SEARCH ENGINES AND § 512(D) OF THE D.M.C.A.

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I. INTRODUCTION

It is impossible to overstate the importance of search engines in today’s online world. As Internet access becomes more widespread, and the amount of information available in

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cyberspace becomes more voluminous, such information-gathering tools grow ever more valuable. Without a way to efficiently sift through online data, Internet users would be unable to locate and access the information they need.

Recognizing the importance of search engines to the public, Congress placed safe-harbor provisions for “information location tools” into the Digital Millennium Copyright Act (the “D.M.C.A.”).\(^1\) Section 512(d) of the D.M.C.A. states that an Internet service provider cannot be liable for merely using tools like a “directory, index, reference, pointer, or hypertext link” to direct users toward a website that displays copyrighted works.\(^2\) This section indicates an attempt by Congress to balance the needs of Internet service providers (“ISPs”) and copyright holders.

In the years since the passage of the D.M.C.A., however, search engines have evolved at a rapid pace along with the rest of the World Wide Web. Today, a search engine like Google or Yahoo! is often the first tool people use when seeking information online, a gateway of sorts through which all other online activity arrives. As search engines have become increasingly important to the average Internet user, many search engines have begun to commoditize, adding new functions to grow their customer base. For instance, the current incarnation of the Google search engine not only allows users to find web pages, but also allows them to search for image files, news stories, blog results, products for sale in online stores, and more.\(^3\) Search engine providers have also added specialized search tools, which allow users to narrow their search to certain specific subjects.\(^4\) Additionally, many search engines now host their own material or cache third-party websites, allowing Internet users faster and easier access.\(^5\) In a world where copyrighted material is available through a link, search engines may become liable for copyright infringement as they add new features, which discourage growth and expansion.

One recently filed lawsuit, which brings all of these

\(^2\) Id. Other qualifications apply and will be discussed infra Part II.B.
distinctions into focus, is Warner Bros. Records v. SeeqPod, Inc. SeeqPod is a specialized search engine that finds mostly music-related results, such as for mp3s, music videos, or articles on artists. The engine directs Internet users to third-party sites using hyperlinks, and it provides a built-in “playlist” feature, allowing users to hear the results of their queries instantly. In January 2008, Warner Brothers sued SeeqPod for copyright violations, alleging the creators of the search engine knew that the music found in search results was overwhelmingly copyrighted material.

By law, a search engine is sheltered from liability for copyright infringement as long as it removes or disables access to links that direct Internet users toward copyrighted material, after a legitimate copyright holder sends notice that infringing links exist. SeeqPod allegedly received notice from the Recording Industry Association of America (RIAA) of “thousands” of infringing links. Yet the heart of the plaintiffs’ complaint is the assertion that notice is unnecessary for a music-oriented search engine because almost all playable music is copyrighted in some way. According to the plaintiffs, SeeqPod’s creators should know better than to allow Internet users to seek out and play back music-related search results.

Clearly, the issue of whether search engines should be liable for the copyright infringement of third-party websites is contentious. As the first tool that most Internet users employ to reach media and information on the World Wide Web, search engines are uniquely situated to prevent or allow access to unauthorized works on third-party sites. However, placing this burden on search engines may generate unnecessary restrictions on the navigation of online content and discourage the development of new features like SeeqPod’s “playlist” function.

This Note argues that search engines deserve broad protection from liability because it may otherwise be daunting for such sites to provide sophisticated, specialized search functions and to integrate new features that benefit the public. Despite its puzzling terminology, the safe-harbor provision for search engines in the D.M.C.A. is meaningful, and courts should interpret it broadly. This Note argues, moreover, that even without subscribers, search engines may still fulfill the

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6 No. CV08-00335 (C.D. Cal. filed Jan 18, 2008).
9 Complaint, supra note 7, at 16, ¶ 37.
10 Id. at 12, ¶ 29.
11 Id.
conditions for safe-harbor treatment under the D.M.C.A., and it suggests possible solutions to the problematic “notice and takedown” provisions of the D.M.C.A.

Part II gives a brief history of copyright law in the United States and discusses the legal definition of a “search engine.” It explains the steps a search engine must take to protect itself from liability for copyright infringement. Part III questions whether the safe-harbor provision for search engines is at all meaningful in light of how the terms in § 512(d) closely mirror the standards for contributory and vicarious liability for copyright infringement. It also examines whether search engines must have a policy of control over users in the same way as other service providers under § 512(i). Part IV argues that the “notice and takedown” regime in the D.M.C.A. can be exploited or abused, and it explores alternatives, which strike a better balance between copyright holders’ interests and the public good.

II. THEORIES OF LIABILITY FOR COPYRIGHT INFRINGEMENT AND LEGAL REQUIREMENTS FOR SAFE-HARBOR PROTECTION UNDER THE D.M.C.A.

A.  Brief History of Copyright Law and Theories of Liability

The U.S. Constitution gives Congress the power to “Promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the Exclusive Right to their respective Writings and Discoveries.”12 The intent of this provision is to allow the public access to ideas and products that the creators might not otherwise have an incentive to produce.13 This economic incentive to generate ideas and inventions intends to benefit the public.

Pursuant to this Constitutional power, Congress enacted the Copyright Act, protecting any “original works of authorship fixed in a tangible medium.”14 A copyright holder has the exclusive right to reproduce or distribute his work, to create derivative works, and to publicly display or perform the copyrighted work.15 Direct infringement of copyright occurs when one personally violates one or more of these five exclusive statutory rights without the permission of the

Other than direct infringement, three forms of secondary liability for copyright violations have emerged from the common law: contributory infringement, vicarious liability, and inducement theory liability. Contributory liability occurs when one has knowledge of direct infringement and “materially contributes” to or assists in the violation. Knowledge can be actual or constructive. Knowledge of specific abuses of copyright is an essential element in establishing such liability; the mere fact that a product or service is capable of infringing use is not sufficient to show a violation. Next, a material contribution can be as simple as providing the “site or facilities” where direct infringement takes place, or providing a service or program without which copyright infringement could not occur.

Another kind of secondary liability for copyright infringement, vicarious liability, concerns the relationship between direct infringers and the defendant, rather than the defendant’s knowledge or facilitation of copyright violations. A defendant is vicariously liable for the copyright infringement of others if he “profits” from direct infringement while declining to exercise a right to stop or limit these acts. Over the objections of online service providers, courts have held that almost anything can constitute a financial stake in infringing activities. In A&M Records v. Napster, Inc., the appellate court held the mere fact that “availability of infringing material” attracted customers could show the defendant directly benefited from his users’ behavior. The appellate court in MGM Studios v. Grokster, Ltd. noted that “advertising revenue” satisfies this financial element of vicarious liability. It does not matter “how substantial the benefit is in proportion to a defendant’s overall profits,” but only that some “causal relationship between the infringing activity” and the defendant’s earnings exists.

17 A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1019 (9th Cir. 2001) (quoting Gershwin Publ’g Corp. v. Columbia Artists Mgmt., Inc., 443 F.2d 1159, 1162 (2d Cir. 1971)).
18 Id. at 1020.
19 Id. at 1021.
20 Id. at 1022 (citing Fonovisa, Inc., v. Cherry Auction, Inc., 76 F.3d 259, 264 (9th Cir. 1996)).
22 Id.
23 239 F.3d 1004 (9th Cir. 2001).
24 Id. at 1023.
25 380 F.3d 1154 (9th Cir. 2004).
26 Id. at 1164.
27 Ellison v. Robertson, 357 F.3d 1072, 1079 (9th Cir. 2004).
Finally, reserving the right to block users’ access to a service is sufficient to demonstrate control, satisfying the second prong of vicarious liability. 28

The Supreme Court recently elaborated a third theory for secondary liability in copyright infringement: inducement. A defendant is liable for the copyright infringement of third parties when he intends for others to use his program or service for such a purpose. 29 The defendant shows intent “by clear expression or other affirmative steps taken to foster infringement [such as] advertisement or solicitation . . . designed to stimulate others to commit violations.” 30

Answering customer “requests for help in locating” copyrighted works, “aiming to satisfy a known source of demand for copyright infringement,” or failing to “develop filtering tools” may all be factors to show intent and, thus, liability for inducement. 31

B. Eligibility Restrictions on Safe-Harbor Provisions for Online Service Providers

To “provide certainty for copyright owners and Internet service providers” alike in the murky copyright waters of an increasingly digitalized world, Congress passed the D.M.C.A. in 1998. 32 Title II of the D.M.C.A. includes four safe-harbors against liability for ISPs. 33 Yet, before obtaining protection, an ISP must show it is eligible by law. The first test is definitional. Section 512(k) defines “Internet service provider” very broadly, as any “provider of online services or network access, or the operator of [online] facilities.” 34 The second test is one of policy and implementation. Under § 512(i), the ISP must have “adopted and reasonably implemented” a policy that terminates “repeat infringers,” and it must have informed its subscribers of

28 A&M Records, 239 F.3d at 1023. Napster had a policy reserving the right to block users’ access for “any reason whatsoever.” Id. at 1023. Lacking such a policy, other cases have held the mere ability to block access is not sufficient to demonstrate the right and ability to supervise users consistent with a vicarious liability scheme. See, e.g., Costar Group, Inc. v. Loopnet, Inc., 164 F.Supp.2d 688, 704 (D. Md. 2001) (“[A]s the concept is used in the DMCA, [control] cannot simply mean the ability of a service provider to remove or block access to materials.”).

29 Id. at 938-39.

30 Id. at 937.

31 Id. at 938-39.


33 17 U.S.C. § 512 (a)-(d).

34 17 U.S.C. § 512(k)(1)(B). This section includes § 512(k)(1)(A), which states that any providers “offering the transmission, routing, or providing of connections for digital online communications . . . without modification to the content of the material as sent or received.”
this policy. In addition, the ISP must not interfere with a copyright holder’s steps “to identify or protect copyrighted works.”

Exactly what § 512(i) entails for ISPs is unclear. The Congressional Reports on this Section recognize a wide spectrum between an “inadvertent” copyright violation for no financial gain and a “willful” violation for a commercial purpose. Those who “repeatedly or flagrantly . . . disrespect the intellectual property rights of others” are the true target of § 512(i). Congress never intended to imply a requirement for an ISP to “investigate possible infringements, monitor its service, or make difficult judgments as to whether conduct is or is not infringing.” As long as an ISP has a “repeat offender” policy and implements it reasonably, the ISP is protected under § 512(i)(1)(A).

Several cases discuss the “reasonable implementation” of policy. In Ellison v. Robertson, a defendant published short stories to a newsgroup without the author’s permission. The stories were then copied to America Online (AOL) USENET newsgroups as well. AOL had a system in place to deal with repeat infringers. However, it changed the e-mail address designated to receive complaints from copyright holders without informing the U.S. Copyright Office or forwarding e-mails from the old address. The Ninth Circuit held that permitting “notices of potential copyright infringement to fall into a vacuum and to go unheeded” showed evidence of a policy that was not “reasonably implemented” under § 512(i)(1)(A).

The Seventh Circuit also dealt with this issue in In re Aimster Copyright Litig. Aimster prevented itself from gathering data on repeat infringers and terminating their accounts by allowing users to encrypt file-transfers. The court held this sort of willful blindness did not constitute reasonable implementation of a “repeat infringer” policy under § 512(i).

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38 Id.
39 Id.
40 See Ellison v. Robertson, 357 F.3d 1072, 1080 (9th Cir. 2004).
41 357 F.3d 1072 (9th Cir. 2004).
42 Id. at 1075.
43 Id. at 1080.
44 Id.
45 334 F.3d 643 (7th Cir. 2003).
46 Id. at 655.
Interestingly, the Ninth Circuit later interpreted Aimster as holding that a service provider cannot prevent copyright holders from gathering data on infringement and sending D.M.C.A. compliant notices under § 512(i). \(^{48}\) Requiring a service provider to deal with repeat infringers is consistent with Congressional intent behind this provision. \(^{49}\) Both House and Senate Reports state that § 512(i) should not be construed in a way that diminishes the “protection of privacy rights.” \(^{50}\) Unfortunately, the law is unclear as to what protection of consumer privacy means. The statute specifies that an ISP may obtain safe-harbor even if it does not monitor users or search for infringing activity, and it links safe-harbor to the “protection of privacy.” \(^{51}\) This is only true to the extent that an ISP does not interfere with “standard technical measures” used by copyright holders to “identify or protect copyrighted works.” \(^{52}\) Thus, service providers are left in an ambiguous position. On one hand, an ISP cannot encrypt files solely to avoid knowledge of infringing activity. \(^{53}\) On the other hand, the Ninth Circuit’s statement that encryption destroys a service provider’s protection under § 512(i) seems broader than Congress intended, so long as that encryption is designed to protect consumer privacy and not purposefully engineered to hamper copyright holders from identifying infringing works online.

Fortunately for service providers, “[a]n infringement policy need not be perfect; it need only be reasonably implemented.” \(^{54}\) In Perfect 10 v. CCBill L.L.C., \(^{55}\) defendants tracked potential infringers in a spreadsheet after receiving notice of allegedly infringing behavior. \(^{56}\) The court held this was a reasonable policy under § 512(i), even though the information was incomplete and did not list every webmaster’s name. \(^{57}\) In

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\(^{48}\) Perfect 10, Inc. v. CCBill L.L.C., 488 F.3d 1102, 1109-1110 (9th Cir. 2007) (holding that a policy is only reasonable “if it does not actively prevent copyright owners from collecting information needed to issue such notifications” and that “a repeat infringer policy is not implemented under § 512(i)(1)(A) if the service provider prevents copyright holders from providing DMCA-compliant notifications”).


\(^{51}\) 17 U.S.C. § 512(m).

\(^{52}\) 17 U.S.C. § 512(i)(2).

\(^{53}\) In re Aimster Copyright Litig., 334 F.3d 643, 655 (7th Cir. 2003).


\(^{55}\) 488 F.3d 1102 (9th Cir. 2007).

\(^{56}\) Id. at, 1110-11.

\(^{57}\) Id.
addition, the holding of *Corbis Corp. v. Amazon.com, Inc.* suggests that a repeat infringer policy might be reasonable, even if users circumvent it by changing user names and reapplying for service with the Internet service provider. Finally, the Ninth Circuit has denied any need to discuss how “reasonable” an ISP’s policy is under §512(i)(1)(A) if the copyright holder has sent deficient notice.

In sum, even if an ISP does not track or prevent every instance of copyright circumvention by its users, a good faith effort to implement a “repeat infringer” policy under §512(i) will likely qualify the provider for safe-harbor treatment under §§512(a-d). It remains unclear whether encrypting data disqualifies an ISP under §512(i) by interfering with a copyright owner’s ability to discover illegal transfers.

### C. Obtaining Safe-Harbor Under §512(d) by Following a “Notice and Takedown” Regime

After satisfying the definition of §512(k) and adopting a policy compliant with §512(i) to ban repeat infringers, an ISP may then qualify for protection under one or more of the safe-harbor provisions in Title II of the D.M.C.A. The first safe-harbor is intended for service providers that engage in transitory communications, the second involves system caching, the third limits liability for a provider who stores information at the direction of users, and the fourth concerns information location tools. Congress intended these provisions to defend against existing and evolving theories of copyright liability by limiting a plaintiff’s injunctive relief and eliminating monetary relief if an ISP successfully meets a safe-harbor’s terms. These defenses do not hinder alternative defenses under the Copyright Act, such as fair use.

Under §512(d), ISPs that use “information location tools” are protected from copyright liability that occurs “by reason of the provider referring or linking users to an online location containing infringing material.” Although large search engines and directories like Google or Yahoo! seem to be what Congress had in mind when it passed the law, this safe-harbor

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59 *Id.* at 1104.
60 *Perfect 10, Inc. v. CCBill L.L.C.*, 488 F.3d 1102, 1113 (9th Cir. 2007).
61 17 U.S.C. §§ 512(a)-(d).
64 17 U.S.C. § 512(d).
might apply even if a search engine hosts a small number of links and has some form of contractual relationship with linked third-party sites.\textsuperscript{66} A search engine with multiple features may be protected by several safe-harbor categories, but § 512(d) only applies to that portion of the service that utilizes an information location tool.\textsuperscript{67}

Three conditions must be satisfied before § 512(d) is satisfied. First, this safe-harbor requires a lack of knowledge, both actual and constructive, of infringing material or activity on linked sites.\textsuperscript{68} Upon gaining such knowledge, a search engine must “expeditiously . . . remove, or disable access to” infringing material.\textsuperscript{69} Second, the search engine must not “receive a financial benefit directly attributable to the infringing activity,” if it “has the right and ability to control such activity.”\textsuperscript{70} Third, the search engine must comply with “notice and takedown” procedures, as described in § 512(c)(3).\textsuperscript{71}

The notification procedures in § 512(c) are complex, and it may be difficult for a search engine to tell when proper notice has been received. A proper notice must identify allegedly infringing material or activity that occurs through an ISP and it must include “information reasonably sufficient” for the ISP to locate the copyrighted work.\textsuperscript{72} In the case of a search engine, this means each notice must list hyperlinks to sites containing allegedly infringing material.\textsuperscript{73} The complainant must also provide a signature, contact information, a good faith statement that he believes infringement occurred, and a declaration under penalty of perjury that he is authorized to act on behalf of the copyright holder.\textsuperscript{74}

All of these requirements are soon undercut by the next section of the law, which asserts that a notice need only “comply substantially” with these guidelines.\textsuperscript{75} As long as a complainant includes contact information and identifies allegedly infringing links or sites, the burden then moves to the search engine to contact the copyright holder and obtain “proper notice” of alleged infringement.\textsuperscript{76} The receipt of a substantially compliant notice weighs into a court’s decision on whether an

\textsuperscript{67} 17 U.S.C. § 512(n).
\textsuperscript{68} 17 U.S.C. §§ 512(d)(1)(A)-(B).
\textsuperscript{69} 17 U.S.C. § 512(d)(1)(C).
\textsuperscript{70} 17 U.S.C. § 512(d)(2).
\textsuperscript{71} 17 U.S.C. § 512(d)(3).
\textsuperscript{72} 17 U.S.C. § 512(c)(3)(A)(iii).
\textsuperscript{73} 17 U.S.C. § 512(d)(3).
\textsuperscript{74} 17 U.S.C. §§ 512(c)(3)(A)(i), (iv-vi).
\textsuperscript{75} 17 U.S.C. § 512(c)(3)(B)(i).
\textsuperscript{76} 17 U.S.C. § 512(c)(3)(B)(ii).
ISP had knowledge of infringing activity. Thus, by sending a “substantially compliant” notice, a copyright holder may generate “knowledge” on the part of a search engine, destroying the application of its safe-harbor.

Courts are divided as to the meaning of “substantial compliance” with notice requirements. The Fourth Circuit has held that a “representative list” of just two websites can constitute sufficient notice, where “virtually all the images” in the offending newsgroups showed the plaintiff’s copyrighted material, and the newsgroups were “created for the sole purpose of publishing” the plaintiff’s copyrighted work. Screenshots of an MP3 message board system displaying potentially infringing links have also been held to be substantially compliant notices.

A less sympathetic plaintiff, however, may receive harsher treatment from a court. In Perfect 10, the Ninth Circuit held that 22,185 pages of image printouts were insufficient notice because they required the defendant to spend great time and effort combing through files to find infringing material. In addition, the court required the complainant’s “good faith” declaration that infringing use occurred, and his oath under penalty of perjury that he was authorized to represent the copyright holder. The plaintiff was not allowed to “cobble together” sufficient notice from multiple, insufficient conveyances.

Similarly, the plaintiff in Hendrickson v. eBay Inc. provided eBay with user names but not item numbers where infringing sales occurred. Although eBay attempted to work with him, the plaintiff refused to provide additional information. The court held that his written notice was insufficient without a good faith assertion of infringement and a declaration under penalty of perjury that he was the authorized copyright holder. Both cases gave the technical notice requirements of § 512(c)(3)(A) more potency in handling unhelpful plaintiffs.

78 ALS Scan, Inc. v. RemarQ Cmty, Inc., 239 F.3d 619, 625 (4th Cir. 2001).
81 Id.
82 Id. at 1113.
84 Id. at 1090-91.
85 Id. at 1085.
86 Id. at 1089.
For many Internet uses, it is in a search engine’s interest to disable access to allegedly infringing links without waiting for legally proper notice, because the safe-harbor protects those sites that disable access to infringing material “expeditiously.”\textsuperscript{87} Again, Congress did not intend for ISPs to make complex legal judgments.\textsuperscript{88} Instead, the law safeguards search engines and ISPs that remove access to links quickly, whether or not copyright violation has truly occurred.\textsuperscript{89}

If a site is unjustly denied access to the Internet, then a site-owner can provide “counter-notice” that complies with the requirements of § 512(g)(3) and, in addition, possibly have his services restored.\textsuperscript{90} However, a mandatory ten-day waiting-period is imposed on the search engine before it may restore links to the site, regardless of whether copyright infringement occurred, providing yet another blockade for site-owners and Internet users.\textsuperscript{91} In sum, Title II of the D.M.C.A is problematic for search engines and Internet users alike. Obtaining safe-harbor by following a “notice and takedown” regime can be a difficult task to accomplish.

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III. THE LIMITED UTILITY OF § 512(D) AGAINST SECONDARY LIABILITY AND THE PROBLEM OF APPLYING § 512(I) TO SEARCH ENGINES WITHOUT ‘USERS’
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A. Liberal Interpretation of § 512(d) Is Necessary to Give Search Engines Meaningful Protection Against Secondary Liability for Copyright Infringement
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Courts and commentators alike have discovered a pitfall in the application of the safe-harbor for information location tools under the D.M.C.A. As mentioned above, for § 512(d) to apply, search engines must \textit{not} have “actual knowledge” or awareness of “facts or circumstances from which infringing activity is apparent.”\textsuperscript{92} If a search engine has such actual or constructive knowledge, then it must promptly disable access to the infringing links to maintain its eligibility under § 512(d).\textsuperscript{93} In addition, the search engine must not receive “financial benefit” from third-party infringers where it has a “right or ability to control such activity.”\textsuperscript{94}

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\textsuperscript{87} 17 U.S.C. § 512(d)(3).
\textsuperscript{88} S. Rep. No. 105-190, supra note 32, at 52.
\textsuperscript{89} 17 U.S.C. § 512(g)(1).
\textsuperscript{90} 17 U.S.C. § 512(g)(3).
\textsuperscript{91} 17 U.S.C. § 512(g)(2)(C).
\textsuperscript{92} 17 U.S.C. §§ 512(d)(1)(A)-(B).
\textsuperscript{93} 17 U.S.C. § 512(d)(1)(C).
\textsuperscript{94} 17 U.S.C. § 512(d)(2).
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Given how these provisions echo the knowledge requirement for contributory liability and the form of vicarious liability under the common law, some courts have honestly struggled to understand the meaning of § 512(d). For instance, the district court in *Napster* noted that no shelter from contributory infringement was possible under § 512(d). Once *Napster* was found contributory liable, any protection afforded by § 512(d) seemed to disappear. If the defendant had sufficient “knowledge” to satisfy contributory liability, then he also had sufficient knowledge of infringement to deny the safe-harbor. Similarly, the district court in *Aimster* found that imposition of vicarious liability on the defendant simultaneously denied the application of § 512(d).

Yet Congress clearly intended for the D.M.C.A. to limit liability for contributory and vicarious infringement claims, and most courts are unwilling to hold that the language of a statute serves no real purpose. Accordingly, the Ninth Circuit reversed the lower court’s opinion in *Napster* concerning § 512(d) and contributory infringers, and the Seventh Circuit found an alternative route to denying safe-harbor protection in *Aimster*—the appellate court held § 512(i) was not satisfied, so any discussion of safe-harbors was a moot point.

Scholars have similarly struggled to grasp the utility of § 512(d). Professors Mark Lemley and Anthony Reese agree that the section “essentially mirrors” the tests for contributory infringement and vicarious liability and therefore confers “little protection to innovators against secondary liability claims.” These professors suggest that the “financial benefit” required to establish common law vicarious liability is a slightly lower standard than the “direct financial benefit” required to lose protection under § 512(d)(2). Likewise, for contributory infringement purposes, the ‘fatal’ knowledge imputed by courts might be a somewhat less stringent standard than the actual or

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96 Id.
97 Id. at 1371.
98 H.R. REP. No. 105-551(II), supra note 37, at 50, S. REP. No. 105-190, supra note 32, at 20.
100 In re *Aimster Copyright Litig.*, at 655.
102 Id. at 1371.
103 Id. at 1372 n.104 (“[T]he directness of the financial benefit a defendant must have in order to lose the protection of the safe harbor may be somewhat greater than the somewhat loosened ‘direct financial benefit’ required by courts in ordinary cases to hold a defendant vicariously liable.”).
constructive knowledge required for a search engine to lose its safe-harbor treatment under §§ 512(d)(1)(A-B).

Congress has provided some guidance, at least, for the problematic “knowledge” components of § 512(d)(1). Instead of requiring the common law standard for constructive knowledge, a Senate Report suggests that courts should adopt a “red flag” test that contains both subjective and objective parts.\(^{104}\) Merely asking what a reasonable service provider should have known, based on facts and circumstances, is not sufficient in determining liability.\(^{105}\) A court must also test a defendant’s “subjective awareness” of those “facts or circumstances.”\(^{106}\)

The subjective awareness mental state seems close to actual knowledge. Under such a standard, an ISP would have no obligation to seek out copyright infringement, but it would not qualify for the safe harbor if it ignored ‘red flags’ of obvious infringement.\(^{107}\) If websites “make their illegal purpose obvious” by using “words such as ‘pirate,’ ‘bootleg,’ or slang terms in their uniform resource locator (URL) and header information,” then a search engine cannot obtain immunity under § 512(d) after viewing these sites and subsequently linking to them.\(^{108}\) However, Congress specifically intended this red flag test to insulate “online directories prepared by human editors and reviewers,” not automated systems like Google.\(^{109}\) The red flag test may therefore be of limited applicability to automated search engines.

The red flag test has not entirely satisfied courts either. The Ninth Circuit was unwilling to conclude that the mere presence of certain words in a URL or an online directory necessarily comprised a red flag of infringing activity or material.\(^{110}\) The court noted that “describing photographs as ‘illegal’ or ‘stolen’ may be an attempt to increase their salacious appeal, rather than an admission that the photographs are actually illegal or stolen.”\(^{111}\)

\(^{108}\) Id.
\(^{111}\) Id.
A disclaimer may generate a red flag, depending on its content. In *Perfect 10, Inc. v. CCBill L.L.C.*, a third-party disclaimer stated, “The copyrights of these files remain the creator’s. I do not claim any rights to these files, other than the right to post them.” Because the third-party allegedly retained a right to post the images, the appellate court found this disclaimer insufficient to constitute a red flag of copyright infringement for an ISP. However, in *Perfect 10, Inc. v. Cybernet Ventures, Inc.*, many third party sites were less devious in their use of disclaimers, effectively stating, “[W]e do not hold copyrights for these works.” In this case, “serious questions as to Cybernet’s constructive knowledge” arose.

Due to these issues with the wording of § 512(d), liberal interpretation of its terms is necessary to give search engines meaningful protection against contributory and vicarious liability for copyright infringement. A strict reading of § 512(d) will lead to results like the district court holdings in *Napster* and *Aimster*. Rather than treating § 512(d) as mere surplusage, courts should protect search engines in one of two ways.

First, a court might creatively redefine the terms of § 512(d) so that the provision will not automatically fail when a search engine meets common law requirements for secondary copyright liability. As mentioned above, a court might establish a more stringent interpretation of “financial benefit or knowledge” required to lose safe-harbor treatment than to create vicarious or contributory liability. Alternatively, a court might use a “red flag” test to add a subjective element to the constructive knowledge requirement of § 512(d)(1)(B). Then, even where a search engine is contributorily liable, the safe-harbor might still apply, provided the ISP is not subjectively aware of third-party violations. Admittedly, these subtle, subjective tests can confuse the issue and unjustly shelter purposeful rule-breakers. Almost any technicality or play-on-words may be enough to circumvent the “red flag” test of constructive knowledge.

A second option for courts is to exercise restraint when imposing secondary copyright liability on search engines. If a search engine is less likely to be held liable for secondary infringement in the first place, the fact that § 512(d) has

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113 *Id.*
114 *Id.*
116 *Id.* at 1169.
117 *Id.* at 1170.
ineffective and confusing terms becomes less problematic. *Perfect 10 v. Amazon.com* takes this route, narrowing the common law rule for contributory liability when dealing with search engines like Google. Specifically, the Ninth Circuit held that Google could only be contributorily liable for linking to third-party sites with copyrighted images if (1) it had “actual knowledge that specific infringing material is available,” (2) it could have taken “simple measures to prevent further damage” to copyrighted works, and (3) it failed to do so. Requiring actual knowledge of specific abuses lightens the load on search engines, making it harder for plaintiffs to prove contributory liability. An additional opportunity to avoid liability exists if the search engine cannot feasibly limit access to infringing works. Since Google automatically indexes the entire web, it might be infeasible for Google to take “simple measures” to avoid third-party infringement. Google would need to completely redesign its service by implementing “image-recognition technology” or by inspecting each potential infringing image.

In sum, scholars, lawyers, and judges are puzzled by how terms in § 512(d) closely mirror standards for contributory and vicarious liability in copyright law. If courts rely on Congressional intent for the meaning of the safe-harbor provision, there are a number of ways to distinguish the terms of § 512(d) from existing theories of secondary liability. Courts might consider it slightly more difficult to fail § 512(d) than to meet common law requirements for secondary liability, thereby giving the safe-harbor some teeth. Alternatively, courts might simply reinterpret common law requirements for secondary liability, thereby making search engines less likely to be exposed to liability and less likely to need § 512(d) in the first place.

**B. Special Problems in Applying § 512(i) Eligibility Requirements to Search Engines**

The wording of § 512(i) poses a fundamental problem unique to search engines, and it limits the application of § 512(d). Under § 512(i), a search engine is only eligible for

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119 *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1172 (9th Cir. 2007).
120 *Id.* (citing A&M Records v. Napster, Inc., 239 F.3d 1004, 1022 (9th Cir. 2001)).
122 *Id.*
123 *Id.* at 1172-73. This issue has been remanded to the district court. *Id.* at 1173.
124 *Perfect 10 v. Amazon.com*, 508 F.3d at 1174.
safe-harbor treatment if (1) it adopts a policy of terminating
“repeat infringers,” (2) the policy is “reasonably implemented,”
and (3) the ISP informs “subscribers and account holders” of
this policy.\textsuperscript{125} Part II of this Note discussed the “reasonable
implementation” of policy. This subsection discusses whether
§ 512(i) should apply to search engines, in light of the italicized,
problematic wording of the statute above.

If a search engine has no “subscribers and account holders”
to terminate, but only links, should it still be allowed safe-
harbor protection, even though it fails to implement a “repeat
offender” policy pursuant to § 512(i)? No court has specifically
decided this issue, but two cases mention the problem. In
\textit{Perfect 10, Inc. v. CCBill L.L.C.},\textsuperscript{126} the district court confirmed
that “the focus of § 512(i) is on infringing users rather than on
content.”\textsuperscript{127} The Ninth Circuit also espoused this concept in
\textit{Perfect 10, Inc. v. Amazon.com, Inc.}\textsuperscript{128} In holding that Google
could not be vicariously liable for third-party infringement of
websites it linked to, the court distinguished Google from
Napster:

Napster had a closed system requiring user registration,
and could terminate its users’ accounts… By contrast,
Google cannot stop any of the third-party websites from
reproducing, displaying, and distributing unauthorized
copies of Perfect 10’s images because that infringing
conduct takes place on the third-party websites. Google
cannot terminate those third-party websites or block
their ability to “host and serve infringing full-size
images” on the Internet.\textsuperscript{129}

Because of this inability to terminate ‘users,’ Google argued
that it should be exempt from the eligibility requirements of
§ 512(i).\textsuperscript{130} Admittedly, Google now disables access to
infringing links upon receiving proper notice, and it has adopted
a policy compliant with § 512(i) of the D.M.C.A.\textsuperscript{131} At the time
it was sued by Perfect 10, however, Google had not yet taken
these measures, and the issue remains unresolved.

\begin{footnotes}
\item[125] 17 U.S.C. § 512(i)(1)(A) (emphasis added).
\item[127] Id., at 1088 (emphasis added).
\item[128] 508 F.3d 1146 (9th Cir. 2007).
\item[129] Id. at 1174 (emphasis added).
\item[130] Eric Carnevale, Note, Questions of Copyright in Google’s Image
Tech. L. 132, 142 (2008) (discussing Google’s opposition to Perfect 10’s Motion for
Preliminary Injunction).
\item[131] Google.com, Digital Millennium Copyright Act,
\end{footnotes}
One commentator suggests exempting search engines from the prerequisites of § 512(i) whenever they “lack subscribers and account holders.”132 Otherwise, search engines might not be eligible for safe-harbor protection at all, for, without “subscribers or account holders[,] [they] simply cannot fulfill the initial eligibility requirements.”133 It might be safer to exempt search engines entirely from § 512(i), since Congress did not intend to be overly harsh to ISPs.134

This Note contends that a total exemption for search engines from § 512(i) would not be in the spirit of the law either. On its face, the D.M.C.A. explicitly requires all ISPs to comply with § 512(i) before obtaining safe-harbor.135 Congress intended to create “strong incentives for service providers and copyright owners to cooperate” and work together against copyright infringement online.136 A “repeat infringer” termination policy follows Congressional intent to force service providers to think about the consequences of receiving a “notice and takedown” request ahead of time.

This Note contends that Google has already provided an excellent solution. It has established a written policy of disabling access to infringing links upon receiving proper notice, and it has posted this policy to its own site.137 Since Google’s “subscribers and account holders” consist almost entirely of Internet users, simply posting this policy to its website should satisfy any user-notification requirements under § 512(i). In addition, the written policy clarifies for copyright holders and Internet users, what steps Google will take upon receiving a “notice and takedown” request.

In sum, although § 512(i) technically requires ISPs to adopt a policy of terminating repeat infringers, not links, it seems reasonable to interpret this loosely in the case of search engines. Despite the broad, anonymous customer base of search engines, the user-notification requirement of § 512(i) may still be satisfied when the search engine posts its policy on its main search page. After that, it is up to Internet users to inform themselves.

133 Id.
134 S. REP. NO. 105-190, supra note 32, at 8.
136 H.R. REP. NO. 105-551(II), supra note 37, at 49; see also S. REP. NO. 105-190, supra note 32, at 40.
137 See Google.com, supra note 131.
IV. POSSIBLE SOLUTIONS TO “NOTICE AND TAKEDOWN” PROBLEMS

A. Common Criticisms and Present Abuses of the “Notice and Takedown” Regime

Currently, the “notice and takedown” provisions in the D.M.C.A. favor copyright holders and ISPs over end-users. An Internet user may provide “counter-notice” to the ISP if he believes a provider mistakenly removed or disabled access to his work.\(^{138}\) Whether copyright infringement actually occurred or not, the law imposes a mandatory ten-day waiting period on an ISP before restoring access.\(^{139}\) Furthermore, once a copyright holder files an action in court, an ISP must persist in preventing access to allegedly infringing online content in order to maintain its eligibility for safe-harbor treatment.\(^{140}\) Critics argue that this creates “impermissible restrictions on free speech by effectively granting temporary restraining orders prior to any determination by a court.”\(^{141}\)

Another common critique of the notice and takedown procedures is that ISPs have no incentive to verify the authenticity of the notices they receive. For an ISP, it is safest to “respond by treating all complaints of infringements as actual infringements, overzealously enforcing copyright.”\(^{142}\) In fact, one commentator notes that “[t]he lack of a subscription relationship between search engines and alleged infringers suggests that search engines will be more likely than other types of service providers to overzealously remove content.”\(^{143}\) Because search engines often have no account holders or subscribers, there is hardly any economic incentive for a search engine to resist removing allegedly infringing links.\(^{144}\) Moreover, a search engine lacking a close relationship with its users might find it hard “to provide adequate notice to alleged infringers so that they have the opportunity to defend their rights” by sending a counter-notice.\(^{145}\)

A recent study performed by Jennifer Urban and Laura

\(^{138}\) 17 U.S.C. § 512(g)(3).

\(^{139}\) 17 U.S.C. § 512(g)(2)(C).

\(^{140}\) Id.

\(^{141}\) Walker, supra note 132, at 28; see also Alfred C. Yen, Internet Service Provider Liability for Subscriber Copyright Infringement, Enterprise Liability, and the First Amendment, 88 Geo. L.J. 1833, 1889 (2000).

\(^{142}\) Yen, supra note 141, at 1888.

\(^{143}\) Walker, supra note 132, at 46.

\(^{144}\) Id.

\(^{145}\) Id. at 47.
Quilter on takedown notices substantiates scholars’ fears about the “overzealous” removal of content. Urban and Quilter analyzed over 900 notices stored at Chilling Effects, an online depository for takedown notices from various search engines, predominately Google. The study showed that significant abuses of the notice and takedown process occurred — many senders used D.M.C.A. notices “to create leverage in a competitive marketplace, to protect rights not given by copyright (or perhaps any other law), and to stifle criticism, commentary, and fair use.” To Urban and Quilter, this result was not surprising. The simplicity of sending infringement notices and “the weak remedies available for spurious claims create an irresistible temptation for the upset or unscrupulous” to furnish ISPs with faulty or erroneous notices. The volume of defective claims is what most surprised the authors. Over 22.5% of “competitor-related notices sent to Google were substantively questionable.” In addition, many senders displayed confusion over the extent of their rights, demanding that ISPs police online content or remove a “high-level URL . . . just to get at one incorporated image file [or] overly-lengthy quotation.”

Other commentators note similar abuses of and questionable results in the notice and takedown process. Copyright holders push ISPs “to cut off subscribers who are accused of committing infringement [rather than] simply blocking access to allegedly infringing content, as the law requires.” Congress intended for repeat infringers to suffer a “realistic threat of losing [Internet] access,” yet an ISP’s censorship of users based solely on a notice sent by a copyright holder goes beyond the scope of Congressional intent. Courts, not copyright holders, decide when a violation truly occurs, so notice alone should not prevent an Internet user from accessing the World Wide Web.

The notice and takedown provisions are also used to suppress criticism and debate. In 2002, for instance, the Church

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147 Id. at 623.
149 Urban & Quilter, supra note 146, at 687.
150 Id. at 681.
151 Id. at 684.
152 Id. at 683.
154 H.R. REP. NO. 105-551(II), supra note 37, at 61; S. REP. NO. 105-190, supra note 32, at 52.
of Scientology requested that Google disable links to third-party websites that used copyrighted church material in a critical manner.\textsuperscript{155} The site owner contended that his webpage made “fair use” of the church material and that copyright law protected it.\textsuperscript{156} Although Google initially removed access to the site, it soon restored the links, and the website became more popular than ever due to this episode.\textsuperscript{157} The foreign site owner noted, however, that if Google had not restored access, “he would not file a counter-complaint because it would put him under the jurisdiction of United States law.”\textsuperscript{158} Anecdotes like this highlight troubling issues of “fair use” under copyright law and the misuse of infringement notifications to stifle critical social commentary.

While this is not an exhaustive list of the ways copyright holders abuse or exploit notice and takedown procedures, it illustrates some of the existing problems with the D.M.C.A. provisions. The law serves copyright holders’ interests by providing a “quick and inexpensive way to remove material that they believe is infringing [and] ISPs also will flourish because they need not fear liability for the acts of their subscribers.”\textsuperscript{159} Internet users fall in the middle, without much protection for their rights.\textsuperscript{160}

\textbf{B. Potential Revisions to Wording in the D.M.C.A.}

There have been many proposed solutions to problems with the D.M.C.A. Some have suggested a system of compulsory levies or an alternative dispute resolution system as a better solution to the problems of § 512.\textsuperscript{161} Others suggest doing away with the D.M.C.A. entirely and embracing Digital Rights Management instead.\textsuperscript{162} Some ISPs, like AT&T, are forming contractual relationships with copyright holders where the ISP agrees to filter Internet content by upload.\textsuperscript{163}

\begin{flushright}
\footnotesize
156 Id.
157 Id.
158 Id.
159 Yen, supra note 141, at 1888-89.
160 Id. at 1888.
\end{flushright}
To solve the problematic “knowledge” provisions of § 512(d) discussed above, one commentator suggests that search engines should be completely immune from contributory liability claims.\textsuperscript{164} Search engines would only be exposed to direct or vicarious liability “in extraordinary circumstances where a search engine's conduct is particularly active and egregious.”\textsuperscript{165} Furthermore, ISPs may be in a better position to deal with users’ behavior. The existence of a contractual relationship between an Internet user and his ISP may allow the typical ISP to control end-user behavior more effectively than a search engine.\textsuperscript{166}

Still, this solution seems contrary to Congressional intent. Both House and Senate Reports note that the D.M.C.A. shields qualifying search engines “from liability for all monetary relief for... vicarious and contributory infringement.”\textsuperscript{167} Search engines like Google are one of the first tools Internet users employ to locate information. In \textit{Perfect 10 v. Amazon.com}, the appellate court refused to discount the possibility of contributory infringement for search engines, stating that:

There is no dispute that Google substantially assists websites to distribute their infringing copies to a worldwide market and assists a worldwide audience of users to access infringing materials. We cannot discount the effect of such a service on copyright owners, even though Google's assistance is available to all websites, not just infringing ones.\textsuperscript{168}

Without an incentive for search engines to remove or disable access to infringing links, copyright holders would be at a further disadvantage.

This Note proposes a simpler means of protecting Internet users and search engines. To guard against the “upset or unscrupulous” sender of infringement notices,\textsuperscript{169} the law might simply require that copyright holders post online notices. A takedown request would not be “effective” under § 512(c)(3) until it is displayed in a designated online database. This would help make the “notice and takedown” process more transparent to Internet users and should discourage copyright holders from

\begin{footnotesize}
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\item[164] Walker, \textit{supra} note 132, at 54.
\item[165] \textit{Id.}
\item[166] \textit{Id.} at 33.
\item[168] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1172 (9th Cir. 2007).
\item[169] Urban & Quilter, \textit{supra} note 146, at 681.
\end{enumerate}
\end{footnotesize}
making erroneous claims.

Chilling Effects already exists as one such online repository for takedown notices. Currently, Google informs its users whenever it disables a link because of a takedown notice, sends a copy of the takedown request to Chilling Effects, and directs the end-user to view the letter for further information. While Google’s efforts are commendable, this Note contends that the burden of filing such a takedown notice should be on the copyright holder, not the search engine. Under the current law, a copyright holder is not required to send notice or publicly file it. However, the copyright holder should not be allowed to use a takedown notice as evidence of the search engine’s knowledge and awareness of the facts and circumstances without public filing.

Another simple revision to the D.M.C.A. that would make its terms more equitable concerns the “good faith” statement copyright holders must have in their takedown request. The law states that a notice is not complete without “a statement that the complaining party has a good faith belief that use of the material . . . is not authorized by the copyright owner.” However, to form a proper counter-notice, an Internet user must state “under penalty of perjury that the subscriber has a good faith belief that the material was removed or disabled as a result of mistake or misidentification.” The law gives copyright holders preferential treatment over Internet users when it comes to notice versus counter-notice.

Due to the above wording, there is little downside for a copyright holder who sends multiple notice and takedown requests, even when the allegedly infringing activity or material is unclear. The law specifies that material misrepresentation of infringement may expose the copyright holder to “damages, including costs and attorney’s fees, incurred by the alleged infringer,” but this brings small comfort to an innocent Internet user whose work is removed due to mistake, misidentification, or purposeful misuse of the notice and takedown procedures. Additionally, the user would still need to prove his case in court to win damages, and a typical Internet user may not have the resources to litigate.

The law further discourages “counter-notice” requests by

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171 S. Rep. No. 105-190, supra note 32, at 45 (“Section 512 does not require use of the notice and take-down procedure.”).
forcing an Internet user to take an oath under penalty of perjury before his materials may be restored online. It remains unclear why Congress decided to expose Internet users to potential jail-time when sending a counter-notice, while copyright holders merely must hold a “good faith” belief. This Note contends that the notice and counter-notice requirements should mirror each other. If the law requires only a good faith belief of infringement for copyright holders to send notice, then the law should also allow Internet users to send counter-notifications with only a good faith belief. Lowering the burden on Internet users might encourage them to send counter-notice, allowing innocent online material or activity to remain in place.

Copyright holders may argue that such a provision lowers the burden for unjustified Internet users who are trying to subvert the system. However, changing the D.M.C.A. counter-notice provision would not prevent determined infringers from violating copyright laws any more than the current provision does. This Note merely contends that the burden should be equal for both copyright holders and Internet users, requiring only a “good faith” statement that material or activity is non-infringing.

V. CONCLUSION

As technology changes, the law must change accordingly. Congress intended for the D.M.C.A. to strike a balance between the important interests of copyright holders and the continued productivity of ISPs. However, as the Internet continues to expand and change in ways Congress did not predict in 1998, both copyright holders and search engines grow increasingly dissatisfied with the D.M.C.A. Lawsuits like Warner Bros. Records v. SeeqPod demonstrate that a company may not be immune from liability merely because it markets itself as a search engine. Moreover, in their study of takedown notices, Urban and Quilter noted that “the movie and music industries combined were responsible for only . . . 3% of the § 512(d) notices,” a statistic which “suggests that the copyright industry’s concerns about piracy are currently not well-addressed by the notice-and-takedown process.” Some copyright holders feel the safe harbor approach is not good enough. For instance, U2’s manager, Paul McGuinness says, “The safe harbor approach under which ISPs are not held

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175 H.R. REP. No. 105-551(II), supra note 37, at 21.
176 Urban & Quilter, supra note 146, at 651.
177 Id. at 652.
accountable for criminal activity enabled by their services . . . has been enormously damaging to content owners and developing artists.”\textsuperscript{178}

Due to the vital importance of search engines in the online world today, effective safe-harbor treatment for information location tools is essential. As one judge has stated, “[i]t is by now a truism that search engines such as Google Image Search provide great value to the public.”\textsuperscript{179} To allow service providers to continue developing and adding new features or innovative methods of file-searching, courts should afford a wide latitude of protection to search engines under § 512(d).

Unfortunately, confusion over the meaning of terms in § 512(d) and “the more demanding eligibility requirements under this safe harbor provision create a disincentive for ISPs to characterize themselves under this provision.”\textsuperscript{180} This Note contends that § 512(d) is a meaningful provision in light of Congressional intent and that courts should liberally interpret the terms of the law to shelter search engines. Also, § 512(i) should apply to search engines, despite a potential lack of “subscribers and account holders,”\textsuperscript{181} because it is important that ISPs retain their eligibility for safe-harbor treatment under the law.

Finally, there is potential for abuse of the “notice and takedown” provisions, which could potentially suppress Internet users’ rights. Search engines seem likely to comply with the letter of the law rather than its spirit, overzealously removing content. This Note has suggested several potential solutions to the weak points of the notice and takedown provisions of Title II of the D.M.C.A. In the long run, stability and transparency in the law will benefit service providers, copyright holders, and Internet users alike.

\textsuperscript{178} ISPs, Music Industry Battle over Duties to Combat Piracy, supra note 163.


\textsuperscript{181} 17 U.S.C. § 512(i)(1)(A).