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Repeat Infringement in the Digital Millennium Copyright Act

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INTRODUCTION

Copyright law balances incentives for creativity against social demand for access to artistic expression. This balance has always been delicate, and the internet has tipped the scales. Not only have new communication technologies made distribution significantly cheaper, they have also given shelter to primary infringers' and provided copyright holders with new, third-party litigation targets.

The Digital Millennium Copyright Act (DMCA or the Act), passed in 1998, attempts to protect internet innovators while preserving copyright holders' ability to prevent infringing activity. It does so in part through the creation of safe harbors, which an internet service provider (ISP) can enter if it takes statutorily prescribed steps. Liability shields are available only if an ISP has "adopted and reasonably implemented, and informs subscribers and account holders ... of, a policy that provides for the termination in appropriate circumstances of ... repeat infringers."

The statute does not, however, precisely define the term "repeat infringer." Lacking clear statutory guidelines, litigants have looked to the courts for direction. Unfortunately, they have yet to provide it. The resulting uncertainty leads to inefficient investment. Consider first the position of an ISP: if it can be sued for any infringement on its network, the potential liability will be crippling. A copyright holder prevailing at trial is entitled to up to \$30,000 in statutory damages per

[†] S.B. Brain and Cognitive Sciences 2002, S.B. Science, Technology, and Society 2002, Massachusetts Institute of Technology; J.D. 2006, The University of Chicago.

¹ A primary infringer is the person directly responsible for the infringing act. See Melville B. Nimmer and David Nimmer, 4 *Nimmer on Copyright* § 13.01 (Matthew Bender 2005).

² Digital Millennium Copyright Act, 17 USC §§ 512, 1201–05 (2000) (setting forth limitations on online copyright liability, as well as copyright protection and management systems).

³ See 17 USC § 512 (establishing the situations and conditions under which "a service provider shall not be liable for monetary relief or . . . for injunctive or other equitable relief for infringement of copyright").

⁴ Id at § 512(i)(1)(A).

⁵ See, for example, Costar Group, Inc v LoopNet, Inc, 164 F Supp 2d 688, 699 (D Md 2001) (noting that "there is little interpretive case law").

work infringed. If ten users download ten songs each, the ISP could be on the hook for \$3 million. Given that there are nearly ten million people at any moment using peer-to-peer file-swapping services, each downloading hundreds of songs, an ISP's potential legal exposure could easily run into the billions of dollars. Investment in ISPs will be seriously diminished unless investors are given some assurance that the DMCA's safe harbors will shield an ISP from this exposure.

Alternatively, consider the position of a copyright holder. The same ten million people exposing ISPs to overwhelming liability can destroy the value of a copyright by obtaining the underlying work at next to no cost. In the offline context, copyright holders can ordinarily defend themselves via the Copyright Act's enforcement provisions. These provisions, however, are unlikely to be useful here. Online infringers are numerous, difficult to identify, and often judgment proof. Thus, in order to protect his work's value, a copyright holder needs to know that he can either rely on a third party to help him find online infringers and bring them to justice or, in the alternative, simply sue that third party.

The DMCA was passed to alleviate these concerns. It has, however, failed to do so, in large part because of the uncertainty surrounding three phrases in § 512(i). First, what are "appropriate circumstances" that put a user at risk of service termination? Second, does "repeat infringer" refer to the number of works infringed or the number of times a user has been identified as an infringer? Third, what actions satisfy the "reasonably implement" requirement?"

This Comment answers those questions. Part I first examines the inadequacy of the law prior to the DMCA. It then explains how the DMCA attempted to address those inadequacies. Finally, Part I demonstrates how existing law has left open the meaning of "appropriate circumstances," "repeat infringement," and "reasonably implement[]." Part II defines these terms. Part II.A provides a theoretical grounding for the proposed definitions through an analysis of the incentive structure for

⁶ 17 USC § 504(c) (Supp 2004) (giving copyright holders the option of asking for statutory damages between \$750 and \$30,000).

⁷ Note that, even at the low end of the statutory range, the ISP in this example would be liable for \$75,000 in damages. Again, when we extrapolate from the example to an ISP's entire user base, the potential damages are astronomical.

⁸ See Simon Aughton, *P2P Activity Doubles in Two Years*, PC Pro (Oct 11 2005), online at http://www.pcpro.co.uk/news/78525/p2p-activity-doubles-in-two-years.html (visited Oct 17, 2006).

^{9 17} USC § 504 (establishing damages and profits as remedies for infringement).

The Digital Millennium Copyright Act of 1998, S Rep No 105-190, 105th Cong, 2d Sess 2 (1998) ("Title II will provide certainty for copyright owners and Internet service providers with respect to copyright infringement liability online.").

¹¹ See 17 USC § 512(i).

copyright holders, infringers, and ISPs. Part II.B argues that only distributional and consumer infringers¹² are the proper targets of termination policies; those who infringe as part of their own creative endeavors do not pose "appropriate circumstances" for termination. Part II.C explains that "repeat infringer" refers to the number of times the actor has been identified as an infringer, not to the number of infringing or infringed works. Part II.D shows that reasonable implementation consists of a joint effort between copyright holders and ISPs to identify infringers.

I. THE EXISTING LAW

The Copyright Act grants a copyright holder a private right of action to pursue infringers directly.¹³ In such an action, the plaintiff must first prove that she owns a valid copyright in the work and that the defendant has copied original portions of the work.¹⁴ Generally, copyright ownership is undisputed. If the plaintiff can prove that the defendant copied, the key questions become whether the copying actually infringed the holders' copyright and, if so, whether there is an affirmative defense to the infringement.¹⁵

Yet a direct action against the primary infringer is not the only way to protect copyrights. The primary infringer is often unidentifiable, not subject to jurisdiction, or otherwise judgment proof. To cope with these circumstances, the law grants copyright holders the ability to pursue third parties for indirect infringement under the doctrines of

A distributor-infringer is one whose infringement consists primarily of making unauthorized copies of a copyrighted work for others. A consumer-infringer is one whose infringement consists primarily of making unauthorized copies for his own personal consumption. A third type of infringer, a creator-infringer, is one who, without authorization, uses a copyrighted work in the process of making his own expressive work. The different types of infringers are defined and discussed in depth in Part II.B.

¹³ See 17 USC § 106 (2000) (granting a copyright holder the exclusive right to reproduce, adapt, publish, perform, or display her work); 17 USC § 501(b) (2000) (creating the private right of action). I set aside for purposes of this Comment the differences between reproduction and other exclusive rights because the DMCA does not distinguish between them. See 17 USC § 512. For ease of exposition, I will use the phrase "copying" interchangeably with "copyright infringement."

¹⁴ Feist Publications, Inc v Rural Telephone Service Co, 499 US 340, 361 (1991) ("To establish infringement, two elements must be proven: (1) ownership of a valid copyright, and (2) copying of constituent elements of the work that are original."), citing Harper & Row, Publishers, Inc v Nation Enterprises, 471 US 539, 548 (1985).

¹⁵ See Feist, 499 US at 361 (noting that "[n]ot all copying, however, is copyright infringement").

contributory¹⁶ and vicarious¹⁷ infringement. For each of these types of indirect copyright liability, there must be an underlying instance of direct infringement.¹⁸

The boundaries of these doctrines as applied to the internet were explored in several cases preceding the passage of the DMCA. Part I.A explains the rules these cases announced. Because the DMCA was created to provide safe harbors from these rules, interpretations of the safe harbors that effectively return to those rules must be rejected. Part I.B discusses Congress's effort through the DMCA to resolve complicated questions inadequately addressed in those decisions. Part I.C criticizes courts' rulings on the adequacy of ISP policies for failing to provide sufficient guidance and for failing to further the goals of the DMCA. Part I.D highlights the ambiguities in the repeat infringement provision as shown in ISPs' § 512 policies.

A. Copyright Infringement on the Internet prior to the DMCA

In several cases prior to the passage of the DMCA, copyright holders sought to hold ISPs liable for infringement that took place on their networks. Courts were first asked whether ISPs could be held directly liable. In two instances, they answered yes. In Sega Enter-

¹⁶ See Gershwin Publishing Co v Columbia Artists Management, Inc, 443 F2d 1159, 1162 (2d Cir 1971) (describing someone guilty of contributory liability as one who "with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another"); Melville B. Nimmer and David Nimmer, 3 Nimmer on Copyright § 12.04(A)(2) (Mathew Bender 2005) (noting that contributory infringement is grounded in the doctrine of enterprise liability).

see 3 Nimmer on Copyright at § 12.04(A)(1) (cited in note 16) (describing the doctrine as making liable one who, having "the right and ability to supervise infringing conduct" receives an obvious and direct financial benefit from the actual infringement); id at § 12.04(A)(2) (noting that vicarious infringement is derived from the doctrine of respondeat superior). See also Ellison v Robertson, 357 F3d 1072, 1079 (9th Cir 2004) (rejecting a claim of vicarious infringement because "no jury could reasonably conclude that AOL received a direct financial benefit from providing access to the infringing material").

¹⁸ See 3 Nimmer on Copyright at § 12.04 (cited in note 16).

¹⁹ See S Rep No 105-190 at 19 (cited in note 10) ("Rather than [clarify] these doctrines, the Committee decided to leave current law in its evolving state and, instead, to create a series of 'safe harbors.").

None of these cases reached the circuit court level before Congress passed the DMCA.

See Sega Enterprises Ltd v MAPHIA, 857 F Supp 679, 686–89 (ND Cal 1994) (issuing a preliminary injunction because Sega had established a strong likelihood of success on the merits of showing a prima facie case of direct and contributory infringement by defendant's operation of the MAPHIA bulletin board service), modified by Sega Enterprises Ltd v MAPHIA, 948 F Supp 923, 932 (ND Cal 1996) (granting summary judgment to Sega, but noting that under Religious Technology Center v Netcom On-Line Communication Services, Inc, 907 F Supp 1361 (ND Cal 1995), defendants were not liable for direct infringement); Playboy Enterprises, Inc v Frena, 839 F Supp 1552, 1559 (MD Fla 1993) (holding a bulletin board service directly liable for the infringing acts of its users).

prises Ltd v MAPHIA,²² the MAPHIA bulletin board service (BBS), a kind of ISP,²³ solicited the infringing activity.²⁴ The court reasoned that the BBS could be held directly liable because copies were made by the BBS when its users uploaded games onto the site.²⁵ This copying, however, was entirely automated—that is, when a user uploaded a game to the site, the copies were made with no intervention of the BBS or its operators. Yet because "[t]he unauthorized copying of copyrighted computer programs is prima facie [] infringement," the court issued the preliminary injunction.²⁶

In a sense, MAPHIA is an easy case. The BBS and its operators wanted to create a forum for the infringement of Sega's copyrights. When they succeeded in doing so, they were held liable. What makes this a hard case is that intent is not an element of direct copyright infringement. Though MAPHIA's desire to create a forum for infringement would have been a solid basis for a finding of indirect liability, it ought to have been irrelevant in a suit proceeduing under a theory of direct liability. Defendants are liable in direct infringement suits only if they actually make the unauthorized copies.

While MAPHIA's intent makes the court's result understandable, consider the hypothetical case of Public Domain BBS, a site that wanted only to discuss works in the public domain. Following MAPHIA's reasoning, any user could make Public Domain directly liable for infringement simply by posting a copyrighted work on the site. This result must be avoided if anyone is to invest in the technology that is revolutionizing global communications.

In an earlier case, *Playboy Enterprises v Frena*,²⁸ the ISP was not even aware of the infringement for which it was held directly liable.²⁹ Frena, the defendant, ran a BBS that contained copies of pictures in

^{22 857} F Supp 679 (ND Cal 1994).

²³ ISPs are defined broadly by the DMCA. See 17 USC § 512(k)(1) (defining a service provider as "an entity offering the transmission, routing, or providing of connections for digital online communications, between or among points specified by a user, of material of the user's choosing, without modification to the content of the material as sent or received"). The user, not the ISP, chooses what material is sent or received. Of course, the DMCA had not yet been passed at the time of this case, but its definition nonetheless indicates how broadly liability could reach if liability standards conformed to those existing under prior law.

²⁴ MAPHIA, 857 F Supp at 683 ("[The] evidence indicates that Defendant specifically solicited[the] copying and expressed the desire that these video game programs be placed on the MAPHIA bulletin board for downloading purposes").

²⁵ Id at 686.

²⁶ Id, citing MAI Systems Corp v Peak Computer, Inc. 991 F2d 511 (9th Cir 1993).

²⁷ See 17 USC § 501.

²⁸ 839 F Supp 1552 (MD Fla 1993).

²⁹ Id at 1559.

which Playboy held copyrights. The court, assuming arguendo that Frena was unaware of the infringement, held the ISP liable nonetheless. Again, the difficult question of whether Frena could fairly be said to have committed the infringing actions (here, the unauthorized distribution and display of copyrighted works was avoided. By considering these cases under the rubric of direct liability and bypassing the hard question of what it means to copy something, MAPHIA and Frena announced far-reaching liability rules that had the potential to chill investment in communications technology.

The fears engendered by these cases were short lived, though, replaced instead by those that arose following *Religious Technology Center v Netcom On-Line Communication Services, Inc.*³³ A Netcom user had posted on a Netcom BBS copyrighted materials belonging to the Church of Scientology. The Church sought to hold both Netcom and the user liable for the infringement. The court first decided that Netcom could not be held directly liable for the infringement because it did not cause the copies to be made.³⁴ A contrary result, "carried to its natural extreme, would lead to unreasonable liability." Instead, the court decided that ISP liability is better considered within the framework of vicarious or contributory, rather than direct, infringement.

These cases represent the law prior to the passage of the DMCA. The rule announced in *Frena* and *MAPHIA* made building internet infrastructure unattractive. As *Netcom* recognized, anyone running a server would be liable for copyright infringement that takes place over his network, notwithstanding any steps he takes to prevent it. Yet even *Netcom* liability was troubling. A triable question would be raised whenever a copyright owner mailed a letter to an ISP indicating

³⁰ Id at 1554 ("Frena states that as soon as he was served with a summons and made aware of this matter, he removed the photographs from BBS and has since that time monitored BBS.").

³¹ Id at 1559 ("Intent or knowledge is not an element of infringement, and thus even an innocent infringer is liable for infringement.").

³² See id.

^{33 907} F Supp 1361 (ND Cal 1995).

³⁴ Id at 1368–69 (analogizing Netcom to the owner of a copying machine who allows the public to make copies on the machine).

³⁵ Id at 1369 (noting that direct liability would effectively make Usenet systems unsustainable). See also id at 1372 ("[I]t does not make sense to adopt a rule that could lead to the liability of countless parties whose role in the infringement is nothing more than setting up and operating a system that is necessary for the functioning of the Internet.").

³⁶ See id at 1373–77. Because the case came on a motion for summary judgment, the court did not resolve the question whether Netcom was in fact liable. It only stated that genuine issues of material fact existed with respect to contributory infringement. See id at 1375. No such issues existed for vicarious liability, but the court appeared to think that such liability could arise in similar circumstances. See id at 1375–77.

that one of the ISP's users infringed." Even if the ISP could fend off some of these claims, the litigation costs alone would make running an ISP a considerably risky venture.

Fortunately, Congress provided protection from the *Netcom* rule when it passed the DMCA.³⁸ Interpretations leading either to the *Frena/MAPHIA* rule of direct liability or the *Netcom* rule of straightforward vicarious and contributory liability must therefore be rejected.

B. Safe Harbors of the DMCA

Though *Netcom* represented a step back from the reach of *MAPHIA* and *Frena*, it still threatened crippling liability for ISPs. In an attempt to help protect ISPs from this threat while maintaining copyright holders' ability to safeguard their interests, Congress included a series of safe harbors in the DMCA that limit the exposure of ISPs to financial damages for direct, contributory, and vicarious infringement."

These safe harbors, however, are available only when ISPs satisfy certain statutory provisions. For example, an ISP is not protected if it fails to act on actual or constructive knowledge of the underlying direct infringement. There is also a variety of technical requirements with which an ISP must comply. Most relevant for our purposes, § 512(i) limits the protective measures of the Act to ISPs that "adopt[] and reasonably implement[], and inform[] subscribers and account holders... of, a policy that provides for the termination in appropriate circumstances of subscribers and account holders... who are repeat infringers. A § 512(i) policy thus consists of a set of guidelines that detail when a user's infringing activity will result in termination of his account access. Moreover, to take advantage of the DMCA's safe harbors, an ISP must "reasonably implement[]" this policy.

For an ISP trying to comply with § 512(i), this raises three questions. First, what type of infringement constitutes "appropriate circum-

³⁷ Consider *Netcom*, 907 F Supp at 1373–75 (holding that if the Church's letter to Netcom was sufficient to show Netcom knew of the infringement, it would be liable under the doctrine of contributory liability).

³⁸ See S Rep No 105-190 at 19 (cited in note 10) (citing *Netcom* as one of the cases from which the safe harbors are designed to protect ISPs).

³⁹ See 17 USC § 512. See also 3 *Nimmer on Copyright* at § 12B.01(C)(2) (cited in note 16) (noting that the Act's "limitations on liability" are so comprehensive as to constitute "exemptions" in most respects).

^{40 17} USC § 512(a)-(d).

⁴¹ See, for example, 17 USC § 512(i)(1)(B) (prohibiting ISPs from interfering with a copyright holder's use of "standard technical measures").

^{42 17} USC § 512(i).

stances" justifying the termination of a user's internet access? Second, must a "repeat infringer" be identified as an infringer repeatedly or is it simply the infringement itself that must be repeated? Finally, ISPs hoping to stay out of court must know what actions on their part will meet the "reasonably implement[]" requirement. Unfortunately, neither the statutory language nor the legislative history resolves these issues.

1. The statutory language does not answer three important questions concerning § 512(i).

The plain language of § 512(i) is silent on the first question asked above: what kind of infringement ought to be targeted by a § 512(i) policy? The statute only refers to vague "appropriate circumstances." It does not mention direct, vicarious, or contributory infringement. Nor does it distinguish between willful and inadvertent infringement or commercial and noncommercial infringement. In the face of silence, one may be inclined to reject any limitations the statute does not expressly include. Still, that some circumstances are "appropriate" strongly implies that others are inappropriate. Thus, the first task is to determine what kinds of infringement fall within each category.

The statutory term "repeat infringer" also begs for clarification. It could refer to the number of works infringed, the number of times a work has been infringed, the number of infringing works, or the number of times an actor has been identified as an infringer. The most natural interpretation of "repeat infringer" may be that it is someone who has infringed on more than one occasion. After all, a repeat player is one who plays many times, not one who has been identified as a player many times.

Yet this interpretation is not inevitable. Consider that a "repeat offender" is someone who has been found guilty of offenses on at least two occasions. If "repeat infringer" is interpreted analogously to "repeat offender," then a § 512(i) policy must terminate the access of anyone who has been identified as an infringer on more than one occasion. The point for now is not to choose between these two compet-

⁴³ Id.

⁴⁴ Id

See, for example, Fla Stat Ann § 775.084(1)(c) (West 2005) (defining a "[t]hree-time violent felony offender," in part as a defendant who "has previously been convicted as an adult two or more times of a felony, or an attempt to commit a felony"); Hawaii Rev Stat § 709-906(5)(b) (2006) ("For a second offense that occurs within one year of the first conviction, the person shall be termed a 'repeat offender."); NY Penal Law § 70.06 (2004) ("A second felony offender is a person . . . who stands convicted of a felony . . . after having previously been subjected to one or more predicate felony convictions.").

ing interpretations but to note simply that the language does not compel one or the other.

The phrase "reasonably implement[s]" raises the final question concerning § 512(i) policies: who is supposed to identify the repeat infringer and through what procedure? The safe harbors have meaning only if an ISP can take advantage of them without going through a costly trial. Accordingly, at the summary judgment stage, the ISP ought to be able to point to easily identifiable actions that satisfy the "reasonably implement[s]" provision. Section 512(i), however, does not delineate what those actions might be.

Another DMCA provision provides some (insufficient) guidance. Section 512(m) states that the liability limitations are not conditioned on the ISP "monitoring its service or affirmatively seeking facts indicating infringing activity." An ISP therefore does not bear the burden of finding infringing activity on its network to meet the "reasonably implement[]" requirement. Yet if an ISP is under no duty to police its network, or affirmatively seek any facts, who is? And once that unidentified party affirmatively seeks and finds facts, what are the ISP's responsibilities?

2. Legislative history helps clarify the meaning of "appropriate circumstances" and "reasonably implemented."

Congress passed the DMCA to meet the United States's obligation under the World Intellectual Property Organization treaty (WIPO). While doing so, Congress hoped to address some additional issues that had emerged relating to online copyright infringement, issues that were highlighted in *Netcom*. In order to help alleviate the increasing friction between copyright holders and ISPs, Congress wanted to craft a law that would promote market-based technological

^{46 17} USC § 512(m) (noting that the safe harbors are not conditional on the ISP "monitoring its service or affirmatively seeking facts indicating infringing activity, except to the extent consistent with a standard technical measure complying with the provisions of subsection (i)"). A "standard technical measure" is defined in § 512(i) as a measure used by a copyright holder, and thus cannot be something the ISP must implement on its own. Though the provision therefore appears to eliminate any duty on the part of the ISP to police its network, its practical effect has been ambiguous, as some courts have begun imposing a kind of policing duty on ISPs. See Jennifer Bretan, *Harboring Doubts About the Efficacy of § 512 Immunity Under the DMCA*, 18 Berkeley Tech L J 43, 62 (2003) (arguing that the case law interpreting § 512(i) is beginning to impose a "backdoor duty to police" contrary to § 512(m)'s mandate that no such duty exists).

⁴⁷ See S Rep No 105-190 at 1 (cited in note 10) ("The Committee on the Judiciary reported an original bill ... to implement the WIPO Copyright Treaty [and] to provide limitations on copyright liability relating to material online."). See also WIPO Copyright Treaty, S Treaty Doc No 105-17 (1997).

solutions rather than government-mandated legal ones. It seems paradoxical to hope for market-based technological solutions to arise from a statute as complicated and ambiguous as the DMCA. Yet perhaps the DMCA represents precisely the end Congress meant to achieve—namely, reducing online copyright infringement through cooperation between copyright holders and ISPs —and this end, being itself complicated, gave rise to a complex statute. The means have been outlined in the Act, but their ultimate shape is left to market forces.

More importantly, the stated congressional intent to pursue market solutions raises questions about judicial pronouncements on the validity of a market-mediated repeat infringement policy. Why would the termination policy of any ISP be insufficient to meet the statutory requirement? When an ISP crafts its policy, we might expect it to consider the interests of legitimate internet users (after all, those are many of the ISP's customers) and the interests of copyright holders, who evidently suffer minimal (if any) coordination problems in representing their economic interests. Thus, the interests of both sides would be well represented. For present purposes, note simply that the Senate wanted to minimize the role of the government in this dispute.

A couple of phrases in the legislative history relating to § 512(i) and the repeat infringement provision have become touchstones in judicial analysis of the provision. The congressional report acknowledges "that there are different degrees of on-line infringement, from the inadvertent and noncommercial, to the willful and commercial." Within this range, Congress hoped to ensure that those who "abuse their access to the Internet through disrespect for the intellectual

⁴⁸ See S Rep No 105-190 at 20 (cited in note 10) ("Title II preserves strong incentives for service providers and copyright owners to cooperate to detect and deal with copyright infringements that take place in the digital networked environment."). See also *Perfect 10, Inc v Cybernet Ventures, Inc*, 213 F Supp 2d 1146, 1178 (CD Cal 2002) ("[ISPs] are meant to have *strong* incentives to work with copyright holders.").

⁴⁹ See S Rep No 105-190 at 20 (cited in note 10) (noting that Title II aims to preserve incentives).

The presence of large, organized trade associations, such as the Recording Industry Association of America and the Motion Picture Association of America, indicates that the copyright industry coordinates well to represent its interests. Indeed, both organizations are focused on legal issues. See http://www.riaa.com/issues/copyright/laws.asp (visited Oct 17, 2006) (compiling federal, state, and international law dealing with copyright); http://www.mpaa.org/Issues_CRresrs.asp (visited Oct 17, 2006) (providing links to copyright organizations).

Digital Millennium Copyright Act of 1998, HR Rep No 105-551, Part 2, 105th Cong, 2d Sess 61 (1998). See also The Digital Millennium Copyright Act of 1998, S Rep No 105-190 (cited in note 10) (invoking the same language as in the House Report).

property rights of others should know there is a realistic threat of losing [] access."²

These two statements shed some light on two of the three questions raised by the statute's language. First, they indicate that "appropriate circumstances" in § 512(i) do not include all kinds of infringement. Certainly, "willful and commercial" infringement showing "disrespect for the intellectual property rights of others" qualifies. Conversely, "inadvertent and noncommercial" infringement does not. Between those two poles, however, lies uncertain territory.

Second, the legislative history also helps illustrate what steps an ISP must take to "reasonably implement[]" a § 512(i) policy. Congress may have meant to make termination for repeat infringement result in a permanent loss of internet access for the repeat infringer. If "termination" from one ISP merely meant a repeat infringer could sign up with another, there would be no "realistic threat of losing [] access," merely a realistic threat of having to find a new ISP. Yet there is a strong countervailing consideration. The Copyright Act itself is the regulator of primary infringing behavior—the DMCA solves problems unique to the digital and online contexts. Those problems arise because copyright holders need ISP cooperation to enforce the primary regulations of the Copyright Act. The DMCA is consequently designed to facilitate ISP-copyright holder cooperation; it is not designed to punish infringers directly. A permanent loss of access for the infringer is a direct punishment. Moreover, it is unlikely to facilitate ISP-copyright holder cooperation. Therefore, the DMCA should not be read to require permanent termination of repeat infringers' internet access. Instead, an ISP must respond to repeat infringers active on its own network by terminating their access to that ISP's network.

Might requiring actual termination of access, rather than merely threatening it, go too far? The report appears to focus on informing repeat infringers of the "threat of losing [] access." So too does the statutory language, which requires that the ISP inform its subscribers of the possibility of termination, rather than just adopting and implementing a termination policy." Indeed, this has led at least one court

⁵² HR Rep No 105-551, Part 2 at 61.

⁵³ Id.

⁵⁴ Id.

⁵⁵ Id.

⁵⁶ Id.

^{57 17} USC § 512(i) (mandating that service providers "inform[] subscribers and account holders of the service provider's system or network of, a policy that provides for [] termination").

to treat § 512(i) as no more than a threat. Yet this focus on threats and information does not square well with cases that indicate enforcement is required. Those cases take the correct approach; a threat that is never carried out is not sufficiently credible to have the intended effect. It is important, therefore, not to be misled by the indications in the report that threats—credible or not—directed at repeat infringers are the primary aim of the statute. Copyright holders would rightly be reluctant to accept an ISP's promise to issue empty threats as part of a jointly developed § 512(i) policy. Because cooperation between ISPs and copyright holders is a critical aim of the statute, to "reasonably implement[]" a § 512(i) policy, an ISP must actually terminate repeat infringers' access when "appropriate circumstances" exist.

C. Judicial Interpretations of § 512(i)

Courts have yet to explain what is sufficient to satisfy § 512(i). Still, they have attempted to reduce the ambiguity of § 512(i)'s requirements by examining what is and is not necessary to "reasonably implement[]" a repeat infringement policy. Part I.C.1 shows that § 512(i) does not require ISPs to actively monitor their networks or act on difficult infringement issues. Part I.C.2 demonstrates that, at a minimum, an ISP must facilitate copyright holders' efforts to inform the ISP of suspected infringement and, when the ISP knows a user is a blatant repeat infringer, his access to the ISP's network must be terminated.

1. What § 512(i) does not require.

There are two important limits on § 512(i) policies. First, ISPs are not forced to actively monitor their network. Instead, copyright holders bear the burden of seeking out and presenting to ISPs cases of infringement that take place on their networks. From one perspective, this appears inappropriate. ISPs seem better positioned to detect copying because they have unparalleled access to their own networks.

⁵⁸ Ellison, 189 F Supp 2d at 1066 n 15 (noting that "the 'realistic threat of losing [Internet] access' that Congress wishes to impress upon would-be infringers remains just that—a mere threat—unless the ISP decides to implement procedures aimed at identifying, investigating, and remedying infringement in hopes of meeting subsection (c)'s safe harbor").

⁵⁹ Perfect 10, 213 F Supp 2d at 1162 (implying that a policy was probably unacceptable because no one had ever been terminated for repeat infringement).

^{60 17} USC § 512(m) (requiring a service provider to monitor its service only "to the extent consistent with a standard technical measure under subsection (i)"). See *Perfect 10*, 213 F Supp 2d at 1176–77 (indicating that § 512(i) "may not require the service provider to actively monitor for copyright infringement").

Yet copyright holders are best positioned to know whether the first prong of a direct infringement case⁶¹ is met. Moreover, the copyright holder has to worry only about his own copyrights—his focus is narrower than an ISP's and so his costs of detection are likely to be lower as well. Finally, copyright holders, because they know which of their works are in the greatest demand, may be better able to predict a particular work's susceptibility to infringement. These three consid-

erations support placing the monitoring burden on copyright holders,

Second, at least one court has suggested that ISPs "need not act [on] or address difficult infringement issues." It is unclear, however, what the implications of this statement are. Presumably, every act of infringement that gets taken to trial involves at least some difficult factual issues, otherwise the action would be defeated at the summary judgment stage. Must ISPs therefore respond only to uncontested allegations of infringement? Or settlements between the copyright holder and the alleged infringer? Or does resolution of those difficult issues by a court impose a subsequent duty on the ISP to terminate access? At the very least, if an ISP can raise doubts about the legitimacy of a copyright holder's claim of infringement, § 512(i) does not require the ISP to take any further action.

2. Minimal requirements of § 512(i).

rather than ISPs.

Though courts have refrained from specifying precisely what steps are sufficient to satisfy § 512(i), they have been willing to indicate that at least some actions are necessary. This willingness is most common in cases where courts find that an ISP has failed to take necessary steps, indicating that some ISPs do not understand even the minimal requirements of the provision.

Courts' conclusions that an ISP has failed to satisfy § 512(i) have occasionally been predicated on a factual finding that the ISP had never terminated an account holder for repeat infringement — implying that ISPs must show they have terminated repeat infringers to satisfy § 512(i). This conclusion is unwarranted. One could surmise that the requirements of § 512(i) are such that few account holders are at risk of termination. For example, "appropriate circumstances" may

That is, whether the plaintiff holds a valid copyright in the work in question. See 4 *Nimmer on Copyright* at § 13.01 (cited in note 1).

⁶² Perfect 10, 213 F Supp 2d at 1176, citing HR Rep No 105-551, Part 2 at 61 (cited in note 51).

⁶³ See, for example, *Perfect 10*, 213 F Supp 2d at 1161–62 (stating that the ISP failed to enforce its policy against repeat infringers).

mean the user repeatedly has been convicted of infringement, settled infringement claims, or admitted to infringing activity. There are likely to be few people who meet this definition. A definition that excludes many people may actually be optimal if the policy functions as an effective threat. That is, if the termination policy achieves the goal Congress envisioned for it (reducing the instances of flagrant violation of copyright law by threatening people with termination of internet access for such violations⁶⁴), few people would choose to be repeat infringers. Thus, once an ISP has an effective policy in place, few people would actually fall under its purview. Few, however, is not none.

Still, that an ISP has never terminated a user's access does not prove that it failed to meet § 512(i)'s requirements. Because ISPs bear no policing duty, it may be that the copyright holder has not informed the ISP of account holders who are repeat infringers. The copyright holder may not have been able to successfully identify and bring to the ISP's attention the few account holders whose activities fit the definition of repeat infringement. It is therefore conceivable that an ISP may have "reasonably implemented" a § 512(i) policy and yet never terminated an individual's access.

Despite these caveats, the courts' pronouncements on the minimal requirements of § 512(i) are sensible. In *Perfect 10, Inc v Cybernet Ventures, Inc*, ⁶⁵ Perfect 10 alleged that websites in Cybernet's network infringed copyrights it held for nude photographs of women. ⁶⁷ Cybernet's attempt to take advantage of the DMCA safe harbors was unsuccessful because it had not responded when Perfect 10 notified it of obviously infringing activity. ⁶⁶ The court held that "at a minimum, [an ISP's termination policy must deal with] instances where [the ISP] is given sufficient evidence to create actual knowledge of blatant, repeat infringement by particular users. ⁶⁶ This statement suggests that the definition of "infringement" in repeat infringement should be agreed upon by both the ISP and the copyright holder. However, the ISP in *Perfect 10* was held not to have met the safe harbor prerequisites because of its failure to have ever terminated a user. ⁷⁰ Its disagreement

⁶⁴ See HR Rep No 105-551, Part 2 at 61 (cited in note 51).

^{65 213} F Supp 2d 1146 (CD Cal 2002).

⁶⁶ As an adult verification service, it was unclear whether Cybernet even qualified as an ISP under the DMCA. The court nevertheless assumed that it did. See id at 1175.

⁶⁷ Id at 1162.

⁶⁸ Id at 1177-79.

⁶⁹ Id at 1177.

⁷⁰ Id at 1177-79.

with the copyright holder over whether someone was a repeat infringer evidently did not count for much.

Ellison v Robertson⁷¹ attempted to give more flesh to the statutory requirements. Harlan Ellison sued America Online, Inc. (AOL) because it provided subscribers with access to a Usenet group where Stephen Robertson had posted unauthorized copies of Ellison's short stories.⁷² AOL sought the protection of the DMCA's safe harbors, noting that it had set up an e-mail address to receive allegations of infringement.⁷³ Significantly, the court refused to hold as a matter of law that AOL had satisfied § 512(i) because, upon changing the e-mail address, AOL neglected to forward allegations sent to the old address.⁷⁴ Reasonable implementation of a § 512(i) policy must include effective channels for copyright holders to notify ISPs of suspected infringement.

Taken together, these cases support the notion that ISPs and copyright holders must agree that someone has infringed—a functional e-mail address is critical for the copyright holders' efforts to provide notice of infringement to the ISP. While considering this agreement model, note that another case emphasized that "[t]he DMCA places the burden on the copyright owner to monitor the internet for potential[] infring[ement]." The minimum requirement of § 512(i) appears to be that ISPs must facilitate the efforts of copyright holders to notify the ISP of infringement and then, when the ISP is aware that there has been "blatant, repeat infringement by particular users," such users' accounts must be terminated.

D. Examples of § 512(i) Policies Currently in Place

ISPs have instituted policies to comply with § 512(i). Some have even sought to define "repeat infringer" or "appropriate circumstances" in their policies. Verizon Online has perhaps the most comprehensive statement:

[I]t is the policy of Verizon to terminate, in appropriate circumstances, the Service provided to any subscriber or account holder who is deemed to infringe third-party intellectual property rights,

⁷¹ 357 F3d 1072 (9th Cir 2004).

⁷² Id at 1074.

⁷³ Id at 1080.

⁷⁴ Id ("There is at least a triable issue of material fact regarding AOL's eligibility for the safe harbor limitations of liability in this case.... AOL should have closed the old e-mail account or forwarded the e-mails sent to the old account to the new one.").

⁷⁵ Hendrickson v Amazon.com, Inc, 298 F Supp 2d 914, 916 (CD Cal 2003).

⁷⁶ Perfect 10,213 F Supp 2d at 1177.

including repeat infringers. Appropriate circumstances may exist where (i) a Subscriber or account holder has been found by a court of competent jurisdiction to have infringed the copyrights of a third party on two or more occasions, i.e., a repeat infringer, (ii) Subscriber or account holder has entered into an agreement acknowledging wrongdoing to settle a claim of copyright infringement and subsequently uses Verizon's service to violate the terms of that agreement by engaging in copyright infringement or to otherwise engage in conduct that is found by a court of competent jurisdiction to constitute copyright infringement, (iii) where a valid, effective and uncontested notice has been provided to Verizon alleging facts which are a violation by the Subscriber or account holder of Verizon's Copyright Policy prohibiting infringing activity involving Verizon systems or servers, or (iv) in other cases of repeated flagrant abuse of access to the Internet (e.g., willful commercial piracy or malicious attempts to destroy the value of copyrighted works)."

More commonly, ISPs make far less specific statements. NetZero, for example, simply targets those who "unlawfully transmit copyrighted material without a license, valid defense or fair use privilege to do so." The account will be terminated "[a]fter proper notification by the copyright holder ... and later confirmation through court order or an admission by the subscriber that an account has been an instrument of unlawful infringement." Earthlink similarly reserves the right to terminate the account of a subscriber who "infringes any copyright [or other intellectual property rights] of any third party, including, but not limited to, the unauthorized copying of copyrighted material, the digitization and distribution of photographs from magazines, books, or other copyrighted sources, and the unauthorized transmittal of copyrighted software."

These policies all probably pass the "adopt and inform" requirements of § 512(i). However, ISPs have been prevented from entering the DMCA's safe harbors largely because they have not "reasonably implemented" these policies. As courts have demonstrated, the failure

⁷⁷ Verizon Online, Acceptable Use Policy, online at http://www2.verizon.net/policies/acceptable_use.asp (visited Oct 17, 2006).

⁷⁸ NetZero, Copyright Policy, online at http://www.netzero.net/legal/copyright.html (visited Oct 17, 2006).

⁷⁹ Id.

⁸⁰ Earthlink, Acceptable Use Policy, online at http://www.earthlink.net/about/policies/use/ (visited Oct 17, 2006).

to terminate any user's account might be sufficient to violate § 512(i). But if termination is only required after the identification of a repeat infringer, then it is critical to define "repeat infringer." The burden of proof must rest on the copyright holder to demonstrate that a repeat infringer has been found and not terminated. *Perfect 10*, and cases like it, are incorrect because they are based on the presumption that someone on the network must have been a repeat infringer. Courts must know who is a repeat infringer before punishing ISPs for their failure to terminate them.

II. DEFINING A REPEAT INFRINGER

As the preceding discussion illustrates, statutory language, legislative history, and precedent are insufficient guides to the meaning of § 512(i). First, the legislative commentary indicates that the Act only targets certain types of infringement without clarifying which types, and the statute itself is silent on this question. Second, the statutory language does not define what exactly must be repeated in order to meet the definition of repeat infringer. Finally, the statute does not dictate how infringement is to be identified or who should identify it.

Part II.A introduces a theoretical framework for resolving these questions. Part II.B then demonstrates that a user's unauthorized distribution and consumption of copyrighted works constitute "appropriate circumstances," putting him at risk of termination; the unauthorized use of copyrighted works in the creation of a new work does not. Part II.C finds that a "repeat infringer" is, like a repeat offender, one who has been identified as an infringer on at least two occasions. Finally, Part II.D argues that an ISP "reasonably implement[s]" its § 512(i) policy when it agrees with a copyright holder that "appropriate circumstances" exist and a "repeat infringer" has been identified.

A. A Theoretical Framework

Following the Constitution's mandate that Congress shall have the power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive

⁸¹ Perfect 10, 213 F Supp 2d at 1177 ("The Court does not read section 512 to endorse business practices that would encourage content providers to turn a blind eye to the *source* of massive copyright infringement while continuing to knowingly profit ... until a court orders the provider to terminate each individual account.").

⁸² Id at 1178 ("[The Court] respectfully parts ways with the interpretation of 512(i) in *Ellison*, in order to maintain the 'strong incentives' for service providers to prevent their services from becoming safe havens or conduits for known repeat copyright infringers.").

Right to their respective Writings and Discoveries," copyright law has evolved in a distinctly utilitarian manner, aiming to create the proper incentives for the creation and distribution of copyrightable works. In considering repeat infringement in particular and the DMCA safe harbors in general, it is important to understand the relationship between the "immediate effect" of helping authors profit from their works and the "ultimate aim" of achieving broad distribution of a public good. Specifically, one must understand the various incentives at play that operate to produce works, motivate their distribution, and push some to try to circumvent the copyright system.

Part II.A.1 begins by considering copyright holders and the nature of the relationship between creators and distributors. It concludes that copyright holders are indifferent to infringing activity that does not make potential purchasers less likely to buy copyrighted works. Part II.A.2 considers the incentives that motivate ISPs and concludes that they need a legal impetus to cooperate with copyright holders.

1. Copyright holders are indifferent to infringement that has no impact on potential purchasers' decisions.

There are two key costs in producing an expressive work.⁸⁶ The first is the cost to the creator of creating, and to the distributor of soliciting and preparing, the work ("cost of expression").⁸⁷ This cost is incurred only once and does not vary with the units made or sold.⁸⁶ The second is the cost to the distributor of making and distributing actual copies of the expressive work ("cost of production"), which

⁸³ US Const Art I, § 8, cl 8.

⁸⁴ See Twentieth Century Music Corp v Aiken, 422 US 151, 156 (1975). In this celebrated description of the law, the Supreme Court stated:

Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts. The immediate effect of our copyright law is to secure a fair return for an "author's" creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good.

Id.

⁸⁵ Id

William M. Landes and Richard A. Posner, The Economic Structure of Intellectual Property Law 37 (Belknap 2003).

⁸⁷ Id.

⁸⁸ Id ("[F]irst is the cost of creating the work ... [which presumptively] does not vary with the number of copies produced or sold, since it consists primarily of the author's time and effort plus the cost to the publisher of soliciting and editing the manuscript and setting it in type.").

varies with the number of copies produced. Only when the expected revenue is greater than the sum of the fixed cost of expression and the variable cost of production will a work be created.

Creators generally need help from distributors in overcoming the costs of expression. Of course, many creators undertake their tasks without support from a distributor, incurring the costs of expression themselves. However, a rational, profit-maximizing creator will incur those costs only if he thinks he can convince a distributor to compensate him once the work is completed. Thus, to the extent that creators are motivated by monetary incentives, distributors' ability to reap revenues greater than the combined costs of expression and production is crucial to the creation of an expressive work. Insofar as non-monetary incentives are at play in motivating the creation of an expressive work, those incentives should remain in place regardless of how the copyright regime is structured.

One other important aspect of the creator-distributor relationship is the risk-spreading function the distributor serves. It is difficult to estimate the demand for a particular work before the work is created and distributed. The creator's income stream would be highly variable if he were limited to the profit made solely from the distribution of his own works. The advance money he receives from the dis-

⁸⁹ Id ("The second component, the cost of producing the actual copies, increases with the number of copies produced, for it is the cost of printing, binding, and distributing individual copies.").

⁹⁰ Id at 39 ("Since the decision whether to create the work must be made before the demand for copies is known, it will be a 'go' only if the difference between expected revenue and the cost of making copies equals or exceeds the cost of expression.").

In nearly every copyright-focused industry (software being a perhaps notable exception, and leaving aside noncopyright-focused industries that nonetheless create expressive works like user manuals for consumer electronics), work is created on the initiative of an author, who seeks a significant part of his compensation directly from the distributor of the work, rather than from the end users. Thus, an author obtains an advance from a publisher, record labels pay for the upfront costs of recording an album, and movie studios pay the production costs of filming a movie.

⁹² This is so even if he distributes the work himself. In that case, the "distributor" is still theoretically distinct, even if practically indistinguishable. Hence this is of no consequence, as the essential question will remain the same: will the costs of creating and distributing the work be outweighed by the revenues generated by its distribution? Perhaps more importantly, a creator-infringer acting as his own distributor does not sever the creator-distributor relationship the way a distributor-infringer does. See Parts II.B.1-II.B.2.

⁹³ In other contexts, some authors have argued that nonmonetary incentives may be crowded out by monetary incentives and that the monetary incentives then produce nonoptimal activity levels. See generally Yochai Benkler, *Coase's Penguin, or, Linux and* The Nature of the Firm, 112 Yale L J 369 (2002) (discussing nontraditional incentives for the production of intellectual property).

Landes and Posner, Economic Structure at 38 (cited in note 86) (discussing the incentives created by royalties and explaining that "variability of the author's income stream . . . is

tributor represents the extent to which the distributor, by holding a diverse group of expressive works, can mitigate the risk specific to any particular work. It is therefore not the case that the creator cares only about his work's ability to generate revenues above his cost of expression. He must also be concerned with the distributor's ability generally to reap revenues above the combined cost of expression and production. William Landes and Richard Posner rely on this dependence in eliding the differences between creators and distributors. However, as will be seen in the following discussion, the differences between the two are critical to understanding what kinds of activities pose the biggest threat to the continued creation and distribution of expressive works. For this reason, the creator and distributor should be thought of as related but distinct entities, rather than as a unitary whole.

Not all infringement influences the incentives for creators and distributors of copyrighted works to the same degree. The harm of infringement is in the loss of revenue that occurs when someone who would have purchased the expressive work from the copyright owner decides to purchase (or make) an unauthorized copy instead." Because the expressive work is a public good, consumption by one person does not affect consumption by others. The harmful activity targeted, then, is infringing activity that results in a potential purchaser deciding not to purchase, because only this activity diverts revenue from the copyright holder. For every potential purchaser who decides not to purchase, the projected revenue for a work decreases, as does the likelihood that the costs incurred in creating and distributing the work will be recouped and a sufficient profit generated. Copyright holders therefore strenuously fight activity that makes potential purchasers decide not to purchase.

Conversely, copyright holders are indifferent to infringement when no potential purchaser of the expressive work is involved. Suppose Isaac and Paul are interested in an expressive work; when unauthorized copies are unavailable, Isaac would choose not to use the work at all but Paul would purchase a copy from the copyright holder.

minimized because authors who actually live on their royalties usually receive nonrefundable advances against royalties").

⁹⁵ Id (describing the nonrefundable advances that "shift[] risk back to the publisher").

⁹⁶ Id ("We shall generally ignore differences in costs or incentives between authors and publishers, instead using 'author' or 'creator' to mean both."). Landes and Posner recognize that there are "interesting economic questions involving the relation between author and publisher."
Id. Yet this does not, for them, extend to the matters discussed here.

⁹⁷ Id at 47.

⁹⁸ Id.

When unauthorized copies are available, Isaac will acquire one. To the extent that Paul is less likely to purchase an authorized copy as a result of his awareness of Isaac's ability to get an unauthorized copy at a much lower price, the copyright holder has an economic interest in stopping Isaac's infringing activity. Nevertheless, when Isaac's activity has no effect on Paul's, as will often be the case, the copyright holder is indifferent.

2. ISPs need legal incentives to cooperate with copyright holders.

ISPs have incentives that push both toward and away from helping distributors and creators enforce their copyrights against infringers of all types. If ISPs were liable for infringement that took place on their networks, they would have a sufficient incentive to crack down on infringing behavior. Yet such liability may "come at too high a cost in terms of possible interference with the sale of a legitimate product." The DMCA's safe harbors are designed to reduce these costs so running an ISP remains an economically viable activity. However, if those safe harbors were available at no cost at all to ISPs and with no need for ISPs to take any action against infringement, then there would be no legal incentive to cooperate with copyright holders. Limitations on ISP immunity are therefore conditioned on several technical prerequisites and, of course, the implementation of a § 512(i) policy. 101

Still, ISPs retain incentives to avoid cooperation with copyright holders. ISPs can partially protect users from liability for their direct infringement by refusing to divulge their identities to copyright holders. Though statutory provisions limit this ability, ¹⁰² ISPs can at least raise copyright holders' enforcement costs by forcing them to go through the statutorily described process. ISP subscribers value even this partial protection; if ISPs can capture that value in their pricing, then there is an incentive for them not to cooperate with copyright holders.

The puzzle is why copyright holders do not themselves provide ISPs with a stronger incentive to cooperate. Copyright holders do not

⁹⁹ Douglas Lichtman and William Landes, Indirect Liability for Copyright Infringement: An Economic Perspective, 16 Harv J L & Tech 395, 397 (2003).

¹⁰⁰ S Rep No 105-190 at 8 (cited in note 10) ("[W]ithout clarification of their liability, service providers may hesitate to make the necessary investment in the expansion of the speed and capacity of the Internet.").

¹⁰¹ 17 USC § 512(i)(1) (stating that "[t]he limitations on liability established by this section shall apply to a service provider only if the service provider" has adopted a termination policy targeting infringing subscribers).

¹⁰² Id at § 512(h)(1) ("A copyright owner... may request the clerk of any United States district court to issue a subpoena to a service provider for identification of an alleged infringer.").

suffer from coordination problems—witness the Recording Industry Association of America and the Motion Picture Association of America and the Motion Picture Association of America —so they ought to be able to represent their interests collectively. A holdout problem on the part of ISPs is unlikely to be the answer either. Copyright holders need not pay off every ISP. Because there must be a consumer-infringer at the end of every transaction, the cooperation of a few large ISPs is probably sufficient to shut down a large percentage of online copyright infringement. If distributor-infringers migrate to ISPs willing to protect them, copyright holders will have trouble eliminating the supply of infringing works. Yet if copyright holders could greatly reduce demand for infringing works—and one suspects they could if AOL, Comcast, AT&T, EarthLink, Road Runner, and Verizon cooperated—much of the problem would be solved.

Given the foregoing, if copyright holders value the elimination of online infringement more than the users of the major ISPs value infringing online, there should be payments from copyright holders to ISPs in exchange for the ISPs' cooperation in eliminating demand. The absence of such payments may indicate that copyright holders do not value eliminating online infringement more than infringers value being able to infringe online. If that is the case, ending online infringement would be inefficient.

This analysis assumes, of course, that ending online infringement is not necessary for the continued production of expressive works. One reason why copyright holders do not make payments to ISPs may be that copyright holders inadequately represent the interests of future creators, focusing instead on the interests of those who have already created. If copyright holders acted to protect existing works at the expense of future ones, then they could not be relied upon to speak for the "need for incentives to create" purpose of copyright against the desire for widespread access represented by end users and ISPs.

Whatever the reason, it remains the case that copyright holders have not made payoffs large enough to offset the incentive an ISP has to shield its customers from infringement liability. Thus, the counterweight comes from a legal incentive. This legal incentive arises from the possible loss of liability limitations that results from failure to comply with the DMCA's safe harbors requirements. Among these requirements, of course, is the need to "reasonably implement[]" a

¹⁰³ See note 50.

¹⁰⁴ See Part II.B.3 (discussing consumer-infringers).

¹⁰⁵ See Part II.B.2 (discussing distributor-infringers).

§ 512(i) policy—one that terminates the access of repeat infringers in "appropriate circumstances." 1006

B. "Appropriate circumstances"

The first question to be answered in an attempt to craft a § 512(i) policy is the nature of the infringing activity to be targeted. As noted earlier, the legislative history suggests that the DMCA is not an attempt to regulate the behavior of infringers; rather, it is an attempt to regulate the relationship between copyright holders and ISPs so that they deal with online copyright infringement cooperatively.107 The Act's focus on online copyright infringement, rather than copyright infringement generally, is the key to answering the first question. Only infringement that is threatening because of its online character should be targeted. The key concern is the ratio between the fixed costs of creating a work and the variable costs of distributing it. Online infringement is uniquely problematic because the internet reduces variable distribution costs to near zero—making and distributing copies of expressive works online is almost costless. Infringement that takes place online but does not gain a competitive advantage because of this reduction in distribution costs ought not be the focus of a § 512(i) policy. There are three candidate types of infringers: creator-infringers, distributor-infringers, and consumer-infringers. These types will be examined in turn.

1. Creator-infringers.

Creator-infringers use portions of a copyrighted work in creating their own, but do so without the authorization of the copyright holder. A common example may be a musician who samples without permission. Here, the creator-infringer may gain an advantage over the original creator by decreasing his fixed costs of expression. Because his variable distribution costs are similar to those of the creator, the advantage of the creator-infringer is limited to the lower creation costs. These lower creation costs may be offset by higher costs imposed by the possibility of detection and payment of damages if he

^{106 17} USC § 512(i)(1)(A).

¹⁰⁷ See Part I.B.2.

¹⁰⁸ See, for example, Danger Mouse, *Grey Album* (Danger Mouse 2004). This album consisted entirely of remixed portions of The Beatles' *White Album* (EMI 1968) and Jay-Z's *Black Album* (Def Jam 2003). EMI eventually issued cease-and-desist letters to Danger Mouse and the websites that hosted the album. See Bill Werde, *Defiant Downloads Rise from Underground*, NY Times E3 (Feb 25, 2004).

loses at trial.¹⁰⁹ When the possibility of detection is very low, though, the lower creation costs a creator-infringer enjoys are not offset and he can obtain a cost advantage over the original creator and those who license from him.

In these circumstances, however, the consumers of the creatorinfringer's works often are not less likely to purchase the copyrighted work. As noted by Landes and Posner, the demand curve for copyrighted works "will be negatively sloped because there are good but not perfect substitutes." Only to the extent that the creatorinfringer's work is a substitute for the original creator's work should the copyright holder be concerned about consumers of works made by creator-infringers. Such consumers are not potential purchasers made less likely to purchase as a result of the infringing activity. Indeed, exposure to the sampled work might even increase the number of potential purchasers of the original work. Leaving that speculation aside, however, a different kind of potential purchaser in this example is the creator-infringer himself. Were it not for his unauthorized use of the sample, the copyright holder would be able to extract a payment from the creator-infringer who would be likely to purchase authorization so that he could create his work. The decreased revenue potential for the copyright holder will, of course, have a negative impact on the original creator's incentive to create.

Ultimately, the competitive advantage gained by creator-infringers over creators can be represented by the ratio between a creator-infringer's fixed costs and the creator's fixed costs. As should now be clear, there are many instances where that advantage is either negated (because of increased costs imposed by the creator or distributor through the Copyright Act) or minimized (because of other costs of expression the creator-infringer must incur). Still, when the creator-infringer's fixed costs are extremely low because of the infringement, the original creator will be at a greater disadvantage and should therefore be more concerned about the infringing activity. If we include the creator's enforcement costs in his costs of expression and compare that amount to the creator-infringer's fixed costs, we will have one measure of the threat the creator-infringer poses to the creator. Because those costs are plausibly similar, it would appear that a creator-infringer is not particularly threatening. Combine that with the crea-

¹⁰⁹ See 17 USC § 504 (describing the remedies available to successful plaintiffs in an infringement action). See also, for example, *Harrison Music Corp v Tesfaye*, 293 F Supp 2d 80, 86 (DDC 2003).

¹¹⁰ Landes and Posner, Economic Structure at 39 (cited in note 86).

tor-infringer's minimal impact on potential purchasers (because of the imperfect substitution among expressive works), and it appears that creator-infringers are not a significant threat.

Creator-infringers should not be the focus of termination policies. The online context of their infringement does not increase the threat they pose to copyright holders because creator-infringers' competitive advantage, if any, is a consequence of lower expression costs. The internet does not significantly affect these costs. Because the online environment poses unique problems for copyright due to its effect on production costs, online acts of creator-infringers should not fall within the reach of § 512(i).

2. Distributor-infringers.

Distributor-infringers make copies of and distribute original copyrighted works in their entirety. Both distributors and distributorinfringers bear similar variable costs of distribution. Distributorinfringers obtain an advantage because they do not incur the same fixed costs of expression that distributors must bear because of their relationship to creators." The distributor-infringer's fixed costs will be small, including only the cost of obtaining a copy of the copyrighted work and the Copyright Act damages he may face."2 Most relevant to the DMCA is the fact that the cost of making digital copies of a work and distributing them online has approached zero. Thus, the distributor-infringer's total costs are the fixed costs of expression (here, the cost of obtaining a copy of the work and the discounted probability of punishment), which are likely to be very small, and the variable cost of distribution, which approaches zero. The distributor's costs, on the other hand, remain high (even if his costs of distribution approach zero as well) because his relationship with the creator forces him to bear significant fixed costs of expression. Thus, the ratio between the distributor's costs and the distributor-infringer's costs becomes infinitely large as the variable distribution costs approach zero.113

¹¹¹ See Part II.A (introducing a theoretical framework under which to analyze the relevant incentives of different parties).

¹¹² See 17 USC § 504(a) ("[A]n infringer of copyright is liable for either the copyright owner's actual damages and any additional profits of the infringer ... or statutory damages.").

¹¹³ See Mark A. Lemley and R. Anthony Reese, *Reducing Digital Copyright Infringement Without Restricting Innovation*, 56 Stan L Rev 1345, 1374–75 (2004) ("The great promise of digital dissemination—the virtual elimination of the costs of copy production and distribution—is a mixed blessing for copyright owners.").

The effect of a distributor-infringer's activity on potential purchasers also distinguishes distributor-infringers from creator-infringers. As noted above, the creator-infringer's activity often does not decrease the total number of potential purchasers significantly because of the imperfect substitution of expressive works. However, a distributorinfringer's activity is likely to have a significant impact on potential purchasers. Surely some of the people who consume the distributorinfringer's unauthorized copy of the work would not have been willing to pay anything for the copyrighted work, but it is likely that many more would have paid some amount. Moreover, distributors of copyrighted works have the ability to engage in price discrimination.¹¹⁴ This can be accomplished through a variety of means, and is perhaps most common in the film industry, which charges progressively less as a film goes from a first-run theater to a later-run theater to a DVD release to pay cable to basic cable to network TV.115 The ability to price discriminate means that distributors ought to be able to capture most of the demand for their good through flexible pricing. Price discrimination, however, is undermined by the cost advantage distributor-infringers enjoy-low-value users have a new (unauthorized) lower price alternative. Finally, unauthorized digital copies of a work have become near perfect substitutes for the copyrighted work. As the quality of digital copies increases and the distribution of authorized copies begins to mimic the distribution of unauthorized copies, the substitution will become more perfect.

Thus, distributor-infringers pose a significant threat to distributors. The ratio of a distributor's costs to a distributor-infringer's costs is almost infinite. There is near perfect substitution between the distributor-infringer's work and the distributor's work. Finally, the distributor-infringer's activity is likely to have a large negative effect on potential purchasers, turning many of them away from the distributor's product. For these reasons, distributor-infringers are quite threatening to distributors (and, by extension, creators) of original expressive works.

Distributor-infringers are the archetype of the difficulties the internet has presented to creators and distributors. Their competitive advantage is directly attributable to the reduced variable production costs that computers and the internet have made possible. Fixed expression costs represent a much larger portion of total costs than they did in a preinternet environment. A distributor-infringer's infringe-

¹¹⁴ See Landes and Posner, Economic Structure at 39 (cited in note 86) (describing various methods used by distributors to price discriminate).

¹¹⁵ Id.

ment greatly reduces his fixed expression costs while the internet has greatly reduced his variable product costs—a distributor-infringer's total costs are therefore substantially less than a distributor's total costs. Because it is the online nature of their activity that makes distributor-infringers dangerous to creators and distributors, they should be a prime target of ISPs and copyright holders acting under § 512(i).

3. Consumer-infringers.

A consumer-infringer is someone who purchases or otherwise obtains an unauthorized copy of an expressive work. Unlike creatorinfringers and distributor-infringers, a consumer-infringer does not compete with a creator or distributor. However, she is the ultimate source of the distributor's and creator's revenues—she is the potential purchaser. When a consumer-infringer obtains unauthorized copies through a distributor-infringer, she has obtained a near perfect substitute of the original work for a lower price, reflecting the distributorinfringer's cost savings relative to the distributor. The consumerinfringer's activity makes a potential purchaser much less likely to add to the distributor's revenue stream and therefore makes her a serious threat to the distributor and creator. The distributor can avoid this if he can increase the cost to the consumer-infringer of obtaining the unauthorized work. This is generally achieved through enforcement of the copyright. The cost of the unauthorized work to the consumer-infringer is the cost of obtaining it from the distributor-infringer plus the discounted probability of paying a settlement or trial damages. If the probability of paying these damages is sufficiently high, it is cheaper to purchase the expressive work from the distributor. For this reason, it is critical for the distributor to be able to pursue consumer-infringers.

Consumer-infringers may be the biggest stumbling block in identifying the type of activity that constitutes § 512(i) "appropriate circumstances." They may pose the biggest threat to creators and distributors because they are the potential purchasers that ultimately can become actual purchasers of authorized copies of copyrighted works. If the online nature of their infringement makes them less likely to become actual purchasers than if their infringement took place offline, then they are properly targets of § 512(i) policies. Conversely, to the extent that their online infringement has the same effect as offline infringement or makes them more likely to become actual purchasers, then they are not. Resolution of this question is beyond the scope of this Comment, but if the law is to sweep consumer-infringers within the scope of a § 512(i) policy, it should have some answers to the em-

pirical question of what a consumer-infringer's effect is on a potential purchaser of a copyrighted work.

Ultimately, we can come to two firm conclusions concerning the definition of "appropriate circumstances." Creator-infringers do not present "appropriate circumstances" putting them at risk of termination. Distributor-infringers do. Whether consumer-infringers do as well is a question for another day.

C. The "Repeat" Question

Having resolved what kind of activity constitutes "appropriate circumstances," we can approach the second problem in constructing a § 512(i) repeat-infringement policy: what needs to be repeated. As noted, the statute and legislative history are inconclusive on this point. 116 One possibility is to take a works-based approach. Under this approach, repeat infringement is infringement of multiple works by a single actor or infringement of a single work by a single actor on multiple occasions. This approach aligns with our understanding of a copyright holder's incentive. Every time a work is infringed by a distributor-infringer, he gains a competitive advantage that harms the copyright holder's ability to profitably create and distribute expressive works. Yet this model is unsatisfying. First, if the boundaries of § 512(i) are kept appropriately narrow, the copyright holder's incentives will be untouched by copying of even multiple works. 117 Moreover, a consumerinfringer who has downloaded two movies over the course of ten years should not be treated the same way as a consumer-infringer who has downloaded several dozen in a single month."8 The question is, then, a line drawing one—are three downloads sufficiently like several dozen? Four? Five?

The better approach employs an identification-based method. In this model, a repeat infringer is someone who has been identified as an infringer at least twice. This aligns with the incentives of the ISP.

¹¹⁶ See Part I.B (discussing the safe harbors of the DMCA).

¹¹⁷ For example, when a creator-infringer infringes multiple works, a copyright holder's incentives will remain unaffected. See Part II.B.1.

Act provides a better vehicle for that. It may be difficult for the copyright holder to track all the people who have downloaded one work and wait for years to see if they download another. Moreover, the ISP will have trouble gathering evidence to evaluate the copyright owner's claim. Because the focus of the DMCA repeat infringer provision is on the ISP and the copyright holder—and not on the infringer—we ought not be overly concerned with whether the infringer should be punished. Instead, we should ask whether the copyright owner and ISP should focus on this type of infringement.

Once an ISP has agreed with a copyright holder that one of the ISP's users has infringed, "it will take action on information that the user has infringed again. Without this safeguard, an ISP would be pressed into duty as the copyright holder's online enforcement officer. Repeated agreements that someone has infringed would promote cooperation between the ISP and the copyright holder.

It may still seem inadequate to treat someone twice identified as an infringer the same way as someone identified as an infringer several dozen times. Yet at least three considerations indicate that the differences between two and twenty-four may not be relevant. First, infringement likely to come to the attention of a copyright holder is probably not of the one or two downloads variety—more likely, an actor has to have participated in significant amounts of infringing activity to be marked as an infringer in the first instance. Therefore, this Comment's proposed definition is unlikely to sweep up those who have in fact infringed on only two occasions. Second, someone who has been identified as an infringer is put on notice about the risks of further activity. Finally, this conclusion conforms to repeat offender statutes that rely on multiple convictions (that is, identifications) rather than multiple counts (that is, works). For these reasons, an identification-based method is preferable.

D. Accusations, Agreements, and Convictions

Having clarified "appropriate circumstances" and "repeat infringer," a final problem arises: identifying when an infringing act has taken place. This is the "reasonably implement[s]" question. At least three possibilities can be considered. First, it may suffice for a copyright holder to accuse an account holder of infringement. Under this model, an accusation triggers duties on the part of the ISP to examine the validity of the claim and, if it fails to find bases for doubt, the ISP must keep a record and perhaps inform the user that he has been identified as an infringer and will lose his account if he continues to infringe. This squares with cases suggesting that though § 512(m) explicitly states that an ISP does not have a duty to police its own network, it does have a duty to take some action in response to allegations of infringement on its network. However, this approach has some serious flaws. Most importantly, it may afford insufficient room

¹¹⁹ See Part II.D (discussing the agreement model).

¹²⁰ See note 45

¹²¹ See, for example, Perfect 10, 213 F Supp 2d at 1162.

for the alleged infringer to clear his name. If the ISP chooses not to inform the account holder of the accusation, then the suspected infringer may not be able to present evidence that he either did not infringe or has some affirmative defense. Less important, though not insignificant, is the fact that this model may lead to attempts by copyright holders to swamp ISPs with so many baseless claims that they will be unable to examine their validity.¹²²

On the other side of the spectrum is the conviction model, wherein only findings of infringement by courts of competent jurisdiction count. Indeed, at least one commentator has suggested this approach and it has found its way into the Verizon termination policy. Yet it is almost surely inappropriate. First, some convictions result from trials—that is, situations most likely to involve difficult copyright issues. If there was a clear-cut situation, it should have been resolved by settlement or conviction on summary judgment (of course, to the extent summary judgment convictions outweigh trial convictions, this objection is nullified). But ISPs are not meant to take action on difficult copyright issues. In that sense, infringement that results in a conviction is least likely to be what the DMCA directs ISPs to act on.

One might respond by noting that if the stakes are high enough, a defendant may try to contest the claim through trial. Because high stakes here would result from massive fines, these are precisely the situations that should be targeted by ISPs. However, if the stakes are high enough, the copyright holder does not need the ISP's cooperation to make his pursuit cost effective. If the stakes are high for the defendant, then the enforcement costs to the plaintiffs are likely to be low compared to the damages the defendant might pay, which defeats the primary rationale for third-party liability in this context. Thus, because they are likely to present difficult copyright issues, and because cooperation between the ISP and the copyright holder is not

¹²² This may happen when an ISP is itself a major copyright-holder and wants to gain a competitive advantage over an ISP that is not a major copyright-holder.

¹²³ See David Nimmer, *Puzzles of the Digital Millennium Copyright Act*, 46 J Copyright Socy 401, 453 (1998).

¹²⁴ Verizon Online, Acceptable Use Policy (cited in note 77) (describing Verizon's policy to terminate subscriptions where "a Subscriber or account holder has been found by a court of competent jurisdiction to have infringed the copyrights of a third party on two or more occasions"). However, Verizon does not limit itself to this definition. See id.

¹²⁵ Perfect 10, 213 F Supp 2d at 1176 ("The service provider need not act or address difficult infringement issues."). See also HR Rep No 105-551, Part 2 at 61 (cited in note 51) (indicating that the DMCA does not suggest "that a provider must... make difficult judgments as to whether conduct is or is not infringing").

¹²⁶ See Lichtman and Landes, 16 Harv J L & Tech at 397 (cited in note 99).

necessary in these cases, convictions probably are not a good way to identify a repeat infringer.

The best solution is to require the copyright holder and the ISP to agree that an act of infringement has taken place. If they agree on multiple occasions that an actor has infringed, that may be sufficient to trigger termination duties on the part of the ISP. ISPs will have to protect their users from frivolous infringement accusations to the extent necessary to compete with other ISPs. The flip side of this is that ISPs must be discouraged from stonewalling. If there is no cost to the ISP of denying in all instances that an act of infringement has taken place, then it would deny all instances because doing so benefits its users and, by extension, the ISP. That is why there needs to be a legal incentive. A court could find that the ISP was given sufficient evidence to create actual knowledge of infringement with no exculpatory evidence and then prevent access to the safe harbors. This would discourage ISPs from unreasonably refusing to agree that infringement has taken place.

CONCLUSION

The problem of online copyright infringement is complex, and the DMCA is undoubtedly inadequate to address it in its entirety. Each provision of the Act should be read to focus on a particular aspect of the problem. Here, the statutory language and the legislative commentary accompanying it indicate that a § 512(i) termination policy is meant to encourage cooperation between ISPs and copyright holders so they can jointly deal with copyright infringement made especially problematic by its online character. For this reason, reasonably implemented § 512(i) policies should terminate access to distributor-infringers (and possibly consumer-infringers) who have been identified as such by agreement between the ISP and the copyright holder on more than one occasion.

¹²⁷ See, for example, Perfect 10, 213 F Supp 2d at 1162.