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## Blinded by Science: Does the General Acceptance of Forensic DNA Evidence Warrant a More Streamlined Approach to Admissibility?

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#### FAIR USE RIGHTS IN A WORLD OF THE BROADCAST FLAG AND DIGITAL RIGHTS MANAGEMENT: DO CONSUMERS HAVE A CHANCE?

#### Andrew William Bagley\*

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#### I. INTRODUCTION

The mandatory transition to Digital Television (DTV) offers consumers the ability to receive High Definition Television (HDTV) with quality much better than DVDs over broadcast airwaves for free.<sup>1</sup> Unlike the analog standard, under the digital regime, copies of DTV programming are carbon copies of the original.<sup>2</sup> Thus, unencrypted digital broadcast content can be captured easily and transferred over the Internet.<sup>3</sup> Content providers, realizing the piracy possibilities of the new digital medium, have responded by threatening to withhold high-value high-definition content such as Hollywood films if digital broadcasters do not offer protections against piracy.<sup>4</sup>

One solution to the DTV dilemma came in the form of the Advanced Television Systems (ATSC) Flag, or "Broadcast Flag," which failed to pass in Congress, but was mandated by the Federal Communications Commission (FCC) in 2003.<sup>5</sup> The mandate required that all digital televisions and DTV-related products, such as recorders and receivers, include a Broadcast Flag decoder chip capable of activating or deactivating recording and redistribution features at the discretion of the broadcaster. The FCC required these chips, capable of decoding a content-controlling Broadcast Flag signal, to be placed in all DTV-related devices manufactured after July 1, 2005.<sup>6</sup> The policy empowered the FCC with the authority to approve "Broadcast Flag compliant" technologies for use in DTV devices.

Though the FCC mandate was struck down on jurisdictional grounds by the U.S. Court of Appeals for the D.C. Circuit,<sup>7</sup> the Broadcast Flag still

1. Kevin Hunt, New HDTVs Reach Higher and Higher, HARTFORD COURANT, Feb. 23, 2006, at D1.

2. Center for Democracy and Technology, Implications of the Broadcast Flag: A Public Interest Primer (Version 2.0) at 6-7, *available at* http://www.cdt.org/copyright/20031216broadcast flag.pdf (last visited Nov. 7, 2006). *See also* Marshall Brain, *How Digital Television Works*, How STUFF WORKS, *at* http://electronics.howstuffworks.com/dtv2.htm (last visited Nov. 7, 2006).

3. Center for Democracy and Technology, supra note 2, at 7.

4. Jay Lyman, FCC Anti-Piracy Play Rejected, TECHNEWSWORLD, May 9, 2005, available at http://www.technewsworld.com/story/tech/fcc-anti-piracy-broadcast-flag-1290039FHA1L.xhtml.

5. Digital Broadcast Content Protection, 18 F.C.C.R. 23,550, 23,552 (2003) (Rep. Order and Notice of Proposed Rulemaking) [hereinafter Broadcast Flag R&O].

7. Am. Library Ass'n v. FCC, 406 F.3d 689 (D.C. Cir. 2005).

<sup>6.</sup> Id. at 25,576.

remains alive in bills circulating Congress.<sup>8</sup> The technology in its current form permits digital broadcasts to include a 16-bit code capable of disabling recording and portability features on Flag-compliant hardware without discretion as to whether or not the behavior being restricted is protected under the fair use doctrine.

In an era of copyright infringement litigation and Digital Rights Management (DRM) fabrication, it is important to explore the extent to which the fair use exemptions detailed in 17 U.S.C. § 107 exist in the digital realm. This research briefly defines the Broadcast Flag technology as part of a multi-faceted response to intellectual property challenges. In light of the Broadcast Flag context, this Note carefully examines existing case law to discover how far fair use time-shifting rights extend in the digital realm. The purpose of this study is to highlight current fair use challenges and to provide insight as to how far fair use rights extend with current technology and consumer usage.

# II. DIGITAL RIGHTS MANAGEMENT AND CHALLENGES IN THE DIGITAL ERA

The primary issue regarding digital content is the carbon copy nature of the technology. Digital broadcasts transmit exact copies of source content unlike the imperfect, reduced reproductions created through longreigning analog methods.<sup>9</sup> Thus, Hollywood came to fear the possibility of end users utilizing digital video recorders (DVRs) or other digital recording devices to produce carbon copies of over-the-air content, which could then be redistributed over the Internet via file sharing software.<sup>10</sup> These concerns were specifically focused on the prospect of airing high definition-quality movies and other valuable content over free digital

<sup>8.</sup> See, e.g., Communications, Consumer's Choice, and Broadband Deployment Act of 2006, S. 2686, 109th Cong. (2006) [hereinafter Deployment Act]. Specifically, the bill contains provisions in subsection 342 of section 452 to give the FCC authority to reauthorize the Broadcast Flag in its original form.

<sup>9.</sup> Center for Democracy and Technology, supra note 2, at 6-7.

<sup>10.</sup> Jim Hu, Hollywood Sets Stage for Piracy Battle with TV Industry, CNET NEWS.COM, Aug. 7, 2002, http://att.com.com/Lights,+camera,+legislation/2009-1023\_3-948672.html.

broadcast signals.<sup>11</sup> The paranoia was well founded due to the music industry's recent and ongoing battle with peer-to-peer network piracy.<sup>12</sup>

#### A. The Broadcast Flag Defined

The "Broadcast Flag" is a hardware- and software-based code designed by the Broadcast Protection Discussion Subgroup (BPDG) and adopted by the FCC.<sup>13</sup> The FCC Broadcast Flag mandate requires hardware manufacturers to embed commission-approved copy protection in all digital television receivers and related products.<sup>14</sup> Compatible copy protection schemes must be capable of receiving broadcasted "flags," which are signals that instruct digital television receivers to place behavior restrictions on flagged content.<sup>15</sup> Thus, a consumer could be prevented from copying a flagged television program from a video recorder to another device depending on the level of protection.

#### B. The DRM Trend

The Broadcast Flag is a form of DRM which is a broader genre of technologies designed to protect digital content through encryption- and permission-based controls.<sup>16</sup> DRM encompasses the broad category of technologies designed to restrict access, manipulation, and proliferation of digital media.<sup>17</sup> The term also describes technologies designed to promote and empower consumers to use content in a specific and intended way.<sup>18</sup> Large digital media corporations, such as Microsoft and Apple, are developing important DRM technologies.<sup>19</sup> Likewise, small, specialized

- 13. Broadcast Flag R&O, supra note 5, at 23,556.
- 14. See id. at 23,551.

15. Digital Output Protection Technology and Recording Method Certifications, 19 F.C.C.R. 15,876, 15,877-78 (2004).

16. Jeff Howe, Licensed to Bill, WIRED, Oct. 2001, available at http://wired.lycos.com/ wired/archive/9.10/drm.html.

17. See Wikipedia, Digital Rights Management, http://en.wikipedia.org/wiki/Digital\_ rights\_management (explaining DRM) (as of Feb. 2, 2007, 10:07 EST); William Ku & Chi-Hung Chi, Survey on the Technical Aspects of Digital Rights Management, in INFORMATION SECURITY: 7TH INTERNATIONAL CONFERENCE 392 (Kan Zhang & Yuliang Zheng eds., 2004).

18. Stefan Bechtold, Digital Rights Management in the United States and Europe, 52 AM. J. COMP. L. 323, 324 (2004).

19. Jacqueline Emigh, Reporter's Notebook: Who's Leading the DRM Race?, EWEEK.COM,

<sup>11.</sup> See id.

<sup>12.</sup> See Frank Aherns, File-Swap Sites Not Infringing, Judge Says; Firms Held Blameless For Copyright Violations, WASH. POST, Apr. 26, 2003, at E01.

companies are also entering the increasingly competitive industry. A common goal of many DRM creators is to protect intellectual property and ensure economic vitality, but DRM is also used to mine personal information out of users and control digital behavior.<sup>20</sup>

DRM code can take the form of stand-alone software or be embedded in hardware. Two primary ways to mandate DRM are "through standardsetting processes or through public legislation."<sup>21</sup> Examples of the "standard-setting processes" occur in the private sector whether by an individual programmer or an industry organization.<sup>22</sup> Unlike the FCC Broadcast Flag mandate, DRM technologies usually are created by private software consortia or corporations and not through democratic statutory channels.<sup>23</sup> The Broadcast Flag is not the first video-targeted copyright mandate; however, U.S. copyright law already prohibits the manufacture and importation of VCRs that do not include copyright protection schemes.<sup>24</sup>

Codified fair use rights for traditional technologies, such as analog television, CD music players, and VCRs, are subject to change with digital technologies controlled by DRM regimes.<sup>25</sup> One of the most vocal scholars on the regulatory nature of DRM technologies is law professor Lawrence Lessig. He neatly articulated the theory that "code," as in the software and hardware governing cyberspace, is capable of creating a more rigid system of societal control than laws because of its ability to restrict behavior.<sup>26</sup> The Broadcast Flag comes from this paradigm and also totes the potential fair use controversies packaged with it.

Lessig notes that copyright law efficacy, as a mere legal code, is diminishing because reproduction costs for a wide variety of media are rapidly vanishing.<sup>27</sup> Technology allows digital reproductions to spread globally via the Internet whether or not legal restrictions exist. Following this logic, Lessig stresses the important role technology will increasingly

July 28, 2005, available at http://www.eweek.com/article2/0,1895,1841504,00.asp.

<sup>20.</sup> Bruce Schneier, *Real Story of the Rogue Rootkit*, WIRED NEWS, Nov. 17, 2005, *available at* http://www.wired.com/news/privacy/0,1848,69601,00.html.

<sup>21.</sup> Pamela Samuelson, Digital Rights Management {and, or, vs.} the Law, 46 COMM. OF THE ASS'N FOR COMPUTING MACHINERY 41, 43 (2003).

<sup>22.</sup> Id.

<sup>23.</sup> Id.

<sup>24. 17</sup> U.S.C.S. § 1201(k)(1)(A) (2006).

<sup>25.</sup> Stefan Bechtold, Digital Rights Management in the United States and Europe, 52 AM. J. COMP. L. 323, 361-63 (2004).

<sup>26.</sup> See LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 55 (1999).

<sup>27.</sup> Id. at 124-25.

play in protecting intellectual property.<sup>28</sup> He challenges the suggestion that copyright law coupled with DRM code is not in a more vulnerable state in the digital era, but instead believes that intellectual property is "more effectively protected" through DRM code than at anytime since the advent of the printing press.<sup>29</sup>

#### **III. BEYOND DRM: LITIGATION**

With fresh memories of copyright protection failures, such as the Content Scrumble System (CSS) and Circuit City's rental DVD format, Divx, content providers are once again attempting to ensure protection of digital intellectual property.<sup>30</sup> The content industry has launched a multifaceted approach to copyright control infringement. DRM technologies are not the only means available to content providers. Copyright holders are granted legal tools under the Digital Millennium Copyright Act (DMCA)<sup>31</sup> and recently lobbied Congress for broad-sweeping laws such as the formerly-proposed Induce Act legislation, which would have rendered illegal the creation of any device capable of enabling copyright infringement.<sup>32</sup> The overbroad proposal was defeated, in part, because of its potential to suppress innovation.<sup>33</sup>

Content providers are also targeting infringers directly. In 2004, the Recording Industry Association of America (RIAA) began a lawsuit campaign to hold copyright infringers accountable, targeting not only the living, but a deceased 83-year-old as well.<sup>34</sup> The RIAA sued individuals accused of uploading copyright protected songs to the Internet via peer-to-peer networking programs. While the RIAA received backlash for its first target, a 12-year-old girl living in subsidized housing, it has continued to target individual infringers.<sup>35</sup> To catch Internet file swappers, content providers are able to sue Internet Service Providers (ISPs) for user records

- 30. See Learmonth, infra note 45.
- 31. 17 U.S.C.S. § 504 (2004).

32. Marilyn Geewax, Broad Anti-Piracy Bill Could Ensnare Device Makers, ATLANTA J.-CONST., Sept. 30, 2004, at C1.

33. Tom Zeller Jr., As Piracy Battle Nears Supreme Court, The Messages Grow Manic, N.Y. TIMES, Feb. 7, 2005, at C1.

34. Andrew Orlowski, *RIAA Sues the Dead*, REGISTER, Feb. 5, 2005, *at* http://www.the register.co.uk/2005/02/05/riaa\_sues\_the\_dead.

35. Id. See also Reuters, DJ, Music Networks Offer to Pay Girl's Settlement, SAN DIEGO UNION-TRIB., Sept. 12, 2003, at C4.

<sup>28.</sup> See id. at 126.

<sup>29.</sup> Id. at 127.

after filing anonymous John Doe complaints against particular IP addresses.<sup>36</sup> In 2003, it was estimated that 60 million Americans had used peer-to-peer networking programs with access to copyright protected content.<sup>37</sup> It would take over 1,600 years to sue all 60 million of these infringers at a rate of 100 lawsuits per day.<sup>38</sup>

Individuals are not the only parties held accountable in copyright infringement lawsuits. The RIAA proved with Napster and Aimster that peer-to-peer network creators can be held liable when actively engaging in secondary copyright infringement.<sup>39</sup> Similarly, the Motion Picture Association of America (MPAA) succeeded in a motion for summary judgment against decentralized peer-to-peer network operator Grokster, and the company soon shutdown after an expensive legal battle.<sup>40</sup>

Hollywood is motivated to change its own market models because of evolution in consumer behavior from technological convergence. Content providers anticipate changes in movie distribution where films might be released on multiple digital platforms at the same time as they debut in theaters.<sup>41</sup> One filmmaker has already adopted this strategy, though not with high definition-quality media.<sup>42</sup> Hollywood wants control over content on all mediums before the multi-pronged distribution scheme becomes the norm.<sup>43</sup>

Some entertainment firms such as Walt Disney Co. and rival NBC Universal are selling downloadable television programs to users via the Internet for use on portable devices such as the video iPod.<sup>44</sup> Able to make

37. Benny Evangelista, RIAA Pursues 80 More; Suits Filed Against File Sharers Include 2 in Bay Area, S.F. CHRON., Oct. 31, 2003, at B1.

38. 60,000,000 users/365.25 days (1 yr.) = 164,271.05 users/1 day , 164,271.05 users/100 lawsuits/1 day = 1,642.7 years.

39. See generally Andrew J. Lee, Note and Brief, MGM Studios, Inc. v. Grokster, Ltd. & In re Aimster Litigation: A Study of Secondary Copyright Liability in the Peer-to-Peer Context, 20 BERKELEY TECH. L.J. 485 (2005).

40. Dawn C. Chmielewski, Grokster Might Not Be Dead After All, SEATTLE TIMES, Nov. 14, 2005, at C5.

41. See Stefanie Olsen, Piracy Fears Threaten Hollywood Innovation, CNET NEWS.COM, Sept. 29, 2004, at http://news.com.com/Piracy+fears+threaten+Hollywood+innovation/2100-1025\_3-5387917.html.

42. See Phyllis Furman, See the Movie, Buy DVD Now, N.Y. DAILY NEWS, Nov. 7, 2005, available at http://www.nydailynews.com/business/story/363072p-309235c.html.

43. See infra text accompanying note 71.

44. See, e.g., Dawn Kawamoto, NBC Teams Up with iTunes, CNET NEWS.COM, Dec. 6, 2005, http://news.com.com/NBC+teams+up+ with+iTunes/2100-1026\_3-5983894.html.

<sup>36.</sup> Jefferson Graham, 532 John Does Accused of Sharing Songs, USA TODAY, Jan. 22, 2004, at 1B.

money selling current TV shows, content providers protested against the FCC's approval of a TiVo Broadcast Flag-compatible DRM protection that gave users the liberty to transfer recorded television shows to portable devices.<sup>45</sup>

Federal laws are not the only tools used by copyright owners to recover damages and prosecute infringers. The state of Arizona worked with the FBI, RIAA, and MPAA to successfully prosecute a college student under state law.<sup>46</sup> The parties claimed that the student possessed over \$50 million worth of music and movies on his hard drive.<sup>47</sup> However, at the time of the initial charges, the largest hard drives on the consumer market could not hold much more than 300 gigabytes worth of data, which, with compression, could hold approximately 300 movies or 100,000 songs.<sup>48</sup> Under this scenario, with DVDs running at approximately \$15 apiece and songs roughly \$1 per track, each hard drives of this size, a technical impossibility with contemporary IDE and serial ATA technologies, to possess \$50 million worth of music.<sup>49</sup> Thus, the accuracy of the industry's own piracy figures is called into question.

DRM legislation has been proposed many times, usually for specific purposes. A congressional proposal in 2002, known as the "Consumer Broadband and Digital Television Promotion Act," sought to make it illegal to create digital devices that did not employ DRM technologies.<sup>50</sup> This highly-restrictive, anti-open source proposal died in committee in March 2002.<sup>51</sup>

47. Id.

48. See Digit-life.com, Digest 2005: Hard Disk Drives and SATA/SAS Controllers (assuming specifications within the range available at the time), *available at* http://www.digit-life.com/articles2/storage/itogi2005hdd.html (last visited on Feb. 1, 2007).

49. See Apple, ATA, IDE, EIDE and ATAPI Defined (explaining that ATA/IDE/EIDE can hold no more than two hard drives per controller), *available at* http://docs.info.apple.com/article. html?artnum=30510 (last visited Feb. 1, 2007).

<sup>45.</sup> Michael Learmonth, NBC Loads Up Apple's Vid Barrel, VARIETY.COM, Dec. 6, 2005, available at http://www.variety.com/article/VR1117934071?categoryid=1009&cs=1&s=h&p=0.

<sup>46.</sup> Susan B. Shor, Arizona Prosecutes Teen for Internet Piracy, TECHNEWSWORLD, Mar. 8, 2005, available at http://www.technewsworld.com/story/41190.html.

<sup>50.</sup> Consumer Broadband and Digital Television Promotion Act, S. 2048, 107th Cong. (2002).

<sup>51.</sup> Declan McCullagh, Congress to Take on Spam, Copyright, Cnet NEWS.com, *available at* http://news.com.com/2100-1023-979623.html (last visited on Feb. 1, 2007).

#### **IV. BACKGROUND ON FAIR USE RIGHTS**

#### A. Fair Use

With all the controversy surrounding unauthorized copying and recording of copyright-protected content such as music and movies, it might seem that individuals have no legitimate rights to copy or record in the digital realm. "Fair Use" rights allowing individuals to exempt themselves from copyright restrictions were initially present only in case law<sup>52</sup> and were not codified until the 1976 Copyright Act.<sup>53</sup> As defined by the Act, U.S. copyright law exempts users of copyrighted works from copyright infringement liability with consideration to the following four criteria:

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

(2) the nature of the copyrighted work;

(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

(4) the effect of the use upon the potential market for or value of the copyrighted work.<sup>54</sup>

Other exemptions exist for libraries that are immune from copyright infringement provisions when duplicating copyright protected materials for archival purposes.<sup>55</sup> Also, news organizations and other media outlets are protected when using copyrighted works without authorized consent.<sup>56</sup> The Broadcast Flag can hinder the protected activities of librarians, news organizations, and individuals acting within statutory guidelines by restricting the video quality of the content.<sup>57</sup>

- 55. 17 U.S.C. § 108(a) (2000).
- 56. Supra note 53.

57. Robert T. Numbers II, To Promote Profit in Science and the Useful Arts: The Broadcast Flag, FCC Jurisdiction, and Copyright Implications, 80 NOTRE DAME L. REV. 439, 458 (2004).

<sup>52.</sup> Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 549 (1985) (citing HORACE G. BALL, THE LAW OF COPYRIGHT AND LITERARY PROPERTY 260 (1944)).

<sup>53. 17</sup> U.S.C. § 107 (2005).

<sup>54.</sup> Id.

#### B. Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417 (1984)

Many of today's copyright battles are not over new issues, but instead merely involve new media. The 1984 Sony v. Universal City Studios case is the most relevant Supreme Court precedent regarding the fair use rights of consumers to duplicate copyrighted materials for time-shifting purposes.<sup>58</sup> The Sony Betamax Video Tape Recorder (VTR), introduced in 1976, was functionally similar to today's DVRs, though much less sophisticated.<sup>59</sup> Still, the Betamax VTR was capable of recording broadcast television programs for consumers to view at later times.<sup>60</sup>

At issue in *Sony v. Universal City Studios* was whether Sony engaged in secondary and vicarious copyright infringement by selling a video tape recorder (VTR) that permitted customers to record copyrighted content.<sup>61</sup> Motion picture studios were dismayed at Sony's home recording device because it permitted consumers to make personal copies of broadcast television programs, including copyrighted material.<sup>62</sup> Content providers sued Sony, the technology distributor, rather than the individuals using the device for home recording.<sup>63</sup> Backing the content providers, the Court of Appeals for the Ninth Circuit ruled in favor of Universal City Studios and Disney World Productions.<sup>64</sup>

Sony appealed the unfavorable Ninth Circuit Court of Appeals ruling to the Supreme Court.<sup>65</sup> Respondents, Universal City Studios and other movie studios, sought to obtain royalties from Sony for lost revenue.<sup>66</sup> The Court sided with Sony and held that such remedies were not within the scope of the 1976 Copyright Act.<sup>67</sup>

- 59. See Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 422-23 (1984).
- 60. Id. at 421-22.
- 61. Id. at 420.
- 62. Id. at 421-23.
- 63. Id. at 420.
- 64. Sony, 464 U.S. at 420-21.
- 65. Id.
- 66. Id. at 421.
- 67. Id.

<sup>58.</sup> See Michael J. Madison, A Pattern-Oriented Approach to Fair Use, 45 WM. & MARY L. REV. 1525, 1571, 1602 (2004).

#### C. Interpretation of the 1976 Copyright Act

To determine the scope of the Act, the *Sony* Court looked to patent law to form a contributory copyright infringement doctrine.<sup>68</sup> However, the main focus of the decision was the interpretation of the fair use exemptions of the 1976 Copyright Act as they applied to users of the Betamax.<sup>69</sup> The Court noted that anyone "who makes a fair use of the work is not an infringer of the copyright with respect to such use."<sup>70</sup> Citing legislative history, the Court noted that there existed no "rigid, bright-line approach to fair use."<sup>71</sup>

The Court rejected the Court of Appeals's requirement that fair uses be productive uses and instead adopted the District Court's "equitable rule of reason" analysis to answer the question of whether consumers violated copyright law when engaging in home recording of broadcast television.<sup>72</sup> Guided by Congress, the Court analyzed the economic merits of Universal's arguments.<sup>73</sup> However, the Court determined that Universal did not significantly suffer from consumers' engagement in home recording for personal use.<sup>74</sup> The Court assumed non-commercial consumer recording to be a fair use unless proven otherwise.<sup>75</sup>

#### D. Time-Shifting in Sony

The *Sony* Court assumed that broadcast airwaves belong to the public.<sup>76</sup> Justice John Paul Stevens delivered the opinion of the Court in *Sony* noting that customers using the Betamax VTR did so for "time-shifting" purposes, which allowed customers to watch a program after its scheduled broadcast.<sup>77</sup> The Court also stated that time-shifting "enlarges the television viewing audience."<sup>78</sup> Based on the foregoing arguments, the Court concluded that time-shifting was not objectionable to most affected

69. See Sony, 464 U.S. at 480-81.

- 71. Id. at 448 n.31.
- 72. Id. at 454-55.
- 73. Id. at 450-51.
- 74. Sony, 464 U.S. at 456.
- 75. Id. at 449.
- 76. Id. at 419-20.

77. Id. at 421. The Court defined "time-shifting" as "the practice of recording a program to view it once at a later time, and thereafter erasing it." Id. at 423.

78. Id.at 421.

<sup>68.</sup> See id. at 429.

<sup>70.</sup> Id. at 433.

copyright holders.<sup>79</sup> Furthermore, Justice Stevens explained that neither Universal City Studios nor Walt Disney Productions proved that the action was harmful to its revenues.<sup>80</sup>

With regard to consumer home recording habits, the Court held that "unauthorized uses of a copyrighted work are not necessarily infringing."<sup>81</sup> A distinguishing factor that sets recording of broadcast television apart from other unauthorized duplication is that "time-shifting merely enables a viewer to see such a work which he had been invited to witness in its entirety free of charge."<sup>82</sup> The Court held that, if anything, advertising viewership would increase because of increased audience size.<sup>83</sup> However, this finding does not necessarily stand true today with the advent of commercial-skipping digital video recorders.<sup>84</sup>

The Court in *Sony* held that a technology "need merely be capable of substantial non-infringing uses" for its creators to escape copyright infringement liability.<sup>85</sup> The Court identified the four prongs of the fair use doctrine and interpreted its definition to include legal uses of the new technology.<sup>86</sup> The Court remarked that it had historically been reluctant to expand copyright law because of Congress's constitutional capacity to do so.<sup>87</sup> Nevertheless, it concluded that Congress had not specified legislative intent for the time-shifting technology.<sup>88</sup> In a five-to-four decision, the *Sony* Court reversed the Ninth Circuit Court of Appeals ruling and sided with Sony.<sup>89</sup>

The *Sony* Court placed the burden on the complainant to prove that consumer creation of noncommercial unauthorized copies of copyrighted works was harmful or could have an adverse affect on the market for the copyrighted work.<sup>90</sup> The market detriment argument is central to current content providers' arguments against unrestricted HDTV home recordings that allow for consumers to produce perfect copies of over-the-air

- 82. Id. at 449.
- 83. Id. at 454.

84. Frank Ahrens, With Digital Video Recorders, Viewing Times, They Are A-Changin'; DVRs Manipulate Broadcast Schedules to Fit Audience's, WASH. POST, May 13, 2005, Financial, at H03.

85. Sony, 464 U.S. at 442. The Opinion also stated that "unauthorized uses of a copyrighted work are not necessarily infringing." *Id.* at 447.

86. Id. at 449 n.30.

- 87. Id. at 430-31.
- 88. Id. at 431.
- 89. Id. at 456.
- 90. Sony, 464 U.S. at 451.

<sup>79.</sup> Sony, 464 U.S. at 446.

<sup>80.</sup> Id. at 452.

<sup>81.</sup> Id. at 447.

programming.<sup>91</sup> The *Sony* doctrine is still the foundation for legallyprotected fair use rights of consumers to make home recordings of analog broadcast television for time-shifting purposes.<sup>92</sup>

#### V. CONSUMER FAIR USE RIGHTS IN A DIGITAL WORLD

#### A. Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., 180 F.3d 1072 (9th Cir. 1999)

Today's consumers continue to enjoy *Sony*-protected "time-shifting" with digital video recorders such as TiVo. Additionally, the availability of portable media players and other consumer electronic devices have led consumers to engage in "time-shifting" in a new way through the process of "space-shifting."<sup>93</sup> "Space-shifting," defined as the process of transferring content from one medium to another, was upheld as a fair use by the Ninth Circuit Court of Appeals in the 1999 case *RIAA v. Diamond Multimedia.*<sup>94</sup>

The controversy centered on a digital music player known as the Diamond Rio, which enabled users to transfer and store songs from audio CDs onto the Rio via a computer for portable playback.<sup>95</sup> Analogizing *Sony*, the court described the ability of the Rio to transfer music from a computer to the portable hard drive-based unit, or "space-shift."<sup>96</sup> The question before the court was whether the Rio's digital copying features violated the 1992 Audio Home Recording Act (AHRA), which forbids the importation or sale of any digital audio device that does not employ the Serial Copy Management System (SCMS).<sup>97</sup>

SCMS technology prevents digital audio devices from making more than one identical first generation copy of an audio recording.<sup>98</sup> The

- 95. Id. at 1073.
- 96. Id. at 1079.

<sup>91.</sup> Steve Hirsch, *Movie Piracy's Harm Felt Beyond Industry*, WASH. TIMES, Sept. 30, 2006, *available at* http://washingtontimes.com/business/20060929-102719-8659r.htm.

<sup>92.</sup> Frank Chao, The FCC and Congress should Consider Consumer Rights When Making the Transition to DTV, 2003 DUKE L. & TECH. REV. 17 (2003).

<sup>93.</sup> Id.

<sup>94.</sup> Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., 180 F.3d 1072, 1079 (9th Cir. 1999).

<sup>97.</sup> Audio Home Recording Act, 17 U.S.C. § 1002(a)(1).

<sup>98.</sup> JAN MAES & MARC VERCAMMEN, DIGITAL AUDIO AND COMPACT DISC TECHNOLOGY 333 (2001); KEN C. POHLMANN, PRINCIPLE OF DIGITAL AUDIO 220 (2005); Wikipedia, Serial Copy Management System, http://en.wikipedia.org/wiki/Serial\_copy\_management\_system (explaining SCMS and its history) (as of Dec. 10, 2006, 10:27 EST).

system was originally intended to prevent piracy in response to the advent of the Digital Audio Tape (DAT) format.<sup>99</sup> Like the Broadcast Flag of the DTV era, the SCMS was a government-sanctioned digital rights management system.<sup>100</sup> The RIAA claimed that the Rio breached the AHRA because it did not include SCMS technology.<sup>101</sup> Diamond argued that the Rio did not fall under the auspices of the AHRA because it was a hard drive-based data storage unit and not a digital recording device.<sup>102</sup>

The Ninth Circuit was keen to the industry challenges that arose due to the popularity and portability of the MP3 file format.<sup>103</sup> However, the court sided with Diamond and agreed that the device was more similar to a computer than a digital recording device.<sup>104</sup> The court noted that Rio was in fact more restricting than SCMS because it did not allow any audio, not even a first generation copy, to be transferred to another audio device.<sup>105</sup> Instead, the court noted that Rio was consistent with the legislative intent of AHRA because it promoted "personal use" and prevented piracy.<sup>106</sup>

Though not binding beyond the Ninth Circuit, *Diamond* paved the way for other electronics companies to manufacture MP3 players without fear of violating AHRA. The *Diamond* court's expansion of the *Sony* doctrine provided resistance to DRM controls over now-common fair use behavior. "Space-shifting" through CD-ripping and music downloads are part of the expanding portable media industry.<sup>107</sup> Although it is possible to manufacture technologies that restrict consumer behavior, it is unlikely that a lawsuit would prevail against the manufacturer of a device with similar freedoms to the Rio. However, implementation of a policy like the Broadcast Flag could successfully erode the ability to "space-shift" both through code and by law.

#### B. A&M Records v. Napster, 239 F.3d 1004 (9th Cir. 2001)

In 2000, RIAA went on the legal offensive again and sued the startup peer-to-peer (P2P) company Napster for copyright infringement. Napster offered an Internet file-sharing service that allowed users to exchange digital music files, much of them copyright protected, in the MP3 format

104. Id. at 1081.

106. Diamond, 180 F.3d at 1079.

<sup>99.</sup> Wikipedia, Serial Copy Management System, supra note 98.

<sup>100.</sup> The SCMS was mandated by the AHRA in the same way that the Broadcast Flag began in Congress, became an FCC rule, and is once more a legislative proposal.

<sup>101.</sup> Diamond, 180 F.3d at 1075.

<sup>102.</sup> Id. at 1078.

<sup>103.</sup> Id. at 1073-74.

<sup>105.</sup> Id. at 1079.

<sup>107.</sup> Reuters, Survey: iTunes, Others to Pick up Slack in Music Sales, Mar. 27, 2005.

over the company's network. In a multifaceted defense, one of Napster's arguments was that its users engaged in fair use "sampling" and "space-shifting" when they downloaded copyright-protected files.<sup>108</sup> Similar to the *Sony* analysis, the court, turned to the four prongs of fair use:

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

(2) the nature of the copyrighted work;

(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

(4) the effect of the use upon the potential market for or value of the copyrighted work.<sup>109</sup>

The Ninth Circuit did not extend the rule of *Sony* to Napster's users because they were not engaging in personal fair use.<sup>110</sup> The court found Napster's users violated all four prongs of fair use.<sup>111</sup> Analyzing the character of use, the court wrote that Napster's users were retrieving songs for free, which they would have otherwise paid for, and Napster planned to profit in future revenue as a result,<sup>112</sup> thus rendering the file transfers commercial use.<sup>113</sup> Weighing in prong two, nature of the use, the court found that the files being transferred were creative in nature. Thus, the transferred files were protected by copyright law so the users' behavior was not protected under the fair use doctrine.<sup>114</sup> For prong three, the court held that because Napster users exchanged songs in their entirety, the behavior was not protected as sampling or any other non-substantial use of copyright works.<sup>115</sup> In analyzing the fourth and final fair use prong, the court concluded that Napster and its users were not protected because the infringing behavior adversely affected CD sales and had direct commercial impact on copyright holders' ability to earn money.<sup>116</sup>

- 112. Id. at 1023.
- 113. Napster, 239 F.3d at 1015.
- 114. Id. at 1016.
- 115. *Id*.
- 116. *Id*.

<sup>108. &</sup>quot;[W]here users access a sound recording through the Napster system that they already own in audio CD format." A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1014 (9th Cir. 2001), aff<sup>7</sup>g in part and vacating in part, 114 F. Supp. 2d 896 (N.D. Cal. 2000).

<sup>109.</sup> Id.

<sup>110.</sup> Id. at 1014-15.

<sup>111.</sup> Id. at 1015-17.

Napster was held liable for vicarious and contributory copyright infringement, which were the same charges that Sony evaded.<sup>117</sup> Napster structured its P2P network so the company maintained a file index on a centralized server.<sup>118</sup> Due to this, the court held that, unlike Sony, Napster had "actual, specific knowledge of direct infringement"<sup>119</sup> and thus rendered "Sony's holding of limited assistance to Napster."<sup>120</sup> While "bound to follow Sony,"<sup>121</sup> the court did not extend Sony to protect the fileswapping company or its users.<sup>122</sup> The Napster court limited the Diamond court's extension of Sony to the "space-shifting" context and it dissuaded the same infringing behavior the Broadcast Flag is aimed to prevent.<sup>123</sup>

#### C. RealNetworks, Inc. v. Streambox, Inc., 2000 U.S. Dist. LEXIS 1889 (W.D. Wash Jan. 18, 2000)

In *RealNetworks v. Streambox*,<sup>124</sup> the U.S. District Court for the Western District of Washington further explored the "space-shifting" rights first articulated in *Diamond*<sup>125</sup> and limited in *Napster*.<sup>126</sup> In this case, a software program captured and recorded "streaming" video from the Internet that could not otherwise be saved to one's hard drive.<sup>127</sup> RealNetworks developed software that enabled users to view streaming video over the Internet. Streambox made software capable of recording both unprotected and copy-protected streaming video encoded in RealNetworks's format.<sup>128</sup> The district court granted a preliminary injunction against Streambox to prevent the manufacture and sale of three software applications.

The case involved RealNetworks, Inc., which offers software to computer users to view video and audio content transmitted over the Internet in the form of digital data packets from remote web servers to their home personal computers.<sup>129</sup> RealNetworks software processes and

123. Napster, 239 F.3d at 1020.

124. RealNetworks, Inc. v. Streambox, Inc., No. C99-2070P, 2000 U.S. Dist. LEXIS 1889 (W.D. Wash. Jan. 18, 2000).

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

126. Napster, 239 F.3d at 1014.

127. *Id*.

128. Streambox, 2000 U.S. Dist. LEXIS 1889, at \*10-11.

129. Id. at \*3.

<sup>117.</sup> Id. at 1027.

<sup>118.</sup> Napster, 239 F.3d at 1011.

<sup>119.</sup> Id. at 1020.

<sup>120.</sup> Id.

<sup>121.</sup> Id.

<sup>122.</sup> Id. at 1021-22.

decodes the information as the content-provider receives the video. "Streaming" occurs where a content-provider sends audio or video content from one computer to a consumer computer for real-time playback.<sup>130</sup> When streamed, the entire media file never completely downloads onto the end user's computer. Instead, portions of the file are buffered for continuous playback.<sup>131</sup> The software, offered by RealNetworks, allows content-providers to stream video to consumers' computers in much the same way broadcasters currently deliver content to home television sets. Yet, the streaming content-provider can restrict the ability of the consumer to download and store the content on their computer or even prevent use of the fast forward function. This makes the technology strikingly similar to DTV broadcasts under the Broadcast Flag regime.

Of the three Streambox software offerings, the most important was the Streambox VCR, which worked like a standard VCR by capturing video that could not otherwise be saved. Similar to Broadcast Flag restrictions, online video providers could protect their video by streaming it from a RealServer that prevented users from capturing the content. The Streambox VCR allowed users to bypass the restrictions and download streaming video.<sup>132</sup> The court drew a clear distinction between video that is exclusively streamed and video that is downloaded, saved, and ultimately controlled by the end user.<sup>133</sup> The court did not rule on the legality of downloading unrestricted video, but ruled on the issues surrounding video offerings that copyright holders did not want to be downloaded.<sup>134</sup>

The court applied *Sony* to the Streambox VCR model, but found the cases distinguishable on the grounds that in *Sony* "substantial numbers of copyright holders who broadcast their works either had authorized or would not object to having their works 'time-shifted' by private viewers."<sup>135</sup> With Streambox, however, copyright holders specifically placed video content onto a RealServer, which, similar to the Broadcast Flag or restrictions currently imposed by some cable and satellite providers, controlled content that could be viewed and recorded by a consumer.<sup>136</sup> Thus, the court held that Streambox users likely were not

- 132. Id. at \*10-12.
- 133. Id. at \*3-4.

- 135. Id. at \*22.
- 136. Streambox, 2000 U.S. Dist. LEXIS 1889, at \*11-12.

<sup>130.</sup> See, e.g., LISA RYSINGER, EXPLORING DIGITAL VIDEO 206 (2005); Hyperdictionary, Streaming: Dictionary Entry and Meaning, http://www.hyperdictionary.com/dictionary/streaming (last visited Nov. 7, 2006).

<sup>131.</sup> Streambox, 2000 U.S. Dist. LEXIS 1889, at \*3-4.

<sup>134.</sup> Id. at \*4.

exercising a fair use and that Streambox likely could be found liable for copy protection circumvention.<sup>137</sup> The court drew another distinction between Streambox and *Sony* because "the Sony decision did not involve interpretation of the DMCA."<sup>138</sup> The court granted a preliminary injunction to enjoin the distribution of two software programs, including the Streambox VCR, noting that Streambox likely violated sections 1201 and 1202 of the DMCA.<sup>139</sup> Thus, the U.S. District Court for the Western District of Washington no longer interpreted *Sony* to be the only standard by which to determine legitimate uses of digital technologies.<sup>140</sup>

#### D. Paramount Pictures Corp. v. RePlayTV, 298 F. Supp. 2d 921 (U.S. Dist. C.D. Cal. 2004)

In 2002, the RePlavTV 4000 Personal Video Recorder (PVR) became noteworthy, as well as controversial, because of its touted commercialskipping and digital video redistribution capabilities.<sup>141</sup> Twenty-eight companies filed a lawsuit against RePlayTV's parent company, SONICblue, Inc., in response to the perceived threat.<sup>142</sup> Five consumers who owned the 4000 series PVR sought declaratory relief under the Declaratory Judgment Act to determine whether use of their device to skip commercials and redistribute video constituted protected fair uses.<sup>143</sup> Under Newmark v. Turner Broadcasting Network, the consumer case was consolidated with SONICblue.<sup>144</sup> SONICblue filed for Chapter 11 bankruptcy in the midst of the legal confrontation.<sup>145</sup> Subsequently, RePlayTV chose not to include the controversial commercial-skipping and redistribution features in their newer video devices.<sup>146</sup> Thus, under the consolidated case of Paramount v. RePlayTV, the U.S. District Court for the Central District of California held that it did not possess authority to grant declaratory relief to the five consumers, nor could it rule on whether the no longer manufactured RePlayTV device was a fair use because a conflict no longer existed.<sup>147</sup>

139. Id. at \*15-18.

140. Id. at \*23 (citing Nimmer on Copyright (1999 Supp.), § 12A.18[B]).

141. Geoffrey Morrison, SONICblue ReplayTV RTV4000 PVR, HOME THEATER, June 2002, available at http://www.hometheatermag.com/pvr/123/.

142. Newmark v. Turner Broad. Network, 226 F. Supp. 2d 1215 (C.D. Cal. 2002).

143. See Paramount Pictures Corp. v. ReplayTV, 298 F. Supp. 2d 921 (C.D. Cal. 2004).

144. Newmark v. Turner Broad. Network, 226 F. Supp. 2d 1215, 1223 (C.D. Cal. 2002).

145. Katie Dean, Bankruptcy Blues for PVR Maker, WIRED NEWS, Mar. 24, 2003, http://www.wired.com/news/digiwood/0,1412,58160,00.html.

146. Paramount, 298 F. Supp. 2d at 923.

147. Id. at 927.

<sup>137.</sup> Id. at \*21-23.

<sup>138.</sup> Id. at \*22.

#### E. MGM Studios, Inc. v. Grokster, Ltd., 125 S. Ct. 2764 (2005)

The 2005 MGM v. Grokster showdown revisited some of the secondary liability and copyright infringement inducement issues posed in Sony. Grokster did not, however, focus on consumer fair use behavior, and stopped short of providing a digital update to Sony's "time-shifting" interpretation. Similar to Sony, the question presented in Grokster was "under what circumstances the distributor of a product capable of both lawful and unlawful use is liable for acts of copyright infringement by third parties using the product."<sup>148</sup>

Grokster was a P2P network software creator and distributor. It manufactured the "Kazaa" P2P client software that allowed Internet users to search for and swap files directly with each other. These files included copyright-protected software and video and audio media. Unlike Napster, which hosted a centralized server to catalog the names of shared files,<sup>149</sup> Kazaa did not. However, widespread proliferation of P2P file sharing of motion pictures led MGM Studios to sue Grokster for contributory copyright infringement in 2003. Prior to reaching the Supreme Court, the U.S. Court of Appeals for the Ninth Circuit granted summary judgment in favor of Grokster basing its decision on the technology's structural similarity to the Sony Betamax VTR. At issue before the Supreme Court was whether Grokster could be held liable for the infringing actions of those using its software.

Grokster merely created the software, but it did not host or index the movies and music traded with its application. Because the P2P network was entirely decentralized, Grokster argued it could not be held liable for the infringing actions of its users.<sup>150</sup> Despite Grokster's argument, however, the Court noted that Grokster profited from advertisements promoted on the company's peer-to-peer network.<sup>151</sup> Thus, the availability of pirated movies, music, and other digital files induced larger audiences and yielded higher revenue for the company. Though brief, the Court addressed individual behavior stating that there existed "no finding of any fair use and little beyond anecdotal evidence of noninfringing uses."<sup>152</sup>

In the *Grokster* decision, the Supreme Court also ruled upon summary judgment for another P2P network creator, Streamcast. The Court found evidence of vicarious copyright infringement in the company's marketing

<sup>148.</sup> Metro-Goldwyn-Meyer Studios, Inc. v. Grokster, Ltd., 125 S. Ct. 2764, 2770 (2005).

<sup>149.</sup> A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1011 (9th Cir. 2001), aff'g in part and vacating in part, 114 F. Supp. 2d 896 (N.D. Cal. 2000).

<sup>150.</sup> Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 380 F.3d 1154, 1159 (9th Cir. 2004), remanded by Grokster, 125 S. Ct. at 2764.

<sup>151.</sup> Grokster, 125 S. Ct. at 2774.

<sup>152.</sup> Id. at 2785.

of the software as a Napster alternative.<sup>153</sup> Hollywood levied the advertisement charge against Sony for its marketing of the Betamax VTR, but because the Court held personal "time-shifting" of broadcast television legal, it did not hold Sony liable for infringement.<sup>154</sup> In *Napster*, file swapping of copyrighted materials was infringing,<sup>155</sup> and thus marketing a product as analogous to one already deemed to be in violation of copyright law made Grokster's motives the same.<sup>156</sup>

The case was remanded to the U.S. Court of Appeals for the Ninth Circuit, which remanded the case back to the District Court for the Central District of California.<sup>157</sup> As a result of the ruling, the Court granted summary judgment to MGM so the movie studio could press forward with a lawsuit to sue Grokster.<sup>158</sup> The Court made no mention of "time-shifting," "space-shifting," or *Sony* consumer fair use rights.<sup>159</sup>

#### VI. ANALYSIS

Consumer fair uses in the digital realm are not obvious in the face of current industry efforts to protect copyrights through litigation and digital rights management technologies. The question of the current state of protected fair uses is extremely important in the face of the Broadcast Flag, which is capable of restricting now common behavior of "space-shifting" video from television to portable media players. Although *Diamond* extended *Sony* to protect the "space-shifting" of already-owned audio CDs, the case stopped short of endorsing space shifting of broadcasted television. Television viewers, though publicly owning the airwaves, do not possess specific rights to free content broadcast into their homes. In *Napster*, the Supreme Court, though not explicitly, held that there were limits to the "space-shifting" doctrine. The Court did not extend *Sony* to protect "space-shifting" of copyright-protected content, thereby leaving ambiguity as to "space-shifting" rights.

The *RealNetworks* court held that consumers bypassing DRM protections to duplicate content were in violation of the DMCA. In *Grokster*, the Supreme Court declined to resolve various interpretations of

159. See id.

<sup>153.</sup> Id. at 2773.

<sup>154.</sup> Id. at 2777.

<sup>155.</sup> Id. at 2772.

<sup>156.</sup> Grokster, 125 S. Ct. at 2680-81.

<sup>157.</sup> Id. at 2786-87; Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 419 F.3d 1005, 1007 (9th Cir. 2005).

<sup>158.</sup> Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 454 F. Supp. 2d 966, 971 (C.D. Cal. Sept. 27, 2006).

Sony in the digital realm. Thus, fair use case law, in its current form, does not provide a clear rule of law. This is problematic because the Broadcast Flag, as it is now, does not reserve legal immunity for individuals engaging in traditional fair use behaviors. The AHRA included provisions for consumer copyright infringement exemption when consumers used a SCMS compatible device. It might be necessary for policy makers to do the same with the Broadcast Flag.

#### VII. CONCLUSION

Absent a landmark Supreme Court decision on digital fair use rights, current consumer fair use rights are not consistently articulated nor do they adequately extend into the digital era. Digital rights management technologies are a contentious topic for their protective and at times userimpairing qualities. Current case law offers consumers protections in the analog world and possibly affords minimal uses, such as "space-shifting" of already owned media, in the digital world. Yet, no boundaries exist on how far software can go to protect content-owner interests and limit user behavior.

The digital Pandora's Box is already open and American consumers currently embrace "time-shifting" and "space-shifting" on a daily basis with an array of digital video recorders and portable media players. The ambiguity of case law should be resolved by Congress, which should codify the rights of consumers to engage in fair use "time-shifting" and "space-shifting" with digital television and other mediums such as portable media players. Consumers engaging in personal uses with digital television broadcasts should be exempt from copyright infringement liability.