

TELEVISION: PEER-TO-PEER'S NEXT CHALLENGER

D. BRANCH FURTADO¹

ABSTRACT

The entertainment industry has obsessed over the threat of peer-to-peer file sharing since the introduction of Napster in 1999. The sharing of television content may present a compelling case for fair use under the long-standing "Betamax" decision. Some argue that television sharing is fundamentally different than the distribution of music or movies since television is often distributed for free over public airwaves. However, a determination of fair use is unlikely because of the fundamental differences between recording a program and downloading it, recent regulation to suppress unauthorized content distribution and shifts in the television market brought on by new technology.

INTRODUCTION

¶1 Although much of the controversy surrounding peer-to-peer trading of entertainment files has centered on the music and movie industries, the television industry faces an increasing threat and may be forced to reevaluate its long-standing, advertising-based business model. For example, the introduction of Personal Video Recorders ("PVRs") and PC-based TV tuners, which allow subscribers to record and digitally store hours of television programming,² has loosened the television industry's control over when and how content is consumed. Indeed, the steady rise in the unauthorized trading of copyrighted content via the Internet³ may soon

¹ B.A. in Political Science, Amherst College, 1999; Candidate for J.D., Duke University School of Law, 2007; Candidate for M.B.A., Duke University Fuqua School of Business, 2007. The author would like to thank Professor James Boyle for his gracious assistance and insight on the development of this iBrief. Additionally, research on the recent developments in television, technology, and copyright law benefited from the thoughtful suggestions of Kerri Smith and Ryan King.

² The percentage of U.S. households with a PVR device is expected to grow from 3.8% in 2003 to 20% by 2007. Hank Kim, *PVRs to Hit 20% by '07; Exec Forecasts for Ad Impact Mixed*, ADVERTISING AGE, Sept. 29, 2003, p. 6.

³ Jefferson Graham, *Online Trading of TV Episodes Grows*, USA TODAY, May 20, 2004, available at http://www.usatoday.com/tech/webguide/internetlife/2004-05-20-tv_x.htm (last visited Jan. 10, 2005); Lorne Manly & John Markoff, *Steal This Show*, N.Y. TIMES, Jan. 30, 2005. (Arts & Leisure), § 2, at 1.

force the television industry to consider lawsuits against networks and individual users alike.⁴

¶2 In general, today's PVRs do not allow users to transfer copy-protected content to removable digital media (such as recordable DVDs),⁵ thus reducing the likelihood of widespread unauthorized distribution.⁶ However, by using either a PC with a built-in TV tuner or a TV "capture card," which can be purchased for only \$50, file traders can currently easily record television content, transfer it to digital files and distribute this content via the Internet using available peer-to-peer networks.⁷ Although Microsoft is taking steps to limit TV recording capability within its operating system,⁸ major computer hardware manufacturers have also entered the television recording business. In January 2005, Hewlett Packard introduced the "HP Media Hub," a home media console with robust recording and storage capabilities.⁹ As a result of the increased ease with which consumers can record and digitally store content, over 20,000 television files were available on the Internet as of May 2004, according to BayTSP.¹⁰ By January 2005, episodes of *The Simpsons* alone were being traded via peer-to-peer networks at the rate of almost one million files per week.¹¹

⁴ Michael Snider, *Hot Television*, MACLEANS, Nov. 29, 2004 at http://www.macleans.ca/topstories/technology/article.jsp?content=20041129_93836_93836 (last visited Jan. 10, 2005).

⁵ TiVo announced a new service, TiVoToGo, in January 2005 that allows users to transfer programs to personal computers in password-encrypted form, as well as plans to eventually allow transfer to DVD recorders. However, this program would specifically block copy-protected content from transfer, thus protecting against the use of TiVo to create and distribute unauthorized content. Jonathan Skillings, *TiVo Goes Mobile With New Free Service*, CNET NEWS.COM, Jan. 3, 2005 at http://news.com.com/2102-1041_3-5510240.html?tag=st.util.print (last visited Jan. 10, 2005).

⁶ ELEC. FRONTIER FOUND., EFF OVERVIEW OF BROADCAST PROTECTION DISCUSSION GROUP, at http://www.eff.org/IP/Video/HDTV/?f=20020117_eff_bpdg_overview.html (last visited Jan. 10, 2005).

⁷ Graham, *supra* note 3.

⁸ Microsoft announced plans in January 2005 to incorporate advanced copy-protection in its operating system in order to prevent unauthorized TV recording and distribution. John Borland, *Microsoft, Macrovision align on copy protection*, CNET NEWS.COM, January 31, 2005 at http://news.com.com/Microsoft%2C+Macrovision+align+on+copy+protection/2100-1030_3-5557984.html (last visited Feb. 17, 2005).

⁹ *HP to Offer TV Media Hub*, N.Y. TIMES, Jan. 5, 2005, at C5.

¹⁰ Graham, *supra* note 3.

¹¹ Manly & Markoff, *supra* note 3.

¶3 In response to the threat of unauthorized television distribution, the Federal Communications Commission (FCC) recently endorsed Digital Broadcast Content Protection, known as “Broadcast Flag,” which specifically requires the manufacturers of hardware that receive digital television signals to detect and prevent the distribution of copy-protected content.¹² Broadcast Flag was designed to prevent the distribution of recorded television shows via unauthorized distribution channels, such as peer-to-peer networks.¹³ Despite these protections, it is unlikely that television trading will be completely eradicated because, due to the viral nature of online digital file sharing, the creation of only one unauthorized, unencrypted copy facilitates distribution to thousands of users.¹⁴ Therefore, the threat of unauthorized trading of television content via the Internet is likely to persist regardless of future encryption and protection policy.

¶4 However, the trading of television content, much of which is distributed free-of-charge over public airwaves by the major broadcast networks, may present a much stronger argument for “fair use” than those posed for music or movies.¹⁵ In 1984’s landmark case of *Sony Corporation of America v. Universal City Studios, Inc.* (familarly known as the “Betamax” case), the United States Supreme Court declined to find numerous Video Cassette Recorder (“VCR”) manufacturers responsible for facilitating alleged copyright infringement against television copyright holders.¹⁶ The decision carved out a fair use exemption for the consumers’ right to record television programs for viewing at a later time, a practice known as “time-shifting.”¹⁷ *Betamax* also established that manufacturers would not be liable for the distribution of products that facilitate copyright infringement if that challenged functionality was also “capable of substantial noninfringing uses.”¹⁸

¶5 All U.S. television consumers have access to freely distributed broadcast network content via the airwaves. In addition, 67% of U.S. households subscribe to some form of cable television service.¹⁹ Based on

¹² FCC, DIGITAL BROADCAST CONTENT PROTECTION, FCC 03-273, I,4 (2003).

¹³ *Id.*

¹⁴ ELEC. PRIVACY INFO. CTR., *In the Matter of Digital Broadcast Copy Protection*, Dec. 6, 2002, available at <http://www.epic.org/privacy/drm/broadcastflagcomments.html> (last visited Jan. 10, 2005).

¹⁵ Originally developed through judicial precedent and later codified by Congress in 1976, the “fair use” doctrine provides immunity from infringement liability for certain uses of copyright protected works. 17 U.S.C. § 107 (2000).

¹⁶ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 456 (1984).

¹⁷ *Id.*

¹⁸ *Id.* at 441.

¹⁹ NORTHWESTERN UNIV. MEDIA MGMT CTR., *Cable Size*, Mar. 16, 2004 (citing Nelsen Media Research), at

the wide reach of cable programming, it is highly likely that many television file traders are fully subscribed and authorized to view cable or broadcast content upon its original transmission. An argument can be made that acquiring a televised program via an online file-sharing network after its initial airdate is the latest evolution of consumer time-shifting. In fact, many current television traders believe their conduct to be completely ethical²⁰ and legal.²¹ According to this argument, rather than viewing the program during its original broadcast, the consumer has merely chosen to shift the viewing of the program to a more convenient time by acquiring that file from a fellow television subscriber on a peer-to-peer network.

¶6 The distinction between personally recording a program and acquiring that program from another subscriber may weigh against fair use and is discussed below. However, it is conceivable that the distribution of television shows via peer-to-peer networks could qualify as fair use under *Betamax*,²² although several key distinctions and developments since 1984 suggest that such protection is unlikely.

¶7 At the same time, some television content distributors seeking audiences beyond their current broadcast timeslot or cable subscriber base may choose to authorize and even promote the distribution of their programming through the cheap and efficient channel of peer-to-peer file-trading networks. Therefore, even if downloading television programs is not protected as fair use, authorized file-trading has the potential to become a commercially viable option for some content owners.

¶8 This iBrief examines the unauthorized file-sharing of television content as a potential fair use, focusing specifically on the first and fourth factors of the fair use analysis and recent shifts in legislative policy with respect to copyright protection of digital entertainment. Television file-sharing demonstrates some potential for fair use protection because (1) downloading shows to watch them at a more convenient time is arguably noncommercial; (2) a substantial segment of downloaders had access to the programs during their original broadcast; and (3) like the VCR, the impact

<http://www.mediainfocenter.org/television/cable/size.asp> (last visited Jan. 10, 2005).

²⁰ NBC executive Brandon Burgess summed up the current sentiment of file-sharers who feel “a sense of entitlement that once [television] hits the airwaves it’s free.” Manly & Markoff, *supra* note 3.

²¹ Duke University student Elliot Wolf suggested that he may challenge an MPAA warning for illegally trading television files on the grounds that his actions were not prohibited under current law. Kelly Rohrs, *Student Challenges MPAA warning*, DUKE CHRON., Nov. 30, 2004, available at http://www.chronicle.duke.edu/vnews/display.v/ART/2004/11/30/41ac6a2fd7d04?in_archive=1 (last visited Jan. 10, 2005).

²² See *Sony*, 464 U.S. at 456.

of unauthorized downloading on television revenues may prove to be minimal. However, this practice is unlikely to be protected as fair use because (1) the distinction between recording in the home and downloading via an anonymous network weighs against the activity being considered noncommercial use; (2) new distribution options offered at a premium fee, such as “video-on-demand” (VOD) and DVD compilations, can be avoided through file-sharing at a cost to the copyright holder; (3) the enhanced ease-of-use of digital technology may result in a more substantial and detrimental affect on advertising revenue; and (4) significant legislation designed to prevent unauthorized distribution of digital entertainment evidences a shift in policy weighing against fair use. Although many copyright holders may stand to gain financially by authorizing some forms sharing, this practice is unlikely to be protected as an exception to copyright infringement liability.

I. THE EVOLUTION OF TV FILE SHARING

A. *The rise of file-sharing*

¶9 Since the introduction of the player piano in the early 20th century, the entertainment industry has struggled to suppress technological innovations that threaten to drastically alter existing revenue models.²³ However, the onset of compression technologies and file-sharing networks in the late 1990s allowed widespread, unauthorized distribution of digital entertainment files via the Internet and has presented, arguably, the most concrete threat to existing business models for the entertainment industry to date.²⁴

¶10 The threat of file-sharing most immediately affected the music industry, which filed highly-publicized copyright infringement lawsuits against file-sharing networks, such as Napster,²⁵ and, beginning in 2003, against individual file-sharers.²⁶ Furthermore, representatives of the movie industry joined record companies in the “Grokster” action, which accused peer-to-peer networks of copyright infringement for facilitating illicit unauthorized distribution of protected content.²⁷ Most recently, the movie

²³ JESSICA LITMAN, *DIGITAL COPYRIGHT* 47 (2000).

²⁴ WILLIAM FISHER, *PROMISES TO KEEP: TECHNOLOGY, LAW AND THE FUTURE OF ENTERTAINMENT*, 15-16 (Stanford University Press 2004).

²⁵ *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 380 F.3d 1154, 1157 (9th Cir. 2004); *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001).

²⁶ Katie Dean, *RIAA Legal Landslide Begins*, WIRED.COM, Sept. 8, 2003, at <http://www.wired.com/news/digiwood/0,1412,60345,00.html> (last visited Jan. 10, 2005).

²⁷ *Metro-Goldwyn-Mayer*, 380 F.3d at 1154.

industry challenged the unauthorized trading of motion pictures by bringing suits against individual file-traders in November 2004.²⁸

B. Television's advertising-based revenue model

¶11 Unlike the movie and music industries, which generate substantial revenues by selling content directly to consumers on an a la carte basis (i.e., sale of a ticket to one movie, sale of one CD, etc.), television has historically exploited its copyrights by using an advertising-based model.²⁹ Presently, television programming is distributed free of charge (for broadcast) or within a monthly subscription package (for cable or satellite). Under this model, “film and television producers get paid by advertisers that sponsor the broadcasts” rather than by consumers.³⁰ The district court articulated this still-dominant model in *Betamax*,³¹ explaining that:

[A]dvertisers typically pay the broadcasters a fee for each transmission of an advertisement based on an estimate of the expected number and characteristics of the viewers who will watch the program. While, as members of the general public, the viewers indirectly pay for the privilege of viewing copyrighted material through increased prices for the goods and services of the advertisers, they are not involved in a direct economic relationship with the copyright holders or their licensees.³²

¶12 Because of this revenue model, the television industry has previously opposed technological innovations that threaten to displace or mitigate advertising effectiveness. The potential for lost advertising revenue was one of the industry's primary objections to the introduction of the VCR, as they feared the ability of consumers to record programs and

²⁸ Press Release, Motion Pictures Association of America, Studios File First Wave of Suits Against Online Illegal File Traders, (Nov. 16, 2004) *available at* http://www.respectcopyrights.org/11-16-04_Lawsuit_Press_Release.pdf (last visited Jan. 10, 2005).

²⁹ Peter S. Menell, *Envisioning Copyright Law's Digital Future*, 46 N.Y.L. SCH. L. REV. 63, 106. (2002-2003).

³⁰ *Id.*

³¹ *Universal City Studios, Inc. v. Sony Corp. of Am.*, 480 F. Supp. 429, 453 (D.C. Cal. 1979) (quoting *Teleprompter Corp. v. Columbia Broad. Sys., Inc.*, 415 U.S. 394, 411-12 (1974)).

³² *Id.* Some new services, like VOD, allow consumers to purchase ad-free programs directly to watch at their discretion on a la carte basis. CBS Executive David Poltrack indicated that networks may soon allow customers to buy VOD content at an estimated price of \$1 per show. John Consoli, *Kicking VOD's Tires*, MEDIAWEEK, Dec. 13, 2004, *at* http://www.mediaweek.com/mediaweek/headlines/article_display.jsp?vnu_content_id=1000735709 (last visited Jan. 10, 2005).

watch them while skipping over advertisements would damage the market for television commercials.³³ In reality, the effect on advertising from VCR time-shifting was minimal, as A.C. Nielsen estimated in 1991 that only 3% of television consumption came through the playback of recorded programs and only 40% of those viewers attempted to skip advertisements through fast-forwarding.³⁴

C. Regulatory response to technological threats to copyright

1. Digital Millennium Copyright Act

¶13 Because of fears that piracy brought on by digital technology would severely erode markets for numerous types of copyrights, Congress passed the Digital Millennium Copyright Act (“DMCA”) in 1998.³⁵ This act took several steps to prevent the unauthorized distribution of copyrighted works, most notably the introduction of “anti-circumvention” regulations that made it a crime to “circumvent a technological measure that effectively controls access to a [copyrighted] work.”³⁶ This language was designed to prevent unauthorized distribution of copy-protected works (such as music CDs or DVDs), by criminalizing any technology intentionally designed to copy such files. Although the legislation largely predated the file-sharing phenomenon brought on by Napster, the entertainment industry has been successful in invoking the DMCA to prevent the spread of anti-circumvention technology capable of descrambling DVD content.³⁷ Therefore, the DMCA remains at least relevant in preventing the distribution of television shows copied from copy-protected broadcasts or official DVD releases.

2. Broadcast Flag (FCC 03-273)

¶14 Although the language of the DMCA remains relevant enough to discourage the copying of DVDs and other copy-protected content for redistribution, this legislation left unanswered questions. Much of current TV copying occurs by capturing signals delivered either by cable or over-the-air broadcast to television sets or to PCs with no universal copy-protection standard. As television moved toward a digital signal distribution, the FCC endorsed the Broadcast Flag standard in November

³³ *Universal City Studios*, 480 F. Supp. at 452.

³⁴ Matthew W. Bower, Note, *Replaying the Betamax Case for the New Digital VCRs: Introducing TiVo to Fair Use*, 20 CARDOZO ARTS & ENT. L.J., 417, 442 (2002).

³⁵ Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified in relevant part at 17 U.S.C. § 1201 (2000)).

³⁶ *Id.* at § 1201(A)(1)(a).

³⁷ Fisher, *supra* note 24, at 95 (citing *Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2d Cir. 2001)).

2003.³⁸ This regulation requires that, as of July 2005, any hardware capable of receiving a digital TV (“DTV”) signal be capable of recognizing and responding to a copy-protection rights management system embedded in the signal, and, preventing the unauthorized distribution of that signal.³⁹ The FCC endorsed such a policy primarily because “the potential threat of mass indiscriminate redistribution will deter content owners from making high value digital content available through broadcasting outlets absent some content protection mechanism.”⁴⁰ In other words, the Broadcast Flag was designed specifically to prevent the unauthorized redistribution of television content.

¶15 While its proponents argue that this regulation is necessary to motivate copyright holders to introduce digital TV content, the Broadcast Flag is not without critics. The Electronic Frontier Foundation offered staunch opposition to the bill, suggesting that Broadcast Flag requirements would limit “innovation in the high-end digital video technology, wireless home networks, digital displays, and more” and were “the latest piece of a broad effort by copyright holders to attain perfect control over every use of a copyrighted work, even within a private home.”⁴¹ The Center for Democracy and Technology suggested that although the regulation is important for promoting the expansion of digital programming, it could frustrate ostensibly reasonable consumer uses, prohibit fair uses of content, and may extend beyond the FCC’s jurisdiction.⁴² The Broadcast Flag was also opposed by the Electronic Privacy Information Center, which expressed consumer and privacy protection concerns, as well as the position that Broadcast Flag will be ineffective at successfully preventing unauthorized copying.⁴³

II. ARE THERE “FAIR USES” OF SHARED TELEVISION CONTENT?

¶16 Because the sharing of television, unlike music or movies, often occurs between consumers who already have access to the content through a free over-the-air broadcast or through cable subscription, some forms of peer-to-peer trading of television content present a strong argument of fair use, although judicial protection remains unlikely.

³⁸ FCC, DIGITAL BROADCAST CONTENT PROTECTION, FCC 03-273. (2003).

³⁹ *Id.*

⁴⁰ *Id.* at I.4.

⁴¹ ELEC. FRONTIER FOUND., *supra* note 6.

⁴² CTR. FOR DEMOCRACY AND TECH., IMPLICATIONS OF THE BROADCAST FLAG: A PUBLIC INTEREST PRIMER (VERSION 2.0), Dec. 2003, at 18, 24, 26, *available at* <http://www.cdt.org/copyright/031216broadcastflag.pdf> (last visited Jan. 10, 2005).

⁴³ ELEC. PRIVACY INFO. CTR., *supra* note 14.

A. Fair use as an exception to copyright protection

¶17 As authorized by the U.S. Constitution⁴⁴ and defined by Congress, copyright protection grants owners the “exclusive right” to reproduce and distribute copies of the work, prepare derivative works based on the copyrighted work, and perform or display the work publicly.⁴⁵ Despite the comprehensiveness of these exclusive rights, Congress codified a statutory exemption to copyright infringement liability in 1976 based on the common law doctrine of “fair use.” According to the Copyright Act, fair use is based on an analysis of four factors:

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.⁴⁶

B. Time-shifting as authorized in Betamax

¶18 The *Betamax* case originally introduced the concept of fair use to television viewing.⁴⁷ Movie studios argued that VCR technology threatened to harm potential markets by (a) reducing the ability to market movies in theaters or on video and (b) reducing the audience and advertisement demand for repeat or even first-run showings.⁴⁸

¶19 The Court first considered the plaintiffs’ argument that VCR distribution was contributory infringement because it allowed consumers to record television programming, thus violating the license implicit in the broadcast.⁴⁹ On this note, the Court determined that the sale of copying equipment is not prohibited if the “product is widely used for legitimate,

⁴⁴ “Congress shall have the Power...To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” U.S. CONST., art. I, §8.

⁴⁵ 17 U.S.C. § 106 (2000).

⁴⁶ *Id.* at § 107.

⁴⁷ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 417 (1984).

⁴⁸ *Id.* at 483 (Blackmun, J., dissenting).

⁴⁹ *Id.* at 441.

unobjectionable purposes” and “capable of substantial noninfringing uses.”⁵⁰

¶20 Next, the majority agreed with the district court that “unauthorized home time-shifting of respondent’s programs is legitimate fair use.”⁵¹ In determining fair use, the Court focused on the fourth factor. First, the majority determined that, because many copyright holders would support and authorize time-shifting as a means of expanding the viewer population, there were substantial noninfringing uses for the VCR.⁵² Second, unauthorized, but noncommercial, recording of programs was fair use primarily because the plaintiff failed to prove a likelihood that such use would result in future harm to the copyright holder’s market.⁵³ Specifically, the Court endorsed the district court’s findings that (a) there was no factual basis that those who viewed recorded copies would watch less live TV or attend less theatrical releases⁵⁴ and (b) marketing research revealed that time-shifting likely would increase, rather than decrease, a program’s demand in rerun or syndication.⁵⁵ Therefore, because time-shifting was a substantial noninfringing use, VCR manufacturers were not liable for this practice. It must be noted that the majority left open the opportunity for Congressional clarification on the legality of time-shifting of televised programming.⁵⁶

¶21 On the other hand, the dissent argued that the making of a videotape for home viewing was an “ordinary rather than productive use” and therefore declined to “permit unfettered use of this new technology in order to increase access to television programming.”⁵⁷ Because time-shifting could have an impact on the potential market for the copyright holder’s works, the practice should not be protected as fair use. According to the dissent, in order to invoke fair use, the infringer cannot simply prove that the net result of infringement was positive to the copyright holder, but that the challenged use had not damaged the ability to “demand compensation

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² This determination was based partly on the testimony of Fred Rogers of *Mr. Rogers’ Neighborhood*, who stated that he had no objection to taping for noncommercial use and believed this to be a service to his audience. *Id.*

⁵³ *Id.* at 454.

⁵⁴ *Id.* at 453 n. 37.

⁵⁵ *Id.* at 453 n. 38.

⁵⁶ “It may well be that Congress will take a fresh look at this new technology, just as it has examined other innovations in the past. But it is not our job to apply laws that have not yet been written.” *Id.* at 456.

⁵⁷ *Id.* at 480 (Blackmun, J., dissenting).

from (or to deny access to) any group who would otherwise be willing to pay to see or hear the copyrighted work.”⁵⁸

C. Fair use implications of space-shifting

¶22 The proliferation of digital recording and transferring capabilities in the 1990s created a new form of potentially noncommercial use of copyright through “space-shifting,” the transfer of legitimately owned content from one medium or storage device to another.⁵⁹ In *Recording Industry Association of America v. Diamond Multimedia Systems, Inc.*, representatives of the music industry challenged the introduction of Diamond’s Rio mp3 player by arguing that that its digital recording capabilities violated the Audio Home Recording Act (AHRA).⁶⁰ In ruling for Diamond, the Ninth Circuit explained that “merely mak[ing] copies in order to render portable, or ‘space-shift,’ those files that already reside a user’s hard drive” was “paradigmatic noncommercial personal use.”⁶¹

¶23 However, the practice of space-shifting via digital recording and transfer of copyrighted content was interpreted differently by the United States District Court for the Southern District of New York in *UMG Recordings, Inc. v. MP3.com, Inc.*⁶² In *UMG*, the My.MP3.com service, which permitted subscribers to access copyrighted music files via the Internet after proving they owned legitimate CD copies of the content, was not protected under fair use.⁶³ Under the fourth factor, the court found that the defendant’s interference with the Internet download market, which the plaintiffs had not yet entered, was sufficient to negatively affect the potential market for the copyrighted works, thus weighing against fair use.⁶⁴

⁵⁸ *Id.* at 485 (Blackmun, J., dissenting).

⁵⁹ Space-shifting is defined as “the act of copying digital content for use on a device other than the one for which it is was originally intended, such as copying a music from a compact disc to an MP3 file for use on a portable MP3 player, or copying an MP3 file onto a compact disc for use in a digital audio player.” DRM WATCH, available at http://drmwatch.webopedia.com/TERM/S/space_shifting.html (last visited Mar. 20, 2005).

⁶⁰ *Recording Indus. Ass’n of Am. v. Diamond Multimedia Sys., Inc.*, 180 F.3d 1072, 1075 (9th Cir. 1999). See 17 U.S.C. §1001-10 (1992).

⁶¹ *Id.*

⁶² 92 F.Supp.2d 349 (S.D.N.Y. 2000). It should be noted that fair use was argued to defend the actions of MP3.com, which copied and uploaded copyrighted content to its commercial web site, rather than the actions of the MP3.com’s customers, who subsequently downloaded the music files from that site. *Id.* at 351.

⁶³ *Id.* at 353.

⁶⁴ *Id.* at 352.

¶24 In 2001, the Ninth Circuit in *A&M Records, Inc. v. Napster, Inc.* ruled that the Napster network, which facilitated the unauthorized trading of music files, was not protected under fair use even if users were space-shifting by downloading or transferring previously purchased files via the network.⁶⁵ Although Napster claimed that this form of space-shifting was one form of legitimate use, the court disagreed because listing a music file on Napster for the purposes of downloading that file elsewhere also inappropriately made that file publicly available to millions of users.⁶⁶

D. Extending Betamax to unauthorized television file sharing

¶25 Although arguments can be made differentiating television content from the file sharing held to be infringing uses in *UMG* and *Napster*, acquiring a television show via an unauthorized peer-to-peer network is probably not fair use. An analysis of the first and fourth fair use factors, arguably the most relevant factors for television time-shifting and peer-to-peer file sharing,⁶⁷ does not support copyright exemption. Under the first factor, purpose and character of use, viewing recorded television within the home has been protected as noncommercial,⁶⁸ and it is conceivable that most downloaders of broadcast shows had permission to view content at its initial airtime. However, noncommercial use is weakened when content is acquired via an anonymous, public peer-to-peer network, and is unlikely to be protected as fair use.⁶⁹

¶26 Regarding the fourth factor, the effect upon real or potential markets, the minimal financial impact of the VCR,⁷⁰ and the currently unsettled empirical impact of file-sharing on copyright holders' revenue⁷¹ suggest that television copyright holders have yet to definitively prove substantial damage to actual or potential markets. On the other hand, weighing against fair use protection, recent research suggests that new

⁶⁵ *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1019 (9th Cir. 2001).

⁶⁶ *Id.* at 1004.

⁶⁷ The second and third factors are often conceded in entertainment file-sharing cases as weighing against fair use because creative works are clearly protected under copyright and the nature of digital file sharing facilitates copying files in their entirety. See *UMG*, 92 F.Supp.2d at 351-2; *Napster*, 239 F.3d at 1016.

⁶⁸ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 448 (1984).

⁶⁹ *Napster*, 239 F.3d at 1019.

⁷⁰ Bower, *supra* note 34, at 442.

⁷¹ See Felix Oberholzer & Koleman Strumpf, THE EFFECT OF FILE SHARING ON RECORD SALES: AN EMPIRICAL ANALYSIS, WORKING PAPER, March 2004 available at <http://www.nber.org/~confer/2004/URCs04/felix.pdf> (last visited Jan. 10, 2005).

television recording technologies will have a much bigger impact on television broadcasters' advertising and other revenue.⁷²

¶27 Finally, significant policy shifts away from unauthorized copyright use indicate that a fair use ruling is unlikely. Technological legislation, such as the DMCA and Broadcast Flag, suggest a more recent Congressional intent to limit distribution of television content without authorization and also weighs heavily against fair use.

1. The first factor

¶28 The first fair use factor evaluates “the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes.”⁷³ Although some aspects of television file-sharing would appear noncommercial in nature, judicial precedent suggests that this practice is unlikely to be protected as fair use under the first factor.

¶29 Indeed, valid arguments exist for the characterization of television sharing as noncommercial. First, the practice of downloading television files that a consumer had legitimate access to on initial broadcast for the purpose of consumption in the home is arguably a noncommercial use. In *Betamax*, the majority endorsed the district court's finding that “time-shifting for private home use must be characterized as a noncommercial, nonprofit activity,” thus weighing in favor of fair use under the first factor.⁷⁴ The Court noted that the “time-shifter no more steals the program by watching it once than does the live viewer,”⁷⁵ More recently in *Diamond*, the transfer of music files to a digital recording device by users with legitimate access to the copyrighted work was seen as a “paradigmatic noncommercial personal use.”⁷⁶

¶30 Second, weighing in favor of fair use is the fact that file traders have access to at least a substantial segment of shows either through free broadcast or cable subscriptions. In *Betamax*, the Court upheld the right to time-shift partly because consumers already had free access to this content upon broadcast.⁷⁷ Although the landscape of television has changed, with

⁷² 88% of viewers of previously-recorded content skip ads when using PVRs. Bower, *supra* note 34, at 442.

⁷³ 17 U.S.C. § 107 (2000).

⁷⁴ Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 449 (1984).

⁷⁵ *Id.* at 450 n.33.

⁷⁶ Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072, 1079 (9th Cir. 1999).

⁷⁷ “[W]hen one considers . . . that timeshifting merely enables a viewer to see such a work which he had been invited to witness in its entirety free of charge, the fact that the entire work is reproduced does not have its ordinary effect of mitigating against a finding of fair use.” *Sony*, 464 U.S. at 449-450 (internal citation omitted).

ad-supported cable programming now constituting as much as 55.1% market share in primetime, free broadcast network television still takes up over one-third of the primetime share.⁷⁸ Therefore, traded television shows from broadcast network television would meet the same criteria of those protected for time-shifting by the Supreme Court.

¶31 Beyond broadcast, approximately two-thirds of U.S. households subscribe to some form of cable service.⁷⁹ Under the *Betamax* reasoning, these users could argue that they have already been granted permission to view cable programs through a paid subscription; therefore, time-shifting through downloading should be protected as fair use. Of course, copyright holders can, and do, specifically retain the right to control redistribution and alternative forms of paid subscription content in their commercial transmissions, thereby frustrating the cable subscriber's fair use argument.

¶32 On the other hand, television sharing under the first factor is unlikely to be characterized as noncommercial and a fair use. There is a fundamental difference between personally recording within the home for home use and acquiring that content from an anonymous, external trader. In fact, downloading a television file in order to view it at a more convenient time or place might be more analogous to space-shifting.⁸⁰ *Betamax* was silent on whether distribution of time-shifted copies beyond the home would still be considered a private, noncommercial use.⁸¹ In deciding against fair use within the Napster network, the Ninth Circuit ruled against space-shifting as fair use, emphasizing the anonymous and public nature of file-trading.⁸² Therefore, when more modern decisions are examined, file-sharing of a television program stands on tenuous ground as a protected use.

⁷⁸ *Cable's July Share Is Highest Ever*, MEDIAPOST, (Aug. 1, 2003), at http://www.mediapost.com/dtls_dsp_news.cfm?cb=112717A&subMatter=Traditional&newsID=213888&newsDate=08/01/2003 (last visited Jan. 10, 2005).

⁷⁹ Cable Size, *supra* note 19.

⁸⁰ *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1019 (9th Cir. 2001).

⁸¹ The issue of sharing digitally recording television as a fair use might have been resolved after television copyright holders filed suit against ReplayTV for marketing a PVR that allowed users to automatically skip advertisements and send programs to fellow users. However, the suit was dismissed when ReplayTV was sold and the purchaser dropped the controversial functionality, leaving this concept judicially untested. *Paramount Pictures Corp. v. ReplayTV*, 298 F.Supp.2d 921, 923 (D.C. Cal. 2004). See also Adam A. Hurowitz, *Copyright in the New Millennium: Is the Case Against RePlayTv a New Betamax for the Digital Age?*, 11 COMMLAW CONSPECTUS 145, 160 (2003).

⁸² "It is obvious that once a user lists a copy of music he already owns on the Napster system in order to access music that he already owns, the song becomes 'available to millions of other individuals.'" *Napster*, 239 F.3d at 1019.

¶33 In addition, downloading music from the Napster network was, at least according to the Ninth Circuit, a commercial use based on a “showing that repeated and exploitative unauthorized copies of copyrighted works were made to save the expense of purchasing authorized copies.”⁸³ Ultimately, commerciality hinged on the district court’s determination that “Napster users get for free something they would normally have to buy.”⁸⁴ Based on the traditional perception of broadcast television as a freely distributed good (or cable television as a good legitimately purchased by the majority of households),⁸⁵ it would be difficult to argue that television file sharers download primarily to avoid legitimate compensation in the same manner as Napster users. Therefore, downloading a show to view it once within the home could be noncommercial, assuming the user was not downloading for the purpose of avoiding payment, such as a basic or premium cable subscription.

¶34 However, this reasoning assumes the historical distribution of television primarily in one form (i.e., live transmission) and does not consider that television could be offered in a variety of forms (for a variety of prices). For example, the current television market has already evolved so that consumers can acquire the same show (a) live, with advertisements, at no additional cost on free broadcast networks or within a cable subscription package; (b) “on demand” and ad-free for a premium fee;⁸⁶ or (c) in a commercially-available DVD compilation.⁸⁷ Therefore, copyright holders could argue that the downloading of more convenient digital television files effectively circumvents the need to purchase legitimate premium copies, such as those available through VOD or DVDs. Under this rationale, downloading television files in order to avoid payment would be commercial under the test applied to Napster users.

¶35 Lastly, space-shifting by downloading television files for more convenient viewing would not qualify for fair use protection under the first factor merely on the basis of improved consumer ease-of-use. In *UMG*, the court rejected the argument that providing music files through MP3.com to utilize the convenience of Internet storage over traditional CD media should be protected.⁸⁸ Although this fair use decision concerned MP3.com as a

⁸³ *Napster*, 239 F.3d at 1015.

⁸⁴ *Id.* (quoting *A&M Records, Inc. v. Napster, Inc.*, 114 F.Supp.2d 896, 912 (N.D. Cal. 2000)).

⁸⁵ *Cable Size*, *supra* note 19.

⁸⁶ *Consoli*, *supra* note 32.

⁸⁷ *Manly & Markoff*, *supra* note 3.

⁸⁸ *See UMG Recordings, Inc. v. MP3.Com, Inc.*, 92 F.Supp.2d 349, 351 (S.D.N.Y. 2000) (space-shifting in order to listen to music “without lugging around the physical discs themselves” does support fair use under the first factor because such services are “innovative” but not “transformative.”)

facilitator of convenience for its users, it remains unlikely that the convenience of downloading a television show for personal viewing would be sufficient to justify fair use under the first factor.

2. *The fourth factor*

¶36 The fourth fair use factor examines “the effect of the use upon the potential market for or value of the copyrighted work.”⁸⁹ The lack of consensus on the impact file-sharing has on television revenues prevents a definitive forecast of this practice as fair use under this factor. To demonstrate harm to a present or potential market, copyright holders bear the burden of proving that file-sharing of television shows will potentially harm future primary or derivative markets.⁹⁰ To date, numerous reports have suggested that unauthorized file-sharing has, and will continue to have, a detrimental effect on entertainment revenues.⁹¹ However, other researchers have suggested that file-sharing may have no impact on traditional revenue channels⁹² and may actually improve the efficiency, and thus profitability, of certain entertainment markets.⁹³ Regardless, divergent views on the sales effects of file-sharing on other entertainment industries suggests that the television industry will at least have to deliver persuasive research demonstrating the damaging effect of file sharing in order to persuasively defeat fair use.

¶37 Additionally, modern television recording technologies coupled with the emergence of file-sharing have potentially created a much more realizable harm to copyright holders than was experienced by the introduction of the VCR. The Supreme Court protected VCR time-shifting

⁸⁹ 17 U.S.C. § 107 (2000).

⁹⁰ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 451 (1984).

⁹¹ The MPPA estimates losses of the movie industry from file-trading and the sale of pirated movies at \$3 billion a year. Frank Ahrens, *MPAA to Sue Over Movie File Sharing*, WASHINGTON POST, Nov. 5, 2004, at E01. File-sharing has allegedly been the primary cause of a 30% reduction in retail music sales from 1999 to 2003. Norbert J. Michel, *Internet File Sharing: The Evidence So Far and What It Means for the Future*, THE HERITAGE FOUNDATION, Aug. 23, 2004, available at

<http://www.heritage.org/Research/InternetandTechnology/bg1790.cfm> (last visited Jan. 10, 2005), (citing Stan J. Liebowitz, *Pitfalls in Measuring the Impact of File Sharing*, UNIV. OF TEXAS AT DALLAS, SCHOOL OF MGMT, WORKING PAPER, July 2004 available at <http://www.utdallas.edu/~liebowitz/intprop/pitfalls.pdf> (last visited Jan. 10, 2005)).

⁹² Oberholzer & Strumpf, *supra* note 71.

⁹³ “Historical evidence suggests that sharing usually increases the profits of copyright owners.” Michael J. Meurer, *Too Many Markets or Too Few? Copyright Policy Toward Shared Works*, 77 S.CAL.L.REV. 903, 932 (July 2004).

because of the district court's finding that "harm from time-shifting is speculative and, at best, minimal."⁹⁴ Even by 1991, when VCRs had substantially penetrated U.S. households, only 3% of television viewing occurred using VCR time-shifting methods, with 40% of those users using time-shifting to skip commercials.⁹⁵ Consequently, this resulted in minimal damage to TV advertising revenues. Furthermore, without file-sharing networks, the small subset of TV viewers who recorded programs using their VCR could not easily redistribute content.

¶38 On the other hand, research on digital recording use suggests that PVRs and other digital recording technologies alone may reduce live audiences by as much as 15% by 2010, resulting in losses of \$5.5 billion in advertising revenue.⁹⁶ To date, comprehensive research on the viewing of downloaded television shows has yet to be conducted. However, anecdotal evidence suggests that many downloaded shows have already been stripped of advertisements⁹⁷ and, based on the viewing habits of consumers of digitally pre-recorded television,⁹⁸ it is likely that a substantial portion of television downloaded with advertisements will eventually be viewed ad-free.

¶39 Moreover, recording via more advanced digital TV tuners can create copies of a higher quality, and more easily transferable with the advent of the Internet, than those made possible with a VCR. The resulting unauthorized copy of comparable quality, which can be viewed at any time and easily transferred to multiple users, provides a much bigger threat to displace the original than was conceivable under *Betamax*. Specifically, the widespread availability of free television content on peer-to-peer networks would severely undermine the \$2.3 billion market for television DVDs.⁹⁹ Therefore, a significant shift away from live viewing in favor of downloaded television files could lead to significant losses in live television advertising revenue and direct-to-consumer DVD sales for television broadcasters in a way unseen with VCR use. Such an impact would reduce the value of the copyrighted work, and weighs against fair use.¹⁰⁰

¶40 Another technological innovation unanticipated in *Betamax* is the emergence of VOD television programming. VOD allows viewers to

⁹⁴ *Sony*, 464 U.S. at 454.

⁹⁵ Bower, *supra* note 34, at 442.

⁹⁶ Kim, *supra* note 2.

⁹⁷ Snider, *supra* note 4 ("downloaders can select from a smorgasbord of swiped [television programs] cleansed of commercials").

⁹⁸ Research by PVR manufacturers indicates that users skip commercials 88% of time on playback. Bower *supra* note 34, at 442.

⁹⁹ According to Merrill Lynch, the TV DVD market represents approximately 15% of all DVD revenue. Manly & Markoff, *supra* note 3.

¹⁰⁰ 17 U.S.C. § 107 (2000).

immediately access archived television content, complete with the ability to pause, fast-forward or rewind, by paying a premium fee – without the added hassle of recording that program in the first place.¹⁰¹ Some analysts predict that this added convenience will allow television content providers to demand “sky-high licensing rates” for such access in the future.¹⁰² Although VOD is currently offered predominantly for cable or premium content, broadcast networks are likely to enter this market in the future with the potential for substantial profits.¹⁰³ However, the emergence of a robust file-sharing universe in which consumers can download the same television content instantly at no cost surely will frustrate the emergence of VOD, which offers a very similar value proposition, but for a fee. The widespread downloading of television files is likely to be considered a potential harm to the copyright holders’ market; accordingly, the introduction of VOD is yet another factor weighing against fair use.

3. Shifts in Legislative Policy

¶41 In addition to judicial precedent weighing against fair use, significant legislation since the *Betamax* decision suggests that public policy stands opposed to the distribution of televised content as a fair use. First, the DMCA specifically states that “no person shall circumvent a technological measure that effectively controls access to a work.”¹⁰⁴ Because digital television will permit distributors to copy-protect television content, any subsequent copying and redistribution of this content that technologically circumvents copy-protection would inherently oppose Congressional intent. Therefore, it seems unlikely that any court would endorse as fair use the downloading of television files created in direct opposition to the spirit of the DMCA.

¶42 Second, Broadcast Flag regulation was specifically designed to prevent the “potential threat of mass indiscriminate redistribution” of digital television content.¹⁰⁵ Again, any unauthorized file-sharing of copy-protected television content is in direct defiance of this regulatory standard. The FCC has made small concessions to potential sharers, including approval of a

¹⁰¹ Lisa Delgada, *New Cry Coming: I Demand My HBO*, WIRED.COM, Oct. 30, 2001 at <http://www.wired.com/news/digiwood/0,1412,47975,00.html> (last visited Jan. 10, 2005).

¹⁰² Peter Burrows, *Next: TV Meets IP*, BUSINESSWEEK ONLINE, Nov. 23, 2004 at http://www.businessweek.com/technology/content/nov2004/tc20041123_3012_tc184.htm (last visited Jan. 10, 2005).

¹⁰³ According to CBS Executive David Poltrack, “[w]ithin the next two years, video-on-demand services featuring the broadcast networks’ most popular shows will provide a steady new revenue stream for program providers and program distributors.” Consoli, *supra* note 32.

¹⁰⁴ 17 U.S.C. § 1201 (A)(1)(a) (2000).

¹⁰⁵ FCC, Digital Broadcast Content Protection, FCC 03-273, at I.4. (2003).

TiVo feature that allows subscribers to share content with up to 10 other users who share the same customer account.¹⁰⁶ However, this is a far cry from a deregulated TV-sharing environment. Although FCC regulation does not authoritatively represent Congressional intent and the FCC was clear that “the scope of our decision does not reach existing copyright law,”¹⁰⁷ the passage of Broadcast Flag suggests that unauthorized trading of copy-protected television files is unlikely to remain protected alongside FCC regulations implemented specifically to prevent such redistribution.

III. SHOULD THE TELEVISION INDUSTRY AUTHORIZE PEER-TO-PEER CONTENT SHARING?

¶43 Even if we concede (or the Supreme Court decides) that the sharing of television content between paying customers is not fair use, should television content owners forgo some copyright control by authorizing the sharing of programming via peer-to-peer networks? The introduction of new technology has forced the entertainment industry to define a collective stance opposing unauthorized digital copying, but much uncertainty remains regarding the future of entertainment distribution. “Hollywood, electronics companies, the government and consumers are all staking out positions on the great policy spectrum that extends from Willy-Nilly Copying Freedom on one end to Intrusively Oppressive Copy Protection on the other,” wrote David Pogue of *The New York Times*.¹⁰⁸ “Settling on a mutually agreeable position will take some time.”¹⁰⁹

¶44 Although restricting all unauthorized forms of copying is an understandable position, copyright holders often stand to gain by encouraging consumers to copy and distribute works. The *Betamax* decision foretold such potential in 1984, explaining that “copyright law does not require a copyright owner to charge a fee for the use of his works, and...the owner of a copyright may well have economic or noneconomic reasons for permitting certain kinds of copying to occur without receiving direct compensation from the copier.”¹¹⁰

¶45 The movie and television industries vehemently opposed the introduction of the VCR because they feared the ability to record television

¹⁰⁶ Stephen Warley, *Sharing TV Shows in a Digital World*, TVSPY, Aug. 10, 2004 at http://www.tvspy.com/nexttv/nexttvcolumn.cfm?t_nexttv_id=2281&page=1&content_cat_id=10 (last visited Jan. 10, 2005).

¹⁰⁷ FCC, Digital Broadcast Content Protection, FCC 03-273, at I,9 (2003).

¹⁰⁸ David Pogue, *TiVo Adds Portability to the Mix*, N.Y. TIMES, January 6, 2005, at G1.

¹⁰⁹ *Id.*

¹¹⁰ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 447 n.28 (1984).

programs would erode the market for syndication¹¹¹ and allow viewers to create a personal library from recorded programs.¹¹² Additionally, television executives worried that the ability to replay recorded television and “fast-forward” commercials would dilute the market for their works (in the form of advertising revenue).¹¹³ In reality, the introduction of the VCR ultimately added a substantial revenue stream to movie studios (in the form of video rentals and sales) and created new markets for prerecorded videos of television shows.¹¹⁴ Furthermore, television advertising revenues have continued to remain strong, with the industry generating \$44.8 billion in revenue in 2001.¹¹⁵

¶46 Despite the staunch opposition from the music industry, some commentators have suggested, albeit controversially, that unauthorized file-sharing may have no detrimental impact on retail music sales.¹¹⁶ Hence, it is well within the realm of possibility that similar sharing of television shows may not affect the retail market for this content (via VOD, DVD compilations, etc.) Research suggests that, rather than diluting demand, the larger a television show’s initial audience, the more value that show will retain in syndication.¹¹⁷ For this reason, the ability to distribute copyrighted television shows cheaply and efficiently via peer-to-peer networks after their original airdate may actually increase the frequency with which this programming (including its advertising) is viewed, thus raising the value of the underlying content. Therefore, television copyright holders might consider a “laissez-faire” approach to file-sharing, regardless of the fate of the practice as fair use.

CONCLUSION

¶47 The recent phenomenon of peer-to-peer file sharing has made an indelible impact on all forms of entertainment. As discussed above, the television industry has not been immune to this revolutionary shift in how consumers acquire copyrighted content. The distribution of hundreds of thousands of unauthorized copies of popular television shows such as *The Simpsons*, *The Sopranos*, and *Friends* on file-sharing networks¹¹⁸ suggests

¹¹¹ *Id.* at 453 n.38.

¹¹² *Id.* at 483 (Blackmun, J., dissenting).

¹¹³ *Id.* at 452 n.36, 37.

¹¹⁴ Litman, *supra* note 23, at 107.

¹¹⁵ Matthew Scherb, Comment, *Free Content’s Future: Advertising, Technology, and Copyright*, 98 NW. U.L. REV. 1787, 1791 (Summer 2004).

¹¹⁶ According to empirical research based on .01% of the world’s downloads, file sharing has “an effect on sales which is statistically indistinguishable from zero.” Oberholzer & Strumpf, *supra* note 71, p. 3.

¹¹⁷ Bower, *supra* note 34, at 438.

¹¹⁸ Manly & Markoff, *supra* note 3.

that television downloading is popular and, according to television executives, “a very serious growing problem.”¹¹⁹

¶48 Regardless of industry concern, the emergence of file-sharing as an alternative method for the acquisition of television content raises interesting questions about the potential for protection under fair use. The similarities with personal time-shifting as protected by the Supreme Court in *Betamax* are substantial.¹²⁰ Much like using a VCR, the television downloader may view prerecorded shows that he was fully permitted to view in their original form. Similarly, the television industry has yet to conclusively demonstrate that the widespread proliferation of file-sharing will materially affect future revenues. Finally, viewing prerecorded content within the home could be construed as a noncommercial use, especially if that user has made no effort to avoid a licensing fee.

¶49 However, key differences and developments in the television landscape suggest that television downloading is unlikely to qualify for fair use protection. Unlike the consumer who watches a show recorded with his own VCR, the downloader has not recorded the content himself and must seek out these programs from anonymous public networks. Furthermore, the post-*Betamax* introduction of the DMCA¹²¹ and Broadcast Flag standard¹²² suggest that legislative and regulatory policy has shifted to a clear interest in protecting copyright holders from the threat of new technologies such as file-sharing. Finally, the advances in recording technology and emergence of new markets, such as VOD, suggest that unfettered, unauthorized recording and sharing of content would have a much more substantial impact on the market for copyrighted works than those inflicted by the VCR.

¶50 In conclusion, although some research suggests that television copyright holders may see substantial gains in some areas from the authorization of file-sharing, this will be a decision ultimately placed in the hands of the television distributors themselves. Regardless of how the television industry chooses to utilize the online distribution of content, unauthorized sharing of copyrighted television files is unlikely to gain fair use protection.

¹¹⁹ Remarks by Fox Entertainment Senior Vice-President Ron Wheeler. Graham, *supra* note 3.

¹²⁰ Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 456 (1984).

¹²¹ 17 U.S.C. § 1201 (2000).

¹²² FCC, Digital Broadcast Content Protection, FCC 03-273 (2003).