

DIGITAL RIGHTS MANAGEMENT (DRM) IN ONLINE MUSIC STORES: DRM-ENCUMBERED MUSIC DOWNLOADS' INEVITABLE DEMISE AS A RESULT OF THE NEGATIVE EFFECTS OF HEAVY-HANDED COPYRIGHT LAW

I. INTRODUCTION

Music consumption will never be the same again. Album sales are plummeting as more people switch to purchasing music online.¹ A digitally downloaded album or song is a significantly different product from a compact disc (CD) bought at a record store. The downloaded song often comes equipped with Digital Rights Management (DRM) technology, which is a form of encryption that limits the song's playback ability.² Music publishers claim DRM technology is necessary to combat the increase in piracy from both peer-to-peer (P2P) file sharing programs and advances in technology, such as increased broadband Internet access.³ Until recently, the majority of songs purchased from any legal Internet music provider contained DRM protection.⁴ In 2008, Amazon MP3 became the first online music store to offer music downloads from all four major music labels, as well as several independent labels, unencumbered by DRM technology.⁵

1. See MSNBC.com, Album Sales Decline as Music Downloads Are Up, <http://www.msnbc.msn.com/id/18220349> (last visited Mar. 14, 2008); see also Toby Sterling, *After 25 Years, CDs Fall on Hard Times*, ORLANDO SENTINEL, Aug. 19, 2007 at G6.

2. See BBCNews.com, Q&A: What is DRM?, <http://news.bbc.co.uk/2/hi/technology/6337781.stm> (Mar. 14, 2007) (stating that DRM allows music copyright owners to set and enforce the terms by which listeners can use their music files, such as limiting listeners' ability to copy the music and restricting its usage to a set number of computers and portable music players).

3. See S. REP. NO. 105-190, at 8 (1998); BBCNews.com, *supra* note 2.

4. See Kim Komando, *Unprotected Format Options on Rise*, ALBANY TIMES UNION, Sept. 17, 2007, at C2; see also Press Release, Apple, Apple Unveils Higher Quality DRM-Free Music on the iTunes Store (Apr. 2, 2007), <http://www.apple.com/pr/library/2007/04/02itunes.html> (stating that in June 2007, Apple's iTunes Music Store (iTMS) partnered with music publisher Electric and Musical Industries, Ltd. (EMI) to create iTunes Plus, a new iTMS feature that allows users to download DRM-free tracks from EMI's music catalog).

5. See Eric Benderoff, *Amazon Takes a Stab at iTunes Market: Site Offers Cheaper Music*

The music industry's recent acceptance of online music sales without the accompanying DRM technology highlights a larger legal problem. Namely, Congress and the music industry's attempts to control music consumption by regulating the use of DRM in online music has had unintended, detrimental consequences to both consumers and the music industry. Over-regulation has forced the music industry to offer music without DRM protection to compensate for the negative effects of DRM legislation.

In enacting the 1998 Digital Millennium Copyright Act (DMCA),⁶ Congress criminalized attempts to circumvent DRM technologies placed in music by copyright holders.⁷ The DMCA grants copyright holders an unprecedented level of control over how their products are used and accessed.⁸ Regrettably, the DMCA has disturbed existing copyright law that allowed courts to weigh the interests of protecting intellectual property against the interests of encouraging competition and protecting consumer choice.⁹

The DMCA's legal protection of DRM technology has not been very successful in the area of digital music downloads. The music industry has been unable to stop piracy on the Internet.¹⁰ Moreover, the DMCA's protection of DRM technology has led music retailers to use the law not to prevent piracy, but to prevent interoperability between downloaded music files and portable music players.¹¹ In effect, the combination of the DMCA and DRM created statutorily sanctioned anti-competitive behavior,

Downloads, CHI. TRIB., Sept. 26, 2007, at B1 (noting that the top four labels are Warner Music Group, Universal Music Group, EMI Music Group and Sony); *see also* Saul Hansell, *Sony Drives Another Nail in the D.R.M. Coffin*, N.Y. TIMES, Jan. 10, 2008, <http://bits.blogs.nytimes.com/2008/01/10/sony-drives-another-nail-in-the-drm-coffin/?ref=technology>; FOXNews.com, Warner Music to Sell DRM-Free Music Via Amazon, Dec. 31, 2007, <http://www.foxnews.com/story/0,2933,319258,00.html>.

6. 17 U.S.C. § 1201 (2000).

7. *See id.* § 1201(a)(1)(A).

8. *See* Timothy B. Lee, CATO Institute, *Circumventing Competition: The Perverse Consequences of the Digital Millennium Copyright Act*, at 1 (Mar. 21, 2006), available at http://www.cato.org/pub_display.php?pub_id=6025.

9. *See id.*

10. *See* Grant Gross, *Despite Lawsuits, P-to-P Use Still Growing*, PC WORLD, Oct. 5 2007, http://www.pcworld.com/article/138138/despite_lawsuits_ptop_use_still_growing.html.

11. *See Digital Music Interoperability and Availability: Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Property of the H. Comm. on the Judiciary*, 109th Cong. 11–14 (2005) [hereinafter *Digital Music*] (statement of Raymond Gifford, President, The Progress & Freedom Foundation). For instance, Apple encrypts its DRM to play only on Apple's iPod, and DRM'd music from competing music retailers will not play on the iPod. *See* Nicola F. Sharpe & Olufunmilayo B. Arewa, *Is Apple Playing Fair? Navigating the iPod Fairplay DRM Controversy*, 5 NW. J. TECH. & INTEL. PROP. 332, 333 (2007).

which hurts both record label copyright holders and music consumers.¹²

Part I of this comment introduces the main issues created by DRM technology and the enactment of the DMCA. Part II frames the historical tension between copyright law and restrictive technologies, such as DRM, and discusses the current problems created by the enactment of the DMCA. Part III explains how the anti-circumvention provision of the DMCA forces courts to focus on the narrow issue of DRM circumvention at the expense of the more important issues of copyright infringement and piracy. Part IV describes how the DMCA's legal protection of DRM enables companies to misuse DRM in anti-competitive ways. Finally, Part V explains that DRM has little practical effect on preventing piracy because it punishes legitimate consumers.

The DMCA is a heavy-handed copyright law that was enacted to help the music industry regulate music consumption on the Internet.¹³ The law has hurt both consumers and the music industry. The negative effects of the DMCA have left the music industry with little choice but to offer music unencumbered by DRM protections.¹⁴ However, the outlook for the music industry is not completely bleak. Sales of this unrestricted music may actually benefit both music consumers and the music industry.

II. HISTORY OF COPYRIGHT LAW, DRM, AND THE DMCA

The purpose of copyright law is to “promote the creation and publication of free expression” by creating an economic incentive to generate and distribute one’s creation.¹⁵ The Copyright Clause of the Constitution gives Congress the power to legislate copyright terms “[t]o promote the Progress of Science . . . by securing for limited Times to Authors . . . the exclusive Right to their respective Writings.”¹⁶ While the Copyright Clause makes the content producer’s expression of ideas copyrightable, the ideas themselves are not.¹⁷ The Supreme Court refers to this as the “idea/expression dichotomy.”¹⁸ Copyright law recognizes five exclusive rights for the copyright holder: (1) the right to reproduce, (2) adapt, (3) publish, (4) perform, and (5) display the protected work.¹⁹

12. See *Digital Music*, *supra* note 11.

13. See Timothy K. Armstrong, *Digital Rights Management and the Process of Fair Use*, 20 HARV. J.L. & TECH. 49, 60 (2006); see generally S. REP. NO. 105-190, at 8 (1998).

14. See, e.g., Benderoff, *supra* note 5.

15. *Eldred v. Ashcroft*, 537 U.S. 186, 219 (2003) (emphasis removed).

16. U.S. CONST. art. I, § 8, cl. 8.

17. See *Eldred*, 537 U.S. at 219.

18. *Id.*

19. 17 U.S.C. § 106 (2000).

Digital Rights Management (DRM) technology offers control over the protected work in both a legally and practically different manner than traditional copyright protection.²⁰ For instance, DRM technology allows copyright holders to control the way consumers use their work once it is in a digital format.²¹ While copyright law is limited by such rules as “term duration” (allowing copyright protection for only a certain amount of time), “fair use” (allowing copyright protection to be circumvented in special circumstances), and the “first sale doctrine” (allowing owners of copyrighted material to sell that material without permission from the copyright holder), DRM protection is not necessarily subject to the same limitations.²² Consequently, copyright holders use DRM technology primarily to restrict the use or access of the copyrighted work, while copyright law protects the underlying work from an unauthorized violation of the copyright holder’s exclusive rights to reproduce, adapt, publish, perform, and display the protected work.²³

Regardless of this important distinction, as of 1998, DRM technology enjoys statutory protection that is legally enforceable under the Digital Millennium Copyright Act (DMCA).²⁴ Copyright law was amended by the DMCA to grant copyright holders legal protection for use of DRM and similar access control technology for copyrighted works.²⁵ Section 1201 of the DMCA makes it illegal to “avoid, bypass, remove, deactivate, or impair” DRM technology embedded in copyrighted works.²⁶

Congress passed the DMCA for two reasons.²⁷ The first reason was to respond to pressures from the entertainment industries, which feared that advances in technology would increase online piracy.²⁸ The second was

20. See MICHAEL A. EINHORN, *MEDIA TECHNOLOGY AND COPYRIGHT: INTEGRATING LAW AND ECONOMICS* 47 (Edward Elgar Publ’g 2004).

21. See Christopher D. Kruger, Comment, *Passing the Global Test: DMCA § 1201 as an International Model for Transitioning Copyright Law into the Digital Age*, 28 HOUS. J. INT’L L. 282, 283 (2006).

22. EINHORN, *supra* note 20, at 47.

23. See *id.*

24. See 17 U.S.C. § 1201(a)–(b) (2000); see also EBERHARD BECKER, *DIGITAL RIGHTS MANAGEMENT: TECHNOLOGICAL, ECONOMIC, LEGAL AND POLITICAL ASPECTS* 367 (Springer 2004).

25. See RAYMOND T. NIMMER, *LAW OF COMPUTER TECHNOLOGY* § 1:17 (Thompson/West 3d ed. 2006).

26. 17 U.S.C. § 1201(a)(3)(A) (2000).

27. See Aaron Burstein, Will Thomas DeVries & Peter S. Menell, *The Rise of Internet Interest Group Politics*, 19 BERKELEY TECH. L.J. 1, 12–13 (2004); Armstrong, *supra* note 13, at 60; S. Rep. No. 105-190, at 8 (1998).

28. See Burstein, DeVries & Menell, *supra* note 27, at 12–13; see Armstrong, *supra* note 13, at 59 (arguing that “the combination of advancing compression technologies, wide availability of desired entertainment products in easily reproducible digital form, increasing computer power

the United States' obligations under the 1996 World Intellectual Property Organization treaties, which mandated statutory protection for copyright holders' use of DRM.²⁹

Essentially, advances in technology concerned the music industry because it made illegal copying of music files faster and easier than ever.³⁰ This fear of new technology was not a recent development.³¹ In fact, the industry's lobbying for the enactment of the DMCA was not the first time the music industry had pressured Congress to pass new legislation restricting access to technology.³²

A. *The Digital Audio Tape Machine: DRM's Beginnings and the Introduction of the Audio Home Recording Act*

After Sony and Phillips first introduced the compact disc as a medium for music file storage in 1982, music became widely available in digital format.³³ Four years later, Digital Audio Tape (DAT) machines were created.³⁴ Unlike traditional cassettes, which only allowed copies of progressively inferior quality, DAT machines allowed users to make a "perfect" copy of a compact disc without any loss in quality.³⁵ At that time, the music industry feared that high quality audio copies would result in piracy on a grand scale.³⁶ The threat of legal action by the music industry prevented the DAT machine from entering the consumer market until seven years after its creation.³⁷ The delay prevented the DAT machine from gaining a foothold in the market.³⁸

Congress' legislative reaction to the introduction of the DAT machine is noteworthy because of the pressure it received from the music industry. After much lobbying from the music industry,³⁹ Congress passed the

and storage capacity, and growing access to the Internet at broadband speeds formed a 'perfect storm.'").

29. See S. REP. NO. 105-190, at 8 (1998); see also Armstrong, *supra* note 13, at 60.

30. See Armstrong, *supra* note 13, at 60 n.41.

31. See Nika Aldrich, *An Exploration of Rights Management Technologies Used in the Music Industry*, 2007 B.C. INTELL. PROP. & TECH. F. 051001, 13-15, (2007), available at <http://ssrn.com/abstract=932088>.

32. See *id.*

33. See BBCNews.com, Compact Disc Hits 25th Birthday, <http://news.bbc.co.uk/2/hi/technology/6950845.stm> (last visited Nov. 28, 2007).

34. See Aldrich, *supra* note 31, at 13-15.

35. See *id.*

36. See Jocelyn Dabeau & William Fisher, The DAT Controversy, <http://www.law.harvard.edu/faculty/tfisher/music/DAT.html> (last visited Nov. 28, 2007).

37. See Aldrich, *supra* note 31, at 14.

38. See *id.*

39. See Dabeau & Fisher, *supra* note 36.

Audio Home Recording Act (AHRA) in 1992, which required all DAT machines and other audio recorders to be equipped with Serial Copy Management System (SCMS).⁴⁰ The SCMS technology allowed only first generation copies of digital recordings,⁴¹ meaning copies could only be made from an original recording.⁴²

In 1998, years after Congress passed the AHRA to address DATs, the music industry invoked the statute for the first time when it sued Rio, the manufacturer of one of the first portable MP3 players.⁴³ The trade group that represents the United States recording industry, known as the Recording Industry Association of America (RIAA),⁴⁴ sued Rio for not complying with the SCMS requirement of the AHRA.⁴⁵ The court found that computers and MP3 players were not digital audio recording devices and were therefore not required to comply with the SCMS provision of the AHRA.⁴⁶ Thus, the music industry needed another way to prevent the perceived threats of emerging technologies. The 1998 Digital Millennium Copyright Act followed.

B. From the AHRA to the DMCA

In many ways, the AHRA was a precursor to the DMCA because it mandated the use of SCMS to prevent piracy, and SCMS technology is similar to the DRM technologies used today. In fact, SCMS was the first example of access restricting technology in the music industry.⁴⁷ Section 1002(a)–(c) of the AHRA prohibits circumvention of SCMS⁴⁸ and is arguably a precursor to the anti-circumvention provision of the DMCA.⁴⁹ However, the DMCA's anti-circumvention provision is more expansive than the AHRA's provision because it directly prohibits the *user's* attempts at circumvention, rather than mandating the circumvention protections to

40. See 17 U.S.C. §§ 1001–02 (2000).

41. See *id.*

42. See Stefan Bechtold, *Digital Rights Management in the United States and Europe*, 52 AM. J. COMP. L. 323, 370 (2007).

43. See CONSUMER MULTIMEDIA REPORT, RIAA SUES OVER INTERNET MUSIC RECORDER (Oct. 19, 1998), available at 1998 WLNR 3885640.

44. See RIAA.com, Who We Are, <http://www.riaa.com/aboutus.php> (last visited Mar. 14, 2008).

45. See *Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc.*, 180 F.3d 1072, 1075 (9th Cir. 1999).

46. See *id.* at 1081.

47. See Aldrich, *supra* note 31, at 14.

48. 17 U.S.C. §§ 1002(a)–(c) (2000).

49. See June M. Besek, *Anti-Circumvention Laws and Copyright: A Report from the Kernochan Center for Law, Media and the Arts*, 27 COLUM. J.L. & ARTS 385, 437 (2004).

companies that produce the devices.⁵⁰

Through the use of the AHRA, the music industry successfully suppressed new technology such as the DAT machine.⁵¹ Perhaps this success led the music and movie industries to believe they could control how music is transferred and consumed on the Internet through the DMCA. However, the Internet is not as easily categorized and dismissed as was the DAT machine. Steve Jobs, the Chief Executive Officer of Apple, said, “[there] is this amazingly efficient distribution system for stolen property called the Internet—and no one’s gonna shut down the Internet.”⁵² Unlike the DAT machine, the Internet cannot easily be set aside or become obsolete. Consequently, restrictive copyright legislation will not significantly affect Internet piracy of digital music. Therefore, the DMCA’s restrictive legal protection of DRM through its anti-circumvention provision will lead to both the music consumer’s and the music industry’s rejection of DRM protected music.

III. SECTION 1201 OF THE DMCA FORCES COURTS TO FOCUS ON THE NARROW ISSUE OF DRM CIRCUMVENTION AT THE EXPENSE OF THE MORE IMPORTANT ISSUES OF COPYRIGHT INFRINGEMENT AND PIRACY

Congress initially passed the 1998 Digital Millennium Copyright Act (DMCA) with the intent to protect copyright holders’ digital works from Internet piracy.⁵³ Congress was concerned that the Internet provided an easy, quick, and inexpensive way for digital works to be transferred between large groups of people.⁵⁴ However, the DMCA’s anti-circumvention provision leaves courts with little flexibility in balancing the rights of copyright holders against consumer choice and technological innovation. Section 1201 of the DMCA directs courts to focus on whether a Digital Rights Management (DRM) scheme is being circumvented, but seems to ignore the arguably more important issue of whether DRM protection is actually preventing piracy.⁵⁵ As a consequence, digital content providers can misuse DRM as a legally enforceable means of

50. *See id.*

51. *See* AnimeNewsService.com, Sony Drops DAT, Nov. 30, 2005, <http://www.animenewsservice.com/archives/nov30.htm> (reporting Sony’s announcement that the final domestic shipment of its DAT machines would occur early in December 2005).

52. Jeff Goodell, *Steve Jobs: The Rolling Stone Interview*, ROLLING STONE, Dec. 3, 2003, *available at* http://www.rollingstone.com/news/story/5939600/steve_jobs_the_rolling_stone_interview/.

53. *See* S. REP. NO. 105-190, at 8 (1998).

54. *See id.*

55. *See id.* at 28.

restricting competition by preventing interoperability between downloaded music and a competing company's digital music players.

Instead of creating new legislation that focuses on the use of DRM technology to battle emerging technological threats, Congress should have allowed the courts to use preexisting copyright precedent to find a more nuanced approach to dealing with piracy. This approach would focus on such issues as whether a listener's intention was to steal the music, rather than on the narrow issue of whether a DRM protection scheme has been violated.

As evidenced by the music industry's recent shift to once again selling music unburdened by DRM protections,⁵⁶ the DMCA is simply unnecessary legislation in the music industry's fight to protect itself against new and potentially threatening technologies. Existing legislation, namely the Copyright Act of 1976, the last major modification made to copyright law,⁵⁷ already provided courts with a basic framework of copyright law and the freedom to address issues raised by new technologies in common-sense ways within that framework. When faced with factual scenarios involving new and potentially copyright-infringing technologies, the courts have crafted balanced decisions by taking into consideration the rights of both the copyright holder and the consumer.⁵⁸ Perhaps the most well-known example of the courts' ability to nimbly balance these competing interests is *Sony Corp. of America v. Universal City Studios, Inc.*⁵⁹

A. *The Court's Past Response to New Technology: Sony Corp. of America v. Universal City Studios, Inc.*

In *Sony*, the plaintiffs, who were copyright owners of television programs, sued Sony, a manufacturer of home videocassette recorders (VCRs), alleging that Sony's devices could be used for copyright infringement, and Sony was therefore liable for any infringement committed by the purchasers of Sony's VCRs.⁶⁰ The Supreme Court ruled in favor of Sony, holding Sony could not be held liable for contributory copyright infringement because VCRs had substantial non-infringing uses.⁶¹ Moreover, the Court found that personal use of VCRs to record

56. See Benderoff, *supra* note 5; Hansell, *supra* note 5; FOXNews.com, *supra* note 5.

57. See U.S. COPYRIGHT OFFICE, CIRCULAR 92: COPYRIGHT LAW OF THE UNITED STATES AND RELATED LAWS CONTAINED IN TITLE 17 OF THE UNITED STATES CODE (2007), available at <http://www.copyright.gov/title17/circ92.pdf>.

58. See, e.g., *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984).

59. *Id.*

60. See *id.* at 417.

61. See *id.* at 456.

broadcast television programs for later viewing constituted fair use, which was a complete defense to a claim of copyright infringement.⁶² The Court argued that the law must “strike a balance between a copyright holder’s legitimate demand for effective—not merely symbolic—protection of the statutory monopoly, and the rights of others freely to engage in substantially unrelated areas of commerce.”⁶³ Accordingly, even if a device can be used for copyright infringement, courts will not hold the device’s manufacturers liable for copyright infringement if that device has substantial non-infringing uses.

Justice Blackmun noted in his dissent that, “in the absence of a congressional solution, courts cannot avoid difficult problems by refusing to apply the law. We must ‘take the Copyright Act . . . as we find it’”⁶⁴ At the time of the *Sony* case, there was not yet any legislation, such as the Audio Home Recording Act (AHRA) or the DMCA, specifically regulating new technologies.⁶⁵ When faced with issues involving new technologies, the Court simply applied long established principles of copyright law.⁶⁶

In *Sony*, the Court balanced the interests of consumers against the interests of copyright holders so that all parties benefited from the decision. Consumers enjoyed the benefits of taping television programs for later viewing.⁶⁷ After *Sony*, copyright holders, including the movie industry, profited when consumer spending on videocassettes reached \$4.8 billion, while the domestic box office totaled only \$3.8 billion a year.⁶⁸ Additionally, many movie theater owners believed that the advent of the VCR had a positive effect on movie theater attendance.⁶⁹ Ultimately, both consumers and the entertainment industries benefited in the wake of *Sony* because the Court let technological innovation flourish. Nevertheless, the Court narrowed *Sony*’s holding nearly twenty years later when the emergence of radically new technologies threatened the applicability of copyright law and the holding of *Sony*.

62. *See id.* at 454–56.

63. *Id.* at 442.

64. *Sony Corp.*, 464 U.S. at 500 (Blackmun, J., dissenting).

65. *Compare* 17 U.S.C. § 1201 (1998) with 17 U.S.C. §§ 1001–02 (1992).

66. *See Sony Corp.*, 464 U.S. 417.

67. *See Antipiracy Feature Would Harm Booming VCR Sales, Retailers Warn*, DISCOUNT STORE NEWS, Oct. 27, 1986, http://findarticles.com/p/articles/mi_m3092/is_v25/ai_4512838/.

68. *See id.*

69. *See id.*

B. *The Court's Most Recent Response to New Technology: Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd*

The Court limited the scope of *Sony* in *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.* by narrowing *Sony's* "substantial non-infringing use" defense.⁷⁰ In *Grokster*, the defendant company produced and distributed peer-to-peer (P2P) software online, which allowed users to share music files.⁷¹ Many of the songs that users transferred to each other were protected by copyright.⁷² *Grokster* did not generate revenue from the users themselves, but did profit from the streaming advertisements in its program.⁷³ Again, the Court faced the dilemma of balancing the copyright holders' interests against the public interest in the face of new technology.⁷⁴ The Court held that a company that encourages and profits from the direct copyright infringement of third parties can be held contributorily liable for copyright infringement by those third parties.⁷⁵

Though the Court unanimously held that *Grokster* could be liable,⁷⁶ the Justices differed in their reasoning. Justice Ginsburg found, in a concurring opinion, that *Grokster* differed "markedly" from *Sony* because there was an insufficient showing of substantial non-infringing uses, suggesting that *Grokster* could be held liable without needing to address the issue of secondary liability.⁷⁷ Justice Breyer concurred, finding that "a strong demonstrated need for modifying *Sony* . . . has not yet been shown."⁷⁸ Critics of *Grokster's* fractured opinion argue that the Court's ruling creates ambiguities as to when a defendant could be held liable for inducing copyright infringement.⁷⁹

However, the Court's use of narrow language⁸⁰ suggests that its holding applies to P2P software or substantially similar technology. The *Grokster* Court focused on the defendants' intent, claiming that the "inducement rule . . . premises liability on purposeful, culpable expression

70. See Jill David, Note, *Does Grokster Create a New Cause of Action that Could Implicate the Apple TV*, 17 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1197, 1230-31 (2007).

71. See *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 919 (2005).

72. See *id.* at 920-21.

73. See *id.* at 926.

74. See *id.* at 928.

75. See *id.* at 919, 941.

76. See *id.* at 941, 948, 949.

77. *Grokster*, 545 U.S. at 944.

78. *Id.* at 965.

79. See, e.g., Kent Schoen, *Metro-Goldwyn-Mayer v. Grokster: Unpredictability in Digital Copyright Law*, 5 NW. J. TECH. & INTELL. PROP. 156, 156 (2006).

80. See *Grokster*, 545 U.S. at 919.

and conduct, and thus does nothing to compromise legitimate commerce or discourage innovation having a lawful promise.”⁸¹ *Sony* is distinguishable because the defendants did not intentionally induce copyright infringement and the technology was markedly different than the technology at issue in *Grokster*.⁸²

For example, one can physically trace and restrict VCRs because they are pieces of hardware, unlike *Grokster*’s P2P software.⁸³ Copyright infringement using a VCR is only possible on one recorder, for one program, on one videocassette at a time.⁸⁴ *Grokster*, on the other hand, allowed users to both upload and download files from multiple people simultaneously and quickly.⁸⁵

Using the theory of secondary liability to hold companies liable for the actions of third parties, the *Grokster* Court looked at both the nature and the producer of the technology.⁸⁶ Unlike *Grokster*, *Sony* is a large, well-known, multinational producer of electronic goods.⁸⁷ A company like *Sony* would have little incentive to act illegally by intentionally promoting copyright infringement because, at the time of the *Sony* decision, there was a large and profitable market for videocassettes.⁸⁸ Conversely, the overwhelming source of *Grokster*’s revenue came from the sale of advertising space viewed by consumers while using *Grokster*’s software to illegally transfer copyrighted files.⁸⁹

Due to the uncertain impact on copyright infringement of new and rising technologies like *Grokster*’s P2P software, the Court needed to distinguish lawful, innovative technology from harmful, infringing technology.⁹⁰ Viewed from this perspective, the Court’s secondary liability doctrine, which was founded on the theory of intentional inducement of infringement, gave lower courts the flexibility to punish companies creating technology solely to profit from copyright infringement, while still protecting companies’ production of new

81. *Id.* at 937.

82. *See id.* at 933–34.

83. *See* Brief for the Washington Legal Foundation as Amici Curiae in Support of Petitioners at 7, *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd.*, 545 U.S. 913 (2005), No. 04-480, available at <http://www.copyright.gov/docs/mgm/Washington-Legal-brf.pdf>.

84. *See id.*

85. *See id.*

86. *See Grokster*, 545 U.S. at 936–37.

87. *See* Sony, Corporate Fact Sheet, <http://www.sony.com/SCA/corporate.shtml> (last visited July 14, 2008).

88. *See Grokster*, 545 U.S. at 931.

89. *See id.* at 925.

90. *See id.* at 936–37.

technological innovations.⁹¹

C. The Court's Response to New Technology using the DMCA, and How the DMCA Constrains Courts

The Court's main focus in both *Sony* and *Grokster* was on *how* the new technology was used by consumers.⁹² Embedded in the Court's analysis of the use of new technology is an intrinsic and overarching question of intention: Is the way that consumers use the new technology undermining further technological innovation by granting companies a monopoly over that technology?⁹³ With the introduction of the DMCA, courts can no longer balance these interests as effectively and must instead focus on technological means. A court must now ask whether the DRM scheme is being circumvented to pirate content.⁹⁴ As Justice Breyer said in his concurring opinion in *Grokster*:

Judges have no specialized technical ability to answer questions about present or future technological feasibility or commercial viability where technology professionals, engineers, and venture capitalists themselves may radically disagree and where answers may differ depending upon whether one focuses upon the time of product development or the time of distribution.⁹⁵

Accordingly, DRM is an example of technology for which "[j]udges have no specialized technical ability."⁹⁶

Copyright holders can use DRM legitimately to prevent access to copyrighted works, but they can also abuse DRM in an anti-competitive way to prevent interoperability.⁹⁷ In cases where new technology and copyright infringement collide, courts should focus on whether copyright holders' rights are being undermined, and not whether a DRM scheme has been circumvented. Unfortunately, the enactment of § 1201 of the DMCA prevents courts from taking into account the evolving nature of technology, as the Supreme Court was able to do in *Sony* and *Grokster*.⁹⁸ As a consequence, copyright law, which was originally intended to create a limited monopoly designed to promote innovation,⁹⁹ is instead used to

91. *See id.*

92. Compare *id. with Sony Corp.*, 464 U.S. at 417.

93. *See Grokster*, 545 U.S. 913.

94. *See* 17 U.S.C. § 1201 (2000).

95. *Grokster*, 545 U.S. at 958 (Breyer, J., concurring).

96. *Id.*

97. *See* Lee, *supra* note 8.

98. *See id.* at 2.

99. *See Grokster*, 545 U.S. at 943.

suppress consumer choice and innovation by competing companies. *Lexmark International, Inc. v. Static Control Components, Inc.* and *Chamberlain Group, Inc. v. Skylink Technology* are two recent examples of companies attempting this kind of suppression.¹⁰⁰

D. Lexmark International, Inc. v. Static Control Components, Inc.

Instead of battling piracy, opportunistic companies misuse DRM to advance their interests.¹⁰¹ The result has been an increase in “private control over content” through legally protected anti-circumvention technologies.¹⁰² Companies can use the DMCA’s anti-circumvention provision to provide an extra-legal layer of protection to their use of DRM.¹⁰³

In *Lexmark International, Inc. v. Static Control Components, Inc.*, printer manufacturer Lexmark sought to enjoin Static Control Components (SCC), a manufacturer of low-cost replacement toner cartridges, from producing cartridges for Lexmark printers.¹⁰⁴ Lexmark’s toner cartridges contained a microcontroller that performed a “secret handshake” with the printer, preventing the printer from working with non-Lexmark cartridges.¹⁰⁵ SCC’s cartridges contained a “SMARTEK” chip that replaced the Lexmark chip and allowed the Lexmark printer to work with their toner cartridges.¹⁰⁶

Lexmark claimed that the SMARTEK chip violated the anti-circumvention provision of the DMCA.¹⁰⁷ Rejecting Lexmark’s argument, the court held that the “handshake” was not an access-control security device.¹⁰⁸ The court reasoned that anyone who owned a Lexmark printer could read the authentication code from the printer because it was easily visible.¹⁰⁹ Thus, because the authentication was not a security device, SCC could not be held in violation of the DMCA’s anti-circumvention provision.¹¹⁰ The court emphasized that Congress did not create the

100. *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522 (6th Cir. 2004); *Chamberlain Group, Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178 (Fed. Cir. 2004).

101. See Lee *supra* note 8, at 15.

102. See Matt Jackson, *Using Technology to Circumvent the Law: The DMCA’s Push to Privatize Copyright*, 23 HASTINGS COMM. & ENT. L.J. 607, 610 (2001).

103. See *id.* at 644.

104. See *Lexmark Int’l*, 387 F.3d at 529.

105. *Id.* at 530.

106. *Id.*

107. See *id.* at 531.

108. See *id.* at 546–47.

109. See *id.*

110. *Lexmark Int’l*, 387 F.3d at 547.

DMCA's anti-circumvention provision to impose "liability for the circumvention of technological measures designed to prevent consumers from using consumer goods while leaving the copyrightable content of a work unprotected."¹¹¹

The concurring opinion by Judge Merritt went even further in denouncing this application of the DMCA by stating that the court's "holding should not be limited to the narrow facts [of this case]."¹¹² He explained that "[w]e should make clear that in the future companies like Lexmark cannot use the DMCA in conjunction with copyright law to create monopolies of manufactured goods for themselves."¹¹³ However, the mere fact that liability and the threat of litigation exists under the DMCA's anti-circumvention provision is enough to grant companies the opportunity to use the DMCA in just this way. While Judge Merritt understood the source of the problem, the majority's holding is too narrow to adequately address it. Had Lexmark hidden the authentication code, they could have claimed that it was a "security device," and that SCC was circumventing Lexmark's legitimate use of DRM protections under the DMCA.¹¹⁴

Lexmark's ultimate concern was a loss in profits given the cheaper cartridge alternatives offered by competitors.¹¹⁵ Printer companies typically under-price their printers because they expect to make up the difference by selling their ink cartridges at a high margin.¹¹⁶ By offering low-cost ink cartridges, SCC posted a threat to Lexmark's business model.¹¹⁷ Accordingly, Lexmark used the DMCA's anti-circumvention provision, not to protect its copyright or to prevent piracy, but rather to maintain its high profit margins by preventing interoperability with competing toner cartridges.¹¹⁸

E. Chamberlain Group, Inc. v. Skylink Technology

Although the court ruled in favor of SCC, its narrow holding did not clearly limit the use of the DMCA to prevent inoperability.¹¹⁹ Similarly, in

111. *Id.* at 549.

112. *Id.* at 551 (Merritt, J., concurring).

113. *Id.*

114. *See id.* at 547.

115. *See* David Bogoslaw, *Lexmark Falls as Profit Picture Fades*, BUSINESSWEEK, July 9, 2007, http://www.businessweek.com/investor/content/jul2007/pi2007079_192036.htm.

116. *See* William Trent, *Lexmark and HP's Business Model is Increasingly Unsustainable*, SEEKING ALPHA, May 10, 2006, <http://seekingalpha.com/article/10372-lexmark-s-and-hp-s-printer-business-model-is-increasingly-unsustainable-lxk-hpq/>.

117. *See id.*

118. *See generally* Bogoslaw, *supra* note 115.

119. *See Lexmark Int'l*, 387 F.3d at 551.

Chamberlain Group, Inc. v. Skylink Technology, the court held there was no liability under the DMCA,¹²⁰ but left the DMCA intact and ripe for further abuse. Chamberlain, the manufacturer of garage door openers and transmitters, sued Skylink, a rival manufacturer, for creating a universal transmitter that worked with Chamberlain's garage door openers.¹²¹ Chamberlain had developed an opener with a copyrighted "rolling code" program that constantly changed the garage transmitter signal.¹²² Skylink sold a universal transmitter that could bypass Chamberlain's rolling code protection and operate Chamberlain's garage door devices.¹²³

To prevent Skylink from selling its universal transmitter, Chamberlain filed a lawsuit against Skylink, claiming the universal transmitter was a circumvention device.¹²⁴ The court, however, rejected Chamberlain's claim, emphasizing that "the DMCA does not create a new property right for copyright owners."¹²⁵ In doing so, the court explained that the DMCA does not "divest the public of the property rights that the Copyright Act has long granted to the public."¹²⁶ Furthermore, the court stressed that "the DMCA emphatically *did not* 'fundamentally alter' the legal landscape governing the reasonable expectations of consumers or competitors."¹²⁷ Thus, the court seems to admonish against such anti-competitive use of the DMCA's anti-circumvention provision.

However, the court missed its opportunity to analyze the consequences of enforcing DRM schemes that essentially deny interoperability. First, the court found that Chamberlain did not prove that its software copyright had been infringed,¹²⁸ a finding that brings into question the applicability of the DMCA to the case altogether. Second, Chamberlain placed no limitations on how its customers could use its products or what type of replacement products they could buy.¹²⁹ Accordingly, the court found that "[t]he Copyright Act authorized Chamberlain's customers to use the copy of Chamberlain's copyrighted software . . . that they purchased . . . therefore [making them] immune from § 1201(a)(1) circumvention liability."¹³⁰ Though the court used some

120. See *Chamberlain Group*, 381 F.3d at 1204.

121. See *id.* at 1183.

122. See *id.*

123. See *id.*

124. See *id.* at 1185.

125. *Id.* at 1204.

126. *Chamberlain Group*, 381 F.3d at 1204.

127. *Id.* at 1194.

128. See *id.* at 1203–04.

129. See *id.*

130. See *id.* at 1204.

sweeping language to condemn misuse of the DMCA, it effectively left the scope of the anti-circumvention provision untouched and its potential for misuse intact. The outcome of this case may have been different had Chamberlain met its evidentiary burden, established that use of its software was unauthorized, and that only Chamberlain openers could be used with Chamberlain transmitters.

F. Consequences of DMCA Protection of DRM

Both *Lexmark* and *Chamberlain* represent cases in which the DMCA's anti-circumvention provision was unsuccessfully invoked by companies to curtail genuine competition.¹³¹ Neither case involved piracy or illegal transfer of digital content over the Internet, or United States obligations under World Intellectual Property Organization treaties.¹³² Instead, they both represent attempts by corporations to maintain higher profit margins through legally protected DRM schemes designed to prevent interoperability between similar products.¹³³ Both courts denounced such use of the DMCA and tacitly acknowledged that the DMCA gave extra-legal protection to copyright holders.¹³⁴ Both opinions seem like victories for those who are concerned with the consequence of legally protected DRM schemes. However, these cases essentially left the DMCA fully open to such use.¹³⁵ The *Lexmark* court suggested that if Lexmark had hidden its authentication code, it could have claimed it as a security device that "control[ed] access" to its copyrighted material.¹³⁶ Likewise, if Chamberlain had printed "not to be used with non-Chamberlain" devices on its boxes, the court would likely have ruled in its favor.¹³⁷

"Paracopyright" is a term used by commentators to describe the extra layer of protection provided by the DMCA's anti-circumvention provision for companies that employ DRM schemes.¹³⁸ Paracopyright rules protect

131. See *Lexmark Int'l*, 387 F.3d at 551; see also *Chamberlain Group*, 381 F.3d at 1204.

132. See generally *Lexmark Int'l*, 387 F.3d at 549; *Chamberlain Group*, 381 F.3d at 1194–95.

133. See generally Katie Dean, *Lexmark Loss Good for Consumers*, WIRED, Aug. 27, 2004, <http://www.wired.com/techbiz/media/news/2004/10/65494>.

134. See *Lexmark Int'l*, 387 F.3d at 549; *Chamberlain Group*, 381 F.3d at 1198–99.

135. See *Lexmark Int'l*, 387 F.3d at 547; *Chamberlain Group*, 381 F.3d at 1204.

136. See *Lexmark Int'l*, 387 F.3d at 547.

137. See *Chamberlain Group*, 381 F.3d at 1204 (explaining that Chamberlain did not meet its burden of proof in showing a lack of authorization).

138. See Jack M. Balkin, *Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society*, 79 N.Y.U. L. REV. 1, 18 (2004); see also Stacy F. McDonald, Comment, *Copyright for Sale: How the Commodification of Intellectual Property Distorts the Social Bargain Implicit in the Copyright Clause*, 50 HOW. L.J. 541, 561 (2007).

the security technologies that companies create to protect their underlying copyrights.¹³⁹ These security technologies can then protect the underlying works in ways that traditional copyright law does not. Thus, in addition to the bundle of rights that copyright holders have always enjoyed under traditional copyright statutes, the DMCA expands copyright protections.¹⁴⁰ By imposing liability for unauthorized circumvention of protection technologies, the DMCA creates entirely new rights and remedies pertaining to copyright infringement. The anti-circumvention provision of the DMCA represents a significant change in American copyright tradition¹⁴¹ because it shifts the balance of competing interests away from the public to the copyright holder.¹⁴² As a result, the DMCA has enabled companies—for instance, online music retailers like Apple’s iTunes Music Store—to use DRM technology for illegitimate purposes.

IV. THE DMCA’S LEGAL PROTECTION OF DRM CREATES AN OPENING FOR COMPANIES TO MISUSE DRM IN ANTI-COMPETITIVE WAYS

The increased power wielded by copyright holders because of the Digital Millennium Copyright Act’s (DMCA) protection of Digital Rights Management (DRM) has a significant, unintended consequence. Namely, copyright holders employing DRM protections can use the technology anti-competitively by suppressing interoperability.¹⁴³ Even though *Lexmark* and *Chamberlain* represent instances in which courts held in favor of the defendants,¹⁴⁴ the DMCA continues to be misused to stifle competition. Online music stores, including Apple’s iTunes Music Store (iTMS), sell music encumbered with different forms of DRM protection that have the common effect of restricting music playback to specific portable music players, while claiming the feature is only to prevent piracy.¹⁴⁵ Since iTMS controls an overwhelming portion of online music sales¹⁴⁶ and Apple

139. See Balkin, *supra* note 138, at 18; see also McDonald, *supra* note 138, at 560–61.

140. See McDonald, *supra* note 138, at 559–61.

141. See Fred von Lohmann, *Measuring the Digital Millennium Copyright Act Against the Darknet: Implications for the Regulation of Technological Protection Measures*, 24 LOY. L.A. ENT. L. REV. 635, 635 (2004) [hereinafter von Lohmann, *Measuring*].

142. See *id.*

143. See *id.* at 648.

144. See generally *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 551 (6th Cir. 2004); *Chamberlain Group, Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1204 (D.C. Cir. 2004).

145. See *The Customer is Always Wrong: A User’s Guide to DRM in Online Music*, ELECTRONIC FRONTIER FOUND., <http://www EFF.ORG/PAGES/CUSTOMER-ALWAYS-WRONG-USERS-GUIDE-DRM-ONLINE-MUSIC> (last visited Mar. 12, 2008).

146. See Nicola F. Sharpe & Olufunmilayo B. Arewa, *Is Apple Playing Fair? Navigating*

sells the world's most popular music player,¹⁴⁷ its practice of restricting interoperability has come under increased scrutiny.¹⁴⁸

The lack of interoperability with non-Apple devices through Apple's use of FairPlay DRM has led to claims that Apple uses DRM protection as an anti-competitive restraint on consumer choice by preventing interoperability between iTunes-purchased music and non-Apple digital music players.¹⁴⁹ Not surprisingly, Apple is currently facing an antitrust lawsuit concerning this very issue in the form of two consolidated class action lawsuits.¹⁵⁰ Apple is also facing the possibility of new regulations in several European jurisdictions in response to iTunes' lack of compatibility with other music devices.¹⁵¹ Apple's iTunes represents the best example of the anti-competitive nature of DRM's use in online music stores.

A. *The iTunes Music Store*

Apple's iTunes is the undisputed champion of online music retail, having sold over three billion music tracks since its inception in April of 2003.¹⁵² Currently over eighty percent of all music sold online is sold by iTunes.¹⁵³ In March 2008, iTunes surpassed Wal-Mart to become the number one music retailer in the United States.¹⁵⁴

When Apple unveiled iTunes, it sold individual music tracks for ninety-nine cents and most complete albums for \$9.99, a price structure it had negotiated with the record labels.¹⁵⁵ In return, Apple was required to

the iPod Fairplay DRM Controversy, 5 NW. J. TECH. & INTELL. PROP. 332, 333 (2007).

147. See May Wong, *Apple Retail Stores Revamp for the Holidays*, ASSOCIATED PRESS, Nov. 24, 2007, available at http://www.boston.com/business/articles/2007/11/24/apple_retail_stores_revamp_for_holidays/.

148. See Thomas Crampton, *For Apple, Europe Becoming a Tougher Customer*, INT'L HERALD TRIB., Aug. 2, 2006, at 8, available at <http://iht.com/articles/2006/07/16/yourmoney/music17.php>.

149. See Sharpe & Arewa, *supra* note 146, at 336.

150. See Apple Inc., Quarterly Report (Form 10-Q) at 38, (May 10, 2007), available at http://sec.gov/Archives/edgar/data/320193/000110465907037745/a07-13266_110q.htm

151. See Crampton, *supra* note 146.

152. See Press Release, Apple Inc., iTunes Store Tops Three Billion Songs (July 31, 2007), available at <http://www.apple.com/pr/library/2007/07/31itunes.html>; see also Press Release, Apple Inc., Apple Launches the iTunes Music Store (Apr. 28, 2003), available at <http://www.apple.com/pr/library/2003/apr/28musicstore.html>.

153. See Richard Siklos, *Universal Music's Rebellion Against Apple Portends Growing Tension between the Music Industry and the iPod*, INT'L HERALD TRIB., July 8, 2007, at 43, available at <http://www.iht.com/articles/2007/07/08/sports/frenzy09.php>.

154. See Press Release, Apple Inc., iTunes Store Top Music Retailer in the US (Apr. 2 2008), available at <http://www.apple.com/pr/library/2008/04/03itunes.html>.

155. See Laurie J. Flynn, *Apple Offers Music Downloads with Unique Pricing*, N.Y. TIMES,

sell music with FairPlay DRM.¹⁵⁶ With FairPlay, purchased songs cannot be played on more than five computers and cannot be copied onto compact discs more than seven times.¹⁵⁷ FairPlay DRM also prevents iTMS-purchased songs from playing on all portable music devices, except for Apple's iPod.¹⁵⁸ Furthermore, DRM-protected music purchased from competing online music stores cannot be played back on either iTunes music software or on Apple's iPod.¹⁵⁹

Thus, people who have purchased songs from iTMS are incentivized to purchase an Apple iPod digital music player, rather than one made by another manufacturer, in order to have the option of listening to their music portably in addition to listening on their computer. Once consumers have purchased music from iTMS, there is little incentive to purchase other products or services that may be incompatible with iTMS. As a consequence, consumers can become tied to a line of products and services that may be more expensive and have fewer features than competing portable music players.¹⁶⁰ More importantly, consumers' freedom to choose alternative products, even inferior ones, is diminished.

Lack of interoperability also affects other online music retailers.¹⁶¹ For instance, iTMS competitors have a hard time attracting subscribers and downloaders because their DRM-protected music is incompatible with Apple's iPod music player.¹⁶² Interestingly, Apple CEO Steve Jobs responded to these accusations of anti-competitive behavior by claiming Apple has no choice but to employ the restrictive FairPlay DRM.¹⁶³ In a comment posted on the Apple website, Jobs claimed he would wholeheartedly embrace music unencumbered by any DRM protections on iTMS, but the major record companies would not allow it.¹⁶⁴ Apple was and is contractually obligated to sell its music with FairPlay DRM

Apr. 29, 2003, at C2; Steve Jobs, CEO, Apple, Inc., Thoughts on Music, Feb. 6, 2007, <http://www.apple.com/hotnews/thoughtsonmusic/>.

156. See Jobs, *supra* note 155.

157. See Apple, Authorization FAQ, <http://www.apple.com/support/itunes/store/authorization/> (last visited Mar. 8, 2008).

158. See Benderoff, *supra* note 5.

159. See Jim Welte, *Yahoo Music Chief Jabs at DRM*, Feb. 24, 2006, <http://www.mp3.com/news/stories/3418.html>.

160. See Eric Benderoff, *Rivals to iPods are Music to Your Ears*, CHI. TRIB., Nov. 26, 2007, at C1; see also Donald Bell, *Top Flash Memory Players*, <http://reviews.cnet.com/best-flash-memory-mp3-players/> (last visited Mar. 8, 2008).

161. See Welte, *supra* note 159.

162. See *id.*

163. See Jobs, *supra* note 155.

164. See *id.*

protections.¹⁶⁵ Thus, Jobs implies that Apple does not intend to cause a lack of interoperability through Fairplay DRM, but it is an inevitable byproduct of its obligations to record companies.¹⁶⁶

Jobs went on to suggest that licensing Apple's FairPlay DRM technology to other companies would not be a feasible alternative.¹⁶⁷ Disclosing Apple's FairPlay "secrets" to outside companies would "inevitably" lead to Internet leaks of its FairPlay DRM software.¹⁶⁸ In turn, such disclosure would compromise Apple's contractual commitment to record labels because Apple could no longer quickly respond to breaches in FairPlay DRM security.¹⁶⁹ He argued that Apple could not guarantee FairPlay's effectiveness once the software is in the hands of third parties—licensing their DRM for third-party use would defeat FairPlay's ability to protect copyright holders.¹⁷⁰ Essentially, Jobs claimed his hands were tied because record companies demanded the use of FairPlay DRM and because licensing FairPlay would compromise the DRM's effectiveness. Perhaps Jobs' argument might seem more credible if Apple had not exhibited the deft ability to effectively control its software "secrets" so many times before.¹⁷¹

B. RealNetworks Circumvents FairPlay and Apple Responds

Before Jobs' call to remove DRM protections from music, RealNetworks (Real), a competitor, unlocked FairPlay's software "secrets" without Apple's consent.¹⁷² In July 2004, Real introduced its Harmony Technology, which allowed songs purchased from Real's Rhapsody online music store to be played on Apple's iPod.¹⁷³ Harmony Technology accomplished this by converting music purchased from its store into a

165. *See id.*

166. *See id.*

167. *See id.*

168. *See id.*

169. *See* Jobs, *supra* note 155.

170. *See id.*

171. *See generally* Jefferson Graham, *Apple Lashes Real Networks' Music Move*, USA TODAY, Aug. 30, 2004, at 1B, available at http://www.usatoday.com/tech/news/2004-07-29-apple_x.htm (quoting an Apple press release that states, "When we update our iPod software from time to time it is highly likely that Real's Harmony technology will cease to work [with iPods]").

172. *See* John Borland, *iPod Secrets Unlocked by RealNetworks*, July 26, 2004, <http://networks.silicon.com/webwatch/0,39024667,39122560,00.htm?r=1/>.

173. *See* Press Release, RealNetworks, RealNetworks Introduces Harmony, Enabling Consumers to Buy Digital Music That Plays on All Popular Devices (July 26, 2004), <http://www.realnetworks.com/company/press/releases/2004/harmony.html> [hereinafter *Real Press Release*].

FairPlay protected music file.¹⁷⁴ Real issued a press release at the time of Harmony's launch that quoted several representatives of major record labels praising the move and stated that Harmony Technology addressed the foremost problem facing the distribution of online digital content: the need for interoperability.¹⁷⁵

Real even launched a promotional campaign entitled "Freedom of Music Choice," which proclaimed that "[c]onsumers are getting a raw deal with the status quo in digital music, which limits healthy, open competition that drives down prices and encourages innovation."¹⁷⁶ However, the campaign failed to win the support of consumers, as evidenced by the overwhelming amount of negative comments users left on the "Freedom of Music" website.¹⁷⁷ Real's perceived hypocrisy was chief among the complaints left on the website.¹⁷⁸ The DRM that encumbered Real's Rhapsody music files not only prevented compatibility with Apple's devices,¹⁷⁹ the very problem Real had purported to fix with Apple's iTMS music files, but Real's DRM protections were more restrictive than Apple's FairPlay DRM.¹⁸⁰ Additionally, Real's end-user licensing agreement prohibited reverse engineering of its DRM¹⁸¹—the same technique that Real used to breach Apple's DRM protections.¹⁸²

Apple responded to Real's implementation of Harmony by saying it was "stunned that [Real had] adopted the tactics and ethics of a hacker to break into the iPod."¹⁸³ Unsurprisingly, Apple stated it would examine the possibility of invoking the DMCA against Real.¹⁸⁴ This prompted Real, in an August 2005 Securities and Exchange Commission filing, to disclose to its investors that "[i]f Apple decides to commence litigation against us in order to prevent interoperation with its products, we may be forced to spend money defending their legal challenge, which could harm our

174. *See id.*

175. *See id.*

176. *See* Fred von Lohmann, *Hypocrite, Thy Name is Real*, ELECTRONIC FRONTIER FOUND., Aug. 18, 2004 <http://www.eff.org/deeplinks/2004/08/hypocrite-thy-name-real/>.

177. *See* Jo Best, *Real v. Apple Music War: iPod Freedom Petition Backfires*, SILICON.COM, Aug. 18, 2004, <http://hardware.silicon.com/storage/0,39024649,39123271,00.htm>.

178. *See id.*

179. *See id.*; *see also* von Lohmann, *supra* note 176.

180. *See The Customer is Always Wrong*, *supra* note 145.

181. *See* RealNetworks, Distribution License for RealPlayer Basic and/or RealPlayer Basic with RealJukebox Basic, <http://www.real.com/licensing/agreement.html> (last visited Mar. 8, 2008).

182. *See* Best, *supra* note 177.

183. *See* Graham, *supra* note 171.

184. *See id.*

operating results.”¹⁸⁵ Real also acknowledged “the risk that Apple will continue to modify its technology to ‘break’ the interoperability that Harmony provides to consumers” and that if “Apple chooses to continue this course of action, Harmony may no longer work with Apple’s products . . . or we may be forced to incur additional development costs to refine Harmony to make it interoperate again.”¹⁸⁶ Though Real believed its product was legal, it admitted that it could not guarantee that it would withstand judicial scrutiny.¹⁸⁷ Thus, Real faced both legal and technological obstacles. In the end, Real abandoned Harmony Technology software due to these obstacles, particularly the threat of litigation.¹⁸⁸ Moreover, Real seemed convinced that Apple’s ability to continually update its FairPlay DRM would make Harmony’s sustainability difficult.¹⁸⁹ Apple gave credence to Real’s fears in a statement it issued warning customers that Harmony-converted songs would no longer work with Apple’s iPods.¹⁹⁰ Though Apple’s software “secrets” could be circumvented,¹⁹¹ Apple maintained an advantage because it has the technological ability to update its software, as well as the DMCA to deter its competitors.

Real’s fear of litigation may have arisen from firsthand experience with the DMCA. Real was among the first to invoke the statute to protect its use of DRM.¹⁹² When software manufacturer Streambox created the Streambox VCR, a device that gave users the ability to copy Real’s Realmedia audio and video files, Real sued claiming a violation of § 1201 of the DMCA.¹⁹³ The court imposed a preliminary injunction¹⁹⁴ and Streambox eventually settled, agreeing to remove their software’s recording ability and to pay Real damages.¹⁹⁵

185. AppleInsider.com, Real Admits Risk of Apple Lawsuit, Aug. 10, 2005, http://www.appleinsider.com/articles/05/08/10/real_admits_risk_of_apple_lawsuit.html.

186. *Id.*

187. *See id.*

188. *See* Wikipedia, FairPlay, http://en.wikipedia.org/wiki/FairPlay_%28DRM%29 (last visited Mar. 12, 2008).

189. AppleInsider.com, *supra* note 185.

190. *See* Graham, *supra* note 171.

191. *See* Jobs, *supra* note 155.

192. *See* von Lohmann, *supra* note 176.

193. *See* RealNetworks, Inc. v. Streambox, Inc., No. 2:99CV02070, 2000 WL 127311, at *1 (W.D. Wash. Jan. 18, 2000).

194. *See id.*

195. Monica Soto, *Deal Protects RealNetworks-Generated Files*, SEATTLE TIMES, Sept. 9, 2000, at B1, available at <http://community.seattletimes.nwsourc.com/archive/?date=20000909&slug=TTQP1HF7J>.

C. The “Real” Reason Music Stores Use DRM

Apple, Real, and even major record label officers admit that the lack of interoperability hurts customers and hurts the music industry itself.¹⁹⁶ Nevertheless, they all use the DMCA in an anti-competitive manner to protect their business interests.¹⁹⁷ Apple claimed that it could not license FairPlay because of the risks posed by hackers.¹⁹⁸ However, illegal programs that circumvent every major DRM scheme, including Apple’s own FairPlay, are already available online.¹⁹⁹ Moreover, when Apple’s FairPlay did end up in the hands of rival Real, both companies implicitly acknowledged that Apple’s ability to provide constant software updates made Real’s Harmony program unfeasible.²⁰⁰ Jobs’ argument that licensing FairPlay DRM to third parties would inevitably lead to software leaks is disingenuous. FairPlay has *already* been leaked with little damage to Apple who has shown a rapid ability to respond to leaks.²⁰¹

Real’s actions are even more hypocritical. While the company touted a desire to free “consumers from the limitation of being locked into a specific portable device,”²⁰² it seemed to want to do so only if that device was an Apple iPod.²⁰³

Apart from Jobs’ argument against licensing FairPlay DRM to third parties, concerns about piracy are strikingly absent from the DMCA lawsuits.²⁰⁴ Apple and Real are using the technological might of their DRM protections and the legal might of the DMCA to lock out their competitors, but not to thwart piracy.²⁰⁵ When a piece of legislation, originally intended to combat piracy, is used by rival companies to leverage control over their respective markets, it raises the question of whether that piece of legislation is really serving its purpose. The most obvious answer is that the legislation—as it stands— does not accomplish what it was intended to accomplish.

196. See Paul R. La Monica, *Steve Jobs vs. The Music Industry*, CNNMONEY.COM, Feb. 7, 2007;

http://money.cnn.com/2007/02/07/commentary/mediabiz/index.htm?section=money_news_funny; see also *Real Press Release*, *supra* note 173.

197. See Lee, *supra* note 8.

198. See Jobs, *supra* note 155.

199. See Lee, *supra* note 8.

200. See Jobs, *supra* note 155.

201. See Jobs, *supra* note 155.

202. *Real Press Release*, *supra* note 173.

203. See generally von Lohmann, *supra* note 176.

204. See *id.*

205. See Graham, *supra* note 171.

V. DRM HAS LITTLE PRACTICAL EFFECT ON PREVENTING PIRACY BECAUSE IT PUNISHES LEGITIMATE CONSUMERS

The 1998 Digital Millennium Copyright Act's (DMCA) use of Digital Rights Management (DRM) protections simply does not do what it was intended to do: fight piracy. Moreover, DRM technology does nothing to prevent widespread illegal file-swapping over the Internet, which is one of the main sources of music piracy.²⁰⁶ Despite the music industry's efforts to shut down illegal peer-to-peer (P2P) networks, new methods of piracy continue to emerge.²⁰⁷ DRM protections cannot prevent this piracy.²⁰⁸ Instead, DRM protections inflict damage on public values and upset the delicate balance between the public interest and the interests of the copyright holders.²⁰⁹

A. *The New Generation of Internet Piracy: BitTorrent*

Perhaps the most infamous P2P file-sharing software was Napster.²¹⁰ Napster emerged in 1999 and at the peak of its popularity had twenty-six million users.²¹¹ Various music companies jointly sued Napster for contributory copyright infringement, and Napster eventually settled the case.²¹² After Napster, other file-sharing networks emerged, such as KaZaA, LimeWire, and iMesh.²¹³ Eventually, under the threat of litigation, these P2P networks were restructured as legal pay-for-download services or were simply shut down.²¹⁴ Though many popular P2P networks no longer exist—at least as illegal file-swapping sites—piracy is thriving now more than ever.²¹⁵ New ways of transferring digital content over the Internet have replaced the older generation of P2P technology.²¹⁶ Released in 2001, BitTorrent is the most popular of these new

206. See John Borland, *File Swapping Shifts Up A Gear*, CNETNEWS.COM, May 27, 2003, http://news.cnet.com/2100-1026_3-1009742.html.

207. See Welte, *supra* note 159.

208. See Jobs, *supra* note 155.

209. von Lohmann, *supra* note 141, at 636.

210. See Patrick Turner, *Digital Video Copyright Protection with File-Based Content*, 16 MEDIA L. & POL'Y 165, 173 (2007).

211. See *id.*

212. See *id.*

213. See Brian Garrity, *From Piracy to Profit?*, BILLBOARD, Oct. 7, 2006, available at 2006 WLNR 17817937 (detailing ongoing litigation issues with services such as LimeWire, iMesh and KaZaA).

214. See Mary Shedden, *Dancing Around the Law*, TAMPA TRIB., Jan. 1, 2007, at B1.

215. See Borland, *File Swapping*, *supra* note 206.

216. See *id.*

communication protocols.²¹⁷ BitTorrent is faster and more efficient at distributing content than previous P2P technologies.²¹⁸ It works by dividing digital files into small pieces and spreading them between different downloaders.²¹⁹ Unlike previous P2P methods that slowed the rate of transfer as total traffic increased, the speed of transfer between BitTorrent users increases as more people transfer files.²²⁰

BitTorrent represents between fifty to seventy-five percent of all P2P activity on the Internet.²²¹ By some estimates, BitTorrent constitutes between forty and fifty percent of total Internet traffic.²²² Although any type of digital content can be transferred using BitTorrent, music files are the most popular and the most downloaded files.²²³ As new pirating technologies have appeared, the amount of illegal file-sharing has dramatically increased.²²⁴

B. Despite Increases in Piracy, DRM Continues to Target the Wrong People

Despite the abundance of transfers taking place through illegal file-sharing networks, the music industry's use of DRM protections targets consumers who pay for legal downloads, thereby punishing innocent parties for the actions of illegal file sharers.²²⁵ The number of illegal P2P users has tripled in the last four years, increasing to nine million.²²⁶ Despite the Recording Industry Association of America's (RIAA) 26,000-plus²²⁷ lawsuits against individual file-sharers, the number of households

217. See Chris Nuttall, *Valley View: File Sharing Joins the Mainstream*, FIN. TIMES, Oct. 17, 2007; Jeremy Kirk, *Shutdown of eDonkey Servers May be Short-Lived*, PC WORLD, Sept. 21, 2007,

http://www.pcworld.com/article/137463/shutdown_of_edonkey_servers_may_be_shortlived.html

218. See Nuttall, *supra* note 217.

219. See How Does BitTorrent Work, <http://freelegaltorrents.blogspot.com/2007/04/how-does-bittorrent-work.html> (last visited Mar. 31, 2008).

220. See Nuttall, *supra* note 217.

221. See Kirk, *supra* note 217.

222. See Nuttall, *supra* note 217.

223. See Kirk, *supra* note 217.

224. See Jim Welte, *Woman Guilty in Landmark P2P Case*, MP3.COM, Oct. 5, 2007, <http://www.mp3.com/news/stories/10274.html> (noting burdensome restrictions on legally purchased content).

225. See TheWallStreetJournalOnline.com, "DRM" Protects Downloads, But Does it Stifle Innovation?, June 20, 2006, http://online.wsj.com/public/article/SB115047057428882434-IV_FEK_CJelMfjtdST8APRW&cZw_20060720.html.

226. See Welte, *supra* note 224 (citing findings by BigChampagne, a firm that monitors P2P use).

227. See Tom Spring, *RIAA Piracy Trail: Day One*, PC WORLD, <http://blogs.pcworld.com/staffblog/archives/005594.html> (Oct. 3, 2007, 07:38 PST).

that downloaded illegal P2P programs increased eight percent in 2006 alone.²²⁸ Illegally downloaded tracks in 2006 equaled five billion in the United States, nearly doubling the number from the previous year.²²⁹

In contrast, the number of legal downloads was only five hundred million last year.²³⁰ Even though music companies have expended tremendous time and resources combating piracy caused by P2P file-sharing, their efforts are yielding no lasting results.²³¹ Instead, their efforts have only served to make illegal downloads more appealing.²³² Why should consumers pay for legal music downloads with restrictions when downloading unencumbered music is free and easy?

Some executives in the entertainment industry have acknowledged that DRM protections do not prevent piracy, but such protections are necessary to “keep honest people honest” by reminding them not to pirate content.²³³ However, the results of a recent experiment by rock band Radiohead questions this sentiment.²³⁴ In October 2007, Radiohead made their latest album available only on the Internet.²³⁵ Consumers could go to their website and could pay any amount—including zero—to download the album.²³⁶ The majority of consumers paid retail price for the album,²³⁷ and the release week sales of the album exceeded the band’s previous release week sales.²³⁸ Interestingly, the number of pirated downloads of Radiohead’s album through BitTorrent exceeded 500,000 during the album’s first six days of release.²³⁹ Thus, even though the music was free, distribution of the music on illegal P2P networks still occurred, as

228. See Gross, *supra* note 10.

229. See *id.*; *Music Industry Wins Key Victory in Illegal U.S. Download Trial*, AGENCE FRANCE-PRESSE, Oct. 5, 2007, <http://afp.google.com/article/ALeqM5gLAoKFpytnYI3gaB4YbdeS-yu7iw>; see also Stan J. Liebowitz, *File Sharing: Creative Destruction or Just Plain Destruction*, 49 J.L. & ECON. 1, 7–8 (2006) (recognizing that earlier statistics from Webnoize, a company that tracked P2P usage, are no longer considered reliable; today, NPD P2P data is more widely accepted).

230. See Gross, *supra* note 10.

231. See *TheWallStreetJournalOnline.com*, *supra* note 225.

232. See Gross, *supra* note 10.

233. See *TheWallStreetJournalOnline.com*, *supra* note 225; see also BBCNews.com, *Digital Film: Industry Answers*, <http://news.bbc.co.uk/2/hi/entertainment/4691232.stm#7> (last visited Mar. 8, 2008).

234. See BBCNews.com, *Fans Crash Radiohead Album Site*, <http://news.bbc.co.uk/2/hi/entertainment/7024130.stm> (last visited Aug. 14, 2008).

235. See *id.*

236. See *id.*

237. See *id.*

238. See *Innovation in Rainbows*, ENT. MKT. LETTER, Nov. 11, 2007, at 4, available at 2007 WLNR 22538755.

239. See *id.*

thousands chose to pirate it.²⁴⁰

Consequently, Radiohead's experiment illustrates the obvious fact that honest people do not need a reminder to keep them honest. While some people will act honestly, and by extension legally, many will not. Thus, DRM-laden songs only serve to punish the honest by restricting their legitimately purchased music. If the music industry wishes to promote honesty, it should punish pirates, not legitimate music purchasers.

C. *The Pirate Bay*

Not only has piracy increased, but the most notorious piracy promoters are beyond the traditional reach of United States copyright law because they are based in foreign nations. There are various music files available across the Internet, and unlike older P2P software, BitTorrent does not provide a list of those files. Instead, users must find the "torrent" files on their own. A torrent tracker is a website that indexes the torrent files and centrally coordinates transfers between peers.²⁴¹ The Pirate Bay, based in Sweden, is the world's most popular torrent tracker²⁴² and receives an estimated 12,000 requests for content every second.²⁴³

The Pirate Bay represents another obstacle in fighting piracy because it lies outside of U.S. jurisdiction. At the Motion Picture Association of America's (MPAA) insistence, Swedish authorities raided The Pirate Bay's operations in 2006 and shut it down, but the site became operational again three days later.²⁴⁴ The incident actually elicited sympathy for the website's operators in Sweden,²⁴⁵ a country that views copyright infringement less critically than does the United States.²⁴⁶ Not only has The Pirate Bay eluded the entertainment industry's legal challenges, the website has actually expanded its operations by reviving previously shut down torrent trackers.²⁴⁷ Moreover, it is developing new P2P software that will make digital transfers untraceable.

240. *See id.*

241. *See* uTorrent.com, A Beginners Guide to BitTorrent, <http://www.utorrent.com/beginners-guide.php> (last visited Mar. 12, 2008).

242. *See* TorrentFreak.com, The Five Most Popular BitTorrent Trackers, Sept. 24, 2007, <http://torrentfreak.com/5-most-popular-bittorrent-trackers-070924/>.

243. *See* Tony Glover, *Nordic Pirates*, CNBC EUROPEAN BUSINESS, June 2007, <http://cnbceb.com/articles/2007/July/17/nordic-pirates.aspx>.

244. *See* David Sarno, *The Internet Sure Loves Its Outlaws*, L.A. TIMES, Apr. 29, 2007, at E8.

245. *See id.*

246. *See* Glover, *supra* note 243.

247. *See* Joes Vilches, *The Pirate Bay to Bring Back to OiNK?*, TECHSPOT, Oct. 26, 2007, <http://www.techspot.com/news/27638-the-pirate-bay-to-bring-back-oink.html>.

Piracy is a global challenge for the music and movie industries, and the new producers of P2P technology are both relentless and elusive. Given that illegal downloading is so widespread, the use of DRM will have no effect on piracy as a whole because legal downloads comprise an insignificant percentage of all downloads.

D. DRM Provides No Protection Against Piracy

On a very practical level, DRM provides no real protection against piracy because the restrictions are, oftentimes, very easy to circumvent. For example, no special software or knowledge of computer science is necessary to bypass Apple's FairPlay. A user can simply burn FairPlay-laden songs on a compact disc (CD) and import the songs from the CD back to the iTunes library, thus eliminating the DRM.²⁴⁸ Moreover, Apple's iTunes Music Store (iTMS) exclusive tracks are found on P2P minutes after appearing on iTMS, further demonstrating the ineffectiveness of FairPlay's DRM protection.²⁴⁹

Even if DRM was completely impervious to circumvention, Internet piracy would not be curbed because DRM-free digital music already exists in the form of a CD.²⁵⁰ In fact, CDs are the source of most of the shared music online because they can easily be ripped to a computer, encoded, and transferred to others through a P2P program.²⁵¹ It only takes one digital DRM-free track to leak on a P2P network and then proliferate into hundreds or even thousands of copies through peer transfer.²⁵²

VI. CONCLUSION

Digital Rights Management (DRM) does not prevent piracy or provide the music industry with any benefit. DRM punishes people who have downloaded their music legally by placing restrictions on the way they use their music. This incentivizes unlawful downloading through various illegal peer-to-peer (P2P) systems. Section 1201 of the Digital

248. See Roman Loyola, *Remove the FairPlay DRM from Your iTunes Songs*, MACLIFE.COM, June 18, 2007, http://www.maclife.com/article/remove_the_fairplay_drm_from_your_itunes_songs.

249. See Fred von Lohmann, *FairPlay: Another Anticompetitive Use of DRM*, ELECTRONIC FRONTIER FOUND., May 25, 2004, <http://www.eff.org/deeplinks/2004/05/fairplay-another-anticompetitive-use-drm>.

250. See Ken Fisher, *Universal to Track DRM-Free Music Online Via Watermarking*, ARS TECHNICA, Aug. 15, 2007, <http://arstechnica.com/news.ars/post/20070815-universal-to-track-drm-free-music-online-via-watermarking.html>.

251. See *id.*

252. See *id.*

Millennium Copyright Act (DMCA) complicates matters by protecting DRM schemes and preventing interoperability by implicitly creating a legal safeguard for closed technology platforms. When analyzing cases involving DRM protection schemes, courts must look to see if a DRM scheme has been circumvented instead of focusing on how DRM has been misused. Nevertheless, § 1201's narrow focus on circumvention creates room for companies to misuse DRM by claiming piracy prevention and copyright infringement as a pretext.

Apple's iTunes Music Store (iTMS) and iPod are the most evident examples of DRM's misuse. Apple acknowledges DRM is not effective in preventing piracy and even claims to support DRM-free music,²⁵³ but Apple's conduct towards RealNetworks belies its rhetoric.²⁵⁴ Apple's large share of both the online music sales market and the portable music device market leaves the music industry little flexibility in how it distributes music online.²⁵⁵ Apple will not allow variable pricing structures proposed by music labels, and music companies are beholden to Apple's sales terms because Apple controls an overwhelming share of legal online music downloads.²⁵⁶ So far, other online music retailers and portable music device players have not posed a credible threat to Apple's market dominance.²⁵⁷ Thus, if the music industry wants to break free from Apple's tight hold of online music sales and control pricing, it must offer music unencumbered by DRM protections.

However, the music industry should not fear music being distributed online without DRM protections. An early report indicates that major music label EMI is already selling DRM-free music at a much higher rate than music with DRM protections.²⁵⁸ Moreover, popular bands like Radiohead²⁵⁹ and online music stores like eMusic²⁶⁰ have successfully and

253. See Jobs, *supra* note 155.

254. See *supra* Part II.C.

255. See *Universal, the Biggest Label, May Not Re-Up with iTunes, Biggest Online Music Service*, ONLINE REP., Aug. 8, 2007, available at http://www.onlinereporter.com/article.php?article_id=9928 [hereinafter *Universal May Not Re-Up*] ("Apple's dominance of the online music business . . . allows it to dictate terms."); see also Andy Ho, *Why Apple is Not Singing Along*, STRAITS TIMES (Sing.), Apr. 18, 2007, available at 2007 WLNR 7264492; see also Joshua Chaffin, *Media Labels Ask Apple to Adopt Subscription*, FIN. TIMES, Apr. 12, 2007, available at 2007 WLNR 7002522.

256. See *Universal May Not Re-Up*, *supra* note 255; Ho, *supra* note 255.

257. See *supra* Part IV.A.

258. See Jacqui Cheng, *UK Music Store: DRM-Free Music Outsell Protected Tunes Four to One*, ARS TECHNICA, Nov. 9, 2007, <http://arstechnica.com/news.ars/post/20071109-uk-music-store-drm-free-music-outsell-protected-tunes-4-to-1.html>; Andrew Orłowski, *Music DRM "Dead by Next Summer,"* REGISTER, Nov. 8, 2007, http://www.theregister.co.uk/2007/11/08/drm_free_music_sales_up/.

259. See *Innovation in Rainbows*, *supra* note 238, at 4.

profitably offered DRM-free music. Amazingly, eMusic has become the second largest online music seller behind iTMS, without the benefit of major music label support to boost its sales.²⁶¹ Furthermore, evidence suggests those who purchase content from eMusic do not share that content on illegal file sharing networks.²⁶² Thus, selling music unencumbered by DRM can be both viable and profitable.

The DMCA's prevention of interoperability through legal protection of DRM safeguards Apple's market dominance. Music piracy has flourished as legal music purchasers are punished. Offering DRM-free music will benefit both consumers and the music industry. Consumers will have the freedom to play their music without restrictions. Furthermore, the music industry will have more control over music pricing and distribution. If the music industry intends to survive the compact disc's imminent demise, it must embrace the next evolution of music content delivery: digital music downloads unencumbered by DRM protections.

Ali Matin *

260. See Katie Allen, *Major Labels Targeted by iTunes Rival*, GUARDIAN.CO.UK, Oct. 22, 2007, <http://www.guardian.co.uk/business/2007/oct/22/2/>.

261. See *id.*

262. See Brad Stone, *Publishers Phase Out Piracy Protection on Audio Books*, N.Y. TIMES, Mar. 3, 2008, at C2.

* J.D. Candidate, May 2009, Loyola Law School, Los Angeles; B.A., University of California, Irvine. I would like to thank my family for their tremendous love and support. Special thanks to the editors and staff of the *Loyola of Los Angeles Entertainment Law Review* for their hard work and skillful editing. I would also like to extend my sincere gratitude to Professor John Tehranian for his valuable feedback and insight.