

COMMERCIAL SKIPPING TECHNOLOGY AND THE NEW MARKET DYNAMIC: THE RELEVANCE OF ANTITRUST LAW TO AN EMERGING TECHNOLOGY

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ABSTRACT

Commercial-skipping technology can liberate the consumer and make the television business more competitive. It rose to prominence with the advent of the digital video recorder (DVR), also known as the personal video recorder (PVR). PVRs have helped advertisers reach their target audience more effectively through personalized advertisements, and it has successfully pressured television networks and advertisers to innovate more appealing ways to induce consumers to buy advertised products. But even if this technology fails to enhance the business of television, television networks can still outpace commercial-skipping technology in an arms race. Through competitive pressure, such technology promotes innovation, progress, and a more competitive market without posing an undue burden on the entertainment industry.

INTRODUCTION

¶1 At first glance, the American jurisprudence of copyright and antitrust law appear to be in tension.² Antitrust seeks to break the “restraints on trade” associated with market power,³ while copyright law

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² See WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 372 (The Belknap Press of Harvard University Press 2003) (“Then, too, it is widely believed that intellectual property law and antitrust law are enemies—that intellectual property authorizes patent and copyright (and perhaps also trademark and trade secret) monopolies that offend antitrust principles.”).

³ See *United States v. Addyston Pipe & Steel Co.*, 85 F. 271, 282-83 (6th Cir. 1898) (“But where the sole object of both parties in making the contract as expressed therein is merely to restrain competition, and enhance or maintain prices, it would seem that there was nothing to justify or excuse the restraint, that it would necessarily have a tendency to monopoly, and would therefore be void.”).

rewards the creators of innovative works with a monopoly for a limited period of time.⁴ Nevertheless, they both stem from the same English common law origins: “Whatever is injurious to the interests of the public is void on the ground of public policy.”⁵ Whether copyright promotes monopoly or antitrust breaks it up, the object remains the same: to secure “the general benefits derived by the public from the labors of authors.”⁶ The benefits to the public derive from competition via decreased prices or increased quality.⁷ Even the tendency of copyright law to confer monopoly status spurs competition to create among authors and inventors.

¶2 Accordingly, the economic perspective of antitrust law can guide the development of copyright law, particularly in regards to the new questions presented by emerging technologies. For example, with the advent of VCRs, the Supreme Court conducted an economic analysis to apply copyright law to this new technology in *Sony Corporation of America v. Universal City Studios*.⁸ Like antitrust law, the interests of the consumer are paramount. “Reward to the owner” constitutes “a secondary consideration.”⁹ Monopoly status to the copyright owners, in this case the entertainment industry represented by Universal City Studios and Walt Disney, served only to further “the general benefits derived by the public.”¹⁰ Although the entertainment industry lost this case, the loss created more business from the proliferation of VCR technology. It opened up new markets and means of distribution,¹¹ namely, the “home-viewing” market.¹²

¶3 The same may prove true for the relationship between the technology industry and the entertainment industry today. Specifically, commercial-skipping technology could provide consumers with greater autonomy and provide the entertainment industry with increased revenue by

⁴ *United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 158 (1948) (“The copyright law, like patent statutes, makes reward to the owner a secondary consideration.”).

⁵ *Addyston Pipe*, 85 F. at 282 (quoting *Horner v. Graves*, 7 Bing. 735 (1831)).

⁶ *Fox Film Corp. v. Doyal*, 286 U.S. 123, 127 (1932).

⁷ *See N. Sec. Co. v. United States*, 193 U.S. 197, 332 (1904) (finding that allowing monopolies to remain intact would destroy the public benefits of competition).

⁸ 464 U.S. 417, 456 (1983) (considering impact of the technology on market for plaintiff’s copyrighted works).

⁹ *Id.* at 429.

¹⁰ *Id.*

¹¹ *In re Aimster Copyright Litig.*, 334 F.3d 643, 650 (7th Cir. 2003).

¹² *See Matthew Fagin et al., Beyond Napster: Using Antitrust Law to Advance and Enhance Online Music Distribution*, 8 B.U. J. SCI. & TECH. L. 451, 499-500 (2002) (“The movie industry, for example, feared and fought VHS technology, although the technology eventually revitalized the movie business by opening a secondary ‘home-viewing’ market.”).

making television more appealing and competitive with other forms of entertainment.¹³ Television has lost viewers because of the increasing popularity of the internet, but research indicates that commercial-skipping technology can make television a more competitive entertainment medium. Viewers who purchased a particular brand of DVRs watched an average of three hours of television more than they did before they made their purchase.¹⁴

¶4 Because this technology may ultimately make the television business more competitive, it does not fall under the ambit of *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster*. In *Grokster*, the Supreme Court held peer-to-peer music sharing networks liable for inducing copyright infringement to the harm of music studios.¹⁵ In contrast, commercial skipping technology promotes what the *Grokster* Court sought to preserve: “innovation having a lawful promise.”¹⁶ This term can be defined with the insights of Joseph Schumpeter, who argued that the “creative destruction” of obsolete technologies, market strategies, and commercial values ultimately fuel the capitalist economy.¹⁷

¶5 Part I of this iBrief will summarize the history of television commercials to provide a context for how Schumpeter’s wisdom and legal precedent applies to commercial-skipping technology and DVRs. Part II will illuminate how these technologies further consumer interest. Part III reveals how these technologies ultimately advance commercial interests. Part IV contains an antitrust approach to market power to prescribe the ideal relationship among these competing interests: Copyright laws that promote creativity in television should not discourage the development and distribution of commercial-skipping technology. Commercial-skipping technology does not infringe upon copyright protection as some members of

¹³ See Michael Lewis, *Boom Box*, NEW YORK TIMES MAGAZINE, Aug. 13, 2000, <http://www.nytimes.com/2000/08/13/magazine/boom-box.html> (reporting concerns that the internet is gaining more consumers at the cost of television companies and suggesting that emerging technologies are attracting more viewers).

¹⁴ *Id.* (noting that the data was gathered and reported by SonicBlue, a manufacturer of this technology).

¹⁵ *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd.* 545 U.S. 913, 936–37 (2005).

¹⁶ *Id.* at 937.

¹⁷ See JOSEPH SCHUMPETER, CAPITALISM, SOCIALISM, AND DEMOCRACY 84, 96 (Routledge 1994) (1942) (“Progress entails, as we have seen, destruction of capital values in the strata with which the new commodity or method of production competes.”); see also STANLEY I. KUTLER, PRIVILEGE AND CREATIVE DESTRUCTION: THE CHARLES RIVER BRIDGE CASE 160 (Johns Hopkins University Press 1990) (1971) (observing how legal precedent supports the process of creative destruction).

the entertainment industry claim, but rather, promotes a more competitive entertainment industry.

I. A BRIEF HISTORY OF TELEVISION COMMERCIALS

¶6 Before the advent of television, “a relatively small group of theater owners” possessed oligopolistic control over access to films.¹⁸ They earned their revenue by charging the public for each viewing. The advent of television opened up a new market for “live and shorter duration programming,” and also provided a secondary market for films released in theaters.¹⁹ Broadcast television could reach a wide audience at a marginal cost of zero.²⁰ However, with this new technology came a new complication. Initially, copyright owners and broadcasters could not charge their customers on a per viewing basis. Instead, they developed an advertising-based model where the payments of advertisers, rather than the direct financial contribution of consumers became the primary source of funding.²¹ With only three stations available, playing advertisements at approximately the same time, consumers had little choice but to watch advertisements,²² each lasting sixty seconds in length.²³ Advertisers could also pay to place their name on the title of the television program, as was the case with NBC’s “Colgate Theatre” and “Texaco Star Theater.”²⁴

¶7 Not until Sony introduced the Betamax video recording device, a storage device later known as the VCR, could consumers fast forward through commercials on programs that they recorded without watching.²⁵ In the alternative, they could pause their VCRs to avoid taping the commercials, a tactic that required watching the commercials to appropriately time the button pressing. Commercial-skipping technology

¹⁸ Peter S. Menell, *Can Our Current Conception of Copyright Law Survive the Internet Age?: Envisioning Copyright Law’s Digital Future*, 46 N.Y.L. SCH. L. REV. 63, 106 (2002–2003).

¹⁹ *Id.*

²⁰ Konstantinos Chorianopoulos & Diomidis Spinellis, *Coping with TiVo : Opportunities of the Networked Digital Video Recorder*, 24 TELEMATICS AND INFORMATICS 48, 50 (2007).

²¹ Menell, *supra* note 18, at 106.

²² *Id.* at 107.

²³ Tina M. Lowrey et al., *The Future of Television Advertising*, in *MARKETING COMMUNICATION: NEW APPROACHES, TECHNOLOGIES, AND STYLES* 113, 121 (Allan J. Kimmell ed., 2005).

²⁴ Joe Flint & Emily Nelson, “*All My Children*” Gets Revlon Twist, WALL ST. J., Mar. 15, 2002, at B1.

²⁵ See JAMES LARDNER, *FAST FORWARD: HOLLYWOOD, THE JAPANESE, AND THE ONSLAUGHT OF THE VCR* 114–16 (Norton & Co. 1987) (reporting television executives’ newfound fears of consumers skipping commercials).

was available in these analog VCRs,²⁶ but this technology was not particularly effective or convenient.²⁷ It did not present as much of a threat to the entertainment industry as the DVR.²⁸ With the capacity to fast-forward through commercials and unwanted materials sixty times the regular playback speed, and more convenient features to select television programming to be recorded, the advent of DVR in the late 1990s posed a “cataclysmic” event to some executives in the entertainment industry.²⁹ Out of this new technology emerged two rivals: SonicBlue, which manufactured ReplayTV, and TiVo.³⁰ Only TiVo remains; pending lawsuits pressured SonicBlue to file for bankruptcy.³¹ TiVo survived because it adopted a friendly approach toward television networks by eliminating the form of commercial skipping most attractive to consumers.³² Because of TiVo’s conciliatory approach and SonicBlue’s bankruptcy, consumers can no longer use technology that can skip commercials in thirty second increments, or better yet, automatically detect and erase commercials.³³

II. CONSUMER INTERESTS

¶8 In *Sony*, the Supreme Court intimated the autonomy of the consumer.³⁴ No longer could the network and entertainment industry hold

²⁶ Chorianopoulos & Spinellis, *supra* note 200, at 51.

²⁷ See Rob Pegoraro, *Adding Replay Value to TV*, WASH. POST, Apr. 30, 1999, at N78 (describing ReplayTV’s “Quick Skip” feature as “very empowering” and not prone to the mistake that commercial-skip VCRs make in being “fooled by momentary blank screens in the middle of a show”); see Lewis, *supra* note 13 (“The VCR proved too unwieldy to be used for anything but rented videos. The remote control enabled people to surf but not so much that they spooked Procter & Gamble and General Motors and the rest.”).

²⁸ Chorianopoulos & Spinellis, *supra* note 200, at 51.

²⁹ Frank Rose, *The Fast-Forward, On-Demand, Network-Smashing Future of Television*, WIRED, Oct. 2003,

<http://www.wired.com/wired/archive/11.10/tv.html> [hereinafter Rose, *Fast-Forward*]; see Michael Freedman *Zapper War*, FORBES, Jul 8, 2002, <http://www.forbes.com/forbes/2002/0708/046.html> (noting how fast TiVo enable viewers to speed through commercials).

³⁰ Farhad Manjoo, *TiVo Town or SonicBlue City?*, WIRED, Jun. 6, 2002, <http://www.wired.com/news/business/0,1367,53008,00.html>.

³¹ Kevin Lemley, *The Innovative Medium Defense: A Doctrine to Promote the Multiple Goals of Copyright in the Wake of Advancing Digital Technologies*, 110 PENN ST. L. REV. 111, 155 (2005).

³² See Menell, *supra* note 18, at 171-72 (contrasting the strategies TiVo and SonicBlue toward the entertainment industry and noting the corresponding outcomes).

³³ See *id.* at 125 (describing the features of ReplayTV that are now extinct).

³⁴ Joseph P. Liu, *Copyright Law’s Theory of the Consumer*, 44 B.C. L. REV. 397, 408 (2003).

their audience captive to rigid television programming schedules. VCR technology freed consumers from these shackles. The Court quoted with approval the testimony of Fred Rogers, president of the corporation that owned and produced Mr. Rogers' Neighborhood, who spoke of the autonomy of the consumer:

Very frankly, I am opposed to people being programmed by others. My whole approach in broadcasting has always been, "You are an important person just the way you are. You can make healthy decisions." Maybe I'm going on too long, but I just feel that anything that allows a person to be more active in the control of his or her life, in a healthy way, is important.³⁵

¶9 Mr. Rogers referred to the sovereignty of individuals to make their products work for them and their daily activities.³⁶ For similar reasons, Professor Ralph Brown extolled "the consumer as an individual,"³⁷ whose autonomy is threatened by "a bombardment of stupefying symbols."³⁸ Judicial recognition of the sovereignty of the individual to be free from corporate dominance can be traced back to 1904, when the Supreme Court sustained the government's argument that a failure to enforce Congressional antitrust legislation would put "the public at the absolute mercy of the holding corporation."³⁹ When the Court used similar language in the same opinion, it reaffirmed its admonishment against putting the consumer "at the mercy of a single holding."⁴⁰

¶10 The Supreme Court has promoted traditional competition, confined to a single sector of the economy or a single vertical channel.⁴¹ Under this arrangement, a distributor of a product may be brought into traditional competition with the manufacturers of that product. For example, in *Addyson Pipe & Steel Co. v. United States*, the Court enforced the Antitrust Act of 1890 against a cartel of cast-iron pipe manufacturers conspiring to reduce competition.⁴² In *Northern Securities Co. v. United States*, The Court enforced the same Act against railroad operators forming an unlawful combination to inhibit competition.⁴³ Laws promoting traditional competition like the Antitrust Act protect against both horizontal

³⁵ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 445 n.27 (1984).

³⁶ *See id.*

³⁷ Ralph S. Brown, Jr., *Advertising and the Public Interest: Legal Protection of Trade Symbols*, 57 YALE L. J. 1165, 1180 (1948).

³⁸ *Id.* at 1182.

³⁹ *N. Sec. Co. v. United States*, 193 U.S. 197, 325 (1904).

⁴⁰ *Id.* at 327.

⁴¹ *See Lemley, supra* note 31, at 137 (describing different types of competition).

⁴² 175 U.S. 211, 212 (1899).

⁴³ 193 U.S. 317-18 (1904).

agreements and vertical agreements.⁴⁴ They give the consumer a greater choice among competing brands and products, thus promoting the sovereignty of the consumer. Autonomous competition also protects the sovereignty of the consumer and the interests of the public, but through a different process that materializes with the advent of new technologies.⁴⁵ Joseph Schumpeter referred to this process as “creative destruction,” which he argued constitutes “the fundamental impulse that sets and keeps the capitalist markets from failing.”⁴⁶ Schumpeter’s observation reflects a lesson that history has repeatedly taught: the exclusion of perceived threats to markets, products, and economic structures often undermines progress by rewarding inefficiency. The consequences of neglecting this lesson have become apparent with the history of copyright law.

¶11 Copyright tends to emerge from the “interstices of the censorship,” according to Benjamin Kaplan’s interpretation of Sir Henry Maine’s aphorism.⁴⁷ As early as 1586, the Star Chamber decreed a system of licensing books before their publication and granting patents for works meeting the approval of censors.⁴⁸ The major stationers ultimately gained control of “a large number of patents,”⁴⁹ just as the television networks of today own the copyrights to television shows. Through this decree, the English Crown censored books and restrained ideas.⁵⁰ Currently, a more subtle, less alarming, but still malignant kind of censorship targets the practice of a particular idea. The chill of litigation, the ghost of the Sonicblue bankruptcy, discourages the creation of new market structures, which fuels the capitalist economy and drives technological progress.⁵¹

¶12 The Supreme Court promoted this kind of competition long before Schumpeter did with its 1837 decision *Charles River Bridge v. Warren Bridge*.⁵² This case arose because of the decision of entrepreneurs to defy economic conventions and usurp “one of the most profitable companies in

⁴⁴See, e.g. N. Sec., 193 U.S. at 335, 337 (observing how Congress promotes free competition by prohibiting horizontal agreements by railroad companies to refrain from competition).

⁴⁵See *id.*

⁴⁶See Raymond Shih Ray Ku, *Grokking Grokster*, 2005 WIS. L. REV. 1217, 1276 (2005).

⁴⁷BENJAMIN KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT REPUBLISHED 4 (Iris C. Geik et al. eds., Matthew Bender & Co. 2005) (1967).

⁴⁸*Id.* at 3-4.

⁴⁹*Id.* at 4.

⁵⁰*Id.*

⁵¹See Kutler, *supra* note 177, at 160 (“The doctrine of the Charles River Bridge case provided, and continues to offer, the formal answer because it fashioned a legal doctrine to justify the process of creative destruction.”).

⁵²36 U.S. 420 (1837).

its day,” The Proprietors of the Charles River Bridge.⁵³ This corporation emerged after the decision of the Massachusetts legislature to replace a ferry service from Charlestown to Boston with a bridge.⁵⁴ In 1785, it chartered the company The Proprietors of the Charles River Bridge to construct this new mode of transportation, to operate it, and to charge tolls for forty years.⁵⁵ The legislature subsequently extended this term to seventy years, but the demand for access to the bridge exceeded its capacity before this term expired.⁵⁶ To meet this increased demand, the Warren Bridge emerged.⁵⁷ It received permission to charge the same tolls as the Charles River Bridge for six years; after this point, the public could access the bridge for free.⁵⁸ The Warren Bridge received a “fixed profit” from its six years charging tolls.⁵⁹ It represented the superior business model (and encouraged states to grant charters that better served the public interest),⁶⁰ just as the Charles River Bridge exploited superior technology to supplant the more expensive ferry boats that held its customers to more inflexible schedules.⁶¹ More inefficient technologies and businesses have continuously faced destruction by superior competition, a principle recognized by Chief Justice Taney:

Turnpike roads have been made in succession, on the same line of travel; the later ones interfering materially with the profits of the first. These corporations have, in some instances, been utterly ruined by the introduction of newer and better modes of transportation and traveling. In some cases, railroads have rendered the turnpike roads on the same

⁵³ Ku, *supra* note 46, at 1235.

⁵⁴ *Id.* at 1234-35.

⁵⁵ *Id.*

⁵⁶ *Id.* at 1235.

⁵⁷ *Id.* at 1234.

⁵⁸ *Id.*

⁵⁹ *See id.* at 1240 (“The Charles River Bridge investors could have insisted that the charter include an express grant of monopoly privileges, and the state could have chosen to fund the construction of the bridge by guaranteeing only the recovery of costs and some fixed profit similar to the charter for the Warren Bridge.”).

⁶⁰ *See* Kutler, *supra* note 17, at 19-23, 29-30 (describing how public dissatisfaction with the Charles River Bridge over issues such as narrowness, excessive crowds, dangerousness, and excessive tolls promoted the development of new business models that did not entail the “public injustice” of “heavy tolls”); *See also* HERBERT HOVENKAMP, ENTERPRISE AND AMERICAN LAW: 1836-1937, at 112 (1991) (“The state originally should have granted a charter that permitted the private company to collect tolls until it recovered its costs plus profits, when the bridge would become the state’s.”).

⁶¹ *See* Kutler, *supra* note 177, at 7-8, 12-13 (describing the problems with the ferry service and public enthusiasm for replacing the ferry service with a bridge).

line of travel so entirely useless, that the franchise of the turnpike corporation is not worth preserving.⁶²

¶13 The Chief Justice wrote during the emergence of new forms of autonomous competition. He recognized that “newer and better modes of transportation” should out-compete obsolete ones in the most traditional sense.⁶³ The competitor offering the best services at the cheaper prices should win. But new technologies can also discipline existing ones with the threat of market adoption or market extinction.⁶⁴ It can force companies like the Charles River Bridge to adjust to new business structures and experiment with ideas that would not otherwise be considered. Competitors in this realm of technology may in fact find one another mutually beneficial, but only if they learn to utilize one another.

¶14 For example, when Sony introduced the VCR, it forced the entertainment industry to adapt to this new public benefit—to spend resources adjusting to new distribution mechanisms.⁶⁵ It did not directly compete with this new technology in the traditional sense because VCRs occupied a different market; VCRs and television programming were not substitutes for one another. Indeed, they were complements that eventually expanded the markets of one another, yet the entertainment industry feared that VCRs would render its primary source of revenues, advertising, a nullity. It also feared that as more viewers shifted to using VCRs, the ratings would decline because of inaccuracies in measurement, and consequently, revenues as well.⁶⁶ Out of this fear, it sued Sony for copyright infringement.⁶⁷ Ultimately, the Supreme Court ruled in favor of Sony because of the “public interest in making television broadcasting more available.”⁶⁸ Just as the Warren Bridge served the public interest by facilitating transportation across the river, the Betamax served the public interest by facilitating access to television.⁶⁹ Just as the bridge freed the public from the rigid time schedules of ferries, the VCR freed the public from rigid television programming schedules. In each case, markets were disrupted for the sake of economic efficiency and the public interest.

⁶² *Charles River Bridge v. Warren Bridge*, 36 U.S. 420, 551-52 (1837).

⁶³ *Id.* at 551.

⁶⁴ See SCHUMPETER, *supra* note 177, at 85 (“It disciplines before it attacks.”).

⁶⁵ See LARDNER, *supra* note 255, at 323-24 (“By 1985 the flow of theatrical movies into home video was slowing down, while the output of original programming, mainly in the how-to and kid vid genres, was speeding up; and the studios were doing their best to adjust.”).

⁶⁶ *Sony Corp. of Am. v. Universal City Studios, Inc.* 464 U.S. 417, 452 (1984).

⁶⁷ See *id.* at 420.

⁶⁸ *Id.* at 454.

⁶⁹ Ku, *supra* note 466, at 1247 (drawing a similar analogy between Charles River Bridge and peer-to-peer technology).

¶15 As the Ninth Circuit observed in *Metro-Goldwyn-Mayer Studios v. Grokster*, “[t]he introduction of new technology is always disruptive to old markets, and particularly to those copyright owners whose works are sold through well-established distribution mechanisms. Yet, history has shown that time and market forces often provide equilibrium in balancing interests”⁷⁰ This case, ultimately overturned by the Supreme Court, arose from peer-to-peer music file sharing technology, but it was the expressed illegal purpose of the defendants that led the Court to rule against the defendants because of their intent to induce copyright infringement.⁷¹ The effort of defendant companies to usurp the source of demand from the entertainment industry constituted a particularly salient feature of intent.⁷² One of the defendants displayed a particularly egregious disregard for the law when he declared that “[t]he goal is to get in trouble with the law and get sued. It’s the best way to get in the new[s].”⁷³ Perhaps this flagrantly illegal intent led Justice Breyer to distinguish *Grokster* from other technological innovations in his concurring opinion, joined by Justices Stevens and O’Connor.⁷⁴ Justice Breyer made this distinction after acknowledging the litany of legal uses that *Grokster* technology may offer in the future: “Of course, *Grokster* itself may not want to develop these other noninfringing uses. But *Sony*’s standard seeks to protect not the *Groksters* of this world (which in any event may well be liable under today’s holding), but the development of technology more generally.”⁷⁵ Therefore, *Grokster* does not disturb the protection *Sony* affords to emerging technology and autonomous competition. According to Justice Breyer, *Sony* shelters technologies “that help disseminate information and ideas more broadly or more efficiently,” such as VCRs and digital recorders.⁷⁶

¶16 Justice Breyer’s analysis expounds upon the tension that the majority of the Court recognized “between the respective values of supporting creative pursuits through copyright protection and promoting innovation in new communication technologies by limiting the incidence of liability for copyright infringement.”⁷⁷ Only what the Court considers creative pursuits, Breyer appears to suggest, “help disseminate information and ideas more broadly or more efficiently.”⁷⁸ However, while the majority

⁷⁰ *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd.* 380 F.3d 1154, 1167 (9th Cir. 2004), *rev’d*, 545 U.S. 913 (2005).

⁷¹ *Grokster*, 545 U.S. at 941.

⁷² *Id.* at 939.

⁷³ *Id.* at 925.

⁷⁴ *Id.* at 949-55 (Breyer, J., concurring).

⁷⁵ *Id.* at 955 (Breyer, J., concurring).

⁷⁶ *Id.* at 957 (Breyer, J., concurring).

⁷⁷ *Id.* at 928.

⁷⁸ *Id.* at 957 (Breyer, J., concurring).

answered the question of whether Grokster's product is "capable of 'substantial' or 'commercially significant' noninfringing uses" by answering what infringement and culpable intent mean,⁷⁹ Breyer focused more on the creative promise of noninfringement uses.⁸⁰ In other words, the majority and concurrence agreed on the same basic question, but diverged only in which side of the legal coin it paid attention to—positive creative promise or illegal, culpable infringement. Both are important.⁸¹

¶17 Commercial-skipping technology also introduces autonomous competition. Once again, the entertainment industry has fought this technology because of similar fears over loss of revenues from advertising, but once again, these fears may prove unfounded. Commercial-skipping technology can force television networks to reevaluate their policies toward advertisers, but this would make advertising more efficient for the consumer through DVRs.⁸²

¶18 Even the greatest enemies of commercial skipping, who consider the technology a form of theft, namely, former head of Turner Broadcasting Systems Jamie Kellner, acknowledge the way the technology motivates them to provide more convenience to consumers: "I'm a big believer we have to make television more convenient or we will drive the penetration of PVRs and things like that, which I'm not sure is good for the cable industry or the broadcast industry or the networks."⁸³ For Kellner, the threat of purported theft generates creativity, or at least the expenditure of corporate resources to better serve the consumer.⁸⁴ If networks decrease the amount of commercials, they would also decrease the incentive of consumers to invest in commercial-skipping technology. The commercial skip feature would also encourage consumers to substitute away from analog VCRs to DVRs. This technology can "unbundle ads from the content" and instead personalize them to an individual's personal characteristics.⁸⁵ Although commercials would decline, they would also be individually tailored to the viewer's interests. Consequently, consumers could spend less time learning only about products that would interest them.

⁷⁹ *Id.* at 934.

⁸⁰ *Id.* at 949 (Breyer, J., concurring).

⁸¹ *Id.* at 934.

⁸² Randal Picker, *The Digital Video Recorder: Unbundling Advertising and Content*, 71 U. CHI. L. REV. 205, 207 (2004).

⁸³ Interview of Jamie Kellner, VOD's Ad-Skipping Irks Kellner, in Staci D. Kramer, *Content's King*, CABLE WORLD 32 (Apr. 29, 2002); see Picker, *supra* note 82, at 206 (describing Kellner's position and his attack on commercial-skipping technology as "infamous[']").

⁸⁴ Interview of Jamie Kellner, *supra* note 83 (calling commercial skipping theft when asked to explain why PVRs pose a threat that motivated him to make television more convenient)

⁸⁵ Picker, *supra* note 82, at 207.

¶19 Through unbundling, consumers would receive a greater benefit from the commercial itself: information. Commercials inform the consumer about product qualities, prices, and other information that can enable them to make more rational purchasing decisions.⁸⁶ Fewer, but far more relevant, advertisements reduce the search costs borne by the consumer in sifting through and processing this information. Because commercial technology facilitates the dissemination of commercial information more efficiently, it meets *Sony*'s standard as interpreted by Justice Breyer in *Grokster*: "*Sony* thereby recognizes that the copyright laws are not intended to discourage or control the emergence of new technologies, including (perhaps especially) those that help disseminate information and ideas more broadly or more efficiently."⁸⁷ The current use of this efficiency-enhancing technology has less legal relevance than the potential use:

Sony's rule is forward looking. It does not confine its scope to a static snapshot of a product's current uses (thereby threatening technologies that have undeveloped future markets). Rather, as the VCR example makes clear, a product's market can evolve dramatically over time. And *Sony*—by referring to a *capacity* for substantial noninfringing uses—recognizes that fact. *Sony's* word "capable" refers to a plausible, not simply a theoretical, likelihood that such uses will come to pass, and that fact anchors *Sony* in practical reality.⁸⁸

¶20 Perhaps even more than the Betamax, DVRs have a great potential for noninfringing uses. Hollywood itself implicitly recognized this potential when it invested in the only major DVR technologies: TiVo and SonicBlue.⁸⁹ Disney, NBC, Time Warner, and Viacom's Showtime invested in ReplayTV before SonicBlue acquired this product.⁹⁰ AOL Time Warner also invested "millions in advertising dollars to help promote the TiVo service."⁹¹ These companies saw the potential of DVRs to bolster, not threaten, the benefits they received from their copyrights. The interests of consumers and advertisers also converge, for viewers replay commercials they find interesting.⁹²

⁸⁶ Glynn S. Lunney, Jr., *Fair Use and Market Failure: Sony Revisited*, 82 B.U. L. REV. 975, 1002 (2002) [hereinafter Lunney, *Fair Use and Market Failure*].

⁸⁷ *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster*, 545 U.S. 913, 957 (2005) (Breyer, J., concurring).

⁸⁸ *Id.* at 958

⁸⁹ Molly Prior, *TV Revolution gets Personal; Personal Video Recorders*, DSN RETAILING TODAY, Sept. 4, 2000, at 37.

⁹⁰ *Networks, Studios Fear PVR Could Reshape Home Entertainment*, AUDIO WEEK, Nov. 26, 2001 [hereinafter *Networks*].

⁹¹ Monica Hogan, *TiVo Curbs Spending on Brand Awareness*, MULTICHANNEL NEWS, Feb. 5, 2001, at 34.

⁹² Chorianopoulos & Spinellis, *supra* note 20, at 51.

¶21 Yet, the entertainment industry filed three lawsuits against SonicBlue, partly out of concerns over ReplayTV's capability to skip commercials.⁹³ Although the entertainment industry filed lawsuits based on specific features of its own erstwhile investment, *Sony* suggests that a company cannot be sued over the features of a particular product, but only the product itself: "The sale of copying equipment, like the sale of other articles of commerce, does not constitute contributory infringement if the product is widely used for legitimate, unobjectionable purposes. Indeed, it need merely be capable of substantial noninfringing uses."⁹⁴ The Court analyzed the copying equipment—in this case, the VCR—as a single entity. It did not distinguish between the ability of the equipment to copy videos from the ability of the equipment to fast-forward through commercials, or to pause during recording. It could have approved the Betamax on the condition that Sony eliminate the fast-forward, rewind, and pause functions, but it did not.⁹⁵ Instead, it quoted the District Court's opinion about how few consumers exploit the fast-forward feature to skip commercials, and its conclusion that "[a]dvertisers will have to make the same kinds of judgments they do now about whether persons viewing televised programs actually watch the advertisements which interrupt them" with approval.⁹⁶ The district court did not analyze the benefit or the cost (aside from tediousness to the consumer) of the fast-forward feature to the viewer, and neither did the Supreme Court. Both courts effectively sidestepped this question. The Supreme Court focused almost exclusively on the "primary use of the machine:" "time-shifting," or the ability of the viewers to watch television recordings according to their own schedules.⁹⁷

III. COMMERCIAL INTERESTS

¶22 A shorter duration of television commercials would benefit the entertainment industry because it would make advertising more attractive to advertisers who attempt to induce consumers to buy a particular product. The goal of advertising converges with the goal of the trademark as described by Justice Frankfurter:

A trademark is a merchandising short-cut which induces a purchaser to select what he wants, or what he has been led to believe he wants. The owner of a market exploits this human propensity by making every

⁹³ *Networks*, *supra* note 90.

⁹⁴ *Sony Corp. of Am. v. Universal City Studios, Inc.* 464 U.S. 417, 442 (1984).

⁹⁵ *See* Landes & Posner, *supra* note 2, at 119 (recognizing this alternative).

⁹⁶ *Sony*, 464 U.S. at 453 n.36.

⁹⁷ *Id.* at 423.

effort to impregnate the atmosphere of the market with the drawing power of a congenial symbol.⁹⁸

Like the trademark, the success of an advertisement depends on its drawing power.⁹⁹ In addition to minimizing confusion over different trade names and guarding against the misappropriation of creative efforts, trademark protection aims to prevent the dilution of commercial symbols¹⁰⁰ Dilution theory suggests that the wider use of a symbol leads to a diminished value, and laws have been developed according to this theory.¹⁰¹ Most recently, the Trademark Dilution Revision Act of 2006 aims to protect the trademark from “conduct that lessens the distinctiveness and value of the mark.”¹⁰²

¶23 Likewise, increased clutter in television advertising can reduce the attention, recall, and persuasion of viewers.¹⁰³ These findings raise the concern of advertisers.¹⁰⁴ Furthermore, diminished audience size has decreased the demand of advertisers to purchase more commercial inventory in order to reach the same size of audience.¹⁰⁵ Television networks tried to compensate by charging more for the same amount of commercial time. They attempted to boost the demand of advertisers by making the supply more valuable, but this strategy only caused advertisers to retreat from their business with television stations.¹⁰⁶ If, instead, the

⁹⁸ *Mishawaka Rubber & Woolen Mfg. Co. v. S. S. Kresge Co.*, 316 U.S. 203, 205 (1942), *superseded by statute*, Lanham Act of 1946, 15 U.S.C. § 1051, *as recognized in* *A & H Sportswear v. Victoria's Secret Stores*, 61 U.S.P.Q.2D 1637 (E.D. Pa. 2002) (“Both Century Distilling and Mishawaka were decided prior to the passage of the Lanham [A]ct which, departing from the Trade-Mark Act of 1905, made any award of monetary relief specifically subject to ‘principles of equity.’”).

⁹⁹ See Brown, *supra* note 37, at 1191-92 (explaining the application of dilution theory to marketing).

¹⁰⁰ See Marjorie A. Shields, Annotation, *What Constitutes “Famous Mark” for Purposes of the Federal Trademark Dilution Act, 15 U.S.C.A. §1125(c), Which Provides Remedies for Dilution of Famous Marks*, 165 A.L.R. FED. 625 (2000) (describing how the Federal Trademark Dilution Act creates remedies in the case of the dilution of famous marks).

¹⁰¹ See 152 Cong. Rec. H.6963, H.6964 (statement of Rep. Sensenbrenner) (“A 2003 Supreme Court decision, *Mosely v. V Secret Catalogue, Inc.*, compelled the Committee on the Judiciary to review the Federal Trademark Dilution Act. . . . Enactment of this bill will eliminate confusion on key dilution issues that have increased litigation and resulted in uncertainty among the regional circuits.”).

¹⁰² 152 Cong. Rec. at H.6964 (statement of Rep. Sensenbrenner).

¹⁰³ Robert Kent, *Competitive Clutter in Network Television Advertising: Current Levels and Advertiser Responses*, 35 J. ADVERTISING RES. 49, 51 (1995).

¹⁰⁴ *Id.* at 49.

¹⁰⁵ Marian Azzaro, *At Networks, Less Means More*, BROADCASTING & CABLE, Dec. 1, 2003, at 50.

¹⁰⁶ *Id.*

television stations reduce the supply of advertisements available, and the total duration of commercial breaks, then a new equilibrium could be reached. Commercial-skipping technology catalyzes this process by exerting additional pressure on television networks to adjust to a market less dependent on conventional television advertising.

¶24 Because commercial-skipping technology can persuade customers to switch to DVRs, it has the potential to boost the demand of advertisers through ad personalization. More important than the total audience exposed to commercials is the audience interested in actually buying the goods. No matter how enticing the advertisement, a commercial for dog food can never appeal to people allergic to dogs.¹⁰⁷ A commercial for a luxury international travel package cannot induce viewers without the budget to afford it. By unbundling ads from content, advertisers could deliver their message to their ideal target—not just viewers, but interested viewers. TiVo users interested in Sprite, for example, have used their remote control to choose additional exposure to Sprite advertising.¹⁰⁸

¶25 Advertisers and technology companies could also collaborate to provide the consumers a greater range of options regarding their level of exposure to advertisements. Murdoch's News Corporation exploited the potential of such a relationship by introducing XTV.¹⁰⁹ This DVR gives consumers the option of paying a fee to skip advertisements on some shows.¹¹⁰ On other shows, consumers may be forced to watch only one ad for each commercial break with the fast forward feature disabled.¹¹¹ Regardless, Murdoch's News Corporation has worked with advertisers to offer consumers a product that balances all interests. News Corporation receives revenues for its product, consumers have a wider range of possible purchases available, and advertisers have another outlet to serve their clients without fear of the fast forward button. Although premium channels like HBO already offer commercial-free television, XTV could introduce a

¹⁰⁷ See Picker, *supra* note 82, at 205 (“Next time you turn on your television, actually watch the commercials and you will quickly see how poorly the economic model of TV is working. They put on a commercial for dog food, but you are allergic to dogs.”).

¹⁰⁸ Press Release, TiVo Inc., Sprite's 'subLYMONal' Advertising to Be Featured on TiVo (July 25, 2006), available at <http://investor.tivo.com/phoenix.zhtml?c=106292&p=irol-newsArticle&ID=1254260>; see Chorianopoulos & Spinellis, *supra* note 200, at 51.

¹⁰⁹ Chorianopoulos & Spinellis, *supra* note 20, at 53.

¹¹⁰ Frank Rose, *Murdoch's Must-See TV*, WIRED, Sep. 2000, <http://www.wired.com/wired/archive/8.09/mustread.html?pg=7>.

¹¹¹ *Id.*

spectrum of options between television cluttered with ten minutes of ads every hour and television with absolutely no advertisements.¹¹²

¶26 Technology companies and manufacturers of DVRs also recognize that cooperation should emerge as the optimal behavior for all parties. As TiVo spokeswoman Rebecca Baer suggests, the viability of networks is essential to the commercial success of commercial-skipping technology: “[a]s much as the consumers have difficulties with networks, they do provide the content—if you’re going to completely alienate them, what will happen to the content?”¹¹³ Accordingly, both TiVo and SonicBlue have at least attempted a cooperative approach with the networks whose advertisements they seek to zap.¹¹⁴

¶27 There are other alternative, more traditional forms of advertising as well that would not fall prey to commercial-skipping technology, such as product placement, which is restrained through regulation.¹¹⁵ The top three American networks still manage to place an average of fifteen branded products on a 30 minute program, approximately 40% of which were “negotiated product placements.”¹¹⁶ Television stations even have integrated commercial products into the plots of their television shows, for a negotiated price.¹¹⁷ For instance, cosmetics company Revlon paid ABC to give the company a leading role in its soap opera “All My Children,” as the company that one of the main characters arranges for her daughter to spy on.¹¹⁸ Ford parked its Mustang in the studio audience of Leno’s *The Tonight Show*, which according to the show’s host, contained the “best seats in the house.”¹¹⁹ It also arranged for *American Idol* contestants to sing “car songs” such as “Mustang Sally” and “Fun, Fun, Fun (‘Til Her Daddy Takes The T-Bird Away).”¹²⁰ In 2000, Ford developed, with the help of Lions Gate Entertainment, its own show, “a trekking-through-the wilderness reality series” called *No Boundaries*, named after the tagline for its SUV campaign.¹²¹ The WB broadcasted the show, but only for six episodes, due to what the marketing manager at Ford considered lack of commitment on

¹¹² See Chorianopoulos & Spinellis, *supra* note 200, at 56 (“Between the two extreme possibilities of control, there is a wide spectrum of control schemes that balance between the needs of the viewer and the broadcaster.”).

¹¹³ Manjoo, *supra* note 300.

¹¹⁴ *See id.*

¹¹⁵ *See* Lowrey et al., *supra* note 233, at 117.

¹¹⁶ *Id.*

¹¹⁷ *Id.* at 118.

¹¹⁸ Flint & Nelson, *supra* note 244.

¹¹⁹ Rose, *Fast-Forward*, *supra* note 29.

¹²⁰ *Id.*

¹²¹ *Id.*

the part of WB.¹²² Regardless of the reason, the threat of commercial skipping has prompted networks to search for creative alternatives to the staple thirty second television spot. Finally, program sponsorships can give advertisers a bundle of benefits, including product placements and official recognition, often through an announcer declaring, “Brought to you by”¹²³

¶28 With all these alternatives, commercial-skipping technology would not lead to the death of advertising and (for better or worse) the television business. It would facilitate the more efficient viewing of advertisements, which could be viewed simultaneously with the real television show (such as product placements), or perhaps the title, so that consumers can distinguish similar programming like “Colgate Theatre” and “Texaco Star Theater.” Since less than half of product placements are negotiated, television networks could sell more product placements rather than commercials. Advertisers could still produce just as many commercials, but viewers would not have to watch them separately. This additional free air time would reduce the adverse impacts of dilution on advertisers, and the advertised companies would also benefit from the free time consumers would gain to make additional purchases.¹²⁴ Content owners would also benefit because this additional air time could be used to attract a greater variety of consumers.¹²⁵ A greater number of television programs would allow for more opportunities for creative programming ideas, an especially important prerogative given the reality that “all hits are flukes.”¹²⁶ Each year, the four broadcast networks evaluate “thousands of concepts for new series” and buy “approximately 600 pilot scripts.”¹²⁷ The sheer number of concepts, ideas, and scripts to evaluate precludes a “reliable basis” for

¹²² *Id.* (“We were very proud of ‘*No Boundaries*,’ says Rich Stoddart, a marketing manager at Ford. ‘But you can make the most wonderful content in the world, and without a commitment from a distribution outlet, you have an audience of one.’”).

¹²³ Lowrey, et. al. *supra* note 233, at 120.

¹²⁴ See Lunney, *Fair Use and Market Failure*, *supra* note 866, at 1007 (“Eventually, the increasing opportunity costs of watching additional television will exceed the marginal influence of the additional commercials, and, at that point, additional time spent watching television will actually begin to reduce a consumer’s spending on the advertised products.”).

¹²⁵ See Picker, *supra* note 82, at 207 (comparing the potential of unbundled advertising to advertisers in specialized magazines who can target particular varieties of consumers).

¹²⁶ Lunney, *Fair Use and Market Failure*, *supra* note 866 at 1018 (quoting Jeff Sagansky, President, CBS Entertainment as quoted in Betsy Frank, On Air: Primetime Programming Development 1991–92, 1 (1991)).

¹²⁷ *Id.* (quoting William T. Bielby & Denise D. Bielby, “*All Hits are Flukes*”: *Institutional Decision Making and the Rhetoric of Network Prime-Time Program Development*, 99 AM. J. SOC. 1287, 1288 (1994)).

selecting the very best.¹²⁸ Even if networks could learn which ideas would receive the most demand, findings in the music industry suggest that low demand items, in the aggregate, can earn content owners more revenue than the most popular.¹²⁹ In the interests of advertisers, the brands they promote, and consumers, commercial-skipping technology may save consumers from some advertisements.

¶29 But television networks may develop counter-technology to counteract commercial-skipping technology. The latter does not have to reign superior. In fact, it does not. Networks have already outsmarted TiVo technology, purportedly inadvertently.¹³⁰ Television networks occasionally air a television show a few minutes before it is scheduled to begin.¹³¹ By following a popular show immediately with a lower-rated show in the place of a commercial break, networks can charge more for this advertisement that they delayed in the television schedule.¹³² The executive vice president and general manager of TiVo, Brodie Keast, claimed that the networks did not intend to undermine the convenience of TiVo, but ABC scheduling chief Jeff Bader indicated otherwise: “It’s not my job to make it easy for people to leave our network.”¹³³ This strategy would counter commercial-skipping technology that skips in thirty second intervals, but not technology that detects commercials automatically.

¶30 NBC has also devised an incentive approach by captivating viewers during advertisement segments with “minimovies.”¹³⁴ Other networks have copied this strategy with success. Turner Networks has successfully courted brands such as MasterCard, Chase, and Sierra Mist by featuring them prominently in these miniature shows that entertain viewers during commercial breaks.¹³⁵ In order to discourage viewers from exploiting commercial-skipping technology, TBS made a point of featuring amusing advertisements by featuring sponsors such as Sonic and Nationwide auto insurance in its segments entitled “Everybody Loves Funny Commercials,” during the first commercial break of its show “Everybody Loves Raymond.”¹³⁶ IAG Research indicates that the features of “Everybody

¹²⁸ *Id.*

¹²⁹ Chorianopoulos & Spinellis, *supra* note 200, at 53 (“This finding has been defined as the ‘Longtail’ of sales.”).

¹³⁰ Gary Levin, *Shows Start and End Just Off the Half-Hour* USA TODAY, Nov. 28, 2004, at 3D, available at http://www.usatoday.com/life/television/news/2004-11-28-tv-schedule_x.htm.

¹³¹ *Id.*

¹³² *Id.*

¹³³ *Id.*

¹³⁴ Rose, *Fast-Forward*, *supra* note 29.

¹³⁵ Anne Becker, *Turner Knows Branding*, BROADCASTING & CABLE, Apr. 23, 2007, at 10.

¹³⁶ *Id.*

Loves Funny Commercials” enjoy “58% stronger brand recall, 100% stronger message recall and 60% stronger likeability scores than spots that ran in the show’s traditional commercial pods.”¹³⁷ Advertiser’s clients, such as Sierra Mist, have praised TBS for this initiative, and as IAG Research findings suggests, consumers have enjoyed the advertisements as well.¹³⁸

^{¶31} But even for viewers that never will enjoy advertisements, automatic commercial detection technology is not impregnable either, especially given the wide variety of commercial formats.¹³⁹ One form of automatic commercial detection technology searches for black frames paired with silence, which can indicate the beginning of a commercial break, but some television stations in France and the Netherlands have already replaced black frames with different color frames, thereby evading this commercial detection technology.¹⁴⁰ Some commercial technology looks for black frames spaced fifteen, thirty, or sixty seconds apart,¹⁴¹ but television stations can outsmart this technology by apportioning odd lots of advertisement time, such as forty-three second or twenty-seven second spots. Inventors are developing more sophisticated methods of detecting commercial separators,¹⁴² but these methods can also be counteracted. The current commercial technology still requires the same kind of guesswork by commercial-averse viewers as the VCR required. The primary difference is that commercial-skipping technology is more automatic. As the *Sony* Court recognized, the tendency of consumers to avoid advertisements before the advent of the VCR (for example, by going to another room) remains constant: “Advertisers will have to make the same kinds of judgments they do now about whether persons viewing televised programs actually watch the advertisements which interrupt them.”¹⁴³ Advertisers would still accrue the same kind of benefits they did with the introduction of VCRs: Even if consumers watching commercials zip past them with the fast-forward

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ See Jen-Hao Yeh, Jun-Cheng Chen, Jin-Hau Kuo & Ja-Ling Wu, *TV Commercial Detection in News Program Videos*, 3 IEEE INT’L SYMP. ON CIRCUITS & SYS. 4594, 4594 (2005) (“Detection of the commercials in TV videos is hard because the diversity of them puts up a rather high barrier to find an appropriate model.”).

¹⁴⁰ Commercial Detection in Audio-Visual Content Based on Scene Change Distances on Separation Boundaries, U.S. Patent No. 20,030,123,841 (filed Dec. 27, 2001).

¹⁴¹ Commercial Skip and Chapter Delineation Feature on Recordable Media, U.S. Patent 7,272,295 (filed Nov. 1, 2000).

¹⁴² *Id.*

¹⁴³ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 453 n.36 (1984) (citing *Universal Studios Inc. v. Sony Corp. of Am.* 480 F. Supp. 429, 468 (1979)).

feature, there would still be “a positive effect on the recall and the recognition of Ads, when compared to viewing the same advertising message just once,” so long as these zipped commercials are watched repeatedly.¹⁴⁴

¶32 The perceived threat of commercial-skipping technology may also open new markets, and consequently, new fields of employment. Companies like Overpeer have grown to assist record labels in countering file sharing sites by overwhelming them with “spoof files,”¹⁴⁵ and broadcasters can follow suit. These industries would still come with costs, but these costs would be borne by the entertainment industry, not by either the individual users pressured by the entertainment industry to settle copyright infringement actions,¹⁴⁶ or future entrepreneurial enterprises chilled from testing the legal limits of consumer freedom.¹⁴⁷ Past entrepreneurial failures, such as the bankruptcy of SonicBlue, illustrate the danger of the threat of litigation to nascent innovation.¹⁴⁸ Natural market forces, not extra litigation, would best resolve potential issues because the market can best account for society’s interest “in promoting the development of new technologies and . . . experimenting with new business opportunities and market structures.”¹⁴⁹

¶33 Advertisers and broadcasters have felt the pressure from consumers and the technology industry to rethink their methods of commercial promotion, as evidenced by ABC’s effort to integrate Revlon into its soap opera’s storyline. The costs of conventional advertising outlets encourage

¹⁴⁴ Chorianopoulos & Spinellis, *supra* note 200, at 51.

¹⁴⁵ David Segal, *A New Tactic in the Download War; Online ‘Spoofing’ Turns the Tables on Music Pirates*, WASH. POST, Aug. 21, 2002, at A01.

¹⁴⁶ See Justin Hughes, *On the Logic of Suing One’s Customers and the Dilemma of Infringement-Based Business Models*, 22 CARDOZO ARTS & ENT. L. J. 725, 749-50 (2005) (explaining the costs of litigation and the potential of litigation as a profit source for the industry).

¹⁴⁷ See Julie E. Cohen, *Pervasively Distributed Copyright Enforcement*, 95 GEO. L. J. 1, 33 (2006) (“Although users have repeatedly shown that they will reward entrepreneurs who provide them with freedom and flexibility to use. . . digital content, the costs of providing freedom have risen sharply in the wake of the content industries’ highly-publicized legal victories against MP3.com, Napster, Grokster, SonicBlue, and other innovators.”).

¹⁴⁸ See *id.* (“The costs of raising startup capital have risen commensurately, and may become prohibitive if the suit against Napster’s backers succeeds.”).

¹⁴⁹ See William Landes & Douglas Lichtman, *Indirect Liability for Copyright Infringement: Napster and Beyond*, 17 J. OF ECON. PERSPECTIVES 113, 118 (2003) (“Copyright law is important, but at some point copyright incentives must take a backseat to other societal interests, including an interest in promoting the development of new technologies and an interest in experimenting with new business opportunities and market structures.”).

this creativity. If they choose to spend their resources countering commercial-skipping technology instead, the burden will shift to viewers who have a substantial interest in avoiding exposure to commercials. At this point, the consumer would have to spend additional resources to acquire the latest generation of commercial-skipping technology to counter the efforts of the entertainment industry. If the interest of the entertainment industry in preventing commercial skipping exceeds the interest of the consumer in using this technology, the entertainment industry need only invest in countering the current generation of commercial-skipping technology to defeat it. Under the efficiency principle, whichever side has a greater interest in (or against) this technology will prevail by investing more resources in it.

¶34 If the entertainment industry makes this initial investment to counter the first generation of commercial-skipping technology, the Digital Millennium Copyright Act (DMCA) would present another obstacle to the technology industry and the consumer. It prohibits any person from manufacturing, importing, or providing “any technology, product, service, device, component, or part thereof” that “is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access” to copyrighted works.¹⁵⁰ However, a “substantial consensus” has emerged that this provision is unconstitutional.¹⁵¹ It violates the First Amendment because it impairs the availability of information.¹⁵² It permits copyright owners to exact a price that some individuals may not be able to afford, possibly even for information that is not protected by copyright.¹⁵³ If anti-circumvention technology controls access to both copyrighted works and public domain works protected by the First Amendment, the DMCA precludes any effort to counter this technology, regardless of the purpose of this counter-technology.¹⁵⁴

¶35 Congress may have also overstepped its constitutional authority to legislate under the Patent and Copyright Clause.¹⁵⁵ This clause gives Congress the power “to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to

¹⁵⁰ 17 U.S.C. § 1201 (2009).

¹⁵¹ Pamela Samuelson, *The Public Domain: Mapping the Digital Public Domain: Threats and Opportunities*, 66 LAW & CONTEMP. PROB. 147, 161-62 (2003).

¹⁵² Neil Weinstock Netanel, *Locating Copyright Within the First Amendment Skein*, 54 STAN. L. REV. 1, 75-76 (2001).

¹⁵³ *Id.*

¹⁵⁴ *Id.* at 25 n.99.

¹⁵⁵ Glenn Lunney, *The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act*, 87 VA. L. REV. 813, 847 (2001) [hereinafter Lunney, *Death of Copyright*].

their respective Writings and Discoveries.”¹⁵⁶ The Courts developed the fair use doctrine, and Congress later codified it, to advance the constitutionally enshrined Progress of Science,¹⁵⁷ but the DMCA may hinder the applicability of this doctrine, and consequently, run afoul of the Constitution.¹⁵⁸ Because of television’s function as a medium of mass communication relating to science, art, and civic engagement, viewers should have the freedom and autonomy to access this information in the most efficient manner.

¶36 Although the DMCA also prohibits imports of such technology, enforcement problems have already emerged. When Napster’s file sharing system was held illegal, new services popped up overseas to take its place.¹⁵⁹ Other services attempted to evade legal accountability through a decentralized structure.¹⁶⁰ Commercial-skipping technology may share a similar fate, and such a black market would deprive the state of tax revenue,¹⁶¹ and a favorable balance of trade.¹⁶² IV. The New Market Dynamic

¶37 Copyright and limited monopolies are intended to “motivate the creative activity of authors and inventors by the provision of a special reward.”¹⁶³ Yet, in television, this reward has frequently curtailed creativity. Too often, copyright holders have sought to sustain their privileged position by stifling the development of other technologies and innovations.¹⁶⁴ Excessive energies have already been invested in television because of excessive copyright incentives.¹⁶⁵ The protection that copyright provides may mollify the entertainment industry into accepting the market structure without giving due consideration to other alternatives. On the

¹⁵⁶ U.S. CONST. art. I, § 8.

¹⁵⁷ *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 575-76 (1994).

¹⁵⁸ Lunney, *Death of Copyright*, *supra* note 1555, at 847-48.

¹⁵⁹ Landes & Lichtman, *supra* note 1499, at 123.

¹⁶⁰ *See id.* (“Others designed their technologies such that there was no clear central party to hold accountable in court.”).

¹⁶¹ *Cf.* MICHAEL R. CAPUTO & BRIAN J. OSTROM, *Potential Tax Revenue From a Regulated Marijuana Market: A Meaningful Revenue Source*, 53 AMER. J. OF ECON. & SOC. 475 (1994) (discussing potential government revenue from legalization of marijuana).

¹⁶² *Cf.* *Smuggled Sugar Leaves Local Crop Sat on the Shelf* VIET. INV. REV. Apr 29, 2002; DAVID C. JORDAN, *DRUG POLITICS* 59 (University of Oklahoma Press, 1999) (noting the adverse impact of opium smuggled into China on the state’s balance of trade).

¹⁶³ *Sony Corp. of Am. v. Universal City Studios, Inc.* 464 U.S. 417, 429 (1984).

¹⁶⁴ *See* *Ku*, *supra* note 466, at 1242-43 (describing *Charles River Bridge* as an attempt by one interest group to exert its privileged position over the other).

¹⁶⁵ *See* *Lunney, Fair Use and Market Failure*, *supra* note 866, at 977 n.8 (describing the problem of excess incentives in general).

other hand, competition and tough markets breed creativity, as the president of ABC Daytime, Angela Shapiro acknowledged. In explaining to the *Wall Street Journal* the company's reasons for incorporating Revlon into the storyline of "All My Children," she noted advertiser's concerns about dilution.¹⁶⁶ She also observed that because of competition to attract audiences, "none of us can look at what we do as business as usual."¹⁶⁷ Instead, competition forces these companies to not only create higher quality products, but also more innovative business strategies.

¶38 Commercial-skipping technology could make a similar impact. It could act as a competitor, forcing the entertainment industry to strive for progress and not satisfy itself with the status quo. On the other hand, broadcasters fear the free, advertiser-sponsored television may end. The senior vice president of communications for the National Association of Broadcasters, Dennis Wharton, said, "Our member stations rely solely on advertising to support free, over-the-air broadcasting."¹⁶⁸ He feared that "if advertising is not seen, there's less likelihood that advertisers will pay the money to purchase advertising."¹⁶⁹ His insecurities may be well founded, but this is precisely what drives competition. Competitors attempt to divert the demand of their products or services from one another; they respond by making their own products or services more attractive to increase demand. Product placement, product incorporation, ad personalization, and more entertaining commercials all qualify as ways to make commercials more attractive for both advertisers and television networks.

¶39 The Supreme Court took a similar approach in a copyright infringement action against a group that parodied the song "Oh, Pretty Woman."¹⁷⁰ It considered whether the defendant's parody "would result in a substantially adverse impact on the potential market for the original."¹⁷¹ Because parody's legitimate criticisms may undermine the demand for a product, the courts find copyright infringement only when the defendant usurps demand, rather than merely suppresses it.¹⁷² Likewise, the question with commercial-skipping technology arises over whether such technology usurps the market for free television, or merely pressures it to progress.

¹⁶⁶ Flint & Nelson, *supra* note 24.

¹⁶⁷ *Id.*

¹⁶⁸ Benny Evangelista, *TV Moguls Are Threatened by DVRs That Zip Past the Ads*, S.F. CHRON., May 27, 2002, at E1.

¹⁶⁹ *Id.*

¹⁷⁰ *Campbell v. Acuff-Rose Music*, 510 U.S. 569, 590 (1994).

¹⁷¹ *Id.* (quoting 4-13 Nimmer on Copyright §13.05 (1993)).

¹⁷² *Id.* at 592.

¶40 Only dominant technologies, technologies that command a high demand, can usurp.¹⁷³ Technologies with little following would be too insubstantial to present a threat. In antitrust law, the dominance of corporations is a function of market power. The Supreme Court has inferred monopoly power from “the predominant share of the market.”¹⁷⁴ A similar inference may be applied to the question of whether commercial-skipping technology could usurp the market for free television. To usurp the market for free television, commercial-skipping technology must dominate the alternative form of copying and replaying television: the VCR.

¶41 Numerous reports indicate that it does not. About ninety percent of households equipped with a television also have at least one VCR.¹⁷⁵ By contrast, only twenty-two percent of U.S. households possess some form of DVR technology, and an additional 13% of households indicated an interest in owning DVRs.¹⁷⁶ The threat of the DVR and prevalence of commercial-skipping technology has waned in the entertainment industry itself.¹⁷⁷ According to Magna Global USA, a “big media-buying shop,” the rate of DVR penetration has declined, so that at its peak, DVRs will reach only one-third of American homes with television.¹⁷⁸ If TiVo reached a penetration rate of thirty to forty percent, only one out of ten commercials would be lost, far from inducing the demise of free television.¹⁷⁹ Even among consumers that do possess technology capable of skipping commercials, not all of them use it. TiVo users only use the playback feature for forty percent of their prime time viewing, and of that, seventy percent of commercials are avoided by viewers.¹⁸⁰ Television station

¹⁷³ See *id.* (Kennedy, J., concurring) (“What it may not do is usurp demand by its substitutive effect.”).

¹⁷⁴ *United States v. Grinnell Corp.*, 384 U.S. 563, 571 (1966).

¹⁷⁵ In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming: Twelfth Annual Report, 21 F.C.C. R. 2503, 2509 (2006).

¹⁷⁶ Paul Jackson, *Consumers and the DVR: Continued Device Adoption Hides the Coming Device “Virtualization”*, FORRESTER RESEARCH: FOR EBUSINESS, CHANNEL & PRODUCT MANAGEMENT PROFESSIONALS, Apr 3, 2008, at 1.

¹⁷⁷ See Steve McClellan, *TiVo’s Ad-Friendly Claim Doesn’t Sway Top Researchers*, BROADCASTING & CABLE, Jul. 7, 2003, at 12 (reporting that the executive vice president of research and planning at CBS considers TiVo as a standalone unit a failure); see Joe Mandese, *DVR Threat Gets Downgraded*, BROADCASTING & CABLE, Sept. 12, 2005, at 20 (reporting studies indicating that the DVR threat “may not be as bad as everyone thinks.”).

¹⁷⁸ Joe Mandese, *DVR Threat Gets Downgraded*, BROADCASTING & CABLE, Sept. 12, 2005, at 20.

¹⁷⁹ Steve McClellan, *TiVo’s Ad-Friendly Claim Doesn’t Sway Top Researchers*, BROADCASTING & CABLE, Jul. 7, 2003, at 12.

¹⁸⁰ *Id.* *Contra* Jackson, *supra* note 176 (reporting only 12% of U.S. DVR householders rarely or never use the technology to skip ads).

managers like executive vice president of Lifetime, Tim Brooks, would attribute statistics like these to human nature: “We are couch potatoes.”¹⁸¹

¶42 Aside from comparing the use of TiVo features to the prevalence of VCR, the competitiveness of markets can also be gauged by “how far buyers will go to substitute one commodity for another.”¹⁸² The willingness of buyers to choose one product or another can be measured with cross-elasticity, or more broadly, how high a product’s price must be for customers to purchase substitutes. The low demand for TiVo indicates that the payment structure for the DVR machine and the accompanying monthly subscription have dissuaded potential viewers from adopting commercial-skipping technology, according to Roy Rothstein, senior vice president of programming at Zenith Media.¹⁸³ The failure of TiVo as a standalone unit makes TiVo more amenable to working with cable and satellite services, so that TiVo can package its product with these services.¹⁸⁴ Consequently, TiVo and other companies that offer commercial-skipping technology could face pressure by these services to make their products friendlier toward advertisers and the entertainment industry.¹⁸⁵ Likewise, cable and satellite services have much to gain from other features of DVRs, such as personalized ads. This situation typifies the classic free rider problem. In other words, individuals would not give up their commercial skipping preferences in hopes that others would give up theirs to preserve free television for all.¹⁸⁶ But this problem is avoidable. TiVo could advance the interests of the consumer in making deals with cable and satellite services. In fact, they already have.¹⁸⁷ The company envisions itself as a “bridge” that promotes progress from both sides: consumers and networks.¹⁸⁸ This arrangement centralizes consumers (or perhaps more accurately, pushes them aside in favor of TiVo), so that the free rider problem becomes

¹⁸¹ *See id.* (“For one thing, they say, early-adapter zapping patterns very likely won’t hold; most people just don’t care enough to take action to zap the spots. ‘We are couch potatoes,’ Brooks says.”).

¹⁸² *See United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 393 (1956) (“Determination of the competitive market for commodities depends on how different from one another are the offered commodities in character or use, how far buyers will go to substitute one commodity for another.”).

¹⁸³ McClellan, *supra* note 1777.

¹⁸⁴ *Id.*

¹⁸⁵ *Cf. Picker, supra* note 82, at 218 (“[T]he DVR will likely be distributed mostly through cable set top boxes...the cable operators will take account of, in a way that a free-standing DVR maker would not, the potential lost cable revenues from allowing end-users to redistribute shows.”).

¹⁸⁶ *See id.* at 219 (describing this situation as a prisoner’s dilemma).

¹⁸⁷ *See Hogan, supra* note 91 (suggesting that DirectTV bundled its product with TiVo as part of TiVo’s plan to package its products).

¹⁸⁸ Manjoo, *supra* note 30.

irrelevant.¹⁸⁹ Through repeated dealings,¹⁹⁰ and a well-established, bilateral relationship,¹⁹¹ the equilibrium would shift in favor of cooperation. Consequently, these services would receive mutual gain with TiVo through cooperative product bundling.

¶43 But this solution does not necessarily translate well into equity, based on the potential objection that TiVo in this arrangement would be the “free rider.” Viewers just as adverse to commercials as those with DVR technology must bear the boredom, while the more technologically savvy do not have to. However, this differential is more closely tied with transaction costs and the costs of the DVR itself than equity. Even among the viewers who have purchased DVR technology, they only occasionally use it to skip commercials. At other times, voluntarily subjecting themselves to commercials qualifies as the more efficient alternative.

¶44 The implications of this technology are more complex than the prisoner’s dilemma, articulated in its classic formulation by Albert W. Tucker:

Two suspects, A and B, are arrested by the police. The police have insufficient evidence for a conviction, and having separated both prisoners, visit each of them to offer them the same deal: if one testifies for the prosecution against the other and the other remains silent, the betrayer goes free and the silent accomplice receives the full 10-year sentence. If both stay silent, the police can sentence both prisoners to only six months in jail for a minor charge. If each betrays the other, each will receive a two-year sentence. Each prisoner must make the choice of whether to betray the other or to remain silent. However, neither prisoner knows for sure what choice the other prisoner will make.¹⁹²

¶45 The situation of potential TiVo consumers are analogous in that they must decide whether to cooperate in refraining from commercial skipping in order to preserve the current business model of television, or risk jeopardizing the future viability of television programming by seizing commercial skipping technology. On the other hand, the decisions television viewers face are more numerous than the choice of whether to

¹⁸⁹ See Picker, *supra* note 82, at 219 (suggesting a more collective or more centralized mechanism).

¹⁹⁰ Jean-Phillippe Platteau, *Behind the Market Stage Where Real Societies Exist, Part I: The Role of Public and Private Order Institutions*, 30 J. DEV. STUD. 533, 546-47 (1994).

¹⁹¹ *Cf. id.* at 546 (noting that personalized human relationships foster cooperation in most societies).

¹⁹² Quoted in Siang Yew Chong et al., *Iterated Prisoner’s Dilemma and Evolutionary Game Theory*, in *THE ITERATED PRISONER’S DILEMMA* 23, 23 (Graham Kendall et al. eds., 2007).

cooperate or defect posed in the classic prisoner's dilemma. The possible outcomes exceed the two-by-two payoff matrix in the prisoner's dilemma: mutual cooperation, mutual defection, unilateral defection by one prisoner, or unilateral defection by the other. The first decision confronting TiVo viewers is whether the technology is worth learning about, and if so, how much to invest in related search costs.¹⁹³ In 2002, seven out of every ten consumers "didn't even know what a DVR was."¹⁹⁴ If consumers invest little after learning about the technology, they may not learn about the more controversial features.¹⁹⁵ After buyers of DVRs make their purchases, they may not want to learn how to use commercial skipping features or spend the energy required to operate the remote. After all, an empowered couch potato is still a couch potato.¹⁹⁶ Because of this dizzying array of choices, a viewer using threatening technology can still contribute to the profits of television networks. Especially with these viewers' support, copyright owners would have a sufficient incentive to create and distribute content without the full protection of copyright. Copyright owners already have more incentive than necessary to prompt them to produce their works.¹⁹⁷

¶46 This excess detracts from other parts of the economy by luring more people than necessary to become authors.¹⁹⁸ Indeed, the television industry already has more authors than it can evaluate, but copyright protections tend to drift from the original holders or authors to the distributors.¹⁹⁹ Because authors and creators of television shows lack the access to get their ideas across,²⁰⁰ they lack the bargaining power to retain their copyrights. Commercial skipping technology may empower these original copyright holders to air their shows in what would otherwise be commercial space. If "every hit is a fluke," then hits are in great supply, but advertisement time blocks them from entering the market. Consequently, the consumer would have direct access to a greater variety of creative works. The relationship between creator and consumer would be more direct.

¹⁹³ Rose, *Fast-Forward*, *supra* note 29 (citing Forrester Research).

¹⁹⁴ *Id.*

¹⁹⁵ See Menell, *supra* note 188, at 172 ("After initially bashing television executives through its early product advertisements, TiVo has discontinued advertisements directly attacking the major networks and has downplayed its product's ability to skip commercial advertisements.").

¹⁹⁶ Compare Rose, *Fast-Forward*, *supra* note 29 ("Technology is empowering the couch potato."), with McClellan, *supra* note 177 ("We are couch potatoes," Brooks says.).

¹⁹⁷ Lunney, *Fair Use and Market Failure*, *supra* note 866, at 1016-17.

¹⁹⁸ Glynn S. Lunney, *Reexamining Copyright's Incentives-Access Paradigm*, 49 VAND. L. REV. 483, 487-89 (1996).

¹⁹⁹ Ku, *supra* note 466, at 1250.

²⁰⁰ See *supra* ¶ 28 and notes 125-27.

CONCLUSION

¶47 To effect further progress, to pressure networks to adapt more innovative strategies in making commercials appealing to the consumer, the form of commercial-skipping technology that appeals to consumers should be free from the threats of litigation that SonicBlue faced.²⁰¹ Automatic commercial skipping technology pressures television networks to select a strategy more conducive to the interests of consumers: either make advertisements more palatable to consumers, or cooperate more with the competitors of companies that would market automatic commercial-skipping technology, such as TiVo or News Corporation. The fact that only half of product placements on television shows are actually negotiated suggests that while TiVo has already prompted some progress, television networks still have not met their potential of making television more appealing to consumers, and still profitable for businesses.

¶48 A greater distribution of commercial skipping technologies would rebalance bargaining power among advertisers, their clients, television networks, creators of television programs, the technology industry, and the consumers they serve. Currently, the networks wield too much power, derived from excessive copyright protection designated more for creators than distributors. They have used their dominant market power to insulate themselves from the interests of other groups: advertisers and their clients concerned about dilution, creators of television shows who go unnoticed, and viewers who could be spending their time contributing more efficiently to the economy.

¶49 On the other hand, television stations still must survive so that they can continue to distribute their content free of charge. If they perceive commercial-skipping technology as the knell of bankruptcy and market failure, they have a variety of fiscally reasonable alternatives available: invest in counter-technology, work with advertisers to devise alternatives, or work with the providers of commercial-skipping technology themselves—or their competition. The outcome determines whether commercial skipping technology threatens the entertainment industry more than it benefits consumers. Accordingly, it guides these groups toward efficiency. It sets the television market for a new round of autonomous competition.

²⁰¹ See Lemley, *supra* note 31, at 156 (“The broadcasters’ de facto victory in ReplayTV prevented the court from setting the standard for evaluating innovative mediums that enhance consumer autonomy in the digital television industry. It is necessary to develop that standard now, for digital television will become the next copyright litigation battleground.”).