A MODERN SYSTEM FOR RESOLVING ONLINE COPYRIGHT INFRINGEMENT DISPUTES: ADMINISTRATIVE RULEMAKING AND ADJUDICATION, A ONE-STOP FIX TO THE DIGITAL MILLENNIUM COPYRIGHT ACT*

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ABSTRACT

In its current state, the DMCA’s notice and takedown system acts as means to suppress free speech, places excessive burdens on Internet service providers, and yet fails to effectively combat online copyright infringement. This article explores the intricacies of the notice and takedown regime, identifies its most critical shortcomings, and proposes a comprehensive one-stop remedy. More specifically, this article suggests that administrative rulemaking and adjudication could provide the responsiveness, consistency, and legitimacy necessary to implement an efficacious and fair mechanism for resolving online copyright disputes.

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INTRODUCTION

The twentieth century has seen technological growth and development at an unprecedented rate, much of which can be attributed to the advent of the Internet.1 Just in the last few decades, technology has fundamentally transformed every major industry—music being no exception.2 Sound recordings can now be easily transferred

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1 See Maria Styvén, The Intangibility of Music in the Internet Age, 30 POPULAR MUSIC AND SOC’Y 53, 53 (2007).
2 See id.
or streamed across the globe within a matter of seconds.³ Positively, the Internet offers content owners new opportunities to reach consumers at a fraction of the cost.⁴ Conversely, “[t]he introduction of compressed digital music files has led to widespread dissemination of digital music and a host of uncompensated and unauthorized uses of digital music content.”⁵

Tensions between copyright owners and Internet service providers have become increasingly intensified by the rise in popularity of websites featuring user-generated content.⁶ For instance, a significant portion of videos available on YouTube, one of the leading online entertainment companies in the world, is either pirated or contains infringing material.⁷ With the expansion and

³ See id.
⁵ Olufunmilayo B. Arewa, YouTube, UGC, and Digital Music: Competing Business and Cultural Models in the Internet Age, 104 NW. U. L. REV. 431, 439 (2010); see also Styvén, supra note 1, at 54.
⁷ See Eugene C. Kim, YouTube: Testing the Safe Harbors of Digital Copyright Law, 17 S. CAL. INTERDISC. L.J. 139, 141 (2007-2008). YouTube is not the only website to offer online content delivery, but it is certainly one of the most obvious examples. Since its humble beginnings in 2005 as an experiment created by former PayPal employees, the video sharing website has evolved into an international video destination. The mechanisms employed by YouTube are similar to those employed by its competitors: users can send digital video files from their computers or web-capable devices to the central YouTube system, where the video files are then converted into Adobe’s Flash
availability of pirated music, a substantial number of record labels, artists, and other members of the music industry are worried about the long-term viability of their professions.8 Similarly, service providers fear that they may be exposed to virtually unlimited liability.9

In 1998, Congress passed the Digital Millennium Copyright Act (hereinafter the “DMCA” or “Act”) as a response to problems associated with widespread online copyright infringement.10 The Act grants Internet service providers11 and intermediaries (collectively hereinafter

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Video format and stored on the YouTube servers. YouTube users may then visit the website and view the videos through their web browsers. This system allows users to create and share videos with friends and others without having to worry about issues such as the cost of, or limitations on, bandwidth.


10 Peets & Young, supra note 4, at 40.

11 The DMCA defines service provider in the context of transitory digital network communications 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.” 17 U.S.C. §512(k)(1)(A). For all other contexts relating to the DMCA, a service provider is “a provider of online services or network access, or the operator of facilities therefore,” which includes entities described in the above definition. Id. at §512(k)(1)(B).

“Content, uploaded by users, is commonly hosted online by websites such as YouTube, Google Video, and Scribd. Once material is uploaded, each hosting website becomes a “service provider” as described in the act.” Jeffery Cobia, The Digital Millenium Copyright Act Takedown Notice Procedure: Misuses, Abuses, and Shortcomings

58 IDEA 131 (2018)
“service providers” or “ISPs”) a series of safe harbors, substantially limiting ISP liability for indirect infringement. Codified in chapter 17 section 512 of the United States Code, the DMCA’s four primary safe harbors are categorized by type of conduct: (a) Transitory Digital Network Communications; (b) System Caching; (c) Information Residing on Systems or Networks at Direction of Users; and (d) Information Location Tools (collectively “512 safe harbors,” or “safe harbors”). Eligibility for each safe harbor is contingent on satisfying a number of conditions. While requirements generally vary, three out of four 512 safe harbors—subsections (b), (c) and (d)—include a notice and takedown provision.


13 17. U.S.C. § 512 (note that each letter corresponds to the relevant statutory subsection, e.g. “(a) Transitory Digital Network Communications” is governed by section 512(a)). Note, when a service provider is a “public or other nonprofit institution of higher education” section 512(e) funotethter limits liability stemming its faculty members or employee graduate students. 17 U.S.C. § 512(e).


15 While the notice and takedown provisions, applicable to various contexts. See generally 17 U.S.C. § 512. When used in the context of user-generated content, notice and takedown is typically governed by section 512(c); see also § 512(c)(1)(C). Nonetheless, this article refers to “notice and takedown” as a single provision for stylistic reasons, for simplicity, and because an ISP can satisfy all of the notice and takedown conditions with a single set of procedures and policies, Compare with 17 U.S.C. §§ 512(b)(2)(E), 512(d)(3).
specifically, ISPs must implement policies and procedures for receiving takedown requests and expeditiously removing or disabling infringing content.

Note, it is legally voluntary but is a prerequisite to receiving DMCA safe harbor. See generally 17 U.S.C. § 512.

See 17 U.S.C. § 512(b)(2)(E) (“[I]f the person . . . makes that material available online without the authorization of the copyright owner of the material, the service provider responds expeditiously to remove, or disable access to, the material that is claimed to be infringing upon notification of claimed infringement as described in subsection (c)(3) . . . “); § 512(c)(1)(C), (c)(2) & (c)(3); § 512(d)(3) (“[U]pon notification of claimed infringement as described in subsection (c)(3), responds expeditiously to remove, or disable access to, the material that is claimed to be infringing or to be the subject of infringing activity, except that, for purposes of this paragraph, the information described in subsection (c)(3)(A)(iii) . . . ”); see also 17 U.S.C. §§ 512(g)(2)–(3). But see 17 U.S.C. § 512(a).

Assuming a party is a service provider under § 512(c) or § 512(d), it must also comply with a miscellaneous set of provisions that (among other things) ensure the provider is acting in good faith. These provisions include the “notice and takedown” regime, which requires platforms to remove content upon receiving a valid notice from a copyright owner. Some of the commonly litigated “good faith” prerequisites include the following: 1) the defendant must not have “actual” or “apparent” knowledge of the infringing activity; 2) the defendant must not enjoy a direct financial benefit from infringing activity that it has the right and ability to control; 3) the defendant must have established adequate “notice and takedown” procedures and complied with them; and 4) the defendant must have instituted and implemented adequate policies to remove repeat infringers.

John Belvins, Uncertainty as Enforcement Mechanism: The New Expansion of Copyright Liability to Internet Platforms, 34 CARDOZO L. REV. 1821, 1835–36 (2013) (citations omitted); see also Brian Leary, Safe Harbor Startups: Liability Rulemaking Under the DMCA, 87 N.Y.U. L. REV. 1135, 1143 (2012). The DMCA further shields ISPs from liability from good faith takedowns. See § 512(g) (more specifically, it limits liability for “good faith disabling of access to, or removal of, material or activity claimed to be infringing or based on facts or circumstances from which infringing activity is apparent”).

58 IDEA 131 (2018)
The notice and takedown system was intended to balance the competing interests of service providers, copyright owners and Internet users.18 However, this balancing act has proven to be significantly more difficult than initially anticipated.19 The notice and takedown regime has turned out to be inordinately burdensome for service providers, ineffective at combating wide scale online copyright infringement, and easily exploitable as a means to suppress free speech.20 “Immunizing technology and telecommunication companies [can] serve[] the public interest by fostering innovation,” thereby, “further[ing] the constitutional directive of copyright to promote the progress of knowledge”—but this is the case only if

18 See Kim, supra note 7, at 153–54; Timothy Wiseman, Limiting Innovation Through Willful Blindness, 14 NEV. L.J. 210, 210 (2013) (“The 1998 Digital Millennium Copyright Act (“DMCA”) reflects this tension between the need to provide authors and creators with compensation and some control over their creations while protecting technological innovators and Internet service providers from potentially crushing liability exposure due to the actions of their users.”); Cobia, supra note 11, at 390–93 (“The DMCA is a compromise between allowing content providers to avoid liability and continuing to grant copyright holders rights online.”).

The DMCA was designed to address “unique copyright enforcement problems caused by the widespread use of the [I]nternet.” Congress created safe harbors under the DMCA to motivate both the creation of new works and the rapid growth of various industries on the Internet while limiting the unconstrained liability that an OSP might face due to its users’ actions. These limitations, listed under § 512(a) through (d), protect eligible service providers from monetary liability, leaving the plaintiff with limited injunctive relief, when services are used to infringe copyrights. Liliana Chang, The Red Flag Test for Apparent Knowledge Under the DMCA § 512(C) Safe Harbor, 28 CARDOZO ARTS & ENT. L.J. 195, 198 (2012) (citations omitted).


20 See Cobia, supra note 11, at 387 & 399.
copyright owners can effectively police online infringement in a manner consistent with fair use and free speech principles. 21

Section one of this article analyzes the DMCA’s notice and takedown provision and identifies the regime’s most critical shortcomings. In section two, I suggest that Congress could comprehensively address the regime’s defects by granting administrative rulemaking and adjudicative authority to the United States Copyright Office (prior to changes, “Copyright Office”; post-proposal, “New Copyright Office”). Part A discusses the economic feasibility of expanding the Copyright Office, part B explains why administrative rulemaking would allow for more responsive, consistent, and equitable governance, and part C outlines a possible adjudicatory framework. 22

I. DMCA’S NOTICE AND TAKEDOWN SYSTEM

In theory, the DMCA’s “safe harbors reflect a compromise between the demands of copyright holders and the concerns of the Internet industry...” 23 In practice,

21 See Leary, supra note 17, at 1149.
23 See Cobia, supra note 11, at 387; Kim, supra note 7, at 153–54; see also Wiseman, supra note 18, at 210 (“The 1998 Digital Millennium Copyright Act (“DMCA”) reflects this tension between the need to provide authors and creators with compensation and some control over their creations while protecting technological innovators and Internet service providers from potentially crushing liability exposure due to the actions of their users.”); Cobia, supra note 11, at 390 (“The DMCA is a compromise between allowing content providers to avoid liability and continuing to grant copyright holders rights online.”).
however, the notice and takedown regime neither properly balances competing interests nor achieves Congress’s underlying policy objectives. In this section, I will first explain how notice and takedown operates, then explore its problems from the perspectives of each affected group—copyright owners, ISPs, and users.  

How Notice and Takedowns Operate

In order to receive safe harbor under the DMCA, ISPs must establish a system for receiving and reviewing takedown notices. Copyright owners are responsible for monitoring the Internet for infringing content, and when detected, issuing takedown requests to the relevant ISP or its designated agent. In order to be effective, a takedown notice must be submitted in written form, “substantially”

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24 See Kim, supra note 7, at 153. See generally Steven Seidenberg, Copyright in the Age of YouTube, ABA J. (Feb. 02, 2009), http://www.abajournal.com/magazine/article/copyright_in_the_age_of_youtube/ [https://perma.cc/K568-L33P].

25 Generally, copyright owners, Service Providers and users each have reasons to be unhappy with the DMCA. See Boyden, infra note 46, at 1. Note, this article frequently substitutes the term “user” for the “subscriber,” the term employed by the DMCA. See generally 17 U.S.C. § 512 (2010).

26 More specifically, three out of four safe harbors. See 17 U.S.C. § 512; Alan J. Gocha, United States: Internet Service Providers Must Register DMCA Agents In Copyright Office’s New Online Registry, MONDAQ (June 23, 2017), http://www.mondaq.com/unitedstates/x/604774/Copyright/Internet+Service+Providers+Must+Register+DMCA+Agents+In+Copyright+Office+s+New+Online+Registry.

27 Supra note 15 and accompanying text. Additionally, the ISP must designate an agent to receive notifications, which is to be listed in a location accessible to the public, and provide “to the Copyright Office substantially . . . the name, address, phone number and electronic mail address of the agent . . . [and] other contact information which the Register of Copyrights may deem appropriate.” 17 U.S.C. § 512(c)(2).

including: a physical or electronic signature of the owner (or her authorized agent); identification of both the alleged infringing material and the work claimed to be infringed; information reasonably sufficient to contact the complaining party; a statement that the copyright owner has a good faith belief that “use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law;” and a statement, under penalty of perjury, that the information contained in the notification is accurate and that the issuer is authorized to act on behalf of the copyright owner.29

Although, legally speaking, ISPs may refuse to remove or disable content, service providers typically acquiesce to nearly all-takedown requests as a matter of policy.30 This phenomenon is likely a result of the DMCA’s incentive structure.31 On the one hand, ISPs are generally shielded from liability for their compliance with

29 Id. The DMCA also permits copyright owners, or their agents, to request that any United States district court issue a subpoena to a Service Provider for identification of an alleged infringer. 17 U.S.C. § 512(h).

30 Cf. Wendy Seltzer, Free Speech Unmoored in Copyright’s Safe Harbor: Chilling Effects of the DMCA on the First Amendment, 24 HARV. J.L. & TECH. 171, 172–173 (2010); Lydia Pallas Loren, Deterring Abuse of the Copyright Takedown Regime by Taking Misrepresentation Claims Seriously, 46 WAKE FOREST L. REV. 745, 749 (2011); BLAYNE HAGGART, COPYRIGHT: THE GLOBAL POLITICS OF DIGITAL REFORM 138 (2014) (quoting a partner, whose firm represents content and software owners, saying that nearly 100% of the firm’s takedown requests are complied with); cf. also Andrew Pramschufer, Reinstating Legal Ethics in the Over-Assertion of Copyright Rights, 28 GEO. J. LEGAL ETHICS 857, 869–874 (2015) (outlining possible mechanisms for addressing over use of takedown notices)

takedown notices. On the other hand, failure to expeditiously remove or disable content results in safe harbor ineligibility (for the particular claim), exposing the ISP to secondary liability. Likewise, it is more cost effective to implement an automatic takedown system than it is to analyze claims on a case-by-case basis.

In cases where an ISP refuses to remove or disable content, copyright owners have the option to sue the user and/or the ISP, to issue another takedown request, or to do nothing. Alternatively, when content is removed or disabled, the ISP is required to “take reasonable steps to promptly notify the user of the takedown.” Users can then seek a declaratory judgment in court, issue a counter notification to the ISP’s designated agent, or passively comply.

For a counter notice to be effective, it must include: a “physical or electronic signature of the subscriber,” a “statement 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,” and the “subscriber’s name, address, and telephone number.”

32 See 17 U.S.C. § 512(g) (this provision applies only if procedurally proper).
33 See 17 U.S.C. §§ 512(c)(1)(A) & (C); Seltzer, supra note 30, at 208.
34 See Seltzer, supra note 30, at 183.
35 Cf. Seltzer, supra note 30, at 173.
37 17 U.S.C. § 512(g)(3).
38 17 U.S.C. §§ 512(g)(3)(A), (C), (D). Additionally, a counter notification must include, [A] statement that the subscriber consents to the jurisdiction of Federal District Court for the judicial district in which the address is located, or if the subscriber’s address is outside of the United States, for any judicial district in which the service provider may be found, and that the subscriber will accept service of process from the person who provided notification under subsection (c)(1)(C) or an agent of such person.
must also identify “the material that has been removed or to which access has been disabled and the location at which the material appeared before it was removed…” Upon receiving the notice, ISPs are obligated to expeditiously inform the complainant and provide them with a copy of the counter notice.

Even after a counter notice is filed, the content must nevertheless remain down or disabled for at least ten business days (hereinafter the “freeze period”). Thus, in effect, the DMCA grants copyright owners the ability to extra-judicially issue a “temporary restraining order, based solely on the copyright holder’s allegation of copyright infringement.” A copyright owner can extend the freeze period by notifying the ISP of her intention to enjoin the alleged infringing activity (hereinafter “injunctive notice”) vis-à-vis court order. If the ISP has not received an injunctive notice after ten business days, it may replace or re-enable access to the user’s content. But, the ISP—absent an injunctive notice—must unfreeze the content prior to fourteen business days.

**Why Notice and Takedown is Ineffective**

Notice and takedown “is a system that makes no one happy. Copyright owners are unhappy with the amount of expense and effort the system requires for such paltry results”; service providers are “unhappy with the burden of

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41 17 U.S.C. §§ 512(g)(2)(B), (C).
44 Id. (emphasis added).
45 Id. (emphasis added).
having to process and respond to all of those notices,” and “[u]sers are unhappy with inconsistent enforcement... mistakes,” and abuse.\(^{46}\)

1. Copyright Owners

Copyright owners send over 6.5 million takedown notices every month, and although most are successful, the infringing content frequently reappears as a new upload within a matter of hours.\(^{47}\) Google alone has received over 100 million takedown requests, many of which were related to illegal sources of music.\(^{48}\) To date, the Recording Industry Association for America has sent over 128 million takedown notices to various websites.\(^{49}\) For the vast majority of copyright holders, it is cost prohibitive to both systematically monitor the entire Internet and continuously


\(^{47}\) See id.


issue takedown notices. Even large companies have to make strategic decisions about which of their copyrights are valuable enough to justify allocating the resources needed for effective enforcement.

_A Bad Deal: The Technical Protection Measures and Specific Knowledge Provisions_

Absent the DMCA, copyright owners would need to expend substantially less time and money to combat online infringement. Indeed, without safe harbors, copyright owners could simply sue ISPs under the theory of contributory liability. This would both incentivize ISPs to self-policing and reduce the overall enforcement and litigation costs. It is clear from the legislative history that Congress understood ISPs would not be required to affirmatively monitor infringement. However, it appears

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51 *Id.* Notice and takedown has been very costly, both in terms of human and financial capital, to service providers as well. See generally Patrick H.J. Hughes, _Fair-use Review Must Precede Takedown Notice, Panel says in YouTube Dispute_ (C.A.9), WESTLAW Intellectual Property Daily Briefing, 2015 WL 5435365 (2015).
55 See _The Digital Millennium Copyright Act of 1998_, S. REP. NO. 105-190, at 44 (1998) ("Subsection (c)(1)(A)(ii) can best be described as a “red flag” test. As stated in subsection (l), a service provider need not monitor its service or affirmatively seek facts indicating infringing activity (except to the extent consistent with a standard technical measure complying with subsection (h)), in order to claim this
that Congress thought it could counterbalance this pitfall by imposing two additional alternative conditions, “standard technical measures” and “specific knowledge.”

_Standard Technical Measures_

The first is the implementation of standard technical measures [hereinafter “TPMs”] (a condition for all section 512 safe harbors). The Act defines TPMs as “technical measures that are used by copyright owners to identify or protect copyrighted works...” which: (1) “have been developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process”; (2) “are available to any person on reasonable and nondiscriminatory terms”; and (3) “do not impose substantial costs on service providers or substantial burdens on their systems or networks.” The first element reflects Congress’ belief that “an open, voluntary, multi-industry process” was best suited to address copyright infringement. Elements two and three,

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56 See Marc Aaron Melzer, _Copyright Enforcement in the Cloud_, 21 FORDHAM INT’L PROP. MEDIA & ENT. L.J. 403, 439–40 (2011); See also 17 U.S.C. § 512(i); see, e.g., § 512(c)(1)(A) (a specific knowledge provision). See generally Gallo, _infra_ note 144.

57 See § 512(i); Gallo, _infra_ note 144, at 283.


Section 107 establishes a mechanism for monitoring, evaluating, and informing the Congress of the impact of this legislation, especially on the key issue of the role of technological protection measures.

(a) Statement of congressional policy and objective

Section 107(a) expresses the sense of Congress that technological protection measures, developed by the private sector through voluntary, industry-led processes, will play a crucial role in the
conversely, reflect equity concerns (fairness amongst ISPs).\textsuperscript{60} Problematically, these elements in conjunction have proven to be exceedingly high bars—thus, excluding most technologies.\textsuperscript{61} Moreover, “these guidelines are too imprecise and elusive to actually guide service providers and right holders toward a consensus; the term ‘standard technical measures’ remains undefined... more than a decade after passage.”\textsuperscript{62}

\textit{Specific Knowledge}

The second is the specific knowledge condition.\textsuperscript{63} In order to be eligible for either the 512(c) or 512(d) safe harbors, an ISP must act “expeditiously to remove, or disable access to [infringing] material” upon obtaining actual or apparent knowledge that the material or activity is

\underline{healthy development of the Internet and other new paths for dissemination of copyrighted materials. Such measures can facilitate lawful uses of such materials, while safeguarding the private property interests that are recognized by the copyright law. Section 107(a) thus identifies an open, voluntary, multi-industry process for expeditious implementation of these technological protection measures.

(b) Technological protection measures

Section 107(b) mandates at least three technological protection measures for implementation pursuant to Section 107(a) that are especially important in achieving the full potential of the Internet and other digital media: (1) those that enable nonprofit libraries to continue in their critical role of lending copyrighted materials to individual patrons; (2) those that effectively protect against infringement of copyrighted materials; and (3) those that facilitate a diversity of legitimate uses, by individual members of the public, of copyrighted works in digital formats.

\textit{Id.}


\textit{See} Gallo, \textit{infra} note 144, at 285–86.

\textit{See} Gallo, \textit{infra} note 144, at 283.

infringing. The difference between actual and apparent knowledge (or so-called “red flag knowledge”) “is not between specific and generalized knowledge, but instead between a subjective and an objective standard.”

In other words, the actual knowledge provision turns on whether the provider actually or “subjectively” knew of specific infringement, while the red flag provision turns on whether the provider was subjectively aware of facts that would have made the specific infringement “objectively” obvious to a reasonable person. The red flag provision, because it incorporates an objective standard, is not swallowed up by the actual knowledge provision under our construction of the § 512(c) safe harbor. Both provisions do independent work, and both apply only to specific instances of infringement.

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64 See id.; see also Belvins, supra note 17, at 1837 (“Section 512’s safe harbor is unavailable if service providers have ‘actual’ or ‘apparent’ knowledge of infringing activity and fail to remove it.”).
66 Viacom, supra note 65; see also Belvins, supra note 17, at 1837; MUSIC COMMUNITY SUBMISSION, supra note 49, at 14–15.

These two levels of knowledge are distinct under the statute. Actual knowledge is a purely subjective standard, while apparent knowledge—also called “red flag” knowledge—incorporates subjective and objective standards. Red flag knowledge is created by awareness of “facts or circumstances from which infringing activity is apparent.” As the Second Circuit has explained, the service provider must be “subjectively aware of facts that would have made the specific infringement ‘objectively’ obvious to a reasonable person.”

Belvins, supra note 17, at 1837–38.

The legislative record labels § 512(c)(1)(A)(ii) as a “red flag test” consisting of two prongs. The first prong, which has a subjective component, determines whether the OSP is aware of the circumstances of infringement. The second prong, which has an objective component, determines whether the infringement is apparent from the circumstances, that is, “whether infringing activity would have been apparent to a reasonable person operating
Importantly, while neither the actual or red flag knowledge provisions create an affirmative monitoring duty, both penalize inaction once specific acts of infringement are discovered.\footnote{See §§ 512(c)(1)(A), (d)(1).} Problematically, this condition simply incentivizes willful ignorance. On the one hand, ISPs receive no legal benefits under the DMCA if they voluntary monitoring for infringement. On the other, voluntary monitoring places ISPs in a lose-lose situation, where they must either: (a) unilaterally remove or disable its users’ content, potentially angering customers and harming profit generation or (b) risk a proliferation of copyright suits.\footnote{See Greg P. Teran, ISP Liability for Copyright Infringement, BERKMAN CENTER FOR INTERNET & SOCIETY (Feb. 11, 1999), http://cyber.law.harvard.edu/property99/liability/main.html [http://perma.cc/B4MF-8CPJ].} While it is unlikely that Congress intended to actively discourage voluntary monitoring,\footnote{DIGITAL MILLENNIUM COPYRIGHT ACT OF 1998, H.R. CONF. REP. 105–796 at 73 (1998) (“This legislation is not intended to discourage the service provider from monitoring its service for infringing material. Courts should not conclude that the service provider loses eligibility for limitations on liability under section 512 solely because it engaged in a monitoring program.”)} the incentive structure created by the DMCA unfortunately has this result.\footnote{See Music Community Submission, supra note 49, at 14–15.} Consequently, the DMCA leaves copyright
owners with the daunting task of continuously monitoring the Internet with little to no assistance.  

*Why the DMCA fails to Deter Infringement*

Despite this incredible burden placed on copyright owners, the DMCA nevertheless fails to effectively prevent or deter infringement. First, unless an ISP voluntarily employs sophisticated filtering technology, users can simply re-upload content. And given the specific knowledge condition, ISPs are actively discouraged from implementing such detection measures. Without this assistance, copyright owners are forced to engage in a never-ending game of whack-a-mole.

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73 See supra notes 68–71.


Content owners have described that effort as “ultimately Sisyphean: because [these sites are] dynamic and change[ing] day-to-day or hour-to-hour as users upload more material, the task of identifying and sending notifications requesting the removal of copyrighted works would create an unending [version the children’s] game of ‘Whack-A-Mole.’” While judges, as individuals, may be sympathetic to this argument, current precedent and understanding of the DMCA suggests that this is the balance Congress knowingly struck.

Melzer, supra note 56, at 439–40.
Second, the DMCA does not provide a reliable method for addressing repeat infringement. 75 Although the DMCA makes the adoption and implementation of a repeat infringer policy a condition of safe harbor, 76 the act provides no clear guidance as to what actually constitutes repeat infringement. 77 A significant challenge to developing a workable definition arises from the lack of consistency in how service providers determine which content is infringing. 78 “[T]akedown notices are not a reliable means of distinguishing between lawful and infringing content because DMCA takedown notices are commonly faulty.” 79 They are merely “[a] statement that the complaining party has a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law.” 80 As such, it is exceedingly difficult to design a fair metric for identifying repeat infringement because the individual findings lack procedural and substantive legitimacy. 81 And finally, the system fails to deter infringement because meaningful penalties are rarely and inconsistently imposed.

75 See Murtagh, supra note 72, at 259.
76 17 U.S.C. § 512 (i)(1)(A) (including a procedure for informing subscribers and account holders of a policy for terminating accounts in appropriate circumstances if they engage repeat infringement).
77 See Murtagh, supra note 72, at 259. The Courts have not been able to bring much clarity either.
78 Id. at 260.
79 Id. at 254.
81 See Murtagh, supra note 72, at 260. Thus, the notice and takedown system fundamentally fails, because it neither allows copyright owners to effectively deter infringement nor does it protect users from illegitimate takedowns. See Black, supra note 19, at 769–70.
2. Service Providers

Admittedly, ISPs are the greatest beneficiaries of the DMCA. First, the act defines service provider very broadly—arguably covering “every Internet or intranet provider or intermediary, including portal sites, search engines, [and] universities...” Second, it covers a wide range of Internet activities—as long as directed by the user and carried out through an automated technical process—including: (a) “transmitting, routing, or providing connections for, material through a system or network,” (b) “temporary storage of material,” (c) “storage at the direction of a user,” (d) “referring or linking users to an online location containing infringing material or infringing activity, by using information location tools, including a directory, index, reference, pointer, or hypertext link,” and (e) if “a public or other nonprofit institution of higher education... when a faculty member or graduate student who is an employee of such institution is performing a teaching or research function”. And third, the DMCA

82 Cf. Michael S. Denniston, Copyright Owners Face New Obstacles in Fighting Online Infringement, 31 No. 7 WEST. J. COMPUT. & INTERNET L.J. 1, 5 (2013) (concluding that service providers have been overall victorious in major court cases delineating the scope of the DMCA’s safe harbors).
83 Walker, supra note 53, at 5.
84 17 U.S.C. § 512(a) (“transmitting, routing, or providing connections for, material through a system or network controlled or operated by or for the service provider, or by reason of the intermediate and transient storage of that material in the course of such transmitting, routing, or providing connections . . .”).
86 17 U.S.C. § 512(c).
87 17 U.S.C. § 512(d).
88 17 U.S.C. § 512(e). Courts have also adopted broad interpretations of the protected services listed in § 512(c)-(d).” Belvins, supra note 17, at 1842–44; cf. Denniston, supra note 82, at 1 (citing Viacom, 676 F.3d; UMG Recordings Inc. v. Shelter Capital Partners LLC, 718 F.3d 1006 (9th Cir. 2013).
substantially limits ISP liability for hosting infringing content.\textsuperscript{89} Nonetheless, a number of ambiguities in the DMCA have resulted in costly and timely consuming litigation.\textsuperscript{90} One commentator noted that “[t]he application and interpretation of § 512(c)’s safe harbor of the Digital Millennium Copyright Act (DMCA) has been regarded as a notoriously inexact science that provides a confounding experience to both legal practitioners and judges.”\textsuperscript{91} For example, ten years after passage of the DMCA, Viacom sued YouTube and its parent company, Google, over user-generated content.\textsuperscript{92} Viacom asked for one billion in damages, and although Google eventually prevailed, it spent more than $100 million in pre-trial legal fees to defend itself.\textsuperscript{93}

Uncertainty regarding obligations and liabilities is particularly damaging to new and smaller service providers as they are typically more susceptible to legal missteps and as they often face greater injury from the incidence of unexpected expenses.\textsuperscript{94} Nevertheless, ISPs, big or small, would benefit from less legal ambiguity as it would reduce

\textsuperscript{89} See Peets & Young, supra note 4, at 40; Cobia, supra note 11, at 388.
\textsuperscript{92} See Hassanabi, supra note 90, at 405; Hormann, supra note 7, at 1361.
\textsuperscript{93} Id.
\textsuperscript{94} See Belvins, supra note 17, at 1832.
overall legal fees, ease investor anxiety concerning new technologies, and decrease economic waste.\textsuperscript{95}

An example of cost inducing ambiguity can be found in the DMCA’s general safe harbor for compliance with takedown requests (hereinafter “512(g) safe harbor”).\textsuperscript{96} Although 512(g)’s safe harbor is rather broad and not frequently litigated, it is not a perfect shield, as eligibility is dependent on, among other things, whether the ISP acted in good faith.\textsuperscript{97} Thus, theoretically, an ISP can be sued for both compliance and failure to comply with a takedown request.\textsuperscript{98} And, while it may be atypical for a service provider to deny a takedown request, there are situations where ISPs may be compelled to do so—e.g. on political or policy grounds, such as to prevent its users from being the victims of abusive takedown campaigns.\textsuperscript{99} Accordingly, the DMCA inevitably puts service providers in the difficult position of adjudicating takedown notices.\textsuperscript{100} Troubingly, ISPs are likely to resolve takedown disputes on the basis of their economic interests as opposed to traditional notions of truth or fairness.\textsuperscript{101}

3. Users

The notice and takedown regime has been abused for a number of nefarious purposes, including superseding

\begin{itemize}
\item \textit{Cf.} Urist, \textit{supra} note 31, at 225–27.
\item \textit{See} 17 U.S.C. § 512(g)(2)(C); Urist, \textit{supra} note 31.
\item \textit{See} 17 U.S.C. § 512(g).
\item \textit{Cf.} Lenz v. Universal Music Corp., 572 F.Supp.2d 1150 (N.D. Cal. 2008) (holding that copyright owners must consider fair use in formulating good faith basis for issuing a takedown request).
\item \textit{But cf.} Urist, \textit{supra} note 31, at 209–212 (discussing Google’s acquiescence to Church of Scientology’s takedown requests, even though it has knowledge it was disabling access to non-infringing content); Seltzer, \textit{supra} note 30, at 171–73 (discussing YouTube rejection of a policy to be more strict regarding takedown requests of videos posted by political candidates and campaigns).
\item \textit{Cf.} Seltzer, \textit{supra} note 30, at 172–173.
\item \textit{Id.}
\end{itemize}
the fair use doctrine, attacking competitors, and censoring free speech.\textsuperscript{102} Additionally, non-infringing content is often targeted by mistake—a not infrequent occurrence given that millions of takedown requests are sent every month.\textsuperscript{103} And, because the DMCA requires that post-removal content remain down for ten to fourteen days,\textsuperscript{104} copyright owners, in effect, have been granted the power to extra-judicially issue illegitimate temporary restraining orders.\textsuperscript{105} While two weeks may not seem like an exorbitant amount of time, it can be markedly important in certain contexts.\textsuperscript{106} For example, the DMCA has been used to suppress political campaign ads and videos, which is particularly troubling given the societal significance and time sensitive nature of elections.\textsuperscript{107}

It may be argued that the requirement that takedown notices be issued in good faith ought to be sufficient to protect fair use and free speech.\textsuperscript{108} However, this notion falls flat when considering that the DMCA provides no impartial mechanism for adjudicating takedown disputes.\textsuperscript{109} As a result, aggrieved parties are left with only one real

\textsuperscript{102} See Cobia, \textit{supra} note 11, at 390–93.

\textsuperscript{103} Id.

\textsuperscript{104} See 17 U.S.C. § 512(g)(2)(C).

\textsuperscript{105} Id. at 1708–170; see also Cobia, \textit{supra} note 11, at 395 (“The DMCA encourages abuse of fair use because an injunction can be obtained with minimal effort, and counter-notices are rare.”). See generally Seltzer, \textit{supra} note 34, at 171.

\textsuperscript{106} See Seltzer, \textit{supra} note 30, at 171–77.

\textsuperscript{107} Id.


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remedy—litigation.110 Accordingly, while the DMCA grants copyright owners the ability to extra-judicially censor content, users are provided with no commensurable protection, as litigation remains the only genuine avenue to adequately protect their rights.

4. The DMCA Fails to Address the Problem High Litigation Costs

A large obstacle to combating online infringement, which the DMCA sought to address, is the high cost of suing individuals on a case-by-case basis.111 The average expense to litigate a copyright infringement suit, per party and regardless of side, is estimated to be between $384,000 and $2,000,000 (not including the cost of judgments and awards).112 Given that the DMCA does not actually provide any independent mechanism for adjudicating online copyright disputes, it fails to provide adequate relief

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Coats, supra note 109, at 5.

110 See Kim F. Natividad, Stepping it Up and Taking it to the Streets: Changing Civil & Criminal Copyright Enforcement Tactics, 23 BERKELEY TECH. L.J. 469, 470 (2008); see also Shyamkrishna Balganes, Copyright Infringement Markets, 113 COLUM. L. REV. 2277, 2280 (2013); But see, e.g., Morea, supra note 109, at 202–209 (discussing efforts by the music industry to deter piracy through a massive law suit campaign against individual infringers). Similarly, users who are sued for infringement are likely to settle even when they have a valid defense, because attorneys’ fees in music copyright litigation typically exceed settlement offers. See Assaf Hamdani & Alon Klement, The Class Defense, 93 CAL. L. REV. 685, 688 (2005).

112 Balganes, supra note 111, at 2280.
for one of the principal problem it was designed to address.\textsuperscript{113}

II. A NEW AND IMPROVED COPYRIGHT OFFICE

Taken together, the DMCA encourages copyright owners to unscrupulously send takedown notices, for service providers to comply regardless of merit, and for users to acquiesce to takedowns even when the content is non-infringing.\textsuperscript{114} Moreover, the DMCA has failed to provide meaningful protection to copyright interests because users can simply re-upload infringing content after its been taken down (on the same site or a different one),\textsuperscript{115} it does not establish a reliable method for identifying and appropriately addressing repeat infringement,\textsuperscript{116} and does not consistently penalize infringers.\textsuperscript{117}

Commentators have proposed a range of potential amendments to the DMCA, such as: adding a fee-shifting provision for post-takedown litigation,\textsuperscript{118} lowering the liability threshold for filing unfounded takedown notices,\textsuperscript{119} improving and standardizing guidelines for takedown

\textsuperscript{113} See Tarbell, supra note 109, at 42.

\textsuperscript{114} Seltzer, supra note 30, at 208.

\textsuperscript{115} See Boyden, supra note 46; Murtagh, supra note 72.

\textsuperscript{116} See sources cited supra notes 78–82.

\textsuperscript{117} See sources cited supra note 40.


\textsuperscript{119} See, e.g., Lydia Pallas Loren, Deterring Abuse of the Copyright Takedown Regime by Taking Misrepresentation Claims Seriously, 46 WAKE FOREST L. REV. 745, 781–82 ([U]sing a standard that would hold copyright owners liable not only when they had actual knowledge that the material targeted for takedown was not infringing, but also when the copyright owner should have known if it acted with reasonable care or diligence that the material was lawful.

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requests,\footnote{120} reforming music statutory licensing fee arrangements,\footnote{121} and drastically weakening safe harbor protections.\footnote{122} Problematically, these proposals, at least in isolation, do not resolve the fundamental flaws with the DMCA’s notice and takedown regime.\footnote{123} First, costly litigation remains the only meaningful mechanism for adjudicating disputes.\footnote{124} Second, an imbalance of incentives and resources still encourage over reporting and under defending.\footnote{125} Third, there lacks a consistent and fair method of identifying repeat infringers.\footnote{126} Finally, service providers continue, inadvisably, to be tasked with adjudicating claims.\footnote{127}


\footnote{122} See, e.g., Mike Scott, Safe Harbors Under the Digital Millennium Copyright Act, 9 N.Y.U. J. LEGIS. & PUB. POL’Y 99, 163–164 (2005–2006); see also Balganesh, supra note 111, at 2281 (advocating that third parties be allowed to “enter copyright litigation and acquire, fund, or insure infringement claims . . .”). For a broader discussion on proposals see generally Jordan Sundell, Tempting the Sword of Damocles: Reimagining the Copyright/DMCA Framework in a UGC World, 12 MINN. J.L. SCI. & TECH. 335 (2011).

\footnote{123} See generally Murtagh, supra note 72.

\footnote{124} Coats, supra note 109, at 5.

\footnote{125} See Natividad, supra note 111, at 470.

\footnote{126} See generally Murtagh, supra note 72.

\footnote{127} See Leary, supra note 17, at 1149–53. See also Jason Mazzone, 41 WM. & MARY L. REV. 395, 405 (2009) (“Leaving the rules of fair use to private parties to determine impedes . . . public ends.”). Fair use is a complicated doctrine and incredibly fact specific. See Cobia, supra note 11, at 394–95.
An administrative framework offers a one-stop fix to the DMCA’s most pressing problems.128 First, it allows for the precise, detailed, and flexible tailoring of rights and responsibilities.129 And second, it would allow the government to be more responsive to rapid changes in technology and other unanticipated problems.130 Admittedly, administrative agencies have their own drawbacks, but in this case, the relative benefits are likely to outweigh disadvantages.131

III. Economic Viability of a New Copyright Office

Although Congress would need to significantly expand the Copyright Office’s budget in order to equip it with the tools necessary to implement a successful regulatory and adjudicative regime, the negative economic implications of widespread copyright infringement more than justify the cost.132 Notably, estimating the economic loss of online piracy and infringement is extremely challenging, because much of the needed underlying research is absent, it is difficult to determine the rate at which consumers would purchase content absent the availability of pirated versions, and a wide range of content

128 Compare with Morea, supra note 109, at 249 (arguing that “a new system of compensating artists while allowing unobstructed file sharing should be implemented”).
129 Liu, supra note 22, at 92.
130 See Liu, supra note 22, at 92–93.
131 See Liu, supra note 22, at 92; See also Cobia, supra note 11, at 405 (arguing that delaying a takedown notice’s effect until after adjudication is justified by the added advantage of fairness and accuracy).
132 See Cobia, supra note 11, at 404–05 (suggesting that an additional branch to the Copyright Office would be necessary, but that the benefits would far outweigh the costs); see also Black, supra note 19, at 779-84.
and mediums of consumption must be analyzed (e.g. rent, stream with ads, license, or purchase).133

One of the most expansive studies conducted on the topic estimated that piracy costs the U.S. economy $58 billion in output and $2.6 billion in tax revenue annually.134 Out of this estimate, sound recordings accounted for $12.5 billion of total economic loss and $422 million in tax revenue.135 If these estimates are even close to accurate, a more adequate enforcement regime would pay for itself by significantly increasing overall economic output and tax revenue.

The Copyright Office could further offset a large portion of its expenses by charging a moderate fee for conducting adjudications.136 Consider a hypothetical fee of $100 dollars. If one in ten of the 78 million (annual) takedown notices reached adjudication, the Copyright

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135 See Siwek, supra note 134, at i. Motion picture piracy costs the U.S. economy approximately $20.5 billion and over $850 million in tax revenue annually. see id. at 1.

136 Cf. INDEP. FILM & TELEVISION ALL., supra note 23, at 6 (“With the exception of statutory damages, parties should be permitted to seek damages pursuant to U.S. Copyright Law, which include monetary relief, injunctions, attorneys’ fees and other costs. If statutory damages are requested, then the defendant must be provided with an option for a trial by jury and the agency will no longer have jurisdiction over the claims.”).
Office would take in $780 million a year in fees.\textsuperscript{137} In the event that the number of cases falls short of this estimate, although total revenue would be less than anticipated, so too would administrative expenditure.\textsuperscript{138} To give some perspective, the U.S. Patent and Trademark Office’s total annual expenses are around $3.3 billion—collecting about $3.3 million in fees.\textsuperscript{139} The current copyright budget is less than $75 million, more than half of which is recovered from fees.\textsuperscript{140}

The benefits to this regime are even greater if implemented as a loser pays system.\textsuperscript{141} While the possibility of paying a moderate fee, such as $100, is unlikely to deter the pursuance of legitimate takedown requests or contestations, it would nevertheless deter the

\begin{footnotesize}
\textsuperscript{137} The 78 million estimated number of annual takedown requests was arrive at from multiplying the monthly estimate of 6.5 million by 12. See Boyd, supra note 46, at 1 (stating that there are approximately 6.5 million takedown requests filed each month). This remaining calculation was arrived at by: first, dividing the number of annual takedown requests, 78 million, by 10—giving us the total number of annual adjudications, 7.8 million, assuming that 1 in 10 requests were disputed; and second, by multiplying 7.8 million by $100, the hypothetical adjudication fee—giving us an estimated annual revenue of $780 million.

\textsuperscript{138} Cf. Cobia, supra note 11, at 404–05 (suggesting that a similar proposal is feasible by comparing it to the Patent and Trademark Office).


\textsuperscript{140} See Fiscal 2017 Budget Request for the U.S. Copyright Office Before the Subcomm. on the Leg. Branch Comm. on Appropriations, United States S., 114th Cong. 1–3 (2016) (statement of Maria A. Pallante, U.S. Register of Copyrights and Director of the U.S. Copyright Office).

\textsuperscript{141} Cf. Cobia, supra note 11, at 406 (arguing that “a cause of action should be created for the entity that uploaded to sue when the original takedown notice is knowingly perjurious”).
\end{footnotesize}
mass issuing of frivolous takedown requests because this strategy, in the aggregate, would expose the issuer to enormous liability. Alternatively, infringers would be disincentivized to contest legitimate takedown requests, as it would result in a waste of time and money. To further increase the system’s deterrent effect, as well as to reduce abuse, Congress could also adopt a discretionary cost fee shifting provision—similar to that of 17 U.S.C. § 505—to be applied in exceptional cases.  

IV. RULE MAKING AUTHORITY

In this part, I suggest that administrative rulemaking is best situated to effectively respond to technological change, create equitably tailored rules that reflect the nuanced differences between ISPs, and provide the appropriate oversight warranted by the scope and reach of the DMCA. Additionally, I recommend that Congress direct the New Copyright Office to promptly: (1) establish criteria for determining what constitutes “repeat infringement”; and (2) develop a new set of requirements for satisfying the DMCA’s standard technical measures (TPMs) condition.

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143 See also Sandra M. Aistars, The Next Great Copyright Act, or a New Great Copyright Agency? 38 COLUM. J.L. & ARTS 339, 350 (2015); Liu, supra note 22.

TPMs and Digital Fingerprinting

1. Why a Regulatory Framework is the Answer

As discussed in section one, the DMCA currently conditions safe harbor on adopting “standard technical measures.”\(^{(145)}\) In order to be considered a standard technical measure, the technology or process must: (1) “have been developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process”; (2) “available to any person on reasonable and nondiscriminatory terms”; and (3) “not impose substantial costs on service providers or substantial burdens on their systems or networks.”\(^{(146)}\) These three requirements, in conjunction, allow service providers to avoid implementing a number of effective protection mechanisms (including the use of digital fingerprinting technology).\(^{(147)}\) Accordingly, either an unusually well-crafted Congressional amendment or the creation of a regulatory regime is a pre-requisite to making the DMCA’s standard technical measure provision meaningfully effective.\(^{(148)}\)

Legislating the use of TPMs is extremely difficult because ISPs vary widely in size, capability, and type, and technology evolves more rapidly than the legislative process is equipped to handle.\(^{(149)}\) This may explain why Congress thought it necessary to let the private sector develop standards through “broad consensus... in an open, fair, voluntary, multi-industry standards process.”\(^{(150)}\) Given the slowness of the legislative process, Congress cannot be

\(^{(145)}\) See 17 U.S.C § 512(i).

\(^{(146)}\) See id. at § 512(i)(2).

\(^{(147)}\) See Gallo, supra note 144, at 285–86.

\(^{(148)}\) See generally Gallo, supra note 144, at 300–311.

\(^{(149)}\) See sources cited supra notes 55 & 59.

\(^{(150)}\) See 17 U.S. Code § 512(i)(2)(A).
certain that it could adequately respond to the unforeseen consequences of a strong legislative position, potentially stifling innovation, damaging American competitiveness, and creating inequity between differently situated ISPs.\(^\text{151}\)

Administrative rule making, alternatively, is substantially more flexible and more quickly adaptable and, thus, better suited to both keep up with technological change and provide more narrowly tailored rules.\(^\text{152}\) First, administrative agencies are specialized and include members with pertinent expertise.\(^\text{153}\) Consequently, it is possible to conduct a more sophisticated analysis of the issues.\(^\text{154}\) Second, its narrower duties reduce interference from other national priorities, increasing responsiveness.\(^\text{155}\) Finally, because administrative agents are appointed, as compared to elected, political gamesmanship has less of an impact on expediency.\(^\text{156}\)

2. Digital Fingerprinting Technology

The predominant mechanism for monitoring digital copyright infringement is the application of digital fingerprints, which contain unique identifying information such as tempo, tone, and pitch.\(^\text{157}\) “Once generated and incorporated into an expansive database, filtering technology will then filter or scan online content by running algorithmic comparisons against works within its referent database.”\(^\text{158}\) This process is significantly more effective than term searching, which can only capture content when the file name and/or tag is sufficiently

\(^{151}\) See sources cited supra notes 55 & 59.
\(^{152}\) See Liu, supra note 22, at 92.
\(^{153}\) Id.
\(^{154}\) Id.
\(^{155}\) Cf. Liu, supra note 22, at 92.
\(^{156}\) Id.
\(^{157}\) Gallo, supra note 144, at 284–85.
\(^{158}\) Id. at 285.
similar. A sophisticated infringer can avoid term searching detection by avoiding use of triggering titles and tags. Conversely, in order to go undetected by digital fingerprinting technology, the user must distort the content—rendering it severely diminished or even unrecognizable. Even if distorted works are still available, they are considerably less suitable as substitutes for sales and licenses. Accordingly, they have a much smaller impact on copyright owner’s economic interests.

Service providers are in the best position to monitor infringement because they can scan files even prior to posting and are only responsible for their own websites. Copyright owners, dissimilarly, must continuously screen the entire Internet in order to identify potentially infringing content. Thus, it is more efficient to have service providers screen for infringing content. The DMCA discourages service providers from implementing effective technology because the safe harbor is unavailable if service providers have actual or apparent knowledge of infringement. A better system, at a minimum, would exempt service providers from liability if they adopt procedures to conduct digital fingerprinting scanning and to notify copyright owners of potentially infringing content.

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159 Id. (“Versions of this technology vary in their ability to match sound or video content that is modified or short in duration, but all perform essentially the same function: scanning the Internet for audiovisual content and comparing that content against a database of copyrighted works in search of matches or incidents of infringement.”)
160 See Wan, supra note 144, at 375.
161 Id.
162 Cf. Wan, supra note 144, at 375.
163 Id.
164 See Black, supra note 19, at 782.
165 Id. at 769.
166 See 17 U.S.C. § 512(c).
167 Cf. Black, supra note 19, at 773 (arguing that courts have collapsed the knowledge exception to protect service providers who monitor content and prudently notify copyright owners).
Even more preferable, service providers would be required to do so. Notably, despite digital fingerprinting technology’s relative sophistication in identifying wholesale pirated content, it is unable to distinguish between infringement and fair use. Accordingly, content ID programming by itself is inadequate to determine whether content is in fact infringing. Therefore, it is important to leave intact the copyright owner’s ability to decide when to issue a takedown request. But, by providing an impartial arbiter, efficiency and equity concerns would be better balanced.

Repeat Infringement

Establishing a consistent and applicable definition of repeat infringement is required to make the DMCA effective. Online infringement cannot be prevented or deterred without the ability to identify and punish the worst

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168 See Gallo, supra note 144, at 284. Although not discussed in this paper, digital watermarking screening could be added as a safe harbor condition. For a discussion about the differences, advantages, and disadvantages of digital watermarking and fingerprinting, See Wan, supra note 144, at 380–85.


170 See Eakman, supra note 169, at 642; see also Black, supra note 19, at 780; David A. Kluft, Toothless or Misunderstood?, 7 No. 3 LANDSLIDE 37, 39 (2015) (“An area that is still very much developing is the intersection between § 512(f) and automated systems. Say you set up a computer to identify unauthorized uses of your copyrighted work online and automatically spit out takedown notices. How is a computer supposed to form a ‘good faith’ belief that something is infringing under § 512(c)? On the other hand, how can a computer make a ‘knowingly’ false statement under § 512(f)?”).

171 See Black, supra note 19, at 781.

172 See Black, supra note 19, at 781.

173 See sources cited supra note 41.
offenders.\textsuperscript{174} There is currently no clear guidance as to what actually constitutes repeat infringement, the result of which is the largely inconsistent application of law.\textsuperscript{175} A regulatory framework could offer greater flexibility, allowing rules to be continuously updated to reflect new information.\textsuperscript{176}

As discussed in section one, takedown notices are not a reliable means of determining infringement. They are merely a statement that the complaining party believes a work is being used in a manner “not authorized by the copyright owner, its agent, or the law.”\textsuperscript{177} Adjudication provides a fair metric for designating repeat infringers because it offers legitimate factual findings.\textsuperscript{178} The New Copyright Office could establish a workable definition that is better suited for consistent application of penalties.\textsuperscript{179} Moreover, once an individual or entity is deemed a repeat infringer, then statutory damages could be made available to further deter infringement.

It is prudent that a rule be established to prevent repeat infringers from avoiding damages and fees by simply complying with takedowns. A potential solution would be to establish a rule for designating users as repeat infringers after a certain number of undisputed takedown requests—how many exactly, may be better left up to trial and error. The New Copyright Office could start with a larger number, such as twenty, and adjust it based on the results of annual evaluations. A more complicated scale

\textsuperscript{174} Id.
\textsuperscript{175} See Murtagh, supra note 72, at 259. The Courts have not been able to bring much clarity either. See Murtagh, supra note 72, at 259.
\textsuperscript{176} See Liu, supra note 22, at 92.
\textsuperscript{177} 17 U.S.C. § 512(c)(3)(A)(v).
\textsuperscript{178} See Murtagh, supra note 72, at 260. Thus, the notice and takedown system fundamentally fails, because it neither allows copyright owners to effectively deter infringement nor does it protect users from illegitimate takedowns. See also Black, supra note 19, at 769–70.
\textsuperscript{179} See sources cited supra note 41.
could also be developed, which takes into account factors like the length of time between takedowns. Moreover, the New Copyright Office could make a rule allowing copyright owners to force repeat infringers into adjudication. Thus, a user designated as a repeat infringer could not avoid liability simply by complying with takedown notices.

This system would function most optimally if the New Copyright Office created a new condition of DMCA safe harbor that requires service providers to restrict functionality for users whose identity has not been authenticated and verified. ¹⁸⁰ Less aggressive alternatives include, requiring services providers to implement: (1) a method for terminating user generated content from IP addresses found to be the source of repeat infringement; and/or (2) identity authentication and verification when the user chooses to monetize content. ¹⁸¹ Regardless, the centralized nature of this proposed system would better prevent repeat infringers from avoiding detection by simply diversifying the websites in which they upload content. ¹⁸² Additionally, it would reduce economic waste by eliminating duplicative screening. ¹⁸³

¹⁸⁰ See 15 CATHERINE PALO, CAUSES OF ACTION 2d 535, § 1 (2d ed. 2000) (“[I]dentifying the party responsible for copyright infringement is sometimes complicated by the fact that the ultimate infringer may not have accessed and used the copyrighted material entirely on his or her own. Often, parties who have been injured by copyright infringement of Internet materials find themselves chasing the ethereal tortfeasor from Internet Service Provider (ISP) to ISP, with little or no hope of actually discovering the tortfeasor’s identity.”).
¹⁸¹ For a discussion about various requirements see generally Arsham, supra note 144.
¹⁸² See Arsham, supra note 144, at 795.
¹⁸³ Id.
V. ADMINISTRATIVE ADJUDICATION

The Copyright Office can be granted administrative adjudicative authority under the Administrative Procedure Act.\(^{184}\) Although the particular contours are fairly flexible, this essay suggests a three-tiered system.\(^{185}\) In the first tier, copyright owners who registered their work with the New Copyright Office, similar to the status quo, would be able to issue takedown requests to participating ISPs.\(^{186}\) Upon receipt of a takedown request, service providers would then be obligated to notify the relevant user. The user would have a pre-established amount of time—for the sake of discussion, let us say 48 hours—to either agree to comply with the request or indicate that they wish to contest the validity of the claim.\(^{187}\) If the user does not respond in the requisite time, the service provider would automatically takedown the content, which would remain down unless it receives notice from the Copyright Office that the user had prevailed in adjudication.\(^{188}\) However, if the user timely indicates a desire to contest the takedown notice, the

\(^{184}\) See 5 U.S.C. § 702.


\(^{186}\) See Cobia, supra note 11, at 390–91 (“When a copyright owner discovers that his or her material is viewable (or audible) on a website, the copyright owner can send a notification to the service provider that the material must be removed. The notification letter must comply with a number of statutory requirements; otherwise, it is void. The service provider must notify the user who uploaded the material after taking it down.”); Adam Eakman, The Future of the Digital Millennium Copyright Act: How Automation and Crowd Sourcing Can Protect Fair Use, 48 IND. L. REV. 631. 637 (2015).

\(^{187}\) Cf. Tarbell, supra note 109, at 49–50 (advocating a two-day grace period for user to respond to takedown; similarly, the content would remain active if disputed until a decision has been rendered).

\(^{188}\) Id. at 49.
content would remain active until the Copyright Office makes a determination. Thus, unlike the current system, users can prevent the imposition of an extra-judicial restraining order.189

The First Tier

First tier adjudication would be fairly informal and, accordingly, is typically less costly than full-blown litigation. In this article’s vision, copyright owners would submit a form stating their claim along with proof of ownership and registration of the relevant copyright (hereinafter the “Complaint”).190 The user would then receive a copy of the Complaint and have an opportunity to file a response (hereinafter the “Response”). In order to maintain fairness, the New Copyright Office ought to make an information guide available, explaining the basics of copyright law, including the varying defenses to infringement allegations.191 A copyright examiner would then—after reviewing the Complaint, the Response, the original work, and the alleged infringing work—electronically submit a determination to the Copyright Office and both parties.192 If no party files an appeal within a pre-set timeframe, the ISP would be notified of the result.

189 For a discussion of the DMCA’s notice and takedown provision and the First Amendment see generally Seltzer, supra note 30.
190 See Cobia, supra note 11, at 405 (stating that registration prevents abuse by individuals who do not in fact own the copyright). For a proposal with a more robust complaint system see generally INDEP. FILM & TELEVISION ALL., supra note 22, at 4–5.
191 See Tarbell, supra note 109, at 38, 39, and 44 (stating that the DMCA does not currently function in an equitable fashion, and advocating for a more balanced process).
192 Cf. Cobia, supra note 11, at 404–05 (“An examiner would look at the takedown notice and perform a quick review of the notice and the underlying copyright checking for two qualifications: 1) whether the takedown notice originated from the same entity that holds the valid, registered copyright, and 2) whether the use was fair use.”)
and the losing party would be issued a bill for the adjudication fee. This stage should be able to resolve the vast majority of disputes and effectively inhibit most illegitimate takedowns.

**The Second & Third Tier**

If the losing party wishes to contest the examiner’s determination, then he or she could request a re-hearing in front of an administrative law judge (second tier). Each party would have the opportunity to fill out a new complaint and/or response if he or she so wished. During the formal adjudication proceedings, parties could choose to participate in person or through telecommunication. If the appealing party loses, then he or she ought to be required to pay an additional fee. The New Copyright Office should establish this fee after analyzing the government’s average cost of providing the appeals process. If the appealing party wins, then the appellant would be required to pay the initial examiner’s determination fee. In the event that either party wishes to contest the administrative law judge’s decision, in full or in part, then he or she could appeal directly to a federal district court (with the proper jurisdictional authority). Thus, the third-tier of the system is the traditional litigation process already allowed under current federal law.

**Benefits of Adjudication Summary**

This administrative system offers impartial adjudication without, in most cases, necessitating costly

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194 *See* Cobia, *supra* note 11, at 405.
195 *See Indep. Film & Television All.*, *supra* note 22, at 4.
196 *See* 5 U.S.C. § 702.
197 *See id.*
litigation. Having the loser pay the adjudication fee serves to incentivize honest takedown requests and contestations. While ISPs are relieved from the burden of adjudicating each dispute, users’ free speech rights are no longer subject to extra-judicial takedowns. Moreover, if examiners and administrative judges are required to be copyright experts—e.g. passing an exam, having an LLM in intellectual property, and/or practice a set number of years in the field of intellectual property—then the system would produce more reliable and consistent determinations. The comparative advantages of this proposal are even further amplified if implemented in conjunction with digital fingerprinting, as previously discussed.

198 See Cobia, supra note 11, at 405–06 (noting that copyright examiners would need far less training than patent examiners, and the associated administrative costs would similarly be less).

199 One may respond to this proposal by pointing out that arbitration and mediation is already available to resolve small copyright disputes. INDEP. FILM & TELEVISION ALL., supra note 22, at 2. However, such adjudication requires the consent of all parties, which is unlikely to occur given the adversarial nature of copyright infringement claims. See id. Moreover, Congress does not have the authority to force arbitration and mediation, because it is a private right, but does have the authority to transfer adjudicative authority to an administrative body. Id. at 2-3. See generally Murray’s Lessee v. Hoboken Land & Improvement Co., 59 U.S. 272 (1856). It could be argued that copyright owners would be negatively affected by a loser pays system. However, this reasoning is faulty for a few reasons. First, under the proposed system, legitimate takedown requests should not result in the copyright owner paying a fee. Second, a moderate adjudication fee is diminutive compared to the cost of litigation. See Balganesh, supra note 111, at 2280 (stating that the average cost for litigating copyright infringement, regardless of side, is estimated to be between $384,000 to $ 2 million without factoring in judgments and awards). Finally, the addition of the digital fingerprinting safe harbor condition would assist copyright owners in policing infringement and, accordingly, reduce their enforcement expenses. Similarly, one could argue that imposing new safe harbor conditions may unnecessarily burden service providers. However, many of these companies already allocate significant resources to implementing infringement detection and prevention.
CONCLUSION

The DMCA’s notice and takedown regime suffers from fatal flaws that must be addressed before the U.S. can efficiently and equitably address online copyright infringement. This article suggests that, as a solution, the Copyright Office be granted administrative rule making and adjudication authority. An administrative agency is best suited to offer sufficiently adaptive, flexible, and responsive governance. Although commentators have suggested many possible changes to the DMCA, this article argues that widespread piracy can only be stopped through the creation of a mutually affordable enforcement mechanism.

Administrative adjudication is the only available framework capable of holding infringers accountable without overburdening service providers and/or trampling on fair use and freedom of speech. Adjudication would bring legitimacy, consistency, and accountability to the takedown regime. And if implemented in conjunction with requiring service providers to deploy digital fingerprinting technology, would allow for effective policing of online copyright infringement.

measures, including the use of fingerprinting technology. See Gallo, *supra* note 144, at 283, 284, and 296. This article’s proposal would only make this process easier by establishing and granting access to a national fingerprinting database. Additionally, service providers would be relieved from (a) the expensive obligation to review and adjudicate takedown requests, and (b) exposure to liability arising from resolving takedown disputes in users’ favor. See Michael S. Sawyer, *Filters, Fair Use & Feedback: User-Generated Content Principles and the DMCA*, 24 BERKELEY TECH. L.J. 363, 365 (2009) (“The DMCA generally places the burden on copyright owners to locate the infringing material and issue takedown notices. This burden to police infringing activity may be one that copyright owners cannot, or at least should not, bear.”).