Winter 2007


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SLINGBOX: COPYRIGHT, FAIR USE, AND ACCESS TO YOUR TELEVISION PROGRAMMING ANYWHERE IN THE WORLD

SHEKAR SATHYANARAYANA

"Change is the law of life. And those who look only to the past or present are certain to miss the future." – John F. Kennedy

I. INTRODUCTION

Like many working professionals who spend more time in the office or traveling than at home, Blake and Jason Krikorian were frustrated at not being able to watch their television programming while traveling on the road. They would pack into airport and hotel bars, only to catch highlights of the latest games or snippets of the national news. Avid San Francisco Giants baseball fans, they wanted to follow their favorite team’s games regardless of location. The 2002 baseball season brought their frustration to a boil as the Giants were on their way to the playoffs. They had a once in a lifetime opportunity to see their team possibly win a World Series, but it was not feasible due to their travel schedule. Their disappointment inevitably led to the invention of the Slingbox.

The Slingbox is a device that allows consumers to watch their home television content anywhere in the world, on their computer or handheld media device. "As young entrepreneurs we spent our lives in the office, on airplanes, and in hotel rooms – in short, everywhere but in front of our living room TVs watching our favorite team," remarked Blake Krikorian before the Committee on House Energy and Commerce Sub-

1. President John Fitzgerald Kennedy, Address in the Assembly Hall at the Paulskirche in Frankfurt, West Germany (June 25, 1963).
committee on Commerce, Trade, and Consumer Protection.\textsuperscript{4} The Kirkorian brothers sought a way to remove limits on a consumer's ability to remotely access their hometown or other regionally based television programming. "Our goal is to enhance the TV-viewing experience by allowing people easy access to their living room television content, no matter their location: around the house or around the world."\textsuperscript{5} At the Consumer Electronics Show where companies unveil new technology products before a panel of journalists, designers, and engineers, Sling Media received the 2005 Innovations Design and Engineering Award for the Slingbox device.\textsuperscript{6} In short, Sling Media has embraced existing technology means by providing consumers with an innovative experience.\textsuperscript{7}

\section*{II. INNOVATIVE EMERGING MEDIA TECHNOLOGY}

Of course, the content industry continues to fear technology that could potentially violate their copyrighted works. By creating the Slingbox, Sling Media Inc. ("Sling Media") gives consumers the ability to "place-shift."\textsuperscript{8} "Place-shifting" allows a person to watch home television content on a personal computer or mobile device, in the presence of a high-speed Internet connection, anywhere in the world.\textsuperscript{9} "Place-shifting" is analogous to "time-shifting," which was permitted by the video cassette recorder ("VCR") and gave consumers the option to record television programs for future personal use.\textsuperscript{10} In \textit{Sony Corp. of America v. Universal City Studios, Inc.},\textsuperscript{11} the motion picture industry and television studios were gravely concerned about profits lost due to consumers' use of the VCR, and accused VCR manufacturers of contributory infringement of copyright. In a close five to four decision by the Court in favor of Sony, a manufacturer of the VCR, Justice Stevens commented in the majority opinion:

\begin{itemize}
\item \textsuperscript{4} Id.
\item \textsuperscript{5} See id. (citing CEO Blake Krikorian who stated the need for access to television content anywhere in the world).
\item \textsuperscript{6} Sling Media, Inc., Sling Media Press Release: CES Innovations 2005 Award and Red Herring Finalist for 100 Most Innovative Companies are Latest Commendations for Sling Media, http://uk.slingmedia.com/object/io_1157566806323.html (accessed Dec. 10, 2007) [hereinafter "Sling Media Press Release"] ("Since 1989, the International CES Innovations Design and Engineering Awards showcase has been a premier venue for consumer technology manufacturers and developers to have their latest products judged by a prestigious panel of independent industry designers, engineers and journalists").
\item \textsuperscript{7} Sling Media Inc., http://us.slingmedia.com/ (last visited Dec. 10, 2007).
\item \textsuperscript{8} Martha Mckay, \textit{Log on, Watch TV; Slingbox Lets You Channel Surf Online}, \textit{The Record}, Mar. 30, 2006, at B01.
\item \textsuperscript{9} Id.
\item \textsuperscript{10} Electronic Frontier Foundation, \textit{The Betamax Case}, http://www.eff.org/legal/cases/betamax/ (last visited Dec. 10, 2007).
\item \textsuperscript{11} Sony v. Universal City Studios, 464 U.S. 417, 443 (1984).
\end{itemize}
The primary use of the machine for most owners was ‘time-shifting’ – the practice of recording a program to view it once at a later time, and thereafter erasing it. Time-shifting enables viewers to see programs they otherwise would miss because they are not at home, are occupied with other tasks, or are viewing a program on another station at the time of a broadcast that they desire to watch.\textsuperscript{12}

Just as with the VCR, the Slingbox has been embraced by consumers as a new and convenient method of watching television programming with fewer limitations. However, as with other new technologies, Slingbox will face challenges similar to what VCR manufacturers experienced.

During the past decade, the music industry heavily criticized Web sites, such as Napster and Grokster because their peer-to-peer technology allowed users to digitally send music files to one another without restrictions. The key difference between these Web sites and Slingbox is that rather than using peer-to-peer technology, Slingbox uses technology that resembles “me-to-me” file sharing because the technology only place-shifts the content of an individual user.\textsuperscript{13} Nevertheless, content providers initially fear new technology because of perceptions about copyright infringement, and they are likely to attack Sling Media’s innovative technology as an infringement of copyright. On the other hand, Sling Media asserts that a consumer should be entitled to view their paid content anywhere at anytime.\textsuperscript{14}

Moreover, the Slingbox technology differs from another recent development in media technology that has raised many copyright concerns—the TiVo device.\textsuperscript{15} The Slingbox allows viewers to watch television programming away from home, whereas TiVo allows viewers to digitally record television shows onto a hard drive in their home with the push of a button.\textsuperscript{16} The Slingbox neither permanently stores nor allows for any sort of manipulation of television content. Instead, the Slingbox provides consumers with an innovative method, unlike any other technology, for watching television content anywhere.

During the 1970s and 1980s, the popularity of technological devices such as the cell phone and the Internet were relatively non-existent. Many travelers were likely to spend their time reading or listening to

\textsuperscript{12} Sony, 464 U.S. at 423.
\textsuperscript{14} Id.
music on their tape cassette or 8-track cartridge player.\textsuperscript{17} Today's traveler now has a myriad of options thanks to advancements in technology. The Slingbox represents one of those new options. Furthermore, users of the Slingbox have provided favorable opinions of the device. "I've seen their product, and it's fantastic," commented Fred von Lohmann, senior staff attorney at the Electronic Frontier Foundation.\textsuperscript{18} Lohmann stated, "[T]o see it is to want it."\textsuperscript{19} As Sling Media continues to market this device to the public, consumers will soon realize how potentially invaluable the device could be to their television viewing experience.

While the consumer market gradually becomes aware of the benefits of the device, content providers will likely challenge the legality of the Slingbox's function. The motion picture studios, television studios, and sports organization—the owners of copyright to a substantial number of audiovisual works—are some of the major parties who might find the device disconcerting. The Motion Picture Association of America ("MPAA") serves to advance the interests of the major Hollywood studios, primarily by limiting illegal trafficking of copyrighted material.\textsuperscript{20} The MPAA may claim that the Slingbox represents an infringement on copyright via a public display or performance, a violation of licensing agreements, and an inducement of unfair competition. Moreover, sports organizations, such as the National Football League could make a strong argument for a violation of licensing agreements and unfair competition over the transmission of NFL games because Slingbox provides a New York resident the option to watch the New York Giants football game live in California, where the game has been blacked out, via a personal computer or mobile device.\textsuperscript{21} The Federal Communications Commission ("FCC") could have a compelling argument for a violation of the Communications Act because the Slingbox might cause a re-transmission, or secondary transmission, of content without permission.\textsuperscript{22} As discussed previously, the Slingbox takes a television signal and sends it elsewhere by "place-shifting." While these issues may be valid, this comment will focus on an evaluation of Slingbox based on potential copyright infringement and circumvention of technological access to copyrighted works as

\textsuperscript{17} Kristine J. Hoffman, \textit{Fair Use or Fair Game? The Internet, MP3, and Copyright Law}, 11 Alb. L.J. Sci. & Tech. 153, 166 (2000) (discussing the importance of available means of music recording when the Copyright Act was written in 1976).

\textsuperscript{18} Wallenstein, \textit{supra} note 13.

\textsuperscript{19} \textit{Id.}


\textsuperscript{21} See Wallenstein, \textit{supra} note 13 (discussing the impact of the device on the NFL and DirecTV as potential copyright infringement).

SLINGBOX applicable under the Digital Millennium Copyright Act ("DMCA"). For example, one of the interested parties mentioned previously may claim the Slingbox infringes one of their exclusive rights in their copyrighted works, namely the exclusive right to perform or publicly display the work. Even if a court decides that the Slingbox violates an exclusive right, Sling Media would not be liable because the device represents a legitimate fair use under copyright law. Furthermore, Slingbox does not violate the DMCA provisions against devices that circumvent technological protections. The device serves as a novel and unique technology that has not only made it more convenient for consumers to view programming, but also provides an aid for both studios and sports organizations in reaching their target audience.

This comment will provide a legal analysis of the Slingbox device by applying the Copyright Act and the DMCA. Part III will provide an explanation of the Slingbox technology and the marketplace. Part IV will demonstrate why the Slingbox does not violate the Copyright Act, providing an in-depth analysis of the fair use defense. Part V will focus on why the Slingbox does not violate the DMCA. Part VI will provide a recommendation for an update to the DMCA. Finally, Part VII will summarize the arguments presented in this comment.

III. SLING MEDIA TECHNOLOGY: AN INNOVATIVE BREAKTHROUGH

A. HOW THE TECHNOLOGY WORKS

The Slingbox device allows individuals to watch and control their home television programming via their personal computer or mobile device in any location with a high-speed Internet connection. The device measures 10.5 inches long, 4 inches wide, and 1.5 inches high. It can easily be placed anywhere at home, but many consumers place it on top of the television or cable box. The Slingbox connects to a video source such as the cable box, digital video recorder ("DVR"), or digital versatile disc ("DVD") player. Like the VCR and DVD player, the incoming cable or television signal filters through to the Slingbox via the antenna, composite video, or S-video inputs. Then, Slingbox is able to send the

23. Amy Harmon, Pondering Copyright vs. Innovation, N.Y. TIMES, Mar. 3, 2003, at C2 (discussing the congressional purpose of the DMCA as providing a restraint against Internet piracy an additional protection for copyrighted digital works).
26. Id.
27. Id.
28. Id.
signal out through an Internet connection provided by the user. The user can then receive the signal at a remote location by accessing the Internet via user-restrictive Slingplayer software. To receive the Slingbox signal, the user needs to have Windows 2000, XP, Vista, or Windows Mobile 5.0 or 6.0 on their computer or mobile device in order to install the Slingbox software. This is the final step in the setup for use of the Slingbox. 29

One of the critical elements of this technology revolves around the different types of television signals that the Slingbox utilizes. The Slingbox can send either analog or digital signals to the user.30 Similar to radio signals, analog television transmissions are basic restricted signals that transmit pictures and sound through amplitude and frequency.31 The drawback is that analog signals are more susceptible to interference due to the distance and actual geographical location of a television set receiving that signal.32 Only select channels travel through analog signals today since digital television transmissions have become the more innovative format. Digital signals differ from the analog format by transmitting the signal as data bits of information that take into account the quality of picture and sound combined. Digital signals provide not only a better audiovisual image, but also more interactivity with video content for the consumer.33 Broadcasting continues to move towards high definition quality programming, which requires digital signals, and analog transmissions will cease entirely by February 17, 2009.34 Unlike analog signals, digital signals allow the user to watch an exact replica of the originally broadcasted signal.

The Slingbox streams digital broadcast signals, but it does not make a permanent, stored copy of broadcast content.35 Streaming is the term given for media continuously sent over a telecommunications network to an end-user.36 The Slingbox interpolates the video signal received and transmits the interpolated video digitally over the Internet. Once the signal is sent to another device, the Slingbox media player enables buffering to temporarily store the data. A buffer is a temporary storage medium used when transferring telecommunications data from one device

29. Id.
30. See Sling Media Press Release, supra note 6 (providing information on how basic cable signals work with the device).
32. Id.
33. Id.
35. See DTV, supra note 30 (explaining how the device does not provide a method for copying or storing content).
36. Id.
to another. The process of buffering allows a device to utilize that stored data content without interruption, differences in rate of flow of data, or timing of events. If the transmission signal is temporarily interrupted due to wireless Internet fluctuations, the television content would not be disrupted intermittently since the media player has a buffer of data ready for viewing. The latent period differs by only a matter of seconds from that in live format. Users only have the ability to stream their programming onto a computer or mobile device with the Slingbox.

Even though the Slingbox software could be installed on any computer, only one computer can be connected to the Slingbox at a time. As a security measure and to allow the Slingbox to search for an Internet connection, each device has a 32-digit, alpha-numeric identification tag. When using the Slingbox via a computer, a remote control window will appear for use in the same manner as if the user was at home in front of the television. The user can then remotely change the channel to select the programming they want to watch. If a consumer uses their Slingbox even as someone at home is watching television at the same time, both devices will display the same channel at all times.

Once the Slingbox is setup, an individual can “sling” their television programming to any location where a high-speed Internet connection exists. As advertised, the Slingbox provides consumers with the convenience of having access to their home television programming wherever they go.

B. Slingbox in the Marketplace

Given the Slingbox’s relative novelty, field research on the Slingbox’s effect on the market is limited. Initiative Media Agency conducted a survey from May 3rd to May 17th of 2006 through Insight Express, an online vendor, of 1,500 people ages thirteen and older regarding the Slingbox. Among those persons interviewed, 23 (1.5%)...
claimed to own a Slingbox. Like many other technologies, Slingbox is currently a male-skewing technology. Of the respondents who own a Slingbox, 74% are male (17 out of 23). The following chart details the distribution of popular technological devices and the distribution between the sexes:

### GENDER DISTRIBUTION:

<table>
<thead>
<tr>
<th>Media Device</th>
<th>%Male</th>
<th>%Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slingbox</td>
<td>74</td>
<td>26</td>
</tr>
<tr>
<td>iPod</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td>TiVo</td>
<td>53</td>
<td>47</td>
</tr>
<tr>
<td>PSP</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Wireless Internet</td>
<td>57</td>
<td>43</td>
</tr>
<tr>
<td>VoIP</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>Bluetooth Phone</td>
<td>63</td>
<td>37</td>
</tr>
</tbody>
</table>

### AGE DISTRIBUTION

<table>
<thead>
<tr>
<th>Age</th>
<th>% Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-17 yrs</td>
<td>8.6</td>
</tr>
<tr>
<td>18-34 yrs</td>
<td>52.2</td>
</tr>
<tr>
<td>35-49 yrs</td>
<td>21.7</td>
</tr>
<tr>
<td>50+ yrs</td>
<td>17.4</td>
</tr>
</tbody>
</table>

According to Initiative's research team, all technologies emerge through the younger, demographic because young people learn how to use new technology more quickly than the average adult. The Slingbox may not have filtered to the youngest demographic because of its price at $229.99. If the price drops and Sling Media continues to increase its marketing efforts, then ownership should grow dramatically in the future.

Slingbox owners possess nearly every other popular technology item on the market. The following chart lists the ownership levels of various devices among Slingbox owners:

ship levels for various emerging platforms and gain a richer understanding of how those platforms were being used).

46. Id.
47. Id.
SLINGBOX

iPod: 91.3%
Video iPod: 82.6%
TiVo: 87.0%
Satellite Radio: 78.3%
3G Mobile Phone: 96.0%
PSP: 86.0%
Wireless Internet: 91.3%
HDTV: 82.6%

Although the Slingbox is not well known, the final survey suggests the largest potential for growth. The respondents were provided with five choices regarding ownership for each technology, with the respondent only being able to select one: “Currently own,” “Plan to buy in next 12 months,” “Would consider buying if it were less expensive,” “Do Not Intend to Buy,” and “I do not know what this is.” Slingbox had the highest percentage (53%) of respondents claim “I do not know what this is.” As an additional side note regarding the respondents who completed the survey, 68% blog daily, 68% podcast daily, and 63% visit a social networking site (Friendster, Facebook, Myspace, etc.) daily. It is evident that although these people are in tune with emerging media, they are just starting to become more educated about the Slingbox device.

Slingbox has few competitors to date. Orb Networks created Orb Media and Sony followed with “LocationFree,” both of which are similar devices to the Slingbox. The Slingbox, however, has already claimed a significant portion of the market share because these competitor brands are relatively new to the market.

IV. SLINGBOX DOES NOT VIOLATE THE COPYRIGHT ACT

Congress enacted copyright laws with the legitimate purpose of promoting “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.” The laws were originally designed to promote creativity by providing copyright owners with exclusive rights to

49. See InsightExpress, supra note 44 (commenting that research was based on question set for a small sample size).
50. Id.
51. Id.
52. See Poniewozik, supra note 15 (discussing that Sling Media does have a few competitors in Sony and Orb Media, but neither has promoted their respective brands as much as Sling Media has with the Slingbox).
53. See Sling Media Inc. Home Page, supra note 7 (explaining that competitors do not carry similar market share or brand awareness as the Slingbox).
certain use of their original works. Copyright owners have the benefit of ownership and control over their works along with the ability to receive financial rewards. These monopoly rights are not unlimited by any means.\(^{55}\) Congress' intent was to balance the copyright holders' interests along with providing the public access to these works via the free flow of information and ideas.\(^{56}\)

The question is whether an exclusive right provided under the Copyright Act has been infringed by the Slingbox device. A copyright holder has the following exclusive rights for their copyrighted works: to reproduce the work, prepare derivative works, distribute copies of the work to the public, to display the copyrighted work in public, and to perform the work publicly.\(^{57}\) Even assuming a broad scope for these rights, the Slingbox should not be held to violate any of these exclusive rights.

If the courts were to proceed with a copyright infringement analysis, they would follow the analysis set forth by the Supreme Court in determining whether a valid copyright exists and if there has been copying of constituent elements of the work that are original.\(^{58}\) The courts will look at direct and indirect (secondary) copyright infringement liability. Indirect infringement is broken down further into contributory and vicarious liability, each of which would hold the infringer accountable for the actions of third-parties.\(^{59}\) Before moving on to secondary liability, which would likely be the case against Sling Media, the courts will first assess whether a direct infringement exists.

**A. DIRECT INFRINGEMENT**

The users of the Slingbox might be liable for direct infringement. The standard for proving direct infringement is a strict liability standard.\(^{60}\) To establish a case of direct copyright infringement, a party must prove two factors: 1) Ownership of the copyright associated with the work, and 2) violation of a reserved use, such as copying the work without authorization.\(^{61}\) "The Copyright Act does not expressly render anyone liable for infringement committed by another."\(^{62}\) Consumers who purchase the Slingbox would be the direct infringers.\(^{63}\) Courts would determine whether consumers directly infringe copyrights by us-

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\(^{55}\) *Sony*, 464 U.S. at 429.


\(^{59}\) *Sony*, 464 U.S. at 435.

\(^{60}\) *Id.*

\(^{61}\) *Id.*

\(^{62}\) *Sony*, 464 U.S. at 434.

\(^{63}\) *Id.*
ing the Slingbox in order to proceed under secondary liability, or indirect infringement, against Sling Media, because a direct infringer is required for indirect infringement.\footnote{A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1013 (9th Cir. 2001) ("Secondary liability for copyright infringement does not exist in the absence of direct infringement by a third party.").}

1. \textit{Right to Reproduce a Copyrighted Work}

Slingbox does not infringe the exclusive right to reproduce a copyrighted work because it does not create a permanent copy of protected material. Reproduction occurs when a copy of a protected work has been produced.\footnote{17 U.S.C. § 101 (2006) ("[C]opies' are material objects, other than phonorecords, 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").} A copy is made when the work is fixed in a material object from which it can be reproduced.\footnote{Id.} Fixation of a work requires it to be "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than a transitory duration."\footnote{17 U.S.C. § 101 (2006) (defining a "fixed" work).} Even though the Slingbox does buffer streamed content for a few seconds, this action would not suffice as infringement because the content is clearly not fixed in a permanent state.\footnote{Adam P. Segal, \textit{Dissemination of Digitized Music on the Internet: A Challenge to the Copyright Act,} 12 Santa Clara Computer & High Tech. L.J. 97, 113 (1996).}

If courts proceed with a violation of a reproduction right, the courts would apply a test to determine the validity of the argument. Courts vary regarding the proper test to apply when determining whether a reproduction has occurred. Two commonly used tests by courts are the "intrinsic/extrinsic" test and the "ordinary observer" test.\footnote{Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp., 562 F.2d 1157, 1164-67 (9th Cir. 1977).} The Eighth Circuit Court of Appeals and Ninth Circuit Court of Appeals will utilize an "intrinsic/extrinsic" test. This test entails a two-part substantial similarity inquiry. Substantial similarity must be "not only of the general ideas but of the expressions of those ideas as well."\footnote{See id. at 1164 .} The first part of this test looks at extrinsic factors by focusing on a comparison of the works itself to find a similarity in ideas.\footnote{Id. at 120.} Because this extrinsic test depends "on such objective criteria as the type of artwork involved, the materials used, the subject matter, and the setting for the subject," expert opinion evidence may be considered.\footnote{Nelson v. PRN Prod, Inc., 873 F.2d 1141, 1143 (8th Cir.1989).}
In Hartman v. Hallmark Cards, Inc., the plaintiff filed suit against a greeting card company asserting the company substantially infringed upon his design for a product called "Rainbow Bright". The Eighth Circuit Court of Appeals affirmed the judgment of the lower court which held in favor of the defendant and ruled that the defendant used non-copyrightable themes and ideas not substantially similar to the plaintiff's product. If the court finds the first prong of the substantial similarity test is not met, it need not inquire further in order to find no copyright infringement.

On the other hand, if the court finds the first part of the substantial similarity test fulfilled, it will analyze the second part of the test that looks to the similarity of expression using an intrinsic test. An intrinsic test is akin to the "ordinary observer" test that many of the other circuit courts will apply to copyright infringement cases. Expert testimony is not appropriate at this phase because the second portion of the test calls upon the perspective of an ordinary observer. A reasonable person could find a violation of copyright because the Slingbox shows the exact same pictures and images in sequential order as would be seen on the television set. Even if the court applies the intrinsic/extrinsic test or the ordinary observer test, Sling Media would have a valid argument that no reproduction has been made and such tests are therefore unnecessary because the technology does not permanently make a copy of any audio-visual works.

Copyright holders will have a difficult time establishing the validity of their case before a court given the amount of obstacles to overcome for each of these similarity tests. The law applied by the Eighth Circuit Court of Appeals and the Ninth Circuit Court of Appeals presents significant obstacles for a plaintiff because both phases of the "extrinsic/intrinsic" test must be met in those circuits. Furthermore, if a case is brought in either circuit court against Sling Media, the plaintiff will have a difficult time establishing any protected elements because the Slingbox does not in fact reproduce any copyrighted elements in part or as a whole.

2. Right to Create a Derivative Work

The Slingbox does not violate copyright law by creation of a derivative work because no work has been produced by the device. According to Section 101 of the Copyright Act, a derivative work consists of any work based on a preexisting creation such as a motion picture that may be...

73. Id.
74. Id. at 120, aff'd, 639 F.Supp. 816 (W.D. Mo. 1986).
75. Id.
76. Id.
"recast, transformed, or adapted." Under Section 106(2), a copyright owner has the exclusive right to "prepare derivative works based upon the copyrighted work." It is a daunting task for a plaintiff to establish that the Slingbox infringes a copyright by reproducing a television program, commercials, or a compilation of sorts. A derivative work requires some modicum of creativity resulting in a derivative work that is substantially different from the original. For example, in *Lee v. A.R.T. Co.*, the defendant was accused of creating derivative works by mounting note cards and lithographs by another artist onto ceramic tiles. The Seventh Circuit Court of Appeals refused to provide the plaintiff artist great control over copyrighted works when slight modifications were made. The technology in *Lee* is distinguished from the technology in the Slingbox because the Slingbox does not permanently copy or provide any manipulation to an original copyrighted work. The broadcasted programming on the Slingbox is exactly the same as that viewed directly from the television set.

3. **Right to Distribute a Copyrighted Work**

Sling Media does not infringe on the exclusive right to publicly distribute copyrighted works. Under Section 106(3), a copyright owner has the exclusive right "to distribute copies... of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease or lending." Copyright law requires actual dissemination of copies to violate this exclusive right. In *A&M Records, Inc. v. Napster, Inc.*, Napster was found liable for vicarious and contributory infringement because it facilitated in the distribution of MP3 music files online. Napster facilitated users by providing technical support for indexing and searching, and set up a "chat room" for users. Unlike Napster, the Slingbox does not engage in any of these actions because it does not distribute television programming to the public. The device place-shifts the content that people watch on their home television. Violation of a distribution right claim has no basis because the Slingbox does not distribute the television content. The device can only stream television programming without any capability to record.

79. *Id.*
80. *Lee*, 125 F.3d at 580.
81. *Id.*
84. See *A&M Records*, 239 F.3d at 1004.
85. *Id.* at 1011.
4. **Right to Display a Copyrighted Work Publicly**

The Slingbox does not violate the exclusive right of a public display under the definition in the Copyright Act. Public display includes: literary, musical, dramatic, choreographic, pantomimes, pictorial, graphic, sculptural, individual images of a motion picture, or other audiovisual works. Under Section 101 of the Copyright Act, a “display” would show individual images non-sequentially. The Slingbox does not create a display because it does not change or manipulate the television programming in any manner. Rather, the Slingbox streams the content sequentially and exactly as it would appear on television, therefore, under the definition provided by the Copyright Act, there is no display of content protected by copyright law.

According to Section 106(5) of the Copyright Act, a transmission of a copyrighted work is a public display if it is sent to a public place or the public itself. The Slingbox does not violate the right of public display since it ‘slings’ the programming from the home television to a personal and private computer or handheld device for the user. This analysis is a defense for Sling Media against a claim of infringement because the television programming is only slinged to one computer or mobile device at a time.

5. **Right to Perform the Copyrighted Work Publicly**

One of the stronger arguments that a potential plaintiff could have against Sling Media is for the violation of an exclusive right of a public performance of a copyrighted work. The exclusive right to the public performance of a copyrighted work is implicated when audiovisual images are shown sequentially, which is how the images are shown using the Slingbox. The performance right differs from the public display right because it does not apply to pictorial, graphic, or sculptural

87. Id.
90. 17 U.S.C. § 106(5) (2006) (“[P]ublicly displaying a work includes displaying it either 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.”); see also H.R. Rep. No. 94-1476, at 63 (1976) (“[T]he concept of . . . public display covers not only the initial . . . showing, but also any further act by which that . . . showing is transmitted or communicated to the public”).
91. 17 U.S.C. § 106(4) (2006) (Defines ‘perform’ as reciting, rendering, playing, dancing, or acting, either directly or by means of any device or process. Perform in the case of a motion picture or other audiovisual work, is to show its images in any sequence or to make the sounds accompanying it audible.).
92. Id.
works. However, a potential plaintiff will not likely be able to build a case against Sling Media for this issue because no performance of a copyrighted work has taken place because the Slingbox does not provide content to the public. Under Section 101 of the Copyright Act, a performance is public if "the location is open to the public, if there are more people present than family and social acquaintances, or if the work is transmitted to the public." In other words, a performance is public if it occurs in a public setting or before a public audience. Sling Media could easily dismiss this notion because the only person with access to the content is the owner of the device itself.

6. Rights to Secondary Transmissions

When Congress enacted the Copyright Act in 1976, a secondary transmission was defined as the process of detecting and retransmitting the signals produced by a primary transmitter. Cable television systems provide selected channels to subscribers by re-transmitting the original signals to their subscribers. When Congress passed the Act, they did not take into account secondary transmissions' relevance to a "performance" or "public performance" and did not include the term in the definition for "performance" or "public performance". The omission of secondary transmissions from these terms could lead one to believe, through a literalist approach, Congress intended performances to apply specifically to primary transmissions. It is reasonable to believe that Congress intended for secondary transmissions to be performances

93. Id.
94. Id.
95. 17 U.S.C. § 111(f) (2006) (defining primary transmission as "a transmission made to the public by the transmitting facility whose signals are being received and further transmitted by the secondary transmission service, regardless of where or when the performance or display was first transmitted. A secondary transmission is defined as "the further transmitting of a primary transmission simultaneously with the primary transmission").
97. 17 U.S.C. § 101 (2006) (explaining to "perform" a work is defined as a work meant "to recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible").
98. Id. ("[T]o 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.").
The Slingbox device does not violate the Copyright Act because it is not addressed as a version of secondary transmissions signals. Section 111 of the Copyright Act specifically addresses the issue of re-transmitting signals from a television station or cable provider. The Copyright Act provides a complex and detailed analysis of the cable licensing system, but it does not address other means by which devices could provide secondary transmissions. The statute also does not define the meaning of a "carrier" of the transmission which leaves it open for courts to interpret. The closest legal analysis that might be applicable to the Slingbox is Section 111(a)(3), which exempts from liability certain secondary transmissions. It is difficult to predict how the courts may rule on this issue given the technicalities and lack of case law in this area. Although this Comment does not discuss FCC rulings, the FCC could play a significant role in shaping the law in the future.

B. SECONDARY INFRINGEMENT

1. Contributory

The courts would ultimately dismiss a copyright infringement claim against Sling Media because there is no evidence of contributory or vicarious liability. Contributory liability places the blame on one party for the actions of another. "One infringes contributorily by intentionally inducing or encouraging direct infringement." To show contributory infringement, a party must prove an act of knowledge by Sling Media and material contribution to the direct infringer's activities. In Sony,

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99. H.R. Rep. No. 98-934; see also The Congressional reference to secondary transmissions as "something extra (which) could be considered as a 'performance,' or as an alternative to a performance, Nimmer on Copyright, § 8.18(B) (Matthew Bender & Co., Inc. 2004).
101. Id.
102. 17 U.S.C. § 111(a)(3) (2006) ("[T]he secondary transmission is made by any carrier who has no direct or indirect control over the content or selection of the primary transmission or over the particular recipients of the secondary transmission, and whose activities with respect to the secondary transmission consist solely of providing wires, cables, or other communications channels for the use of others. Provided that the provisions of this clause extend only to the activities of said carrier with respect to secondary transmissions and do not exempt from liability the activities of others with respect to their own primary or secondary transmissions.").
103. See Fonovisa, Inc. v. Cherry Auctions, Inc., 76 F.3d 259, 262-64 (9th Cir. 1996) (holding that contributory infringement involves situations in which one has knowledge of the infringement and materially contributes to it. Vicarious infringement deals with the situation where one has a financial interest in and the right to supervise the infringement.).
105. Gershwin Publ'g Corp. v. Columbia Artists Mgt., Inc., 443 F.2d 1159, 1162 (2d Cir. 1971).
the burden of proof rested upon Universal Studios to prove consumers infringed their copyrights and Sony should be held responsible for that infringement.\textsuperscript{106} The Court determined that the knowledge requirement had not been fulfilled because Sony did not actively encourage their users to engage in any illegal activities with the video recorder.\textsuperscript{107} Under the staple article of commerce analysis,\textsuperscript{108} the Court refused to impose liability on Sony based on the stipulation that they knew their products were used for infringing uses. “The only contact between Sony and the users of the Betamax that is disclosed by this record occurred at the moment of sale.”\textsuperscript{109} The situation is no different between Sling Media and the users of their Slingbox device because Sling Media has no relationship with purchasers and has no way of knowing whether consumers use the Slingbox in a way that violates copyright law. If the courts allow liability to be imposed on every manufacturer or seller of a product with potential infringing uses, then the “wheels of commerce” would suffer from a substantial amount of obstacles.\textsuperscript{110}

Moreover, Sling Media should not be liable for promoting infringing uses of Slingbox. Contrast Sling Media to Grokster in the case \textit{MGM Studios v. Grokster, Inc.}, where the infringing software operated via a peer-to-peer network whereby users could communicate directly with each other and share music without the need of a central server.\textsuperscript{111} The Slingbox operates in a similar way except that it takes the signal from the television without the use of a central server and redirects it to a personal device of the same user. The U.S. Supreme Court in \textit{MGM Studios}, noted that the Ninth Circuit Court of Appeals erred in reading Sony’s “limitation to mean that whenever a product is capable of substantial lawful use, the producer can never be held contributorily liable for third-parties’ infringing use of it.”\textsuperscript{112} In \textit{MGM Studios}, the Court found the defendant liable for acts by a third-party since they distributed the file-sharing software “with the object of promoting its use to infringe copyright.”\textsuperscript{113} Similar to Sony with the VCR in the late 1970s, Sling Media promotes their device as a new method for watching television. In \textit{Sony}, the Court stated that the defendant’s contribution to an infringement by copying equipment would not hold them liable if there were sub-

\begin{itemize}
  \item 106. \textit{Sony}, 464 U.S. at 434.
  \item 107. \textit{Id.} at 425-28.
  \item 110. \textit{Id.} at 491; see also Kalem Co. v. Harper Brothers, 222 U.S. 55, 62 (1911); Universal City Studios, Inc. v. Sony Corp. of Am., 480 F. Supp. 429, 461 (C.D. Cal 1979).
  \item 111. \textit{MGM Studios Inc.}, 125 S. Ct. at 2764.
  \item 112. \textit{Id.} at 2778.
  \item 113. \textit{Id.} at 2770.
\end{itemize}
stantial non-infringing uses.114 "[T]he sale of copying equipment, like the sale of other articles of commerce, does not constitute contributory infringement if the product is widely used for legitimate, unobjectionable purposes. . . .It need merely be capable of substantial non-infringing uses."115 The Slingbox more than likely provides for substantial non-infringing use as discussed later in this Comment.

Although the Court in MGM Studios narrowed the Sony ruling by shunning active encouragement of an infringing use116, the Slingbox would still not be found liable since it does not violate any exclusive rights of copyright law. “To respect the rights of content holders, we have taken voluntary steps to ensure the Slingbox is a personal-use system,” commented CEO Blake Krikorian.117 Sling Media neither advocates nor promotes copyright infringement on the company’s Web site or via advertisements.

2. Vicarious

Sling Media’s strongest argument favoring legality is the lack of evidence of vicarious infringement. Vicarious infringement accounts for someone who “unfairly reaps the benefits of another’s infringing behavior.”118 To prove vicarious liability, a party must show that the defendant had the right and ability to control a direct infringer’s actions along with an obvious and direct financial interest in the infringing activities.119 In Fonovisa, Inv. v. Cherry Auction,120 the defendant was liable for vicarious infringement because the company required an admission fee to gain access to the flea market premises which was under their control. As discussed under contributory infringement, Sling Media neither has control, nor the ability to restrict the activities of the Slingbox owners. It would be irrational to suggest that Sling Media could control how television consumers watch television programming because Sling Media does not assert control over its users.

C. Fair Use Defense

If the courts were to determine the Slingbox directly or indirectly

114. Sony, 464 U.S. at 442.
115. Id.
116. See supra note 111 (distinguishing the court analyses from both the Sony and Grokster case).
117. See Fair Use of Digital Content, supra note 2.
120. Fonovisa, 76 F.3d at 263.
infringed copyright, Sling Media could assert the defense of fair use.\footnote{121} Justice Story first created the judicial tool of fair use to help determine whether a violation of copyright laws could be justifiable.\footnote{122} With the passage of the Copyright Act of 1976, Congress codified this defense to achieve a balance between protecting the rights of a copyright owner and meeting the needs of the public to make lawful use of the copyrighted work.\footnote{123} Fair use is applied to the use of copyrighted works that may initially infringe on the exclusive rights of the copyright holder.\footnote{124} The purpose of the fair use doctrine is to provide courts with a basis “to avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which that law is designed to foster.”\footnote{125} This doctrine has since become the only true affirmative defense to copyright infringement, despite the unpredictability of analysis by courts.

Section 107 of the Copyright Act lists four factors to help determine if a copyrighted work would be subject to fair use: (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.\footnote{126} Each factor is assessed independently of the others. After conducting a step by step analysis, each factor is weighed together to determine liability.\footnote{127} Given the new innovative technological devices that may come in the future, “the courts must be free to adapt the [fair use] doctrine to particular situations on a case-by-case basis.”\footnote{128} These factors are necessary, not determinative, when balancing the interests of the copyright holders with society’s interests.\footnote{129} “When technological change has rendered its literal terms ambiguous, the Copyright Act must be construed in light of this basic purpose.”\footnote{130}

\begin{itemize}
  \item \footnote{121} 17 U.S.C. § 107 (2006); see also H.R. Rep. No. 94-1476, at 65 (discussing the background of the fair use doctrine).
  \item \footnote{122} Folsom v. Marsh, 9 F. Cas. 342, 348 (C.C.D. Mass. 1841) (stating that courts should “look to the nature and objects of the selections made, the quantity and value of the materials used, and the degree in which the use may prejudice the sale, or diminish the profits, or supersede the objects, of the original work”); see also Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 576 (1994).
  \item \footnote{123} Sony, 464 U.S. at 454-55.
  \item \footnote{124} Id.
  \item \footnote{125} Dr. Seuss Enters., L.P. v. Penguin Books USA, Inc., 109 F.3d 1394, 1399 (9th Cir. 1997).
  \item \footnote{126} 17 U.S.C. § 107 (2006).
  \item \footnote{127} Pierre N. Leval, Toward a Fair Use Standard, 103 Harv. L. Rev. 1105, 1110-11 (1990).
  \item \footnote{128} Sony, 464 U.S. at 450.
  \item \footnote{129} Dr. Seuss Enters., 109 F.3d at 1399.
  \item \footnote{130} Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975).
\end{itemize}
1. Purpose and Nature of the Use

Courts will first look at "the purpose and character of the use" of the Slingbox. The courts will specifically assess the commercial and transformative nature of the device. The purpose is to see if the newly created work will supersede the original work in part or as a whole. In Napster, the company was held liable because people had access to free copyrighted music instead of having to pay for it. The Slingbox does not serve a commercial nature since it is place-shifting the content already paid for by the consumer through their cable or satellite subscription. This activity is purely noncommercial and does not serve profit purposes. In Sony, the Court came to a similar determination based on time-shifting of television content by VCRs. The Sony case attempted to "strike a balance between a copyright holder's legitimate demand for effective - not merely symbolic - protection of the statutory monopoly, and the rights of others freely to engage in substantially unrelated areas of commerce." In Sony, the Court determined that the principal use of the VCR was used for time-shifting which the Court found to be a fair and non-infringing use. Place-shifting is no different since the content is viewed privately in another location.

As mentioned previously, the Slingbox should not violate the exclusive right of reproduction. In Kelly v. Arriba Soft Corp., the Ninth Circuit Court of Appeals analyzed the listing of copyrighted pictures listed as thumbnails on a Web site. The court determined that its use of thumbnail pictures was commercial, but that fact "weighed only slightly against a finding of fair use" when the use is not exploitative in nature. In Perfect 10 v. Google, the court determined that Google, a Web site search browser, derived a commercial benefit from its Web site through advertising and user traffic. The court is likely to rule that the Slingbox does not serve a commercial use.

The court will also inquire if the work is transformative by assessing whether use of a potentially infringing work supersedes the original use.

131. See Artists Music, Inc., 31 USPQ2d 1623 at 1626.
133. Napster, 239 F. 3d at 1014.
134. Sony, 464 U.S. at 449-50 (Justice Stevens stated, "... when one considers the nature of a televised copyrighted audiovisual work. . . and that time-shifting merely enables a viewer to see such a work which he had been invited to witness in its entirety free of charge, the fact that the entire work is reproduced does not have its ordinary effect of mitigating against a finding of fair use.").
135. Sony, 464 U.S. at 442.
136. Id.
138. Id.
copyrighted work completely or adds a "further purpose or different character" to that work.\textsuperscript{140} "Whether a use is transformative depends in part on whether it serves the public interest."\textsuperscript{143} Courts are generally going to find for fair use if a work is more transformative.\textsuperscript{142} Courts are, however, unlikely to grant fair use when an original work has been transmitted in a different medium.\textsuperscript{143} Although the Slingbox does not add anything additional to the programming, it serves an entirely different purpose than viewing the television content at home. The Slingbox provides a service and convenience for regular television viewers who are not often at home. The concept of place-shifting changes the entire format of how viewers watch their television programs. In \textit{Kelly}, the court determined the use of thumbnail pictures was transformative since they were smaller and intended to engage the viewer in an aesthetic experience.\textsuperscript{144} In \textit{Perfect 10}, the court did find the function to be more consumptive without adding anything creative to the original works.\textsuperscript{145} Although many consumers might agree that the Slingbox provides a unique and useful purpose, a court may rule against Sling Media, depending on how a court interprets the transformative nature of Slingbox technology.

2. \textit{Nature of the Copyrighted Work}

The nature of the copyrighted work would likely weigh against Sling Media given no creativity has been added to the original works. The courts will analyze whether the work has been published and evaluate the creative elements involved. "Published works are more likely to qualify as fair use because the first appearance of the artist's expression has already occurred."\textsuperscript{146} The Slingbox provides the same content as the content providers. The question remains whether proper publication exists. The court in \textit{Kelly} determined that the original pictures had already been posted on the Internet which served as publication.\textsuperscript{147} Sling Media would display the content at the same time the content would be displayed on a television set. Thus, Sling Media has not added any creative element to the works given that they are streamed in the exact same

\begin{itemize}
\item \textsuperscript{140} \textit{Campbell}, 510 U.S. at 579.
\item \textsuperscript{142} \textit{Kelly}, 336 F. 3d at 819; see \textit{Infinity Broad Corp. v. Kirkwood}, 150 F.3d 104, 108 (2d Cir. 1998) (stating that the retransmission of a radio broadcast over telephone lines will not be transformative).
\item \textsuperscript{143} UMG Recordings, Inc. v. MP3.com, Inc., 92 F. Supp. 2d 349, 351 (S.D.N.Y. 2000).
\item \textsuperscript{144} See \textit{Kelly}, 336 F.3d at 819.
\item \textsuperscript{145} \textit{Perfect 10}, 416 F. Supp. 2d at 849.
\item \textsuperscript{146} \textit{Kelly}, 336 F.3d at 820.
\item \textsuperscript{147} \textit{Id.} at 820-21.
\end{itemize}
manner as viewing at home. This factor will tend to lean against Sling Media’s fair use defense.

3. Amount and Substantiality of the Copyrighted Work Used

The amount and substantiality of the copyrighted work used by Sling Media are factors considered both together as a whole and as individual parts. In *Harper v. Nation*, the U.S. Supreme Court analyzed whether a magazine company had violated copyright law by excerpting critical information from a manuscript and publishing it without permission. The district court looked at the qualitative nature of the work and determined that the magazine took the “heart of the book.” Sling Media openly explains how the Slingbox is “slinging” the television content from one place to another. Sling Media does nothing more than use the copyrighted content in light of its transformative use of providing convenience. The courts in both *Kelly* and *Perfect 10* asserted that “copying an entire work militates against a finding of fair use.” Both courts could not decide whether the factor weighed more heavily towards one party versus the other, which led to neutral rulings on the issue. The courts analyzed this factor in light of the transformative use. In *Kelly*, the court explained that the necessity to copy the whole image in order for user recognition leads to its transformative use. The courts will likely regard this factor as neutral or weigh it in favor of Sling Media given the nature of the transformative purpose.

4. Effect of the Use on the Potential Market

Courts allocate a substantial amount of weight to the fourth factor regarding the potential market. A court will not only analyze the extent of potential harm created by the Slingbox, but also whether the harm “would result in a substantially adverse impact on the potential market for the original.” A potential plaintiff will need to make a concrete showing of a specific market harm or loss of value from the practice of time-shifting. A plaintiff is likely to do this by showing a statistical model regarding levels of viewing patterns or possible lack of advertiser revenue. In *Sony*, the plaintiffs were unable to show tangible evi-

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150. Id. at 564-65.
152. Id. at 821.
153. See *Nimmer*, supra note 115.
154. Id.
155. *Sony*, 464 U.S. at 482-84.
156. Id.
dence to prove the loss of audience viewing patterns and lower ratings.\textsuperscript{157} The district court noted that the plaintiffs, broadcasters, and advertisers would more than likely benefit from a device that makes it possible for more people to see television programming.\textsuperscript{158} Although the level of media analysis has grown exponentially since the 1980s, Sling Media will likely benefit from almost any media analysis since their device serves to increase access to television content. The content providers still maintain control over their works and the Slingbox helps to provide consumers with access to this content.

Content providers would have a difficult time showing that the Slingbox harms the potential market of providing content to homes. Content providers are likely to find a boost in the potential market due to the Slingbox since the device provides viewers with a convenient and effective means to retrieve their television content. "A transformative work is less likely to have an adverse impact on the market of the original than a work that merely supersedes the copyrighted work."\textsuperscript{159} In Arriba, the court found for the plaintiff Arriba who claimed that showing the images on their Web site would help guide users to the original Web site.\textsuperscript{160} The market was not harmed in that case because the Web site referred to the original content. Although in Arriba the copies could not replace the original works, the Slingbox technically shows a replacement of original content without a copy of any kind. The Slingbox serves a different function by taking the original content and making it available to viewers away from home. Upon media research and analysis, a court would likely view this factor in favor of Sling Media due to its beneficial qualities.

V. SLINGBOX DOES NOT VIOLATE THE DMCA

After claiming Copyright Act violations, opponents to the Slingbox technology may allege violations of the DMCA. The DMCA addresses new issues in digital technology by preventing the illegal use or access to copyrighted works by means of manufacturing, selling, trafficking in technology, or other circumventing devices.\textsuperscript{161} Congress enacted the DMCA in 1998 as an update to existing U.S. copyright laws.\textsuperscript{162} Since the Copyright Act concerns exclusive rights dealing with actual works, it did not include any provisions to deal with digital technology that could infringe on copyright. The DMCA is the U.S. government's response to in-

\textsuperscript{157} Id. at 453 (stating there exists a lack of evidence regarding a negative effect on television viewing or theater attendance due to Betamax VCRs).
\textsuperscript{158} Id. at 454.
\textsuperscript{159} \textit{Kelly}, 336 F.3d at 821.
\textsuperscript{160} Id.
\textsuperscript{161} See \textit{Electronic Frontier Foundation}, supra note 10.
ternational treaties such as the World Intellectual Property Organization ("WIPO") Copyright Treaty, the WIPO Performances and Phonograms Treaty, which addresses protecting against circumvention of technological measures amongst other prevailing digital issues. Copyright holders fear exploitation of their work by piracy over the Internet given its relative ease of use. Industries like the MPAA and Recording Industry Association of America are not afraid to enforce new rights afforded to them by the DMCA. Popular copyright lobbyist and former MPAA President Jack Valenti commented, "if we have to file a thousand lawsuits a day, we'll do it... it's less expensive than losing all of your creative works." As companies and content providers stress that the DMCA is essential to the livelihood of their business, critics assert the DMCA potentially extends monopoly protections for copyright holders, which creates an imbalance of interests against the public's ability to access copyrighted works.

The DMCA addresses three areas of protection for digital technology: (1) circumvention of controls in place to protect access to copyrighted works; (2) distribution of technology to circumvent protective controls; and (3) a distribution of technology that circumvents controls protecting the rights of a copyright owner. The DMCA defines "circumventing" a technological measure without permission as a "means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure." A plaintiff would have to first assert the reproduction of a copyrighted work before applying the DMCA. Section 1201(a) of the DMCA provides for rights against anyone who might try to access copyrighted works by "circumvent[ing] a technological measure that effectively controls access to a work." Concurrently with 1201(a) of the DMCA, section 1201(b) addresses how no person shall be allowed to manufacture and sell any device with the primary purpose of circumventing copyright protections. Given substantial non-infringing uses that could be harmed by the DMCA restrictions, Congress implemented a provision re-

quiring a rulemaking process every three years to address these issues.\textsuperscript{172} The rest of the DMCA bans trafficking of prohibited tools that are capable of circumventing technology.\textsuperscript{173}

A plaintiff will likely scrutinize the Slingbox under the anti-circumvention provisions of the DMCA. A plaintiff has the burden of proof to show that the circumvention of the technological measure “infringes or facilitates infringing a right protected by the Copyright Act” causing piracy.\textsuperscript{174} Under the DMCA, a plaintiff needs to prove circumvention through unauthorized access.\textsuperscript{175} After the plaintiff has proven unauthorized access by technological means, the defendant carries the burden to prove a justifiable use.\textsuperscript{176} The Slingbox does not violate the anti-circumvention provision of the DMCA since it does not make a permanent copy or circumvent any technology protecting television content. The Slingbox does not manipulate the television content in any manner when streaming to another location since the digital signals still contain their inherent protections. To suggest that cable companies or television studios would be fearful of a loss of income due to users of the Slingbox would be improbable. A Slingbox user would already have to be a cable or satellite subscriber. Given the amount of substantial, non-infringing uses for analog signals that are not subject to the DMCA, a court could declare that the DMCA should not apply. However, a court could proceed with analysis under the DMCA since the Slingbox does involve the transmission of digital signals.

If a court allowed a claim to proceed against Sling Media for circumvention of existing technology, it is possible that the court would find in favor of the defendant given prior case law analysis. The issue would be whether the Slingbox circumvents a technological protection by providing an alternate yet similar means of use of the existing technology. Since the Slingbox does allow a user to control their home television set away from home, a plaintiff might assert this type of control as an axiomatic violation of the DMCA since the user is circumventing the remote control device.\textsuperscript{177} Although there have been very few cases applying the DMCA, case law analysis of anti-circumvention provisions shows that courts are unwilling to find liability when no protections are in place to prevent unauthorized use of the technology.

\textsuperscript{172} H.R. Rpt. No. 105-551, Pt. 2 at § 37 (1998) (stating that the House Report rulemaking proceeding should be repeated every two years which was then changed in § 1201(a)(1)(c) to three years); 17 U.S.C. § 1201(a)(1)(c) (2006).


\textsuperscript{174} Chamberlain Group, Inc. v. Skylink Techs., Inc., 381 F.3d 1178, 1203 (Fed. Cir. 2004).


\textsuperscript{176} \textit{Chamberlain Group, Inc.}, 381 F.3d at 1203.

\textsuperscript{177} \textit{See Krakow, supra note 24.}
In *Lexmark International, Inc. v. Static Control Components, Inc.*,178 the defendant was not found liable for creating a microchip that allowed third-parties to sell toner cartridges that worked with the plaintiff's printer products. Lexmark had created microchips with copyrighted computer software to control and monitor operations of toner cartridges and to prevent unauthorized access to the rest of the printer's functions.179 The defendant reverse engineered the microchip to create their own product.180 The Sixth Circuit Court of Appeals ruled that the application of the DMCA's anti-circumvention provisions by the lower court was applied improperly.181 The Circuit Court concluded that the copyrighted software on the microchip for Lexmark toner cartridges did not control access, but rather it is "the purchase of a Lexmark printer that allows 'access' to the program."182 The Slingbox provides software as a means to access a user's home television set, but it is the actual possession of the television itself that allows for control of the set. The Slingbox neither circumvents any technological protections by "slinging" the signal to the user for control of his television set, nor serves as unauthorized access to television content already paid for by the user. In the *Lexmark* decision, Judge Merritt wrote a concurring opinion stating that the DMCA should not be abusively applied in any case unless actual piracy has taken place.183 Manufacturers could otherwise create monopolies for any sort of replacement parts for their products.184 Content industries will have a hard time assessing piracy since the purpose and creation of the Slingbox enhances existing technology only for the individual user.

The ultimate issue a court would address is whether monopoly protections are going to be extended to copyright holders beyond what is originally provided under the Copyright Act. In *Chamberlain Group, Inc. v. Skylink Technologies, Inc.*, the defendant created and sold a universal garage door opener transmitter.185 The plaintiff company claimed a violation of circumventing technology because the company had its own copyrighted computer program to transmit signals for garage door openers.186 The Court of Appeals ruled similarly that the defendant company did not satisfy the requirement of unauthorized circumvention

179. Id. at 529.
180. Id. at 530.
181. Id. at 546.
182. Id.
183. Id. at 522-53.
184. Id.
185. *Chamberlain Group, Inc.*, 381 F.3d at 1183.
186. Id.
because the plaintiff did not put any restrictions on consumers regarding the type of transmitter necessary for use.\textsuperscript{187} The lower court addressed the plaintiff’s argument about never anticipating new technology and warning customers against using unauthorized transmitters:

[A] transmitter is similar to television remote controls in that consumers of both products may need to replace them at some point due to damage or loss, and may program them to work with other devices manufactured by different companies. In both cases, consumers have a reasonable expectation that they can replace the original product with a competing, universal product without violating federal law.\textsuperscript{188}

The Slingbox functions in a similar capacity by utilizing software on a computer to control a television set without violating circumvention provisions of unauthorized use.

Although some courts have shown deference to defendants under the DMCA, other courts have taken the opposite stance with more narrow rulings that could affect the Slingbox. In Davidson & Associations v. Internet Gateway,\textsuperscript{189} the manufacturer of a gaming company sued a third-party operating an Online gaming service in violation of the anti-circumvention provision. Blizzard created video games and launched “Battle.net” to allow users of their games to compete online.\textsuperscript{190} To protect against piracy and infringement, users were allowed to only log on to the company’s Web site which would authenticate the user’s game program via a “CD-Key.”\textsuperscript{191} By utilizing reverse engineering, and without permission from the videogame company, the alleged infringers created a Web site that served the exact same function as Battle.net.\textsuperscript{192} The Eighth Circuit Court of Appeals held that the infringers illegally reverse engineered the Web site by circumventing the protections in place which allowed some pirated users to compete Online without safeguards.\textsuperscript{193} A court might determine that the Slingbox poses a threat to content providers. The technology has encryption keys to make sure only the user has access to their television programming. The court in Davidson basically stated that creating an alternative forum for gaming of copyrighted software would be a violation under the DMCA despite non-infringing uses. A court might take a similar narrow approach with Sling Media and determine that the Slingbox infringes on some copyrighted elements of television programming despite a multitude of non-infringing uses. A

\textsuperscript{188} Chamberlain Group, Inc. v. Skylink Techs., Inc., 292 F. Supp. 2d 1046 (N.D. Ill. 2003), aff’d 381 F.3d 1178 (Fed. Cir. 2004).
\textsuperscript{189} Davidson & Assoc. v. Internet Gateway, 334 F. Supp. 2d. 1164, 1172-73 (E.D. Mo. 2004).
\textsuperscript{190} Id.
\textsuperscript{191} Id. at 1169.
\textsuperscript{192} Id.
\textsuperscript{193} Id.
court taking this approach would not only act as a barrier to protect the content industry, but it would also be displaying anti-competitive measures that go against the original intent of copyright law.

VI. APPROPRIATE DMCA APPLICATION AND RECOMMENDATION

The previous cases show how Sling Media would not be liable under the DMCA. Even though only about a dozen court cases exist to date analyzing the anti-circumvention provisions of the DMCA, courts are reaching binary decisions to make future cases easier to decipher. Binary decisions can create a slippery slope of dangerous decisions that could hinder technological research, place limits on non-infringing uses of reverse engineering, and restrain expressive activity altogether. All of these factors would go against the original intent and purpose of the Copyright Act. If courts improperly apply the DMCA, courts could make the dubious decision to stop valid activities of new technology instead of preventing copyright infringement. By ruling against Sling Media and its Slingbox device under a copyright infringement claim, a court will be going against the very purpose and traditional intent of copyright law.

As technology and business models evolve rapidly, existing laws will become less relevant and may deter the innovation that copyright law was originally intended to promote and protect. The DMCA is classified under the Copyright Act, even though it does not specifically allow for copyright infringement defenses such as fair use. This presents a tip in the balance of monopoly rights to the copyright holder versus the individual.

The courts should assess all cases involving the DMCA under some of the traditional fair use defense factors. The concept of fair use should be applied in the digital arena given the complexity of many cases. Unlike during the time of the Sony decision, plenty of media and electronic research exists to assess the harm to a potential market. Some courts are interpreting the law in a manner which allows for content providers to have total monopolistic control over what is allowed under the copyright act. The DMCA's anti-circumvention provisions make it a likely violation for anyone to access permissible content through technology that the content industry fears as infringing rather than unique. The balance of interests in copyright will shift almost entirely in favor of the

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195. See H.R. Rep. No. 2222, supra note 55 (discussing the purpose of the Copyright Act).
copyright holder because their work would be protected and controlled beyond the permissible means originally intended. If the courts applied fair use to each case involving the DMCA's anti-circumvention provisions, they could reconcile the interests of both parties instead of acting as an impediment to future advancements in technology.

Although critics may assert that Congress has already provided for exceptions under the DMCA to account for legitimate uses of copyright, the rapid pace and scale of technological innovation will outdate many of these exceptions. The law may not be able to account for advances in technology, which is why the fair use defense would be beneficial. Critics can assert that courts would be provided with “carte blanche”\textsuperscript{196} in making determinations regarding liability under the DMCA. Although a valid argument, such a practice could be more beneficial than a court outright determining liability of technological devices based on potential infringement.

Another likely alternative solution is for the content industry and technology companies to strike an agreement without judicial interference. A private agreement will not only improve education with consumers, but will also help benefit future relationships in the digital arena. The world has changed due to easily accessible information on the Internet. In order to benefit consumers, if the content industry and technology companies can strike an agreement regarding new ways to use content, then Congress should stay out of the picture to foster cooperation between copyright holders and technology companies.

\textbf{VII. CONCLUSION}

Even though Sling Media has taken precautions regarding the technology, lawsuits are likely imminent in the near future. Orb CEO Ted Shelton commented, “I'll bet there will be a Supreme Court ruling sometime in the next decade specifically addressing this issue: Does the consumer have the right to place-shift as they do time-shift their content?”\textsuperscript{197} Time Magazine announced its “Person of the Year” for 2006.\textsuperscript{198} It should come as no surprise that it was none other than “You.”\textsuperscript{199} The speed at which information can be accessed has grown

\textsuperscript{196} Merriam-Webster Dictionary, http://www.m-w.com/dictionary/carte%20blanche (last visited Jan. 9, 2008) (providing definition for carte blanche which is defined as full discretionary power).

\textsuperscript{197} See Wallenstein, supra note 13.

\textsuperscript{198} Lev Grossman, “Power to The People: You Control the Media Now, and the World Will Never Be the Same. Meet the Citizens of the New Digital Democracy,” TIME, Dec. 25, 2006, at 42 (discussing how the World Wide Web has evolved to the point where users are able to have access to more multimedia than ever before signifying a revolution in the digital world).

\textsuperscript{199} Id.
exponentially due to new media and technology. As more users rapidly merge into the digital arena, courts need to truly balance the public's interest equally with the private benefits provided to copyright holders. The DMCA appears to lean on the side of protecting the content industry more than the public. The public is more interested in accessing information in the digital age. Although there could be infringing uses of the Slingbox, the device is probably safe from liability under fair use given the substantial non-infringing uses and lack of any copy of a work made by the device. No circumvention of technological measures takes place as demonstrated under the DMCA analysis. Courts need to ensure they do not obstruct innovative technology with shotgun decisions in the present. Former national hockey player Wayne Gretzky said it best when questioned about his ability to keep playing the sport at a high level year after year: “I skate to where the puck is going to be, not where it has been.”