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RS-DVR SLIDES PAST ITS FIRST OBSTACLE AND GETS THE PASS FOR FULL IMPLEMENTATION

Megan Cavender

Digital video recording has become an indispensable household item. The advent of the remote storage digital video recorder (RS-DVR) allows consumers to expand digital recording capability without the need for a stand-alone DVR box. This new technology raises interesting legal questions regarding copyright infringement including: liability resulting from the need for buffer copies in digital technology, liability when a computer system produces the copy, and whether playing back an RS-DVR recorded program constitutes a public performance. This Recent Development discusses the response to some of these copyright liability questions made by the Second Circuit in Cartoon Network LP, LLLP v. CSC Holdings, Inc., which primarily held that a cable company cannot be held liable for operating an RS-DVR through which customers request shows to be recorded. This analysis supports the holding by the court based on the needs of digital technology but concludes that the reasoning will likely serve as weak precedent in future related cases.

I. INTRODUCTION

It is just before nine o'clock on Thursday night and Julie is in a bind. She wants to watch The Office on NBC and Grey's Anatomy on ABC but must go to a late dinner date with friends. If she has a VCR, then she must choose which program she would rather watch because she can only record one of the two programs. However, her problem is solved thanks to her digital video recorder (DVR). With a DVR she is able to record both programs while she attends her dinner date, and then watch them when she returns home.

This scenario is typical for many Americans who have access to a DVR. In fact, according to a recent survey, eighty percent of

1 J.D. Candidate, University of North Carolina School of Law, 2010.
American DVR owners say they cannot live without their DVRs. This survey also indicated that in terms of essential household technology items, DVRs fall in second, just behind cell phones, as must-have items. DVRs have even become the third most indispensable general household item behind the washing machine and the microwave.

Considering the importance many Americans deem their DVRs to hold, any improvement in DVR technology would likely have an impact on television viewers who already employ a DVR system. DVR enthusiasts now have the opportunity to get excited as digital video recording is improved through the invention of a remote storage digital video recorder (RS-DVR). RS-DVRs are the latest advancement to hit the cable television industry. Developed by a major cable service provider, Cablevision Systems Corporation ("Cablevision"), this technology allows television viewers to record programs without the need for a stand-alone DVR box. Instead, customers request programs using a remote control, and Cablevision records and stores the programs on a central server at a remote location. Following this, the copy

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\begin{itemize}
  \item \textit{3} Id.
  \item \textit{4} Id.
  \item \textit{5} See Cablevision Disconnects DVR, RED HERRING, Mar. 26, 2006, http://www.redherring.com/Home/16268 (describing the initial testing of the RS-DVR systems and indicating the advantages of the innovative technology including the new maximum memory storage of eighty gigabytes) (on file with the North Carolina Journal of Law & Technology).
  \item \textit{7} See Cartoon Network, 536 F.3d at 124.
  \item \textit{8} Id.
\end{itemize}
of the recorded program may be obtained by the customer using a remote control and standard cable box.\(^9\)

The RS-DVR is a hybrid system, combining elements of the standard DVR system with that of a typical video on-demand service.\(^10\) The principal difference between an RS-DVR and a standard DVR is the location of television program storage.\(^11\) The standard DVR system stores the program on the individual DVR cable box, whereas the RS-DVR maintains the recordings on a central server operated by Cablevision.\(^12\) The major difference between the RS-DVR system and a video on-demand service involves the amount of selection of available programs to playback.\(^13\) The RS-DVR system creates a list of programs to view based solely on the customer’s requests prior to the program’s airing, much like the DVR systems to which customers are currently accustomed.\(^14\) Video on-demand service, on the other hand, allows a customer to select from a pre-recorded variety of television programs to be played at any time.\(^15\)

In exploring the advantages of this technology, Part I of this Recent Development examines this evolutionary technology and analyzes the Court’s response to the various legal complications associated with its use. Part II discusses the industry response to this advancement in DVR technology and the legal issues of such technology, which the Second Circuit began to address in *Cartoon Network LP, LLLP v. CSC Holdings, Inc.*\(^16\) Part III explains how the RS-DVR system operates. Finally, Parts IV and V set forth the new legal standards that result from *Cartoon Network* and discusses ways in which the case will affect the future of copyright law.

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\(^9\) *Id.*

\(^10\) *Id.* at 125.

\(^11\) *Id.*

\(^12\) *Id.*

\(^13\) *Id.*

\(^14\) *Id.*

\(^15\) *Id.*

\(^16\) *Cartoon Network LP, LLLP v. CSC Holdings, Inc.*, 536 F.3d 121 (2nd Cir. 2008).
II. INITIAL RESPONSE TO RS-DVR INNOVATION

In response to this innovative technology, several major television networks\textsuperscript{17} have attempted to prevent its implementation without proper licensing\textsuperscript{18} by filing suit against Cablevision (also referred to as CSC Holdings, Inc.) in federal court alleging direct copyright infringement.\textsuperscript{19} The television networks alleged that Cablevision's RS-DVR system directly infringed upon the exclusive rights to reproduce and publicly perform the works covered by the networks' copyrights.\textsuperscript{20} In Cartoon Network, the

\textsuperscript{17} The major television networks include: Cartoon Network, Twentieth Century Fox Film Corporation, Universal Studios Productions LLLP, Paramount Pictures Corporation, Disney Enterprises, Inc., CBS Broadcasting, Inc., American Broadcasting Companies, Inc., and NBC Studios, Inc. \textit{Id.} at 121.

\textsuperscript{18} \textit{Id.} at 123-24. The television networks want to force Cablevision to obtain licenses for the content transmitted through its RS-DVR system in addition to the licenses Cablevision currently employs for standard television programming. \textit{Id.}


\textsuperscript{20} Cartoon Network, 536 F.3d at 125-26 (citing the district court’s opinion in Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp. (Cablevision I), 478 F. Supp. 2d 607 (S.D.N.Y. 2007)). The exclusive rights associated with the ownership of a copyright include the right:

1. to reproduce the copyrighted work in copies or phonorecords;
2. to prepare derivative works based upon the copyrighted work;
3. to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;
4. in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly;
5. in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly; and
6. in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.

Second Circuit overturned the district court’s holding in favor of the television networks\textsuperscript{21} and declared that the use of the RS-DVR system does not constitute direct copyright infringement.\textsuperscript{22} The Second Circuit emphasized that it only ruled on direct copyright infringement,\textsuperscript{23} and not indirect, because it was the only theory of liability alleged by the television networks.\textsuperscript{24} In spite of this, the Court discussed the possibility of secondary liability and expressed the opinion that Cablevision may not necessarily be able to escape all theories of copyright infringement.\textsuperscript{25}

When addressing the issue of possible direct copyright infringement, the Court discussed two particular rights associated with copyright ownership: the right to exclusive reproduction.\textsuperscript{26}

Cablevision was required to obtain licensing rights before implementation of the RS-DVR for three reasons: (1) the buffer copies integral to the system directly infringe the exclusive right of reproduction; (2) creation of the playback copies directly infringe the exclusive right of reproduction; (3) and the transmission of the playback copy would directly infringe the exclusive right to public performance. See Cartoon Network, 536 F.3d at 125.

\textsuperscript{21} Id. at 125–26. (citing the district court’s opinion in Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp. (Cablevision I), 478 F. Supp. 2d 607, 617 (S.D.N.Y. 2007)). The district court held that Cablevision’s actions directly infringed upon the copyright owner’s exclusive right to reproduction by producing the buffer copies and storing them on the “Arroyo Server.” Id. at 125. The district court also held that the playback of the stored copies following the customer request directly infringed upon the copyright owner’s exclusive right to public performance. Id. at 126.

\textsuperscript{22} Id. at 123. See generally infra Part IV (discussing the Second Circuit’s specific holding).

\textsuperscript{23} Id. at 124. The court mentioned that the television networks specifically alleged direct liability and not other theories of liability like contributory liability. Id.

\textsuperscript{24} Id. at 139–40.

\textsuperscript{25} Id. ("This holding, we must emphasize, does not generally permit content delivery networks to avoid all copyright liability by making copies of each item of content and associating one unique copy with each subscriber to the network, or by giving their subscribers the capacity to make their own individual copies. We do not address whether such a network operator would be able to escape any other form of copyright liability, such as liability for unauthorized reproductions or liability for contributory infringement.").

\textsuperscript{26} See supra note 22 (listing exclusive rights a copyright owner is entitled to); see also infra note 39 (defining "copies" directly associated with the exclusive right to reproduction).
and the right to public performance.\textsuperscript{27} In discussing these rights, the Court offered a problematic analysis that inadequately addressed other circuit precedents, which could have challenging implications for future DVR copyright cases.\textsuperscript{28} Thus, this potentially significant holding\textsuperscript{29} may nonetheless have a weak influential impact on other circuits and create a circuit split. One path a court may take is to exploit the Second Circuit’s faulty reasoning. Future litigants may also attempt to distinguish themselves from the particular facts underlying this holding—that Cablevision did not copy the copyrighted data through use of its buffer copies and memory storage on the “Arroyo Server.”\textsuperscript{30} This path would effectively disregard Cartoon Network and promote more stringent copyright laws. Alternatively, a court could accept the significance of this holding, which serves as an impetus for flexibility and evolution of copyright law, by recognizing the need for buffer copies in digital technology, thus promoting innovation.

\section*{III. THE OPERATION OF RS-DVR UNVEILED}

Examining the operation of the RS-DVR system is a necessary step in determining the existence of direct copyright

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\item [\textsuperscript{27}] Cartoon Network, 536 F.3d at 126; \textit{see supra} note 20 (listing exclusive rights a copyright owner is entitled to); \textit{see also infra} note 65 (defining “public performance” directly associated with the exclusive right to public performance).
\item [\textsuperscript{28}] \textit{Id.} at 132 (indicating the presence of case law against this line of reasoning, but merely finding it “unpersuasive”); \textit{see infra} note 82 (discussing the Court’s problematic reasoning).
\item [\textsuperscript{29}] \textit{See generally} Zohar Efroni, \textit{The Cartoon Network v. CSC Holdings System} (Aug. 23, 2008), http://cyberlaw.stanford.edu/node/5841 (predicting that this case will be used in several future cases, even potentially beginning a complete transformation of copyright law to account for digital technology) (on file with the North Carolina Journal of Law & Technology); Eric Goldman, “DVR as a Service” Isn’t Copyright Infringement—\textit{Cartoon Network v. CSC Holdings} (Aug. 4, 2008), http://blog.ericgoldman.org/archives/2008/08/ (recognizing the significance of the holding for its elimination of the “odd regulatory distinctions between DVRs as a device and DVRs as a service”) (on file with the North Carolina Journal of Law & Technology).
\item [\textsuperscript{30}] \textit{See Cartoon Network,} 536 F.3d at 130.
\end{itemize}
\end{footnotesize}
Television programming is typically transmitted in a single stream of data from the cable company to the customer’s television in real time. Under the RS-DVR system, this single stream of data is split into two streams whether or not the customer requested the selected program to be recorded through his or her remote control. One stream is transmitted straight to the customer’s television, just like typical television programming. The second stream of data travels through a “Broadband Media Router” (“BMR”), which then reformats the data by sending it through two buffers and stores it on a hard drive called the “Arroyo Server.” The Second Circuit further explained the process: “[when] a customer has requested a particular program, the data for that program move from the primary buffer into a secondary buffer, and then onto a portion of one of the hard disks allocated to that customer.”

The initial buffer stores no more than 0.1 seconds of any program at any one moment, while the buffer in the BMR stores no more than 1.2 seconds of any program at any one moment. After the buffered data is stored on the “Arroyo Server,” the customer obtains the program by selecting it from an on-screen list of recorded shows using his or her remote control. Because a temporary copy of 0.1 seconds is made in a remote storage device, a “copy” is made, which may violate the copyright holder’s

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32 See Cartoon Network, 536 F.3d at 124.

33 Id. at 124–25.

34 Id.

35 Id.

36 Id. at 124. Each customer is allocated a particular portion of the hard drive to record shows, and each recorded show will be placed on this individual portion of the hard drive. Id.

37 Id. After the data is processed by the buffer, it is “automatically erased and replaced.” Id.

38 Id. at 125 (citing Cablevision I, 478 F. Supp. 2d 607, 614–16 (S.D.N.Y. 2007)).

39 “Copies” are defined as follows:

[M]aterial objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work
IV. THE NEW STANDARDS SET BY CARTOON NETWORK: THE HOLDING AND ALL THAT IT ENTAILS

The district court initially awarded the major television production companies summary judgment by declaring that Cablevision committed direct copyright infringement. The court then enjoined Cablevision from implementing the RS-DVR system without first obtaining licenses from the television networks for the content stored on the central server. Summary judgment was awarded on two theories of copyright infringement: the copyright holder’s right to exclusive reproduction and the right to public performance.

After Cablevision appealed the injunction, the Second Circuit exercised de novo review for the following allegedly infringing acts to determine whether any violated the right to reproduction or the right to public performance: production of the buffer copy, creation of the copy for customer playback, and actual playback of the customer copy. Looking first at the buffered data, the court held that two requirements must be met for a violation of the right of exclusive reproduction to exist: “the work must be embodied in a medium ... and it must remain thus embodied ‘for a period of

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40 See Cartoon Network, 536 F.3d at 127–30. The television networks argued this point at the district court level, and the Second Circuit meticulously examined the impact of the buffer copies with respect to the copyright owner’s right to reproduction. Id. 127–30 (citing Cablevision I, 478 F. Supp. 2d at 621–22).
41 Id. at 127–30.
42 Id. at 124 (citing Cablevision I, 478 F. Supp. 2d 607).
43 Id.
44 Id. at 125–26; see also supra note 20 (listing the exclusive rights to which a copyright owner is entitled).
45 Id. at 125–26.
more than transitory duration." The Court emphasized that if the work is not "fixed" in a particular medium, such as the buffer, then the work does not constitute a "copy." However, the court concluded that no serious dispute existed on the issue of whether the programs were "embodied" in the buffer as they passed through the system. The court held that since "every second of an entire work is placed, one second at a time, in the buffer . . . the work is embodied in the buffer." Therefore, the debate revolved around the issue of whether 1.2 seconds, the total length any segment of the program remains in the buffer, represents a "fixed" period. The court called this 1.2 seconds "fleeting" and stated that "each bit of data here is rapidly and automatically overwritten as soon as it is processed . . . ; the works in this case are embodied in the buffer for only a 'transitory' period, thus failing the duration requirement." The court did, however, limit its ruling by holding that this issue is "necessarily fact-specific" and "other factors not present here may alter the duration analysis significantly."

Next, the court addressed the alleged direct copyright infringement through the creation of copies of the programs for playback. Before beginning the analysis, the court concluded that if the Cablevision customer is found to be the one making the copies, Cablevision cannot be held directly liable. The court adopted the theory of direct liability delivered in Religious Tech. Center v. Netcom On-Line Comm. Services, which states that "something more . . . than mere ownership of a machine used by

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46 Id. at 127. The court quotes the statutory language from 17 U.S.C. § 106(1).
47 Id.
48 Id. at 129.
49 Id.
50 Id.
51 Id.
52 Id at 130.
53 Id.
54 Id. (giving no further explanation as to what these "other factors" are or why they could change the analysis).
55 Id.
56 Id.
others to make illegal copies." must be present. In other words, some form of volitional conduct must cause the copy to be made.

In analyzing Cablevision’s role as operator of the RS-DVR system in making the recordings of the programs, the court viewed the computer system’s conduct differently from that of a human employee, thus distinguishing Princeton Univ. Press v. Mich. Document Services. The court believed that the customer is the true operator of the system as they select which programs are to be recorded, and “it seems incorrect to say, without more, that such a proprietor ‘makes’ any copies when . . . [the] machines are actually operated by his customers.” The court discredited the theory that Cablevision ultimately exercises more control over the copies due to Cablevision’s discretion as to which programs are made available for recording. The court held that the customer, not Cablevision, exerts more control over the recordings and that Cablevision cannot be held directly liable. However, the court stated that “the doctrine of contributory liability stands ready to provide adequate protection to copyrighted works.”

58 Cartoon Network, 536 F.3d 121 at 130 (quoting Netcom, 907 F. Supp. at 1370).
59 Id. at 130.
60 Id. at 131-32 (citing Princeton Univ. Press, 99 F.3d 1381, 1384 (6th Cir. 1996)). In Princeton Univ. Press, the court considered an employee’s action in operating the copy machines at the request of college professors in a copy shop sufficient to fulfill the requisite volitional conduct requirement in determining copyright infringement. Id. The court held that the copy shop was liable for directly infringing on the copyrighted works. Id. In Cartoon Network, the court interpreted Cablevision’s role to be analogous to that of a copy shop owner who sells access to the copy machines. Id. Thus, the court felt this activity was insufficient to fulfill the volitional conduct requirement. Id.
61 Id. at 132 (citing Netcom, 907 F. Supp. at 1369).
62 Id.
63 Id.
64 Id. To win a claim for contributory copyright infringement, the copyright owner must initially plead direct copyright liability in the Second Circuit. See generally Marullo v. Gruner & Jahr, 105 F. Supp. 2d. 225 (S.D.N.Y. 2000). The copyright owner must then prove that the conduct of the defendant either furthers copyright infringement or provides the means for the infringing activity. See 3-12 Nimmer on Copyright, § 12.04 (2008).
Finally, the court determined whether the playback of the recording violated the plaintiffs' right to public performance.65 The court emphasized that the applicable statute, 17 U.S.C. §106(4), does not define "performance" or "to the public," and thus turned to the plain meaning of the language, as well as the legislative history of the statute.66 The court concluded that both the plain language and legislative history hinge on who is "capable of receiving" the transmission of a playback recording.67 The court disagreed with the district court's conclusion that the potential audience of the underlying work, not the specific transmission, acts as the relevant consideration when defining "to the public."68 Instead, the Second Circuit reasoned that Congress "refers to the performance created by the act of transmission" itself when describing a public performance.69

The RS-DVR system transmits a unique70 copy to each subscriber that requests the recording, and for this reason, the court held that the single subscriber encompasses the audience who is

65 Id. at 134. Public performance is statutorily defined as follows:
To perform or display a work "publicly" means—
(1) to perform or display it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or
(2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.
17 U.S.C. § 101 (2006). Thus, the airing of typical television program (without DVR) likely falls under subsection (2) of this statutory definition.

66 Id. at 134-35 (citing 17 U.S.C. § 106(4) (2006)). The court lists the statutory definition of "public performance" and discusses the legislative history of the statute in support of its interpretation. Id.

67 Id. at 135.

68 Id. at 136 (citing Cablevision I, 478 F. Supp. 2d 607, 623 (S.D.N.Y. 2007)) (concluding that "to the public" is a mere surplusage and thus conflicts with the congressional intent in adding the words "to the public" to the statute).

69 Id. at 136.

70 The term "unique" signifies that each customer gets his or her own individual, distinct copy of the recorded program. Id. at 126 (citing Cablevision I, 478 F. Supp. 2d at 622).
"capable of receiving" the transmission. The Second Circuit chose not to incorporate the idea that a distinct copy affects the transmission clause and distinguished the present case from Columbia Pictures Indus., Inc. v. Redd Horne, Inc., since the court in that case did not state why the unique copies affected the transmission clause. Thus, the court concluded that each unique transmission cannot be considered a public performance because each playback is made to a single subscriber using a single unique copy of the transmission. Since the transmission does not constitute a public performance, the court held that there can be no infringement on the plaintiffs' exclusive right to public performance.

The Second Circuit found that the district court erred in granting the TV networks summary judgment. The Second Circuit held that Cablevision cannot be held directly liable for infringement against the plaintiffs' right to exclusive reproduction or public performance of their copyrighted works. Thus, the court granted summary judgment in favor of Cablevision and removed the injunction which enjoined them from implementing RS-DVR. The court insisted, however, that only direct liability was addressed, and that this holding does not propose that Cablevision can escape all forms of copyright liability. Finally,

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71 Id. at 137.
72 749 F. 2d 154, 159 (3d. Cir. 1984).
73 See Cartoon Network, 536 F.3d 121 at 138. In Redd Horne, a video rental store had private viewing booths where a customer could watch a movie. Id. (citing Redd Horne, 749 F.2d at 156–57). In reaching the conclusion that this action violated the right to public performance, the court seemed to rely on the fact that the same tape was used for each private viewing. Id. The Second Circuit chose not to follow this reasoning, because no explicit explanation was given in that case to show why a distinct copy affects the transmission clause. Id.
74 Id. at 138–39.
75 Id. at 139.
76 Id. at 140.
77 Id. at 139–40.
78 Id.
79 Id. at 139. The court speaks generally about the possibility of secondary liability. Id.
the court remanded the case for additional proceedings consistent with its holding.80

V. THE COURT’S FAULTY REASONING AND POTENTIAL FUTURE APPLICATION

The reaction to Cartoon Network by copyright experts has been widely varied: some technology advocates feel like the court is finally ruling with technology and innovation in mind; while others feel this decision will have a major impact, both positive and negative, on future copyright infringement cases.81 Many legal analysts believe that the court leaves too many questions open and, therefore, conclude that this ruling may serve as unstable precedent.82 Other legal analysts feel that this holding represents a valid effort at interpreting the relative statutes of the Copyright Act, as well as the court’s attempt to align copyright law closer to advancing technology.83 As aforementioned, it is likely that this fairly decided case will nevertheless have a weak influence on other circuits due to the court’s reasoning.

A. Flawed Use of Authority in Shaping Its Holding

While reviewing each issue confronted by the district court,84 the Second Circuit considered the previous relevant holdings from various circuits.85 The court employed faulty reasoning throughout its holding in an attempt to override or distinguish the conflicting

80 Id. at 140.
81 See generally Efroni, supra note 29; Goldman, supra note 29; See Gigi B. Sohn, Redefining Digital Copyrights, NYTIMES.COM, Aug. 11, 2008, http://query.nytimes.com/gst/fullpage.html?res=9D00E4DF1533F932A2575BC0A96 E9C8B63 (emphasizing the importance of the decision on other areas of technology) (on file with the North Carolina Journal of Law and Technology).
82 See e.g., Goldman, supra note 29 (questioning the court’s action in overriding precedent to reach its conclusions).
83 See e.g., Efroni, supra note 29 (favoring the path that this holding paves for future technology).
84 The issues addressed by the court are the following: production of the buffer copy, the creation of the copies for playback, and the actual playback of the copies. Id. at 18.
85 See Cartoon Network, 536 F.3d at 127; see also Goldman, supra note 29 (opining that the court has overridden an extensive amount of adverse precedent in leading to its holding).
case law for nearly every issue. Moreover, while analyzing some of the issues, the Second Circuit provided illusory guidelines for future courts to interpret. The court used a variety of defective tools when dealing with conflicting case law including: flawed assumptions with no factual basis to support its action, meaningless distinctions rendering the previous case inapplicable, and the omission of particular facts when rendering a conclusion. In interpreting the statutory language concerning the rights to reproduction and public performance, however, the court meticulously addressed each statute and incorporated every word.\(^8\)

The court first declined to follow the reasoning of the Ninth Circuit in *MAI Systems Corp. v. Peak Computer Inc.*,\(^8\) in determining whether the data is “fixed” when it transmits through the buffer.\(^8\) The court in *MAI Systems* held that loading a program into a form of random access memory (“RAM”) can be considered a copy.\(^9\) The court in *Cartoon Network*, however, construed this holding to mean that loading a program into a form of RAM does not automatically constitute a copy despite the fact that it may be a copy.\(^10\) According to the Second Circuit, the analysis in *MAI Systems* did not clarify the duration required to constitute a copy, and “it seems fair to assume that in these cases the program was embodied in the RAM for at least several minutes.”\(^11\)

The main problems with this particular reasoning involve faulty assumptions and future interpretation. The court distinguished the current case from *MAI Systems* without reference to specific facts in *MAI Systems*.\(^12\) Instead, the court merely stated that the assumption of “at least several minutes” is sufficient to explain why 1.2 seconds may be too short to be “fixed.”\(^13\)

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8. Id.
87 991 F.2d 511, 518 (9th Cir. 1993)
88 See *Cartoon Network*, 536 F.3d 121 at 127.
89 See *MAI Systems*, 991 F.2d at 518.
90 See *Cartoon Network*, 536 F.3d at 128 (interpreting the holding in *MAI Systems*, 991 F.2d at 517–18).
91 Id.
92 See Goldman, supra note 29.
93 Id. (quoting *Cartoon Network*, 536 F.3d at 128 (believing that the grounds for holding 1.2 seconds appear to be unsupported by sufficient reasoning). The court relies on the assumption that because the “fixed” requirement was not
making this assumption, the court failed to adequately address the reasoning from *MAI Systems* and rendered its conclusion on a derisory basis. Additionally, the court supplied no useful guidelines for determining the maximum amount of time that a copy could be stored in memory without being considered “fixed.” Thus, future courts cannot look to this case to determine the limitations on the “fixed” standard and each court must create their own standard. Technology advocates like Gigi Sohn, President of Public Knowledge, however, believe that this reasoning is founded on more practical and favorable technical grounds, because making “copies” is an elementary step in all digital action. The problem with this opinion is that courts should provide the policy reasons behind their conclusions if no other legal grounds are used. Merely attempting to distinguish precedent and giving no further basis for holding otherwise seems incomplete, as well as flawed.

Turning next to the issue of who makes the alleged infringing copy, the court determined that the computer system cannot act with volitional conduct when responding to a request. Thus, the

sufficiently addressed; “it seems fair to assume that in these cases the program was embodied in the RAM for at least several minutes.” *Cartoon Network*, 536 F.3d at 128.

94 See Efroni, supra note 29; see also Goldman, supra note 29.


96 See Sohn, supra note 81. She explains her point by stating that “it makes little sense to criminalize the making of ‘copies’ when that action is at the root of every digital action, no matter how minor.” *Id.*

97 See *Cartoon Network*, 536 F.3d at 130 (citing Religious Tech. Ctr. v. Netcom On-line Commc’n Services, Inc., 907 F. Supp. at 1361, 1369 (N.D. Cal. 1995)). The court additionally quotes the requirement for direct liability from *CoStar Group, Inc. v. LoopNet, Inc.*, which states:

[T]o establish *direct* liability under . . . the Act, something more must be shown than mere ownership of a machine used by others to make illegal copies. There must be actual infringing conduct with a nexus sufficiently close and causal to the illegal copying that one could conclude that the machine owner himself trespassed on the exclusive domain of the copyright owner.
court distinguished the present case from a well-known Sixth Circuit case, *Princeton Univ. Press v. Mich. Document Services,* because it believed that there was a "significant difference" between a human employee and a computer system when responding to an order from a customer. Following this, the court mentions that other decisions have held otherwise, but merely finds those decisions to be "unpersuasive." The court instead made, as legal analyst Solveig Singleton states, a "judgment call" in favor of Cablevision despite contradictory precedent. By making this unsubstantiated distinction, the court invites the opportunity for future criticism.

As an alternative, the court appears to use the theory of contributory negligence to cover its narrow interpretation of volitional conduct and direct liability. In reaching this conclusion, the court analogizes Cablevision's role in controlling the content of RS-DVR to Sony's role in controlling the content for its VCR customers in *Sony Corp. of Am. v. Universal City Studios, Inc.* In comparing the two technologies in this way, the

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*Cartoon Network*, 536 F.3d at 130 (quoting CoStar Group, Inc. v. LoopNet, Inc., 373 F.3d 544, 550 (4th Cir. 2004)).

98 99 F.3d 1381 (6th Cir. 1996).

99 See *Cartoon Network*, 536 F.3d at 131–32.

100 Id. at 132 (citing only *Elektra Records Co. v. Gem Elec. Distrib., Inc.*, 360 F. Supp. 821, 823 (E.D.N.Y. 1973) as an example).


102 See *Cartoon Network*, 536 F.3d at 133.

103 Id. at 132–33 (citing *Sony Corp. of Am. v. Universal City Studios*, 464 U.S. 417, 437–38 (1984)). The court concluded that Cablevision cannot be held to any form of liability higher than contributory liability because the "copyrighted material is only 'incidental' to a given technology." *Id.* The court in *Sony* dealt with a similar situation involving the invention of the VCR and the potential liability Sony was exposed to as a result of any copyright infringing activity performed by Sony VCR owners. *See Sony*, 464 U.S. 417, 437–38. The holding from *Sony* emphasized the existence of contributory copyright infringement as a separate form of liability when the copyright infringement is committed by another. *Id.* at 434–35. The court in *Cartoon Network* therefore held that Cablevision cannot be held directly accountable for the copies being made because of the finding that the customer, not Cablevision, is the party responsible for making the copy. *See Cartoon Network*, 536 F.3d at 133.
court overlooks Cablevision’s maintenance and control over the
RS-DVR central server and gives little significance to its control
over which programs can be recorded.104 This omission illustrates
an error in the court’s analysis and may again invite criticism by
future courts. Since the court in this case only addressed direct
liability, the court treated the RS-DVR as a “device,” rather than as
both a “device” and a “service,” and held that Cablevision cannot
be directly liable for the actions of its customers.105 However, the
fact that Cablevision exerts control over the RS-DVR system for
the lifetime of the service, unlike Sony’s role as manufacturer of
the VCR, indicates the likelihood that contributory liability may be
a potential area of relief for the television networks.106

Nevertheless, it is likely that contributory liability can be a
possible area of relief for the television networks against
Cablevision if a later court concludes that the activity of the RS-
DVR customer constitutes copyright infringement, due to its role
in providing the service.107

Lastly, in analyzing the alleged infringement of the right to
public performance, the court again declined to follow other circuit
precedent by distinguishing the accepted definition of “to the
public” from the present facts.108 At least one court concluded that
works can be performed “to the public” even when the “same copy
. . . of a given work is repeatedly played (i.e., ‘performed’) by
different members of the public, albeit at different times.”109 The
court found the present case factually distinguishable since each
requested recording is a unique copy of the program.110 Each copy

104 See Goldman, supra note 29.
105 Id. (considering this holding to follow certain precedent, while conflicting
with other service provider type of businesses, which occupy “more legal
responsibility over the system usage than a device maker”).
106 See generally 3–12 Nimmer on Copyright, § 12.04 (2008) for a discussion
on the requirements of contributory liability in copyright infringement.
107 Id.
108 See Cartoon Network, 536 F.3d at 138–39 (refusing to follow Columbia
Pictures Indus., Inc. v. Redd Horne, Inc., 749 F.2d 154 (3d Cir. 1984) and On
Command Video Corp. v. Columbia Pictures Indus., 777 F. Supp. 787 (N.D.
Cal. 1991)).
109 Id. at 138 (quoting Redd Horne, 749 F.2d at 159).
110 Id. at 139.
is only capable of being viewed in one household due to the nature of the transmission process; therefore, the court renders each playback a private viewing, rather than a public performance.111

By making this distinction, the court sidesteps the definition to hold that the transmission of the program does not infringe upon the right to public performance.112 In determining the plain meaning of “to the public,” the court deviates from the path taken by other courts without providing much explanation.113 The court needs to provide some explanation for holding differently from other courts. By leaving the conclusion void of support, the court fails to provide a method for use by future courts and creates another area of possible exploitation.114 Additionally, the court gives the impression that Cablevision can “freely broadcast third party content to potentially all of its subscribers without constituting a public performance.”115 This potential interpretation of the holding illustrates the instability of the reasoning surrounding this issue.116

In contrast, the court’s thorough examination of the statutory language represents the focus of the court’s analysis leading up to its holding. The court carefully incorporated each factor necessary to find infringement.117 An example of this occurs when the court assesses the possibility of infringement to the right of exclusive reproduction.118 According to the Copyright Act, a “copy”

111 See Michael Kwan, Victory for DVRs in the Clouds, Aug. 4, 2008, http://www.eff.org/deeplinks/2008/08/victory-dvrs-cloud (on file with North Carolina Journal of Law & Technology); see also supra note 67. The statutory definition of “to perform or display a work ‘publicly’” indicates that a “substantial number of persons outside of a normal circle of a family and its social acquaintances” are necessary for a performance to be “public.” 17 U.S.C. § 101 (2006). It seems unlikely then that the court would impose new requirements for RS-DVR which are not already present for the VCR or standard DVR technologies.
112 See Cartoon Network, 536 F.3d at 139.
113 See Goldman, supra note 29.
114 Id.
115 Id.
116 Id.
118 Id. at 127.
constitutes a "material objec[t] . . . in which a work is fixed by any
method now known or later developed, and from which the work
can be perceived, reproduced, or otherwise communicated, either
directly or with the aid of a machine or device." 119 The court
properly took into special consideration the requirement that the
work be "fixed." 120 After recognizing that the buffer copy needs to
be "fixed" to constitute a "copy," the court analyzed precedent
along with its own reasoning to determine the definition of
"fixed." 121 This example, as well as others, demonstrates the
cautious steps taken by the court to properly assess the statutory
authority in reaching its holding. 122

B. Limitations the Second Circuit Placed on Its Holding

Possibly recognizing the potential for reversal, the court placed
limitations on its holding and attempted to distinguish conflicting
precedent to prevent a circuit split on the various copyright
issues. 123 The court repeatedly noted that the ruling is based only
upon the given facts and that other unknown facts may change the
outcome of the case. 124 Additionally, the court attempted to
incorporate some reasoning in distinguishing precedent. 125 Next,
after distinguishing the precedent for direct liability, the court
continually stressed how contributory liability may be relevant in

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120 See Cartoon Network, 536 F.3d at 126–30.
121 Id.
122 Id. at 134. Additional examples of careful statutory interpretation include
discussing the definition of "performance," "to the public," and the analogy of
the congressional intent with the Patent Act and Copyright Act. Id. at 133–34.
123 Id. at 139–40 (expressing that not all theories of copyright infringement
have been addressed and Cablevision may not "be able to escape any other form
of copyright liability").
124 Id. at 130 (emphasizing that "while [the] inquiry is necessarily fact-
specific, and other factors not present here may alter the duration analysis
significantly"); id. at 133 (stating "[the court] conclude[s] only that on the facts
of [the] case" before reaching its conclusion).
125 See Cartoon Network, 536 F.3d at 138 (reasoning that the court in Redd
Horne did not explain its reasoning, thus not feeling compelled to follow it); id.
at 139 (choosing not to follow a particular interpretation of 17 U.S.C. § 106(3)
after recognizing the strength of commentator’s criticism of that interpretation).
this case.\textsuperscript{126} In the end, this court remanded the case back to the
district court for further ruling consistent with the holding, instead
of ruling in favor of Cablevision outright.\textsuperscript{127} These limitations
illustrate the potential recognition by the court of its faulty
reasoning. Moreover, the court may have realized the risk of poor
treatment by future courts and attempted to avoid this by adding
these limitations.

C. Policies That May Affect the Holding

The public reaction to Cartoon Network seems to be on both
sides, in favor and against, promotion of this innovative
technology.\textsuperscript{128} Outside the general praise for the advancement in
technology, advantages exist for everyone in the industry.\textsuperscript{129} The
biggest advantage is for the consumers, because RS-DVR allows
more people to benefit from DVR at a much lower cost.\textsuperscript{130} Cable
providers profit as well by reducing their operational costs through
removing the need for DVR boxes in subscriber households.\textsuperscript{131}

\begin{footnotes}
\item[126] Id. at 132–33 (discussing the possible correlation to contributory liability
as opposed to direct liability in aiding subscribers in obtaining the recorded
programs).
\item[127] Id. at 140.
\item[128] See e.g. Brian Stelter, \textit{A Ruling May Pave the Way For Broader Use of
DVR}, NY TIMES, Aug. 5, 2008, at C8 (expressing the public benefits, like
avoiding installation costs, that can result from this holding); \textit{Cablevision Plans
to Appeal Ruling}, NY TIMES, Apr. 10, 2007, at C2 (indicating how cable
providers may increase rates as a result of their ability to implement this new
system with no charges from content providers).
\item[129] See generally Yinka Adegoke and Martha Graybow, \textit{U.S. Court Backs
Cablevision Network DVR}, Reuters News (Aug. 5, 2008) (on file with the North
Carolina Journal of Law \& Technology) (explaining what possible effects could
result after this ruling).
\item[130] See e.g. Stelter, \textit{supra} note 128 (explaining how customers without DVR
systems will benefit from lower installation costs); \textit{Cloudification of your
content}, \textit{http://deancollinsblog.blogspot.com/2008/08/cloudification-of-your-
content} (Aug. 5, 2008) (on file with the North Carolina Journal of Law \&
Technology) (expressing how people can access the programs "when and
where" they would like).
\item[131] See Adegoke \& Graybow, \textit{supra} note 129.
\end{footnotes}
Finally, television advertisers also gain from the RS-DVR, as it can "open the door to new methods of advertising."132

The opponents of RS-DVR feel that this technology undercuts the "traditional services that . . . copyright owners have developed and are actively licensing into the marketplace."133 Additionally, some feel that instead of reducing costs and helping consumers, Cablevision will take advantage of what this technology can do and will raise the digital recording rates.134

Several technology advocates believe this holding is a major victory for technology and should remain intact,135 because "it makes little sense to criminalize the making of 'copies' when that action is at the root of every digital action, no matter how

132 Stelter, supra note 130 (describing how Cablevision can implement a dynamic advertising system by "customizing and updating commercial pods for different consumers and at different times"). This innovative advertising technique, however, may bring additional copyright infringement liability because these "edited" programs may constitute a derivative work. A derivative work is statutorily defined as:

A work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a "derivative work."


133 5-5 Mealey’s Litig. Rep. Copyright 9 (June 2006) (describing the concerns of the content providers that RS-DVR takes away from other services like on-demand without authorization).


minor.”

Others praise this holding because it appears like a “green light to more remote, digital recording systems, provided that they enable only authorized or fair uses of copyrighted material.” From a less technological standpoint, enthusiasm for this holding has been expressed because the holding “eliminates some of the legal anomalies between DVR as a device and DVR as a service.”

Copyright advocates, on the other hand, recognize the significance of this holding but question its ability to stand as good precedent for the future of copyright law. Professor Douglas Lichtman of UCLA expresses this worry by stating that “the decision is a blow to be sure; it limits some important copyright doctrines and, if it sticks, might disrupt a number of other important legal cases.”

D. Holding Seems Correctly Decided on its Face

Aside from the questionable legal analysis, the holding appears sound because of the various policy implications discussed above. Throughout the case, the court made a legal and practical comparison between RS-DVRs and VCRs when analogizing the present matter to that in Sony. The court ultimately determined

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136 Sohn, supra note 81 (indicating that the decision “shows that current copyright law should be substantially reformed as technology and user practices change”).

137 Healey, supra note 135 (describing how new remote technology which encompasses time-shifting can be free of liability due to this holding as well as that in Sony); see also Rangnath, supra note 135 (explaining how buffers are only a component of digital technology, not permanent copies, and thus should not be enforced as copyright infringement).

138 Goldman, supra note 29.

139 See e.g. Singleton, supra note 101 (explaining that the holding is “less than a victory for the ‘tech’ side than the bare result suggests” and that it actually expands secondary liability); Goldman, supra note 29 (discussing the conflicts that Cartoon Network set up as a result of its holding).


141 See Efroni, supra note 29; Kwun, supra note 111 (each acknowledging the significance and viability of the holding).

142 See Cartoon Network, 536 F.3d 121, 132–33. For example, both RS-DVRs and VCRs provides the necessary technology to allow for the copying. Id. The customers are the ones, however, that determine what programs are to
that the subscriber exerts control over which programs are copied onto the central server and benefits from the recorded programs. Cablevision does not choose which programs are aired and recorded, only those channels which are available for programming. Cablevision merely assists those subscribers in obtaining their recording by maintaining the RS-DVR central server. As the court stated, these facts appear to support a theory of contributory liability, as opposed to direct liability. The court explained that if Congress intended for those who induced copyright infringement to be held directly liable, the Copyright Act would have been constructed like the Patent Act. Therefore, holding Cablevision directly liable for merely hosting and maintaining a server seems contrary to practical standards given today’s technology. Thus, it may “imperil a wide variety of innovative business models that rely on the use of remote computing” to hold otherwise,” which reinforces the idea that in spite of the potentially faulty analysis in the case, the holding was the proper course of action by the court.

E. What to Expect in Future Copyright Law Cases

No one can perfectly predict what the future of copyright law entails after the Cartoon Network holding. According to some, it is capable of significantly transforming copyright law, yet others insist that it may have too many “exploitable holes” to be copied and they initiate the recording process. Id. Thus, it seems like the customers, not the technology manufacturers, have superior control over the respective technology, leading to the conclusion that the manufacturer cannot be held directly liable for those actions of the customer. Id. at 133.

143 Id. at 125.
144 Id. at 132.
145 Id. at 131–32.
146 Id. at 132.
147 See id. at 133.
148 See Sohn, supra note 81 (stating “it makes little sense to criminalize the making of ‘copies’ when that action is at the root of every digital action, no matter how minor”).
149 Kwun, supra note 111.
150 See Goldman, supra note 29.
151 See, e.g., id. (deeming this holding as drastically changing copyright law if followed).
remain good law.\textsuperscript{152} Looking to the decision, the holding seems to be consistent with certain precedent, \textit{Sony} in particular.\textsuperscript{153} The means by which the court reaches its conclusion, however, appear to be shaky and may cause the decision to be overturned or at least scarcely followed.\textsuperscript{154} It is necessary to note, however, that this case solely concerns \textit{direct} copyright infringement and no other theory of secondary liability.\textsuperscript{155} Due to this limitation, it is possible that its narrow holding may correspond to a narrow following.\textsuperscript{156} Policy indicates that this ruling must stand, and copyright law needs reformation to align itself with the advancements in technology.\textsuperscript{157} Therefore, it is difficult to predict how the courts will choose to incorporate \textit{Cartoon Network}. One court has already chosen to follow the reasoning in \textit{Cartoon Network}, at least with respect to volitional conduct.\textsuperscript{158}

\textbf{VI. CONCLUSION}

Cablevision Systems Corporation has developed an innovative technology in its RS-DVR.\textsuperscript{159} Various television producers have ardently attempted to prevent Cablevision from implementing the system without additional copyright licenses for the television programs.\textsuperscript{160} After an injunction was granted at the district court level, the Second Circuit declared that Cablevision has not

\textsuperscript{152} Goldman, \textit{supra} note 29 (discussing the various issues with the reasoning and fact-specific holding which may lead to a questionable future for \textit{Cartoon Network}).

\textsuperscript{153} See \textit{Cartoon Network}, 536 F.3d at 133–34.

\textsuperscript{154} See Goldman, \textit{supra} note 31.

\textsuperscript{155} See \textit{Cartoon Network}, 536 F.3d at 139–40.

\textsuperscript{156} See \textit{generally} Goldman, \textit{supra} note 29 (concluding that the court “sufficiently caveated its opinions to address the narrow facts in Cablevision” and therefore may not have “resolved [anything] definitively”).

\textsuperscript{157} See \textit{e.g.} Sohn, \textit{supra} note 81 (expressing how this ruling exploits the need for copyright law to reform itself as technology does).

\textsuperscript{158} See \textit{Io Group, Inc. v. Veoh Networks, Inc.}, No. C06-03926 HRL 2008 U.S. Dist. LEXIS 65915 (N.D. Cal. Aug. 27, 2008) (ruling that files which are automatically updated as a result of a user does not constitute volitional conduct).

\textsuperscript{159} See \textit{Cartoon Network}, 536 F.3d at 124.

\textsuperscript{160} \textit{Id. at 124.}
committed direct copyright infringement and thereby revoked the injunction.  

The holding seems acceptable by common sense\(^{162}\) and policy standards,\(^{163}\) especially when compared to *Sony*, as RS-DVRs perform like VCRs for customers.\(^{164}\) When addressing each issue, however, the court appears to apply questionable reasoning in support of its seemingly correct holding.\(^{165}\) Subsequent cases must nonetheless recognize the limitations that the court has imposed on the holding.\(^{166}\) This decision has the potential to seriously impact the copyright community as it permits a wide range of digital technology to go forward without the threat of direct copyright infringement.\(^{167}\) Conversely, it remains possible that this case may not significantly impact the copyright jurisprudence due to its narrow holding.\(^{168}\) Thus, it may not be possible to accurately predict how the *Cartoon Network* holding will change future copyright case law. All that can be said for now is that Cablevision is free to implement its inventive RS-DVR system without worrying about direct copyright liability.\(^{169}\)

\(^{161}\) Id. at 139–40.  
\(^{162}\) See Goldman, *supra* note 31.  
\(^{163}\) See *e.g.* Efroni, *supra* note 31.  
\(^{164}\) See *e.g.* Kwun, *supra* note 113.  
\(^{165}\) See Goldman, *supra* note 31.  
\(^{166}\) See *Cartoon Network*, 536 F.3d at 130 (explaining that this reasoning is “necessarily fact specific”); *see also id.* at 139–40 (reinforcing that the court only addresses direct infringement and no other theory of liability).  
\(^{167}\) See *e.g.* Sohn, *supra* note 83.  
\(^{168}\) See Goldman, *supra* note 31 (opining that “this case resolved nothing definitively”).  
\(^{169}\) See *Cartoon Network*, 536 F.3d at 140.