

GAME OVER FOR FIRST SALE

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ABSTRACT

Video game companies have long considered secondhand game retailers a threat to their bottom lines. Some companies are now experimenting with technological tools to discourage and even prevent gamers from buying and selling used games. For example, “tethering” technology suppresses secondhand sales by permanently identifying particular media items (such as video game discs) with a single user’s device. This technology flies in the face of copyright law’s “first sale” doctrine, which gives lawful purchasers the right to sell, lease, and lend DVDs, CDs, and other media.

This Article answers a question posed by many commentators: whether it is legal to employ technology that restricts first sale rights. The answer hinges on two statutes: the Digital Millennium Copyright Act (“DMCA”) and the Sherman Antitrust Act. The DMCA broadly protects technological measures that restrict access to copyrighted material, which would likely include technologies aimed at suppressing secondhand video game sales. If end users came up with a method for getting around these devices, they could potentially incur liability under the DMCA. However, some courts have interpreted the DMCA narrowly so as to allow circumvention that does not clearly lead to copyright infringement. Since accessing the content on a video game disc or other similar media does not constitute infringement, this construction of the statute would most likely permit users to lawfully circumvent restrictive technology.

Moreover, technology that abridges first sale rights may violate the Sherman Act, which prohibits monopolists from acquiring, maintaining, or extending their market power through predatory or anticompetitive means. Antitrust would be a fitting remedy; the first sale doctrine is intrinsically linked to antitrust jurisprudence. Courts recognize the importance of secondhand markets, and have held that monopolists may not use technology to suppress competition. However, the difficulty of demonstrating that any company possesses monopoly power in the relevant market could be fatal to a Sherman Act challenge.

Given these doctrinal complexities, it may ultimately fall to consumers to vote with their wallets and choose not to patronize companies that engage in business practices that abridge first sale rights. Otherwise, it really could be “Game Over” for the first sale doctrine.

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I. INTRODUCTION

In the early days of 2013, just as the holiday shopping season was coming to a close, an obscure legal filing took the video game world by storm. An Internet user known only as “gofreak” posted a brief message to an online discussion forum describing a patent application that Sony Computer Entertainment, maker of the popular line of PlayStation gaming consoles, had filed with the U.S. Patent & Trademark Office a few months earlier.¹ The application described a technology that would permanently affiliate

1. Gofreak, *Sony Has Researched New Tech for Suppressing Second-Hand Game Sales*, NEOGAF (Jan. 3, 2013, 8:36 AM), <http://www.neogaf.com/forum/showthread.php?t=506560>.

video game discs with a particular video game console, such that a game would not run if the disc were inserted into another gamer's device.² This "Disc ID" system would effectively preclude gamers from lending, trading, or selling video games, since each disc could only function on a single console. According to the patent application, this was Disc ID's main purpose. The filing stated that Disc ID would "suppress" secondhand video game sales by forcing all interested gamers to purchase new discs.³ The intended outcome was enhanced "redistribution" of profits to game makers and developers.⁴

As the news spread, bloggers and tech publications registered their outrage. The website ITworld called the Disc ID plans "nefarious" and predicted that gamers would "grab their pitchforks and torches" to protest the technology.⁵ TechDirt sardonically described the news as coming from the "Sony-obviously-feels-it's-not-hated-enough-already" department.⁶ Some commentators were more restrained; Ars Technica, for example, correctly pointed out that "the fact that Sony has applied to patent this idea is a far cry from confirmation that this kind of protection system is in the works for [Sony's next game console,] the PlayStation 4."⁷ Indeed, once the Disc ID controversy attracted mainstream media attention,⁸ Sony began to equivocate⁹ and ultimately decided against employing the technology in the PlayStation 4.¹⁰

2. See generally U.S. Patent Application No. 13/611,243, Publication No. 2013/0007892 (published Jan. 3, 2013) [hereinafter Sony Patent App.].

3. *Id.* at 2.

4. *Id.*

5. Peter Smith, *Sony Patent Suggests PS4 May Not Run Used Games*, ITWORLD (Jan. 4, 2013, 8:30 AM), <http://www.itworld.com/personal-tech/333199/sony-patent-suggests-ps4-may-not-run-used-video-games>.

6. Tim Cushing, *Sony Patent Application Takes on Used Game Sales, Piracy with Embedded RFID Chips in Game Discs*, TECHDIRT (Jan. 4, 2013, 4:28 AM), <http://www.techdirt.com/articles/20130103/11044521571/sony-patent-application-takes-used-game-sales-piracy-with-embedded-rfid-chips-game-discs.shtml>.

7. Kyle Orland, *Examining Sony's Internet-Free Method for Blocking Used Game Sales*, ARS TECHNICA (Jan. 3, 2013, 9:55 AM), <http://arstechnica.com/gaming/2013/01/examining-sonys-internet-free-method-for-blocking-used-game-sales>.

8. See, e.g., Jared Newman, *The Death of Used Games Is a Rumor That Won't Die*, TIME (Feb. 6, 2013), <http://techland.time.com/2013/02/06/the-death-of-used-games-is-a-rumor-that-wont-die>; Chad Sapieha, *Sony's Proposed Patent Has Power to Kill Used Game Sales*, FINANCIAL POST (Jan. 13, 2013, 11:26 AM), <http://business.financialpost.com/2013/01/15/sonys-proposed-patent-has-power-to-kill-used-game-sales>.

9. See Chris Kohler, *What's Up with PlayStation 4 and Used Games?*, WIRED (Feb. 26, 2013, 2:55 PM), <http://www.wired.com/gamelifelife/2013/02/playstation-4-used-games>; Kyle Orland, *Sony UK Exec: PS4 Used Game Question "Isn't Clarified Just Yet"*, ARS TECHNICA (Feb. 26, 2013, 1:30 PM), <http://arstechnica.com/gaming/2013/02/sony-uk-exec-ps4-used-game>.

Video game companies have been cool to secondhand game sales for some time now. The chain retailer GameStop makes billions of dollars each year in used game sales¹¹ and has attracted harsh criticism from the industry.¹² Because GameStop offers pre-owned copies of popular games at discounted prices within months or even weeks of release, game companies argue that secondhand sales “deprive publishers of revenue, with the proceeds of the sale lining only the retailers’ pockets.”¹³ Others in the industry have directed their ire at the gamers themselves. When game maker THQ introduced a system that allowed only original purchasers to access certain content in popular games, an executive told the press that he did not sympathize with used game buyers because “when the game’s bought used we get cheated.”¹⁴ Other developers have pursued similar strategies to discourage secondhand game purchases.¹⁵ GameStop insists that its used games business is in fact good for the video game makers’ bottom lines,¹⁶ a claim that enjoys some empirical support.¹⁷ Nonetheless, many game developers remain unconvinced. Predictably, GameStop’s stock took a hit when Sony’s patent application became public¹⁸ and dropped again when rumors surfaced that

question-isnt-clarified-just-yet/; Steven Ruygrok, *PlayStation 4 May Be Banning Used Games After All, Like Xbox 720*, EXAMINER.COM (Feb. 28, 2013), <http://www.examiner.com/article/playstation-4-may-be-banning-used-games-after-all-like-xbox-720>.

10. See Richard George, *E3 2013: PlayStation 4 Supports Used Games, Doesn’t Require Online Connection*, IGN (June 10, 2013), <http://www.ign.com/articles/2013/06/11/e3-2013-playstation-4-supports-used-games-dont-require-online-connection>.

11. See Yukari Iwatani Kane & Miguel Bustillo, *Used Games Score Big for GameStop*, WALL ST. J., Jan. 21, 2009, <http://online.wsj.com/article/SB123249378212700025.html>. GameStop also sells new games.

12. See *Developers Respond to GameStop’s Used Games Market Comments*, GAMEPOLITICS.COM (Aug. 23, 2011), <http://gamepolitics.com/2011/08/23/developers-respond-gamestop039s-used-games-market-comments> (compiling criticisms from developers at several companies).

13. Nathan Brown, *GameStop: Pre-Owned Benefits Publishers*, EDGE (Aug. 22, 2011, 1:22 PM), <http://www.edge-online.com/news/gamestop-pre-owned-benefits-publishers>.

14. Tom Pakinkis, *Pre-owned ‘Cheats Developers’—THQ*, CVG (Aug. 23, 2010, 10:51 AM), <http://www.computerandvideogames.com/261330/pre-owned-cheats-developers-thq>.

15. See *id.*

16. Dan Pearson, *GameStop: Used Sales Benefit the Whole Industry*, GAMESINDUSTRY (Aug. 23, 2011, 9:24 AM), <http://www.gamesindustry.biz/articles/2011-08-23-gamestop-used-sales-benefit-the-whole-industry>.

17. See, e.g., Nicole F. Velasquez et al., *The Impact of a Secondary Market on Video Game Purchase Intentions*, 16 REV. BUS. INFO. SYS. 103, 109 (2012) (finding that “the accessibility . . . of a secondary market is important to consumers’ purchase behaviors in the primary market,” and suggesting that “game developers and publishers would be wise to reassess their push to criminalize the resale of video games”).

18. *GameStop Shares Fall on Sony Patent Application*, YAHOO! NEWS (Jan. 3, 2013, 3:10 PM), <http://news.yahoo.com/gamestop-shares-fall-sony-patent-201046439.html>.

Microsoft would also employ anti-used game technology in its next-generation Xbox One console.¹⁹

The Disc ID patent application is the content industry's latest volley in a decades-long fight over copyright's first sale doctrine. The first sale doctrine provides that the lawful owner of a copy of a copyrighted work has the right to sell, lease, lend, or otherwise transfer that particular copy.²⁰ With the rise of digital technology and personal computing in the 1980s, copyright-dependent industries grew increasingly anxious over the security of their products. New technology made it dramatically easier and cheaper to copy and distribute movies, computer programs, and other media. The first sale doctrine proved especially troublesome, since it propped up secondhand markets and a rental industry that companies in Hollywood and Silicon Valley alike considered threatening. Software makers were rightly concerned that consumers would rent computer programs for a matter of dollars, only to create their own illicit copies at home before returning the originals to the rental store. Not only did these industries successfully lobby Congress for statutory first sale exceptions, but software companies also adopted widespread licensing practices that precluded first sales from taking place to begin with.²¹

Technologies like Disc ID, which “tether” particular copies of video game discs, DVDs, or other media to a single user's device,²² are simply new tools for accomplishing an old goal: cabining the first sale doctrine. The question many industry analysts have posed is whether these technologies, if adopted, would be legal.²³ This Article seeks to answer that question. The legality of tethering technologies hinges on two statutes: the Digital Millennium Copyright Act (“DMCA”) and the Sherman Antitrust Act

19. Ben Lamoreux, *GameStop Stock Plunges 10% Following Recent Xbox Rumors*, GENGAME (Feb. 6, 2013), <http://gengame.net/2013/02/gamestop-stock-plunges-10-following-recent-xbox-rumors>. Microsoft did not end up incorporating this technology in Xbox One. Ben Gilbert, *Microsoft Reverses Xbox One DRM Policy, Kills Required Online Check-In and Used Game Complications (Updated)*, ENGADGET (June 19, 2013, 4:33 PM), <http://www.engadget.com/2013/06/19/xbox-one-drm-used-games-reversal/>.

20. 17 U.S.C. § 109(a) (2012).

21. *See infra* Part III.

22. Although Disc ID's immediate application is to video games, the patent application states that the technology is “similarly applicable to various kinds of electronic content such as an office suite, images, and music content.” Sony Patent App., *supra* note 2, at 2.

23. *See, e.g.*, Cushing, *supra* note 6 (“[C]reating discs that are ‘locked’ to a certain system would seem to violate the right of first sale.”); Orland, *supra* note 7 (“While this kind of resale-blocking technology would seemingly run afoul of the first sale doctrine codified into US law, legal experts seem unsure about whether that doctrine would be enough to overcome the end-user license agreements common to video game sales.”).

(“Sherman Act”). The DMCA protects “technological protection measures,” including devices like Disc ID, that control consumers’ access to copyrighted material.²⁴ Circumventing these protection measures to gain access to music, video, or other content is ordinarily prohibited.²⁵ While some courts would likely uphold tethering technologies against circumvention, others have interpreted the DMCA narrowly, allowing circumvention where it does not clearly lead to copyright infringement.²⁶ Since accessing the content stored on a video game disc or similar media would not, in itself, constitute infringement, consumers might be able to circumvent tethering technologies without violating the DMCA. Given the split in legal authority, however, it is impossible to say with any certainty how a court might rule on this issue without knowing the jurisdiction in which the court sits.

Moreover, technology that affects first sale rights may run afoul of the Sherman Act, which prohibits monopolization through predatory or anticompetitive means.²⁷ Courts have long recognized the first sale doctrine’s antitrust significance and the importance of secondhand markets.²⁸ While judges are rightfully cautious about standing in the way of technological innovation, it is well established that monopolists may not use technology to suppress competition.²⁹ An antitrust challenge to a tethering technology could therefore be plausible. As a prerequisite to monopolization liability, however, an antitrust defendant must possess monopoly power in the relevant market.³⁰ Depending on industry conditions, it could be difficult if not impossible to show that any relevant company enjoys a monopoly. In these circumstances, the preservation of first sale rights may ultimately depend on consumers choosing not to patronize companies that engage in business practices to which they object.

This Article proceeds as follows. Part II introduces the first sale doctrine and explains its application to software and video games. Part III then describes the content industry’s past and ongoing efforts to restrict first sale through lobbying, licensing, and litigation. Part IV analyzes tethering

24. See *infra* Section III.B.

25. 17 U.S.C. § 1201(a)(1)(A) (2012).

26. See *infra* Section IV.C.

27. 15 U.S.C. § 2 (2012).

28. See *United States v. Aluminum Co. of Am. (Alcoa)*, 148 F.2d 416, 425 (2d Cir. 1945); *United States v. United Shoe Mach. Corp.*, 110 F. Supp. 295, 350 (D. Mass. 1953), *aff’d per curiam*, 347 U.S. 521 (1954).

29. See, e.g., *United States v. Microsoft Corp.*, 253 F.3d 34, 64–66 (D.C. Cir. 2001) (en banc).

30. *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004).

technology under the DMCA's anticircumvention provisions and concludes that, at least in some jurisdictions, the law might permit gamers to circumvent tethering systems without incurring liability. Part V then discusses whether technologically restricting first sale rights would support a monopolization claim under the Sherman Act, using the video game industry as an example. While a claim would potentially be plausible, the difficulty of defining the relevant market so as to establish that any video game maker possesses monopoly power could be prohibitive. Part VI then offers concluding remarks.

II. A LINK TO THE PAST: OLD DOCTRINE, NEW TECHNOLOGY

A. THE COPYRIGHT FIRST SALE DOCTRINE

The first sale doctrine permits the lawful owner of a copy of a copyrighted work to freely resell that copy without restriction.³¹ The Supreme Court first recognized the doctrine over a century ago in *Bobbs-Merrill Co. v. Straus*.³² The plaintiffs in *Bobbs-Merrill* sued to enforce a notice printed in each copy of a novel called *The Castaway*, which read: "The price of this book at retail is \$1 net. No dealer is licensed to sell it at a less price, and a sale at a less price will be treated as an infringement of the copyright."³³ The defendant booksellers had full knowledge of this restriction but nonetheless elected to sell copies of *The Castaway* for eighty-nine cents.³⁴ The Court held that, although the Copyright Act reserved to the copyright holder "the sole right to vend" copies of his or her work, the Act did not "create the right to impose, by notice, . . . a limitation at which the book shall be sold at retail by future purchasers, with whom there is no privity of contract."³⁵ By producing and selling copies of *The Castaway* "in quantities and at a price satisfactory to [them]," the plaintiffs had "exercised the right to vend."³⁶ The Court refused to read into the statute a right to control all *future* sales.³⁷

Congress has codified the first sale doctrine in § 109(a) of the Copyright Act, which states that "the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is

31. See 17 U.S.C. § 109(a) (2012); see also *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351, 1355–56 (2013); *Apple Inc. v. Psystar Corp.*, 658 F.3d 1150, 1155 (9th Cir. 2011).

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

33. *Id.* at 341.

34. *Id.* at 342.

35. *Id.* at 350.

36. *Id.* at 351.

37. *Id.*

entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.”³⁸ Because the first sale doctrine is only triggered by an actual sale or other transfer of title,³⁹ only bona fide owners may avail themselves of its protection.⁴⁰

The first sale doctrine lies at the intersection between intellectual property and tangible property.⁴¹ According to Professors Melville and David Nimmer, once a copyright owner has consented to the sale or distribution of copies of a work, “continued control over the distribution of copies” would only serve as “a device for controlling the disposition of the tangible personal property that embodies the work.”⁴² At this point, “the policy favoring a copyright monopoly . . . gives way to the policy opposing restraints of trade and restraints on alienation.”⁴³ Without the first sale rule, copyright holders could extend the copyright monopoly “so far as to . . . control . . . the disposition of lawfully obtained tangible personal property.”⁴⁴ In this sense, the first sale doctrine can be traced to the ancient common law rule disfavoring limitations on the transfer of private property.⁴⁵

There is also a sound economic rationale for the first sale doctrine. For one, the doctrine avoids the “prohibitive transaction costs” of granting copyright holders unfettered control over successive sales of copies of their works.⁴⁶ In the doctrine’s absence, successive purchasers or possessors of a copy would have to “negotiate with the [copyright] owner each time they

38. 17 U.S.C. § 109(a) (2012).

39. *Adobe Sys. Inc. v. One Stop Micro, Inc.*, 84 F. Supp. 2d 1086, 1089 (N.D. Cal. 2000).

40. *Adobe Sys. Inc. v. Christenson*, 891 F. Supp. 2d 1194, 1203 (D. Nev. 2012).

41. *See Brilliance Audio, Inc. v. Haight's Cross Comm'ns, Inc.*, 474 F.3d 365, 373 (6th Cir. 2007). The court in *Brilliance Audio* stated:

This bargain, first developed in the common law, and later codified in the first sale doctrine, provides that once a copyright owner consents to release a copy of a work to an individual (by sale, gift, or otherwise), the copyright owner relinquishes all rights to that particular copy. . . . The first sale doctrine ensures that the copyright monopoly does not intrude on the personal property rights of the individual owner, given that the law generally disfavors restraints of trade and restraints on alienation.

Id. (footnote and citations omitted).

42. 2-8 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8.12[A] (Matthew Bender Rev. Ed. 2013).

43. *Id.*

44. *Allison v. Vintage Sports Plaques*, 136 F.3d 1443, 1447–48 (11th Cir. 1998).

45. *See Sebastian Int'l, Inc. v. Consumer Contacts (PTY) Ltd.*, 847 F.2d 1093, 1096 (3d Cir. 1988) (citing H.R. REP. NO. 98-987 (1984)).

46. *See Pearson Educ., Inc. v. Liu*, 656 F. Supp. 2d 407, 410 (S.D.N.Y. 2009).

contemplate a further sale or other transfer of the copy.”⁴⁷ Moreover, where a “first sale” has taken place, “it may fairly be said that the copyright proprietor has received his reward” for the use of his or her work, and no further control over the copy’s distribution is warranted.⁴⁸ Copyright exists not to enrich authors and artists but to benefit the public.⁴⁹ With the consummation of a sale, the copyright monopoly has served its constitutionally mandated purpose—to incentivize the creation and dissemination of new works to the public—and any justification for continued control over the work’s distribution evaporates.⁵⁰ First sale therefore balances copyright holders’ economic incentives to create and publish new works against the public’s interest in accessing those works.⁵¹

A number of public institutions and industries owe their existence to the first sale doctrine. For example, according to the American Library Association, “first sale is what allows libraries to do what we do—lend books and materials to our patrons, the public.”⁵² American public libraries collectively house nearly a billion media items, the vast majority of which are printed books. Academic library collections account for over 1.3 billion items in total, and public school media centers contain a billion more.⁵³ Americans collectively borrow these materials 4.4 billion times per year.⁵⁴ Not only do

47. *Id.* (quoting 2 PAUL GOLDSTEIN, GOLDSTEIN ON COPYRIGHT § 7.6.1 (2005)).

48. *Burke & Van Heusen, Inc. v. Arrow Drug, Inc.*, 233 F. Supp. 881, 884 (E.D. Pa. 1964).

49. *See* U.S. CONST. art. I, § 8, cl. 8 (empowering Congress “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries”); *Fogerty v. Fantasy, Inc.*, 510 U.S. 517, 527 (1994) (“copyright law ultimately serves the purpose of enriching the general public through access to creative works”); *United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 158 (1948) (“The copyright law, like the patent statutes, makes reward to the owner a secondary consideration.”).

50. *See* *Eldred v. Ashcroft*, 537 U.S. 186, 241 (2003) (Stevens, J., dissenting) (“[A]s our cases repeatedly and consistently emphasize, ultimate public access is the overriding purpose of the constitutional provision.”); *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984) (“[Copyright] is intended to motivate the creative activity of authors and inventors by the provision of a special reward, and to allow the public access to the products of their genius after the limited period of exclusive control has expired.”).

51. *See* *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975) (“The limited scope of the copyright holder’s statutory monopoly . . . reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts.”).

52. *First Sale Doctrine and* *Kirtsaeng v. Wiley & Sons, Inc.*, AMERICAN LIBRARY ASSOCIATION, <http://www.ala.org/advocacy/copyright/firstsale> (last visited Nov. 3, 2013).

53. Brief for Am. Library Ass’n et al. as Amici Curiae Supporting Petitioner at 10–11, *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351 (2013) (No. 11-697).

54. *Id.*

libraries make for a more literate, cultured, and informed citizenry, but they also promote local economic development.⁵⁵ Post-sale restrictions on the disposition of copyrighted materials would prevent libraries from providing this crucial public service.

Likewise, businesses that profit from the buying, selling, or renting of secondhand media could not exist without the first sale doctrine. Movie and video game rental businesses, such as Redbox, GameFly, and Netflix, purchase inventory and then rent items to customers for a fee.⁵⁶ Although technological innovations like on-demand streaming video have challenged the traditional rental business model,⁵⁷ the movie and video game rental industries still generate billions of dollars per year.⁵⁸ Markets for used goods can also be substantial. GameStop, for example, reaped \$2.6 billion in revenues from used game sales in 2011 alone.⁵⁹ These secondary markets are a boon for consumers, who benefit from increased price competition.⁶⁰ And contrary to conventional wisdom, which maintains that used goods supplant demand for new goods, secondhand markets may often benefit suppliers of new goods as well.⁶¹ These markets all depend upon the first sale doctrine.

55. See generally ROBERT H. GLASS ET AL., THE ROLE OF PUBLIC LIBRARIES IN LOCAL ECONOMIC DEVELOPMENT (2000), available at <http://www.ipsr.ku.edu/resrep/pdf/m260.pdf>.

56. See Julie H. Mortimer, *Vertical Contracts in the Video Rental Industry*, 75 REV. ECON. STUD. 165, 165–69 (2008). The rental market represents a significant revenue stream for content producers (i.e., copyright owners), especially under profit-sharing schemes that have become widespread in the industry. See *id.* at 165–69.

57. See Courtney Subramanian, *The End of an Era: Blockbuster Ceases Rentals in Advance of Closing*, TIME, Nov. 9, 2013, <http://business.time.com/2013/11/09/the-end-of-an-era-blockbuster-ceases-rentals-in-advance-of-closing> (“Parent company Dish Network . . . attributed [Blockbuster’s] decline to increased digital streaming . . .”).

58. IBISWORLD, IBISWORLD INDUSTRY REPORT 53223: DVD, GAME & VIDEO RENTAL IN THE US 5 (May 2011), available at http://www.aba.com/aba/documents/CommercialInsights/IBISWorld_DVD.pdf.

59. Alexander Sliwinski, *GameStop: 70% of Trade-in Credit Spent on New Games*, JOYSTIQ (Aug. 6, 2012, 10:15 PM), <http://www.joystiq.com/2012/08/06/gamestop-70-of-trade-in-credit-spent-on-new-games>.

60. See Anindya Ghose et al., *Durable Goods Competition in Secondary Electronic Markets*, in PROCEEDINGS OF THE TWENTY-FOURTH INTERNATIONAL CONFERENCE ON INFORMATION SYSTEMS 341, 346 (2003), available at <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.231.3720>. Ghose states:

The presence of an active used-goods market creates competition for new goods because the option of buying used goods is now incentive compatible for some consumers who would have bought new goods before. This enhanced competition forces suppliers to decrease the new-good prices in order to remain competitive with used goods.

Id.

61. See *id.* at 350 (“[W]e show that, contrary to popular perceptions, the presence of a used-goods market is beneficial for suppliers too, under a relatively wide range of

The significance of the first sale doctrine can hardly be overstated. This “longstanding and fundamental . . . limitation on the public distribution right”⁶² promotes commerce, safeguards competition, and props up entire industries.⁶³ Although first enunciated over a century ago, the doctrine remains central to our understanding of copyright and property.

B. LICENSING ARRANGEMENTS

Notwithstanding the first sale doctrine, copyright owners do have an effective means for controlling copies of their work in users’ possession. While “the first sale inquiry examines *ownership* of the tangible property in which the copyrighted work has been embodied,”⁶⁴ a copyright owner may lawfully transfer *possession* of a particular copy without forfeiting title to it.⁶⁵ The law permits “copyright owners [to] create licensing arrangements so that users acquire only a license to use the particular copy . . . and do not acquire title that permits further transfer or sale of that copy without the permission of the copyright owner.”⁶⁶ A license functions as a contract,⁶⁷ dictating the terms by which the licensee may possess and use the copy of the work in question. If the licensee violates the terms of the license in a manner that implicates copyright, the copyright owner may sue for both breach of contract and infringement⁶⁸—the latter of which carries significant statutory damages.⁶⁹ The notion that copyright owners may contract around the first

conditions.”); Hal R. Varian, *Reading Between the Lines of Used Book Sales*, N.Y. TIMES, July 28, 2005, <http://www.nytimes.com/2005/07/28/technology/28scene.html> (“[T]he used [book] market does not have a big impact in terms of lost sales in the new [book] market.”).

62. John A. Rothchild, *The Incredible Shrinking First-Sale Rule: Are Software Resale Limits Lawful?*, 57 RUTGERS L. REV. 1, 75 (2004).

63. See Andrew Degner, *Wise-ing Up About the First Sale Doctrine: A Look at the Ninth Circuit’s Approach in Vernor v. Autodesk*, 35 COLUM. J.L. & ARTS 581, 602 (2012) (“[I]t is important to recall that the first sale doctrine was designed to protect the rights of individuals to their property against unreasonable restraints upon alienation under the guise of the copyright law.”).

64. NIMMER & NIMMER, *supra* note 42, § 8.12[B][1][d][i] (emphasis added).

65. See *United States v. Drebin*, 557 F.2d 1316, 1330 (9th Cir. 1977) (“[T]ransfer of title [is] the *sine qua non* of the first sale doctrine.”); *UMG Recordings, Inc. v. Augusto*, 628 F.3d 1175, 1180 (9th Cir. 2011) (“We have recognized . . . that not every transfer of possession of a copy transfers title.”).

66. *UMG Recordings*, 628 F.3d at 1180.

67. See *Flava Works, Inc. v. Gunter*, 689 F.3d 754, 755 (7th Cir. 2012) (Posner, J.) (“[A] copyright license is just a type of contract”).

68. See *MDY Indus., LLC v. Blizzard Entm’t, Inc.*, 629 F.3d 928, 940 (9th Cir. 2010) (“To recover for copyright infringement based on breach of a license agreement, (1) the copying must exceed the scope of the defendant’s license and (2) the copyright owner’s complaint must be grounded in an exclusive right of copyright . . .”).

69. See 17 U.S.C. § 504(c)–(d) (2012).

sale doctrine by way of licensing is as old as the doctrine itself. In *Bobbs-Merrill*, the Supreme Court acknowledged that its first sale holding did not reach license agreements controlling subsequent sales of a book.⁷⁰

C. APPLICATION TO COMPUTER SOFTWARE AND VIDEO GAMES

Computer programs raise special challenges for copyright law. Under the 1980 amendments to the Copyright Act,⁷¹ computer programs became eligible for federal copyright protection.⁷² With the advent of personal computing in the early 1980s, software producers became increasingly concerned with unauthorized copying.⁷³ They were especially worried about software rental, which the Copyright Act permitted (and which, in fact, came to pass in the rental industry).⁷⁴ Due to the ease of copying software, consumers could, in lieu of purchasing a program, “simply rent a copy of the program[] and duplicate it.”⁷⁵ While unauthorized duplication ordinarily constitutes infringement, it would have been impractical and uneconomical for copyright owners to track down and sue individual consumers.⁷⁶ Going after the rental stores made more sense, but the first sale doctrine immunized software rental stores from liability.⁷⁷ Software producers consequently decided to begin licensing, rather than selling, their computer programs.⁷⁸ This allowed software owners to “retain ownership and . . . limit the user’s rights to copy, transfer or modify the software, thereby making the first sale doctrine inapplicable.”⁷⁹ Licensing continues to be the norm in software distribution.⁸⁰

At the same time, the computer industry lobbied Congress for an exception to the first sale doctrine.⁸¹ Recognizing that first sale permitted

70. *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339, 350 (1908). By its own terms, § 109(a) of the Copyright Act only applies to “the *owner* of a particular copy or phonorecord made under this title, or any person authorized by such owner.” 17 U.S.C. § 109(a) (emphasis added).

71. Cf. Judith Klerman Smith, *The Computer Software Rental Act: Amending the “First Sale Doctrine” to Protect Computer Software Copyright*, 20 LOY. L.A. L. REV. 1613, 1620–21 (1987).

72. *Id.*; see 17 U.S.C. § 101 (defining “computer program”).

73. Smith, *supra* note 71, at 1626–28.

74. *See id.* at 1626, 1628.

75. *Step-Saver Data Sys., Inc. v. Wyse Tech.*, 939 F.2d 91, 96 n.7 (3d Cir. 1991).

76. *See id.* (“This copying by the individual consumers would presumably infringe the copyright, but usually it would be far too expensive for the copyright holder to identify and sue each individual copier.”).

77. *Id.*; Smith, *supra* note 71, at 1624–25.

78. *See* Smith, *supra* note 71, at 1630–31.

79. *Id.*

80. *Apple Inc. v. Psystar Corp.*, 658 F.3d 1150, 1155 (9th Cir. 2011).

81. *See* Jessica Litman, *Revising Copyright Law for the Information Age*, 75 OR. L. REV. 19, 23, 35–36 (1996).

“rental firms [to] legally dispose of legitimately purchased copies of computer programs,” and that rented software could be copied with little more than the push of a button,⁸² Congress enacted the Computer Software Rental Amendments Act of 1990.⁸³ While not disturbing “the ability of copyright owners and users to enter into license agreements regarding the use of computer programs,”⁸⁴ the Act amended § 109 to prohibit “any person in possession of a particular copy of a computer program” from renting, leasing, or lending the copy for commercial purposes.⁸⁵ Between licensing and legislation, the software industry had successfully made an end run around the first sale doctrine by the early 1990s.

Video games are of course computer programs,⁸⁶ but they have charted a different course from other types of software covered by the Copyright Act. Unlike personal computing software, video games designed for home consoles are ordinarily difficult to copy.⁸⁷ In fact, Nintendo designed its groundbreaking NES console to play game cartridges rather than floppy disks precisely because cartridges were harder to copy.⁸⁸ Video games are, in this respect, more akin to videocassettes and DVDs than to conventional software: popping a video game cartridge or disc into the console allows the gamer to access its contents, but it does not create a permanent copy on the device (i.e., the game is not “installed” or otherwise stored on a local hard drive). For these reasons, video game makers have been somewhat less guarded,⁸⁹ and they ordinarily sell rather than license their products.⁹⁰

82. S. REP. NO. 101-265, at 3 (1990).

83. Computer Software Rental Amendments Act of 1990, Pub. L. No. 101-650, 104 Stat. 5089.

84. S. REP. NO. 101-265, at 5.

85. 17 U.S.C. § 109(b)(1)(A) (2012).

86. See Erik Bauman, *The Nexus Analysis: License Enforcement in the Wake of MDY v. Blizzard*, 27 BERKELEY TECH. L.J. 503, 525 (2012).

87. See S. REP. NO. 101-265, at 5. In 1990, video games manufactured for home consoles were stored on difficult-to-copy microchips encased in cartridges. *Id.* Subsequent generations of consoles, such as the Sony PlayStation, utilized easier-to-copy compact discs rather than cartridges. However, the consoles themselves were incapable of running pirated discs without modifications to their hardware. See Brian Fitzgerald, *The PlayStation Mod Chip: A Technological Guarantee of the Digital Consumer's Liberty or Copyright Menace/Circumvention Device?*, 10 MEDIA & ARTS L. REV. 85, 86 (2005).

88. See DAVID SHEFF, GAME OVER: HOW NINTENDO ZAPPED AN AMERICAN INDUSTRY, CAPTURED YOUR DOLLARS, AND ENSLAVED YOUR CHILDREN 33 (1993) (“The system would play games on cartridges, not disks. Floppy disks were threatening to computerphobes and, more important, they were copiable.”).

89. This is not at all to say that video game makers have been *unconcerned* about piracy. *Pong*, one of the earliest video games, was “copied with abandon.” SHEFF, *supra* note 88, at 140. Of the 100,000 *Pong* arcade games sold in 1974, only one-tenth were produced by Atari. *Id.*

Congress determined that there was no need to extend the 1990 Amendments Act to video games⁹¹ and, accordingly, excluded video games manufactured for use on home consoles from the Act's coverage.⁹² The first sale doctrine therefore continues to apply with full force to video game sales.

In sum, copyright law has relied upon the first sale doctrine for over a century to mediate the tension between intellectual property and personal property. The doctrine promotes efficiency and competition, and serves as the legal foundation for many public institutions and private enterprises.⁹³ However, the doctrine is not absolute. Copyright owners may contract around it by way of licensing, which allows them to maintain title in distributed media and dictate the terms of use. While computer programs enjoy additional statutory exemptions from first sale, console-based video games remain fully subject to the first sale doctrine, and licensing has not yet become commonplace in the video game industry. This is not to say, however, that first sale is without threat in the gaming world.

III. ALL YOUR BASE ARE BELONG TO US: FIRST SALE UNDER FIRE⁹⁴

First sale's standing in copyright law has probably never been more precarious than it is today. While many have prematurely reported the doctrine's demise—a law review article published almost thirty years ago

90. See *Adobe Sys., Inc. v. One Stop Micro, Inc.*, 84 F. Supp. 2d 1086, 1091 (N.D. Cal. 2000) (“[W]ith the exception of video games, software is licensed rather than sold.” (quoting Raymond Nimmer)).

91. See S. REP. NO. 101-265, at 5 (“At the present time, the rationale for prohibiting the rental of software available in other formats does not apply to video game cartridges.”).

92. See 17 U.S.C. § 109(b)(1)(B)(ii) (2012) (“This subsection does not apply to . . . a computer program embodied in or used in conjunction with a limited purpose computer that is designed for playing video games and may be designed for other purposes.”).

93. See *supra* notes 52–63 and accompanying text.

94. Explaining a cultural reference may defeat the purpose of making it to begin with, but this one is so obscure that it probably warrants comment. The phrase “All Your Base Are Belong to Us” is an awkward translation of “all your bases are under our control” that originally appeared in the European version of *Zero Wing*, a video game released for Sega's Mega Drive console in 1991. The catchphrase “swept across the internet at the dawn of the 21st century,” and was recently referenced in Disney's video game-themed animated film *Wreck-It Ralph*. See *All Your Base Are Belong to Us*, KNOW YOUR MEME, <http://knowyourmeme.com/memes/all-your-base-are-belong-to-us> (last visited Feb. 27, 2013); Luke McKinney, *Leeroy Jenkins Lives! The 6 Best Video Game References in “Wreck-It Ralph,”* MOVIELINE (Nov. 12, 2012, 5:30 PM), <http://movieline.com/2012/11/12/wreck-it-ralph-best-video-game-references-aerith-kano-konami-code>.

pronounced it “the defense that never was”⁹⁵—the doctrine has indeed been under siege for decades. Since the advent of consumer copying technologies, such as Xerox machines and VCRs, the content industry⁹⁶ has incessantly fought first sale through litigation, lobbying, and licensing.⁹⁷ Digital technology has now brought this fight to a head.⁹⁸

This Section focuses on two practices the content industry has widely adopted to limit first sale rights: first, the ubiquitous “shrinkwrap” or “clickthrough” license, which precludes transfer of ownership and affords copyright holders far-reaching control over media in their customers’ hands; and second, technologies that restrict consumers’ access to and usage of copyrighted media, even following a legitimate first sale.

A. THE RISE OF THE END USER LICENSE AGREEMENT

As Professor Raymond Nimmer writes, contract law plays an “overriding role” in the law of first sale: “Contractual terms determine the applicability of first sale doctrine as a matter of copyright law The presence or absence of a first sale ownership privilege thus depends on the terms of a contract.”⁹⁹ While freedom of contract has been heralded as indispensable to a “free enterprise system based on an unheard of division of labor,” the “development of large scale enterprise with its mass production and mass distribution made a new type of contract inevitable—the standardized mass contract.”¹⁰⁰ The concept of standardized contracts, or contracts of adhesion, entered the American legal lexicon in the second decade of the twentieth century.¹⁰¹ Far removed from the idealized notion of two parties “meet[ing] each other on a footing of social and approximate economic equality” to

95. Richard Colby, *First Sale Doctrine—The Defense That Never Was?*, 32 J. COPYRIGHT SOC’Y U.S.A. 77, 77 (1984).

96. The “content industry” broadly encompasses companies that own and produce mass media, such as music and movies. *See generally* Mark A. Lemley, *Is the Sky Falling on the Content Industries?*, 9 J. ON TELECOMM. & HIGH TECH. L. 125 (2011).

97. For example, after the movie industry failed to kill home video players through litigation, see *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984), it lobbied Congress to legislatively prohibit the rental, lease, and lending of videocassettes and other audiovisual works. *See* Ralph S. Brown, Jr., *Eligibility for Copyright Protection: A Search for Principled Standards*, 70 MINN. L. REV. 579, 584 & n.30 (1985).

98. *See* R. Anthony Reese, *The First Sale Doctrine in the Era of Digital Networks*, 44 B.C. L. REV. 577, 581 (2003).

99. Raymond T. Nimmer, *Copyright First Sale and the Overriding Role of Contract*, 51 SANTA CLARA L. REV. 1311, 1345–46 (2011).

100. Friedrich Kessler, *Contracts of Adhesion—Some Thoughts About Freedom of Contract*, 43 COLUM. L. REV. 629, 629, 631 (1943).

101. *See* Edwin W. Patterson, *The Delivery of a Life Insurance Policy*, 33 HARV. L. REV. 198, 222 (1919).

achieve a unity of minds through self-interested bargaining,¹⁰² the terms of a contract of adhesion are entirely dictated by one party to another—take it or leave it.¹⁰³

Courts generally uphold contracts of adhesion, although the equitable doctrine of unconscionability may preclude enforcement of particularly egregious contracts.¹⁰⁴ It is of no consequence that these contracts are seldom read, and even less frequently understood; so long as the purchaser “assents” to the terms, the contract is valid.¹⁰⁵ This is an extremely low bar. In *ProCD, Inc. v. Zeidenberg*, the defendant did not even *see* the contractual terms until after he had paid for the plaintiffs’ product and received it in the mail.¹⁰⁶ Because the defendant used the product after having an opportunity to read the contract, however, Judge Easterbrook reasoned that he had assented to the contractual terms and had become bound by them.¹⁰⁷ There are limits to the doctrine of assent—a contract may be unenforceable, for instance, in the absence of a reasonably conspicuous notice that a party is binding itself.¹⁰⁸ But the nomenclature now applied to contracts of adhesion (e.g., “shrinkwrap,” “clickthrough”) suggests just how little courts require in the way of assent.

Copyright licenses are simply contracts,¹⁰⁹ and copyright owners routinely use contracts of adhesion to avoid the first sale doctrine. The practice first arose in the 1980s with the mass marketization of computer software.¹¹⁰

102. Kessler, *supra* note 100, at 630.

103. *See Victoria v. Superior Court*, 710 P.2d 833, 837 (Cal. 1985). The court in *Victoria* stated:

The term “adhesion contract” refers to standardized contract forms offered to consumers of goods and services on essentially a “take it or leave it” basis without affording the consumer a realistic opportunity to bargain and under such conditions that the consumer cannot obtain the desired product or services except by acquiescing in the form contract.

Id. (quoting *Wheeler v. St. Joseph Hosp.*, 133 Cal. Rptr. 775, 783 (Cal. Ct. App. 1976)).

104. *See, e.g., Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593 (E.D. Pa. 2007); *Comb v. PayPal, Inc.*, 218 F. Supp. 2d 1165 (N.D. Cal. 2002); *Brower v. Gateway 2000, Inc.*, 676 N.Y.S.2d 569 (N.Y. App. Div. 1998).

105. *See Specht v. Netscape Commc’ns Corp.*, 306 F.3d 17, 29 (2d Cir. 2002) (“Mutual manifestation of assent, whether by written or spoken word or by conduct, is the touchstone of contract.”).

106. *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1450 (7th Cir. 1996) (Easterbrook, J.).

107. *Id.* at 1452–53.

108. *See Specht*, 306 F.3d at 35 (“Reasonably conspicuous notice of the existence of contract terms and unambiguous manifestation of assent to those terms by consumers are essential if electronic bargaining is to have integrity and credibility.”).

109. *Flava Works, Inc. v. Gunter*, 689 F.3d 754, 755 (7th Cir. 2012) (Posner, J.).

110. *See Richard H. Stern, Shrink-Wrap Licenses of Mass Marketed Software: Enforceable Contracts or Whistling in the Dark?*, 11 RUTGERS COMPUTER & TECH. L.J. 51, 51 (1985)

Copies of computer programs literally had licensing agreements printed on their shrinkwrap packaging; the licenses were supposedly activated when a purchaser removed the wrapping.¹¹¹ This creative practice was understandable given the state of copyright law at the time. The scope of copyright protection in computer programs was uncertain, and as previously discussed, the first sale doctrine prevented copyright owners from controlling the software rental business, which facilitated widespread unauthorized copying.¹¹² Mass licensing enabled software producers to guard against gaps and uncertainty in copyright law.

Copyright protection in software is no longer a subject of serious debate, and the Copyright Act no longer permits software rental, but the proliferation of nonnegotiable licenses (commonly denominated “End User License Agreements,” or “EULAs”) has continued unabated. As a federal appellate court put it, “[s]oftware licensing agreements, rather than sales, have become ubiquitous in the software industry because they enable the licensor to control the use of the copyright material.”¹¹³ The capacity to make the first sale doctrine irrelevant (and, increasingly, obsolete) explains licensing’s popularity.¹¹⁴ The expanding list of names for EULAs reflects the myriad ways in which these contracts are created in today’s world; so-called “clickwrap” and “browwrap” licenses are now common.¹¹⁵ While most commonly used in connection with software, standardized licenses can be applied to virtually any type of copyrighted media.

(“Shrink-wrap,’ ‘box-top,’ or ‘tear-open’ licenses are a new form of quasi-consensual agreement spawned by the needs of our computer society, or more precisely by the economic needs of mass marketers of software.”).

111. David Bender, *Software Protection: The 1985 Perspective*, 77 W. NEW ENG. L. REV. 405, 438–40 (1985). Software licensing began much earlier, in the 1960s, with the birth of the software industry. Glen O. Robinson, *Personal Property Servitudes*, 71 U. CHI. L. REV. 1449, 1473 (2004). In those early days, “a typical mainframe computer cost hundreds of thousands (and perhaps over a million) dollars. . . . [A]pplication software was all custom developed, and a typical computer program might cost tens of thousands (or even more than a hundred thousand) dollars.” Bender, *supra*, at 438. Software transactions were therefore substantial, low in volume, and highly individualized to the parties involved. *Id.* License agreements were negotiated and drafted by lawyers. *Id.* In the 1980s, when consumers began purchasing software “over the counter like expensive jelly beans,” nonnegotiable, unindividuated licenses became the norm. *Id.* at 438–39.

112. *Id.* at 439.

113. *Apple Inc. v. Psystar Corp.*, 658 F.3d 1150, 1155 (9th Cir. 2011).

114. *See id.* at 1156 (“It is this distinction between sales and licenses that has caused the use of software licensing agreements to flourish and become the preferred form of software transactions.”).

115. *See* Cheryl B. Preston & Eli W. McCann, *Unwrapping Shrinkwraps, Clickwraps, and Browwraps: How the Law Went Wrong from Horse Traders to the Law of the Horse*, 26 BYU J. PUB. L. 1, 17–19 (2011).

The pervasiveness of EULAs means that copyright defendants asserting a first sale defense often have difficulty proving that a true sale—a transfer of ownership—ever took place to begin with. The case law is not uniform,¹¹⁶ but the modern trend largely favors copyright owners over consumers, licenses over ownership.¹¹⁷ The Ninth Circuit has been especially prolific in articulating how copyright owners can avoid the pitfall of actually selling goods to their customers.¹¹⁸ Without sacrificing much in the way of nuance, one may describe the circuit’s recent precedents as establishing the following proposition: by observing certain formalities, a copyright holder can retain ownership in virtually any copyrighted media it “sells,” thereby avoiding the first sale doctrine entirely.¹¹⁹ More specifically, the Ninth Circuit has held that the following factors determine whether a transfer constitutes a sale or a license: (1) whether the copyright owner specifies that a user is granted a license, (2) whether the copyright owner significantly restricts the user’s ability to transfer the software, and (3) whether the copyright owner imposes notable use restrictions.¹²⁰ In other words, a transfer is a license and not a sale if the copyright owner says it is a license.¹²¹

116. See Terence Leong, Note, *When the Software We Buy is Not Actually Ours: An Analysis of Vernor v. Autodesk on the First Sale Doctrine and Essential Step Defense*, 10 NW. J. TECH. & INTELL. PROP. 239, 239 (2012).

117. See Jenny Lynn Sheridan, *Does the Rise of Property Rights Theory Defeat Copyright’s First Sale Doctrine?*, 52 SANTA CLARA L. REV. 297, 371 (2012) (describing courts and Congress as “strong ‘property rights’ adherents,” with “no patience for other values in copyright law other than maximum control over the [intellectual] property by the owner”). *But see* Krause v. Titleserv, Inc., 402 F.3d 119, 122–25 (2d Cir. 2005) (holding that purported “licensee” was in fact an owner, for purposes of 17 U.S.C. § 117(a) “essential step” doctrine, where it “paid substantial sums, to possess and use a copy indefinitely without material restriction, as well as to discard or destroy it at will”).

118. See, e.g., Apple Inc. v. Psystar Corp., 658 F.3d 1150 (9th Cir. 2011); UMG Recordings, Inc. v. Augusto, 628 F.3d 1175 (9th Cir. 2011); F.B.T. Prods., LLC v. Aftermath Records, 621 F.3d 958 (9th Cir. 2010); MDY Indus., LLC v. Blizzard Entm’t, Inc., 629 F.3d 928 (9th Cir. 2010); Vernor v. Autodesk, Inc., 621 F.3d 1102 (9th Cir. 2010); Wall Data Inc. v. L.A. Cnty. Sheriff’s Dep’t, 447 F.3d 769 (9th Cir. 2006); Triad Sys. Corp. v. Se. Express Co., 64 F.3d 1330 (9th Cir. 1995); MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511 (9th Cir. 1993); S.O.S., Inc. v. Payday, Inc., 886 F.2d 1081 (9th Cir. 1989); United States v. Wise, 550 F.2d 1180 (9th Cir. 1977).

119. See Corynne McSherry, “*Magic Words*” Trump User Rights: Ninth Circuit Ruling in Vernor v. Autodesk, ELEC. FRONTIER FOUND. (Sept. 13, 2010), <https://www.eff.org/deeplinks/2010/09/magic-words-trump-user-rights-ninth-circuit-ruling> (“[Under Ninth Circuit precedent,] copyright’s first sale doctrine . . . doesn’t apply to software (and possibly DVDs, CDs and other ‘licensed’ content) as long as the vendor saddles the transfer with enough restrictions to transform what the buyer may think is sale into a mere license.”).

120. *Vernor*, 621 F.3d at 1110–11.

121. See Sheridan, *supra* note 117, at 353 (copyright owners may avoid the first sale doctrine by “unilaterally plac[ing] reservations on title”). That said, the Ninth Circuit

Widespread licensing may have begun with computer software, but court decisions upholding the standard-form licenses contain no such limiting language.¹²² There is nothing preventing copyright holders from applying EULAs to music, DVDs, or even books.¹²³ Given “how easy it is for a vendor to put a ‘license’ label on a mass-marketed product with copyrighted . . . components,” Pamela Samuelson worries what the Ninth Circuit’s precedents “mean for flea markets, bookstores, libraries, garage sales, and auction sites.”¹²⁴ The prospect of having to trace “chain of title” before purchasing a book or record at a secondhand store may sound absurd, but it is no longer beyond the realm of legal possibility.¹²⁵ Courts’ reverence for

recognizes that “the mere labeling of an arrangement as a license rather than a sale . . . [is] not by itself dispositive of the issue.” *UMG Recordings*, 628 F.3d at 1180. In *UMG Recordings*, the Ninth Circuit held that a record company transferred ownership in unsolicited promotional CDs that it distributed freely by mail, despite having labeled the CDs with licensing language. *See id.* at 1182. The court distinguished software licensees “who order and pay to acquire copies” from passive recipients of unrequested CDs. *Id.* at 1183. Unlike software licensees, the CD recipients did not manifest assent to the contractual terms, and their assent could not be inferred from the mere failure to return the CDs (especially since the record company did not request the CDs’ return). *Id.* at 1182–83. *UMG Recordings* therefore stands as a reminder that there must be *some* manifestation of assent on the licensee’s part, however minimal. The copyright holder must also have a degree of knowledge or control over the disposition of media in order to be considered its owner. *Id.*

122. *Compare* *F.B.T. Prods., LLC v. Aftermath Records*, 621 F.3d 958, 965 (9th Cir. 2010) (holding that license exists where a copyright holder “transfers a copy of copyrighted material, retains title, limits the uses to which the material may be put, and is compensated periodically based on the transferee’s exploitation of the material”), and *Vernor*, 621 F.3d at 1109 (holding that a court may consider whether a license existed, and “whether the copyright owner retained title to the copy, required its return or destruction, forbade its duplication, or required the transferee to maintain possession” to determine whether infringement occurred), *with* *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1149 (7th Cir. 1996) (“Shrinkwrap licenses are enforceable unless their terms are objectionable on grounds applicable to contracts in general.”). *See generally* JASON MAZZONE, *COPYFRAUD AND OTHER ABUSES OF INTELLECTUAL PROPERTY* 132–33 (2011).

123. *See* Corynne McSherry, *2012 in Review: First Sale Under Siege—If You Bought It, You Should Own It*, ELEC. FRONTIER FOUND. (Dec. 23, 2012), <https://www.eff.org/deeplinks/2012/12/first-sale-under-siege-if-you-bought-it-you-should-own-it>. McSherry wrote:

Not only does big content deny that first sale doctrine applies to digital goods, but they are also trying to undermine the first sale rights we do have by forcing users to license items they would rather buy. The copyright industry wants you to “license” all your music, your movies, your games—and lose your rights to sell them or modify them as you see fit.

Id.

124. Pamela Samuelson, *Do You Own the Software You Buy?*, *COMM’NS OF THE ACM*, Mar. 2011, at 26, 28.

125. *See* *Microsoft Corp. v. Harmony Computers & Elecs., Inc.*, 846 F. Supp. 208, 212 (E.D.N.Y. 1994) (“Although a sale of a copyrighted work by a party authorized by the

contracts of adhesion and deference to copyright owners threaten to eviscerate the first sale doctrine altogether—upending copyright law’s balance between users and rights holders, undermining secondary markets and the industries that depend on them, and opening the door to anticompetitive conduct.¹²⁶

B. DIGITAL RIGHTS MANAGEMENT (“DRM”) AND THE DIGITAL MILLENNIUM COPYRIGHT ACT (“DMCA”)

Copyright and contract afford only so much control over how consumers use the music, movies, video games, and other media in their possession. For one, the effectiveness of these legal strictures depends upon the degree to which they are followed and enforced. Piracy can be difficult (or at least expensive) to root out and consistently punish. Additionally, the law may not extend as far as content producers would like. Copyright protection is subject to limitations and exceptions, including fair use and first sale,¹²⁷ which some rights holders see as a threat to their profit margins and reputations. Copyright holders commonly rely on technology to extend and solidify their control over content.¹²⁸

“Technological protection measures” (“TPMs”) mediate users’ access to and usage of copyrighted media.¹²⁹ TPMs can be designed to perform any variety of functions; a simple example is requiring the entry of a password to access content.¹³⁰ James Boyle describes these systems as the technological equivalent of barbed wire—just like barbed wire surrounding a farmer’s fields, TPMs “fence off” copyrighted material from unwanted trespass, providing “an additional layer of ‘physical’ protection to the property owner’s existing legal protection.”¹³¹ Of course, “unlike barbed wire, [TPMs] can also

copyright holder may constitute a ‘first sale’ for purposes of the first sale doctrine, defendants have the burden of tracing the chain of title to show that their authority to sell Microsoft Products flows from the copyright holder.” (citations omitted)). In *Vernor*, the Ninth Circuit brushed aside *amici curiae* eBay and the American Library Association’s argument that upholding the license at issue in that case “would force everyone purchasing copyrighted property to trace the chain of title to ensure that a first sale occurred.” *Vernor*, 621 F.3d at 1115.

126. See Sheridan, *supra* note 117, at 356–57.

127. See 17 U.S.C. §§ 107–122 (2012) (enumerating copyright limitations).

128. See generally FRED VON LOHMANN, ELEC. FRONTIER FOUND., UNINTENDED CONSEQUENCES: TWELVE YEARS UNDER THE DMCA 1 (2010), available at https://www.eff.org/sites/default/files/eff-unintended-consequences-12-years_0.pdf.

129. Dan L. Burk, *Legal and Technical Standards in Digital Rights Management Technology*, 74 *FORDHAM L. REV.* 537, 546–47 (2005).

130. *Id.* at 547.

131. JAMES BOYLE, *THE PUBLIC DOMAIN: ENCLOSING THE COMMONS OF THE MIND* 86 (2008).

control what we do once we get access.”¹³² In addition to regulating access to a music or video file, TPMs may also prevent users from copying it, modifying it, chopping it up, or shifting it from one storage medium to another.¹³³

Trepidation over technology-assisted copying is hardly new. Following a setback at the Supreme Court in 1908,¹³⁴ music publishers successfully lobbied Congress for protection from the threat of player pianos and the perforated rolls used to play them.¹³⁵ In 1982, Jack Valenti of the Motion Picture Association of America told Congress that “the VCR is to the American film producer and the American public as the Boston strangler is to the woman home alone.”¹³⁶ But the rise of digital technology, particularly the Internet, has elicited unprecedented and seemingly interminable panic in the content industry.¹³⁷ Realizing that “technology could . . . safeguard the intellectual property rights threatened by the same technology,”¹³⁸ the industry widely embraced digital rights management (“DRM”) (essentially, TPMs in the digital sphere), as a means of achieving and maintaining far-reaching control over content.¹³⁹ With the coming of personal computing, for instance, software makers employed digital encryption and other technological tools to prevent piracy.¹⁴⁰ The makers of DVDs, e-books, and smartphones have likewise wrapped their products in DRM that restrict both access and usage.¹⁴¹ Today, society is saturated with DRM;¹⁴² even garage

132. *Id.*

133. *See id.* at 85–86; *see also* Burk, *supra* note 129, at 538–39, 547–48.

134. *See* White-Smith Music Publ’g Co. v. Apollo Co., 209 U.S. 1, 18 (1908) (holding that a “perforated roll” used on a player piano did not constitute an unlawful copy under the Copyright Act).

135. *See* Michael J. Meurer, *Vertical Restraints and Intellectual Property Law: Beyond Antitrust*, 87 MINN. L. REV. 1871, 1908 (2003).

136. *Hearings Before the Subcomm. on Courts, Civil Liberties, and the Admin. of Justice of the Comm. on the Judiciary on H.R. 4783, H.R. 4794, H.R. 4808, H.R. 5250, H.R. 5488, and H.R. 5705*, 97th Cong. 8 (1982).

137. *See* BOYLE, *supra* note 131, at 60–62 (describing industry response to the “Internet threat”). William Patry aptly describes the content industry’s response to digital technology as “moral panic.” *See* WILLIAM PATRY, MORAL PANICS AND THE COPYRIGHT WARS 28 (2009).

138. Séverine Dusollier, *Electrifying the Fence: The Legal Protection of Technological Measures for Protecting Copyright*, 21 EUR. INTEL. PROP. REV. 285, 285 (1999).

139. BOYLE, *supra* note 131, at 60, 119.

140. *See* Bender, *supra* note 111, at 454–55 (describing “extralegal means” for protecting computer programs).

141. VON LOHMANN, *supra* note 128, at 9–13.

142. *See* Peter Eckersley, *Virtual Markets for Virtual Goods: The Mirror Image of Digital Copyright?*, 18 HARV. J.L. & TECH. 85, 88 (2004) (explaining that DRM seeks to “control the use of information in consumers’ homes—and most everywhere else”).

door openers and car batteries are controlled by DRM-protected computer programs.¹⁴³

Although DRM is rationalized as necessary for the protection of intellectual property rights,¹⁴⁴ it can, and frequently does, extend content owners' control far beyond the "limited monopoly"¹⁴⁵ bestowed by copyright. By controlling users' ability to copy or manipulate content, copyright holders can now make it impossible for users to exercise fair use rights spelled out in the Copyright Act.¹⁴⁶ Content owners can also employ DRM to tie up public domain material,¹⁴⁷ which is ordinarily "free as the air to common use."¹⁴⁸ Finally, DRM and other protection measures are capable of making an end run around first sale, accomplishing with technology what the software industry has traditionally tried to achieve via restrictive licensing.¹⁴⁹ For example, DRM technology prevents DVDs legally purchased in Japan from playing on most DVD players available in North America.¹⁵⁰

At first, TPMs were seen as practical "substitutes" for copyright protection.¹⁵¹ While purportedly bolstering the legal protections of copyright, TPMs "exist[ed] entirely outside of copyright," and functioned independent of it.¹⁵² This was not enough for the content industry; rights holders insisted that TPMs themselves be backed by law.¹⁵³ This demand became a reality in

143. *See generally* Chamberlain Grp., Inc. v. Skylink Techs., Inc., 381 F.3d 1178 (Fed. Cir. 2004) (involving DRM embedded in garage door openers). French car company Renault announced plans to embed DRM in the batteries of its new electric cars, which would allow Renault to rent, rather than sell, the battery to customers. *See* Glyn Moody, *Renault Introduces DRM for Cars*, TECHDIRT (Nov. 12, 2013, 5:01 AM), <http://www.techdirt.com/articles/20131108/09350825182/renault-introduces-drm-cars.shtml>. The DRM could prevent the battery from charging if, for example, the buyer fell behind on his or her payments. *Id.*

144. *See, e.g.*, Dusollier, *supra* note 138, at 285.

145. 1-1 NIMMER & NIMMER, *supra* note 42, § 1.03[A].

146. *See* BOYLE, *supra* note 131, at 88, 95–96; *see also* 17 U.S.C. § 107 (2012) ("[T]he fair use of a copyrighted work . . . is not an infringement of copyright.").

147. BOYLE, *supra* note 131, at 88.

148. *See* Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354, 354 (1999) (quoting *Int'l News Serv. v. Associated Press*, 248 U.S. 215, 250 (1918) (Brandeis, J., dissenting)).

149. *See* Burk, *supra* note 129, at 543–45.

150. *See* Stefan Bechtold, *Digital Rights Management in the United States and Europe*, 52 AM. J. COMP. L. 323, 328 & n.19 (2004) ("The 'regional code playback control' used in the DVD standard, for instance, prevents European consumers from playing U.S. DVDs on their domestic DVD players.").

151. Paul Goldstein, *Copyright and Its Substitutes*, 1997 WIS. L. REV. 865, 865.

152. *Id.*

153. *See* Dusollier, *supra* note 138, at 285 ("Building a technical fence around works was not considered as sufficient. Electrifying it by making its circumvention a criminal act was needed. Therefore a due protection of electronic copyright protection and management

1996 with the passage of a series of World Intellectual Property Organization (“WIPO”) treaties,¹⁵⁴ which required contracting nations to “provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures.”¹⁵⁵ Under these treaties, the mere act of *circumventing* a TPM—cutting the “barbed wire” surrounding a copyrighted work—is itself verboten, regardless of whether the user ever infringes a copyright.¹⁵⁶

The United States became the first nation to implement the WIPO treaties when President Bill Clinton signed the Digital Millennium Copyright Act (“DMCA”) into law in 1998.¹⁵⁷ Even the bill’s “proponents acknowledged that the DMCA provisions went beyond what was required to comply with the United States’ WIPO treaty obligations.”¹⁵⁸ The statute broadly proscribes circumventing TPMs, as well as trafficking in circumvention devices.¹⁵⁹ Specifically, the DMCA protects TPMs that “effectively control[] access to a work” (access controls), and TPMs that “effectively protect[] a right of a copyright holder” (copy controls).¹⁶⁰ The “effectively” qualifier is a very low bar: while the DMCA’s provisions do not extend to a TPM that “restricts one form of access but leaves another route wide open,”¹⁶¹ “the courts are unanimous [in holding] that ‘effective’ protection does not mean protection that is especially difficult to crack.”¹⁶²

systems has always been a great concern for rightholders and for the industry developing these systems.”).

154. See Goldstein, *supra* note 151, at 869.

155. WIPO Copyright Treaty art. 11, Dec. 20, 1996, S. Treaty Doc. 105-17, 36 I.L.M. 65; WIPO Performances and Phonograms Treaty art. 18, Dec. 20, 1996, S. Treaty Doc. 105-17, 36 I.L.M. 76.

156. BOYLE, *supra* note 131, at 87.

157. 2 HANDBOOK OF INFORMATION SECURITY 298 (Hossein Bidgoli ed., 2006).

158. See Gwen Hinze, *Brave New World, Ten Years Later: Reviewing the Impact of Policy Choices in the Implementation of the WIPO Internet Treaties’ Technological Protection Measure Provisions*, 57 CASE W. RES. L. REV. 779, 794 & n.32 (2007).

159. See 17 U.S.C. § 1201(a)–(b) (2012).

160. *Id.*

161. *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 547 (6th Cir. 2004).

162. Jane C. Ginsburg, *Legal Protection for Technological Measures Protecting Works of Authorship: International Obligations and the US Experience*, 29 COLUM. J.L. & ARTS 11, 23 (2005). Courts have explained that requiring more in the way of effectiveness would “gut the statute” by limiting its application to TPMs that successfully thwart circumvention—in other words, precisely those TPMs that have no need for the legal protection. *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 318 (S.D.N.Y. 2000); see also *Realnetworks, Inc. v. DVD Copy Control Ass’n*, 641 F. Supp. 2d 913, 938 (N.D. Cal. 2009). The court in *Realnetworks* stated:

The mere act of circumventing an access control is illegal, subject only to narrow exceptions—which notably do not include fair use or first sale.¹⁶³

The DMCA forbids trafficking in devices that are designed or marketed for circumventing either access or copy controls.¹⁶⁴ *Universal City Studios v. Reimerdes* was one of the first decisions to apply these provisions.¹⁶⁵ The case revolved around the Content Scramble System (“CSS”), an encryption technology developed by the movie industry to prevent unauthorized access to and copying of DVDs.¹⁶⁶ CSS-protected DVDs can only be played on DVD players that are equipped with the digital “keys” required to decrypt and unscramble CSS encryption.¹⁶⁷ The movie industry licenses CSS technology to manufacturers, who are under strict contractual obligations to maintain the system’s security.¹⁶⁸ Among other things, licensed manufacturers may not produce devices that are capable of copying the contents of a DVD.¹⁶⁹

In September 1999, a Norwegian teenager named Jon Johansen became acquainted with two individuals, known only by their pseudonyms, over the Internet.¹⁷⁰ Together, the three hackers “reverse-engineered a licensed DVD player and discovered the CSS encryption algorithm and keys.”¹⁷¹ With this information in hand, they devised a program called “DeCSS,” which was capable of decrypting CSS-protected DVDs.¹⁷² Johansen and his colleagues were purportedly motivated, at least in part, by a desire to create a DVD player that was compatible with the Linux operating system.¹⁷³ However, in

This argument is audacious in its assertion and to countenance it would virtually jettison the law of [§] 1201(b). If this were the law, a copy protection measure would have to protect against every possible current and future means of copying copyrighted content. There could be no liability under this section, for once the copy protection measure had been circumvented, it would purportedly be rendered ineffective. This is circular nonsense.

Id.

163. 17 U.S.C. § 1201(a)(1)(A) (2012); *see id.* § 1201(a)(1)(B)–(E).

164. *Id.* § 1201(a)(2), (b)(1) (2012).

165. Reuven Ashtar, *Licensing as Digital Rights Management, From the Advent of the Web to the iPad*, 13 YALE J.L. & TECH. 141, 160 (2011).

166. *Reimerdes*, 111 F. Supp. 2d at 308.

167. *Id.* at 308, 310.

168. *Id.* at 310.

169. *Id.*

170. *Id.* at 311.

171. *Id.*

172. *Id.*

173. *Id.*

addition to unlocking *access* to movies stored on DVDs, DeCSS allowed users to create *copies* of the digital movie files.¹⁷⁴

Defendant Eric Corley belonged to a hacker organization named for Emmanuel Goldstein, leader of the underground Brotherhood in George Orwell's *Nineteen Eighty-Four*.¹⁷⁵ Corley published a magazine called *2600: The Hacker Quarterly*, which he founded, appropriately enough, in 1984.¹⁷⁶ In late 1999, Corley posted the source and object code for DeCSS to his website, 2600.com.¹⁷⁷ Corley's website was only one of hundreds from which DeCSS could be downloaded, but for one reason or another, he was one of the few singled out by the movie studios for litigation under the DMCA.¹⁷⁸ The movie studios contended that CSS was an effective protection measure and that Corley had illegally trafficked in a program designed to circumvent CSS.¹⁷⁹ After the district court issued a preliminary injunction, Corley removed DeCSS from 2600.com—but in an act of “electronic civil disobedience,” he continued to direct Internet users to as many as 500 other websites offering DeCSS for download.¹⁸⁰ Predictably, this did not help Corley's case.

Judge Lewis A. Kaplan's permanent injunction order in *Reimerdes* reflects an unfamiliarity, and possibly discomfort, with digital technology. The decision began with a lengthy “vocabulary of the case,” in which Judge Kaplan methodically defined such terms as *computer*, *Internet*, *CD-ROM*, and *web site*.¹⁸¹ While venerating coders as “highly skilled human beings [who] can reduce data and instructions to strings of 1's and 0's,”¹⁸² he characterized hackers as degenerates with criminal inclinations.¹⁸³ For Judge Kaplan,

174. *Id.*

175. *Id.* at 308; see GEORGE ORWELL, *NINETEEN EIGHTY-FOUR* 11–13 (Signet Classic 1950) (1949).

176. *Reimerdes*, 111 F. Supp. 2d at 308.

177. *Id.* at 309.

178. *Id.* at 311–12.

179. *Id.* at 303, 316.

180. *Id.* at 312–13.

181. *See id.* at 305–07.

182. *Id.* at 306.

183. Judge Kaplan's opinion of hackers was far from veiled:

The name “2600” was derived from the fact that hackers in the 1960's [sic] found that the transmission of a 2600 hertz tone over a long distance trunk connection gained access to “operator mode” and allowed the user to explore aspects of the telephone system that were not otherwise accessible. Mr. Corley chose the name because he regarded it as a “mystical thing,” commemorating something that he evidently admired. Not surprisingly, *2600: The Hacker Quarterly* has included articles on such topics as how to steal an Internet domain name, access other people's e-

hackers like Eric Corley were indistinguishable from burglars, and programs like DeCSS were digital crowbars¹⁸⁴—except far more dangerous.¹⁸⁵ The judge essentially embraced and codified the content industry’s panic mentality: “from Judge Kaplan’s language it is evident that he sees [DeCSS] not as an act of expression but as a virus spreading like wildfire. . . . Just as in an epidemic, the harshest measures are called for.”¹⁸⁶ The *Reimerdes* decision foresaw—and attempted to avert—a “looming digital Black Death” heralded by DeCSS and other tools for circumventing DRM.¹⁸⁷

While the specter of unmitigated digital piracy certainly animated Judge Kaplan’s opinion,¹⁸⁸ he analyzed the movie studios’ DMCA claims within the framework of § 1201(a)(2), which prohibits trafficking in technologies that circumvent *access* controls, rather than § 1201(b), which deals with *copy* controls.¹⁸⁹ The analysis was straightforward: CSS effectively controls access to copyrighted works (i.e., movies stored on DVDs); DeCSS “clearly is a means of circumventing a technological access control measure”; and Corley illegally trafficked in DeCSS.¹⁹⁰ Judge Kaplan acknowledged that access controls may preclude lawful uses of copyrighted material such as fair use,¹⁹¹ and may even restrict access to works that are not protected by copyright,¹⁹² but concluded that the DMCA “fundamentally altered the landscape,” such that some traditional copyright norms do not apply to DRM.¹⁹³ In a newly

mail, intercept cellular phone calls, and break into the computer systems at Costco stores and Federal Express. One issue contains a guide to the federal criminal justice system for readers charged with computer hacking.

Id. at 308–09 (footnotes omitted).

184. *See id.* at 316 (quoting Congress as stating that circumventing DRM is “the electronic equivalent of breaking into a locked room”); *id.* at 329 (comparing laws “preventing people from circumventing technological access control measures” to “laws prohibiting the possession of burglar tools”).

185. *See id.* at 315 (“[Publishing DeCSS] is analogous to the publication of a bank vault combination in a national newspaper.”). Judge Kaplan continued with this analogy to further emphasize the harm, explaining that “[d]evelopment and implementation of a new DVD copy protection system, however, is far more difficult and costly than reprogramming a combination lock and may carry with it the added problem of rendering the existing installed base of compliant DVD players obsolete.” *Id.*

186. BOYLE, *supra* note 131, at 101.

187. *Id.* at 102.

188. *See Reimerdes*, 111 F. Supp. 2d at 309, 313–15, 329–30, 335 & n.230 (emphasizing threat of piracy).

189. *Id.* at 316. The movie studios also brought claims under § 1201(b). *See id.* at 316 n.133.

190. *See id.* at 317–19.

191. *Id.* at 322.

192. *Id.* at 322 n.159.

193. *Id.* at 323.

digital world, fair use and other copyright limitations must give way in order to stamp out what Judge Kaplan described as “the electronic equivalent of breaking into a locked room in order to obtain a copy of a book.”¹⁹⁴

What the *Reimerdes* opinion fails to acknowledge is that, if the breaking-and-entering analogy is taken at face value, then the burglar is implicitly breaking into the locked room in order to gain access to a book he *lawfully owns*.¹⁹⁵ This perfectly (if inadvertently) illustrates why DRM is problematic for the first sale doctrine. As many commenters have expressed, legally protected DRM “give[s] copyright owners the ability to maintain a running control on access to . . . their works,” which “frustrates the goal of the first sale doctrine, by extending the rights of the copyright owner beyond the first sale of a particular copy.”¹⁹⁶ The U.S. Copyright Office collected and summarized these comments in an August 2001 report that it prepared pursuant to Section 104 of the DMCA.¹⁹⁷ The DMCA’s implications for first sale elicited a “dramatic range of opinions,” many of which argued that the anticircumvention provisions would restrict the doctrine’s application.¹⁹⁸ Several commenters specifically discussed CSS protection, as well as the related practice of DVD region coding.¹⁹⁹

Although the Copyright Office was not terribly swayed by these arguments,²⁰⁰ it did acknowledge that “legitimate concerns have been raised about what may develop as the market and technology evolve.”²⁰¹ The Copyright Office singled out “[t]he practice of using technological measures to tether a copy of a work to a particular hardware device” as raising special challenges for first sale rights.²⁰² It did not endorse congressional action, since tethering was still uncommon at the time the report was published²⁰³—but it left the door open for recommending amendments to the first sale

194. *Id.* at 316 (quoting H.R. REP. NO. 105-551, at 17 (1998)).

195. In the context of *Reimerdes*, DeCSS permitted users to gain access to the content stored on *legally purchased* DVDs, using computers running the Linux operating system. *See id.* at 319; *see also* BOYLE, *supra* note 131, at 100 (“In other words, even if Mr. Johansen made DeCSS so that he and his friends could watch DVDs they purchased legally on computers running Linux, they could still be liable for breaking the DMCA”).

196. U.S. COPYRIGHT OFFICE, DMCA SECTION 104 REPORT 39 (2001).

197. *See id.* at v.

198. *Id.* at 34.

199. *See id.* at 35–37.

200. *See id.* at 73–76.

201. *Id.* at 96.

202. *Id.* at 76.

203. *Id.*

doctrine in the future.²⁰⁴ Now may be an opportune time to revisit these concerns.

IV. PLAYING WITH POWER: CIRCUMVENTION TO PRESERVE FIRST SALE

The development of anti-used game technology is but the latest content industry tactic for limiting the first sale doctrine. Although video game technology is generally less susceptible to piracy than computer software, video game titans have long employed DRM and long resisted the first sale doctrine. Tethering technology weds these two ideas, using DRM to permanently link video game discs or other media to particular pieces of hardware. Assuming that the content industry adopts some form of tethering technology in the near future, the question necessarily arises: would circumventing this technology in a manner that permits a single copy to be played on multiple devices violate the DMCA? (The predicate question—*whether* the technology will be circumvented—need not be asked, for “DRM is *always* circumvented” sooner or later.²⁰⁵) The answer is far from simple. Despite the *Reimerdes* court’s wooden interpretation of the DMCA, subsequent appellate court decisions have produced contradictory views of the statute’s anticircumvention provisions.²⁰⁶ The resulting ambiguity only makes it more likely that video game makers and other content owners will shore up their position through restrictive licensing.

A. EARLY SHOTS ACROSS THE BOW

The video game industry’s suspicion toward first sale is by no means of recent vintage. Nintendo first targeted the doctrine in the late 1980s and early 1990s, when the company enjoyed a dominance that the video game industry had never before seen and that has not since been replicated.²⁰⁷ Nintendo spent years fighting the burgeoning video game rental industry, which depended on the first sale doctrine for its survival.²⁰⁸ Rental businesses

204. *See id.* at 96–97.

205. Cory Doctorow, *DRM Gives Companies Security—From Competition*, BOINGBOING (Feb. 17, 2012, 9:10 AM), <http://boingboing.net/2012/02/17/drm-gives-companies-security.html> (emphasis added).

206. *See, e.g.*, MDY Indus., LLC v. Blizzard Entm’t, Inc., 629 F.3d 928 (9th Cir. 2010) (interpreting the DMCA as granting additional anticircumvention rights to copyright holders); Chamberlain Grp., Inc. v. Skylink Techs., Inc., 381 F.3d 1178 (Fed. Cir. 2004) (articulating that the DMCA anticircumvention provisions only prohibit forms of access that bear a “reasonable relationship” to copyright protection).

207. *See* SHEFF, *supra* note 88, at 402.

208. *Id.* at 276.

insisted that they were good for Nintendo's bottom line, but Nintendo disagreed.²⁰⁹ Nintendo executive and lawyer Howard Lincoln characterized video game rental as "nothing less than commercial rape," pointing out that a single copy of a game could be rented out to potentially hundreds of customers who might have otherwise bought a new copy for \$40 or \$50.²¹⁰ Blockbuster generated \$1.5 billion in revenue in 1990, as much as ten percent of which was derived from Nintendo game rentals.²¹¹ Aside from profits made from sales of rental cartridges, Nintendo did not receive any of that money.

Considering that demand for Nintendo game cartridges consistently outpaced supply during this period,²¹² it is difficult to believe that rental stores displaced new cartridge sales in any significant degree. At the time, Nintendo controlled eighty-five to ninety percent of the Japanese and American home video game markets and generated several billion dollars per year in net sales.²¹³ The company nonetheless went on the attack. Nintendo considered suing rental businesses, but the first sale doctrine stood squarely in its way.²¹⁴ The company then sought to change first sale law by lobbying Congress for a prohibition on video game rentals.²¹⁵ Nintendo joined the coalition of software companies pushing for a ban on computer software rental, but when the Video Software Dealers Association (a trade association of video-rental dealers) threatened to crush the bill if it included video games, the software companies succumbed.²¹⁶ The bill was rewritten to exclude "computer program[s] embodied in or used in conjunction with a limited purpose computer that is designed for playing video games" and ultimately adopted.²¹⁷

Political infighting may have killed the video game rental prohibition, but the official rationale for excluding it from the Computer Software Rental Amendments Act of 1990 was sound: "It was easy to rent computer software and make a permanent copy at home, but it was nearly impossible to make a copy of 'Super Mario Bros.'" ²¹⁸ Unlike traditional software makers, video game companies simply did not have as much to lose from the rental

209. *Id.* at 283.

210. *Id.* at 276, 283.

211. *Id.* at 283.

212. *See id.* at 203, 244–45.

213. *See id.* at 196, 349, 402.

214. *Id.* at 284.

215. *Id.* at 283–84.

216. *Id.*

217. 17 U.S.C. § 109(b)(1)(B)(ii) (2012).

218. SHEFF, *supra* note 88, at 284; *see supra* notes 78–83 and accompanying text.

industry. Including video games in the 1990 Amendments Act would have served but one purpose: shoring up Nintendo's monopoly profits. Despite losing in Congress, the video game giant did not back down. Nintendo refused to sell cartridges directly to rental chains and forbade retailers from selling multiple copies of any game to a single customer.²¹⁹ In at least one instance, Nintendo threatened retaliation against a retailer who sold to renters.²²⁰

In short, video games and the first sale doctrine got off to a rocky start. Although revenue-sharing agreements (which have overtaken the rental industry) may have softened game makers' feelings toward rental chains,²²¹ the existence of a robust secondhand market for video games means that the first sale doctrine remains controversial within the industry.

B. TETHERING: THE LATEST ATTACK ON FIRST SALE

Tethering technology represents a promising strategy for video game producers fed up with competition from the secondhand market. DRM is certainly not new to video games,²²² but as Sony acknowledged in its Disc ID patent application, “[t]ypically, DRM is a technology for the prevention of the unlimited copy [sic] of electronic content.”²²³ By contrast, tethering technology seeks to “prevent . . . electronic content from being *used* unlimitedly” by successive owners.²²⁴ More to the point, the technology “reliably restricts the use of electronic content dealt in the second-hand markets.”²²⁵ Were video game makers to widely adopt tethering technology, buying and selling used games could become a thing of the past.

Tethering technology can take many different forms.²²⁶ The vision set forth in the Disc ID patent application would be to package each video game

219. SHEFF, *supra* note 88, at 276, 283.

220. *Id.* at 276–77. Nintendo also sued Blockbuster for including photocopied instruction manuals with rented games. See Nadia Oxford, *Trials and Tribulations: Video Games' Many Visits to Court*, 1UP.COM (Dec. 14, 2005), <http://www.1up.com/features/trials-and-tribulations>.

221. See James D. Dana & Kathryn E. Spier, *Revenue Sharing and Vertical Control in the Video Rental Industry*, 49 J. INDUS. ECON. 223 (2001); Julie H. Mortimer, *Vertical Contracts in the Video Rental Industry*, 75 REV. ECON. STUD. 165 (2008).

222. Nintendo's NES console included a “lock-out” security system that prevented counterfeit and unlicensed games from playing. See *Atari Games Corp. v. Nintendo of Am. Inc.*, 975 F.2d 832, 844 (Fed. Cir. 1992) (describing NES security system); *Atari Games Corp. v. Nintendo of Am., Inc.*, 897 F.2d 1572, 1574–75 (Fed. Cir. 1990) (same).

223. Sony Patent App., *supra* note 2, at [0006].

224. *Id.* (emphasis added).

225. *Id.*

226. For example, Microsoft originally designed its Xbox One system to require a virtually constant Internet connection, which would permit the company to enforce policies

disc with a “use permission tag,” which would be capable of wirelessly communicating with a sensor on the game console.²²⁷ Boiled down to essentials, when a game disc is first played, the use permission tag would associate that specific disc with the specific game console in which it is used.²²⁸ From that point on, every time the disc is played, the user would have to swipe the tag across a scanner located on the console, allowing the tag to check the disc ID and console ID.²²⁹ If the disc ID and console ID match the information stored on the tag, the disc would run; if either the disc ID or the console ID does not match up, the disc would not operate.²³⁰ Since each game disc can only be associated with one console, as a practical matter, lending or selling the disc to another gamer would be pointless—the disc would be incapable of playing on another person’s console. The first sale doctrine would be rendered obsolete for game consoles employing this technology.

C. LAWFUL CIRCUMVENTION?

Video game players, proprietors of used games, digital activists, and others²³¹ would have an obvious interest in coming up with a way to circumvent tethering technology. The question is whether doing so would run afoul of the DMCA’s anticircumvention provisions.²³² As a threshold matter, it appears that tethering technology like Disc ID would readily qualify for DMCA protection as a technological measure that “effectively controls access to a work.”²³³ If the Disc ID patent application is to be believed, the technology “in the ordinary course of operation, requires the application of information, or a process or a treatment, with the authority of the copyright

pertaining to used and rented games. See Andrew Goldfarb, *Microsoft Details Xbox One Used Games, Always Online*, IGN (June 6, 2013), <http://www.ign.com/articles/2013/06/06/microsoft-details-xbox-one-used-games-always-online>.

227. Sony Patent App., *supra* note 2, at [0033] (“In other words, the game disk 210 and the use permission tag 220 are commercially released and transacted as a set and are also distributed integrally as an inseparable set, that is, are distributed as a bundle.”).

228. See Luke Karmali, *Report: New Sony Patent Blocks Second Hand Games*, IGN (Jan. 3, 2013), <http://www.ign.com/articles/2013/01/03/report-new-sony-patent-blocks-second-hand-games>.

229. Sony Patent App., *supra* note 2, at 4.

230. *Id.* The patent application also describes a “temporary use device,” which would allow a disc to be played on a console for a limited number of times without permanently associating that disc with that console. See Sony Patent App., *supra* note 2, at [0075], fig.7. This would presumably facilitate rental.

231. For example, intermediaries such as eBay.

232. See U.S. COPYRIGHT OFFICE, *supra* note 196, at 75 (“The only way of accessing the content on another device would be to circumvent the tethering technology, which would violate [§] 1201.”).

233. 17 U.S.C. § 1201(a)(1)(A) (2012).

owner, to gain access to the work.²³⁴ That is, in order to obtain access to game content stored on a disc, the user would have to swipe the use permission tag across the game console's reader, and if the information supplied by the tag matches both the disc ID and the console ID, only then will the game run.²³⁵ The tag ensures that users access game content solely on the copyright owners' terms. This "authentication sequence" and others like it readily satisfy the "effectiveness" bar to DMCA protection.²³⁶

With that preliminary showing in place, circumventing a tethering system may seem like an uncontroverted DMCA violation. The DMCA prohibits users from circumventing TPMs that effectively control access to a work,²³⁷ and breaking a tethering system like Disc ID would do just that. *Reimerdes* left very little wiggle room.²³⁸ Just as CSS encryption prevents DVDs from playing on unlicensed DVD players, tethering technology would prevent copies of copyrighted media from playing on unauthorized devices (i.e., any device other than the one on which the copy was first used). On Judge Kaplan's reasoning, circumventing tethering technology would violate the DMCA just as "clearly" as DeCSS did.²³⁹

The DMCA has already been applied in the video games context—to an earlier generation of Sony DRM, no less. In *Sony Computer Entertainment America v. GameMasters*,²⁴⁰ Sony asked a California district court to issue a preliminary injunction blocking defendants from selling the "Game Enhancer," a device that allowed American gamers "to play games sold in Japan or Europe and intended by [Sony] for use exclusively on Japanese or European PlayStation consoles."²⁴¹ Sony's PlayStation consoles featured classic lock-and-key DRM: "The PlayStation console is designed to operate only when encrypted data is read from a CD-ROM that verifies that the CD is an authorized, legitimate [Sony] product licensed for distribution in the same geographical territory of the console's sale."²⁴² Each console could only access those games with "data codes" matching the region in which the

234. *Id.* § 1201(a)(3)(B).

235. *See* Sony Patent App., *supra* note 2, at [0072].

236. *See* *Lexmark Int'l Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 547 (6th Cir. 2004) (holding the effectiveness bar precludes DMCA protection where a technological measure leaves a route to access "wide open").

237. 17 U.S.C. § 1201(a)(1)(A).

238. *See* *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294 (S.D.N.Y. 2000).

239. *See id.* at 314; *supra* text accompanying notes 188–94.

240. *Sony Computer Entm't Am. Inc. v. GameMasters*, 87 F. Supp. 2d 976 (N.D. Cal. 1999).

241. *Id.* at 977, 981.

242. *Id.* at 981.

console itself was sold.²⁴³ In practical terms, the DRM system prevented games sold abroad from playing on American PlayStation consoles.²⁴⁴ The Game Enhancer circumvented this system, allowing gamers to play legally purchased Japanese and European games on their American consoles.²⁴⁵ Sony alleged that its lock-and-key system qualified for DMCA protection as an access control measure and that defendants violated the DMCA by trafficking in the Game Enhancer device.²⁴⁶ The court agreed that “the Game Enhancer appear[ed] to be a device whose primary function is to circumvent ‘a technological measure . . . that effectively controls access to a system protected by a registered copyright.’”²⁴⁷ Finding that Sony was likely to prevail on its DMCA claim, the court issued the preliminary injunction.²⁴⁸

Perhaps to a greater extent than *Reimerdes*, *Sony v. GameMasters* appears to foreclose any reasonable argument that circumventing tethering technology would not run afoul of the DMCA. Tethering technology is essentially a more sophisticated version of the DRM at issue in *GameMasters*, except that rather than limiting a game’s operability to consoles sold within the same geographic region, tethering limits a game’s operability to a *single* console. That the gamer may have legally purchased the game is of no matter; in *GameMasters*, the court acknowledged that the games at issue may have been “legally, validly manufactured and sold in Japan,” and that they “do not become transformed into illegal, bootleg infringing games merely because they are transported across the ocean.”²⁴⁹ That did not preclude DMCA liability.²⁵⁰ As Judge Kaplan would remind us, the DMCA forbids “the electronic equivalent of breaking into a locked room”—even, apparently, when the only purpose is to gain access to a video game that the alleged “burglar” lawfully purchased.²⁵¹

But the story does not end with *GameMasters* and *Reimerdes*. In 2004, the Federal Circuit issued a major decision interpreting the DMCA

243. *Id.* at 987.

244. *Id.* at 981.

245. *Id.*

246. *Id.* at 987.

247. *Id.* (quoting 17 U.S.C. § 1201(a)(2)(A)).

248. *GameMasters*, 87 F. Supp. 2d at 988.

249. *Id.* at 986. The Supreme Court recently clarified that copyrighted media legally purchased abroad may be imported and resold in the United States without violating the Copyright Act. *See Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351 (2013).

250. *GameMasters*, 87 F. Supp. 2d at 986–88.

251. *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 316 (S.D.N.Y. 2000) (quoting H.R. REP. NO. 105-551(I), at 17 (1998)); *see also supra* notes 194–99 and accompanying text.

anticircumvention rules within the broader context of copyright protection.²⁵² In *Chamberlain Group v. Skylink*, the circuit court reviewed a summary judgment order finding that defendant Skylink's "universal" garage door opener did not violate Chamberlain's rights in its "Security+" garage door technology.²⁵³ Unlike ordinary garage door systems, which typically rely on a single fixed transmitter signal, Security+ garage door openers incorporated a "rolling code" computer program, which constantly changed the transmitter signal required to open the garage door.²⁵⁴ When the Security+ garage door receptor detected a signal, it would check it against the previous 1,024 signals received.²⁵⁵ If the signal were identical to any of the most recent 1,024 signals, the garage door would not open.²⁵⁶ If, however, the signal were among the next 4,096 binary signals incorporated in the Security+ system, the garage door would open.²⁵⁷ The idea behind Security+ was to prevent "code grabbing," a practice whereby burglars might theoretically detect a garage door system's fixed transmitter signal and use it to surreptitiously enter the garage.²⁵⁸

Skylink's "Model 39" universal transmitter was designed to interoperate with many common garage door systems, including rolling code and fixed code systems.²⁵⁹ The Model 39 did not use rolling code technology but rather simulated the effects of it.²⁶⁰ When the button on a Model 39 opener was pressed, the transmitter would emit three codes in rapid succession, as determined by a complex algorithm.²⁶¹ This programming allowed the Model 39 to interoperate with Chamberlain's Security+ system, meaning that homeowners who purchased a Model 39 "universal" opener could use the device to open their Security+ automatic garage door.²⁶²

Chamberlain characterized its Security+ system as a "technological measure . . . control[ling] access" to a copyrighted work—the copyrighted

252. *Chamberlain Grp., Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178 (Fed. Cir. 2004).

253. *Id.* at 1181, 1183.

254. *Id.* at 1183.

255. *Id.* at 1184.

256. *Id.*

257. *Id.*

258. *Id.* at 1183–84. As the court noted, and as Chamberlain conceded, "code grabbers are more theoretical than practical burgling devices; none of [Chamberlain's] witnesses had either firsthand knowledge of a single code grabbing problem or familiarity with data demonstrating the existence of a problem." *Id.*

259. *Id.* at 1184.

260. *Id.* at 1184–85.

261. *Id.* at 1185.

262. *Id.*

“rolling code” computer programs that governed the garage door.²⁶³ Because “[t]he only way for the Model 39 to interoperate with a Security+ [garage door opener] is by ‘accessing’ copyrighted software,” Chamberlain argued, Skylink had “committed a per se violation of the DMCA.”²⁶⁴ The district court disagreed and granted Skylink’s summary judgment motion.²⁶⁵ The court held that Chamberlain had not demonstrated that circumventing the Security+ system afforded customers *unauthorized* access to Chamberlain’s software.²⁶⁶

The Federal Circuit affirmed the district court, but for different reasons. The Federal Circuit premised its decision on the proposition that the DMCA anticircumvention provisions “do not establish a new property right.”²⁶⁷ Unlike copyrights and patents, which are considered property, “liability protection from unauthorized circumvention merely creates a new cause of action under which a defendant may be liable.”²⁶⁸ To the Federal Circuit panel, this distinction between property and liability was “critical” to its interpretation of the DMCA.²⁶⁹ The court rejected Chamberlain’s argument that “Congress empowered manufacturers to prohibit consumers from using embedded software products in conjunction with competing products,” reasoning that such a broad reading of the DMCA would be plausible only “if the anticircumvention provisions established a new property right capable of conflicting with the copyright owner’s other legal responsibilities,” rather than merely a “new way” to secure preexisting intellectual property rights.²⁷⁰ Contrary to Judge Kaplan’s assertion in *Reimerdes*, the Federal Circuit held that “the DMCA emphatically *did not* ‘fundamentally alter’ the legal landscape governing the reasonable expectations of consumers or competitors.”²⁷¹

Since the DMCA merely “introduce[d] new grounds for liability *in the context* of the unauthorized access of copyrighted material,”²⁷² the court reasoned that the circumvention prohibitions “applie[d] only to

263. *Id.* at 1185, 1197.

264. *Id.* at 1197.

265. *Chamberlain Grp., Inc. v. Skylink Techs., Inc.*, 292 F. Supp. 2d 1040, 1046 (N.D. Ill. 2003), *aff’d*, 381 F.3d 1178 (Fed. Cir. 2004).

266. *See id.* at 1040–41, 1045–46.

267. *Chamberlain Grp., Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1179, 1192 (Fed. Cir. 2004).

268. *Id.* at 1192–93.

269. *Id.* at 1192.

270. *Id.* at 1193–94.

271. *Id.* at 1194; *cf.* *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 323 (S.D.N.Y. 2000) (“By prohibiting the provision of circumvention technology, the DMCA fundamentally altered the landscape.”).

272. *Chamberlain*, 381 F.3d at 1194 (emphasis added).

circumventions reasonably related to protected rights.”²⁷³ The court found support for this construction in legislative history as well as the statute itself, which consistently links “access” to copyright “protection.”²⁷⁴ Chamberlain’s arguments predictably relied heavily on *Reimerdes*, but the Federal Circuit found that decision inapposite.²⁷⁵ Whereas DeCSS permitted not only unauthorized access but also unauthorized copying (i.e., infringement), the Model 39 “enable[d] only legitimate uses of copyrighted software.”²⁷⁶ In the decision’s key passage, the circuit court concluded that Chamberlain’s broad reading of the DMCA would afford the owners of copyrighted works “unlimited rights to hold circumventors liable . . . merely for accessing that work, even if that access enabled only rights that the Copyright Act grants to the public.”²⁷⁷ The court suggested that, even allowing for the substantial deference given Congress in its exercise of the authority bestowed by the Copyright Clause, such a redefinition of copyright owners’ rights could potentially violate the Constitution.²⁷⁸ In affirming the district court, the Federal Circuit articulated the following rule: the DMCA anticircumvention provisions only prohibit forms of access that bear a “reasonable relationship” to copyright protection.²⁷⁹ Because Chamberlain failed to establish this “critical nexus,” the circuit court affirmed the district court’s summary judgment in favor of Skylink.²⁸⁰

Although the Federal Circuit did not mention the first sale doctrine in its *Chamberlain* opinion, it nevertheless relied heavily upon the classical understanding of personal property rights that first sale embodies. The court

273. *Id.* at 1195.

274. *See id.* at 1197 (“[I]t is significant that virtually every clause of § 1201 that mentions ‘access’ links ‘access’ to ‘protection.’”).

275. *See id.* at 1198 (“Though Chamberlain is correct in considering some of the *Reimerdes* language supportive, it is the differences between the cases, rather than their similarities, that is most instructive in demonstrating precisely what the DMCA permits and what it prohibits.”).

276. *Id.*

277. *Id.* at 1200 (emphasis omitted).

278. The Federal Circuit noted:

[A]s the Supreme Court recently explained, “Congress’ exercise of its Copyright Clause authority must be rational.” . . . Chamberlain’s proposed construction of § 1201(a) implies that in enacting the DMCA, Congress attempted to “give the public appropriate access” to copyrighted works by allowing copyright owners to deny all access to the public. Even under the substantial deference due Congress, such a redefinition borders on the irrational.

Id. (quoting *Eldred v. Ashcroft*, 537 U.S. 186, 205 n.10 (2003)).

279. *Id.* at 1202.

280. *Id.* at 1204.

began by noting that, in the absence of “explicit restrictions” on their use of the Security+ system, Chamberlain’s customers may justifiably assume that they “enjoy all of the rights associated with the use of their [garage door openers] and any software embedded therein” that the laws provide.²⁸¹ Neither party disputed that “a homeowner who purchases a Chamberlain [garage door opener] owns it and has a right to use it to access his or her own garage.”²⁸² The court rejected the notion that Chamberlain was “entitled to prohibit legitimate purchasers of its embedded software from ‘accessing’ the software by using it,” since such a construction would “allow copyright owners to prohibit exclusively fair uses even in the absence of any feared foul use.”²⁸³ The court declared unequivocally that “[c]onsumers who purchase a product containing a copy of embedded software have the inherent legal right to use that software.”²⁸⁴ While the court described this legal right as “inherent,” the right is also explicit: the first sale doctrine grants lawful owners of copyrighted material the right to use the particular copy that they purchased.²⁸⁵ “What the law authorizes, Chamberlain cannot revoke.”²⁸⁶

Under *Chamberlain*, the legal argument against circumventing tethering technology is considerably less certain. Assuming that hackers came up with a method for circumventing the technology that did not also facilitate illicit copying—a method that broke through the game console’s access controls but not its copy controls—the question would be whether the circumvention bears “a reasonable relationship to the protections that the Copyright Act otherwise affords copyright owners.”²⁸⁷ That is, would circumventing a tethering system like Disc ID permit access to copyrighted video game content “in a manner that . . . infringes or facilitates infringing a right protected by the Copyright Act?”²⁸⁸ The rights bestowed by the Copyright Act are enumerated in § 106.²⁸⁹ That section provides that, subject to the limitations and exceptions prescribed in §§ 107 through 122—such as first

281. *Id.* at 1183.

282. *Id.* at 1187.

283. *Id.* at 1202 (emphasis omitted).

284. *Id.*

285. *See* Bell Atl. Bus. Sys. Servs., Inc. v. Hitachi Data Sys. Corp., No. C93-20079 JW, 1995 WL 798935, at *3 (N.D. Cal. Mar. 10, 1995) (“As BABSS correctly points out, ‘a “first sale” by Comparex terminates Hitachi Data’s right to control the distribution of the service items, and BABSS would have every legal right to use the service items to maintain its customers’ equipment.’” (quoting *Parfums Givenchy, Inc. v. Drug Emporium, Inc.*, 38 F.3d 477, 481, 482 n.8 (9th Cir. 1994))).

286. *Chamberlain*, 381 F.3d at 1202.

287. *Id.* at 1202.

288. *Id.* at 1203 (emphasis omitted).

289. 17 U.S.C. § 106 (2012).

sale²⁹⁰ and fair use²⁹¹—copyright owners in video games and other audiovisual works enjoy exclusive rights of reproduction, preparation of derivative works, distribution, public performance, and public display.²⁹² Merely *accessing* video game content stored on a disc does not implicate any of those rights.²⁹³

One might argue that circumventing tethering technology “reasonably relates” to the distribution right because it facilitates the resale of video games.²⁹⁴ But so long as new game discs are actually *sold* to customers, the first sale doctrine exhausts the copyright owner’s distribution right at the moment of transfer.²⁹⁵ As the *Chamberlain* court pointed out, sanctioning the technological repeal of copyright limitations would contradict DMCA § 1201(c)(1), which states that the provisions against circumvention shall not affect copyright limitations or defenses to infringement, including fair use (and implicitly, first sale).²⁹⁶ If purchasers of Chamberlain’s Security+ system possess an “inherent right” to use the software embedded in their garage door opener, it seems inescapable that lawful purchasers of video games—including secondhand purchasers—must have the same right to use the software embedded in their game discs.²⁹⁷

Not all courts have followed the Federal Circuit’s lead. Most notably, the Ninth Circuit took issue with *Chamberlain*’s “nexus” requirement in *MDY*

290. *Id.* § 109(a).

291. *Id.* § 107.

292. *Id.* § 106(1)–(5).

293. *See* Storage Tech. Corp. v. Custom Hardware Eng’g & Consulting, Inc., 421 F.3d 1307, 1318 (Fed. Cir. 2005) (“[C]ourts generally have found a violation of the DMCA only when the alleged access was intertwined with a right protected by the Copyright Act.”).

294. *Cf. id.* (“A copyright owner alleging a violation of [§] 1201(a) consequently must prove that the circumvention of the technological measure either ‘infringes or facilitates infringing a right protected by the Copyright Act.’” (quoting *Chamberlain*, 381 F.3d at 1203)).

295. *See* Sebastian Int’l, Inc. v. Consumer Contacts (PTY) Ltd., 847 F.2d 1093, 1099 (3d Cir. 1988) (“Because that exclusive [distribution] right is specifically limited by the first sale provisions of § 109(a), it necessarily follows that once transfer of ownership has cancelled the distribution right to a copy, the right does not survive . . .”).

296. *Chamberlain Grp., Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1200 (Fed. Cir. 2004); 17 U.S.C. § 1201(c)(1) (2012); *see* *Vernor v. Autodesk, Inc.*, 621 F.3d 1102, 1107 (9th Cir. 2010) (“The exclusive distribution right is limited by the first sale doctrine, an affirmative defense to copyright infringement that allows owners of copies of copyrighted works to resell those copies.”); *Allison v. Vintage Sports Plaques*, 136 F.3d 1443, 1444 (11th Cir. 1998) (stating that the first sale doctrine is a “well-established limitation on intellectual property rights”); *Pearson Educ., Inc. v. Liu*, 656 F. Supp. 2d 407, 409 (S.D.N.Y. 2009) (“This limitation on scope of the distribution right, known as the first sale doctrine, is codified in § 109(a) of the Act.”).

297. *See Chamberlain*, 381 F.3d at 1202.

*Industries, LLC v. Blizzard Entertainment, Inc.*²⁹⁸ That case concerned a “bot” program that a computer programmer had developed for use in Blizzard’s popular online computer game, *World of Warcraft*.²⁹⁹ The bot, called “Glider,” essentially controlled the game on auto-pilot. As Glider’s website explained, “You tell [Glider] about your character, where you want to kill things, and when you want to kill. Then it kills for you automatically. You can do something else, like eat dinner or go to a movie, and when you return, you’ll have a lot more experience and loot.”³⁰⁰ Glider allowed players to quickly amass experience points and in-game currency, rendering their *World of Warcraft* avatars more powerful and allowing them to purchase more expensive items for in-game use.³⁰¹ Glider’s creator, Michael Donnelly, began selling copies of Glider through his company, MDY Industries, in summer 2005.³⁰² Shortly after Glider hit the market, Blizzard launched a program called “Warden” to detect and prevent players using bots from connecting to its servers, prompting Donnelly to modify Glider to effectively avoid detection by Blizzard.³⁰³ Donnelly acknowledged in online statements that Glider violated Blizzard’s Terms of Use, remarking that “[a]voiding detection is rather exciting, to be sure.”³⁰⁴ After Blizzard sent a cease-and-desist letter to MDY in August 2006 and dispatched an attorney to Donnelly’s home in October 2006, MDY brought suit in the District of Arizona seeking a declaration that Glider did not infringe Blizzard’s copyrights or any other rights.³⁰⁵ Blizzard filed counterclaims alleging vicarious and contributory copyright infringement and violations of the DMCA.³⁰⁶ After a bench trial, the district court held MDY liable for violating the DMCA and Donnelly

298. *MDY Indus., LLC v. Blizzard Entm’t, Inc.*, 629 F.3d 928, 950 (9th Cir. 2010).

299. *Id.* at 934–35.

300. *Id.* at 935. Appropriately, the term “bot” is short for “robot.” *Id.*

301. *See id.* at 935–36. The appeal of a “bot” is that it allows players to gain experience points and in-game currency without the monotony of “grinding”—“the action of repeatedly killing mobs inside of a video game in order to mass experience or currency,” which may be required in order to progress to higher stages in a role-playing video game. *See* Justin Eldridge, *What is Grinding? Grinding in Video Games*, EXAMINER.COM (Mar. 5, 2012), <http://www.examiner.com/article/what-is-grinding-grinding-video-games>. The necessity of “grinding” in role-playing video games—particularly subscription-based games like *World of Warcraft*—has sparked a cottage industry in China, where low-paid workers spend hours upon hours grinding for in-game currency—which is then sold to Western gamers online, in exchange for *real* money. *See* Julian Dibbell, *The Life of a Chinese Gold Farmer*, N.Y. TIMES MAG., June 17, 2007, at 36.

302. *MDY Indus.*, 629 F.3d at 936. By September 2008, the company had reaped gross revenues of \$3.5 million from Glider sales. *Id.*

303. *Id.*

304. *Id.* (internal quotations omitted).

305. *Id.* at 936–37.

306. *Id.* at 937.

personally liable for copyright infringement, and entered a judgment for \$6.5 million.³⁰⁷

Blizzard presented several theories of liability for its DMCA claims, but its central argument related to *World of Warcraft*'s “dynamic non-literal elements: that is, the ‘real-time experience traveling through different worlds, hearing their sounds, viewing their structures, encountering their inhabitants and monsters, and encountering other players.’”³⁰⁸ Blizzard argued, and the district court agreed, that Warden effectively controlled access to *World of Warcraft*'s dynamic non-literal elements, and that MDY unlawfully marketed Glider as a tool for circumventing Warden.³⁰⁹ Since Glider did not infringe or facilitate infringement of Blizzard's copyrights in the game's dynamic non-literal elements, MDY's appeal required the Ninth Circuit to address whether the DMCA prohibits circumvention where infringement is not an issue.³¹⁰

The Ninth Circuit considered, but ultimately rejected, the Federal Circuit's reasoning in *Chamberlain*. The court observed that “[n]either of [§ 1201(a)'s] two subsections explicitly refers to traditional copyright infringement,” despite the statute's use of the term “work protected under this title.”³¹¹ Further, the DMCA's definition of circumvention describes acts that do not necessarily infringe or facilitate infringement.³¹² The court therefore interpreted the DMCA as “granting copyright owners a new anti-circumvention right.”³¹³

The Ninth Circuit found support for this construction in the DMCA's legislative history.³¹⁴ For example, the Senate Judiciary Committee's report explains that the two subsections prohibiting trafficking in circumvention devices—one for access controls, the other copy controls—are “not interchangeable,” for the former “protect[s] access to a copyrighted work,” while the latter “protect[s] the traditional copyright rights of a copyright owner.”³¹⁵ The court then cited an example of DMCA liability given in the Committee's report: crafting a tool to bypass a password in order to gain access to a copyrighted work.³¹⁶ Notably, in this example, liability would

307. *Id.*

308. *Id.* at 942–43.

309. *Id.* at 943.

310. *Id.*

311. *Id.* at 945 (internal quotations omitted).

312. *See id.* (quoting 17 U.S.C. § 1201(a)(3)(A) (2010)).

313. *Id.*

314. *See id.* at 946–47.

315. *Id.* at 947 (quoting S. REP. NO. 105-109, at 12 (1998)).

316. *Id.*, 629 F.3d at 947.

attach even though the circumvention bears no nexus to infringement.³¹⁷ Echoing Judge Kaplan, the Ninth Circuit underscored the moral turpitude of infringement-free circumvention, emphasizing that the DMCA's proscriptions are "roughly analogous to making it illegal to break into a house using a tool, the primary purpose of which is to break into houses."³¹⁸ While acknowledging the policy considerations that drove the Federal Circuit's reasoning, the Ninth Circuit concluded that "to follow *Chamberlain* in imposing an infringement nexus requirement" would mean "disregard[ing] the plain language of the statute."³¹⁹ The court held that MDY had violated the DMCA with respect to *World of Warcraft's* dynamic non-literal elements.³²⁰

With *Chamberlain* and *MDY* both on the books, there is now a circuit split as to whether circumventing an access control gives rise to liability where there is no threat of infringement.³²¹ Thus far, other circuits have done little to resolve the disagreement. The Fifth Circuit initially embraced the Federal Circuit's rule, but then issued a revised opinion omitting any mention of *Chamberlain*.³²² In affirming Judge Kaplan's decision in *Reimerdes*, the Second Circuit implicitly adopted the stricter rule later embraced by the Ninth Circuit in *MDY*.³²³ District courts have gone both ways,³²⁴ as have academics and

317. *Id.*

318. *Id.* (quoting S. REP. NO. 105-109, at 12).

319. *MDY Indus.*, 629 F.3d at 950.

320. *Id.* at 958.

321. *See* *Murphy v. Millennium Radio Grp. LLC*, 650 F.3d 295, 300 n.4 (3d Cir. 2011) (noting circuit split); *Ground Zero Museum Workshop v. Wilson*, 813 F. Supp. 2d 678, 691 n.6 (D. Md. 2011). The court in *Ground Zero* stated:

There is disagreement as to whether liability under § 1201(a) can only exist if the circumvention device facilitated infringement. Neither the Fourth Circuit nor any district court within this circuit has addressed the issue. The Federal Circuit has limited liability under § 1201(a) to devices that facilitate infringement. In contrast, the Ninth Circuit has interpreted the statute to create "a distinct anti-circumvention right under § 1201(a) without an infringement nexus requirement."

Ground Zero, 813 F. Supp. at 691 n.6 (citations omitted).

322. *See* *MGE UPS Sys., Inc. v. GE Consumer & Indus. Inc.*, 612 F.3d 760, 765 (5th Cir. 2010) (original opinion); *MGE UPS Sys., Inc. v. GE Consumer & Indus. Inc.*, 622 F.3d 361 (5th Cir. 2010) (substituted opinion).

323. *See* *Universal City Studios, Inc. v. Corley*, 273 F.3d 429, 443 (2d Cir. 2001) ("[T]he DMCA targets the *circumvention* of digital walls guarding copyrighted material (and trafficking in circumvention tools), but does not concern itself with the *use* of those materials after circumvention has occurred.>").

324. *See, e.g.*, *Point 4 Data Corp. v. Tri-State Surgical Supply & Equip., Ltd*, No. 11-CV-726, 2012 U.S. Dist. LEXIS 113791, at *12–13 (E.D.N.Y. June 13, 2012) (following *MDY*); *Agfa Monotype Corp. v. Adobe Sys., Inc.*, 404 F. Supp. 2d 1030, 1034–36 (N.D. Ill. 2005) (following *Chamberlain*); *see also* *Tracfone Wireless, Inc. v. Zip Wireless Prods., Inc.*, 716 F.

commentators.³²⁵ Since circumventing tethering technology would likely be lawful under *Chamberlain* but unlawful under *MDY* and *Reimerdes*, it is difficult to make any prediction as to how the controversy might fare in court. As the leading treatise on copyright law acknowledges, “the airy drafting of the Digital Millennium Copyright Act . . . has led to a situation in which no perfect judicial construction presents itself.”³²⁶ The outcome of any litigation would therefore largely depend upon the forum in which it is brought and whether the parties’ claims and defenses are such that the Federal Circuit would have jurisdiction over any appeals.³²⁷

The profound uncertainty surrounding the DMCA only makes it more likely that video game companies will resort to restrictive licensing as a legal backstop to DRM. Using technological protection in conjunction with restrictive licensing is not uncommon.³²⁸ The two strategies are mutually reinforcing: the DRM technologically enforces license terms,³²⁹ and if the legal protection afforded the DRM fails, the copyright owner may rely on the license in order to punish and prevent circumvention. This “combination of contractual terms and technological measures” can effectively abridge fair use, first sale, and other rights and protections the end user would normally enjoy.³³⁰ This double-layered protection carries an additional advantage: even if circumventing the DRM is deemed lawful,³³¹ using the product in violation

Supp. 2d 1275, 1284–85 (N.D. Ga. 2010) (citing *Chamberlain* favorably but not clearly embracing its rule).

325. See, e.g., Alessandra Garbagnati, *The Wrath of the Blizzard King: How the Ninth Circuit’s Decision in MDY Industries, Inc. v. Blizzard Entertainment May Slay the Game Genie*, 34 HASTINGS COMM. & ENT. L.J. 313 (2012) (criticizing *MDY*); Raymond Nimmer, *Ninth Circuit Rejects Chamberlain, Places DMCA Back on a Proper Track*, 16 CYBERSPACE L. 21 (2011) (embracing *MDY*).

326. 3-12A NIMMER & NIMMER, *supra* note 42, § 12A.06[B][7][c][iii].

327. See 28 U.S.C. § 1295 (2012) (prescribing Federal Circuit’s jurisdiction).

328. Burk, *supra* note 129, at 547.

329. See *id.* at 547–48.

330. *Chamberlain Grp., Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1202 (Fed. Cir. 2004).

331. It is unclear whether even the Federal Circuit would apply *Chamberlain*’s review to a licensee:

It is not clear whether a consumer who circumvents a technological measure controlling access to a copyrighted work in a manner that enables uses permitted under the Copyright Act but prohibited by contract can be subject to liability under the DMCA. Because *Chamberlain* did not attempt to limit its customers [sic] use of its product by contract, however, we do not reach this issue.

Id. at 1202 n.17.

of the license terms may give rise to infringement liability.³³² The benefits of licensing are not lost on video game companies; Sony has been licensing rather than selling PlayStation 3 games for several years.³³³ The EULA for a popular line of PlayStation games provides: “THIS SOFTWARE IS LICENSED, NOT SOLD. . . . You agree not to . . . distribute, lease, license, sell, rent, convert into convertible currency, or otherwise transfer or assign the Software.”³³⁴ It appears that the age of video game ownership is already drawing to a close.

V. ONE-UP: THE COMING COLLISION—AND POSSIBLE SOLUTION

In *Chamberlain* and *MDY*, the Federal Circuit and Ninth Circuit both intimated that a conflict between the antitrust laws and copyright owners’ abrogations of the first sale doctrine may be on the horizon.³³⁵ Video game DRM has already attracted antitrust scrutiny.³³⁶ As protective technology becomes more sophisticated and more aggressive, we can expect to see further antitrust activity in the years ahead. In fact, antitrust may be a uniquely appropriate remedy for preserving first sale. The first sale doctrine first arose in the context of an elaborate price-fixing scheme that itself was

332. *MDY Indus., LLC v. Blizzard Entm’t, Inc.*, 629 F.3d 928, 940 (9th Cir. 2010). In the case of video games and computer software, end users operating under a license do not enjoy the protections of § 117(a)(1) of the Copyright Act, which provides that there is no infringement when “the owner of a copy of a computer program” runs the software, resulting in the creation of a temporary copy in the computer’s random access memory (“RAM”). 17 U.S.C. § 117(a)(1) (2012); see *Vernor v. Autodesk, Inc.*, 621 F.3d 1102, 1109–11 (9th Cir. 2010). Licensees may only create RAM copies to the extent provided in their license. *Vernor*, 621 F.3d at 1110–11.

333. See Tuan Nguyen, *Sony May Prohibit PS3 Preowned Game Sales*, DAILY TECH (May 24, 2006, 7:22 PM), <http://www.dailytech.com/Sony+May+Prohibit+PS3+Preowned+Game+Sales/article2512.htm>.

334. *Rockstar Games End User License Agreement*, ROCKSTAR GAMES, <http://www.rockstargames.com/eula> (last revised Oct. 1, 2013). Rockstar Games is responsible for the popular *Grand Theft Auto* franchise. The fine print on packages for such games directs users to read the EULA online.

335. The Federal Circuit construed the DMCA narrowly so as to avoid a conflict with the antitrust laws. See *Chamberlain Grp., Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1191 n.8, 1201–02 (Fed. Cir. 2004). The Ninth Circuit broadly interpreted the DMCA but left open the possibility that a copyright owner might exercise his or her rights under the DMCA in a manner that violates the antitrust laws. See *MDY Indus.*, 629 F.3d at 951 (“If a § 1201(a)(2) defendant in a future case claims that a plaintiff is attempting to enforce its DMCA anti-circumvention right in a manner that violates antitrust law, we will then consider the interplay between this new anti-circumvention right and antitrust law.”).

336. See, e.g., *Datel Holdings Ltd. v. Microsoft Corp.*, 712 F. Supp. 2d 974 (N.D. Cal. 2010).

the subject of antitrust litigation. The courts have long recognized the value of competition from secondhand markets and protected against aftermarket monopolization. Because tethering technology allows a console maker to squelch competition in the aftermarket for video game discs, employing this or a related technology could give rise to antitrust liability. However, it is by no means clear such an argument could succeed in court.

A. THE FIRST SALE DOCTRINE'S ANTITRUST ORIGINS

From its birth, the copyright first sale doctrine has been intertwined with antitrust law. *Bobbs-Merrill Co. v. Straus*,³³⁷ the case in which the U.S. Supreme Court first recognized the first sale doctrine, involved a publisher's resale price maintenance scheme—"[t]hat is, the publisher wanted to control the price of a book after ownership passed from the publisher to the wholesaler and from the wholesaler to the retailer."³³⁸ The wholesaler in *Bobbs-Merrill* was aware of the price restriction printed in copies of the book but did not agree to enforce it and, in fact, sold the book for less than the specified price of one dollar.³³⁹ The Supreme Court's opinion fails to mention that this particular vertical price restraint was "part of a larger scheme by publishers and retailers to engage in horizontal price fixing, which was the subject of [an] earlier New York Court of Appeals case."³⁴⁰ But as the district court recognized, *Bobbs-Merrill* placed the restrictive notice in its books "as an attempt . . . , as a member of said American Publishers' Association, to enforce as against this defendant the rules of such associations and combination fixing prices, in an effort to maintain them."³⁴¹

Just three years after deciding *Bobbs-Merrill*, the Supreme Court held in *Dr. Miles Medical Co. v. John D. Parks & Sons Co.* that resale price maintenance constitutes a *per se* violation of the Sherman Act.³⁴² The Court relied on *Bobbs-*

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

338. Sharon Billington, *Relief From Online Used Book Sales During New Book Launches*, 29 COLUM. J.L. & ARTS 497, 519 (2006); see *supra* text accompanying notes 32–37.

339. See Billington, *supra* note 338, at 519.

340. *Id.* at 519–20 (citing *Straus v. Am. Publishers' Ass'n*, 69 N.E. 1107 (N.Y. 1904)). In 1913, the U.S. Supreme Court heard an antitrust case involving the New York publishers' price-fixing arrangement. See *Strauss & Strauss v. Am. Publishers' Ass'n*, 231 U.S. 222 (1913). The Court held that, like the Patent Act, the Copyright Act was not "intended to authorize agreements in unlawful restraint of trade and tending to monopoly, in violation of the specific terms of the Sherman Law." *Id.* at 234.

341. *Bobbs-Merrill Co. v. Straus*, 139 F. 155, 178 (S.D.N.Y. 1905), *aff'd*, 210 U.S. 339 (1908).

342. See *Dr. Miles Med. Co. v. John D. Park & Sons Co.*, 220 U.S. 373, 405 (1911). The Supreme Court overturned *Dr. Miles* in 2007. See *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 907 (2007) (holding that vertical price restraints should be analyzed under the rule of reason).

Merrill, reasoning that if “no such privilege [to fix prices for downstream sales] exists under the copyright statutes . . . [i]t will hardly be contended, with respect to such a matter, that the manufacturer of an article of commerce, not protected by any statutory grant, is in any better case.”³⁴³ As in *Bobbs-Merrill*, the Court found it legally significant that the complainant had transferred ownership over the goods in question: “The agreements are designed to maintain prices, *after the complainant has parted with the title to the articles*, and to prevent competition among those who trade in them.”³⁴⁴ Repeating in part the language it had used just three years earlier, the Court held that “[t]he complainant having sold its products at prices satisfactory to itself, the public is entitled to whatever advantage may be derived from competition in the subsequent traffic.”³⁴⁵ As subsequent courts recognized, the *Bobbs-Merrill* and *Dr. Miles* decisions go hand in hand—not only because they both concern resale price maintenance, but also because the first sale doctrine and competition are intrinsically linked.³⁴⁶

343. *Dr. Miles*, 220 U.S. at 405 (quoting *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339 (1908)).

344. *Id.*, 220 U.S. at 407 (emphasis added).

345. *Id.* at 409; *see also Bobbs-Merrill*, 210 U.S. at 351. In *Bobbs-Merrill*, the Court stated:

The owner of the copyright in this case *did sell copies of the book in quantities and at a price satisfactory to it*. It has exercised the right to vend. . . . To add to the right of exclusive sale the authority to control all future retail sales, by a notice that such sales must be made at a fixed sum, would give a right not included in the terms of the statute, and, in our view, extend its operation, by construction, beyond its meaning, when interpreted with a view to ascertaining the legislative intent in its enactment.

Id. (emphasis added).

346. *See, e.g., Ethyl Gasoline Corp. v. United States*, 309 U.S. 436, 456–58 (1940) (citing both *Bobbs-Merrill* and *Dr. Miles* in holding that “by the authorized sales of the fuel by refiners to jobbers the patent monopoly over it is exhausted,” and that “[a]greements for price maintenance of articles moving in interstate commerce are, without more, unreasonable restraints of trade within the meaning of the Sherman Act because they eliminate competition”); *Waltham Watch Co. v. Keene*, 202 F. 225, 233–34 (S.D.N.Y. 1913) (relying on both *Bobbs-Merrill* and *Dr. Miles* in declaring unlawful “an attempt to monopolize and control prices and destroy competition”); *see also Herbert Hovenkamp, The Law of Vertical Integration and the Business Firm: 1880–1960*, 95 IOWA L. REV. 863, 889 (2010) (“However, in its *Dr. Miles* decision three years later the Supreme Court cited both the first-sale doctrine and the Sherman Act for the proposition that even an explicit resale-price-fixing agreement between a manufacturer of a patent medicine and a retailer was contrary to legal policy.”).

B. ANTTITRUST, AFTERMARKETS, AND THE DMCA

In *Chamberlain*, the Federal Circuit's construction of the DMCA was driven largely by a desire to avoid conflict with antitrust law.³⁴⁷ The court was concerned that Chamberlain's expansive construction, if adopted, "would allow any manufacturer of any product to add a single copyrighted sentence or software fragment to its product, wrap the copyrighted material in a trivial 'encryption' scheme, and thereby gain the right to restrict consumers' rights to use its products in conjunction with competing products."³⁴⁸ Such a broad interpretation of the DMCA would "allow virtually any company to attempt to leverage its sales into aftermarket monopolies"³⁴⁹—that is, monopolies in markets for parts and accessories to the original product.³⁵⁰ As the Federal Circuit noted, monopolization of aftermarkets violates the Sherman Act.³⁵¹ The Ninth Circuit, for its part, skirted the aftermarket issue in *MDY*,³⁵² but nonetheless left the door open to antitrust liability, stating that it would "consider the interplay between this new anti-circumvention right and antitrust law" if a future defendant "claims that a plaintiff is attempting to enforce its DMCA anti-circumvention right in a manner that violates antitrust law."³⁵³

Manufacturers of "durable goods"—products that are intended for use over a period of time after purchase, such as washing machines, cars, and computer printers³⁵⁴—are "highly protective of the aftermarkets of their goods because these are the most profitable—a manufacturer may sell the initial product at a low cost but mark up the price of the aftermarket goods or services to make a profit."³⁵⁵ In fact, "[f]irms may even price equipment *below cost* in order to 'buy' market share that will yield profits from high

347. *See* *Chamberlain Grp., Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1193 (Fed. Cir. 2004) ("Chamberlain's interpretation of the DMCA would . . . grant manufacturers broad exemptions from both the antitrust laws and the doctrine of copyright misuse.").

348. *Id.* at 1201.

349. *Id.* (citing *Eastman Kodak Co. v. Image Tech. Servs.*, 504 U.S. 451, 455 (1992)).

350. *See* *Latimer v. Roaring Toyz, Inc.*, 601 F.3d 1224, 1228 n.2 (11th Cir. 2010) (defining "aftermarket").

351. *Chamberlain*, 381 F.3d at 1201; *see* *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 470–78 (1992).

352. *See* *MDY Indus., LLC v. Blizzard Entm't, Inc.*, 629 F.3d 928, 951 (9th Cir. 2010) ("[T]here is no clear issue of anti-competitive behavior in this case.").

353. *Id.*

354. ROBERT L. SEXTON, *EXPLORING ECONOMICS* 563–64 (6th ed. 2011).

355. Jennifer Miller, Note, *The Battle Over "Bots": Anti-Circumvention, the DMCA, and "Cheating" at World of Warcraft*, 80 U. CIN. L. REV. 653, 683 (2011).

aftermarket prices.”³⁵⁶ This is precisely what happens in the video game market. Like washing machines, video game consoles are durable goods that are intended for extended use after purchase.³⁵⁷ Console manufacturers regularly sell video game consoles at or below cost in order to maximize market share, with the expectation that they will realize profits in aftermarkets—most importantly in video game sales (including licensing royalties from third-party game publishers).³⁵⁸ Incredibly, when the Xbox 360 and PlayStation 3 consoles were first released, Microsoft and Sony each lost hundreds of dollars for each console sold.³⁵⁹ Because console makers depend on aftermarkets to recoup these initial losses and generate all of their profits, they have a significant incentive to erect barriers to entry in the aftermarkets. DRM can be, and in fact has been, utilized for the purpose of excluding aftermarket competitors in the video game industry.³⁶⁰ And because competition in primary markets does not necessarily translate to competition in aftermarkets,³⁶¹ DRM can be an effective tool for reducing aftermarket competition and increasing profits.³⁶² The DMCA’s protections for DRM only increase the likelihood of competitive harm in the video game market.³⁶³

C. MONOPOLIZATION IN THE VIDEO GAME AFTERMARKET

Although *Bobbs-Merrill* and *Dr. Miles* concerned vertical price restraints that implicated § 1 of the Sherman Act, which governs restraints on trade

356. Severin Borenstein et al., *Antitrust Policy in Aftermarkets*, 63 ANTITRUST L.J. 455, 463 (1995) (emphasis added).

357. This Author, for example, still owns a functioning Sega Genesis console that he purchased over two decades ago.

358. Thomas Eisenmann et al., *Strategies for Two-Sided Markets*, 84 HARV. BUS. REV. 92, 98 (2006); see Dmitri Williams, *Structure and Competition in the U.S. Home Video Game Industry*, 4 INT’L J. ON MEDIA MGMT. 41, 44 (2002) (“The incentive to sell units below cost is created by the need for a large installed user base; since the systems are proprietary, competition for the hearts and minds of consumers is fierce.”). There is also a lucrative aftermarket for accessories and add-ons. See *Datel Holdings Ltd. v. Microsoft Corp.*, 712 F. Supp. 2d 974, 979 (N.D. Cal. 2010) (“There is a considerable aftermarket for Xbox 360 accessories and add-ons, apart from Xbox 360 games.”).

359. Eric Bangeman, *Sony Taking Big Hit on Each PS3 Sold; Xbox 360 in the Black*, ARS TECHNICA (Nov. 16, 2006, 11:33 AM), <http://arstechnica.com/gaming/2006/11/8239>.

360. See, e.g., *Datel Holdings*, 712 F. Supp. 2d at 985–86 (analyzing technological barriers preventing competition in aftermarket for Xbox 360 add-ons and accessories); SHEFF, *supra* note 88, at 247–50 (explaining that the NES lock-out chip prevented unlicensed game cartridges from playing).

361. Borenstein et al., *supra* note 356.

362. See Anupam Chander, *Exporting DMCA Lockouts*, 54 CLEV. ST. L. REV. 205, 206–07 (2006) (positing that DRM allows “a company with a popular product . . . to attract monopoly rents in follow-on goods”).

363. See *id.* at 206–10.

between two or more parties, technological limitations on the exercise of first sale rights would more appropriately be analyzed under § 2, which governs monopolization.³⁶⁴ Federal courts have at times condemned the accumulation of monopoly power as an evil in itself,³⁶⁵ but in general, the “mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system.”³⁶⁶ Section 2 liability does not attach unless the possession of monopoly power is accompanied by anticompetitive or exclusionary conduct.³⁶⁷

By limiting consumers’ ability to resell durable goods like video game discs, tethering technologies prevent or inhibit the development of a market for used products. As the Copyright Office recognized in its DMCA Section 104 report, “[t]he practice of using technological measures to tether a copy of a work to a particular hardware device” makes reselling the copy “a useless exercise, since the recipient will always receive nothing more than a useless piece of plastic.”³⁶⁸ This allows the original producer to acquire or maintain a monopoly in the market, potentially in violation of § 2.³⁶⁹

364. *Id.* “The Sherman Act contains a ‘basic distinction between concerted and independent action.’” *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 767 (1984) (quoting *Monsanto Co. v. Spray-Rite Serv. Corp.*, 465 U.S. 752, 761 (1984)). Section 2 governs the conduct of a single firm, while § 1 reaches conduct undertaken by multiple entities. *Copperweld Corp.*, 467 U.S. at 767–78. Vertical restraints necessarily involve multiple parties, but technological monopolization does not.

365. *See* *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 273 (2d Cir. 1979) (“Because, like all power, it is laden with the possibility of abuse; because it encourages sloth rather than the active quest for excellence; and because it tends to damage the very fabric of our economy and our society, monopoly power is ‘inherently evil.’” (quoting *United States v. United Shoe Mach. Corp.*, 110 F. Supp. 295, 345 (D. Mass. 1953), *aff’d per curiam*, 347 U.S. 521 (1954))); Sandeep Vaheesan, *The Evolving Populisms of Antitrust* 21–22 (Feb. 21, 2013) (unpublished manuscript), available at http://ssrn.com/abstract_id=2222368.

366. *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004).

367. *Id.*; *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 595–96 (1985).

368. U.S. COPYRIGHT OFFICE, *supra* note 196, at 75–76.

369. *See* *Christy Sports, LLC v. Deer Valley Resort Co., Ltd.*, 555 F.3d 1188, 1198 (10th Cir. 2009) (finding unilateral conduct unlawful under § 2 if it threatens a monopoly); *see also* *Aspen Skiing Co.*, 472 U.S. at 595–96 (“[T]he offense of monopolization under § 2 of the Sherman Act has two elements: (1) the possession of monopoly power in a relevant market, and (2) the willful acquisition, maintenance, or use of that power by anticompetitive or exclusionary means or for anticompetitive or exclusionary purposes.”). The “willful acquisition or maintenance” of monopoly power that § 2 prohibits is “distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.” *Aspen Skiing Co.*, 472 U.S. at 596 n.19 (quoting *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966)).

Courts and commentators have long recognized the value of secondhand competition.³⁷⁰ As the leading treatise on antitrust law explains, “[d]urability bears on market power when the second use ‘competes’ in some significant sense with the first. . . . To this extent, the durable item competes with the new item and limits the power of its producer.”³⁷¹ In the well-known *Alcoa* decision, Judge Learned Hand gave the following illustration: even though the owner of a copyright enjoys a “lawful monopoly,” he “cannot prevent those to whom he sells from reselling at whatever prices they please.”³⁷² Consequently, “[a]t any moment his control over the market will therefore be limited by that part of what he has formerly sold, which the price he now charges may bring upon the market, as second hand or reclaimed articles.”³⁷³ The presence of a secondhand market therefore limits a monopolist’s ability to charge monopoly prices.³⁷⁴

Attempting to suppress a secondhand market may raise antitrust concerns.³⁷⁵ In *United States v. United Shoe Machinery Corp.*,³⁷⁶ defendant United Shoe manufactured a variety of machines used for shoemaking, enjoying an

370. See, e.g., *United States v. Aluminum Co. of Am. (Alcoa)*, 148 F.2d 416, 424–25 (2d Cir. 1945). The Court in *Alcoa* stated:

At any given moment therefore “secondary” competes with “virgin” in the ingot market; further, it can, and probably does, set a limit or “ceiling” beyond which the price of “virgin” cannot go, for the cost of its production will in the end depend only upon the expense of scavenging and reconditioning. . . . At any moment his control over the market will therefore be limited by that part of what he has formerly sold, which the price he now charges may bring upon the market, as second hand or reclaimed articles.

Id.

371. PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION* § 573a (2012).

372. *Alcoa*, 148 F.2d at 425 (citing *United States v. Gen. Elec. Co.*, 272 U.S. 476, 484 (1926)).

373. *Id.*

374. AREEDA & HOVENKAMP, *supra* note 371, § 573b.

375. See Barak Y. Orbach, *The Durapologist Puzzle: Monopoly Power in Durable-Goods Markets*, 21 *YALE J. ON REG.* 67, 108 (2004) (“Courts therefore usually condemn practices that tend to cripple secondhand markets, such as limiting access to necessary replacement parts and lease-only policies.” (footnotes omitted)); Michael Waldman, *Antitrust Perspectives for Durable-Goods Markets* 16 (CESifo Working Paper No. 1306, 2004), available at http://www.econstor.eu/dspace/bitstream/10419/18671/1/cesifo1_wp1306.pdf (“The antitrust issue here is whether the antitrust authorities should intervene to eliminate practices that serve to make used units unavailable for consumption. The perspective put forth here is that the answer is frequently yes.”).

376. *United States v. United Shoe Mach. Corp.*, 110 F. Supp. 295 (D. Mass. 1953), *aff’d per curiam*, 347 U.S. 521 (1954).

approximately eighty-five percent share of the relevant market.³⁷⁷ The company engaged in a number of business practices to maintain and extend its monopoly, chief among them being a complex leasing system.³⁷⁸ United's practice was to lease rather than sell its more important machines.³⁷⁹ This "lease-only system" was exclusionary in the extreme—for example, the leases imposed a lengthy ten-year term—which allowed United to maintain its market power and engage in price discrimination.³⁸⁰ By not selling its machines outright, United erected barriers to entry³⁸¹ and prevented the development of a secondhand market for shoe machinery.³⁸² To the extent that used machines did make it to market, United bought them back.³⁸³ "It is a fair inference," the court observed, "that United's purpose in acquiring them was to curtail competition from second-hand shoe machinery."³⁸⁴ Finding that United had violated § 2,³⁸⁵ the court fashioned a remedy that, among other things, required United to begin offering its machines for sale as well as lease.³⁸⁶ This remedy ensured that United machines would eventually reach secondhand markets, from which "United will face a type of substitute competition which will gradually weaken the prohibited market power which it now exercises."³⁸⁷ The Supreme Court ultimately affirmed the district court's decision.³⁸⁸

United Shoe suppressed competition through leasing practices, but a monopolist might accomplish the same end through technological means.³⁸⁹ Of course, "courts are properly very skeptical about claims that competition

377. *Id.* at 297, 307.

378. *See id.* at 314–29 (describing lease system).

379. *Id.* at 344.

380. *Id.*

381. *See id.* at 340 ("United's leases, in the context of the present shoe machinery market, have created barriers to the entry by competitors into the shoe machinery field.")

382. The court stated:

United's lease system makes impossible a second-hand market in its own machines. This has two effects. It prevents United from suffering that kind of competition which a second-hand market offers. Also it prevents competitors from acquiring United machines with a view to copying such parts of the machines as are not patented, and with a view to experimenting with improvements without disclosing them to United.

Id. at 325.

383. *Id.* at 333–34.

384. *Id.* at 334.

385. *Id.* at 343.

386. *Id.* at 349, 352.

387. *Id.* at 350.

388. *United Shoe Mach. Corp. v. United States*, 347 U.S. 521 (1954).

389. *Foremost Pro Color, Inc. v. Eastman Kodak Co.*, 703 F.2d 534, 545 (9th Cir. 1983).

has been harmed by a dominant firm's product design changes."³⁹⁰ Antitrust law not only permits but also encourages monopolists to "compete aggressively on the merits" and to strive to succeed through "the process of invention and innovation."³⁹¹ But a monopolist may be on the hook under the Sherman Act if a plaintiff can prove that a technological "innovation" was in fact implemented for anticompetitive reasons, "rather than for improving the operation of the [product]."³⁹² In *C.R. Bard v. M3 Systems*, for example, the Federal Circuit upheld an antitrust verdict finding that C.R. Bard had modified a patented medical device (a biopsy "gun") not to improve functionality but to "prevent its competitors' non-infringing, flangeless needles from being used in Bard's guns."³⁹³ Similarly, in *United States v. Microsoft*, the D.C. Circuit held that Microsoft's technological integration of its Windows operating system and Internet Explorer web browser was subject to antitrust scrutiny.³⁹⁴ The government put forth evidence establishing that the integration did not make Internet Explorer more attractive to consumers, but rather discouraged competitors from distributing rival products.³⁹⁵

Under these standards, one can easily envision how a monopolization claim against tethering technology might look. The sole purpose of a tethering technology like Disc ID is to reduce competition in an aftermarket. In fact, according to the patent application, the Disc ID system is specifically designed to "suppress" the secondhand market for video games by preventing game discs from being played on multiple consoles.³⁹⁶ Eliminating competition from secondhand sellers "supports the redistribution of part of proceeds from sales of the electronic content to the developers."³⁹⁷ In other words, like the lease-only system in *United Shoe*, tethering technology shields the console maker from secondhand "substitute competition"³⁹⁸—thereby enhancing corporate profits and cementing the console maker's monopoly status in the aftermarket for games. The patent application does not suggest that this technological "improvement" would enhance the console's

390. *United States v. Microsoft Corp.*, 253 F.3d 34, 65 (D.C. Cir. 2001) (en banc).

391. *Foremost Pro Color, Inc.*, 703 F.2d at 544–45 (9th Cir. 1983) (quoting *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 281 (2d Cir. 1979)).

392. *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1382 (Fed. Cir. 1998).

393. *Id.*

394. *Microsoft Corp.*, 253 F.3d at 64–66.

395. *Id.* at 65.

396. Sony Patent App., *supra* note 2, at 2.

397. *Id.*

398. *United States v. United Shoe Mach. Corp.*, 110 F. Supp. 295, 350 (D. Mass. 1953), *aff'd per curiam*, 347 U.S. 521 (1954).

functionality or make video game products more attractive to consumers. Instead, its sole purpose and effect would be to prevent competitors from selling substitute goods in the form of used games.³⁹⁹ Because the acquisition of monopoly power through tethering technology does not represent legitimate success “as a consequence of a superior product, business acumen, or historic accident,” but rather amounts to aftermarket control through “anticompetitive or exclusionary means,”⁴⁰⁰ it provides a plausible basis for antitrust liability under § 2 of the Sherman Act.

D. THE RELEVANT MARKET PROBLEM

A business cannot engage in monopolization in violation of § 2 if it does not possess monopoly power in the relevant market.⁴⁰¹ Defining the relevant market is therefore a crucial issue in § 2 cases. The Supreme Court has explained that the relevant market consists of those “commodities reasonably interchangeable by consumers for the same purposes.”⁴⁰² Interchangeability requires only rough equivalence—that is, “while there may be some degree of preference for one [product] over the other, either would work effectively.”⁴⁰³ For example, under certain circumstances a market for transportation might include not only cars of varying makes and models, but also bicycles.⁴⁰⁴ One of the major indicators of interchangeability is “cross-elasticity of demand,” that is, the degree to which a rise in the price of one product precipitates greater demand for another.⁴⁰⁵ Products belonging to the same market are typically characterized by higher cross-elasticity of demand.⁴⁰⁶

399. *Cf.* *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1382 (Fed. Cir. 1998). The court in *C.R. Bard* stated:

Although Bard contended at trial that it modified its Biopty [sic] gun to make it easier to load and unload, there was substantial evidence that Bard’s real reasons for modifying the gun were to raise the cost of entry to potential makers of replacement needles, to make doctors apprehensive about using non-Bard needles, and to preclude the use of “copycat” needles.

Id.

400. *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 596 & n.19 (1985) (quoting *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966)).

401. *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004).

402. *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 395 (1956).

403. *Allen-Myland, Inc. v. Int’l Bus. Machs. Corp.*, 33 F.3d 194, 206 (3d Cir. 1994).

404. *Id.*

405. *Queen City Pizza, Inc. v. Domino’s Pizza, Inc.*, 124 F.3d 430, 437–38 (3d Cir. 1997) (quoting *Tunis Bros. Co. v. Ford Motor Co.*, 952 F.2d 715, 722 (3d Cir. 1991)).

406. *Id.*, 124 F.3d at 437–38.

In the case of tethering technologies, defining the relevant market so as to support a monopolization claim could be a considerable (and perhaps insurmountable) challenge. For purposes of this Article, let us consider the video game industry as an example. Perhaps the most logical measure of a video game company's monopoly power is the console market, which "represent[s] the mainstream of the video game industry."⁴⁰⁷ Although the console market has historically accommodated no more than two or three major players at any given time, it is marked by fierce competition.⁴⁰⁸ With the exception of Nintendo, whose NES console dominated the industry in the late 1980s and early 1990s,⁴⁰⁹ the market has not seen a true monopolist in the past few decades.⁴¹⁰ The market for the most recent generation of consoles⁴¹¹ was split more or less evenly: Nintendo accounted for about forty percent of the market, while Sony and Microsoft held about thirty percent each.⁴¹² Even if Nintendo is taken out of the equation—compared to Sony's PlayStation 3 and Microsoft's Xbox 360, Nintendo's Wii utilized inferior hardware, cost less, and targeted different classes of consumers⁴¹³—the console market would have still been split evenly.⁴¹⁴ No competitor could be considered a monopolist in these conditions,⁴¹⁵ as evidenced by the robust competition between the major console makers. The same is true of other industries in which tethering technology might appear, such as the market for copies of Hollywood movies on DVD or Blu-ray discs.⁴¹⁶

As discussed above, however, the real market of interest is the aftermarket for video game discs. Since this is where the profits lie, console makers try to "lock in" a critical mass of users at the console level and then

407. Williams, *supra* note 358, at 44.

408. *See id.* at 43.

409. SHEFF, *supra* note 88, at 196, 349, 402.

410. Williams, *supra* note 358, at 43–44.

411. That is, Nintendo's Wii, Sony's PlayStation 3, and Microsoft's Xbox 360. The market structure may yet shift in response to these companies' newly released next-generation consoles: Nintendo's Wii U, Sony's PlayStation 4, and Microsoft's Xbox One. As of this writing, it is too early to predict whether or how the market may change.

412. William D'Angelo, *2013 Year on Year Sales and Market Share Update to February 16th*, VGCHARTZ (Feb. 26, 2013), <http://www.vgchartz.com/article/250783/2013-year-on-year-sales-and-market-share-update-to-february-16th>.

413. *See* Patricio O'Gorman, *Wii: Creating a Blue Ocean the Nintendo Way*, PALERMO BUS. REV., Aug. 2008, at 97, 100–103.

414. *See* D'Angelo, *supra* note 412.

415. AREEDA & HOVENKAMP, *supra* note 371, § 532c (generally market shares below fifty or sixty percent do not constitute monopoly power).

416. There are six major Hollywood studios (often referred to as the "Big Six"): Disney, Fox, Paramount, Sony, Universal, and Warner Bros. *See* Cynthia Littleton, *Majors Prosper on the Margins*, VARIETY, Apr. 16, 2013, at 38.

extract as much profit from them as possible in the aftermarket.⁴¹⁷ Tethering technology aims to reduce competition and promote console makers' monopoly power in this lucrative aftermarket. It therefore makes sense, at least in theory, to define the "relevant market" as the aftermarket for video games rather than as the primary market for gaming consoles. In fact, interchangeability principles support an even more precise definition: the market for video game discs that are compatible with a particular console (e.g., the market for PlayStation 3 games). Games produced for the Wii or Xbox 360 are not generally interchangeable with those produced for the PlayStation 3. This owes, in part, to the fact that many games are only developed for a single gaming console—the popular *God of War* franchise, for example, is exclusive to Sony's consoles, while games featuring Nintendo's mascot Mario are only available for Nintendo consoles. More fundamentally, however, games manufactured for different consoles are not interchangeable because different consoles are not interoperable.⁴¹⁸ If the price of Xbox games increases, consumers who are "locked in" to the Xbox console cannot opt for less-expensive Wii or PlayStation games without buying a new console. The absence of cross-elasticity of demand favors a market definition that is specific to a single console's games.⁴¹⁹

Defining the relevant market as the aftermarket for video games compatible with a particular console may be plausible under current law. The Supreme Court has held that the relevant market can be an aftermarket for products belonging to a single brand, at least where consumers are "locked in" to equipment purchased in the primary market.⁴²⁰ *Eastman Kodak v. Image Technical Services* centered on Kodak's policy of selling photocopier replacement parts only to purchasers of Kodak photocopiers who used Kodak repair services.⁴²¹ The Court held that the relevant market could be defined as the aftermarket for Kodak-provided parts and services, even though Kodak did not have market power in the photocopier market.⁴²² This

417. See Williams, *supra* note 358, at 43 ("In seeking to create dominant positions for themselves, each firm release[s] a system incompatible with the others. . . . Meanwhile, the consumer [is] forced into an all-or-nothing decision when purchasing a home machine . . .").

418. *Id.*

419. See Michael L. Katz & Carl Shapiro, *Antitrust in Software Markets*, in COMPETITION, INNOVATION AND THE MICROSOFT MONOPOLY: ANTITRUST IN THE DIGITAL MARKETPLACE 30, 39 (Jeffrey A. Eisenach & Thomas M. Lenard eds., 1999) ("Thus, application software markets tend to be defined for a given hardware and operating system configuration, or 'platform.'").

420. *Eastman Kodak Co. v. Image Tech. Servs.*, 504 U.S. 451, 481–82 (1992).

421. *Id.* at 458.

422. *Id.* at 477–78, 481–82.

holding was premised on a theory of “locking in”: because most consumers were incapable of, or simply chose not to undertake, the “sophisticated analysis” required to evaluate the total lifetime cost of Kodak equipment, parts, and services, they could not make informed purchasing decisions in the primary equipment market.⁴²³ (The Court referred to this market imperfection as “information costs.”⁴²⁴) Once consumers had purchased a Kodak photocopier, they were essentially “locked in” to Kodak’s parts and services aftermarket.⁴²⁵ “If the cost of switching is high,” the Court reasoned, “consumers who already have purchased the equipment, and are thus ‘locked in,’ will tolerate some level of service-price increases before changing equipment brands.”⁴²⁶ The combination of high information and switching costs meant that, from the consumer’s perspective, “service and parts for Kodak equipment [were] not interchangeable with other manufacturers’ service and parts.”⁴²⁷ The Court concluded that it was appropriate to define the relevant market as “only those companies that service Kodak machines”—i.e., Kodak alone.⁴²⁸

The video game market presents some of the same characteristics. As in *Kodak*, video game consumers are apt to being “locked in.” Consumers are “forced into an all-or-nothing decision” when purchasing a console: they can only play games manufactured for the console they purchase, and are excluded from playing games developed for other consoles.⁴²⁹ This means that switching costs are high. Consumers who have committed to a particular console will tolerate some level of price increase in the aftermarket for games before investing in a brand new console. Given the gap between the cost of switching consoles and any marginal increase in the price of games—new consoles typically retail for anywhere from \$200 to \$600, while games go for \$50 or \$60—video game companies arguably have considerable latitude to increase game prices before customers start jumping consoles.⁴³⁰

423. *Id.* at 473–76.

424. *Id.* at 477.

425. *Id.* at 476.

426. *Id.*

427. *Id.* at 477, 481–82.

428. *Id.* at 482.

429. *See Williams, supra* note 358, at 43.

430. *See Kodak*, 504 U.S. at 476 (“Under this scenario, a seller profitably could maintain supracompetitive prices in the aftermarket *if the switching costs were high relative to the increase in service prices*, and the number of locked-in customers were high relative to the number of new purchasers.” (emphasis added)); *see also Katz & Shapiro, supra* note 419, at 39. Katz and Shapiro wrote:

[C]onsumers use applications software in conjunction with specific configurations of hardware and/or operating systems, and often will not

There is precedent for defining the relevant market to include only software compatible with a particular hardware configuration. In the *Microsoft* litigation, for example, one of the relevant markets identified by the district court was the market for “licensing of all *Intel-compatible* PC operating systems.”⁴³¹ Microsoft argued that non-Intel-compatible operating systems, chiefly Apple’s Mac OS, should be included in the relevant market.⁴³² The district court found, and the appellate court agreed, that high switching costs militated against including non-Intel-compatible systems in the definition. In the district court’s words, there were, at the time, “no products . . . that a significant percentage of computer users worldwide could substitute for [Intel-compatible operating systems] without incurring substantial costs.”⁴³³ Mac OS was not interchangeable with Microsoft’s Intel-compatible Windows program because most “consumers would not switch from Windows to Mac OS in response to a substantial price increase because of the costs of acquiring the new hardware needed to run Mac OS (an Apple computer and peripherals) and compatible software applications.”⁴³⁴ Under this reasoning, the relevant market in a § 2 challenge to tethering technology might also be defined in hardware-specific terms. Just as Microsoft unquestionably possessed monopoly power in the market for Intel-compatible operating systems (Windows had a ninety-five percent market share),⁴³⁵ so too does a video game console maker enjoy monopoly status in the market for games that are compatible with its console.⁴³⁶

Most courts, however, maintain that high switching costs are insufficient to justify a narrow market definition like that in *Kodak* and *Microsoft*. As one district court explains, aftermarket monopolization is only possible “when there are ‘significant information *and* switching costs,’ ” which sever the link

purchase new hardware or a new operating system in response to modest shifts in application software prices. In part, this results from the fact that consumers have already purchased the hardware and operating system prior to buying specific pieces of software.

Id.

431. United States v. Microsoft Corp., 253 F.3d 34, 52 (D.C. Cir. 2001) (emphasis added).

432. *Id.*

433. *Id.*

434. *Id.*

435. *Id.* at 54–56.

436. For example, all PlayStation games must be produced by Sony or a third party licensed by Sony. See Williams, *supra* note 358, at 44.

between the primary market and the aftermarket.⁴³⁷ This is intuitive. In *Kodak*, it was consumers' inability to accurately assess lifetime photocopier costs (inclusive of equipment, parts, and service) that made them "locked in."⁴³⁸ Had information costs been lower, consumers could have accounted for Kodak's aftermarket costs in deciding whether to purchase a Kodak photocopier in the first place.⁴³⁹ By the same token, had information costs been high and switching costs low, then Kodak's customers could have painlessly switched to a competitor's equipment once they encountered high prices for parts and service. It is the *combination* of product uniqueness, switching costs, and information costs that "generate[s] market power even as [it] delineate[s] the boundaries of the market in which such power is exercised."⁴⁴⁰

Other courts have characterized this relationship in terms of the primary market's interplay with the aftermarket. The First Circuit instructs that "a court may conclude that the aftermarket is the relevant market for antitrust analysis only if evidence supports an inference of monopoly power in the aftermarket *that competition in the primary market appears unable to check.*"⁴⁴¹ Where information costs or switching costs (or both) are low, the Third Circuit states, "aftermarket behavior generally is disciplined by competition in the primary product market."⁴⁴² As the Supreme Court lucidly explained in *Kodak*, aftermarket monopolization is necessarily tempered by the degree to which consumers can make informed decisions in the primary market or easily switch brands to avoid aftermarket gouging.⁴⁴³

This is why an aftermarket monopolization claim against a video game console maker may be doomed to fail, at least under current market conditions. Even though tethering technology would probably cause secondhand dealers to be excluded from the aftermarket for games, and even though switching costs are high, available evidence suggests that information costs are comparatively low. In contrast to *Kodak*, prospective game console

437. *Static Control Components, Inc. v. Lexmark Int'l, Inc.*, 487 F. Supp. 2d 861, 882–83 (E.D. Ky. 2007) (quoting *Eastman Kodak Co. v. Image Tech. Servs.*, 504 U.S. 451, 473 (1992)) (emphasis added).

438. *Kodak*, 504 U.S. at 473–76.

439. *See id.*

440. *ID Sec. Sys. Canada, Inc. v. Checkpoint Sys., Inc.*, 249 F. Supp. 2d 622, 641 (E.D. Pa. 2003).

441. *SMS Sys. Maint. Servs., Inc. v. Digital Equip. Corp.*, 188 F.3d 11, 17 (1st Cir. 1999) (emphasis added).

442. *Harrison Aire, Inc. v. Aerostar Int'l, Inc.*, 423 F.3d 374, 381–82 (3d Cir. 2005).

443. *Kodak*, 504 U.S. at 473–77; *see ID Sec. Sys.*, 249 F. Supp. 2d at 641–43, 647–48 (interpreting *Kodak*).

purchasers have ready access to information about aftermarket costs.⁴⁴⁴ Video game pricing is highly visible, easy to comprehend, and not usually subject to wide fluctuation. Moreover, gamers readily understand the implications of technology that precludes the use of secondhand video games. As GameStop CFO Rob Lloyd has claimed, internal market research found that approximately sixty percent of consumers would not buy a new console if it were incapable of playing pre-owned games.⁴⁴⁵ In other words, information about a console maker's aftermarket behavior directly impacts consumers' decisions in the primary market. GameStop's research bears out the conclusion that "the high switching costs associated with [video game consoles] are significantly counterbalanced by information costs so low as to be almost nonexistent, a fact that increases a consumer's ability to make an intelligent choice when choosing the company with which it will have a long relationship."⁴⁴⁶ A court might therefore be hesitant to conclude that a console-specific aftermarket for video games would be an appropriate market definition.⁴⁴⁷

The difficulty of defining the relevant market so as to establish that any video game company in today's market possesses monopoly power could be fatal to a § 2 claim. Therefore, while antitrust law offers a potential solution to the dilemma posed by tethering technology, consumers' recourse is far from clear. The Sherman Act prizes consumer welfare above all else,⁴⁴⁸ but it will not intervene where consumer preference is sufficient to remedy market abuses.⁴⁴⁹ In durable goods markets that are dominated by a true monopolist, or in which switching and information costs are both high, the Sherman Act might dictate a different outcome. One can only hope that, where antitrust law falls short, consumers will have the good sense to communicate their interests through purchasing decisions.

444. *See Kodak*, 504 U.S. at 473 ("Much of this information is difficult—some of it impossible—to acquire at the time of purchase.").

445. Brian Arnold, *Majority of Gamers Would Not Buy Console That Blocks Used Games*, EXAMINER.COM (Feb. 12, 2013), <http://www.examiner.com/article/majority-of-gamers-would-not-buy-console-that-blocks-used-games>.

446. *ID Sec. Sys. Canada, Inc. v. Checkpoint Sys., Inc.*, 249 F. Supp. 2d 622, 643 (E.D. Pa. 2003).

447. *See SMS Sys. Maint. Servs., Inc. v. Digital Equip. Corp.*, 188 F.3d 11, 15 (1st Cir. 1999) ("Put another way, a court may conclude that the aftermarket is the relevant market for antitrust analysis only if the evidence supports an inference of monopoly power in the aftermarket that competition in the primary market appears unable to check.").

448. Vaheesan, *supra* note 365, at 33–39.

449. *See Abbott Labs. v. Teva Pharm. USA, Inc.*, 432 F. Supp. 2d 408, 421 (D. Del. 2006) ("If consumers are free to choose among products, then the success of a new product in the marketplace reflects consumer choice, and 'antitrust should not intervene when an invention pleases customers.'" (quoting *AREEDA & HOVENKAMP*, *supra* note 371, § 776d)).

VI. CONCLUSION: GAME OVER?

Revisions to the first sale doctrine are not to be taken lightly. Narrowing the doctrine, even modestly, amounts to “a fundamental change in one of the main tenets of copyright law,”⁴⁵⁰ and upsets the “traditional copyright bargain” between copyright holders and personal property owners.⁴⁵¹ The first sale doctrine benefits consumers both directly and indirectly: not only does the doctrine facilitate the free alienability of personal property, minimizing transaction costs and obviating the need to negotiate with copyright owners for resale or transfer rights,⁴⁵² it also promotes competitive pricing in the marketplace.⁴⁵³ The Supreme Court has recognized the first sale doctrine’s importance to consumers and competition for over a century.⁴⁵⁴ In its most recent first sale decision, the Court emphasized that “competition, including freedom to resell, can work to the advantage of the consumer.”⁴⁵⁵

This is precisely why the content industry’s relationship with first sale is so troubling. For the past three decades, copyright-heavy corporations have chipped away at the doctrine through lobbying, litigation, and licensing. Tethering technology threatens to further undermine first sale by physically preventing users from exercising their first sale rights. More broadly, industry’s embrace of tethering technology threatens to stymie competition and enhance copyright owners’ monopolies. These technological barriers are themselves backed by the force of law. The marriage of digital technology and strict anticircumvention rules could effect a de facto repeal of the first sale doctrine.

The irony is that even though “the Copyright Act and the Sherman Act [are] both designed ultimately to improve the welfare of consumers in our free market system,”⁴⁵⁶ neither body of law provides a clear solution to the problems posed by tethering technology. In the case of video games, consumers could be held liable under the DMCA for circumventing a system like Disc ID, and the Sherman Act might not prevent content producers

450. *Software Rental Amendments of 1990: Hearing Before the Subcomm. on Courts, Intellectual Property and the Admin. of Justice of the H. Comm. on the Judiciary*, 101st Cong. 2 (1990) (statement of Rep. Robert Kastenmeier) (quoting Professor David Lange).

451. *Brilliance Audio, Inc. v. Hights Cross Commc’ns, Inc.*, 474 F.3d 365, 374 (6th Cir. 2007) (construing statutory exception to first sale doctrine narrowly so as to protect the copyright “bargain”).

452. *Pearson Educ., Inc. v. Liu*, 656 F. Supp. 2d 407, 410 (S.D.N.Y. 2009).

453. Ghose et al., *supra* note 60, at 346.

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

455. *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351, 1363 (2013).

456. *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 36 F.3d 1147, 1187 (1st Cir. 1994).

from technologically decimating the secondhand video game industry. This Article demonstrates that there is a way through the copyright and antitrust thicket, but also acknowledges that doctrinal challenges could preclude a consumer-friendly resolution in court. Ultimately, it may devolve upon consumers to inform themselves and vote with their wallets. Otherwise, it really could be “Game Over” for first sale.