Music Lockers: Getting Lost in a Cloud of Infringement

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I. Introduction

A group of friends networking and trading information and files over the Internet may do so legally. These particular friends, however, employ a service devoted solely to the online storage for songs, called a “music locker.” They share access by using a common username and password. Each participant places songs in storage which every other contributor may then download to their own personal computer. It seems harmless at first, but soon the storage space contains 200,000 songs, none of which anyone legally purchased. They would face liability for copyright infringement, but copyright owners lack the ability to discover that this is occurring. Nor can they rely on the help of the online service provider (OSP) whose service became the tool for infringement because the law, as interpreted by the courts, provides an almost complete shield against copyright infringement for “music lockers.” It allows the OSP to remain complacent, without fear of liability. This is the case, even if the OSP knows of the existence of infringement or, in some instances, facilitates it.

The jurisprudence of United States Copyright Law contains a plethora of examples where courts sought to equate the law to technological innovations by harmonizing its interpretation to allow for the inclusion of these advancements.\(^1\) The explosive growth of technology and the Internet over the last two decades lead to wildfire-like growth of copyright infringement\(^2\) due to the new found ease in producing and distributing high quality copies of protected works.\(^3\) As

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1 See Burrow-Gile Lithography Co. v. Sarony, 111 U.S. 53 (1884); Midway Mfg., Co. v. Artic Inter., Inc., 547 F. Supp. 999 (N.D. Ill. 1982).
2 See Scope of the Problem, RIAA.COM (last visited Oct. 6 2011), http://www.riaa.com/physicalpiracy.php?content_selector=piracy-online-scope-of-the-problem. Since the advent of Napster and other peer-to-peer filling sharing services, U.S. music sales have dropped from $14.6 billion to $7.7 billion, a 47 percent decrease. Id. Digital piracy of copyrighted content is estimated to take up 24 percent of global bandwidth, and 17.5 percent of the bandwidth in the United States. Id. Estimates indicate that around 30 billion songs were downloaded illegally between 2004 and 2009. Id.
technology and infringement continue to expand both the legislature and courts struggle to maintain the balance between technology and artistic works protected under United States intellectual property laws.

The struggle to protect copyrighted musical works on the Internet gained public notoriety with the music industry’s challenge of peer-to-peer file sharing services, such as Napster and bittorrent providers. Now the music industry fears that the new service, called “music lockers,” will become a conduit for infringement. More so than peer-to-peer networks, “music lockers” present copyright owners with greater trials in combating infringement than those faced in their attempts to thwart infringers who plied the pathways of peer-to-peer services.

Until recently, very few OSPs employed what is known as cloud computing to provide subscribers with an online application designed for the limited purpose of storing one’s music library, but Google, Amazon, and iTunes all recently released their own versions of “music lockers.” iTunes, prior to the introduction of its “music locker,” obtained licenses from the major labels permitting it to store copyrighted songs. By receiving a license iTunes negated

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6 For the last several years cloud computing has been used by OSPs to give users a storage space for data, such as documents or even music, but none had developed a storage service devoted solely for the storage of music besides MP3tunes.

7 Called Google Music Beta, Amazon Cloud Player, and iTunes Scan and Match respectively. Lee supra note 5.

8 Id.
any possibility of subjecting itself to copyright infringement liability from the major labels. Amazon and Google, however, after trying unsuccessfully to negotiate licenses, chose to continue without the blessing of music labels, creating the risk of liability. Instead, Amazon and Google placed their reliance on the safe harbors found in the Digital Millennium Copyright Act (DMCA), specifically the affirmative defense provided by 17 U.S.C. § 512(c).

Initially, proceeding without licenses meant Google and Amazon faced the very real threat of liability for contributory infringement, since, at the time of their services announcement, it remained uncertain whether “music lockers” could qualify for § 512(c). Judge William Pauley answered this question, at least for the interim, by holding that a “music

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9 iTunes does face liability from minor record labels if a user uploads a song from such label because it did not negotiate licenses with the smaller labels. Id.
10 Id.
11 (c) Information residing on systems or networks at direction of users.
   (1) In general. – A service provide shall not be liable for monetary relief, or except as provided in subsection (j), for injunctive or other equitable relief, for infringement of copyright by reason of the storage at the direction of a user of material that resides on a system or network controlled or operated by or for the service provider, if that service provider:
   (A)(i) does not have actual knowledge that the material or an activity using the material on the system or network is infringing;
   (ii) in the absence of such actual knowledge, is not aware of facts or circumstances from which infringing activity is apparent; or
   (iii) upon obtaining such knowledge or awareness, act expeditiously to remove, or disable access, to the material;
   (B) does not receive a financial benefit directly attributable to the infringing activity, in a case in which the service provider has the right and ability to control such activity; and
   (C) upon notification of claimed infringement as described in paragraph (3), responds expeditiously to remove, or disable access to, the material that is claimed to be infringing or to be the subject of infringing activity.
17 U.S.C. § 512(c).
12 “Contributory infringement occurs when a defendant induces, causes, or materially contributes to the infringing conduct of another, with knowledge of the infringing activity.” 3-12A Nimmer on Copyright § 12A.01. See e.g., Grokster, 545 U.S. 913 (finding an peer-to-peer service provider liable for contributory infringement because it induced its users to commit direct infringement); Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417 (1984) (discussing whether a manufacturer of video cassette recorders could be liable for contributory infringement for owners of the recorders who use them to copy television programs); Fonovisa, Inc. v. Cherry Auction, Inc., 76 F.3d 259 (9th Cir. 1996) (finding plaintiff could state a claim for contributory infringement against the owner of a swap meet when it was aware vendors sold recordings that infringed the plaintiffs copyrights).
13 Amazon, Google, and iTunes all announced their music lockers prior to the decision in MP3tunes. See MP3tunes, Inc., 2011 WL 5104616; Lee supra note 5.
locker” could qualify for the safe harbor of § 512(c) if the OSP met its requirements. Judge Pauley’s ruling sustained the trend began by previous courts, which continuously frustrates the music industry in protecting its works on the Internet. The decision employed a standard of apparent knowledge that, in fact, is actual knowledge, and in turn applying a heightened standard of actual knowledge when assessing whether the defendant, OSP, was aware of infringement.

The definitions of apparent and actual knowledge employed by the courts, along with the courts’ strict requirements for issuance of a compliant takedown notice, create substantial hurdles for copyright owners to prevent infringement on “music lockers.” This note will examine the safe harbor and takedown procedures found in § 512(c) and its application to “music lockers.” It will demonstrate that the courts’ interpretation of § 512(c) shields OSPs from

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17 (3) Elements of notification:
   (A) To be effective under this subsection, a notification of claimed infringement must be a written communication provided to the designated agent of a service provider that includes substantially the following:
      (i) A physical or electronic signature of a person authorized to act on behalf of the owner of an exclusive right that is allegedly infringed.
      (ii) Identification of the material that is claimed to be infringing, or, if multiple works at a single online site are covered by a single notification, a representative list of such works at that site.
      (iii) Identification of the material that is claimed to be infringing or to be the subject of infringing activity and that is to be removed or access to which is to be disabled, and information reasonably sufficient to permit the service provider to locate the material.
      (iv) Information reasonably sufficient to permit the service provider to contact the complaining party, such as an address, telephone number, and, if available, an electronic mail address at which the complaining party may be contacted.
      (v) A statement that the complaining party has a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law.
      (vi) A statement that the information in the notification is accurate, and under the penalty of perjury, that the complaining party is authorized to act on behalf of the owner of an exclusive right that is allegedly infringed.

18 Not only does the courts interpretations of § 512(c) have ramifications on the music industry in preventing infringement on cloud services but also the video game industry as there have been recent shifts to increasingly use cloud computing in the distribution and storage of video games. See IGDA Chief: Cloud Gaming Costs to Rise, GAMESPOT.COM (Jan. 17, 2012, 2:39 AM PST), http://www.gamespot.com/news/igda-chief-cloud-gaming-costs-to-rise-6348679. See also ONLIVE, http://www.onlivelive.com, for an online cloud gaming service.
liability by misconstruing the standards of actual and apparent knowledge, as enacted by Congress. This misapplication creates barriers that inhibit the music industry’s ability to combat infringement on “music lockers” because their characteristics make issuing a takedown notice a practical impossibility. The combination of heightened knowledge standards and the copyright holders’ inability to issue takedown notices has the potential to allow “music lockers” to become safe harbors for infringement.

Part II A will provide background on the general aspects of cloud computing as employed in “music lockers” while identifying the differences between Amazon, Google, and iTunes’s “music lockers.” Part II B discusses the safe harbor provision and the notice and takedown procedures provided by § 512(c) of the DMCA. Part III examines the development of the application § 512(c)’s knowledge and takedown provisions through the case law. Part IV assimilates the major decisions of the courts, involving § 512(c), into a functional standard for assessing the liability of a “music locker.” Part V poses alternative solutions that would ensure that copyright owners received compensation for the use of their works on “music lockers” without subjecting the OSPs to liability for contributory infringement.

II. The Cloud and the DMCA: “Gimmie Shelter” from Infringement

A. Cloud Computing: “Where It’s At” for “Music Lockers”

The increasing use and popularity of cloud computing is attributable to the efficiencies and cost savings it provides. Early development and implementation of cloud computing

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19 THE ROLLING STONES, Gimmie Shelter, on LET IT BLEED (Decca 1969).
20 BECK, Where It’s At, on ODELAY! (DGC 1996).
occurred in the private sector, but since that time its application expanded to the public sector.22 “Music lockers,” such as those offered by Amazon, Google, and iTunes, are only made available through the use of cloud computing.23 They are best analogized to an external hard drive on which only songs can be stored, but instead of connecting to the computer via a USB cable one connects to the storage space through the Internet.24

All uses of cloud computing are classified as one of three models; platform as a service (PaaS), infrastructure as a service (IaaS), or software as a service (SaaS).25 “Music lockers” constitute SaaS.26 Other SaaS providers that many are familiar with include YouTube and Facebook.27 SaaS is accessible via the Internet by using a web browser28 or through downloadable apps.29 A user, unlike in PaaS and IaaS clouds, exercises little control of the cloud on a SaaS model.30 Instead, the OSP retains much of the influence concerning the program’s features.31

Broad network access is an essential characteristic of cloud based “music lockers,”32 meaning that a user may access a “music locker” through standard Internet capable devices over the network.33 These devices include cellphones, laptops, and tablets.34 The free sharing and

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22 Id.
23 Tschmuck, supra note 5.
24 Id.
25 BADGER ET AL., supra note 21 at 2-1-2-2.
26 See Id.
27 Marc Aaron Melzer, Copyright Enforcement in the Cloud, 21 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 403, 405 (2011). Megaupload was also a SaaS cloud platform before the Federal Government shut it down.
28 BADGER ET AL., supra note 21, at 2-1.
29 Amazon, Google, and iTunes’s “music locker” programs are downloaded as apps for phones, tablets, pcs, and other devices with such functionality.
30 Melzer, supra note 27, at 410; BADGER ET AL., supra note 21, at 2-1.
31 Id.
32 Melzer, supra note 27, at 409. YouTube and Facebook are also broad network access services. Id. at 405, 408.
33 BADGER ET AL., supra note 21 at 2-1. See also Melzer supra note 27, at 407-8.
34 BADGER ET AL., supra note 21, at 2-1; Melzer, supra note 27, at 408.
access of other users’ files is what makes broad network access so attractive. The attractiveness of broad network access, however, also makes it a potential threat as a vehicle for infringement.

“Music lockers,” contrary to the majority of broad network access services, do not allow the free exchange of files between users. Instead, a user’s music catalog remains viewable and accessible only to him or her. While this may at first appear beneficial to copyright holders by making infringement more difficult, they fear users will share passwords, and that due to the lockers’ inaccessibility they will be challenged to adequately identify and locate incidents of infringement.

“Music lockers” can employ one of two methods to store the songs on their servers. The first method involves the OSP storing an individual copy of each song uploaded for every user, potentially resulting in the OSP storing millions of identical copies of the same song. This option comes with two prominent drawbacks: (1) long upload times for users compared to other storage methods because of massive bandwidth usage, and (2) it requires that the OSP devote more servers to storage capabilities that it may need to otherwise.

Google and Amazon both elected to employ this storage option, despite its shortcomings, due to legal reasons. Both still remain uncertain as to whether a “music locker” can qualify for the safe harbor of § 512(c) because of the potential for reversal of Judge Pauley’s decision in MP3tunes on appeal. As a result of this uncertainty, Amazon and Google continue to store songs...
this way because it would allow them to assert a defense based on the Second Circuit Court of Appeals’s holding in *Cartoon Network, LLP v. CSC Holdings, Inc.* In *Cartoon Network*, the defendant, cable provider, was held not liable for contributory infringement when their customers used digital recording devices to copy television programs because the court deemed the users, not the cable provider, created the infringing copies. For the same reasons that the court found the defendant not liable in *Cartoon Network*, Amazon and Google hope to garner a similar declaration if sued for infringement because their users direct the locker to make the copies of the songs.

The second storage method which OSPs may employ is “a ‘real’ cloud based solution.” When using this option the OSP divides an uploaded song into separate digital portions. These portions are called hash tags which are used to later identify and reassemble the song when users wish to download or stream it from their lockers. If another user uploads a song that the OSP already created hash tags for the OSP will recognize the song through the previously made hash tags, and then delete the newly created, redundant tags. Essentially, a single copy of a song is stored on an OSP’s servers, which all users owning that song share. Because an OSP does not need to store multiple copies of the same song it is left with other options to employ its resources. It can either devote server space to other purposes, or it can forego the use of extra servers, thereby, saving on costs. Not only do OSPs reap the rewards of the “‘real’ cloud based

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44 *Cartoon Network, LLP v. CSC Holdings, Inc.*, 536 F.3d 121 (2nd Cir. 2008); Lee, *supra* note 5.
45 *Cartoon Network*, 536 F.3d at 140.
46 Lee, *supra* note 5. Both Amazon and Google would only be able to rely on the decision in *Cartoon Network*, if litigated in the Second Circuit; otherwise they would need to hope the court where the action was brought would consider it persuasive authority. See *Id*.
47 Tschmuck *supra* note 5.
50 See *Id*.
51 Tschmuck *supra* note 5.
52 Singel, *supra* note 5.
solution⁵³ but users also benefit by experiencing shorter upload times than the method employed by Google and Amazon allows.⁵⁴

MP3tunes created hash tags to store its music.⁵⁵ The court in permitting MP3tunes the safe harbor of § 512(c)⁵⁶ paved the way for Google and Amazon to adopt this method.⁵⁷ Dropbox, a SaaS cloud storage service, though not a “music locker,” also employs hash tags for all users’ files uploaded: including movies, documents, and songs.⁵⁸ iTunes, not fearing liability because of the licenses it obtained from the music labels,⁵⁹ chose this approach for storage as well.⁶⁰

Cloud computing, as applied in “music lockers,” offers OSPs innovative approaches to develop new services for users which can benefit the music industry by limiting a user’s ability to commit infringement. But, as with most other online services, it too can facilitate infringement. As result of the insulation offered by the “music lockers” hurdles exist for copyright holders in combating infringement unless the OSPs aid copyright holders in their enforcement efforts.

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⁵³ Id.
⁵⁴ Id.
⁵⁵ Capitol records, Inc., 2011 WL 5104616 at *1. See also Singel, supra note 5.
⁵⁶ Id. at *19.
⁵⁷ The OSP, however, would not be able to use that same song file merely because it possessed the same song title. All aspects of the uploaded file must be identical. Singel, supra note 5.
⁵⁸ Id.
⁵⁹ Lee, supra note 5. iTunes is free to use master copies of songs, in addition to hash marks, and does not have to worry about matching file sizes and other aspects of uploaded files because of the licenses. Singel, supra note 5. Further, iTunes scan and match also provides users with a higher quality copy of a song if the song the user uploads quality is inferior compared to that available on iTunes. Id.
⁶⁰ Tschmuck, supra note 5.
B. The Digital Millennium Copyright Act’s Limitations on Liability for Copyright Infringement § 512: No Liability, “Absolutely Free” 61

The Constitution empowers Congress with the ability to promote the advancement of science and art by securing monopolies for a limited time to a work’s creator. 62 With the rise of the digital age the monopolies granted to musical works faced increasing threats of infringement as the Internet expanded. 63 In order to provide copyright holders with “reasonable assurance that they will be protected against massive piracy,” 64 and to provide assurance to OSPs by clarifying their liability 65 Congress passed the DMCA in 1998. 66 The act was an attempt to balance the concerns of both copyright owners and OSPs in its approach to infringement, 67 thereby, promoting both the sciences and the arts.

The DMCA departed from previous copyright laws in one of its two articles by focusing on preventing parties from tampering with tools, known as digital rights management (DRM), 68 embedded in works to foil potential infringers, 69 instead of protecting the copyrighted works themselves. Congress provided these protections fearing that “copyright owners [would] hesitate to make their works readily available on the Internet without reasonable assurance that they [would] be protected against massive piracy.” 70

61 THE MOTHERS OF INVENTION, Absolutely Free, on WE’RE ONLY IN IT FOR THE MONEY (Verve 1968).
63 See Scope of the Problem, supra note 2.
64 S. REP. NO. 105-190, at 8.
65 Id.
67 See S. REP. NO. 105-190, at 8.
68 DRM has been largely unsuccessful in preventing infringement of musical works compared with other industries is which it is used. See Aldrich, supra note 3 (discussing types of DRM employed by copyright owners in the entertainment industry).
69 17 U.S.C. § 1201. See Aldrich, supra note 3; Lohman, supra note 3 at 638.
70 S. REP. NO. 105-190, at 8.
The other portion of the act found in the safe harbors of § 512 addresses the concerns of OSPs by offering them “greater certainty . . . concerning their legal exposure to infringements . . .”71 To fulfill this goal § 512 contributes a set of affirmative defenses “if the provider is found to be liable under existing principles of law.”72 The limitations on liability do not completely shelter OSPs, they merely lay out a framework of conditions, which if met, allow an OSP access to § 512’s defenses.73

Section 512 grants protection to four types of OSPs: transitory digital network communications,74 system caching,75 information residing on systems or networks at the direction of users,76 and information location tools.77 Of the four, “music lockers” qualify for § 512(c) because the users’ songs are stored on the “music locker’s” system or network at the direction of its users.78

Before an OSP can claim the safe harbors of § 512(a)-(d) they must first meet § 512(i)’s threshold requirements.79 The subsection prescribes that a service provider institute a policy, of which it informs its subscribers, reasonably implements, and provides for the termination of users who are guilty of repeated incidents of infringement.80 The OSP must also accommodate and not interfere with standard technological measures employed by copyright owners.81 Only if

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71 Id. at 40.
72 Id. at 19. The affirmative defenses found in § 512 primarily address circumstances where the OSP would be liable for contributory infringement.
73 Id. at 41. See 17 U.S.C. § 512.
74 § 512(a).
75 § 512(b).
76 § 512(c).
77 § 512(d).
78 See Capitol Records, Inc., 2011 WL 5104616 at *19 (finding a “music locker” qualifies for the safe harbor of § 512(c)).
79 Perfect 10, Inc. v. CCBill LLC 488 F.3d 1102, 1009 (9th Cir. 2007); Io Group, Inc. v. Veoh Networks, Inc. 586 F. Supp.2d 1132, 1142 (N.D. Cal. 2008).
80 § 512(i)(1)(A).
81 § 512(i)(1)(B). Standard technological measures can be inferred are the DRM protected under 17 U.S.C. §1201, 1202. See generally Susuk Lim, A Survey of the DMCA’s Copyright Management Information Protections: The
the OSP adheres to the strictures of § 512(i) can the analysis proceed to the requirements of the safe harbors in § 512(a)-(d).\textsuperscript{82}

An OSP can assert the affirmative defense for infringing material which it stores on its system or network placed there at the direction of the user under § 512(c) if unaware of the alleged infringement.\textsuperscript{83} The service provider must not possess actual knowledge of the infringing material the user placed on its system or network.\textsuperscript{84} Nor can the OSP have an awareness of “facts or circumstances from which infringing activity is apparent;”\textsuperscript{85} called apparent knowledge.\textsuperscript{86}

Congress developed a “red flag” test to assess whether an OSP possesses apparent knowledge.\textsuperscript{87} The test contains both a subjective and objective element.\textsuperscript{88} According to the subjective element the court must determine the facts and circumstances under which the OSP labored when the complaining party located the alleged infringement.\textsuperscript{89} The objective test then directs the court to ask, under the previously ascertained circumstances, “whether infringing activity would have been apparent to a reasonable person operating under the same or similar circumstances.”\textsuperscript{90} If determined that an OSP possesses either actual or apparent knowledge of infringement it may still claim the shelter of § 512(c) if it acts “expeditiously to remove or disable access to the [infringing] material.”\textsuperscript{91}

\textsuperscript{82} S. REP. NO. 105-190, at 51-2.
\textsuperscript{83} § 512(c)(1).
\textsuperscript{84} § 512(c)(1)(A)(i).
\textsuperscript{85} § 512(c)(1)(A)(ii).
\textsuperscript{86} Io Group, Inc., 586 F. Supp.2d at 1148.
\textsuperscript{87} S. REP. NO. 105-190, at 44.
\textsuperscript{88} Id.
\textsuperscript{89} Id.
\textsuperscript{90} Id.
\textsuperscript{91} 17 U.S.C. §512(c)(1)(A)(iii); S. REP. NO. 105-190, at 44.
Even if an OSP never, actually or apparently knew of infringement, it may still find itself disqualified from § 512(c) if it receives a financial benefit directly attributable to the infringement\(^92\) and maintains the “ability and right to control” the infringement.\(^93\) The financial benefit is attributable to infringement if discriminatory.\(^94\) But when the OSP receives the same amount of payment from both an infringing user and non-infringing user, it is nondiscriminatory, and will not lead to its disqualification from § 512(c).\(^95\) An OSP has the ability and right to control if, “a defendant exercises control over a direct infringer when he has both a legal right to stop or limit the activity, as well as the practical ability to do so.”\(^96\) It is only when both conditions are found to exist that the OSP becomes liable for infringement.\(^97\)

Finally, the OSP must designate an agent with the Register of Copyrights to receive takedown notices from copyright holders.\(^98\) If the agent receives a takedown notice, complying with § 512(c)(3), the OSP must disable access and remove the infringing material from its system or network.\(^99\) When an OSP fails to adequately respond to a valid takedown notice they become liable for the identified infringement because the takedown notice then becomes the basis for the imputation of actual knowledge to the OSP.\(^100\)

\(^{92}\) § 512(c)(1)(B); CoStar Group, Inc. v. Loopnet, Inc., 164 F. Supp.2d 688, 704-5 (D.C. Md. 2001). It is difficult to conceptualize circumstances when an OSP could be found liable based on receiving a direct financial benefit from infringement alone because the OSP would need knowledge of infringement to institute a pricing plan that is discriminatory.

\(^{93}\) § 512(c)(1)(B); Io Group, Inc., 586 F. Supp.2d at 1151; Corbis Corp, Inc. v. Amazon.com, Inc., 351 F. Supp.2d 1090, 1109-10 (W.D. Wash. 2004). Just as with the financial benefit disqualification, an OSP would need to know of infringement to have the right and ability to control.

\(^{94}\) S. REP. NO. 105-190, at 44

\(^{95}\) Id.

\(^{96}\) Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1173 (9th Cir. 2007).

\(^{97}\) Corbis Corp, Inc., 531 F. Supp.2d at 1109.

\(^{98}\) § 512(c)(2).

\(^{99}\) § 512(c)(3)(C); S. REP. NO. 105-190, at 45.

\(^{100}\) See Capitol Records, Inc., 2011 WL 5104616 at *17.
C. "Help on the Way" The Copyright Owner’s Remedy: Takedown and Notice

The DMCA, in § 512(c)(3), grants the copyright owner with the means to protect their works from infringement through a takedown notice. The takedown compels OSPs to remove and disable access to identified infringing material. In order for a takedown notice to obligate an OSP to act it must meet § 512(c)(3)’s firm guidelines.

Two salient requirements exist, which are not merely procedural like the other requirements, under § 512(c)(3). The takedown must identify the work subject to infringement, or if several works are the target of the infringement a representative list of works is sufficient. The purpose behind the specificity of identification is to inform the OSP of the scope of the infringement. A description of the location of the alleged infringement enabling the OSP to easily locate it must accompany the representative list. The URL address where the infringement resides is a sufficient form of location.

When the takedown notice complies with § 512(c)(3)’s strictures, the OSP must disable and remove access to the infringing material or face liability. Liability results when the OSP neglects to remove the infringing material because courts may then impute knowledge to the OSP based on receipt of the copyright holder’s notice. If the takedown notice fails to

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101 THE GRATEFUL DEAD, Help on the Way, on BLUES FOR ALLAH (United Artists 1975).
102 § 512(c)(1)(C).
103 § 512(c)(3)(A)(ii).
104 § 512(c)(3)(A)(ii). “It is not necessary for a compliant notification to list every musical composition or sound recording that has been or could be infringed at that site, so long as a representative list of those compositions or recordings is provided so that the service provider can understand the nature and scope of the infringement being claimed.” S. REP. NO. 105-190, at 46.
105 S. REP. NO. 105-190, at 46.
106 § 512(c)(3)(A)(iii).
107 S. REP. NO. 105-190, at 46.
substantially comply with the prescriptions of § 512(c)(3).\textsuperscript{110} however, the OSP has no duty to act, nor can the notice be used by a court to impute knowledge.\textsuperscript{111}

III. Safe Harbor of § 512(c): Lost in the “Purple Haze”\textsuperscript{112} of Knowledge

A. “Goodbye Blue Sky,”\textsuperscript{113} Hello Clouds of Infringement: Vanishing of Actual and Apparent Knowledge

Since the inception of the DMCA’s safe harbors courts grappled over the appropriate standards of knowledge in § 512(c).\textsuperscript{114} The standards courts arrived at exasperates copyright owners because it permits OSPs to operate, even though aware of the presence of infringement, until they receive a takedown notice from a complaining party. This frustration is due, in large part, to a heightened standard of actual knowledge, and an interpretation of apparent knowledge that confuses itself with actual knowledge.\textsuperscript{115}

\textit{Perfect 10, Inc. v. CCBill LLC} became one of the first cases to truly address the knowledge requirements under § 512(c).\textsuperscript{116} Perfect 10, an adult entertainment magazine, filed suit against CCBill alleging images posted by users on CCBill’s services were stolen, and, as

\textsuperscript{10}“[S]ubstantial compliance standard in subsections . . . (c)(3) be applied so that technical errors . . . do not disqualify . . . copyright owners from the protections afforded under subsection (c).” S. Rep. No. 105-190, at 47. Errors that a copyright owner may commit while still substantially complying include typos and failures to update information such names or addresses. \textit{Id.}

\textsuperscript{11}§ 512(c)(3)(B); S. Rep. No. 105-190, at 46. \textit{See Perfect 10, Inc.}, 488 F.3d at 1113.

\textsuperscript{12}JIMI HENDRIX, \textit{Purple Haze}, on \textit{ARE YOU EXPERIENCED} (MCA Records 1967).

\textsuperscript{13}PINK FLOYD, \textit{Goodbye Blue Sky}, on \textit{THE WALL} (Columbia 1979).

\textsuperscript{14}\textit{See Perfect 10, Inc.}, 488 F.3d 1102; \textit{Io Group, Inc.}, 586 F. Supp.2d 1132. \textit{See generally} Black, supra note 16; Chang, supra note 16.

\textsuperscript{15}Black, supra note 16 at 773, Chang, supra note 16 at 203.

\textsuperscript{16}\textit{Perfect 10, Inc.}, 488 F.3d 1102.
such, infringed Perfect 10’s copyright in those images.\textsuperscript{117} Prior to the commencement of litigation, Perfect 10 sent multiple letters and emails to CCBill’s designated agent to receive takedown notice, alerting it of the infringement,\textsuperscript{118} but never transmitted a statutorily complaint takedown notice.

The court, after determining CCBill met the threshold requirements of § 512(i)\textsuperscript{119} considered whether it held apparent knowledge of infringement under the “red flag” test.\textsuperscript{120} Perfect 10 asserted that names of websites\textsuperscript{121} and password hacking sites hosted by CCBill constituted “red flags.”\textsuperscript{122} In order to determine if those websites infringed copyrights the court found that CCBill would need to undergo investigations.\textsuperscript{123} The court declined to impose such investigative duties on an OSP, therefore, no “per se ‘red flags’ of infringement” existed.\textsuperscript{124}

Perfect 10 also endeavored to convince the court to impute knowledge to CCBill based on the emails and letters it previously sent.\textsuperscript{125} After examining each piece of correspondence separately the court found that each letter and email individually failed to substantially comply with § 512(c)(3).\textsuperscript{126} Therefore, they could not provide a basis for the imputation of knowledge.\textsuperscript{127} “[A] notification must do more than identify the infringing file. The DMCA requires a complainant to declare, under penalty of perjury, that he is authorized to represent the copyright holder and that he has a good-faith belief that the use is infringing.”\textsuperscript{128} In so stating,

\textsuperscript{117} Id. at 1108.
\textsuperscript{118} Id.
\textsuperscript{119} Id. at 1109. \textit{See} 17 U.S.C. § 512(i).
\textsuperscript{120} \textit{Perfect 10, Inc.}, 488 F.3d at 1114.
\textsuperscript{121} Names of the websites included illegal.net and stolencelebritypics.com. \textit{Id.}
\textsuperscript{122} Id.
\textsuperscript{123} Id.
\textsuperscript{124} Id. The court inferred that an OSP need not undergo an investigation due to 17 U.S.C. § 512(m)(1), which states that nothing in subsections (a) through (d) requires a “service provider [to monitor] its service or affirmatively [seek] facts indicating infringing activity.” § 512(m)(1).
\textsuperscript{125} Id. at 1111-3.
\textsuperscript{126} \textit{Perfect 10, Inc.}, 488 F.3d at 1113.
\textsuperscript{127} Id.
\textsuperscript{128} Id.
the court indicated the strict standard copyright owners would be held to in ensuring that notices strictly complied with § 512(c)(3).

Following *Perfect 10*, a court next addressed § 512(c) in *Io Group, Inc. v. Veoh Networks Inc.* Io brought suit against Veoh, claiming that ten adult videos, ranging from clips of a few seconds to twenty minutes, that users posted on Veoh without permission infringed Io’s copyright in those films. In resounding fashion, the court held no actual knowledge existed because, “[Io] provided no notice to Veoh of any claimed copyright infringement. Thus, there [remained] no question . . . that Veoh lacked knowledge of the alleged infringing activity.”

Turning to whether Veoh had apparent knowledge, the court, in interpreting the standard of apparent knowledge, stated that “the question is not what a reasonable person would have deduced given all the circumstances,” but whether the OSP “turned a blind eye to red flags of infringement.” The court, echoing the decision in *Perfect 10*, said that since Veoh would need to conduct investigations to discover that the alleged incidents of infringement occurred it could not be said to possess apparent knowledge. Finding no evidence of apparent knowledge and lack of notice from Io, Veoh obtained shelter under the umbrella of § 512(c).

Soon after the decision in *Io Group* Veoh became the target of another infringement action instituted by Universal Music Group (UMG). UMG argued that Veoh possessed actual knowledge of infringing material beyond the works which RIAA cited in a previously

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130 *Id.* at 1136.
131 *Id.* at 1148.
132 *Id.* (citing *Corbis Corp.*, 351 F. Supp.2d at 1108).
133 *Io Group, Inc.*, 586 F. Supp.2d at 1148.
134 *See Id.*
135 *Id.* at 1155.
137 Recording Industry Association of America.
transmitted takedown notice.\textsuperscript{138} UMG claimed that Veoh had actual knowledge because it knew it was not permitted to host music content subject to copyright protection yet still permitted users to upload it,\textsuperscript{139} and that the list of artists in the RIAA’s takedown notice provided actual knowledge of infringement of all of those artists works.\textsuperscript{140} The court, however, rejected these arguments, because it would require Veoh to perform searches, and “the DMCA notification procedures place the burden of policing copyright infringement-identifying the potentially infringing material and adequately documenting infringement-squarely on the owners of the copyright.”\textsuperscript{141}

The court next asserted that while Veoh had general awareness of the existence of infringement on its service that such awareness could not reach the level required to constitute apparent knowledge.\textsuperscript{142} It based its decision on the fact the UMG could not cite any authority that general awareness results in apparent knowledge.\textsuperscript{143} Yet, the court, itself, neglected to provide any specific authority for its rationale: that general awareness does not constitute apparent knowledge.\textsuperscript{144} The court attempted to construct a tenuous connection to the Senate Report by citing it when trying to establish its proposition concerning apparent knowledge: the “safe harbor would not service its purpose of “facilitate[ing] the robust development and . . . expansion of electronic commerce, communications, research, development, and education in the digital age.””\textsuperscript{145} This citation, however, is to the general purpose of the DMCA,\textsuperscript{146} and leads to no inferences that general awareness cannot constitute apparent knowledge.

\textsuperscript{138} UMG Recordings, Inc., 655 F. Supp.2d at 1108.
\textsuperscript{139} Id.
\textsuperscript{140} Id. at 1109.
\textsuperscript{141} Id. at 1110. See also Perfect 10, Inc., 488 F.3d at 1113.
\textsuperscript{142} UMG Recordings, Inc., 665 F. Supp.2d at 1111.
\textsuperscript{143} Id.
\textsuperscript{144} See Id.
\textsuperscript{145} UMG Recordings, Inc., 655 F. Supp. 2d at 1111 (citing S. REP. NO. 105-190, at 1-2).
\textsuperscript{146} See S. REP. No. 105-190, at 1-2
Many of the same arguments offered by the plaintiff in *UMG Recordings* were later asserted in *Viacom Inter., Inc. v. YouTube, Inc.*\(^{147}\) Viacom claimed that the prevalence of infringement was so large that it alone raised YouTube’s level of awareness to actual knowledge.\(^{148}\) The court continued the trend begun in *UMG Recordings*,\(^ {149}\) holding that widespread infringement could not result in knowledge because “mere knowledge of prevalence of such activity in general is not enough.”\(^{150}\) The court went a step further, clarifying what it would consider to constitute apparent knowledge. It stated there must be instances “of specific and identifiable infringements of particular individual items.”\(^{151}\)

Viacom also claimed that YouTube should face liability because it failed to comply with its takedown notice.\(^{152}\) Upon receipt of the notice, YouTube only disabled access to videos whose location Viacom specifically identified, but declined to remove identical videos located elsewhere on the site.\(^{153}\) Quashing Viacom’s argument, the court averred that requiring OSPs to remove infringing material when the copyright owner identified no location would “eviscerate the required specificity of notice.”\(^{154}\) A representative list was sufficient to identify the works subject to infringement, but the duty to disable and remove access only extended to those works for which Viacom supplied a specific location.\(^{155}\) Therefore, YouTube, having disabling access to the infringing material at the identified locations, avoided liability thanks to §512(c).\(^{156}\)

The courts, in developing the jurisprudence of § 512(c), limited the scope of apparent knowledge and actual knowledge easing the fear that OSPs might become liable for users’

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\(^{147}\) *Viacom Inter., Inc.*, 718 F. Supp.2d 514.
\(^{148}\) *Id.* at 518.
\(^{149}\) *UMG Recordings, Inc.*, 665 F. Supp.2d at 1110.
\(^{150}\) *Viacom Inter., Inc.*, 718 F. Supp.2d at 523.
\(^{151}\) *Id.*
\(^{152}\) *Id.* at 528.
\(^{153}\) *Id.*
\(^{154}\) *Id.* at 528-9. *See also* § 512(c)(3)(A)(iii).
\(^{155}\) *Viacom Inter., Inc.*, 718 F. Supp.2d at 528-9.
\(^{156}\) *Id.* at 529.
infringement. At the same time, however, courts established that they would hold copyright owners to high standard in issuing takedown notices meeting the statutory criteria of § 512(c)(3).

B. MP3tunes: “A Hard Rain’s a-Gonna Fall” of Copyright Infringement

The most recent decision involving the application of § 512(c)’s safe harbor occurred in *Capitol Records, Inc. v. MP3tunes LLC*. The defendant, MP3tunes, one of the first “music locker” providers, operated with membership terms akin to those of Amazon and Google’s lockers. MP3tunes’s locker, however, functioned like iTunes’s “music locker,” particularly with regards to the storage method employed.

MP3tunes locker, in addition to the standard features present in Amazon, Google, and iTunes’s lockers also contained an application called “sideload.” “Sideload” functioned as a search engine allowing users to enter a song or artist into “sideload.” Then “sideload” located free music, available on third party websites, matching the search terms entered by the user. Once “sideload” returned the search results to users they could connect to the third party site, and were given the option to click on a button which would “sideload” the music from the third party website into their lockers without charge.

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157 *E* *Dylan*, *A Hard Rain’s a-Gonna Fall, on The Freewheelin’ Bob Dylan* (Columbia 1963).
159 *Id.* at *1. See also *Lee supra* note 5; Singel, *supra* note 5. Just as Amazon’s and Google’s plans provide a limited amount of storage for free, and users obtain more storage space by paying a monthly or yearly fee so could MP3tune’s subscribers. Tschmuck, *supra* note 5.
162 *Id.*
163 *Id*. Google could provide a similar service by coupling its search engine with its locker. *Lee, supra* note 5.
MP3tunes maintained records of all hits returned for “sideload’s” searches.\footnote{165} It also kept records of the particular users who “sideload-ed” songs from third party sites.\footnote{166} If the third party website either removed the song, or the website itself became unavailable at a later time MP3tunes removed the link from “sideload.”\footnote{167} But, users who previously “sideload-ed” a song, or songs, from the disabled website retained the copies they “sideload-ed” in their “music lockers.”\footnote{168}

Prior to the commencement of litigation, MP3tunes received multiple takedown notices alerting it to infringing songs found on third party websites available via “sideload.”\footnote{169} MP3tunes responded by disabling access to the sites and removing the links on “sideload” connecting users to those infringing sites, but it permitted users to retain songs they previously “sideload-ed” from the infringing sites in their lockers.\footnote{170} Continuing the trend that general awareness of infringement could not constitute apparent knowledge,\footnote{171} the court found that “MP3tunes [was] aware that some infringement occurs . . . but did not have specific ‘red flag’ knowledge of infringement with respect to “sideload.”\footnote{172} Among the evidence presented by the plaintiff declared insufficient to constitute “red flags” were MP3tunes’s executives “sideload-ing” of infringing songs,\footnote{173} and emails from users of MP3tunes alerting it to possible incidents of infringement.\footnote{174} Despite evidence that would make a

\footnote{165} Id.
\footnote{166} Id.
\footnote{167} It is likely that the song or website became unavailable after being targeted for copyright infringement.
\footnote{168} Capitol Records, Inc., 2011 WL 5104616 at *2.
\footnote{169} Id. at *3.
\footnote{170} Id.
\footnote{171} See Viacom Inter., Inc., 718 F. Supp.2d at 525; UMG Recordings, Inc., 665 F. Supp.2d at 1111.
\footnote{172} Capitol Records, Inc., 2011 WL 5104616 at *14.
\footnote{173} Id. at *13.
\footnote{174} Id.
reasonable person likely to conclude there was infringement, MP3tunes only had *specific* “red flag” knowledge of the infringement on URLs contained in the takedown notices.\textsuperscript{175}

Even though the court held that MP3tunes lacked knowledge of any infringement beyond that identified in the takedown notice, it still declared MP3tunes liable.\textsuperscript{176} MP3tunes only disabled access to the third party sites on “sideload.”\textsuperscript{177} It refused to remove the songs from the users’ lockers which were “sideload-ed” from those sites.\textsuperscript{178} Since MP3tunes maintained records allowing them to readily ascertain which users “sideload-ed” songs from the infringing sites it would not need to undergo an investigation to locate the infringement.\textsuperscript{179} Therefore, the court allowed the takedown notice to be used as the basis to impute knowledge to MP3tunes for the infringing “sideload-ed” songs located in users’ lockers.\textsuperscript{180}

The *MP3tunes* court continued the trend in its application of § 512(c) by requiring a higher showing in order to find an OSP possessed either apparent or actual knowledge. The ruling, however, also offered some relief to copyright owners by establishing that if an OSP can track transfers of infringing material on its service, for which it was given a compliant takedown notice, a duty exists to remove all of the infringing material traceable from the originally identified location.

\textsuperscript{175} *Id.* at *19.
\textsuperscript{176} *Id.* at *17.
\textsuperscript{177} *Id.* at *3.
\textsuperscript{178} *Capitol Records, Inc.*, 2011 WL 5104616 at *3.
\textsuperscript{179} *Id* at *17. See *Perfect 10, Inc.*, 488 F.3d at 1114.
\textsuperscript{180} *Id.* at *17. See 17 U.S.C § 512(c)(1)(C).
IV. “Tomorrow Never Knows”\textsuperscript{181} The Scope of Knowledge in § 512(c)

The courts’ standard for both actual and apparent knowledge elevates the requirements a copyright owner must show to eject an OSP from § 512(c)’s embrace. Both interpretations of actual and apparent knowledge present copyright owners with exceptional difficulties in protecting their works on “music lockers” because of the required specificity demanded by courts in takedown notices.\textsuperscript{182} In order for a copyright owner to adequately protect their work on “music lockers,” or anywhere, they must first know the scopes of apparent and actual knowledge.

A. Apparent Knowledge: “Huh, Good God, What is it Good For?, Absolutely Nothing”\textsuperscript{183}

Much of the case law grappled with what constitutes apparent knowledge.\textsuperscript{184} Many agree the resulting standard developed by courts creates a higher threshold than what § 512(c)’s plain language and legislative history anticipates.\textsuperscript{185} Currently, a nebulous understanding of this high threshold exists because no copyright owner ever succeeded when relying on apparent knowledge to show an OSP was aware of infringement.\textsuperscript{186}

Courts consistently state that in order for apparent knowledge to exist under the “red flag” test,\textsuperscript{187} a copyright owner must show that the OSP knew of “specific incidents of

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\textsuperscript{181} THE BEATLES, Tomorrow Never Knows, on REVOLVER (Parlophone 1966).
\textsuperscript{182} See Perfect 10, Inc., 488 F.3d at 1112.
\textsuperscript{183} EDWIN STARR, War, on HE WHO PICKS THE ROSE (Gordy 1970).
\textsuperscript{185} Black, supra note 16 at 773, Chang, supra note 16 at 203.
\textsuperscript{186} Chang, supra note 16, at 203.
\textsuperscript{187} S. REP. NO. 105-190, at 44.
\end{flushright}
infringement”\textsuperscript{188} or that the OSP “turned a blind eye to infringement.”\textsuperscript{189} Some courts go so far as to insist that apparent knowledge is not “what a reasonable person would have deduced.”\textsuperscript{190} This contradicts Congress’s interpretation. The “red flag” test proclaims apparent knowledge exists when “infringing activity would have been apparent to a reasonable person operating under the same or similar circumstances.”\textsuperscript{191} By stating that it is not “what a reasonable person would have deduced” courts completely overlook the objective part of the “red flag” test.\textsuperscript{192} Nowhere does the test call for the identification of “specific incidents of infringement.”\textsuperscript{193} Courts, by requiring specificity and ignoring the objective element of the “red flag” test, drove apparent knowledge into the realm of actual knowledge.

The application of “turned a blind eye to infringement”\textsuperscript{194} to demonstrate apparent knowledge further indicates that courts consistently require actual knowledge instead of apparent knowledge. This standard is similar to willful blindness,\textsuperscript{195} and “the traditional rationale for the doctrine is that defendants who behave in this manner are just as culpable as those who have actual knowledge.”\textsuperscript{196} As such, when a defendant is found to exhibit willful blindness, courts declare that they possess actual knowledge under whatever statute they are being prosecuted.\textsuperscript{197} Thus, those courts requiring a defendant to willfully ignore incidents of infringement,\textsuperscript{198} in fact,
mandate that the copyright holder show actual, instead of apparent knowledge under § 512(c)(1)(A)(ii).

The standard for apparent knowledge under the “specific incidents of infringement”\textsuperscript{199} and “turns a blind eye”\textsuperscript{200} elevating it to actual knowledge creates a redundancy in § 512(c) between actual and apparent knowledge,\textsuperscript{201} giving both subsections the same effect. Such an interpretation goes against a fundamental principle of statutory interpretation: “that no provision should be construed to be entirely redundant.”\textsuperscript{202}

If the redundancy was eliminated and apparent knowledge construed as intended, general awareness of infringement could constitute apparent knowledge under the reasonable person interpretation in the Senate Report.\textsuperscript{203} It is difficult to imagine that apparent knowledge cannot exist when, according to one report, 90\% of the material residing on locker services is copyrighted material posted illegally,\textsuperscript{204} and the report further states that illegal content download makes up 73.2\% of all non-pornographic traffic from various forms of online lockers.\textsuperscript{205} If courts correctly applied the “red flag” test, as originally intended, apparent knowledge would likely exist with such high percentages of infringement occurring on OSPs. It would certainly make infringement apparent to a “reasonable person operating under the same or

\textsuperscript{199} Viacom Inter., Inc., 768 F. Supp.2d at 523 (emphasis added).
\textsuperscript{200} Io Group, Inc., 586 F. Supp.2d at 1148.
\textsuperscript{201} Brief for Appellant at 3 Viacom Inter, Inc. v. YouTube, Case No. 10-327.
\textsuperscript{203} See S. REP. No. 105-190, at 44.
\textsuperscript{205} Id. at 2. These statistics include the data for the now defunct Megaupload that has since been charged with criminal copyright infringement along with several other criminal offenses.
similar circumstances.” In fact, the defendants in Viacom and UMG Recording would face liability if courts used such an application of the apparent knowledge standard.

The present interpretation of § 512(c)(1)(A)(ii) leads to a redundancy that prevents the correct application of the “red flag” test in determining whether an OSP possesses apparent knowledge. Under the courts’ heightened interpretation of apparent knowledge it succeeds in meeting one of the dual goals of the DMCA by ensuring OSPs will not face crushing liability for infringement, but it undermines the DMCA’s other goal, to ensure the copyright owners works “will be protected against massive piracy.” The standard of the “red flag” undermines the cooperation that § 512 meant to foster between OSPs and copyright owners.

**B. Actual Knowledge: The Standard, “It Hurts Me Too.”**

Due to courts elevating the standard of apparent knowledge to that of actual knowledge copyright owners remain left with one option: to show that an OSP possessed actual knowledge of infringement. Just as with apparent knowledge, however, courts have raised the bar for actual knowledge. The elevation allows OSPs to operate with awareness that infringement is occurring on their services, and in some cases facilitate it.

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206 Brief for Appellant at 5 Viacom Inter, Inc. v. YouTube, Case No. 10-327; S. REP. No. 105-190, at 44.
207 Viacom asserts that under such an interpretation which allowed YouTube to succeed on summary judgment at trial allowed it to continue to operate when at least “75-80% of views according to YouTube’s own analyses” consist of infringing material. Brief for Appellant at 2 Viacom Inter, Inc. v. YouTube, Case No. 10-3270.
208 Id. at 8.
209 Id.
210 See S. REP. No. 105-190, at 40. See also Chang, supra note 16, at 219; Michael S. Sawyer, Filters, Fair Use & Feedback: User-Generated Content Principles and the DMCA, 24 BERKLEY TECH. L. J. 363, 372 (2009) (stating that the courts’ interpretation of subjective awareness under apparent knowledge could lead to OSPs purposefully designing their sites to prevent the possibility of awareness of red flags arising).
211 TAMPA RED, It Hurts Me Too, on TIRED OF YOUR RECKLESS WAYS (Bluebird 1940).
Black’s Law Dictionary states that actual knowledge arises with a “direct and clear knowledge.”\textsuperscript{213} Despite this high standard a copyright owner would face if courts applied the true test of actual knowledge, courts limit the language of § 512(c)(1)(A)(i) further. They require that the OSP receive a takedown notice, from the copyright owner, substantially complying with § 512(c)(3) to evidence actual knowledge.\textsuperscript{214} The Io court definitively adopted this standard when stating, “Plaintiff did not provide notice to Veoh of any claimed infringement. Thus, there is no question . . . that Veoh lacked actual knowledge of the alleged infringing activity at issue.”\textsuperscript{215}

While later courts have not specifically cited Io for this proposition they continue to apply this standard. If, as was the case in Viacom, notice is sent to an OSP, actual knowledge of infringement will exist only for those works identified with a specified location despite that one can infer from the takedown that all copies of the identified works on the site are infringing.\textsuperscript{216} Also, courts limit the assessment of actual knowledge to cases where an OSP receives a takedown notice from the complaining copyright holder,\textsuperscript{217} and the courts address all circumstances occurring when a takedown notice is not received under the lens of apparent knowledge.\textsuperscript{218}

\textsuperscript{213} Black’s Law Dictionary (9th ed. 2009).
\textsuperscript{214} See 17 U.S.C. § 512(c)(3). Compare Capitol Records, Inc., 2011 WL 5104616 at *12; Viacom. Inter., Inc., 718 F. Supp. 2d at 525 (finding that the OSP possessed actual knowledge because it received a takedown notice) with, Io Group, Inc., 586 F. Supp.2d at 1148 (stating that the OSP lacked actual knowledge because the OSP never received a takedown notice from the plaintiff).
\textsuperscript{215} Io Group, Inc., 586 F. Supp.2d at 1148.
\textsuperscript{216} Viacom Inter., Inc., 718 F. Supp.2d at 528-9.
\textsuperscript{218} See Capitol Records, Inc., 2011 WL 5104616.
As it stands, courts will not find the presence of actual knowledge under § 512(c)(1)(A) unless the OSP receives a takedown notice from the complaining copyright holder. Congress, however, made clear that a takedown was not required for copyright holders to enforce their rights. In fact, Congress confirmed that a takedown notice was unnecessary to evidence knowledge. The intersection of a takedown notice and knowledge only establishes that if the takedown notice is faulty, by not complying with the requirements of § 512(c)(3), it cannot be the foundation for imputing knowledge of infringement to the OSP. The courts’ interpretation of actual knowledge under § 512(c)(1)(A)(i) ignores Congress’s explicit statement that “copyright owners are not obligated to give notification of claimed infringement in order to enforce their rights.” Yet, by requiring a takedown notice to show actual knowledge courts, in fact, require notification for copyright owners to enforce their rights.

Courts’ confusion of apparent knowledge with actual knowledge, coupled with the heightened standard of actual knowledge requiring the receipt of a takedown notice to show its presence, means copyright owners must rely on their own actions to prevent infringement. By requiring copyright owners to issue a takedown notice in order to show that an OSP knew of infringement, actual or apparent, the courts place copyright holder’s rights in jeopardy, especially on “music lockers.”

219 See Jansen, Greg, Whose Burden is it Anyway? Addressing the Needs of Content Owners in DMCA Safe Harbors, 62 FED. COMM. L.J. 153, 162-3 (2010) (claiming that courts will only find an OSP to have actual knowledge if the copyright owner previously sent it a takedown notice pursuant to § 512(c)(3)).

220 “Under this subsection [§ 512(c)(3)], the court shall not consider such notifications as evidence of whether the service provider has knowledge, is aware of facts or circumstances . . .” S. REP. NO. 105-190, at 46.

221 “Section 512 does not require use of the notice and take-down procedure. A service provider wishing to benefit from the limitation of liability under subsection (c) must ‘take down’ or disable access to infringing material . . . of which it has actual knowledge or that meets the ‘red flag’ test, even if the copyright owners or its agent does not notify it of a claimed infringement.” S. REP. No. 105-190, at 45 (emphasis added).

222 Id. at 45. See 17 U.S.C. § 512(c)(1)(C), (3)(B)(ii). See also Perfect 10, Inc., 488 F. Supp.2d at 1112-3 (refusing to impute knowledge to an OSP because notice provided by the copyright holder did not substantially comply with § 512(c)(3)).

223 S. REP. NO. 105-190, at 45.
C. “All Blues”\textsuperscript{224} Liability and Protection in the Cloud

As a result of the melding of apparent knowledge and actual knowledge coupled with the strict requirements to issue a takedown notice, only two circumstances exist by which copyright owners within the music industry can prevent infringement on “music lockers.” The first exists where the OSP actually based its entire business model on the premise that its “music locker” would induce users to commit infringement resulting in contributory liability.\textsuperscript{225}

The second case involves the copyright owner first issuing a takedown notice to the “music locker” forcing the OSP to remove the infringing material.\textsuperscript{226} There are two ways which sending the takedown notice could conclude: First a situation similar to MP3tunes could occur, where after receiving a takedown notice the OSP fails to adequately respond, thereby, becoming liable for infringement as a result of the imputation of knowledge disqualifying them from the safe harbor of §512(c).\textsuperscript{227} The other scenario results when the OSP acts expediently by removing access to the infringing material avoiding liability.\textsuperscript{228}

Issuing the takedown notice, however, presents copyright owners in the music industry with a quandary. The private characteristic of “music lockers” makes issuing a compliant takedown notice nearly impossible because of the need for the identification of the specific location of infringement,\textsuperscript{229} that is unless the “music locker” has a feature such as MP3tunes

\textsuperscript{224} MILES DAVIS, All Blues, on KIND OF BLUE (Columbia 1959).
\textsuperscript{225} See Grokster, Ltd., 545 U.S. 913. Grokster, as a peer-to-peer file sharing platform, could not qualify for any of § 512’s safe harbors but under the Court’s ruling any OSP whose sole purpose was to promote infringement on their service would be contributorily liable no matter if they fit into one of §512’s safe harbors.
\textsuperscript{226} See 17 U.S.C. §512(c)(1)(C), (c)(3).
\textsuperscript{227} 17 U.S.C. § 512(c)(1)(C); Capitol Records, Inc. 2011 WL 5104616 at *11-2. See also Mike Scott, Safe Harbors Under the Digital Millennium Copyright Act, 9 N.Y.U. LEGIS & PUB. POL’y 99, 121 (2005-06).
\textsuperscript{228} The only instance in which the DMCA’s dual goals are actually fulfilled.
\textsuperscript{229} See UMG Recordings, Inc., 655 F. Supp. 2d at 1110
All “music lockers” permit access to a locker only with the correct username and password. Since parties seeking to issue takedown notices will not have access to these keys they are unable to issue a substantially compliant takedown notice because the copyright owner cannot provide the OSP with the required specificity of location.

Due to the difficulties in issuing substantially complaint takedown notices to “music lockers” it allows the OSPs to remain complacent, since they need not fear reprisal due to the courts heightened knowledge standards. This is due to the fact that OSPs have no “affirmative duty to police their users,” and “the DMCA notification procedures place the burden of policing copyright infringement-identifying the potentially infringing material and adequately documenting infringement-squarely on the owners of the copyright.” The burden resting on the copyright owners to prevent infringement, and their inability to issue the takedown notices to “music lockers” allows the OSPs to ignore users’ infringement creating a safe harbor for infringement on “music lockers.”

V. Solution: “The End” to Infringement in the Cloud.

“Music lockers” were unanticipated technology in 1998 when Congress passed the DMCA. While “music lockers” fit neatly into the definition of an OSP qualifying for the safe harbor of § 512(c), the nature of “music lockers” make the copyright owner’s remedies in the section irrelevant. Instead what is needed, to both prevent the crushing liability feared by OSPs, 

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232 Capitol Records, Inc., 2011 WL 3667335 at *9. But see Ginsberg, supra note 198, at 597 (“§ 512(m)’s dispensation of service providers from ‘affirmatively seeking facts indicating infringing activity,’ should not entitle a service provider to remain militantly ignorant.”).
233 Perfect 10, Inc., 388 F.3d at 1113.
234 THE DOORS, The End, on THE DOORS (Elektra 1967).
and to ensure that the music industry is compensated for the use of its copyrighted works, is an alternative solution than the one provided by the DMCA. Without an adequate system in place to provide those who own the musical copyrights with just compensation, revenues will continue to drop as the Internet increasingly becomes the dominant vehicle for music commerce.\textsuperscript{235} This would result in the failure of copyright law’s primary goal by diminishing the incentive of artists to produce new musical works.\textsuperscript{236}

\textbf{A. The Audio Home Recording Act: No More “Lip Service”\textsuperscript{237} for Copyright Owners}

The Audio Home Recording Act of 1992\textsuperscript{238} (AHRA) could provide Congress with the guidelines to build a new statute giving copyright holders in the music industry their desired compensation for the storage of their songs on “music lockers” without resulting in the liability feared of by OSPs. The Act provides that two percent of the transfer price of every “digital audio device imported into and distributed in the United States” is to be collected for royalty payments, and payable by the first person to manufacture and distribute the device.\textsuperscript{239}

Previously, commentators suggested adding computers to the list of digital recording devices,\textsuperscript{240} but this casts the net too wide because not every computer is employed for music purposes. Instead, the better target is “music lockers” themselves. Requiring the OSPs to

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\textsuperscript{236} See U.S. CONST. art. I, § 8, cl. 8.

\textsuperscript{237} ELVIS COSTELLO, \textit{Lip Service, on THIS YEAR’S MODEL} (Radar 1978).

\textsuperscript{238} See 17 U.S.C. § 1004.

\textsuperscript{239} § 1004(a)(1).

\textsuperscript{240} See Aldrich, supra note 3, at P83.
distribute a select percentage of their revenues to copyright owners would remedy copyright holders concerns of lack of compensation.\textsuperscript{241}

A provision similar to the AHRA pertaining to “music lockers” would also assuage the fears of OSPs that they would face liability for infringement. This is because under the AHRA when a party fails to remit the required fees, instead of liability for infringement,\textsuperscript{242} the guilty party only becomes liable for the statutorily imposed royalty payments.\textsuperscript{243}

The more difficult question in employing such a scheme is its application to cloud storage services not solely devoted to the storage of songs.\textsuperscript{244} In such circumstances a yearly audit could be conducted to determine the percentage of such lockers which are employed to store music. That percentage could then be the basis for calculating the required remittance of royalties to copyright owners.

B. “Do You Realize??”\textsuperscript{245} The Need for a New Statutory License

Another solution is the creation of a new statutory license. Contained within the Copyright Act are numerous sections which create compulsory licenses for the use copyrighted works.\textsuperscript{246} These licenses are not subject to the copyright owners’ approval. Anyone wishing to use a copyrighted musical work may do so simply by following the procedure prescribed within the statutory license.

\footnotesize{\textsuperscript{241} Some “music lockers” do not charge users for storage, however, these locker make their profits from ad revenue which can still be sizable. YouTube, whose main source of revenue is ads, made $450,000 million in revenue in 2009. Ryan Lawler, *YouTube Revenues More Than Doubled in 2010*, GIGAOM.COM (Jan. 20, 2011), http://www.gigaom.com/video/youtube-revenues-doubled.
\textsuperscript{242} “[N]o action may be brought under this title alleging infringement of copyright . . . .”17 U.S.C. § 1008.
\textsuperscript{243} “[A]ctual damages shall constitute the royalty payments that should have been paid . . . the court, in its discretion, may award an additional amount of not to exceed 50 percent of the actual damages.” § 1009(d)(1)(A)(ii).
\textsuperscript{244} Such services include Livedrive, the rackspace cloud, Mozy, and dropbox.
\textsuperscript{245} *THE FLAMING LIPS, Do You Realize, on YOSHIMI BATTLES THE PINK ROBOTS* (Warner Bros. 2002).
\textsuperscript{246} See 17 U.S.C. §§ 111, 112, 114, 115, 118, 119, 122.}
Storing songs in “music lockers” does not fall under the canopy of § 114, the compulsory license for the distribution by public performance of a digital audio record,\(^247\) since streaming music is not considered a public performance,\(^248\) and the argument that “music lockers” provide public performances is even more tenuous. A clarification establishing when a license is required to utilize or profit from an artist’s copyrighted musical works on “music lockers” is achievable through a new statutory license in the Copyright Act.

A new section can be instituted requiring a license for “music lockers” wishing to store copyrighted works on its service based on § 115, the compulsory license for making and distributing sound recordings.\(^249\) As such, the OSP need not obtain permission from the copyright owners to operate a music locker, in only needs to provide the required notice that it intends to exercise its right to use the musical work.\(^250\) After providing the copyright owner notice the OSP would need to ensure that the statutorily prescribed licensing fees were submitted to the parties.\(^251\) If the fees failed to be remitted, only then would the OSP face liability for copyright infringement.\(^252\)

The applicable rates for a license can be determined just as under § 115. The rate can be freely negotiated between the copyright owners and the OSP, or if a licensing rate cannot be agreed upon they would be required to use the reasonable rates as determined by the Copyright Royalty Judges.\(^253\) On the possibility that it appears the rates as determined by the Royalty Judges would be unfair to the OSP, for instance where the storage service was not solely devoted to store songs. Then either copyright owner or OSP could challenge the fees set by the Royalty

\(^{247}\)§ 114
\(^{249}\)§ 115.
\(^{250}\)See § 115(b).
\(^{251}\)See § 115(c)(5).
\(^{252}\)See § 115(c)(6).
Judges in the Court of Appeals for the District of Columbia.\textsuperscript{254} The review by the Court of Appeals would be limited, however, because the Royalty Judges decisions are subject to the standards applied when reviewing the decision of an agency.\textsuperscript{255}

V. Conclusion

The use of Internet applications to commit infringement consistently denies copyright owners the compensation to which they are entitled. “Music lockers,” more so that other online services, present copyright with more pernicious complications in combating infringement. The heightened standards of knowledge developed by the courts in the safe harbor of § 512(c) lie at the heart of these difficulties. Without legislative intervention “music lockers” have the capability of becoming safe harbors for infringement just as § 512(c) provides safe harbors to “music lockers.”

\textsuperscript{254} § 801(d).