NOTE

Lost in Transitory Duration: A Look at *Cartoon Network v. CSC Holdings, Inc.* and Its Implications for Future Copyright Infringement Cases

Michelle Hugard[*]

TABLE OF CONTENTS

[*] Articles Editor, UC Davis Law Review; J.D. Candidate, UC Davis School of Law, 2010; B.A., Political Science, UCLA, 2007. Many thanks to Kimberly Lucia for guiding me through the Note writing process, to Vaughn Blackman and Elizabeth Kinsella for their excellent editorial assistance, and to Aunt Judy, Uncle Steve, Michael, and Miguel for their endless support and encouragement.

INTRODUCTION

Suppose TeleCo, a leading cable television provider, develops a new video recording technology ("NVRT") and launches a vigorous marketing campaign to publicize the product.[1] The NVRT allows TeleCo's customers to copy, save, and transmit programming without the bulky equipment usually associated with such a service.[2] The company's technology is so efficient that it can create and transmit copies within just a few seconds.[3] TeleCo copies the information, stores the information on its central hard drive, and maintains the information at all hours of the day.[4] Clients pay an additional fee for the convenience of using the technology.[5] Although TeleCo receives a substantial economic benefit from the technology, it never obtains the required licensing to copy, store, and retransmit the programming from its content providers.[6] Can the copyright owners bring a successful copyright infringement action?[7]

If the reviewing court follows *Cartoon Network LP v. CSC Holdings, Inc.* ("*Cartoon Network*"), a recent Second Circuit Court of Appeals

[1] This hypothetical is based on the fact pattern of *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121 (2d Cir. 2008), and all parties are fictitious.

[2] Typical digital video recording systems ("DVRs") like TiVo® include a set-top cable box connected to customers' television sets. *See* Randal C. Picker, *The Digital Video Recorder: Unbundling Advertising and Content*, 71 U. CHI. L. REV. 205, 217 (2004) (noting that cable companies are moving to integrate DVR technology into their cable set-top boxes); Kevin Werbach, *The Federal Computer Commission*, 84 N.C. L. REV. 1, 54 (2005) (mentioning that cable and direct broadcast satellites sell set-top cable boxes with built in DVR functionality); Jody Simon & Arnold Peter, *Facing Reality: A New Era of Deal Making Requires Strong Negotiating Pressure by Attorneys Representing Talent in the Television Industry*, L.A. LAW. MAG., May 1, 2005, at 44, 47 (noting that cable operators promote DVRs by incorporating them in new set-top boxes as means to convert subscribers to digital services); TiVo®, http://www.tivo.com (last visited Nov. 22, 2008) (discussing history of TiVo®).

[3] The speed at which the technology reproduces and transmits copies is a major issue in whether a court will provide copyright protection. *See* 17 U.S.C. § 101 (2006); *Cartoon Network*, 536 F.3d at 127-30; Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp., 478 F. Supp. 2d 607, 621 (S.D.N.Y. 2007).

[4] *Cartoon Network*, 536 F.3d at 124-25; *Twentieth Century Fox*, 478 F. Supp. 2d at 612-16.

[5] *Twentieth Century Fox*, 478 F. Supp. 2d at 609.

[6] *See* 17 U.S.C. § 111(c)(2) (2006); 18 AM. JUR. 2d *Copyright and Literary Property* § 114 (2008) (stating that willful or repeated retransmissions to public of primary transmission is actionable as acts of infringement).

[7] Plaintiffs in *Cartoon Network* brought a suit against Cablevision alleging copyright infringement. *Cartoon Network*, 536 F.3d at 123.

decision, the probable answer is no.[8] TeleCo's fast and efficient design could entirely bar recovery for the copyright owners.[9] Does this action seem fair to the content providers?[10] Does it accomplish the goals of the Copyright Act?[11] These are just two questions that *Cartoon Network* invokes.[12]

Since our nation's inception, courts have applied the various copyright laws to emerging technologies — the printing press, player piano, photograph, and television.[13] As we enter an increasingly digital age, disputes arise as to whether the current laws can adjust to the climate of rapid technological changes.[14] In particular, television

[8] *See id.*; *see also infra* Part III (discussing Second Circuit's decision in *Cartoon Network*).

[9] *See Cartoon Network*, 536 F.3d at 127-30 (rejecting plaintiffs' copyright infringement claim based on speed at which technology operated).

[10] Content providers expend considerable amounts of money to create programming. Peter Boyer, *The Media Business; At Universal, Two Programs for Price of One*, N.Y. TIMES, Apr. 25, 1988, at B1, *available at* http://query.nytimes.com/gst/fullpage.html?res=940DE1DD1E38F936A15757C0A96E948260&sec=&spon=&pagewanted=all. For instance, in 1988, *Law and Order* expended an average of $1.2 million per week for production costs. *Id.* NBC's *Heroes* cost $2.7 million per episode. NY TIMES GUIDE TO ESSENTIAL KNOWLEDGE: A DESK REFERENCE FOR THE CURIOUS MIND 835 (2d ed. St. Martin's Press 2007). Even the game show *Deal or No Deal* costs approximately $1 million per episode. *Id.*

[11] *See* Copyright Act of 1976, 17 U.S.C. § 101 (2006); *see also* Fogerty v. Fantasy, Inc., 510 U.S. 517, 526 (1994) (noting that Copyright Act grants authors limited monopolies over intellectual property to motivate them to create while still serving public good); Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 349 (1991) (noting that primary objective of copyright law is to promote progress of science and useful arts); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) (stating that copyrights reflect balancing of competing claims on public interest: encouraging creative work while promoting public availability to literary, musical, and other artistic works).

[12] *See Cartoon Network*, 536 F.3d at 127-30.

[13] *See* LEE A. HOLLAR, LEGAL PROTECTION OF DIGITAL INFORMATION 2-3 (2002) (noting that history of copyright protection is generally regarded as beginning with invention of printing press). *See generally* Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417 (1984) (questioning legality of Betamax machine, which allows customers to record copyrighted television programming); White-Smith Music Publ'g Co. v. Apollo, 209 U.S. 1 (1908) (discussing alleged copyright infringement of two musical compositions performed by player-pianos); Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53 (1884) (questioning whether court can extend copyright protection over photography even though subject was not copyrightable); Jeffrey D. Neuburger, *Copyright and New Technologies: Old Wine, New Bottles*, 943 P.L.I. 43 (2008) [hereinafter Neuburger, *Copyright*] (discussing major technological events and copyright issues accompanying them).

[14] JESSICA LITMAN, DIGITAL COPYRIGHT 35 (2001) (stating that pressures of new technology on current copyright statutes have sparked disputes as to whether statutes

customers are making increasing demands to view programming on their terms.[15] They want faster service, less bulky equipment, and the option of watching their programs on the days of their choice.[16] Cable companies, such as Cablevision Systems Corporation ("Cablevision"), have attempted to accommodate these demands by creating innovative technological devices.[17] Cablevision's Remote Service Digital Video

can adjust to rapid technological change); *see also* Graeme Dinwoodie, *A New Copyright Order: Why National Courts Should Create Global Norms*, 149 U. PA. L. REV. 469, 483 (2000) (noting that continual technological change requires copyright lawmakers to be receptive to constant adaptation); Eric Schwartz, *Protecting and Exploiting U.S. and Canadian Intellectual Property Abroad in a Technologically Changing World Economy*, 25 CAN.-U.S. L.J. 97, 98 (1999) (noting emerging technologies have placed pressures on U.S. and Canadian governments regarding how copyright laws can adopt to technological changes).

[15] *See* United States v. Am. Soc. of Composers, Authors & Publishers, 562 F. Supp. 2d 413, 419 (S.D.N.Y. 2008) (stating that producers of programming responded to consumer demands and began to offer their programs both on television and on internet); Kevin W. Harris, *I Want My MTV . . . And My ABC, CBS, NBC, and FOX:* CBS Broadcasting, Inc. v. Echostar Communications Corp.*, The Satellite Home Viewer Act of 1988, and an Argument for Consumer Choice in Distance Network Broadcasting*, 2007 BYU L. REV. 1055, 1065 (2007) (noting that recent advent of DVRs has resulted in increased consumer demand for time-shifting viewing options); Seth Metsch, *Setting the Stage: The New Technologies and New Entertainment Challenges*, 943 P.L.I. 11, 19 (2008) (stating that audience demands to view programs on their terms has created shift in balance of power from programmers to viewers).

[16] *See* David Lieberman, *Cablevision Tests 'Remote Storage' DVR Use*, USA TODAY, Mar. 3, 2006, at B1, *available at* http://www.usatoday.com/tech/products/services/2006-03-27-cablevision-dvr_x.htm (noting that consumers have time-shifting rights and Cablevision's technology enables its customers to exercise these rights at cheaper cost); Metsch, *supra* note 15, at 19 (noting new demands customers place on cable providers); Brian Settler, *In the Age of TiVo and Web TV, What is Prime Time?*, N.Y. TIMES, May 12, 2008, at C1, *available at* http://www.nytimes.com/2008/05/12/business/media/12ratings.html (noting that in past television season, linear broadcasts declined due to DVRs, streaming video on Internet, and cable video-on-demand offerings).

[17] Examples of this technology include videocassette recorders and DVRs such as TiVo®. *See* Metsch, *supra* note 15, at 19-22 (discussing time shifting devices including cable multi-system operators, video-on-demand, DVR, gaming consoles, set-top box internet protocol television, and direct-to-TV devices). *See generally Sony Corp.*, 464 U.S. 417 (1984) (holding that making individual copies of complete television shows for time-shifting purposes does not constitute copyright infringement); Galen Moore, *Cable Execs: Embrace Video, 'Time Shifting,' or Perish*, MASS HIGH TECH: J. NEW ENG. TECH., Nov. 11, 2008, *available at* http://www.masshightech.com/stories/2008/11/10/daily12-Cable-execs-Embrace-video-time-shifting-or-perish.html (citing cable executives as stating that industry needs to embrace time-shifting technology and do so in ways that will benefit programmers, advertisers, and consumers).

Recording System ("RS-DVR") is one of many new gadgets entering the market.[18]

Copyright law requires courts to undertake a delicate balancing act, especially in the context of new technologies.[19] Courts must protect the exclusive rights of copyright owners while maintaining the public's right to access the creators' works.[20] *Cartoon Network* touched on some of these basic tensions.[21] In particular, the Second Circuit's analysis of buffer copies has important implications for current and future technologies.[22] All digital devices utilize the transient data buffers questioned in the case.[23] Further, *Cartoon Network*'s analysis of information located in buffer systems leaves unanswered questions for the protection of copyrighted material in future technologies.[24]

[18] *See* Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 121-27 (2d Cir. 2008) (discussing Cablevision's DVR system and its goal of providing increasingly efficient service to its customers).

[19] *See* CRAIG JOYCE ET AL., COPYRIGHT LAW 14 (7th ed. 2006) (stating that development of copyright law has been continual response to challenges posed by new technologies); Daniel E. Abrams, *Personal Video Recorders, Emerging Technology and the Threat to Antiquate the Fair Use Doctrine*, 15 ALB. L.J. SCI. & TECH. 127, 128 (2004) (arguing that although new technologies are more convenient for users, they create challenges when practitioners try to adapt old laws to rapidly developing technological landscape). *See generally* HOLLAR, *supra* note 13, at 2-3 (discussing unique problems courts have when applying traditional copyright principles to new technologies); LITMAN, *supra* note 14, at 35 (discussing copyright protection of digital works and tensions that arise between major copyright players and public at large).

[20] The Copyright Act gives authors the exclusive right to reproduce, disseminate, and perform their works. Copyright Act of 1976, 17 U.S.C. § 106 (2006); *see also Sony Corp.*, 464 U.S. at 432-33 (noting that Copyright Act gives copyright holder exclusive rights to use and authorize use of work in five ways, including reproduction of work in copies); United States v. Martignon, 492 F.3d 140, 151 (2d. Cir. 2007) (discussing exclusive rights to reproduction, derivative works, distribution, performance, and display listed in 17 U.S.C. § 106).

[21] *See Cartoon Network*, 536 F.3d at 123.

[22] *See infra* Part IV.C (discussing policy implications of court refusing to protect buffer copies).

[23] Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp., 478 F. Supp. 2d 607, 613 (S.D.N.Y. 2007); *cf.* Venkat Rangan & Harrick M. Vin, *Efficient Storage Techniques for Digital Continuous Multimedia*, 5 IEEE TRANSACTIONS ON KNOWLEDGE & DATA ENG'G 564 (1993) (discussing transient buffering as part of process for efficient storage on digital multimedia). By simply browsing U.S digital device patent applications, one can understand how integral transient data buffering systems are to new technology. *See* World Intellectual Property Patent Search, http://www.wipo/int/pctdb/en/index.jsp (last visited Jan. 23, 2009). A search for data buffer yielded almost 3,000 patent applications. *Id.*

[24] *See infra* Part IV.C.

This Note argues that the Second Circuit erred in its fixation analysis of Cablevision's RS-DVR system.[25] Part I introduces copyright law.[26] It examines the 1976 Copyright Act, the accompanying House Report, reports from the U.S. Copyright Office, and cases applying copyright law to emerging technologies.[27] Part II describes how Cablevision's RS-DVR system operates.[28] Part III examines the Second Circuit's opinion in *Cartoon Network*.[29] Part IV argues that the Second Circuit erred in its analysis.[30] First, the Second Circuit's interpretation of copies and transitory duration contradicts congressional intent as evidenced by traditional canons of statutory construction.[31] Second, the Second Circuit insufficiently distinguishes *Cartoon Network* from *MAI Systems Corp. v. Peak Computers, Inc.*, which held that the Copyright Act extends to temporary computer copies.[32] Finally, the Second Circuit's decision provides no clear guidance for resolving fixation and duration determinations in future copyright infringement cases.[33] This Note concludes by urging Congress to resolve these issues by providing clear guidelines for determining fixation and transitory duration for future copyright cases.[34]

I. BACKGROUND

Copyright protects the legal and ownership rights of authors in all parts of the information industry, including the literary, dramatic, musical, artistic, and technological arenas.[35] The primary goal of copyright law is to provide incentives for authors to create works while maintaining public access to those works.[36] Tensions inevitably

[25] *See infra* Part IV.

[26] *See infra* Part I.

[27] *See infra* Part I.

[28] *See infra* Part II.

[29] *See infra* Part III.

[30] *See infra* Part IV.

[31] *See infra* Part IV.A.

[32] *See infra* Part IV.B.

[33] *See infra* Part IV.C.

[34] *See infra* Conclusion.

[35] JOYCE ET AL., *supra* note 19, at 2; *see also* Copyright Act of 1976, 17 U.S.C. § 102 (2006) (defining original works of authorship); SecureInfo Corp. v. Telos Corp., 387 F. Supp. 2d 593, 612 (E.D. Va. 2005) (noting that Copyright Act protects original works of authorship including literary works and other artistic works).

[36] *See* JOYCE ET AL., *supra* note 19, at 50 (noting that three groups have interests in copyright and possess competing incentives: individual creators, distributors, and consumers); *see also* Fogerty v. Fantasy, Inc., 510 U.S. 517, 526 (1994) (noting that Copyright Act grants authors limited monopolies over intellectual property to

occur when courts must weigh these competing policy objectives.[37] This Part briefly introduces the legal framework underpinning copyright law, discusses these competing policy aims, and provides an overview of the relevant case precedent.

A. The Copyright Act, House Report, and Copyright Office Report

Copyrights have a long history of protection in the United States.[38] The Constitution 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 their respective writings and discoveries."[39] In adding this provision, the Framers understood the importance of providing artists with incentives to create works for the enhancement and progression of society.[40]

motivate them to create while still serving public good); Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 349 (1991) (noting that primary objective of copyright law is to promote progress of science and useful arts); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) (stating that copyrights reflect balancing of competing claims on public interest).

[37] The Copyright Act gives copyright owners five main exclusive rights: (1) they have the right to reproduce and create copies of their works; (2) they have the right to prepare derivative works; (3) they have the right to distribute copies to the public by sale, transfer of ownership, rental, lease, or lending; (4) they have the right to perform their works; and (5) they have the right to distribute their works publicly. 17 U.S.C. § 106 (2006); *see also* Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 432-33 (1984) (noting that Copyright Act gives copyright holder exclusive rights to use and authorize use of work in five ways, including reproduction of work in copies); United States v. Martignon, 492 F.3d 140, 151 (2d Cir. 2007) (discussing exclusive rights to reproduction, derivative works, distribution, performance, and display listed in 17 U.S.C. § 106); Warner Bros. Entm't Inc. v. RDR Books, 575 F. Supp. 2d 513, 540 (S.D.N.Y. 2008) (stating inevitable tensions exist between rights for original authors and rights of others to express themselves by reference to those original works); United States v. Elcom Ltd., 203 F. Supp. 2d 1111, 1134 n.4 (N.D. Cal. 2002) (stating tensions exist between First Amendment rights and copyright laws, which grant limited monopolies to authors to profit from their original works of authorship); Corsearch, Inc. v. Thomson & Thomson, 792 F. Supp. 305, 323 (S.D.N.Y. 1992) (noting that Copyright Act balances artists' rights to control work during term of copyright protection and public's need for access to creative works).

[38] The United States Constitution includes a provision specifically granting Congress authority to protect copyrights. U.S. CONST. art. I, § 8.

[39] *Id.*

[40] *See The United States Copyright Office and Sound Recordings as Works Made for Hire: Hearing Before Subcomm. on Courts and Intellectual Property of the H. Comm. on the Judiciary*, 106th Cong. 257 (2000) (statement of Marci A. Hamilton, Thomas H. Lee Chair on Public Law, Cardozo School of Law) (stating that Framers explicitly chose to place exclusive rights in creative works into hands of authors); Abbott Marie Jones, *Get Ready Cause Here They Come: A Look at Problems on the Horizon for*

Congress passed the current Copyright Act ("Copyright Act") in 1976.[41] Under the law, copyright owners possess exclusive rights to reproduce and distribute their works or copies thereof.[42] If a party makes an unauthorized reproduction of a work, a court may hold that party liable for copyright infringement, provided that the plaintiff establishes two requirements.[43] First, a copy must be a material object fixed by a method now known or later developed — the fixation requirement.[44] Second, the infringer must be capable of perceiving, reproducing, or otherwise communicating the work directly or with the aid of a machine or a device — the duration requirement.[45]

An infringer fixes a work by embodying it such that future persons can perceive, reproduce, or communicate it for more than a "transitory" period.[46] The duration requirement is a topic of much controversy, especially as it relates to emerging and new technologies.[47] Part of that

Authorship and Termination Rights in Sound Recordings, 31 HASTINGS COMM. & ENT. L.J. 127, 129 (2008) (noting that Framers acknowledged copyright's purpose was to provide economic incentives for authors while preventing printing presses from vesting ownership of copyrights); Jack Russo et al., *Inventors and Their Innovations: Intellectual Property and the Evolution of Its Regulation*, 947 P.L.I. 1213, 1224 (2008) (noting Framers viewed intellectual property rights as incentives for individuals to contribute to knowledge domain and thereby function as engines of economic growth and power); *see also* 2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT 1-3, § 1.01(A) (1994) (noting that Framers had virtual unanimity in determining copyright should be included within federal sphere and that utility of this power would scarcely be questioned).

[41] Copyright Act of 1976, 17 U.S.C. § 101 (2006); *see also* Naomi Jane Gray, *Overview of Copyright Basics and Basics of the Copyright Office*, 901 P.L.I. 25, 31 (2007) (noting that Copyright Act of 1976 is current iteration of copyright law).

[42] 17 U.S.C. §§ 106(1), (3).

[43] *Id.* § 106. A court considers four non-exclusive factors in determining whether an unauthorized use is or is not infringing. Stewart v. Abend, 495 U.S. 207, 237 (1990). First, it looks to the purpose and character of use. *Id.* Second, it looks to the nature of the copyrighted work. *Id.* Third, it looks to the amount and substantiality of the portion used in relation to copyright work as a whole. *Id.* Lastly, the court looks to the effect of the use upon the potential market for or value of the copyrighted work. *Id.*

[44] 17 U.S.C. § 101; *see also* Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 127 (2d Cir. 2008); Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp., 478 F. Supp. 2d 607, 621-22 (S.D.N.Y. 2007).

[45] *See supra* note 44.

[46] *See supra* note 44.

[47] The seminal case regarding temporary information saved in a computer is *MAI Sys. Corp. v. Peal Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993). Other cases have also discussed temporary copies of copyrighted material. *See* Columbia Pictures, Inc. v. Bunnell, 245 F.R.D. 443, 448 (C.D. Cal. 2007); Tiffany Design v. Reno-Tahoe Specialty, Inc., 55 F. Supp. 2d 1113, 1121 (D. Nev. 1999).

controversy has arisen because Congress never explicitly defined transitory for the purposes of the Copyright Act.[48]

The text of the Copyright Act provides no clear guidance as to what transitory duration entails.[49] The House Report accompanying the Copyright Act and the Copyright Office administrative reports, however, do provide helpful insight.[50] Where Congress does not clearly define the terms in a statute, courts may look to these mechanisms for clarification.[51] In the 1976 House Report, Congress specifically addressed the reasons for implementing the fixation requirement and laid out limiting principles to that requisite.[52] In doing so, Congress refused to protect material that is fixed in a tangible medium of expression for a period that is merely transitory.[53] Although Congress did not explicitly provide a definition for transitory, it provided illustrations of the types of activities falling into that category.[54] The House Report indicated that fixation excludes purely evanescent reproductions.[55] Examples include information projected briefly on a screen, shown electronically on a television, or captured briefly in the memory of a computer.[56] The House Report did

[48] The Copyright Act contains no definition of transitory duration. *See* 17 U.S.C. § 101; *see also* H.R. REP. NO. 94-1476, at 53 (1976) (Conf. Rep.), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5666; U.S. COPYRIGHT OFFICE, 2001 REPORT ON THE DIGITAL MILLENNIUM COPYRIGHT ACT (DMCA) 104, AT 109-13 (2001), *available at* http://www.copyright.gov/reports/studies/dmca/sec-104-report-vol-1.pdf [hereinafter COPYRIGHT OFFICE 2001 REPORT].

[49] 17 U.S.C. §§ 101, 102.

[50] *See generally* H.R. REP. NO. 94-1476 (Conf. Rep.) (discussing congressional goals in drafting Copyright Act of 1976).

[51] *See* Bell Atl. Corp. v. Twombly, 550 U.S. 544, 596 (2007) (stating that congressional intent should guide courts in matters of statutory interpretation). *See generally* NLRB v. Bell Aerospace Co. Div. of Textron, Inc., 416 U.S. 267 (1974) (holding that legislative history is important in construing statutes); Tidewater Oil Co. v. United States, 409 U.S. 151 (1972) (stating courts must place statute text in proper context by looking to legislative history); Allen v. State Bd. of Elections, 393 U.S. 544 (1969) (stating that when language is ambiguous, court must resort to legislative history to determine whether Congress intended that statute to be applied in particular manner); United States v. Donruss Co., 393 U.S. 297 (1969) (holding that because language of statute did not provide answer to question, court could examine relevant legislative history in detail).

[52] *See generally* H.R. REP. NO. 94-1476, at 53 (Conf. Rep.) (noting that Congress intended to exclude transitory reproductions).

[53] *Id.*

[54] *Id.* (providing examples of evanescent and transient reproductions, which Copyright Act does not protect).

[55] *Id.*

[56] *Id.*

not, however, provide an explanation as to duration requirements.[57] Because the ambiguous language has led to legal uncertainty, several governmental agencies, including the U.S. Copyright Office ("Copyright Office"), have investigated the limits of protection Congress intended to apply to the duration requirement.[58]

The Copyright Office is the leading expert on the nation's copyright issues.[59] The Copyright Office advises, analyzes, and assists Congress on issues relating to intellectual property matters.[60] It also provides Congress with important insight into the ramifications of congressional legislation.[61] Courts may look to the Copyright Office's expertise when questions of copyright law arise.[62]

---

[57] *Id.* at 52-53.

[58] *See infra* Part I.C (discussing U.S. Copyright Office's reports on transitory duration provision of Copyright Act).

[59] U.S. Copyright Office, http://www.copyright.gov/ (last visited Oct. 6, 2008); *see also* The Copyright Office: General Responsibilities and Organization, 17 U.S.C. § 701(b) (2006) (listing Copyright Office's duties and functions regarding advising legislative and judicial branches); Bonneville Int'l Corp. v. Peters, 153 F. Supp. 2d 763, 772 (E.D. Pa. 2001) (noting that Congress clearly recognized Copyright Office expertise in 17 U.S.C. §701(b)); John Koegel, *Bamboozlement: The Repeal of Copyright Registration Incentives*, 13 CARDOZO ARTS & ENT. L.J. 529, 549 (1995) (noting that Copyright Office possesses expertise and experience to provide courts with initial judgments on issue of Hughes Repeal Bill).

[60] 17 U.S.C. § 701(b) (noting that Copyright Office advises Congress on national and international copyright issues, provides information to judiciary on copyright law, and conducts studies on copyright law); U.S. COPYRIGHT OFFICE, A BRIEF INTRODUCTION AND HISTORY (2009), http://www.copyright.gov/circs/circ1a.html [hereinafter A BRIEF INTRODUCTION AND HISTORY] (noting that Copyright Office provides many services to Congress); *see also* Kimberlee Weatherall, *Of Copyright Bureaucracies and Incoherence: Stepping Back from Australia's Recent Copyright Reforms*, 31 MELB. U. L. REV. 967, 991 n.141 (2007) (noting that Copyright Office provides Congress with opinions on copyright policy and advises relevant government departments).

[61] 17 U.S.C. § 701(b); A BRIEF INTRODUCTION AND HISTORY, *supra* note 60 (noting that Copyright Office analyzes and assists Congress in drafting legislation and legislative reports); *see, e.g.*, *The Computer Software Rental Amendments Act of 1990: The Nonprofit Library Lending Exemption to the "Rental Right,"* 41 J. COPYRIGHT SOC'Y 231, 250 (1994) (noting particular provision of Copyright Act that directs Copyright Office to report to Congress as to whether legislation has achieved Congress's intended purposes).

[62] The Copyright Act specifically states that the Copyright Office's duties include providing information and assistance to the judiciary on national copyright issues. 17 U.S.C. § 701(b). Although courts frequently defer to the Copyright Office's practices, their deference ends as soon as they disagree with the Office's position. *See* 2 NIMMER & NIMMER, *supra* note 40, § 7.26. Generally, courts may refer to administrative agencies when courts have questions relating to the agency's expertise. *See* Nat'l Cable & Telecomm. Ass'n v. Brand X Internet Serv., 545 U.S. 967, 981 (2005) (stating that if

Annual reports to Congress are one of the major mechanisms through which the Copyright Office informs the nation of current legal issues in copyright law.[63] In particular, the 2001 annual report specifically addressed the fixation and duration provisions of the Copyright Act.[64] On its face, transitory duration does not provide a clear and unambiguous meaning. Therefore, the Copyright Office determined that transitory duration must denote something shorter than temporary and ephemeral.[65]

The Copyright Office never provided a bright line time requirement that would satisfy that duration test.[66] Nonetheless, the Copyright Office stated that it could draw a general rule from the statute.[67] Under its interpretation, copyright infringement actions extend to all reproductions from which an infringer could derive economic value.[68] The Copyright Office noted that economic value lies in the ability to copy, perceive, or otherwise communicate copyrighted information.[69] The dividing line for infringement actions is thus whether copies exist for a sufficient time for an infringer to access them in the future.[70] Therefore, in a copyright infringement case, a court should consider as fixed any copies that a party can stably perceive, reproduce, or communicate in the future for economic purposes.[71]

The Copyright Office indicated that this interpretation would extend protection to temporary and buffer copies made in a

agency's reading of ambiguous statute is reasonable, court should accept that reading, even if it contrasts court's opinion); Chevron U.S.A. Inc. v. Nat'l Res. Def. Council, Inc., 467 U.S. 837, 843 (1984) (stating that if statute is ambiguous court should ask whether agency bases its answer on permissible construction of statute). *See generally* Armstrong Paint & Varnish Works v. Nu-Enamel Corp., 305 U.S. 315 (1938) (holding that administrative interpretation of statute has weight in statutory construction for federal courts).

[63] 17 U.S.C. § 701(d) (requiring Register of Copyrights to make annual reports to Library of Congress regarding Copyright Office's work and accomplishments during previous fiscal year); U.S. COPYRIGHT OFFICE, ANNUAL REPORTS (2008), http://www.copyright.gov/reports/ (stating that Copyright Office provides annual reports to Library of Congress); *see also* A BRIEF INTRODUCTION AND HISTORY, *supra* note 60 (noting that Copyright Office analyzes and assists Congress in drafting legislation and legislative reports).

[64] *See* COPYRIGHT OFFICE 2001 REPORT, *supra* note 48, at 109-13.

[65] *Id.*

[66] *Id.*

[67] *Id.*

[68] *Id.*

[69] *Id.*

[70] *Id.*

[71] *Id.*

computer's random access memory ("RAM").[72] RAM temporarily stores data on a computer so that a user may quickly access and recall the information.[73] Several courts have questioned whether copyright fixation could extend over RAM copies, and in 1994, the Ninth Circuit Court of Appeals held that it could.[74]

B. Computers and "Copies" —Case Precedent

Emerging technologies have created numerous problems for courts analyzing copyright protection cases.[75] As computers and the Internet have become an increasing part of everyday life, questions as to what constitutes copyright infringement have increased substantially.[76] The

[72] *Id.*

[73] Hon. Garrett E. Brown, Jr., *Markman Opinion,* Matsushita Elec. Indus. Co., Ltd. v. Samsung Elec. Co., 941 P.L.I. 357, 362 (2008); *see also* Linfo.com, RAM: A Brief Introduction, http://www.linfo.org/ram.html (last visited Jan. 24, 2009); PCMag.Com, Definition of RAM, http://www.pcmag.com/encyclopedia_term/0,2542,t=RAM&j=50159,00.asp (last visited Jan. 24, 2009).

[74] MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511, 519 (9th Cir. 1993); *see infra* Part I.D (discussing computers and copies). *See generally* Storage Tech. Corp. v. Custom Hardware Eng'g & Consulting, Inc., 421 F.3d 1307 (Fed. Cir. 2005) (noting that copyrighted maintenance code copied itself into RAM and court would hold it as infringing copy absent legitimate defense); Ticketmaster L.L.C. v. RMG Tech., Inc., 507 F. Supp. 2d 1096 (C.D. Cal. 2007) (stating that copies of Internet web pages stored automatically in computer's RAM fall under Copyright Act); Columbia Pictures, Inc. v. Bunnell, 245 F.R.D. 443, 448 (C.D. Cal. 2007) (analyzing whether license permitted defendants to stream copyrighted works over internet); Tiffany Design v. Reno-Tahoe Specialty, Inc., 55 F. Supp. 2d 1113, 1121 (D. Nev. 1999) (finding that scanned copyrighted work in defendant's computer's RAM constituted infringement).

[75] *See* JOYCE ET AL., *supra* note 19, at 43-49. Examples of technology that have caused copyright problems for courts include photography, player pianos, and VCRs. *See generally* Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417 (1984) (questioning whether Betamax technology infringed on movie company's exclusive performance and copying rights); White-Smith Music Publ'g Co. v. Apollo, 209 U.S. 1 (1908) (questioning whether perforated music rolls violated copyright owner's exclusive rights under 1909 Act and holding they did not because they required aid of machine); Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53 (1884) (questioning whether courts can offer copyright protection over photography even though subject was not copyrightable); Neuburger, *Copyright*, *supra* note 13 (discussing major technological events and copyright issues accompanying them).

[76] JOYCE ET AL., *supra* note 19, at 43-49. *See generally* LITMAN, *supra* note 14 (discussing digitalization and copyright law); Jessica Litman, *Copyright Legislation and Technological Change*, 68 OR. L. REV. 275 (1989) (questioning whether copyright statute can adjust to current climate of rapid technological change).

seminal case involving computers, copyright infringement, and duration is *MAI Systems Corp. v. Peak Computer, Inc.* ("*MAI*").[77]

In *MAI*, the Ninth Circuit considered whether the Copyright Act protects information saved in a computer's RAM.[78] Specifically, the court examined whether loading a program into RAM creates an infringing copy of software for the purposes of the Copyright Act.[79] The Ninth Circuit held that loading a program on a computer, even if only temporarily, constituted copyright infringement.[80]

In *MAI*, plaintiff MAI Systems manufactured computers and designed operating system software.[81] Defendant Peak Computer, Inc. maintained customers' computer systems, performed routine maintenance on those systems, and conducted emergency repairs.[82] These customers' computers contained installations of MAI's software.[83] Peak did not possess a license authorizing them to use MAI's copyrighted programming.[84] During repairs, Peak operated the customer's computer and accessed its operating system causing the MAI operating system to load into the computer's RAM.[85]

The MAI software licenses allowed MAI customers to use their software for personal needs.[86] Only individuals who lawfully purchased the software obtained licenses permitting them to load MAI's software into their computers' RAM.[87] The licenses, however, prohibited use by third parties such as Peak.[88]

Peak did not deny that MAI owned a valid copyright in the software.[89] Instead, Peak argued that its use did not create a copy

---

[77] 991 F.2d 511.

[78] *Id.* at 513-19.

[79] *Id.* at 517.

[80] *Id.* at 513-19. *MAI*'s ruling on RAM copies remains good law. *Id. But see* 17 U.S.C. § 117(c) (2006). In 1998, Congress amended § 117(c) of the Copyright Act. *Id.* §117. This amendment overruled the specific holding in *MAI* — that loading a copy of a program into a computer for maintenance could lead to infringement. *Id.* Section 117, however, is a very specific provision and only applies when a licensee of a computer program loads the program into their computer. *Id.*

[81] *MAI*, 991 F.3d at 513.

[82] *Id.*

[83] *Id.*

[84] *Id.*

[85] *Id.*

[86] *Id.* at 517.

[87] *Id.*

[88] *Id.*

[89] *Id.*

under the Copyright Act.[90] Specifically, Peak argued that loading MAI's software did not constitute fixation for a period that was more than transitory in duration.[91] Information saved in RAM lasted only until the user turned the computer off, at which point the user lost the saved copy.[92] According to Peak, this phenomenon constituted transitory duration.[93]

The Ninth Circuit rejected Peak's argument.[94] The court held that the copies of MAI's software located in a computer's RAM were sufficiently permanent to constitute infringement.[95] Users could perceive, reproduce, or otherwise communicate the RAM copy.[96] In effect, the Ninth Circuit held that the Copyright Act protects RAM copies, and by logical extension, protects information captured momentarily in a computer's buffer system.[97]

Since the Ninth Circuit's holding in *MAI*, several courts have also considered whether the Copyright Act protects RAM copies.[98] Other circuit courts of appeals have both heavily criticized and widely praised the *MAI* decision.[99] Some courts have followed the Ninth

[90] *Id.*

[91] *Id.* at 518.

[92] *Id.* at 519.

[93] *See Id.*

[94] *Id.*

[95] *Id.* at 518.

[96] *Id.*

[97] *Id.*

[98] *See generally* Storage Tech. Corp. v. Custom Hardware Eng'g & Consulting, Inc., 421 F.3d 1307 (Fed. Cir. 2005) (noting that copyrighted maintenance code copied itself into RAM and court would hold it as infringing copy absent legitimate defense); Ticketmaster L.L.C. v. RMG Tech., Inc., 507 F. Supp. 2d 1096 (C.D. Cal. 2007) (stating that copies of Internet web pages stored automatically in computer's RAM fall under Copyright Act); Columbia Pictures, Inc. v. Bunnell, 245 F.R.D. 443, 448 (C.D. Cal. 2007) (analyzing whether license permitted defendants to stream copyrighted works over internet); Tiffany Design v. Reno-Tahoe Specialty, Inc., 55 F. Supp. 2d 1113, 1121 (D. Nev. 1999) (finding that scanned copyrighted work in defendant's computer's RAM constituted infringement).

[99] *Compare* DCS Commc'ns Corp. v. Pulse Commc'ns, Inc., 170 F.3d 1354, 1360 (Fed. Cir. Va. 1999) (refusing to adopt Ninth Circuit's rationale in *MAI* because it failed to recognize distinction between copyright ownership and ownership of copies of copyrighted software), *and* Vernor v. Autodesk, Inc., 555 F. Supp. 2d 1164, 1171 (W.D. Wash. 2008) (criticizing *MAI* court for holding that customers were not owners of copyrighted software but giving little analysis leading to that conclusion), *with* Wall Data Inc. v. Los Angeles County Sheriff's Dep't, 447 F.3d 769, 785 (9th Cir. 2006) (calling *MAI* leading case on ownership under § 117 of Copyright Act), *and* Triad Sys. Corp. v. Se. Express Co., No. C 92 1539-FMS, 1994 WL 446049, at *4-5 (N.D. Cal. 1994) (holding that *MAI* controlled case and to determine otherwise would impede goals of Copyright Act).

Circuit's lead and held that the Copyright Act protects copies made in a computer's buffer and RAM systems.[100] Other courts have rejected *MAI* and refused to apply the decisions to disputes in their jurisdictions.[101] In either line of cases, reviewing courts must first investigate the specific technology in question to determine whether *MAI* applies.[102] From that analysis, the court can determine if transitory duration is a relevant issue in the infringement action.[103]

II. THE REMOTE SERVICE DIGITAL VIDEO RECORDING SYSTEM (RS-DVR)

MAI and its progeny highlight the complicated tasks courts must undertake when considering legal issues in emerging technologies.[104] Courts are required not only to understand how these systems work, but also how to adapt current law to apply to them.[105] Cablevision's

[100] *See* Triad Sys. Corp. v. Se. Express Co., 64 F.3d 1330, 1335 (9th Cir. 1995); Advanced Computer Servs. of Mich., Inc. v. MAI Sys. Corp., 845 F. Supp. 356, 362-63 (E.D. Va. 1994); Jacqueline C. Charlesworth, *Copyright and the Internet*, 938 P.L.I. 317, 333-35 (2008) (discussing cases involving RAM copies made for purpose of streaming).

[101] *See DCS Commc'ns Corp.*, 170 F.3d at 1360; *Vernor*, 555 F. Supp. 2d at 1171. *See generally* Jane S. Ginsburg, *Putting Cars on the "Information Superhighway": Authors, Exploiters, and Copyright in Cyberspace*, 95 COLUM. L. REV 1466, 1477 n.39 (1995) (listing scholars who have criticized *MAI*'s holding on RAM copies); Jessica Litman, *The Exclusive Right to Read*, 13 CARDOZO ARTS & ENT. L.J. 29, 40 (1994) (criticizing *MAI* as leading to result where acts of reading or viewing digitalized work could constitute copyright infringement); Michael E. Johnson, Note, *The Uncertain Future of Computer Software Users' Rights in the Aftermath of* MAI Systems, 44 DUKE L.J. 327 (1994) (arguing that *MAI* improperly expands scope of limited monopoly extended to copyright owners under Copyright Act).

[102] *See infra* Part II (discussing how RS-DVR system operates).

[103] *See Ticketmaster*, 507 F. Supp. 2d at 1105; *Triad Sys. Corp.*, 64 F.3d at 1330-35; *Advanced Computer Servs.*, 845 F. Supp. at 363.

[104] *See supra* Part I.D (discussing *MAI* and its progeny).

[105] *See* Aundrea Gamble, Comment, *Google's Book Search Project: Search for Fair Use or Infringement*, 9 TUL. J. TECH. & INTELL. PROP. 365, 369 (2007) (stating that courts often struggle to define exclusive copyrights when asked to apply convoluted sections of Copyright Act to new and emerging technologies); Christian J. Keeney, *Kentucky Fried Blog: How the Recent Ejection of a Blogger from the College World Series Raises Novel Questions About the First Amendment, Intellectual Property, and the Intersection of Law and Technology in the 21st Century*, 13 J. TECH. L. POL'Y 85, 87 (2008) (arguing that courts have, and should, balance interests in context of new communications technologies); Orin S. Kerr, *The Fourth Amendment and New Technologies: Constitutional Myths and the Case for Caution*, 102 MICH. L. REV. 801, 879 (2004) (stating that because courts tend to lack knowledge of technological advances, they struggle to create workable and sensible rules governing that technology).

RS-DVR presented one such challenge.[106] The next subparts explain how cable companies gather copyrighted material from content providers, how the RS-DVR system operates, and how it differs from similar devices.[107] Understanding these topics is essential to comprehending the legal challenges the RS-DVR creates.[108]

A. How Cable Companies Gather Televised Content

Cable companies, like Cablevision, offer customers a variety of programmed channels from content providers, who create and produce copyrighted programming.[109] Cablevision collects the programming feeds at its central facility, where it keeps the software and hardware needed to operate and transmit the feeds.[110] Cablevision then collects the feeds into an aggregated programming stream and sends it directly to customers' homes.[111]

The programming is linear, meaning that cable providers televise programs at specified times on specific days.[112] Cablevision then immediately retransmits the data to customers who subscribe to that channel.[113] Traditionally, if customers missed programming, they would wait for the cable provider to re-air the show.[114] Today, this is no longer standard practice, and new technologies give customers additional viewing options.[115]

---

[106] *See generally* Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 121-30 (2d Cir. 2008) (explaining Cablevision's RS-DVR technology); Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp., 478 F. Supp. 2d 607, 610-15 (S.D.N.Y. 2007) (same).

[107] *See infra* Part II.

[108] The legal issue in *Cartoon Network* is whether the RS-DVR system fixes copies of the work for a sufficient period of time. *Cartoon Network*, 536 F.3d at 127-30. Understanding how the system operates is important to analyzing that question. *Id.*

[109] *See* Cablevision, http://www.cablevision.com (last visited Nov. 21, 2008). The named plaintiffs in *Twentieth Century Fox* and *Cartoon Network* include: The Cartoon Network LP, Cable News Network, Twentieth Century Fox Film Corporation, Universal City Studios Productions LLP, Paramount Pictures Corporation, Disney Enterprises Inc., CBS Broadcasting Inc., American Broadcasting Companies, Inc., and NBC Studios. *Cartoon Network*, 536 F.3d at 121; *Twentieth Century Fox*, 478 F. Supp. 2d at 609-10.

[110] *Twentieth Century Fox*, 478 F. Supp. 2d at 610.

[111] *Id.* at 610-11.

[112] *Id.* at 610.

[113] *Cartoon Network*, 536 F.3d at 125.

[114] *Id.*

[115] *See* discussion *infra* Part II.B (discussing advent of new technologies that give television viewers opinion of viewing programming on their terms).

B. How Cablevision's RS-DVR System Operates

Since the advent of Sony's Betamax machine in the 1980s, customers have demanded the option of watching televised programming on their own terms.[116] To fulfill these requests, cable companies began to provide digital video recording devices ("DVRs").[117] DVRs function much like videocassette recorders.[118] Instead of copying television programming onto videocassettes, however, DVRs record programming to a hard drive based digital storage medium.[119]

Many cable providers offer set-top storage DVRs ("STS-DVRs") to their customers.[120] These boxes combine the functions of an at-home

---

[116] *See* Edward Lee, *Warming up to User-Generated Content*, 2008 U. ILL. L. REV. 1459, 1484 (noting that since Betamax case, time-shift recording flourishes like never before through more sophisticated technologies such as DVRs); Brett Lunceford & Shane Lunceford, *Meh, the Irrelevance of Copyright in Public Mind*, 7 NW. J. TECH. & INTELL. PROP. 33, 41 (2008) (noting that technological advances have created new norms that often cause public to make increasing demands without considering relevant copyright law); 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, 417-20 (2002) (discussing relationship of *Sony* to current issues revolving around time-shifting devices like personal video recorders and DVRs such as TiVo®).

[117] TiVo® was among the first producers of DVR technology. History of TiVo, http://www.tivo.com/abouttivo/jobs/historyoftivo/index.html (last visited Jan. 4, 2009). TiVo® introduced its DVR system at the 1999 Consumer Electronics Show. *Id.* Today, 17.6 million Americans own DVRs and 43 million engage in time-shifting activities. Fred von Lohmann, *Fair Use as Innovation Policy*, 23 BERKELEY TECH. L.J. 829, 833-34 (2008); *see also* Matthew Scherb, Comment, *Free Content's Future: Advertising, Technology, and Copyright*, 98 NW. U. L. REV. 1787, 1814 (2004) (stating that personal video recorders like TiVo® entered U.S. market in 1999 as most successful new consumer electronic product in history).

[118] Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp., 478 F. Supp. 2d 607, 611-12 (S.D.N.Y. 2007); Lisa Tittemore & Nicole Smith, *Copyright Law in the New Millennium – Recent Developments and Future Changes*, MASS. CONTINUING LEGAL EDUC. § 26.3h (2002) (noting that DVRs function much like VCRs). Both VCRs and DVRs serve time-shifting functions. Lee, *supra* note 116, at 1484 (noting that since Betamax case, time-shift recording has flourished through sophisticated technologies such as DVRs).

[119] *Twentieth Century Fox*, 478 F. Supp. 2d at 611-12; *see also* Hyangsun Lee, *The Audio Broadcast Flag System — Can It Be a Solution?*, 12 COMM. L. & POL'Y 405, 424 n.97 (2007) (discussing TiVo®'s internal hard disk storage and how it allows users to pause or rewind programming); *cf.* Sasha Mayergoyz et al., *2005 Patent Law Decisions of the Federal Circuit*, 55 AM. U. L. REV. 1001, 1146-47 (2006) (discussing patent infringement case involving TiVo®'s circular storage buffer technology).

[120] *Twentieth Century Fox*, 478 F. Supp. 2d at 611-12; *see also* Andrew Beckerman-Rodau, MGM v. Grokster*: Judicial Activism or a Good Decision?*, 74 UMKC L. REV. 921, 935 (2006) (stating that cable companies provide DVRs to customers for monthly fees); Daniel L. Brenner, *Comments of the National Cable & Telecommunications Association of FCC Annual Assembly Assessment of the Status of Competition in the*

cable box with the recording capabilities of a DVR.[121] With STS-DVRs, customers can simultaneously watch linear channels while recording information on another channel for later viewing.[122]

In March 2006, Cablevision announced a new version of its DVR.[123] This new innovative system worked differently than traditional STS-DVRs.[124] Instead of providing customers with a standalone box to store saved programming, Cablevision offered a remote storage DVR ("RS-DVR").[125] Under the proposed system, customers use an automated on-screen system to request Cablevision record their desired programming.[126] Cablevision then stores the programming on its servers at its central cable facility and charges its customers an additional fee for the convenience of using the system.[127] Cablevision did not obtain licenses or verbal permission from the content providers to copy or retransmit their programming in conjunction with the new system.[128] Content providers were angry that Cablevision infringed on their content, and the RS-DVR's unique operation created numerous questions as to its legality.[129]

The RS-DVR system requires numerous components to function.[130] The customers use remote controls, on-screen guides, wires connected to the cable system, and computer hardware and software located at Cablevision's central facility.[131] Cablevision's personnel oversees the complex system twenty-four hours a day, seven days a week.[132]

Cablevision planned to store its customers' programming on servers located at its central facility ("Arroyo server").[133] Cablevision would

Market for Delivery of Video Programming, 818 P.L.I. 299, 342-44 (2005) (noting that many major cable companies and satellite providers are now offering DVR services as part of cable packages).

[121] *See supra* note 118.

[122] *Twentieth Century Fox*, 478 F. Supp. 2d at 612. *See generally* Lee, *supra* note 119, at 424 n.97 (mentioning TiVo®'s internal hard disk storage and how it allows users to pause or rewind programming); *cf.* Mayergoyz et al., *supra* note 119, at 1146-47 (discussing patent infringement case involving TiVo®'s circular storage buffer technology).

[123] *Twentieth Century Fox*, 478 F. Supp. 2d at 609.

[124] *Id.*

[125] *Id.*

[126] *Id.* at 612.

[127] *Id.*

[128] *Id.*

[129] *See infra* Part II.C (discussing operation of RS-DVR system).

[130] *Twentieth Century Fox*, 478 F. Supp. 2d at 612.

[131] *Id.*

[132] *Id.* at 613.

[133] *Id.* at 612.

give each customer a specified amount of storage space on one of those servers.[134] Only the customers who requested the programming could access the programming saved on the servers.[135] The programming remains there until the customer erases or automatically overrides the data to make room for another program.[136]

As mentioned above, cable programming is usually linear.[137] The RS-DVR system is not.[138] The RS-DVR splits the data into two streams.[139] The system transmits one stream directly to customers.[140] The other stream flows to Cablevision's Broadband Media Router ("BMR").[141] The BMR buffers the data stream, reformats it, and sends it to the Arroyo Server.[142] A buffer is a form of RAM that serves as a temporary place to hold data received from an external device.[143] During the buffering process, the RS-DVR places portions of the copyrighted programming into the BMR's memory.[144] The Arroyo Server contains two data buffers and numerous hard disks with high memory capacities.[145] These buffers are the heart of the RS-DVR.[146] Through them Cablevision records the programming requested by customers and stores it for playback.[147]

The entire programming data stream automatically moves through Cablevision's first buffer — the primary ingest buffer — even if a

[134] *Id.*

[135] *Id.*

[136] *Id.*

[137] *Id.* at 609; *see also* Michael Prohaska, *Interactive Media Agreements*, 428 P.L.I. 465, 475-76 (1996) (defining linear television); John Russum, *AFTRA Interactive Media Agreement*, 505 P.L.I. 469, 476-77 (1998) (defining linear programming and linear television).

[138] Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 124-25 (2d Cir. 2008).

[139] *Id.*

[140] *Id.*

[141] *Id.*

[142] *Id.*

[143] Linfo.Com, Buffer Definition, http://www.linfo.org/buffer.html (last visited Oct. 3, 2008); *see also* Intelligent Computer Solutions, Inc. v. Voom Tech., Inc., 509 F. Supp. 2d 847, 857 (D.C. Ma. 2006) (defining memory buffer in patent application); TiVo Inc., v. Echostar Commc'ns Corp., No. 2:04-CV-1-DF, 2005 WL 6225413, at *12 (E.D. Tex. Aug. 18, 2005) (noting that court will construe buffer to denote place where computer can temporarily story data for future data transfers).

[144] Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp., 478 F. Supp. 2d 607, 614 (S.D.N.Y. 2007).

[145] *Id.*

[146] *Id.*

[147] *Id.*

customer has not requested that Cablevision record the programming.[148] The primary buffer saves data for approximately 1.2 seconds.[149] If a customer requests Cablevision to record the programming, the data stream moves to a secondary buffer.[150] From this point, the stream moves to the customer's hard disk on the Arroyo server.[151] The primary ingest buffering process occurs automatically, even absent a customer's recording request.[152]

The RS-DVR's automatic recording and buffering system created controversy among cable companies, content providers, consumers, and members of the legal profession.[153] The controversy led content providers to sue Cablevision in *Twentieth Century Fox v. Cablevision Systems Corp.*[154] Cablevision then appealed that decision in *Cartoon Network LP v. CSC Holdings, Inc.*[155] The Supreme Court denied certiorari in 2009.[156]

III. *CARTOON NETWORK V. CSC HOLDINGS, INC.*

Cablevision's RS-DVR system angered major content providers.[157] Pursuant to the Copyright Act, owners of copyrights possess exclusive rights to reproduce and distribute copies of their work to the public.[158]

---

[148] *Id.*

[149] *Id.*

[150] *Id.*

[151] *Id.*

[152] *Id.*

[153] *See generally* David Savage, *Video on Demand Goes to Court, TV Networks and Film Studios Are Hoping that Justices Will Block a Cable Service They Say Violates Their Rights*, L.A. TIMES, Jan. 9, 2009 (stating that cable providers hope Supreme Court will make correct holding in case); Peter Schuyler, *Buffer Question: How Long Is 'Transitory'?*, MONDAQ, Oct. 15, 2008, *available at* 2008 WLNR 19623582 (questioning what transitory means for future cases); Jonathan Tombes, *Several Takes on nDVR*, 8 CT'S PIPELINE 19, Aug. 12, 2008 (discussing content provider, cable systems, and consumer views of decision).

[154] *Twentieth Century Fox*, 478 F. Supp. 2d at 607.

[155] Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121 (2d. Cir. 2008).

[156] Cable News Network, Inc. v. CSC Holdings, Inc., 129 S. Ct. 2890 (U.S. June 29, 2009) (No. 08-448).

[157] Content providers ultimately filed a lawsuit, an appeal to the Second Circuit, and a petition for writ of certiorari to the Supreme Court. Brief of Petitioner-Appellant, Cable News Network, Inc. v. CSC Holdings, Inc., No. 08-448 (S.D.N.Y. Oct. 6, 2006); *see also Cartoon Network*, 536 F.3d at 121; *Twentieth Century Fox*, 478 F. Supp. 2d at 607.

[158] 17 U.S.C. §§ 106(1), (3) (2006) (stating that copyright owners possess exclusive rights to reproduce copyrighted work in copies and to distribute copies to public by sale, rental, lease, or lending); *see also* Sony Corp. of Am. v. Universal City

The content providers alleged that Cablevision violated their reproduction and distribution rights by providing a service that copied their programming without the proper licensing agreements.[159] Numerous content providers brought suit in the Southern District of New York against Cablevision and its parent company, CSC Holdings.[160] The content providers claimed that the data residing in Cablevision's server constituted infringing copies of their copyrighted programming.[161]

The Southern District of New York agreed with the content providers.[162] The court held that Cablevision's RS-DVR directly infringed on the content providers' rights to reproduction.[163] The court prohibited Cablevision from copying plaintiffs' programming unless Cablevision obtained permission from the content providers.[164]

Cablevision appealed, and the Second Circuit Court of Appeals reversed.[165] The appellate court concluded that Cablevision's system did not fix the automatic buffer copies for the purposes of the Copyright Act,[166] and Cablevision did not infringe the content providers' rights.[167] In its analysis, the Second Circuit specifically examined the Copyright's Act's duration requirement.[168] Under the Copyright Act, a copy is an object fixed in a tangible medium of expression from which an infringer can reproduce the work.[169] Fixation requires that the copy be stable enough to permit an infringer

Studios, Inc., 464 U.S. 417, 432-33 (1984) (noting that Copyright Act gives copyright holder exclusive rights to use and authorize use of work in five ways, including reproduction of work in copies); United States v. Martignon, 492 F.3d 140, 151 (5th Cir. 2007) (discussing exclusive rights to reproduction, derivative works, distribution, performance, and display listed in 17 U.S.C. § 106).

[159] *Cartoon Network*, 536 F.3d at 124 (stating that Cablevision notified content providers of plans to offer RS-DVR, but did not seek any license for them to operate or sell it).

[160] *Id.* at 121.

[161] *Twentieth Century Fox*, 478 F. Supp. 2d at 609.

[162] *Id.* (stating that Cablevision, and not just its customers, would be engaging in unauthorized reproductions and transmissions of plaintiffs' copyrighted programs under RS-DVR system).

[163] *Id.* at 624.

[164] *Id.*

[165] *Cartoon Network*, 536 F.3d at 123.

[166] *Id.* at 123-25.

[167] *Id.*

[168] *Id.* at 127-30.

[169] 17 U.S.C. § 101 (2006).

to reproduce the material for a period more than transitory in duration.[170]

The Second Circuit interpreted this language to impose two requirements.[171] First, the infringer must embody the programming in a medium where the infringer can perceive or reproduce it in the future.[172] Second, the infringer must embody the work for more than a transitory period.[173] Unless the copy satisfied both requirements, the court would not hold that Cablevision's buffer fixed the copy under the Copyright Act.[174] Without fixation, the data in Cablevision's buffer would not constitute a copy of the content providers' original work.[175]

In comparing copyright law with the case's facts, the Second Circuit emphasized that Cablevision's buffer held the content providers' data for a "fleeting" 1.2 seconds.[176] The court concluded this duration was negligible and constituted only a "transitory" period of time.[177] Therefore, the Second Circuit held that the buffer system did not embody the works sufficiently to satisfy the Copyright Act.[178] Under the court's analysis, the content providers could not satisfy the second requirement.[179] Accordingly, the court denied copyright protection and reversed the district court's decision.[180] For many, the Second Circuit's analysis seemed incomplete and left open numerous questions for future cases.[181]

IV. ANALYSIS

The Second Circuit erred in its fixation analysis of Cablevision's RS-DVR system.[182] First, the Second Circuit's investigation of transitory duration did not properly consider traditional canons of statutory

[170] *Id.*

[171] *Cartoon Network*, 526 F.3d at 123, 140.

[172] *Id.* In its analysis, the court relied on *MAI*, the 2001 COPYRIGHT OFFICE REPORT, and NIMMER ON COPYRIGHT. *Cartoon Network*, 536 F.3d at 129-30; MAI Sys. Corp. v. Peak Computer Inc., 991 F.2d 511, 516-20 (9th Cir. 1993); COPYRIGHT OFFICE 2001 REPORT, *supra* note 48, at 109-13; 2 NIMMER & NIMMER, *supra* note 40, at 8-32.

[173] *Cartoon Network*, 536 F.3d at 129-30; *see also* 17 U.S.C. § 101.

[174] *Cartoon Network*, 536 F.3d at 129-30.

[175] *Id.*

[176] *Id.* at 129.

[177] *Id.*

[178] *Id.*

[179] *Id.*

[180] *Id.* at 123.

[181] *See infra* Part IV (discussing why *Cartoon Network* raises questions for future technologies).

[182] *See infra* Part IV.

construction or the expertise of the U.S. Copyright Office.[183] Second, the Second Circuit insufficiently distinguished *Cartoon Network* from *MAI System*'s holding that RAM copies could constitute infringing copies under the Copyright Act.[184] Finally, the Second Circuit's analysis placed an arbitrary bright line time limit on fixation that threatens the protection of copyrighted material embodied in future technological devices.[185]

A. The Second Circuit's Interpretation of "Copies" and "Transitory Duration" Ignores Congressional Intent and Copyright Office Guidance

Under the Copyright Act of 1976, copies are defined as material objects fixed by any method from which they can be reproduced.[186] Fixation requires that a copyrighted work be embodied in a tangible medium of expression and that the embodiment be sufficiently stable to allow it to be reproduced for a period of time more than transitory in duration.[187] In *Cartoon Network*, the court correctly interpreted the Copyright Act to impose embodiment and duration requirements upon plaintiffs seeking to prove a defendant created infringing copies.[188] The court, however, did not properly analyze whether the RS-DVR system satisfied the duration requirements. The Second Circuit's analysis ignored traditional canons of construction, including congressional intent, legislative history, and administrative agency guidance.[189]

The RS-DVR buffer sufficiently embodied the plaintiffs' copyrighted programming.[190] Embodiment requires that a user be capable of perceiving, reproducing, or otherwise communicating the misappropriated copy.[191] Courts have continuously held that a human audience is not a necessary component of embodiment.[192] Perception,

---

[183] *See infra* Part IV.A.

[184] *See infra* Part IV.B.

[185] *See infra* Part IV.C.

[186] *See* 17 U.S.C. § 101 (2006).

[187] *Id.*

[188] *See id.*; *see also supra* Part III (noting Second Circuit's two fixation requirements).

[189] *See* Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 127-30 (2d Cir. 2008).

[190] *Id.* at 129-30.

[191] *See* 17 U.S.C. § 102(a) (2006); *see also* Christopher M. Mislow, *Cause of Action for Infringement of Copyright in Computer Software*, 9 CAUSES ACTION 557, § 11 (2009).

[192] Mislow, *supra* note 191, §11; *see also* Apple Computer, Inc. v. Formula Int'l Inc., 725 F.2d 521, 525 (9th Cir. 1984); Apple Computer, Inc. v. Franklin Computer

reproduction, and communication of material through a computer satisfies the embodiment requirement.[193] Here, the RS-DVR buffer could reformat, transmit, perceive, and reproduce the content providers' copyrighted programming.[194] Therefore, the system sufficiently embodied the programming for the purposes of the Copyright Act.[195]

At issue in *Cartoon Network* was whether the RS-DVR buffer met the duration requirement.[196] The court held it did not.[197] In reaching this conclusion, the Second Circuit looked only to the plain meaning of the language of the Copyright Act.[198] Under this approach, the court's statutory interpretation inquiry begins and ends with the statutory text if the language possesses a clear and unambiguous meaning.[199] Courts typically favor the plain meaning approach to statutory interpretation.[200]

The Second Circuit rejected copyright protection to buffer copies solely because fixation occurring for a "fleeting 1.2 seconds" constituted a transitory period.[201] The court did not undergo further analysis to clarify what constitutes transitory.[202] Instead, it assumed that transitory duration possessed a clear and unambiguous

Corp., 714 F.2d 1240, 1249 (3d Cir. 1983).

[193] Mislow, *supra* note 191, § 11.

[194] *Id.*

[195] *Id.; see also* 17 U.S.C. § 101 (2006).

[196] Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 127 (2d Cir. 2008).

[197] *Id.* at 130.

[198] *Id.* at 135.

[199] *See* Small v. United States, 544 U.S. 385, 405-06 (2005) (Thomas, J., dissenting) (noting that Supreme Court will apply unambiguous meaning of statute). *See generally* Dodd v. United States, 545 U.S. 353 (2005) (stating that when statute's language is plain, sole function of courts is to enforce it according to its terms); Bedroc Ltd., LLC v. United States, 541 U.S. 176 (2004) (stating that court's statutory interpretation inquiry begins with statutory text and ends there if text is unambiguous); Barnhart v. Sigmon Coal Co., 534 U.S. 438 (2002) (stating first step in statutory construction is to determine whether language at issue has plain and unambiguous meaning with regard to particular disputes of case).

[200] *See generally Dodd*, 545 U.S. 353 (stating that sole function of courts is to enforce plain meeting of statute according to its terms); *Bedroc*, 541 U.S. 176 (stating that court's statutory interpretation inquiry begins with statutory text and ends there if text is unambiguous); *Barnhart*, 534 U.S. 438 (stating first step in statutory construction is to determine whether language at issue has plain and unambiguous meaning with regard to particular disputes of case).

[201] *See Cartoon Network*, 536 F.3d at 130.

[202] *Id.*

meaning.[203] In doing so, the court improperly avoided investigating traditional mechanisms of interpretation.[204]

In the context of the fixation requirement, the definition of transitory is not unambiguous. Reasonable minds can and, in fact, did disagree as to its meaning.[205] Transitory is defined as "tending to pass away, not persistent, and of brief duration."[206] But what does "brief" denote in the context of technological devices whose sole purpose is to transmit information in an expeditious manner?[207] How many seconds must the programming reside in Cablevision's buffer system for a court to consider it fixed for more than a brief period?[208] If 1.2 seconds is an insufficient period, is 3 seconds as well?[209] The court never addressed these questions.[210]

Because the term transitory is vague, the court should have investigated congressional intent.[211] This is especially true when courts

---

[203] *Id.* at 127-30.

[204] See court's discussion of buffer copies and transitory duration. *Id.*

[205] Ambiguity exists when reasonable, informed persons are capable of understanding a statute in two or more ways. *See generally* United Services Auto. Ass'n v. Perry, 92 F.3d 295 (5th Cir. 1996) (discussing ambiguity and statutory interpretation); United States v. Tomison, 969 F. Supp. 587 (E.D. Cal. 1997) (same); *In re* Andover Togs, Inc., 231 B.R. 521 (Bankr. S.D.N.Y. 1999) (same).

[206] MERRIAM-WEBSTER COLLEGIATE DICTIONARY 1234 (10th ed. 1997).

[207] Merriam-Webster defines brief as short in duration, extent, or length. *Id.* Commentators have also contemplated the meaning of brief in the context of the Copyright Act. *See* Zohar Efroni, The Cartoon Network v. CSC Holdings & Cablevision Systems, STAN. L. SCH. CTR. FOR INTERNET & SOC'Y, Aug. 23, 2008, http://cyberlaw.stanford.edu/node/5841 (stating that no one knows what minimum duration courts will require to trigger exclusive reproduction right); *see also infra* Part IV.C (discussing slippery slope and uncertainties *Cartoon Network* has caused for media, music, and other content providers).

[208] *See* Araceli Campos, Cartoon Network v. CSC Holdings*: Remote DVR Does Not Infringe Copyrights*, ARTICLES FACTORY, Sept. 24, 2008, http://www.articlesfactory.com/articles/law/cartoon-network-v-csc-holdings-remote-dvr-does-not-infringe-copyrights.html (asking how long copies must be embodied to be fixed and inquiring whether 5, 10, or 20 seconds would be sufficient for fixation).

[209] *Id.*

[210] *See generally* Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121 (2d. Cir. 2008) (refraining from discussing time period required for fixation).

[211] *See generally* Allen v. State Bd. of Elections, 393 U.S. 544 (1969) (stating when courts must apply unclear statute, they should look to legislative history to determine whether Congress intended statute be applied to particular case); United States v. Donruss Co., 393 U.S. 297 (1969) (holding that since statutory language did not provide answer to question before court, court could examine relevant legislative history); United States v. Pub. Utils. Comm'n of Cal., 345 U.S. 295 (1953) (noting that where words of statute are ambiguous, judiciary may properly use legislative history to reach conclusion).

apply the duration language to technologies whose sole purpose is to rapidly replicate and transmit information.[212] Inventors design these technologies with the intention of transmitting and copying data at fast speeds.[213] Using the Second Circuit's rationale, a company can create a product whose sole purpose is infringement, as long as the infringement occurs quickly.[214]

Consider the hypothetical at the beginning of this Note.[215] Applying *Cartoon Network*, TeleCo could invent technological products, whose sole purpose is to facilitate infringement, with few legal ramifications.[216] Ultimately, such actions could frustrate the goals of copyright protection.[217] One of the main objectives of copyright law is

[212] LIBRARY OF CONGRESS, FINAL REPORT OF THE NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS 22-23 (1978) (noting that drawing line between copyrightable and uncopyrightable works will become increasingly difficult because of new applications that advancing technology will supply); Brief for Am. Soc'y of Media Photographers, Inc. et al. as Amici Curiae Supporting Appellant at 1, Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121 (2d Cir. 2008) (Nos. 07-1480-cv(L), 07-1511-cv(CON)) (stating that copyright owners' rights are constantly under attack as new technological means of copying content for profit emerge without compensating authors); *see* Triad Sys. Corp. v. Se. Express Co., No. C 92 1539-FMS, 1994 WL 446049, at *5 (N.D. Cal. Mar. 18, 1994) (emphasizing that defining "transitory duration" is important for computer technology cases where speed and complexity of machines is constantly advancing).

[213] A prime example of this is the history of the internet and the continuing attempts to increase the speed at which it functions. *See generally* Bill Gates, *Business @ the Speed of Thought*, 10 BUS. STRATEGY REV. 11 (1999) (discussing how businesses should design themselves to exploit fast communication via internet communities); Exhibits: Internet History, http://www.computerhistory.org/internet_history/ (last visited Jan. 4, 2009) (following evolution of internet from 1962 to 1992); F.C.C., *The Internet: A Short History of Getting Connected* (2009), http://www.fcc.gov/omd/history/internet (last visited Jan. 4, 2009) (discussing development of internet and progression of high speed connections).

[214] *See generally Cartoon Network*, 536 F.3d 121 (discussing Cablevision as company which created technology with purpose of operating efficiently and quickly); Brief of Am. Soc'y of Media Photographers, Inc., *supra* note 212; *supra* Introduction (discussing TeleCo example).

[215] *See supra* Introduction (providing TeleCo hypothetical and examining its relevance to issues present in *Cartoon Network*).

[216] *Compare* TeleCo hypothetical, *supra* Introduction (proposing situation where company produces technology with sole purpose of infringing exclusive copyrights without compensation to copyright owners), *with* Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 123, 127 (2d Cir. 2008) (holding that reproductions made at fast speeds may constitute transitory duration and are not fixed under Copyright Act).

[217] 17 U.S.C. § 106 (2006); *see, e.g.*, Fogerty v. Fantasy, Inc., 510 U.S. 517, 526 (1994) (noting that Copyright Act grants authors limited monopolies over intellectual property to motivate them to create while still serving public good); Feist Publ'ns, Inc.

to protect authors' works against improper appropriation.[218] By doing so, the law provides authors with an economic incentive to continue creating and sharing their works for the enrichment of society.[219]

The Second Circuit, however, refused to acknowledge the statute's ambiguous language.[220] When ambiguities exist in the language of the statute, courts may look to congressional intent, legislative history, and agency interpretation for clarification.[221] Although the plaintiffs introduced evidence of congressional intent, the court refused to give it proper weight.[222] Its analysis ignored legislative history and rejected the guidance of the Copyright Office.[223]

The House Report is insightful.[224] The report provides examples of objects fixed for mere transitory periods.[225] Under the House Report, a

v. Rural Tel. Serv. Co., 499 U.S. 340, 349 (1991) (noting that primary objective of copyright law is to promote progress of science and useful arts); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) (stating that copyrights reflect balancing of competing claims on public interest: encouraging creative work while promoting public availability to literary, musical, and other artistic works).

[218] *See* 17 U.S.C. § 101 (2006); *see also Fogerty*, 510 U.S. at 526; *Feist Publ'ns*, 499 U.S. at 349-50; *Twentieth Century Music*, 422 U.S. at 155.

[219] *See Twentieth Century Music*, 422 U.S. at 156 (stating that copyrights encourage creative work); Corsearch, Inc. v. Thomson & Thomson, 792 F. Supp. 305, 323 (S.D.N.Y. 1992) (emphasizing that copyright laws balance author's rights to control their works and public's need for access to those works); LITMAN, *supra* note 14, at 17 (noting that Copyright Act gives economic compensation to authors who create original works).

[220] *See Cartoon Network*, 536 F.3d at 127-30.

[221] *See, e.g.*, CBS Inc. v. Primetime 24 Joint Venture, 245 F.3d 1217, 1225 (11th Cir. 2001) (noting that canons of construction are interpretative tools which help courts determine meaning of particular statutory provision by focusing on broader, statutory context); *see also* Bell Atl. Corp. v. Twombly, 550 U.S. 544, 596 (2007) (Stevens, J., dissenting) (stating that congressional intent should guide courts in matters of statutory interpretation); Tidewater Oil Co. v. United States, 409 U.S. 151, 157 (1972) (noting that it is essential for courts to place words of statute in proper context by looking to legislative history).

[222] The court stated that no case law or other authority could dissuade them from concluding that the definition of "fixed" imposes both embodiment and duration requirements. *Cartoon Network*, 536 F.3d at 129; *see also* All Saints Parish v. Protestant Episcopal Church, 595 S.E.2d 253, 263 (S.C. Ct. App. 2004) (stating lower court erred in refusing to consider evidence that could shed light on latent ambiguity in law); *cf.* People v. Hagedorn, 25 Cal. Rptr. 3d 879, 886-87 (Ct. App. 2005) (noting that where statute is ambiguous it is appropriate for court to consider evidence of intent of enacting body).

[223] *See Cartoon Network*, 536 F.3d at 127-30.

[224] H.R. REP. NO. 94-1476, at 52 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5665; *see* Harrison v. N. Trust Co., 317 U.S. 476, 479 (1943) (noting that statutes are composed of words which are inexact tools at best and so examining legislative history is helpful); *CBS Inc.*, 245 F.3d at 1225 (noting that canons of construction are

projector flashing a movie onto a screen momentarily is transitory.[226] A scene from a television drama briefly appearing on a television set would also be transitory.[227] Although these examples do not necessarily shed light on how courts should apply the transitory duration clause to technologies like the RS-DVR, the legislative history influenced the Copyright Office's interpretation of the issue.[228]

When courts are unclear on congressional intent, they may examine federal agency explanations of statutory language.[229] The Copyright Office has examined the Copyright Act's transitory duration provision and has scrutinized both the language of the statute and the accompanying house report.[230] After careful examination, the Copyright Office has stated that fixation requires only that an infringer embody the object for a short period.[231] From this, the Copyright Office derived a general rule: Copyright owners' exclusive rights should extend to all reproductions fixed and embodied such that the infringer can derive an economic incentive.[232]

The RS-DVR buffer could perceive, communicate, and copy the information saved in the BMR.[233] Its buffer system copied and reproduced copyrighted programming for Cablevision's customers.[234] Cablevision charged its customers an additional fee for this service.[235]

interpretative tools which help courts determine meaning of particular statutory provision by focusing on broader, statutory context).

[225] H.R. REP. NO. 94-1476, at 52.

[226] *Id.*

[227] *Id.*

[228] *Compare id.*, *with Cartoon Network*, 536 F.3d, at 123-27 (discussing facts of case and RS-DVR operation).

[229] The Copyright Act states that one purpose of the Copyright Office is to provide the judiciary with aid on questions of copyright law. 17 U.S.C. § 701(b) (2006). Courts also look to the expertise of a specific agency when they are faced with questions of law that the agency specializes in. *See generally* Armstrong Paint & Varnish Works v. Nu-Enamel Corp., 305 U.S. 315 (1938) (holding that administrative interpretations of statutes have weight for courts when they construe statutes); United Servs. Auto. Ass'n v. Perry, 92 F.3d 295 (5th Cir. 1996) (holding that courts will defer to agency's interpretations of law if based on permissible constructions of statute).

[230] COPYRIGHT OFFICE 2001 REPORT, *supra* note 48, at 109-13.

[231] *See Id.*

[232] *See Id.*

[233] *See Cartoon Network*, 536 F.3d at 129 (admitting that copyrighted data in buffer can be reformatted and transmitted to other components of RS-DVR system).

[234] *See Id.*

[235] Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp., 478 F. Supp. 2d 607, 612 (S.D.N.Y. 2007).

From these facts, Cablevision clearly derived an economic incentive from the buffer copies.[236]

Proponents of *Cartoon Network* dispute this rationale and applaud the Second Circuit's refusal to go beyond the plain meaning of the statute.[237] They argue that courts may read the fixation requirement out of the Copyright Act by using interpretative tools other than the statute's plain text.[238] These proponents seem to fear that scrutinizing fixation may lead courts to eliminate the fixation requirement altogether.[239] In their eyes, this directly contradicts the text of the Copyright Act.[240]

This argument fails because duration remains essential to satisfy fixation under the Copyright Act.[241] The copied programming must remain in the buffer system for some period of time.[242] The legislative history and Copyright Office interpretation emphasize this requirement.[243] The problem in *Cartoon Network* is that the Second Circuit does not define the required period of duration.[244] Instead, the court simply concludes that 1.2 seconds does not meet the threshold.[245]

---

[236] *See* discussion *supra* Part I.C (describing Copyright Office's rule that copyright protection extends to all copies infringer can reproduce or communicate such that they can derive economic incentives).

[237] Ray Beckerman, *Editorial Comment on* Cartoon Network v. CSC *and* Capital v. Thomas, RECORDING INDUSTRY V. THE PEOPLE, Aug. 4, 2008, http://recordingindustryvsthepeople.blogspot.com/2008/08/editorial-comment-on-cartoon-network-v.html (noting that court's opinion in *Cartoon Network* was heartening because court rejected "content cartel's" request to ignore plain meaning of Copyright Act); Efroni, *supra* note 207 (noting that CIS Fellow Efroni was ecstatic to see holding that takes statute's words seriously); Jon Newton, *The Tide Ebbs on RIAA, MPAA 'Reign of Terror*,' P2PNET, Aug. 5, 2008, http://www.p2pnet.net/story/16601 (quoting that some individuals are glad to see courts applying law in conservative and rational manner and rejecting attempts to rewrite Copyright Act).

[238] *Cartoon Network*, 526 F.3d at 129 (stating that Copyright Office's interpretation reads transitory duration language out of statute).

[239] *Id.*; *cf.* Ray Beckerman, *supra* note 237; Efroni, *supra* note 207; Newton, *supra* note 237.

[240] *See* 17 U.S.C. § 101 (2006); *cf.* Ray Beckerman, *supra* note 237; Efroni, *supra* note 207; Newton, *supra* note 237.

[241] *See* 17 U.S.C. § 101.

[242] *See id.*

[243] *See* H.R. REP. NO. 94-1476, at 52 (1976) (Conf. Rep.), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5665; COPYRIGHT OFFICE 2001 REPORT, *supra* note 48, at 109-13.

[244] *See Cartoon Network*, 526 F.3d at 127-30.

[245] *Id.* at 130.

Ultimately, the Second Circuit erred in its analysis.[246] The court denied protection to works fixed for 1.2 seconds without investigating congressional intent or Copyright Office guidance.[247] Had the court properly utilized the House and Copyright Office Reports, they would have found that Congress intended for copyright infringement actions to extend to all reproductions from which an infringer could derive economic value.[248] The programming in the RS-DVR system was sufficiently stable to allow Cablevision to copy, perceive, and communicate the copyrighted material.[249] Under existing interpretations, the Second Circuit should have upheld the lower court's decision.

B. The Second Circuit Insufficiently Distinguishes Cartoon Network *from* MAI *and Its Progeny*

The Second Circuit's ruling in *Cartoon Network* also conflicts with decisions set forth by other courts.[250] The Second Circuit held that the Ninth Circuit's decision in *MAI* does not apply to *Cartoon Network*. However, in arriving at this conclusion, the court insufficiently distinguished the Ninth Circuit's holding in *MAI* from *Cartoon Network*.

Although *Cartoon Network* signifies the first time courts have grappled with transitory duration in the context of buffer systems, several courts have investigated similar issues.[251] For instance, many

---

[246] *See supra* Part IV (arguing that Second Circuit erred in its decision to reject plaintiffs' claims).

[247] *See Cartoon Network*, 536 F.3d at 127-30.

[248] *See* COPYRIGHT OFFICE 2001 REPORT, *supra* note 48 and accompanying text.

[249] *See Cartoon Network*, 536 F.3d at 127-130.

[250] *See* MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511, 517-20 (9th Cir. 1993); *see also* Triad Sys. Corp. v. Se. Express Co., 64 F.3d 1330, 1335 (9th Cir. 1995); Advanced Computer Servs. of Mich., Inc. v. MAI Sys. Corp., 845 F. Supp. 356, 362-63 (E.D. Va. 1994); Charlesworth, *supra* note 100, at 333-35 (discussing cases involving RAM copies made for purpose of streaming).

[251] *See generally* Stenograph L.L.C. v. Bossard Assoc., 144 F.3d 96 (D.C. Cir. 1998) (holding that loading validly copyrighted software onto computer without owner's permission and using that software for its purpose constitutes infringing copies under Copyright Act); *Triad Sys. Corp.*, 64 F.3d 1330 (holding that transmissions of information through computer's RAM creates copies for purposes of Copyright Act); *MAI*, 991 F.2d at 519 (holding that because copies created in computer's RAM can be perceived, reproduced, or otherwise communicated, loading software into RAM creates copies under Copyright Act); Vault Corp. v. Quaid Software Ltd., 847 F.2d 255, 260 (5th Cir. 1988) (holding that act of loading program from mediums of storage into computer's memory creates copies of program); *Advanced Computer Servs.*, 845 F. Supp. at 362-63 (noting that "fixed" under Copyright Act does not

courts have explored whether RAM copies located in a computer's memory system can constitute infringing copies under the Copyright Act.[252] These courts have held that RAM copies satisfy the Copyright Act's fixation requirement.[253] *Cartoon Network* directly contradicts those rulings.[254]

MAI is the seminal case regarding RAM copies and copyright infringement.[255] Cartoon Network and the other plaintiffs relied on *MAI* to argue that Cablevision's buffer data constituted copies under the Copyright Act.[256] In *MAI*, the Ninth Circuit set forth a test for determining when copies have satisfied the fixation requirement.[257] The court held that to satisfy the statute, copies must be sufficiently stable for an infringer to perceive, reproduce, or otherwise communicate them at a latter point in time.[258] Following this rationale, the Ninth Circuit concluded that loading software into a computer's RAM creates a copy under the Copyright Act.[259]

Many scholars and courts have widely criticized *MAI*.[260] Nonetheless, the Fourth, Ninth, Tenth and D.C. Circuits have all continued to follow the decision.[261] *Cartoon Network* is the first time

require that copy be permanent or that it last for any specified period of time).

[252] *See Stenograph*, 144 F.3d at 100; *Triad Sys. Corp.*, 64 F.3d at 1335; *MAI*, 991 F.2d at 519; *Vault*, 847 F.2d at 260; *Advanced Computer Servs.*, 845 F. Supp. at 362-63.

[253] *See Stenograph*, 144 F.3d at 100; *Triad Sys. Corp.*, 64 F.3d at 1335; *MAI*, 991 F.2d at 519; *Vault*, 847 F.2d at 260; *Advanced Computer Servs.*, 845 F. Supp. at 362-63.

[254] Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 127-130 (2d Cir. 2008); *see also Stenograph*, 144 F.3d at 100; *Triad Sys. Corp.*, 64 F.3d at 1335; *MAI*, 991 F.2d at 519; *Vault*, 847 F.2d at 260; *Advanced Computer Servs.*, 845 F. Supp. at 362-63.

[255] *MAI*, 991 F.2d 511.

[256] *See Cartoon Network*, 546 F.3d at 127-30.

[257] *See MAI*, 991 F.2d at 518.

[258] *Id.* at 518-19.

[259] *Id.*

[260] Courts in other circuits have criticized *MAI*. *See* DSC Commc'ns Corp. v. Pulse Commc'ns, Inc., 170 F.3d 1354, 1360 (Fed. Cir. Va. 1999) (deciding not to adopt Ninth Circuit's rationale); Vernor v. AutoDesk, Inc., 555 F. Supp. 2d 1164, 1171 (W.D. Wash. 2008) (criticizing *MAI* court for insufficient analysis). Scholars have also criticized *MAI*. *See* Ginsburg, *supra* note 101, at 1476 n.39 (stating that some commentators criticize proposition that RAM copies can violate copyright laws); Johnson, *supra* note 101, at 328 (arguing that Ninth Circuit in *MAI* erred in holding that users' loading programs into RAM constitutes copies under law); Jule Sigall, *Copyright Infringement Was Never This Easy: RAM Copies and Their Impact on the Scope of Copyright Protection for Computer Programs*, 45 CATH. U. L. REV. 181, 182 (1995) (stating that *MAI* reaches conclusion that is inequitable, impractical, and nonsensical).

[261] *See generally* Stenograph L.L.C. v. Bossard Assoc., 144 F.3d 96 (D.C. Cir. 1998) (holding that loading validly copyrighted software onto computer without owner's

the Second Circuit has cited *MAI*.[262] Under conventions inherent in the federal court system, *MAI* did not bind the Second Circuit as judicial precedent.[263] Although the court acknowledged *MAI* as an important decision and persuasive authority, the court could have explicitly declined to follow the case. Instead, however, the court unconvincingly argued that *MAI* was not applicable to *Cartoon Network* and attempted to distinguish the facts of the two cases.[264] The Second Circuit emphasized that MAI's software remained in the RAM for several minutes, while *Cartoon Network*'s works remained in the

permission and using that software for its purpose constitutes infringing copies under Copyright Act); Triad Sys. Corp. v. Se. Express Co., 64 F.3d 1330 (9th Cir. 1995) (holding that transmissions of information through computer's RAM creates copies for purposes of Copyright Act); MDY Indus., LLC v. Blizzard Entm't, Inc., No. CV-06-2555-PHX-DGC, 2008 U.S. Dist. LEXIS 53988 (D. Ariz. July 15, 2008) (noting that Ninth Circuit law holds that copying software to RAM constitutes copying); CSU Holdings v. Xerox, 910 F. Supp. 1537 (D. Kan. 1995) (stating that court agrees with *MAI* that transferring computer program from storage device to RAM constitutes copies under law); Advanced Computer Servs. of Mich., Inc. v. MAI Sys. Corp., 845 F. Supp. 356, 362-63 (E.D. Va. 1994) (noting that "fixed" under Copyright Act does not require that copy be permanent or that it last for any specified period of time).

[262] District courts in the Second Circuit have cited to *MAI*, although never on the issue of buffer copies. *See generally* Applied Info. Mgmt. v. Icart, 976 F. Supp. 149 (E.D.N.Y. 1997) (citing *MAI* as example of court suggesting licensees are excluded from § 117 of Copyright Act); Sit-up Ltd. v. IAC/Interactive Corp., No. 05 Civ. 9292(DLC), 2008 U.S. Dist. LEXIS 12017 (S.D.N.Y. Feb. 20, 2008) (applying *MAI*'s ruling on trade secrets); Paramount Pictures Corp. v. Hopkins, No. 5:07-CV-593, 2008 U.S. Dist. LEXIS 8107 (N.D.N.Y. Feb. 4, 2008) (citing to *MAI* for proposition that courts will grant permanent injunctions when parties have established liability and threat of continuing violations exists); Sony Pictures Home Entm't v. Chetney, No. 5:06-CV-227, 2007 U.S. Dist. LEXIS 13314 (N.D.N.Y. Feb. 26, 2007) (citing *MAI* for proposition that courts will grant injunctions when plaintiffs have established infringement); Vermont Microsys. v. Audiodesk, Inc., No. 2:92-CV-309, 1994 U.S. Dist. LEXIS 18737 (D. Vt. Dec. 23, 1994) (citing *MAI* for proposition that computer software can constitute and contain trade secret information).

[263] *See* Nabors v. Workers' Comp. Appeals Bd., 44 Cal. Rptr. 3d 312, 318 (Ct. App. 2006) (noting that appellate courts are not bound by other appellate courts' decisions, but will follow those decisions absent good reason to disagree); Henry J. Friendly, *The 'Law of the Circuit' and All That*, *in* APPELLATE JUSTICE IN THE FEDERAL COURTS 42, 44 (Vol. 4 1975); 20 AM. JUR. 2D *Courts* § 129 (2008) (noting that stare decisis's goal of stability leads many appellate courts to follow lead of similar courts absent reasons to disagree).

[264] For the Second Circuit's discussion of *MAI*, see *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 127-30 (2d Cir. 2008).

RAM for only 1.2 seconds.[265] For the Second Circuit, this was a key distinction.[266]

Yet, *MAI* is sufficiently similar to *Cartoon Network* to warrant use as applicable authority.[267] Not only is *MAI* the leading case on the issue of RAM copying, its facts are analogous to *Cartoon Network*.[268] Both cases examine the legal implications of information captured briefly in a technological device.[269] Both also question whether the infringer has properly fixed that information as required under the Copyright Act.[270] In *Cartoon Network*, the copyrighted information resided in Cablevision's buffer for the sole purpose of perceiving and reproducing the programming for Cablevision's customers.[271] In *MAI*, the Ninth Circuit found that copies created in a computer's RAM allowed an infringer to perceive, reproduce, or otherwise communicate them for future use.[272] For the *MAI* court, this was sufficient to constitute infringement.[273]

Despite these similarities, the proponents of the Second Circuit's decision argue that *MAI* was readily distinguishable from *Cartoon Network*.[274] They contend that the Ninth Circuit in *MAI* did not analyze the fixation issue.[275] Therefore, the omission of this analysis suggests that the parties did not litigate the significance of transitory

[265] *Compare Cartoon Network*, 536 F.3d at 129 (noting that works remained in RS-DVR for 1.2 seconds), *with* MAI Sys. Corp. v. Peak Computer Inc., 991 F.2d 511 (9th Cir. 1993) (noting that MAI's software remained in RAM for several minutes).

[266] *See Cartoon Network*, 536 F.3d at 129-30.

[267] *Compare id.* at 127-30 (rejecting proposition that temporary buffer copies in Cablevision's RS-DVR system are fixed because 1.2 seconds is merely transitory in duration), *with MAI*, 991 F.2d at 517-20 (holding that temporary RAM copies held for indefinite short or long periods of time are fixed under Copyright Act).

[268] *Compare Cartoon Network*, 536 F.3d at 123-25 (explaining factual background), *with MAI*, 991 F.2d at 513 (discussing facts of case).

[269] *See Cartoon Network*, 536 F.3d at 127; *MAI*, 991 F.2d at 517.

[270] *See Cartoon Network*, 536 F.3d at 127; *MAI*, 991 F.2d at 517-18.

[271] *Cartoon Network*, 536 F.3d at 129-30.

[272] *MAI*, 991 F.2d at 518.

[273] *Id.* at 519.

[274] *Cartoon Network*, 536 F.3d at 128; Memorandum of Law in Opposition to all Plaintiffs' Motion for Summary Judgment at 33, Twentieth Century Fox v. Cablevision Syst. Corp., 478 F. Supp. 2d 607 (S.D.N.Y. 2006) (No. 06 Civ. 3990) [hereinafter Memo] (stating that *MAI* does not suggest that data residing in buffers is fixed under Copyright Act); *see also* Efroni, *supra* note 207 (noting that *MAI* does not apply to *Cartoon Network* because *MAI* intentionally disregarded duration limitation clause to avoid answering how many milliseconds constituted modicum of fixation).

[275] *Cartoon Network*, 536 F.3d at 127-30; *see* Memo, *supra* note 274, at 33; Efroni, *supra* note 207.

duration.[276] The parties must not have argued over fixation in *MAI* because Peak embodied infringing copies in the computers' RAM for at least several minutes.[277] These proponents seem to infer that "several minutes" easily satisfies the transitory duration fixation requirement, but a "fleeting" 1.2 seconds does not.[278]

These arguments are flawed.[279] The Ninth Circuit may not have provided a systematic analysis on transitory duration or explicitly provided a minimum time period for fixation.[280] However, *MAI* did conclude that temporary information saved in RAM for an indefinite period of time does satisfy the fixation requirement.[281] Cablevision's buffer system did just that.[282]

MAI was not binding precedent for the Second Circuit.[283] Once the court applied *MAI* to its decision in *Cartoon Network*, however, it should have undergone a proper, thorough, and sufficient legal analysis.[284] The court neglected to do so.[285] Inevitably, the lack of analysis led the Second Circuit to distinguish *Cartoon Network* from *MAI* in an insufficient and unconvincing manner.[286] Further, the

[276] *Cartoon Network*, 536 F.3d at 127-30; *see* Memo, *supra* note 274, at 33; Efroni, *supra* note 207.

[277] *Cartoon Network*, 536 F.3d at 127-30; *see* Memo, *supra* note 274, at 33; Efroni, *supra* note 207.

[278] *See Cartoon Network*, 536 F.3d at 129-30; Efroni, *supra* note 207; *see also* 17 U.S.C. §§ 101, 102 (2006).

[279] *See supra* Part I.D (discussing *MAI*'s facts and rationales).

[280] MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511, 519 (9th Cir. 1993).

[281] *Id.*; *see Cartoon Network*, 536 F.3d at 127-30; *see also* Memo, *supra* note 274, at 33; Efroni, *supra* note 207.

[282] *See Cartoon Network*, 536 F.3d at 123-26.

[283] *See* Nabors v. Workers' Comp. Appeals Bd., 44 Cal. Rptr. 3d 312, 318 (Ct. App. 2006) (noting that appellate courts are not bound by other appellate courts' decisions, but will follow those decisions absent good reason to disagree); 20 AM. JUR. 2D *Courts* § 129 (2008) (noting that stare decisis's goal of stability leads many appellate courts to follow lead of similar courts absent reasons to disagree); Friendly, *supra* note 263, at 44.

[284] *See* United States v. Lincoln, 42 M.J. 315, 321 (C.M.A. 1995) (holding that because lower court's findings of fact, legal analysis, and conclusions of law were incomplete and ambiguous, case must be remanded and reevaluated); City of Kennewick v. Day, 11 P.3d 304, 311-12 (Wash. 2000) (holding that because lower court made its determination based on incomplete analysis, its decision was based on untenable grounds and constituted abuse of discretion); *cf.* Am. Civil Liberties Union v. McCreary County, 354 F.3d 438, 449 (6th Cir. 2003) (inferring that if district court's incomplete legal analysis was outcome determinative for case, flaw may necessitate remand).

[285] *See Cartoon Network*, 536 F.3d at 127-28.

[286] *Id.* The Second Circuit's attempts to distinguish *Cartoon Network* and *MAI* are

decision provides little guidance for future courts analyzing similar fixation issues.[287]

C. Cartoon Network *Provides No Guidance for Future Cases and Diminishes Authors' Incentives to Create*

The Second Circuit inadequately analyzed *Cartoon Network*'s transitory duration issue.[288] The court placed an arbitrary bright line time limit on fixation that threatens the protection of copyrighted material embodied in future technological inventions. The legal implications of that analysis reach far beyond the specific context of the RS-DVR system.[289] *Cartoon Network*'s faulty reasoning will likely provide courts with little guidance for future copyright infringement cases.[290] Legal scholars and practitioners have questioned the standard *Cartoon Network* will provide for cases involving emerging technologies.[291] Without clear direction, future copyright owners risk losing legal protection of their works against third party infringement.[292]

---

unconvincing. *Id.* at 121-30; *MAI*, 991 F.2d at 513.

[287] *See infra* Part IV.C.

[288] *See supra* Part III.

[289] All digital devices use buffering systems like the one at issue in *Cartoon Network*. Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp., 478 F. Supp. 2d 607, 613 (S.D.N.Y. 2007); *cf.* Rangan & Vin, *supra* note 23; World Intellectual Property Organization Patent Search, *supra* note 23.

[290] *See* B. Shrum, *Second Circuit Gets It Wrong in* Cartoon Network v. Cablevision, LAW ON ROW, Aug. 5, 2008, http://musicrowlaw.wordpress.com/2008/08/05/second-circuit-gets-it-wrong-in-cartoon-network-v-cablevision/ (noting that *Cartoon Network* puts practitioners in precarious position of attempting to determine what point after 1.2 seconds is sufficient for fixation). Practitioners and scholars have stated that *Cartoon Network* leaves many questions regarding fixation unanswered. Efroni, *supra* note 207; Jeff Neuburger, *RAM Copying – An Issue of More than Transitory Duration*, PROSKAUER ROSE LLP: NEW MEDIA & TECH. LAW BLOG, Aug. 20, 2008, http://newmedialaw.proskauer.com/2008/08/articles/copyright/ram-copying-an-issue-of-more-than-transitory-duration/ [hereinafter Neuburger, *RAM*]; Schuyler, *supra* note 153.

[291] *See* Neuburger, *RAM*, *supra* note 290 (stating that RAM copying analysis in *Cartoon Network* has been commented on greatly and that it leaves open many questions for resolution in future cases); Shrum, *supra* note 290; Mitchell Zimmerman & Chad J. Woodford, *Copyright Alert:* Cartoon Network v. Cablevision — *Buffer Reproductions Are Not Infringing Copies, Holds Second Circuit in 'Remote' DVR Case*, FENWICK & WEST PUBL'NS, Aug. 6, 2008, http://www.fenwick.com/docstore/Publications/IP/CartoonNetwork_V_Cablevision.pdf (stating that *Cartoon Network* raises several question of first impression and shows tension with related decisions from other circuits).

[292] Copyrights protect author's economic incentives to create. LITMAN, *supra* note 14, at 17; David Bender & Elisa F. Hyman, *Copyright Misuse*, 339 P.L.I. 249, 252

The Copyright Office clearly recommended that courts should extend protection to any copy that an infringer can perceive, reproduce, or transmit in the future.[293] By extending this general rule, the Copyright Office provided courts with a framework to analyze future fixation cases.[294] The rule is flexible enough to apply to a variety of technological situations.[295] Further, the Copyright Office approach serves as a mechanism to continue protecting authors' economic interests in their creations and preventing infringers from making unauthorized reproductions for profit.[296]

Cartoon Network, however, rejected the Copyright Office's opinion in favor of placing a time constraint on fixation.[297] The rigidity of the opinion leaves open questions of what specific time periods might satisfy the court's test.[298] As a result, the Second Circuit diminishes the strength of copyright law's major incentive — authors' economic interests.[299] When future courts apply *Cartoon Network*, they will likely have little guidance to determine whether a copy infringes.[300] If they use *Cartoon Network*, these courts may reject valid copyright infringement claims simply because they are unsure as to how to apply the Second Circuit's standard.[301]

(2008); Raymond Nimmer, *Copyright: Perfect 10 and Beyond*, 947 P.L.I. 209, 223 (2008).

[293] COPYRIGHT OFFICE 2001 REPORT, *supra* note 48, at 109-13.

[294] The Second Circuit could have applied the Copyright Office's rule to the facts of *Cartoon Network*. *Compare* COPYRIGHT OFFICE 2001 REPORT, *supra* note 48 (articulating general rule for fixation), *with* Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 123-27 (2008) (discussing facts of *Cartoon Network*).

[295] COPYRIGHT OFFICE 2001 REPORT, *supra* note 48, at 109-13; *cf.* MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511 (9th Cir. 1993) (utilizing basic rule proposed by Copyright Office in their analysis of case); Religious Tech. Ctr. v. Netcom On-Line Commc'n Serv., Inc., 907 F. Supp. 1361, 1368 (N.D. Cal. 1995) (same).

[296] *See* COPYRIGHT OFFICE 2001 REPORT, *supra* note 48 (emphasizing indirectly that because economic value is important in extending copyright protection, economic incentives for authors are also significant in copyright protection analysis). *See generally* LITMAN, *supra* note 14, at 17; Bender & Hyman, *supra* note 292, at 252; Nimmer, *supra* note 292, at 223.

[297] *Cartoon Network*, 536 F.3d at 128.

[298] Efroni, *supra* note 207; Neuburger, *RAM*, *supra* note 290; Schuyler, *supra* note 153.

[299] *See generally* LITMAN, *supra* note 14, at 17; Bender & Hyman, *supra* note 292, at 252; Nimmer, *supra* note 292, at 223.

[300] Shrum, *supra* note 290 (noting that *Cartoon Network* puts practitioners in precarious position of attempting to determine what point after 1.2 seconds is sufficient for fixation); *see also* Efroni, *supra* note 207; Neuburger, *RAM*, *supra* note 290; Schuyler, *supra* note 153.

[301] *See* Efroni, *supra* note 207; Neuburger, *RAM*, *supra* note 290; Shrum, *supra* note 290; Schuyler, *supra* note 153.

CONCLUSION

The Second Circuit erred in holding that Cablevision's RS-DVR did not violate plaintiff's exclusive copyrights.[302] By attempting to rely on the plain meaning of the Copyright Act, even though the phrase was inherently ambiguous, the court improperly ignored congressional intent.[303] The Second Circuit brushed aside the expertise of an agency designed to provide insight into copyright law and failed to adequately distinguish *Cartoon Network* from *MAI*.[304] In order to prevent further confusion in the courts, Congress must provide clear guidelines as to what constitutes copies and fixation under the Copyright Act.[305] Absent congressional clarification, future technologies will be plagued with similar legal battles, and courts will remain lost in transitory duration.[306]

[302] *See supra* Part IV.

[303] *See supra* Part IV.A.

[304] *See supra* Part IV.A (discussing helpful role federal agencies play in determining congressional intent); Part IV.B.

[305] If Congress provides clear guidelines, courts will not need to investigate beyond the plain meaning of the statute to properly effectuate congressional intent. *See* discussion *supra* Part IV.A (discussing canons of construction).

[306] *See infra* Part IV.C (discussing policy implications of *Cartoon Network*).