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‘Fixing’ the First Sale Doctrine: Adapting Copyright Law to the New Media Distribution Paradigm

SAMUEL PERKINS*

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INTRODUCTION

The music business is a cruel and shallow money trench, a long plastic hallway where thieves and pimps run free, and good men die like dogs. There’s also a negative side.\(^1\)

When Steve Jobs, the visionary CEO of Apple, introduced the iTunes Music Store in 2003, he “demonstrated that the Internet was made for music delivery.”\(^2\) But the iTunes Music Store was not revolutionary in the sense that it provided consumers the ability to download music from the Internet—services like Napster had been doing it for years.\(^3\) Rather, the Store revolutionized the music industry because it provided users a legal means of purchasing and downloading music over the Internet.\(^4\) That revolution has proven quite lucrative for the technology giant; Apple’s online sales of digital content exceeded ten billion dollars in 2013.\(^5\) However, while Apple’s online music store was a victory for consumers over the music business’s “cruel and shallow money trench,” perhaps the “negative side” was that it also created a mutual interest between Internet media distribution services and the music industry in preventing the transfer or resale of digital media between individual consumers.\(^6\)

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4. See Jobs, *supra* note 1 (“Why has [piracy] proliferated? Well, because there is no legal alternative.”).


While Mr. Jobs showed the world that the Internet was made for music delivery in 2003, consumers quickly realized that the Internet was the perfect conduit for delivering all types of digital media. Consequently, the Internet fundamentally altered the way consumers purchase and use copyrighted works. For example, a decade ago, if you wanted to buy a music album or a movie, you would go to the record or movie store and purchase a CD or DVD. You could then play the disk at your home, bring it to a friend’s house, listen to it in your vehicle, or sell it without ever worrying about copyright infringement. Today, music and movies are often purchased through online digital marketplaces, such as Apple’s iTunes or Amazon’s CloudPlayer, where they can be downloaded to a phone, tablet, or laptop. These services also allow users to store their digital content in the cloud instead of on local storage devices such as hard drives or compact disks. In addition, subscription music and video services like Spotify and Netflix give consumers a new alternative to purchasing media—allowing subscribers instant access to vast libraries of digital content for a monthly fee. This paradigm shift in media distribution business models—replacing the physical distribution and sale of CDs and DVDs with digital media downloads, cloud storage, and subscription services—has made some sections of the Copyright Act ambiguous and difficult to apply to new technologies.

This Comment addresses the legal dichotomies between physical and digital mediums and concludes by arguing that Section 109 of the Copyright Act, commonly known as the first sale doctrine, should be amended to address new technologies and market changes in media distribution platforms. Alternatively, courts should apply common law copyright exhaustion principles to resolve the disparate legal treatment between physical and digital media. In the interim, as consumers continue to transition from physical to digital mediums, the necessity for a digital first sale doctrine in copyright law will become even more pronounced.

Part I of this Comment provides a background and history of the Copyright Act and related statutes. Part II presents three recent cases—Capitol Records, LLC v. ReDigi, Inc.; Cartoon Network LP v. CSC Holdings,
Inc., 13 and Kirtsaeng v. John Wiley & Sons, Inc. 14—in order to illustrate the struggle courts face when applying existing copyright law to new technologies and formats. 15 Part III explains how cloud computing is changing the way consumers access and acquire digital media, and proposes that Congress re-work some provisions of the Copyright Act to restore the balance between the competing ownership interests of consumers and copyright holders. 16

Alternatively, Part IV posits that common law copyright exhaustion principles can and should be used to provide a more straightforward and cogent approach to analyzing copyright interests in digital media downloads. 17 This Part also shows that consumers are negatively impacted when copyright owners are allowed to exert unchecked control over works after they enter the stream of commerce. 18 Part V surveys the different ways digital media retailers and Internet service providers have addressed piracy concerns. 19 Finally, Part VI concludes by arguing that, as consumers continue to transition to Internet platforms as their primary conduit for purchasing and accessing digital content, the need for a digital first sale doctrine will become even more apparent. 20 Therefore, courts should take advantage of common law copyright exhaustion principles until adequate changes are made to the Copyright Act. 21

I. THE COPYRIGHT ACT, THE DIGITAL MILLENNIUM COPYRIGHT ACT, AND THE FIRST SALE DOCTRINE.

A. THE COPYRIGHT ACT OF 1976

The Copyright Act grants certain exclusive rights to the owner of a copyrighted work, including the right to reproduce, distribute, and publicly perform the work. 22 As codified, copyright protection extends to “original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” 23 However, these rights are not unlimited. Sections 107 and 109 of

15. See infra Part II, at 7.
16. See infra Part III, at 12.
17. See infra Part IV, at 19.
18. See infra Part IV (B), at 20.
19. See infra Part V, at 23.
20. See infra Part VI, at 25.
the Act—the fair use and first sale doctrines—place limits on a copyright holder’s ability to exploit works once they have entered the marketplace.24 The first sale doctrine allows “the owner of a particular copy or phonorecord lawfully made under this title . . . without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.”25 Similarly, the fair use doctrine protects the use of a copyrighted work “for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research” against claims of infringement.26 Together, these two doctrines significantly limit the copyright holder’s control over a work after it has entered the market.27 For example, the first sale doctrine prevents the owner of a copyrighted work, such as a book, from controlling the sale or distribution of a lawfully made (i.e., not pirated) copy once the particular copy has been sold in the primary market.28 Thus, once a book is purchased from a bookstore, the owner of that particular copy is able to sell the book to a friend, donate it to a library, or sell it to a used bookstore.29 Likewise, the fair use doctrine functions to limit the copyright owner’s ability to control the reproduction or distribution of a work when the copied portion is minor in relation to the whole,30 when the copying is used for education or a non-commercial purpose,31 or when some amount of copying is necessary in order to provide news, commentary, or criticism of the work.32

B. THE DIGITAL MILLENNIUM COPYRIGHT ACT

In addition to the Copyright Act, Congress passed the Digital Millennium Copyright Act (DMCA) to address technological advancements made since the Copyright Act was passed in 1976.33 Section 512 of the Act limits direct liability for copyright infringement for Internet service providers...
(ISPs), including private cloud-based data-storage companies, through a safe harbor provision.\textsuperscript{34} For example, this statutory limitation shields services like Google and Dropbox from liability when individual users upload illegal copies to their personal accounts.\textsuperscript{35} On the other hand, Section 1201 of the DMCA makes it illegal to circumvent the anti-piracy measures in digital media files that prevent the unauthorized copying of protected works.\textsuperscript{36} Thus, while Section 106 of the Copyright Act prevents the owner of a copy from actually making illegal replications of the work, Section 1201 of the DMCA makes it illegal for the owner of that copy to bypass the anti-piracy measures that restrict such copying.\textsuperscript{37} While these technological measures, commonly referred to in this Article as Digital Rights Management, have helped to curb Internet piracy through tethering media content to a physical device or owner, they have also diminished the function of the first sale doctrine because they prevent the copy owner from selling or transferring their copy to others.\textsuperscript{38} Moreover, the DMCA has been criticized for its inadequacies, especially in the context of cloud-based storage and computing.\textsuperscript{39} Although the DMCA helped address piracy concerns from peer-to-peer file-sharing services such as Napster, Grokster, and Aimster,\textsuperscript{40} it fails to offer meaningful protection in the context of private, cloud-based storage platforms.\textsuperscript{41}

C. THE FIRST SALE DOCTRINE

One of the biggest legal issues relating to digital media downloads involves the first sale doctrine.\textsuperscript{42} Traditionally, the first sale doctrine limited a copyright holder’s ability to exploit a protected work—such as a movie on a DVD or a sound recording on a CD—to the initial sale.\textsuperscript{43} This allowed used record stores, movie rental companies, and libraries to sell or lend lawfully made copies of sound recordings and movies.\textsuperscript{44} The policy considerations

\textsuperscript{34} See 17 U.S.C. § 512 (2012); Anne Datesh, Note, Storms Brewing in the Cloud: Why Copyright Law Will Have to Adapt to the Future of Web 2.0, 40 AIPLA Q.J. 685, 694-95 (2012).
\textsuperscript{35} See Datesh, supra note 34, at 694-95.
\textsuperscript{36} See Perzanowski et al., supra note 27, at 902.
\textsuperscript{37} See Datesh, supra note 34, at 724.
\textsuperscript{38} Perzanowski et al., supra note 27, at 903.
\textsuperscript{39} Id.
\textsuperscript{41} See generally Cullen Kiker, Amazon Cloud Player: The Latest Front in the Copyright Cold War, 17 J. TECH. L. & POL’Y. 235, 288-89 (2012).
\textsuperscript{42} 17 U.S.C. § 109(a) (2012).
\textsuperscript{43} See Kiker, supra note 41, at 250.
behind the first sale doctrine center on the fact that “[p]hysical copies of works degrade with time and use, making used copies less desirable than new ones.” Since physical copies of works are restricted by geography and must be transported for resale, a “natural brake” restricts the volume of sales in secondary markets.

The application of the first sale doctrine to copyrighted works “fixed in any tangible medium of expression,” such as records, CDs, and DVDs, is relatively straightforward. However, the increasing prevalence of digital media and the ability to download movies and music via the Internet has created novel legal issues that do not fit well with statutory definitions or judicial interpretations contemplating only physical mediums. Complicating matters further, digital media downloads often subject the purchaser to lengthy End User License Agreements (EULAs) and the digital content itself may contain Digital Rights Management (DRM) technology that restricts the user’s control over the media. Finally, the popularization of subscription music services such as Spotify, iTunes Radio, and Pandora, as well as subscription video services like Netflix, Redbox, and Amazon Prime have fundamentally altered the traditional media distribution business model. In fact, subscription services like Spotify are likely

46. DMCA Report, supra note 45.
47. See Kiker, supra note 41, at 250.
50. See Davis, supra note 48, at 368.
51. See Spotify, All Your Music, supra note 9.
responsible for the first decline in digital music sales since the inception of iTunes in 2001.\textsuperscript{58} In order to understand how the first sale doctrine operates to limit a copyright holder’s control over a work once it has entered the stream of commerce, it is necessary to examine how courts have construed the Copyright Act’s fixation requirement, the reproduction right, and the distribution right.

II. CASES DEALING WITH THE FIRST SALE DOCTRINE

A. THE REPRODUCTION RIGHT: CAPITOL RECORDS, LLC V. REDIGI, INC.

ReDigi launched its “online marketplace for digital used music” on October 13, 2011, offering users the ability to buy and sell digital music previously purchased from iTunes.\textsuperscript{59} Essentially, ReDigi offered an online market analogous to a used record store.\textsuperscript{60} After the user downloads ReDigi’s “Media Manager,” the program searches the computer hard drive for media eligible for sale on ReDigi’s website.\textsuperscript{61} Once the scan is complete, the user is presented with a list of files—iTunes downloads and music purchased from ReDigi—that are eligible for sale.\textsuperscript{62} If a user decides to sell a music file, the Media Manager software uploads the copy to ReDigi’s servers and simultaneously deletes the file from the user’s computer.\textsuperscript{63} Thereafter, the software continuously runs in the background to ensure the user has not retained music that has already been sold or uploaded for sale.\textsuperscript{64}

Once users upload a file to ReDigi’s “Cloud Locker” server, they have the option either to store the file in the “Cloud Locker” for streaming and personal use, or place the music file in ReDigi’s digital marketplace for sale.\textsuperscript{65} ReDigi characterizes the upload process as a piece-by-piece migration of the file “analogous to a train” running from the user’s computer to ReDigi’s servers, so that the file never exists in more than one place at a time.\textsuperscript{66} In contrast, Capitol Records insists that ReDigi’s upload process,
transferring a file from the user’s computer to ReDigi’s servers, “necessarily involves copying.”\(^{67}\) ReDigi earns a sixty percent commission on every sale, while the seller retains twenty percent of the sale price and an additional twenty percent is held in an escrow account for royalty payments for the artist.\(^{68}\)

To determine whether ReDigi violated Capitol’s reproduction or distribution rights, the court first looked to Section 106 of the Copyright Act.\(^{69}\) Since the reproduction right of copyright owners defines sound recordings as “works that result from the fixation of a series of musical, spoken, or other sounds,” the protected work is distinct from the material object it is fixed in.\(^{70}\) Thus, the reproduction right is implicated once the owner of a particular copy embodies the copyright holder’s work in a material object.\(^{71}\) Since, by their very nature, digital music files must be embodied in a new material object (i.e., a hard drive) after they are transferred over the Internet, the transfer implicates the copyright owner’s exclusive reproduction right under the Copyright Act.\(^{72}\)

Rejecting ReDigi’s “train” analogy, the court held that ReDigi infringed Capitol’s reproduction right, even if the original file was deleted simultaneously, because the file transfer (from the user’s computer to ReDigi’s servers) fixed the copy in a new material object.\(^{73}\) Although the court acknowledged that the application of the first sale doctrine to digital media files was necessarily limited, it noted that Section 109(a) still allowed for the owner of a particular phonorecord to sell the device onto which the file was originally downloaded, such as a hard drive, mp3 player, or iPod.\(^{74}\)

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67. Id. at 646.
68. Id.
70. See ReDigi, 934 F. Supp. 2d at 646; H.R. REP. No. 94–1476 at 56 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5669 (“The copyrightable work comprises the aggregation of sounds and not the tangible medium of fixation. Thus, ‘sound recordings’ as copyrightable subject matter are distinguished from ‘phonorecords,’ the latter being physical objects in which sounds are fixed.”).
71. DAVID NIMMER, 1 NIMMER ON COPYRIGHT, § 8.02 (1965).
72. See ReDigi, 934 F. Supp. 2d at 655.
73. Id. The court noted that:

ReDigi’s argument fails for two reasons. First, while technological change may have rendered Section 109(a) unsatisfactory to many contemporary observers and consumers, it has not rendered it ambiguous. The statute plainly applies to the lawful owner’s ‘particular’ phonorecord, a phonorecord that by definition cannot be uploaded and sold on ReDigi’s website. Second, amendment of the Copyright Act in line with ReDigi’s proposal is a legislative prerogative that courts are unauthorized and ill suited to attempt.

Id.
74. Id.
Yet, such a limited reading of the first sale doctrine usurps the long-standing balance of rights between consumers and copyright holders.

B. THE FIXATION REQUIREMENT: CARTOON NETWORK LP V. CSC HOLDINGS, INC.

In *Cartoon Network LP v. CSC Holdings, Inc.*, the Second Circuit was tasked with determining what constituted a fixation in a material object as defined by the Copyright Act. In that case, CSC Holdings (Cablevision), a cable television operator, released a new Remote Storage Digital Video Recorder (RS-DVR), allowing its customers to record cable programming on Cablevision’s remote servers without purchasing a standalone DVR device.

Cablevision’s RS-DVR system works by intercepting live feeds sent from content providers to cable companies and splitting the feed into two streams. The first data stream is relayed directly to customers as expected. However, the second data stream is routed into a Broadband Media Router (BMR) where the video stream is buffered and reformatted before being sent to high-capacity hard drives. If an RS-DVR customer requests a particular program, the stream will move from a buffer to a hard drive on Cablevision’s remote servers. Old data is erased from the buffer as new data enters so that the buffer holds no more than 1.2 seconds of television programming at a time. The process is similar to traditional DVRs in the sense that customers use a remote control to record programming in advance, but may not record an earlier portion of a program that has already begun.

According to the court, the main difference between traditional DVRs and Cablevision’s RS-DVR is that:

> [I]nstead of sending signals from the remote to an on-set box, the viewer sends signals from the remote, through the cable, to [Cablevision’s] Server at [their] central facility. In this respect, RS-DVR

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75. See *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 124 (2d Cir. 2008).

76. See *id.* “RS-DVR customers may then receive playback of those programs through their home television sets, using only a remote control and a standard cable box equipped with the RS-DVR software.” *Cartoon Network*, 536 F.3d at 124.

77. *Id.*

78. *Id.*

79. *Id.*

80. *Id.* at 125.

81. *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 125 (2d Cir. 2008).

82. *Id.*
more closely resembles a [Video On-Demand] service, whereby a cable subscriber uses his remote and cable box to request transmission of content, such as a movie, stored on computers at the cable company’s facility. But unlike a [Video On-Demand] service, RS-DVR users can only play content that they previously requested to be recorded.  

To address the issue of whether Cablevision’s buffering of the feeds contain copyrighted works “reproduced” the work “in copies” within the meaning of Section 106(1) of the Copyright Act, the court first looked to the definitions of copies and fixed.  

According to the court, section 101 of the Act imposes two distinct, but related requirements: the work must be embodied in a medium (the embodiment requirement), and it must remain embodied in the medium for a period of more than transitory duration (the duration requirement).  

Thus, “[u]nless both requirements are met, the work is not ‘fixed’ in the buffer, and, as a result, the buffer data is not a ‘copy’ of the original work whose data is buffered.”  

Finally, the court looked to the Copyright Office’s 2001 DMCA Report to determine when a copy is fixed within the meaning of the Copyright Act, but criticized the Report for reading the “transitory duration” language out of the statute.  

The court held that because the copyrighted works were not embodied in the buffers for a period of more than transitory duration, they were not ‘fixed’ within the meaning of Section 101 of the Act.  

Since, by definition, a copy must be fixed in a material object, Cablevision’s services did not create copies within the meaning of the Act.

83.  Id.  
84.  Id. at 127.  “‘Copies’ are material objects . . . in which a work is fixed by any method . . . and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”  
See 17 U.S.C. § 101 (2012) (“A work is ‘fixed’ in a tangible medium of expression when its . . . embodiment is sufficiently permanent or stable to permit it to be reproduced for a period of more than transitory duration.”).  
85.  Cartoon Network LP, 536 F.3d at 127.  
86.  Id. at 125.  
87.  Id. at 127.  
88.  See id.; DMCA Report, supra note 45, at 111 (a work is fixed “[u]nless a reproduction manifests itself so fleetingly that it cannot be copied, perceived or communicated . . . ”).  
89.  Cartoon Network, 536 F.3d at 130.  
90.  Id.
C. THE DISTRIBUTION RIGHT: KIRTSANG V. JOHN WILEY & SONS, INC.

In *Kirtsaeng v. John Wiley & Sons, Inc.*, the Supreme Court extended the first sale doctrine to copies of a copyrighted work lawfully made abroad. In that case, John Wiley, a publisher of academic books, sued Supap Kirtsaeng, a college student from Thailand, after Kirtsaeng sold foreign editions of textbooks in the United States. Wiley claimed that Kirtsaeng infringed its section 106(3) exclusive distribution right when he imported the textbooks and sold them without Wiley’s permission. Kirtsaeng argued that he did not need Wiley’s permission to sell the books because section 109(a) permitted him to resell the “lawfully made” books without the permission of the copyright holder. Thus, the Supreme Court was tasked with deciding whether the words “lawfully made under this title” impose a geographical limitation on section 109(a)–the first sale doctrine.

First, the Court looked to the text of section 109(a) and concluded that the most logical interpretation of the language favored a nongeographical interpretation. According to the majority view, “lawfully made” distinguishes copies that were made lawfully from those that were made illegally, and “under this title” is used to set forth or define the standard of lawfulness. On the other hand, Wiley’s interpretation of the words “lawfully made” would deprive the words of significance. Moreover, “neither ‘under’ nor any other word in the phrase means ‘where.’” Thus, the Court concluded that a geographical interpretation would create more linguistic problems than it would solve.

Next, the Court looked to the history and context of the first sale doctrine for support of a geographical restriction. Specifically, the Court compared the language of section 109(a) with its immediate predecessor

92. *Id.* at 1356.
93. *Id.* at 1357.
94. *Id.*
95. *Id.* at 1358.
96. *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351, 1358 (2013) (“[T]he nongeographical reading is simple, it promotes a traditional copyright objective (combatting piracy), and makes word-by-word linguistic sense.”).
97. *Id.*
98. *Id.* (the Court asked: “How could a book be un lawfully ‘made under this title’?”).
99. *Id.* at 1359.
100. *Id.* at 1360.
under the 1909 Copyright Act. Under the previous version, the Act read, “Nothing in this Act shall be deemed to forbid, prevent, or restrict the transfer of any copy of a copyrighted work the possession of which has been lawfully obtained.” Under the current version of the Act, the statute reads, “the owner of a particular copy or phonorecord lawfully made under this title is entitled to sell or otherwise dispose of the possession of that copy or phonorecord.” The Court reasoned that the change in language was meant to limit the scope of the first sale doctrine to owners of a particular copy, as opposed to lawful possessors of a copy. Thus, the legislative history behind Section 109(a) clearly favored a non-geographical interpretation.

Finally, the Court looked at how imposing a geographical restriction on Section 109(a) would undermine basic objectives of the Copyright Act. First, the Court noted that libraries contain millions of books published abroad, and imposing a geographical interpretation would “likely require the libraries to obtain permission (or at least create significant uncertainty) before circulating or otherwise distributing these books.” Similarly, used-book dealers rely on the assumption that the first sale doctrine applies to books printed and published abroad. Reading a geographical restriction into section 109(a) would injure a large portion of the used-book business and create uncertainty for books made outside the United States. Moreover, a geographical interpretation of section 109(a) would create difficulties for companies who manufacture products such as automobiles abroad and then import the products into the United States. For example, such interpretation would prevent the resale of a foreign vehicle without first obtaining the permission of the holder of each copyright on each piece of copyrighted automobile software. Thus, the Court rejected a geographical interpretation of section 109(a), reasoning that “the practical problems . . . are too serious, extensive, and likely to come about . . . particularly in light of the ever-growing importance of foreign trade to America.”

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103. Kirtsaeng, 133 S. Ct. at 1360.
104. Id. (citing 17 U.S.C. § 109 (2006)).
105. Kirtsaeng, 133 S. Ct. at 1360.
106. Id. at 1361.
107. Id. at 1362.
108. Id. at 1364.
109. Id.
111. Id.
112. Id.
113. Id. at 1367.
III. CURRENT PROBLEMS AND PROPOSED SOLUTIONS TO THE DIGITAL FIRST SALE DILEMMA

A. THE FIXATION REQUIREMENT LOSES RELEVANCE IN THE CLOUD

Section 101 of the Copyright Act defines “copies” as material objects in which a work is fixed by any method, and from which the work can be reproduced.114 “A work is ‘fixed’ in a tangible medium of expression when its embodiment . . . is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.”115

In ReDigi, the court relied on these definitions, reasoning that because the transfer of a digital file over the Internet requires a new copy to be created on the recipient’s hard drive, the reproduction right is implicated even when the original file is simultaneously deleted.116 However, the ReDigi decision effectively read the duration requirement out of the statute.117 Because the copies only existed for a brief moment (during the transfer from the user’s computer to ReDigi’s servers), they were not “sufficiently permanent or stable”118 and incapable of being reproduced “for a period of more than transitory duration.”119 Thus, the ReDigi court should have concluded that the reproductions were not fixed, and therefore not copies within the meaning of the Act.120 This interpretation is also compatible with the holding in Cartoon Network, which criticized the district court’s decision for reading the durational requirement out of the statute.121 These cases illustrate the difficulty courts face in applying copyright principles to digital

115. Id.
117. See id.
118. Compare MAI Systems Corp. v. Peak Computer, Inc., 991 F.2d 511, 517 (9th Cir. 1993) (holding that a computer program stored in the computer’s temporary memory (RAM) was capable of being perceived, reproduced, or otherwise communicated) with Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 123 (2d Cir. 2008) (noting that the MAI Systems court did not correctly analyze the duration requirement).
120. See id.
121. See id.

The district court mistakenly limited its analysis primarily to the embodiment requirement. As a result of this error, once it determined that the buffer data was “[c]learly . . . capable of being reproduced,” i.e., that the work was embodied in the buffer, the district court concluded that the work was therefore “fixed” in the buffer, and that a copy had thus been made.

Id.
media downloads. Unfortunately, the arduous fixation analysis becomes even more convoluted when applied to cloud-based distribution platforms for digital media.

The advent of cloud storage and computing is fundamentally altering the way consumers buy, store, and access digital media. Digital music distributors such as Apple’s iTunes Store or Amazon’s CloudPlayer allow users to purchase digital media and store it on the distributor’s servers. This allows customers to access the same media file on multiple devices, download the file, or stream it. The emergence of cloud-based platforms has also created an alternative to purchasing media, and a growing number of consumers are transitioning to paid subscription-based streaming services like Netflix and Spotify. Essentially, these services create a limited license for subscribers to reproduce a copyrighted work on any device associated with their account. The shift in the digital marketplace—from purchasing and downloading media files onto local storage devices to purchasing and storing content using cloud storage—presents an interesting question: What happens when you purchase, but do not download, a song from iTunes or Amazon?

In ReDigi, the court stated that “a ReDigi user owns the phonorecord that was created when she purchased and downloaded a song from iTunes to her hard disk.” Thus, since a copy must necessarily be downloaded before it is created, an iTunes user who purchases a song without downloading it should be able to sell his or her access to the song (via their account information) without violating the reproduction right. While the iTunes EULA prohibits sharing or transferring personal accounts, the hypothetical raises serious questions about the applicability of existing copyright law to digital media. Specifically, the fixation requirement, requiring a work to be fixed in a tangible medium (i.e., a computer hard

123. See generally ReDigi, 934 F. Supp. 2d at 655; Kiker, supra note 41, at 239-40.
124. See Kiker, supra note 41, at 239-40.
125. See Datesh, supra note 34, at 694.
126. See, e.g., Apple, iCloud, supra note 8.
127. See Christman, supra note 57 (attributing the decline in digital music sales to the increasing popularity of streaming music services).
128. See, e.g., Apple, iCloud, supra note 8.
129. See Kiker, supra note 41, at 282.
131. See, e.g., Apple, iCloud, supra note 8.
132. See id.
133. See generally Apple, User License Agreement, supra note 49.
134. See Perzanowski et al., supra note 27, at 902.
drive) for a period of more than transitory duration, is ill-suited for cloud storage applications because the fixation initially occurs on the distributor’s server, not the user’s hard drive.\textsuperscript{136} Since “actual dissemination of a copy”\textsuperscript{137} is a prerequisite for infringement of the distribution right, copy owners who resell their media that is stored in the cloud may be able to avoid liability for copyright infringement because the copy has not changed hands;\textsuperscript{138} rather, it remains on the cloud server.\textsuperscript{139} Additionally, files stored on hard disks regularly move to different locations on the same disk, to different disks on the same server, or even between servers.\textsuperscript{140} Thus, until the Copyright Act is amended, courts will continue to struggle with the application of existing copyright law to new technologies and platforms and services.\textsuperscript{141}

B. A MORE WORKABLE APPROACH: AVOIDING TECHNICAL ANALOGIES TO PHYSICAL MEDIA DISTRIBUTION MODELS

The ReDigi court took a very technical approach in defining ReDigi’s digital marketplace.\textsuperscript{142} In ReDigi, the court relied on the fact that a new copy of the music file must be created on the recipient’s hard drive when an Internet transfer takes place in holding that the service infringed the copyright holder’s reproduction right.\textsuperscript{143} However, the practical effect of the service was more akin to ReDigi’s “train” analogy; transferring a copy over the Internet so that the data does not exist in two places at any one time.\textsuperscript{144}

Moreover, the Second Circuit’s decision in Cartoon Network suggests that
a transfer of a media file over the Internet does not necessarily involve copying, especially when the copy is not fixed for more than a transitory duration. The common problem in ReDigi and Cartoon Network is that section 101’s fixation requirement was designed for an era that used physical media. In the age of digital media downloads and cloud storage services, it is better to think of content as fixed to a user’s account, not in a material object such as a CD or DVD. The fixation requirement as currently interpreted creates a significant obstacle for owners of digital media to sell, transfer, or otherwise alienate their digital media libraries.

Instead of defining the material object as a user’s hard drive, courts should interpret the fixation requirement in relation to the user’s account. Under this approach, a work would be fixed in a material object (the user’s account or digital library) when a customer purchases media from an online marketplace such as Apple’s iTunes or Amazon’s CloudPlayer. Thus, a user would be free to stream, download, and access all media purchased under his or her account without violating the copyright holder’s reproduction or distribution right. However, users would not be able to access content that they have not purchased under that particular account. This approach closely mirrors the industry practice; Apple and Amazon already offer these services, avoiding copyright barriers by contracting with record labels and production companies and attempting to license, rather than sell

145. See Cartoon Network, 536 F.3d at 129 (“In sum, no case law or other authority dissuades us from concluding that the definition of ‘fixed’ imposes both an embodiment requirement and a duration requirement.”).
147. See, e.g., Apple, iCloud, supra note 8.
148. See ReDigi, 934 F. Supp. 2d at 653; Cartoon Network, 536 F.3d at 123.
149. See ReDigi, 934 F. Supp. 2d at 649. The court notes that: Because the reproduction right is necessarily implicated when a copyrighted work is embodied in a new material object, and because digital music files must be embodied in a new material object following their transfer over the Internet, the Court determines that the embodiment of a digital music file on a new hard disk is a reproduction within the meaning of the Copyright Act.
150. See Perzanowski et al., supra note 27, at 943.
151. See id. (noting that DRM technologies already tie user-accounts to protected media files).
152. See Kiker, supra note 41, at 244; see also Datesh, supra note 34, at 703-04 (noting that cloud storage creates legal ambiguities and enforcement problems under the DMCA).
153. See Perzanowski et al., supra note 27, at 943 (noting that DRM technologies already tie user-accounts to protected media files).
digital media. In fact, consumer preference for subscription music services like Spotify, which give subscribers access to a vast library of digital music for a fixed monthly fee, are thought to be responsible for the first ever decline in digital music sales since Apple’s iTunes opened in 2001. Although defining the fixation requirement in terms of a user account would provide consumers with legal certainty and greater personal control over their purchased content, without a digital first sale doctrine consumers would still be unable to sell or transfer their purchased media content to others.

C. §117 & COMPUTER PROGRAMS—A ROADMAP FOR CREATING A DIGITAL FIRST SALE DOCTRINE

If Congress ever considers incorporating a digital first sale limitation into the Copyright Act, section 117 would provide them with an ideal template for doing so. Section 117 of the Copyright Act was first introduced in 1980 to extend limited copyright protection to computer programs. The current version of the statute places limitations on the exclusive rights of copyright holders in computer programs, allowing copy owners to make copies of, and alterations to, the original program when it is necessary for the use, backup, or repair of the program. Additionally, section 117 con-

154. See Apple, User License Agreement, supra note 49 (“This license granted to You for the Licensed Application by Application Provider is limited to a non-transferable license . . . .”).
155. See Christman, supra note 57 (attributing the decline in digital music sales to the increasing popularity of streaming music services).
156. See, e.g., Apple, iCloud, supra note 8.
157. See, e.g., Apple, User License Agreement, supra note 49 (“This license granted to You for the Licensed Application by Application Provider is limited to a non-transferable license . . . .”). Although companies such as Apple continue to allow users greater access and flexibility to their purchased digital content, these rights only pertain only to personal use. Thus, without a digital first sale doctrine, users are still prevented from transferring or reselling their digital media libraries to others.
159. Id.
160. 17 U.S.C. § 117(a) (2012) states:
  Making of additional copy or adaptation by owner of copy.-- Notwithstanding the provisions of section 106, it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided: (1) that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner, or (2) that such new copy or adaptation is for archival purposes only and that all archival cop-
tains a corollary to the first sale doctrine of section 109, allowing the owner of a copy to sell, lease, or transfer their copy of the program. The rationale behind allowing copy holders of computer programs to make copies and adaptations of the work stems from the fact that computer programs may need to be reproduced in order to be used as intended. Moreover, many computer programs must be adapted or modified in order to function with the user’s hardware and software configuration. Copies are also necessary to the user because computer programs are inherently susceptible to accidental deletion or corruption, and often must be re-installed when upgrading components and software.

Many of the justifications mentioned above for allowing the copying and resale of computer programs also apply to digital media. For example, computer programs and digital media files must both be reproduced in a computer’s Random Access Memory (RAM) in order to be used. Also, both computer programs and digital media files are capable of degradation, accidental deletion, and corruption. Digital movie files, just like computer programs, must be modified and converted to different formats and resolutions depending on the screen or device they are being played on. The same is true for digital music files; in fact, Apple’s iTunes software allows users to convert music files between multiple formats of varying quality and size. The statutory definition of a computer program—“a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result”—is so overbroad as to encompass not

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161. 17 U.S.C. § 117(b) (2012) states:
   Lease, sale, or other transfer of additional copy or adaptation.—
   Any exact copies prepared in accordance with the provisions of this section may be leased, sold, or otherwise transferred, along with the copy from which such copies were prepared, only as part of the lease, sale, or other transfer of all rights in the program. Adaptations so prepared may be transferred only with the authorization of the copyright owner.

166. See Perzanowski et al., supra note 27, at 936; see also MAI Systems Corp. v. Peak Computer, Inc., 991 F.2d 511, 517 (9th Cir. 1993) (holding that a computer program stored in the computer’s temporary memory (“RAM”) was capable of being perceived, reproduced, or otherwise communicated).

168. See Apple, User License Agreement, supra note 49.
only digital media, but also nearly every file on a computer. The striking functional similarities between computer programs and digital media calls into question the disparate treatment afforded to each under existing copyright law. Regardless, section 117 provides an excellent template for Congress to amend the first sale doctrine to include digital works.

D. UNRESOLVED ISSUES

Fixing a customer’s digital media to their account, instead of to their hard drive, also presents issues of statutory interpretation. First, a user account is not a “material object” contemplated by section 101 of the Copyright Act. Rather, a user account is like a key or passcode that grants a user access to purchased content residing on remote servers. Thus, the requirement that a copy be fixed in a material object presents a significant hurdle to the proposed approach. Second, section 101 of the Act defines copies as material objects “from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” A CD player is an example of a machine or device used to reproduce a copy. However, is the Internet a “machine or device” within the meaning of the Act? If a copy is fixed in a cloud server after a user purchases a song from iTunes, technically the user should be able to sell his or her access to the file without ever making an illegal reproduction. Thus, infringement would lie with the subsequent purchaser, not with the seller. Third, is a media file protected with DRM or a comparable technology capable of being “perceived, reproduced, or otherwise communicated” if it can only be accessed by the original purchaser, and how does the transition to the cloud affect the interests of copyright owners? Finally, even if a digital media file is fixed in a user’s account instead of a local hard drive, the current copyright statutes and case law
IV. COPYRIGHT EXHAUSTION AS AN ALTERNATIVE APPROACH TO THE FIRST SALE DILEMMA

A. APPLYING THE FIRST SALE DOCTRINE TO DIGITAL MEDIA DOWNLOADS

In Kirtsaeng v. John Wiley, the Supreme Court held that copies of textbooks lawfully manufactured abroad were protected by the first sale doctrine.180 In that case, the Court emphasized that “[t]he Court doubt[ed] that Congress would have intended to create the practical copyright-related harms with which a geographical interpretation would threaten ordinary scholarly, artistic, commercial, and consumer activities.”181 This reasoning should also be imported to first sale defenses to copyright infringement for digital media content. Just as a geographical interpretation would substantially limit the rights of libraries and used-book retailers,182 a technical interpretation of fixation and reproduction, like in ReDigi, creates practical copyright-related harms to digital media consumers.183

Without a digital first sale doctrine, a CD can be resold indefinitely, but a digital download of the same album can only be resold if the computer or device is sold along with it.184 The flaw in this approach to digital media is apparent when the analogy is reversed—it would be tantamount to requiring one to sell his or her CD player or stereo along with the CD.185 Although the United States Copyright Office expressed concerns with a digital first sale doctrine in its Digital Millennium Copyright Act Report, its hesitancy to adopt a digital first sale doctrine should not be equated with complete disapproval.186 The “practical copyright-related harms” of a geographical interpretation of fixation and reproduction create the same type of practical harms to digital media consumers.

179. See Apple, User License Agreement, supra note 49 (“This license granted to You for the Licensed Application by Application Provider is limited to a non-transferable license . . . .”).
181. Id. at 1358.
182. Id. at 1354.
184. See id. at 656 (“Section 109(a) still protects a lawful owner’s sale of her ‘particular’ phonorecord, be it a computer hard disk, iPod, or other memory device onto which the file was originally downloaded.” Id.).
185. See ReDigi, 934 F. Supp. 2d at 656.
186. See DMCA Report, supra note 45, at 82-83; see also Kiker, supra note 41, at 252 (noting that “[e]ven though some courts have been skeptical to provide protection to
ical restriction to the first sale doctrine are equally harmful when applied to medium restrictions for digital media resale. As consumers continue to adopt digital mediums as the primary method of purchasing content, the need for a digital first sale doctrine will become even more pronounced.

B. COPYRIGHT EXHAUSTION AS AN ALTERNATIVE REMEDY TO A DIGITAL FIRST SALE DOCTRINE

A corollary to the first sale doctrine is the principle of copyright exhaustion. This principle is premised on the idea that “a fundamental set of user rights or privileges flows from lawful ownership of a copy of a work.” Although copyright exhaustion is a common law principle not codified in the Copyright Act, the fair use and first sale doctrines originated from the broader exhaustion concept. According to Professor Perzanowski, courts should adopt a copyright exhaustion rule that enables copy owners “to reproduce or prepare derivative works based on that copy to the extent necessary to enable the use, preservation, or alienation of that particular copy or any lawful reproduction of it.” Thus, a copyright exhaustion rule, in conjunction with the first sale doctrine, would give users of digital media functionally similar rights to those enjoyed by users of traditional physical mediums. This alternative approach provides functionally similar rights to the fixation in a user account approach outlined in Part III (B), supra.

Using the common law copyright exhaustion principle, together with the first sale doctrine, the analysis in ReDigi would be much simpler and straightforward. First, a court would determine if the user owned the particular media file. If so, the court would determine whether the reproduction of the file was used to facilitate the transfer of the user’s limited ownership interest. If the user does not retain any copies of the file once a transfer is completed, copyright exhaustion should protect the transfer. Since the end result of a transfer requires that only a single copy exist before and after

187. Kirtsaeng, 133 S. Ct. at 1358.
188. See Christman, supra note 57 (attributing the decline in digital music sales to the increasing popularity of streaming music services).
189. See Perzanowski et al., supra note 27, at 912.
190. Id.
191. Id.
192. Id.
193. See supra Part III (B).
195. See generally Perzanowski et al., supra note 27.
196. See id. at 939.
the transaction, the temporary copies discussed in ReDigi would be irrelevant.197 Rather, this approach is comparable to Cablevision’s “train” analogy.198 Overall, copyright exhaustion offers a more flexible and balanced approach than the ad hoc application of the fair use or first sale doctrines on their own.199 Additionally, the increased clarity and easy application that common law copyright exhaustion offers would benefit consumers and copyright owners alike, by reducing the frequency of costly and time-consuming litigation.200

C. COPYRIGHT EXHAUSTION AND THE FIRST SALE DOCTRINE WOULD PROMOTE INNOVATION AND MARKET COMPETITION

Perhaps one of the most compelling arguments for limiting copyright holders’ control over works once they enter the stream of commerce is the positive effect on marketplace innovation and competition.201 For example, because the first sale doctrine applies to physical copies such as DVDs, movie rental companies such as Netflix and Redbox are able to distribute purchased copies of movies to subscribers without the permission of the copyright holders.202 The importance of this right was recently highlighted when the Disney movie studio tried to implement rental windows—a delay between the time a DVD goes on sale at retail stores and when the same disk is offered to rental companies.203 When Netflix and Disney could not reach an agreement regarding the rental windows, the first sale doctrine allowed Netflix to purchase newly released copies from retailers such as Wal-Mart for a slightly higher price in order to make the DVDs available to subscribers without the rental window delay.204 Without common law and statutory limitations on works once they enter the stream of commerce, copyright holders would have excessive control over their works, leaving consumers with fewer choices and reducing competition.205

While the first sale doctrine promotes market efficiency and competition for physical copies of media, digital media distributors such as Apple’s iTunes continue to stifle innovation and consumer choice through monopo-

197. See id. at 912; ReDigi, 934 F. Supp. 2d at 656.
198. See ReDigi, 934 F. Supp. 2d at 657.
199. See Perzanowski et al., supra note 27, at 892.
200. See Kiker, supra note 41, at 269.
201. See Perzanowski et al., supra note 27, at 898.
203. Id.
204. Id.
205. See Perzanowski et al., supra note 27, at 898.
lization and consumer lock-in. Consumer lock-in refers to the high transaction cost consumers face when attempting to switch to a new, more advantageous service or platform. When distributors restrict the compatibility and use of media so that it may only be used with a particular service, consumers are discouraged from switching to newer alternatives, even if they offer a better product or service. Thus, consumer lock-in deprives consumers of meaningful alternatives and creates a windfall for distributors, who enjoy the monopolistic and anti-competitive effects that such restrictions create.

For example, Apple’s iBooks store initially restricted eBook sales to iPad users. Because consumers who purchased eBooks through Apple’s iBook store could only access the texts on their iPads, consumers were discouraged from purchasing newer tablets or eReaders such as Amazon’s Kindle or Barnes & Noble’s Nook. Furthermore, because the first sale doctrine does not apply to eBooks, consumers are unable to sell or lend their digital copies. Eventually, the United States Department of Justice filed suit against Apple and five major book publishers under the Sherman Antitrust Act, alleging that Apple and the publishers colluded to fix prices in the eBook market. Thus, the fact remains that until a first sale doctrine is imported to limit copyright owners’ control over digital works already in the stream of commerce, consumers will have fewer options and continue to pay higher premiums for content that would otherwise be readily available and affordable through a secondary market. Meanwhile, digital media distributors like Apple will continue to monopolize the digital media marketplace, stifling innovation and competition. While piracy concerns provided justification for this disparate treatment in the past, new legal remedies under the DMCA and advances in DRM anti-piracy technologies have obviated the need for such distinctions.

206. Id. at 900.
207. Id.
208. Id.
209. Id.
211. Id.
212. See supra Part III (A).
214. See Perzanowski et al., supra note 27, at 891.
215. Id. at 895.
216. See DMCA Report, supra note 45, at 82-83.
V. DRM TECHNOLOGY AND PIRACY CONCERNS

A. CURRENT ANTI-PIRACY SOLUTIONS SUFFICIENTLY PROTECT COPYRIGHT INTERESTS IN DIGITAL WORKS

Traditionally, both Congress and the courts have been hesitant to expand consumer rights in digital assets due to piracy concerns. However, Digital Rights Management (DRM) and other anti-piracy measures currently used in the industry largely protect copyrighted works from piracy. DRM is an anti-piracy technology that encrypts digital files and restricts the distribution and use of the media. A popular type of DRM technology, known as tethering, links a protected work (i.e., an eBook) to a device or user account. In addition, the DMCA prohibits users from circumventing technological measures that restrict access to and copying of copyrighted works, as well as prohibiting the creation and distribution of tools that facilitate circumvention. Although current DRM and related technologies present obstacles to a digital first sale doctrine by tethering files to a specific device, its use has significantly curtailed piracy. Moreover, the concerns expressed in ReDigi over the differences between physical and digital mediums are less pronounced when DRM tethers a copyrighted work to a particular device because tethering effectively creates the same barriers as a


218. See Hayes Smith, supra note 140, at 856.

219. Id.

220. See Perzanowski et al., supra note 27, at 903-04.


222. See DMCA Report, supra note 45, at 75-76, noting that:

A plausible argument can be made that section 1201 may have a negative effect on the operation of the first sale doctrine in the context of works tethered to a particular device. In the case of tethered works, even if the work is on removable media, the content cannot be accessed on any device other than the one on which it was originally made. This process effectively prevents disposition of the work. However, the practice of tethering a copy of a work to a particular hardware device does not appear to be widespread at this time, at least outside the context of electronic books . . . . Should this practice become widespread, it could have serious consequences for the operation of the first sale doctrine, although the ultimate effect on consumers is unclear.

Id.
physical copy.\textsuperscript{223} Similarly, piracy concerns are adequately addressed by DRM technology because it can prevent playback of a digital media file in the event of an unauthorized transfer.\textsuperscript{224}

Since DRM technology has advanced significantly and offers protection against piracy of copyrighted works, a digital first sale doctrine is now feasible and would not encourage piracy.\textsuperscript{225} Although DRM currently presents an obstacle to a digital first sale doctrine, it could easily be adapted to facilitate the resale and transfer of digital media in a controlled and legal manner.\textsuperscript{226} However, in order for the first sale doctrine to apply, courts would have to consider user accounts to be material objects, an idea that is hard to reconcile with the tangible nature of copies contemplated by the Act’s fixation requirement.\textsuperscript{227} Also, courts would have to decide if a digital download purchase is classified as ownership of the copy or a license to use the copy.\textsuperscript{228} Finally, existing cloud storage platforms like Apple’s iTunes or Amazon’s CloudPlayer that link content to a user account would have to amend their End User License Agreements and DRM technology to allow users to sell or transfer their digital media to other users.\textsuperscript{229}

\textsuperscript{223} See Capitol Records, LLC v. ReDigi Inc., 934 F. Supp. 2d 640, 656 (S.D. N.Y. 2013) (citing DMCA Report, supra note 45, at 82-83 (“Time, space, effort and cost no longer act as barriers to the movement of copies, since digital copies can be transmitted nearly instantaneously nearly anywhere in the world with minimal effort and negligible cost.”)). But see Perzanowski et al., supra note 27, at 905 (noting that tethering a digital work to a device through DRM technology effectively alleviates this concern).

\textsuperscript{224} See Perzanowski et al., supra note 27, at 903-04 (“Many of these systems are tethered not just to particular devices but also to particular services, allowing copyright holders control over post sale consumer uses by requiring access to these services for the enjoyment of the purchased good.”).

\textsuperscript{225} Id. at 904.

\textsuperscript{226} See id.

\textsuperscript{227} 17 U.S.C. § 101 (2012). “Copies” are material objects . . . in which a work is fixed by any method . . . and from which the work can be . . . reproduced . . . . A work is “fixed” in a tangible medium of expression when its embodiment in a copy is sufficiently permanent or stable to permit it to be . . . reproduced . . . for a period of more than transitory duration.

\textsuperscript{228} See Kiker, supra note 41, at 249-50. The issue of sale vs. license is beyond the scope of this Comment.

\textsuperscript{229} See Apple, User License Agreement, supra note 49 (“This license granted to You for the Licensed Application by Application Provider is limited to a non-transferable license . . . .”)

VI. Conclusion

As consumers continue to adopt online digital media services as the primary method of purchasing media content, the necessity for a digital first sale or copyright exhaustion doctrine will become even more pronounced. Although media distributors and the film and recording industries have benefited from a windfall due to the lack of a digital first sale doctrine, recent studies have shown that consumers are beginning to look for alternatives to traditional media retailers and distributors.230 Previously, the courts and legislatures were able to justify differentiating between physical and digital mediums due to the proliferation of Internet piracy.231 However, the times are changing, and digital media distribution platforms have adopted new technologies to significantly curb piracy, making a digital first sale doctrine attainable.232

Regardless, the introduction and popularization of cloud-based computing and storage services will continue to create a gray area of copyright law.233 This confusion stems in part from the fact that when the Copyright Act was introduced, it only contemplated physical mediums.234 Therefore, in order to fully address the inadequacies of existing copyright law, Congress must revise the Copyright Act to include a digital first sale doctrine.235 Although amending the Copyright Act would be a lengthy and arduous process, the legislatures have an excellent template to work from—section 117 of the Act.236

In the interim, the courts are also well equipped to address the legal dichotomies between digital and physical mediums.237 Common law copyright exhaustion principles provide powerful tools for courts to use in restoring the balance between copyright owners and purchasers of digital media content.238 By reducing copyright owner’s control over works once they enter the stream of commerce, secondary markets in digital media would emerge,

230. See Christman, supra note 57 (attributing the decline in digital music sales to the increasing popularity of streaming music services).
232. See Perzanowski et al., supra note 27, at 943 (explaining DRM technology and anti-circumvention provisions of the DMCA).
233. See Kiker, supra note 41, at 288-89.
234. See Abelson, supra note 146, at 29.
235. See supra Part III (B).
237. See Perzanowski et al., supra note 27, at 892.
238. See id.
increasing competition and reducing monopolization and consumer lock-
in.\textsuperscript{239} Additionally, using common law copyright exhaustion principles would provide courts with a more straightforward and succinct process for analyzing copyright infringement claims in the context of digital media.\textsuperscript{240}

\textsuperscript{239} See id. at 907.
\textsuperscript{240} See id.