²¹ In *Quanta*, the Supreme Court concluded that patent exhaustion is available to a third-party acquirer who had notice of post-sale restrictions.³²² Third, owners of personal property may move from state to state or move to a foreign country. The initial presence of notice about the geographical limitation may not be sufficient to inform a third-party acquirer in a foreign country who has no connection with the country of origin. Accordingly, given that protection of third-party purchasers is of paramount importance for the stable development of global commerce, courts should not exclude patent exhaustion because of the presence of a notice to third-party acquirers.

Therefore, the denial of patent exhaustion, as decided in *General Talking Pictures*, was limited to cases where the defendant was a joint infringer, acting with actual knowledge or willful blindness regarding the limitation of the licensee's authority.³²³ The elements of joint infringement liability set forth in *Global-Tech Appliances, Inc. v. SEB S.A.* may be relevant to the determination of patent exhaustion.³²⁴

B. Application to Impression Products

Impression Products recognized international patent exhaustion based on the understanding that the common law prohibition against servitudes is

319. *Id.*

320. See *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 525–26 (2013); see also *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 518 (1917); *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 638 (2008).

321. *Kirtsaeng*, 568 U.S. at 538–40.

322. *Quanta*, 553 U.S. 638.

323. *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1535 (2017).

324. *Glob.-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 769–71 (2011).

the essence of patent exhaustion,³²⁵ and that patents are not different from copyrights.³²⁶ The Court also reconfirmed that post-sale restrictions are not effective to prevent patent exhaustion.³²⁷ If the proposed two-tier test is applied, courts would recognize international patent exhaustion regardless of Lexmark's express prohibition against the use of cartridges within the United States. Additionally, the single-use/no-resale restriction and notice of it to buyers would not preclude patent exhaustion under the test.

The first stage addresses the property law aspect of patent exhaustion, and examines the applicability of the common law prohibition against restraints on the alienation of chattels.³²⁸ *Impression Products* presented facts that demanded stronger protection of third parties through the application of the common law rule. The cartridges were sold in large numbers worldwide.³²⁹ The altered cartridges were indistinguishable from original cartridges except that they were reprogrammed and refilled.³³⁰ The buyers of the cartridges were title holders with full dominion over them.³³¹ To maintain the certainty of trade and prevent unforeseeable injury to third parties, the buyers should have a right to use and sell the cartridges without infringement liability. Thus, the common law prohibition against servitudes on personal property should prevent Lexmark's attempt to restrict the use and resale of the cartridges that were sold to third parties.³³²

Second, through the multifactorial public interest analysis, courts should find that the cartridges have been lawfully made and sold. As decided in *Adams*, a reward to a patentee may be found if the patentee has received an agreed-upon price.³³³ Lexmark received a reward to the invention at the time of the foreign sales.³³⁴ The cartridges were lawfully sold because they were sold through Lexmark's own distribution network.³³⁵

Additionally, the risk of competitive harm that may result from Lexmark's maintenance of the cartridge price in the United States, will

325. *Impression Prods.*, 137 S. Ct. at 1536.

326. *Id.*

327. *Id.* at 1532–33.

328. See *Bloomer v. McQuewan*, 55 U.S. 539, 550 (1852).

329. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 727 (Fed. Cir. 2016); *Static Control Components, Inc. v. Lexmark Int'l, Inc.*, 697 F.3d 387, 394–95 (6th Cir. 2012).

330. Repair of sold products is allowed. See *Wilson v. Rousseau*, 45 U.S. 646, 707 (1846).

331. *Impression Prods.*, 816 F.3d at 727.

332. *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1531–32 (2017) (analyzing single-use/no-resale restrictions).

333. *Adams v. Burke*, 84 U.S. 453, 456–57 (1873).

334. *Impression Prods.*, 816 F.3d at 727–28.

335. *Id.*

provide another reason to support the conclusion of patent exhaustion.³³⁶ In *Quality King Distributors, Inc. v. L'anza Research International, Inc.*, the Court refused to consider the right holder's interests in maintaining a price discrimination in copyright exhaustion.³³⁷ Also, *Kirtsaeng* condemned a scheme of market division.³³⁸ Thus, it was not surprising that the Supreme Court rejected Lexmark's argument and held that the analysis of patent exhaustion should not include Lexmark's price discrimination scheme.³³⁹

Therefore, the proposed test will lead to the adoption of international patent exhaustion and the rejection of Lexmark's argument regarding the single-use/no-resale restriction as the Supreme Court decided in *Impression Products* because the cartridges were lawfully made and sold even though they were reprogrammed and refilled after the use by buyers.³⁴⁰

IV. CONCLUSION

The alienation of property is a fundamental tenet of property law. Servitudes bind successors in the ownership of property and cause inflections with the marketability principle. Through the common law prohibition against servitudes, courts have prevented property from becoming unmarketable or unusable. Additionally, the alienability of personal property has been further promoted by rules such as the BOCB provision in the U.C.C., to meet the heightened need for the smooth commercial transactions.

The urban development in the twentieth century paved the way for the acceptance of equitable servitudes. Servitudes were suited to balance various interests. Nevertheless, as far as personal property is concerned, only a small number of courts have held servitudes valid. Attempts to create equitable servitudes by notices have failed.

Thus, when an intellectual property owner imposes restraints on the use and sale of products, the common law prohibition against restraints on the alienation of personal property prompts courts to apply intellectual property exhaustion. Moreover, equity considerations have supplemented the application of the common law rule. In this regard, the *Restatement (Third) of Property: Servitudes* § 3.1 provides helpful guidance in understanding why courts have applied exhaustion of intellectual property rights to individual cases. A restraint on the use and sale of personal property is likely to be invalidated if (1) it is arbitrary, spiteful, or capricious; (2) it

336. See *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 552–53 (2013).

337. *Quality King Distributors, Inc. v. L'anza Research Int'l, Inc.*, 523 U.S. 135, 138–39, 153 (1998).

338. *Kirtsaeng*, 568 U.S. at 552–53.

339. *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1537 (2017).

340. *Wilson v. Rousseau*, 45 U.S. 646, 707 (1846).

unreasonably burdens a constitutional right; (3) it imposes unreasonable restraints on the alienation; (4) it imposes restraints on trade or competition; or (5) it is unconscionable.

In copyright exhaustion, courts have emphasized the importance of alienation of items and have invalidated restraints that impose unreasonable restraints on competition. With regards to the requirement that the item was lawfully made and sold, courts have flexibly interpreted the requirement and applied exhaustion to cases in which copyright owners argued that the agreement was a license, or that the owner never transferred title to the copy. As seen in *Kirtsaeng*, equity will exert modulating effects when copyright owners take measures that limit the buyers' ability to use and sell copies.

Patent exhaustion is not entirely different from copyright exhaustion because patent exhaustion has been formed through the combined application of the common law prohibition against servitudes and equity. As with copyright exhaustion, a "lawfully made and sold" item must be found. Uniquely in patent exhaustion, courts carefully examine whether a patentee has received a reward for the invention such that it could be viewed as a sale. In examining a reward for the patentee, courts consider relevant public interests, such as maintenance of a free market and the Patent Act's ultimate purpose.

The proposed two-step analysis of patent exhaustion combines a step related to the classic common law prohibition against servitudes and a step for a multifactorial equity analysis. At the first stage, a decision should be made as to whether a case requires protection of third-party purchasers in relation to the ownership interest in the "lawfully made and sold" product. At the second stage, pertinent inquiries will include, whether a patentee had an opportunity to receive an agreed-upon price or a plausible value for the invention, and whether there is an unreasonable restraint upon the alienation of goods, interference with constitutional freedom, competitive injury, and arbitrary enforcement.

Application of the proposed test demonstrates that international patent exhaustion should be adopted, and that the post-sale restrictions in *Impression Products* could not prevent patent exhaustion. The Supreme Court's reversal of the Federal Circuit's decision in *Impression Products* sheds a light on an important question in patent law and the law of equitable servitudes.