

## Notes

### Correcting Computer Vision: The Case for Real Eyes After *Lenz*

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*The internet brought plentiful opportunities for sharing content between individuals. However, along with those opportunities, the potential for abuse and intellectual property infringement increased steadily. When Congress passed the Digital Millennium Copyright Act it attempted to provide protection for the service providers that served as the foundation for the internet's prosperity and for the content producers who grew its fruits. In accordance with this Act, service providers and copyright enforcers built algorithms to determine when content was infringing and when it was not.*

*The recent Ninth Circuit decision in *Lenz v. Universal Music Corp.* established that a copyright holder must “consider fair use” before they can request that content be taken down by a service provider.<sup>1</sup> This Note discusses how an algorithm might “consider fair use” in accordance with *Lenz*, and argues that in the marginal cases where the likeness is too close to call, human review of potential infringements will nevertheless be necessary to comply with the Digital Millennium Copyright Act.*

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1. *Lenz v. Universal Music Corp.*, 815 F.3d 1145, 1148 (9th Cir. 2016).

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## INTRODUCTION

If not for the Digital Millennium Copyright Act (“DMCA”), online services that host user-generated content (“service providers”) would face liability for hosting content that infringes copyrights. The DMCA provides a “safe harbor” for service providers whose core business relies on user-generated content.<sup>2</sup> These service providers do not face liability for indirect infringement when their users upload copyrighted material so long as they comply with the DMCA’s “notice-and-takedown” procedure.<sup>3</sup> Following this apparently simple procedure, an individual who believes that his or her copyright has been infringed may send a takedown notification to a service provider, and that service provider will comply with the DMCA by disabling access to the allegedly infringing content.<sup>4</sup>

The DMCA further requires that service providers must also use proactive technical measures that “have been developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process.”<sup>5</sup> Some large content hosts like Google and Facebook use complex content identification mechanisms to identify infringing content as it is uploaded—a practice that effectively sets the industry standard.<sup>6</sup> This Note focuses on the

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2. Digital Millennium Copyright Act, 17 U.S.C. § 512(c) (2016).

3. *See id.*

4. *See id.*

5. *Id.* § 512(i)(2)(A).

6. *See Digital Millennium Copyright Act: Hearing on Section 512 of Title 17 Before the Subcomm. on Courts, Intellectual Property, and the Internet of the H. Comm. on the Judiciary*, 113th Cong. 49 (2014) [hereinafter *Hearing on Section 512 of Title 17*]; *Copyright Compliance Service: Compliance Automation for*

technologies used by Google and its subsidiary, YouTube, since these companies are relatively open about how their technologies work. Furthermore, one study found that 98.9% of takedown requests were submitted using an automated Google notice submission form.<sup>7</sup>

Identifying an infringement before thousands of people are exposed to it is difficult, causing many companies to look for ways to identify such infringements as they are uploaded and before any harm can occur. This practice of identifying infringements before they can be viewed publicly implicates subsections 512(c)(3) and 512(f) of the DMCA, which provide for a copyright holder to be held liable for making misrepresentations when they send takedown notifications.<sup>8</sup> In some cases a copyright holder will set a predetermined action to be carried out by default—such as, “block all videos that look like mine”—which takes down content on his behalf. In others, the copyright holder may have an overwhelming number of content matches to sift through before sending a notification, potentially causing them to take shortcuts.

Numerous complaints have arisen out of the current DMCA notice-and-takedown scheme on every side. Rightsholders feel that some service providers know more about ongoing individual infringements than the rightsholders themselves could.<sup>9</sup> Individuals who use these services have raised concerns that the volume of takedowns has been overbroad.<sup>10</sup> And service providers have often been sued in cases where rightsholders allege third-party liability in spite of the DMCA’s safe harbor.<sup>11</sup>

Two recent Ninth Circuit decisions related to the case of *Lenz v. Universal Music Corp.* provided a more definite statement of what a copyright holder is responsible for when sending a takedown notification.<sup>12</sup> While the court’s September 2015 decision (“*Lenz I*”) suggests that human review of potential copyright infringements may not be necessary before sending a takedown notification, its subsequent March 2016 decision (“*Lenz II*”) omits this suggestion, indicating that the court may have reneged on that possibility.<sup>13</sup> Indeed, the current

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*Media Sharing Platforms*, AUDIBLE MAGIC, <https://www.audiblemagic.com/compliance-service/#how-it-works> (last visited Jan. 16, 2017). For a list of companies who use the content identification services of one industry giant, Audible Magic, see *Customers & Partners*, AUDIBLE MAGIC, <https://www.audiblemagic.com/customers/> (last visited Jan. 16, 2017) (including 21st Century Fox, AOL, Disney, MTV, Sony Music, SoundCloud, Twitch, Viacom, and Vimeo).

7. JENNIFER M. URBAN ET AL., NOTICE AND TAKEDOWN IN EVERYDAY PRACTICE 82 (2016).

8. 17 U.S.C. §§ 512(c)(3), (f).

9. URBAN ET AL., *supra* note 7, at 17.

10. *Id.*

11. *Id.*

12. *Lenz v. Universal Music Corp.*, 801 F.3d 1126 (9th Cir. 2015) (“*Lenz I*”); *Lenz v. Universal Music Corp.*, 815 F.3d 1145 (9th Cir. 2016) (“*Lenz II*”). For an in-depth discussion of *Lenz I* and *Lenz II*, see *infra* Part III.

13. *Compare Lenz I*, 801 F.3d at 1135–36 (“We note, without passing judgment, that the implementation of computer algorithms appears to be a valid and good faith middle ground for

procedures used by content identification giants like Google require human review to some extent, and a failure to adequately review in certain cases would clearly violate the newly established *Lenz* duty to “consider fair use.” Allowing a service provider’s algorithm to be the final decision as to whether something constitutes fair use results in liability issues that would render the DMCA unworkable. However, before discussing the specifics of the *Lenz I* or *II* court’s decisions in further detail, it will be useful to provide a better picture of the DMCA’s safe harbor provision and of the industry’s current practices.

Part I of this Note first explains the DMCA and its role in providing a safe harbor for service providers. Then, Part II of this Note discusses some of the problems arising from the DMCA notice-and-takedown scheme that have been discussed by stakeholders and academics. Further, Part III will explain the two recent opinions in *Lenz v. Universal Music Corp.*, the second opinion being an amended version of the first. Finally, Part IV of this Note argues that human copyright holders (or their human agents) must perform fair use analyses in cases on the margin after their algorithms and service providers’ algorithms have filtered clear infringements.

#### I. THE DIGITAL MILLENNIUM COPYRIGHT ACT’S SAFE HARBOR PROVISION FOR SERVICE PROVIDERS

The DMCA’s safe harbor provision shields service providers who host user-submitted content that infringes copyright if, upon learning of such infringement, the provider “responds expeditiously to remove, or disable access to, the material . . . .”<sup>14</sup> The provision’s purpose is to provide service providers who had no intent to commit an infringement with immunity from claims of copyright infringement based on content that was uploaded by their users.<sup>15</sup>

The DMCA was passed as a compromise between copyright owners and internet industries.<sup>16</sup> Internet industries provided services that allowed their users to infringe copyrights more easily than prior to the internet’s existence, and copyright owners wanted to enforce their intellectual property rights.<sup>17</sup> In the end, Congress relied on input from

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processing a plethora of content while still meeting the DMCA’s requirements to somehow consider fair use.”), with *Lenz II*, 815 F.3d at 1155 (omitting the language just quoted from *Lenz I*).

14. Digital Millennium Copyright Act, 17 U.S.C. § 512(c)(1)(C) (2016).

15. Scott A. Tarbell, *Don’t Tread on Me: The Need for an Alternate Dispute Resolution Process for the Creators and Uploaders of User-Generated Content*, 14 PEPP. DISP. RESOL. L.J. 27, 30 (2014).

16. *In re Charter Commc’ns, Inc.*, Subpoena Enft Matter, 393 F.3d 771, 774 (8th Cir. 2005) (describing the DMCA as a compromise between Internet companies who wanted to avoid liability and rightsholders who wanted to protect their intellectual property).

17. See Niva Elkin-Koren, *Making Technology Visible: Liability of Internet Service Providers for Peer-to-Peer Traffic*, 9 N.Y.U. J. LEGIS. & PUB. POL’Y 15, 28 (2005).

lobbyists for both groups in drafting the safe harbor provision discussed in this Note.<sup>18</sup>

A copyright holder who believes that a content provider is hosting infringing material must notify the content provider, and include all of the documentation listed in section 512(c)(3) of the DMCA.<sup>19</sup> Notably, section 512(c)(3) requires 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.”<sup>20</sup> Any party that knowingly makes a material misrepresentation regarding the content’s infringing or noninfringing nature is subject to liability pursuant to section 512(f).<sup>21</sup>

## II. THE ADVENT OF CONTENT IDENTIFICATION TECHNOLOGIES

### A. YOUTUBE’S CONTENT IDENTIFICATION PROCESS

Substantial business has grown up around the DMCA’s safe harbor provision. Google alone invested more than sixty million dollars into its “Content ID” media fingerprinting technology (which is currently used by its subsidiary, YouTube as well),<sup>22</sup> and other competitors have developed their own similar services.<sup>23</sup> For the most part, these services are proprietary and their algorithms secret, but they all generally create digital fingerprints of content and compare those to user-uploaded content.<sup>24</sup> A content provider can compare these fingerprints to each other in order to identify any newly-uploaded content that appears to be the same content as something previously uploaded by a true copyright holder—that is, infringed content.

One of the most popular video sharing sites on the internet at the time of this Note is YouTube.<sup>25</sup> Using YouTube’s Content ID technology, a

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18. Jessica Litman, *The Politics of Intellectual Property*, 27 CARDOZO ARTS & ENT. L.J. 313, 314 (2009).

19. A takedown notification must contain a signature of a person authorized to act on behalf of the owner of the exclusive right infringed. 17 U.S.C. § 512(c)(3). It must also contain an identification of the work claimed to have been infringed, an identification of the work claimed to be infringing, information sufficient to contact the complaining party, and a statement that the information in the notification is accurate. *Id.* Most important, it must contain a statement that the complaining party has a good faith belief that the use of the material in the manner complained of is not authorized by the copyright owner or the law. *Id.*

20. *Id.* § 512(c)(3)(A)(v).

21. *Id.* § 512(f).

22. *Hearing on Section 512 of Title 17, supra* note 6, at 49. References to “Content ID” throughout the remainder of this Note intend to refer only to YouTube’s technology in particular.

23. Devlin Hartline, *Notice-and-Staydown and Google Search: The Whack-A-Mole Problem Continues Unabated*, CTR. FOR THE PROTECTION OF INTELL. PROP. (Jan. 17, 2016), <http://cpip.gmu.edu/2016/01/17/notice-and-staydown-and-google-search-the-whack-a-mole-problem-continues-unabated/>.

24. *Id.*

25. *5 Best Free Video Streaming Sites*, GIZMO’S FREWARE (last updated Apr. 23, 2016), <http://www.techsupportalert.com/5-Best-Free-Video-Streaming-Sites.htm>; see YOUTUBE, <https://www.youtube.com/> (last visited Jan. 16, 2017).

copyright holder who wants to check whether their copyright is being infringed on YouTube will submit any of its content reference files (Google's way of saying "its original copies") to YouTube, along with any relevant metadata describing the nature of the work itself.<sup>26</sup> Upon uploading this information the copyright holder then decides whether he or she would like to prospectively track, monetize, or block any matching content that is subsequently uploaded to YouTube.<sup>27</sup> Since the issue of whether a copyright is actually infringed by a certain work is often up for debate, YouTube provides a copyright holder with a match confidence rating, and certain matches are added to a pending claims list.<sup>28</sup> YouTube touts the fact that Content ID can "identify audio matches, video matches, partial matches, and can even identify a match when one's video quality is worse than the other."<sup>29</sup> Part of Content ID's value is its flexibility. Its imprecision allows for some variations on the original content to be identified as matches in order to ensure that it casts a wide enough net to find all infringements. While the system is not without its critics,<sup>30</sup> important players such as Google suggest that the fingerprinting technologies prompted by the DMCA<sup>31</sup> are beneficial for users because they allow "users to remix and upload a wide variety of new creations using existing works."<sup>32</sup>

In order to request a takedown, rightsholders must fill out a short questionnaire, affirm that they own the rights to the content, affirm that they are not knowingly materially misrepresenting any information, and affirm that they have a good faith belief that the content is not authorized by the copyright owner or by the law.<sup>33</sup>

Alternatively, a large copyright administrator can become a part of YouTube's Content Verification Program, which allows "copyright-holding companies to issue multiple removal requests."<sup>34</sup> A holder need merely enter a keyword into a search box and then select each work that

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26. Tarbell, *supra* note 15, at 28. This service is currently provided free of charge. *Id.*

27. *Hearing on Section 512 of Title 17, supra* note 6, at 49.

28. *Resolve Potential Claims, Disputes, and Appeals*, YOUTUBE, <https://support.google.com/youtube/answer/3310838> (last visited Jan. 16, 2017).

29. YouTube Help, *YouTube Content ID*, YOUTUBE (Sept. 28, 2010), <https://www.youtube.com/watch?v=9g2U12SsRns>.

30. See *infra* Part II.C; e.g., Channel Awesome, *Where's the Fair Use? – Nostalgia Critic*, YOUTUBE (Feb. 16, 2016), <https://www.youtube.com/watch?v=zVqFAMotwaI>.

31. See Digital Millennium Copyright Act, 17 U.S.C. § 512(i)(2)(A) (2016) (suggesting that providers must also use proactive technical measures that "have been developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process[.]").

32. *Hearing on Section 512 of Title 17, supra* note 6.

33. *Copyright Infringement Notification*, YOUTUBE, [https://www.youtube.com/copyright\\_complaint\\_form](https://www.youtube.com/copyright_complaint_form) (last visited Jan. 16, 2017). The language present in all of the clickwrap affirmations is more or less identical to that in subsections (c) and (f) of the DMCA. Compare *id.*, with 17 U.S.C. § 512.

34. *Content Verification Program*, YOUTUBE, [https://support.google.com/youtube/answer/6005923?hl=en&ref\\_topic=2778544](https://support.google.com/youtube/answer/6005923?hl=en&ref_topic=2778544) (last visited Jan. 16, 2017).

infringes its copyrights from the list that is generated.<sup>35</sup> Before submitting the request, the holder must input the name of the work that is infringed by each selection.<sup>36</sup>

The content verification tool just described can be effective in many situations and it does provide copyright holders with an avenue for protecting their rights, however, rightsholder industry lobbyists unsatisfied with the status quo have recently begun advocating for an amendment to the DMCA known commonly as “notice-and-staydown” or “take-down, staydown.”<sup>37</sup> “Notice-and-staydown” would require that service providers monitor for and remove reposted works that they have already received a takedown notice for in the past.<sup>38</sup> This would obviate the current need for a copyright holder to continuously monitor for new reposts of a work that had already been taken down subsequent to a prior DMCA takedown notice. It is unclear how much of an effect this would have on YouTube’s current system, since it already proactively matches any newly-uploaded content against content that it already has in its database to check for infringements.<sup>39</sup> Nonetheless, Google opposes “notice-and-staydown,” arguing that it is “not a solution and just does not work.”<sup>40</sup> Google further argued that, because copyright has a limited term, and “stay down” would be forever, “notice-and-staydown” is unworkable.<sup>41</sup>

Proponents, on the other hand, claim that since Audible Magic, YouTube, and other industry leaders are already performing something that looks a lot like “notice-and-staydown” for their customers, a new “notice-and-staydown” rule would merely serve to proliferate an already effective practice.<sup>42</sup>

## B. OTHER CONTENT IDENTIFICATION APPROACHES

Another big player in the content identification industry is Audible Magic, which provides services to media giants like Facebook, Comcast,

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35. *How to Use the YouTube Content Verification Program*, YOUTUBE, <https://support.google.com/youtube/answer/3010500> (last visited Jan. 16, 2017).

36. *Id.*

37. Charlotte Hassan, *Google Faces Government Scrutiny over ‘Take Down, Stay Down’ Refusals*, DIGITAL MUSIC NEWS (Mar. 24, 2016), <https://www.digitalmusicnews.com/2016/03/24/bpi-demans-notice-and-stay-down-piracy-policy-from-google/>.

38. *See Hearing on Section 512 of Title 17, supra* note 6, at 14 (statement of Sean M. O’Connor, Professor of Law and Founding Director, Entrepreneurial Law Clinic, University of Washington).

39. *How Content ID Works*, YOUTUBE, <https://support.google.com/youtube/answer/2797370> (last visited Jan. 16, 2017).

40. Charlotte Hassan, *Google Responds: ‘Take Down Stay Down Is Unjustified,’* DIGITAL MUSIC NEWS (Dec. 1, 2015), <https://www.digitalmusicnews.com/2015/12/01/google-responds-take-down-stay-down-is-unjustified/>.

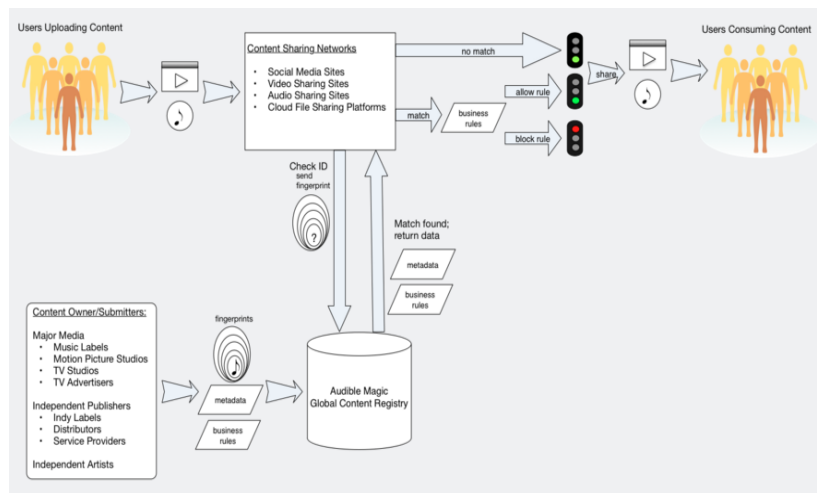
41. *Id.*

42. Devlin Hartline, *Endless Whack-A-Mole: Why Notice-and-Staydown Just Makes Sense*, CTR. FOR THE PROTECTION OF INTELL. PROP. (Jan. 14, 2016), <http://cpip.gmu.edu/2016/01/14/endless-whack-a-mole-why-notice-and-staydown-just-makes-sense/>.

Yahoo, SoundCloud, Vimeo, Twitch, and 21st Century FOX.<sup>43</sup> The service boasts false positive rates—the likelihood that an item would appear to be infringing when it is not actually infringing—of “less than  $10^{-6}\%$ ,” though it is unclear whether that figure factors in situations involving fair use.<sup>44</sup> Audible Magic has a variety of content repositories, including live and archived television databases, movie databases, advertisement databases, and music databases.<sup>45</sup> The service provider’s customers can use its content identification databases for a variety of purposes, such as creating an application to identify a song on the radio or, as previously discussed, to cross-reference any files to check for infringements.<sup>46</sup>

The following diagram demonstrates how the identification database is cross-referenced and, when a match is found, how copyright holders can set rules for how and whether those works are used.

FIGURE 1: AUDIBLE MAGIC’S CROSS-REFERENCE PROCESS<sup>47</sup>



### C. CURRENT CRITICISMS OF CONTENT IDENTIFICATION SYSTEMS

Some commentators are pleased with the substantial work that has gone into these content identification services, and see them as a demonstration of the “finely balanced” nature of section 512 of the

43. *Why Audible Magic?*, AUDIBLE MAGIC, <http://www.audiblemagic.com/why-audible-magic/> (last visited Jan. 16, 2017).

44. *Id.*

45. *Content ID Databases*, AUDIBLE MAGIC, <http://www.audiblemagic.com/content-databases/> (last visited Jan. 16, 2017).

46. See, e.g., *Copyright Compliance Service: Compliance Automation for Media Sharing Platforms*, *supra* note 6.

47. *Id.* This image has been used with permission from Audible Magic.



DMCA.<sup>48</sup> Google does, however, admit that its own content identification technologies are not perfect. Like many methods of identification, there are risks, including the risk that the algorithms will return a match for noninfringing material (“false positives”) as well as the inverse risk that they will not return a match for a genuine infringement (“false negatives”).<sup>49</sup> Anticipating this result, Google has provided a means for users who believe that their content was taken down unfairly to dispute a Content ID claim.<sup>50</sup> The dispute procedure, replete with a process for appealing a claim, provides users with alternative dispute resolution for these copyright issues.<sup>51</sup> However, the dispute procedure leaves the power entirely in the original claimant’s hands, allowing the individual or entity to uphold the claim, release the claim, or schedule a takedown of the allegedly infringing content.<sup>52</sup>

An individual unhappy with the outcome of the appeal process can send a counter notification to the service provider, claiming that the allegedly infringing work was disabled as a result of mistake or misidentification.<sup>53</sup> However, YouTube explicitly states that the counter notification will be sent to the original claimant and that “it will include the full text of the counter notice, including any personal information you provide. The claimant may use this information to file a lawsuit against you in order to keep the content from being restored to YouTube.”<sup>54</sup> So while a user may invoke the counter notification procedure under section 512(g), some content creators worry about sending a counter notification because they may have to provide their personal information and become the subject of a lawsuit they cannot afford.<sup>55</sup> To add to the mess, some commentators suggest that these worries disproportionately affect women and minorities, who already feel marginalized.<sup>56</sup> Regardless of the reasons a user may choose not to

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48. See *Hearing on Section 512 of Title 17, supra* note 6, at 23 (statement of Annemarie Bridy and Alan G. Shepard, Professor of Law, University of Idaho College of Law).

49. *Id.* at 48 (statement of Katherine Oyama, Sr., Copyright Policy Counsel, Google Inc.). While the focus of this Note will be the aforementioned false positives, the fact that many copyright holders are unable to protect their copyrights through these technological means is worrisome.

50. See *Dispute a Content ID Claim*, YouTube, <https://support.google.com/youtube/answer/2797454> (last visited Jan. 16, 2017).

51. *Id.*

52. See *id.*

53. *Counter Notification Basics*, YouTube, <https://support.google.com/youtube/answer/2807684> (last visited Jan. 16, 2017). See Digital Millennium Copyright Act, 17 U.S.C. § 512(g) (2016).

54. *Counter Notification Basics, supra* note 53.

55. See, e.g., Brief for the Org. for Transformative Works, Pub. Knowledge, and Int’l Documentary Ass’n as Amici Curiae Supporting Appellee and Cross-Appellant Stephanie Lenz at 16, *Lenz v. Universal Music Corp.*, 815 F.3d 1145 (9th Cir. 2016) (Nos. 13-16106, 13-16107) [hereinafter Brief of Amici Curiae].

56. U.S. COPYRIGHT OFFICE, *Public Rulemaking Hearing on Exemptions to the Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies*, at 0119.4–0120.4 (2009), <http://www.copyright.gov/1201/hearings/2009/transcripts/1201-5-7-09.txt> (statement of Francesca Coppa).

send a counter notification, the evidence supports the fact that most users do not utilize the tool.<sup>57</sup>

As a result, the practices of using catalogues of media fingerprints and content identification systems are not without their opponents and limitations.<sup>58</sup> Users report receiving takedown notices for videos that are either (1) entirely devoid of unoriginal content or (2) for videos critiquing the original works.<sup>59</sup> This first group, the original works, cannot, by definition, infringe another's copyright, therefore the DMCA's notice-and-takedown safe harbor provision is the improper method to take down these works. The second group of works is an example of fair use under section 107 of the Act, which cannot be "an infringement of copyright" and should likewise be protected from notice-and-takedown procedures.<sup>60</sup>

This Note believes that to an extent these opponents of content identification systems have a valid point. On occasion, a takedown request is plainly wrong. There are two distinct types of illegitimate takedown requests: (1) takedown requests that are malicious or the product of intentional harassment; and (2) mistaken or negligent requests made without regard for the other content creator. The first type is not as concerning as the second, primarily because Congress anticipated such takedown requests and provided for a civil cause of action under section 512(f).<sup>61</sup> Such malicious takedown requests may be somewhat more obvious in terms of their facts—it is relatively clear when an individual is being targeted because that individual has her content removed consistently. Furthermore, fair use considerations are less important when one individual is harassing another. Because this Note is primarily interested in situations involving alleged fair use, it will not focus on this first type of illegitimate takedown request.

57. URBAN ET AL., *supra* note 7, at 44 ("Many—including some large services handling thousands of notices per year—reported receiving none.").

58. See YourMovieSucksDOTorg, *YouTube's Content ID System SUCKS*, YOUTUBE (Dec. 12, 2013), <https://www.youtube.com/watch?v=nuTHtCyzLg>; Channel Awesome, *supra* note 30; GradeAUnderA, *Everything Thats Wrong With Youtube (Part1/2)—Copyright, Reactions and Fanboyism*, YOUTUBE (Feb. 8, 2016), <https://www.youtube.com/watch?v=vjXNvLDkDTA>.

59. See YourMovieSucksDOTorg, *supra* note 58.

60. Digital Millennium Copyright Act, 17 U.S.C. § 107 (2016). Section 107 provides four factors to be considered "in determining whether the use made of a work in any particular case is a *fair use*," which include:

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

*Id.* (emphasis added).

61. *Id.* § 512(f). See, e.g., *Hearing on Section 512 of Title 17*, *supra* note 6, at 48.

This Note will instead focus on the second type of illegitimate takedown request—a request that was made due to negligence or mistake. Once a copyright holder has become a member of Google’s Copyright Verification Program, it is quick and simple to enter search terms and click checkboxes to send takedown notifications.<sup>62</sup> As such, the number of takedown requests has skyrocketed since 2010—Google reported a 7567% increase in completed takedowns between 2010 and 2013—and copyright administrators’ work is only accelerating.<sup>63</sup> Some takedown request senders make upwards of five million takedown requests in a single month.<sup>64</sup> Even if we do not assume that illegitimate takedown requests due to human negligence will increase simply because each copyright administrator has more potential infringements to sift through, pure, reasonably mistaken takedown notifications likely will increase if one were to extrapolate from the trend Google identified. Unfortunately, some copyright holders do seem to be sending frivolous takedown notifications and legal threats to innocent content uploaders.<sup>65</sup>

In the past, fair uses were often the target—as opposed to the unintended casualty—of DMCA takedown notices.<sup>66</sup> Some copyright holders have issued DMCA notices “specifically against content that makes use of their copyrighted material as part of a criticism or negative review—which is a classic fair use.”<sup>67</sup>

Some critics also suggest that copyright holders have taken a “shoot-first,” approach to dealing with Content ID matches.<sup>68</sup> If true, then those copyright holders are exactly the parties the *Lenz* opinion was targeted toward. As previously mentioned, Google admits Content ID is not without its problems,<sup>69</sup> and the Electronic Frontier Foundation (“EFF”) notes that the problems have “become more common, even comically

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62. See *How to Use the YouTube Content Verification Program*, *supra* note 35.

63. See *Hearing on Section 512 of Title 17*, *supra* note 6, at 47.

64. See *Google Transparency Report: Explore the Data*, GOOGLE, <https://www.google.com/transparencyreport/removals/copyright/owners/?r=last-month> (last visited Jan. 16, 2017).

65. See, e.g., Laura Sydell, *Record Label Picks Copyright Fight—With the Wrong Guy*, NAT’L PUB. RADIO (last updated Sept. 27, 2013, 4:01 PM), <http://www.npr.org/sections/alltechconsidered/2013/09/27/226834651/record-label-picks-a-fight-over-copyright-with-the-wrong-guy> (reporting the case of an Australian record label sending a takedown notice to Harvard professor and famous copyright attorney Lawrence Lessig, who sued the label which resulted in the parties settling).

66. See *Hearing on Section 512 of Title 17*, *supra* note 6, at 65 (statement of Paul Sieminski, Automatic Inc.).

67. *Id.* Under *Lenz*, this behavior is clearly proscribed; intentionally targeting material because it is fair use would offer a remedy under section 512(f). See *Lenz v. Universal Music Corp.*, 815 F.3d 1145 (9th Cir. 2015); Digital Millennium Copyright Act, 17 U.S.C. § 512(f) (2016). A section 512(f) remedy may have even been available before *Lenz*, but the rule is explicit now.

68. See Amul Kalia, *Congrats on the 10-Year Anniversary YouTube, Now Please Fix Content ID*, ELECTRONIC FRONTIER FOUND. (May 1, 2015), <https://www.eff.org/deeplinks/2015/05/congrats-10-year-anniversary-youtube-now-please-fix-content-id>.

69. *Hearing on Section 512 of Title 17*, *supra* note 6, at 49.

so.”<sup>70</sup> For example, YouTube disabled monetization on an audio loop of a user’s cat purring, attributing the original work to EMI Music Publishing.<sup>71</sup> In another strange example, one rapper made a video criticizing the Anti-Counterfeiting Trade Agreement, in which he sampled some background vocals and music.<sup>72</sup> He received a Content ID claim from an entity that had also sampled the same background vocals and music, and did not hold any rights to enforce them.<sup>73</sup> These examples, as well as many others, have led critics to believe that Content ID is stacked against YouTube users and in favor of big businesses.<sup>74</sup> One study found that 4.2% of takedown requests it analyzed were flawed because the targeted content did not match the identified infringed work.<sup>75</sup> The study characterized an additional 28.4% of requests (approximately 30.1 million total requests) as questionable, suggesting that they “would benefit from human review.”<sup>76</sup> Of that 30.1 million subset of questionable requests the study found that 7.3%, roughly 2.2 million, had “potential fair use defenses.”<sup>77</sup>

### III. HOW *LENZ* REALLOCATES RESPONSIBILITY TO THE COPYRIGHT HOLDER

The mistaken or negligent notifications previously mentioned are the subject of the Ninth Circuit’s analysis in *Lenz v. Universal Music Corp.*, a case that could result in “tectonic shifts” in the industries copyright inhabits.<sup>78</sup> In *Lenz*, the court turned its attention to the balance between the rights of copyright holders, service providers, and a party that uses content for a transformative fair use.<sup>79</sup> The court placed a higher burden on those claiming copyright infringement, holding that a copyright holder must “consider fair use” before that individual or entity issues a DMCA takedown notification.<sup>80</sup>

*Lenz*, popularly known as the “dancing baby case,” involved a twenty-nine second video of plaintiff Stephanie Lenz’s son dancing to the Prince

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70. Kalia, *supra* note 68.

71. Ernesto Van der Sar, *YouTube Flags Cat Purring as Copyright Infringing Music*, TORRENTFREAK (Feb. 11, 2015), <https://torrentfreak.com/youtube-flags-cat-purring-as-copyright-infringing-music-150211/>.

72. Mike Masnick, *Dan Bull’s ‘Death to ACTA’ Video Silenced After Claim from Rapper Who Used the Same Sample*, TECHDIRT (Apr. 27, 2015, 5:47 AM), <https://www.techdirt.com/articles/20150424/16260830785/dan-bulls-death-to-acta-video-silenced-after-claim-rapper-who-used-same-sample.shtml>.

73. *Id.*; Kalia, *supra* note 68.

74. Kalia, *supra* note 68; Channel Awesome, *supra* note 30.

75. URBAN ET AL., *supra* note 7, at 88.

76. *Id.*

77. *Id.*

78. Nicolas Jampol & Lance Koonce, *The Dancing Baby Grooves to Mixed Victory in the 9th Circuit: Court Holds That DMCA Takedown Notices Require Consideration of Fair Use*, JD SUPRA (Feb. 19, 2016), <http://www.jdsupra.com/legalnews/the-dancing-baby-grooves-to-mixed-14847/>.

79. *Lenz v. Universal Music Corp.*, 801 F.3d 1126, 1138 (9th Cir. 2015).

80. *Id.* at 1129.

song “Let’s Go Crazy.”<sup>81</sup> Universal was Prince’s publishing administrator and thus, was responsible for enforcing his copyright.<sup>82</sup> Universal had assigned Sean Johnson, an assistant in the legal department, to monitor YouTube for infringing videos and to send notifications requesting that certain videos, including Lenz’s, be removed.<sup>83</sup> Johnson included Lenz’s video in a list of 200 YouTube videos Universal wanted taken down.<sup>84</sup> Each of these notifications were accompanied by the statement, “[w]e have a good faith belief that the above-described activity is not authorized by the copyright owner, its agent, or the law[.]”<sup>85</sup> in accordance with the previously described requirements of section 512(f). Lenz and Universal had a short back-and-forth via the counter notification process pursuant to section 512(g)(3), after which the video was eventually reinstated.<sup>86</sup> Lenz filed suit against Universal, the principal claim being one for misrepresentation under section 512(f).<sup>87</sup>

The *Lenz* court broke new ground in its analysis of what goes into a “good faith belief that use of the material in the manner complained of is not authorized by . . . law.”<sup>88</sup> The court held that fair use is “wholly authorized by the law” because it is a type of noninfringing use created by section 107 of the Copyright Act.<sup>89</sup> Because fair use is authorized under section 107, and because the copyright holder seeking the takedown notification must state that it has a good faith belief that the work is not authorized under the law, the holder must “consider fair use before sending a takedown notification.”<sup>90</sup>

The court also held that the “willful blindness doctrine” may be used to determine whether a copyright holder “knowingly materially misrepresent[ed]” that they held a good faith belief that the material was infringing.<sup>91</sup> The willful blindness doctrine describes a category of behavior whereby an individual consciously avoids learning of wrongdoing so as to avoid liability.<sup>92</sup> However, a plaintiff would have to prove that the person

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81. *Id.*

82. *Id.*

83. *Id.*

84. *Id.* at 1130.

85. *Id.*; *Copyright Infringement Notification*, *supra* note 33.

86. *See Lenz*, 801 F.3d at 1130; Digital Millennium Copyright Act, 17 U.S.C. § 512(g)(3) (2016).

87. *See Lenz*, 801 F.3d at 1130; 17 U.S.C. § 512(c)(3)(A)(v) (stating that each notification must be accompanied by 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.”); *id.* § 512(f) (providing a plaintiff with a civil remedy for misrepresentation by a copyright holder in a copyright takedown notification).

88. *See Lenz*, 801 F.3d at 1139.

89. *Id.* at 1132.

90. *Id.* at 1129.

91. *Id.* at 1136.

92. 12 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 12.04(A)(3)(b)(ii) (Matthew Bender, rev. ed. 2015).

assessing the material for fair use held a subjective belief that there was a high probability that the material constituted fair use and that they avoided learning that fact.<sup>93</sup> This may be hard to prove in light of YouTube's copyright procedures—even an individual who avoided watching a potentially infringing video may not hold a subjective belief that the video did not contain facts indicating fair use. Indeed, the dissents in both the initial and amended *Lenz* decisions doubt whether the willful blindness doctrine is even relevant to section 512(f) because the word “knowingly” in the statute should be construed in the same way that it is in other common law torts like fraud, deceit, and misrepresentation.<sup>94</sup> If the dissents' views had carried the day, a copyright holder would have to know that the takedown notification they were sending was misrepresenting the truth in order to be exposed to liability.

There were two important opinions issued by the Ninth Circuit in *Lenz*, one issued in September 2015 and another issued in March 2016. In the September 2015 opinion (hereinafter “*Lenz I*”), the court further explained the standard required for due consideration that a work was fair use under section 512 by clearly stating that mere lip service would not do.<sup>95</sup> However, “mindful of the pressing crush of voluminous infringing content that copyright holders face,” the court noted that the consideration “need not be searching or intensive.”<sup>96</sup> And, indeed, “implementation of computer algorithms appears to be a valid and good faith middle ground . . . .”<sup>97</sup> The court suggested that if an algorithm were to follow certain principles promulgated by the EFF—known as the “Three Strikes Against Fair Use”—algorithms “may be sufficient” to satisfy *Lenz*'s new standard.<sup>98</sup> The “three strikes” are as follows:

- (1) [T]he video track matches the video track of a copyrighted work submitted by a content owner;
- (2) the audio track matches the audio track of that same copyrighted work; and
- (3) nearly the entirety (e.g., 90% or more) of the challenged content is comprised of a single copyrighted work (i.e., a “ratio test”).<sup>99</sup>

However, as Universal did not proffer any evidence that service providers like YouTube used the screening algorithms mentioned above, the court did not provide guidance on what role a content identification

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93. *Id.*

94. *Lenz*, 801 F.3d at 1142. “[A] misrepresentation is knowing if the party knows it is ignorant of the truth or falsity of its representation.” *Id.* at 1140 (Smith, C.J., dissenting).

95. A copyright holder must consider fair use to comply with § 512(f). *See id.* at 1135.

96. *Id.*

97. *Id.*

98. *Id.*; *Fair Use Principles for User Generated Video Content*, ELECTRONIC FRONTIER FOUND., <https://www.eff.org/pages/fair-use-principles-user-generated-video-content> (last visited Jan. 16, 2017).

99. *Fair Use Principles for User Generated Video Content*, *supra* note 98.

service plays in this fair use consideration.<sup>100</sup> Some commentators have noted that the court might have been suggesting that algorithms “may be relied on only to handle non-transformative verbatim copying of an entire work.”<sup>101</sup>

The court reneged on its description of what might suffice when considering fair use in its amended opinion issued in March 2016 (hereinafter “*Lenz II*”). The two pages of guidance that the court devoted to discussing what might qualify as a consideration of fair use was notably omitted, leading some scholars to contemplate what this might mean for copyright holders,<sup>102</sup> raising the following question: If a court says that an algorithm can perform the fair use analysis, but then removes that statement, does that mean that an algorithm cannot perform the fair use analysis?

#### IV. CURRENT SERVICE PROVIDER PRACTICES ARE COMPATIBLE WITH THE *LENZ* DUTY ONLY INsofar AS THEY SUPPLEMENT RIGHTSHOLDERS’ FAIR USE ANALYSIS

The *Lenz I* court held that algorithms may “consider fair use,” but the court’s holding does not take current service provider-copyright holder relations into account.<sup>103</sup> As discussed previously in Part II, service providers are the primary parties using algorithms to determine whether to send takedown notifications, *not* copyright holders.<sup>104</sup> Furthermore, algorithms, like Content ID, send takedown notifications *automatically* assuming the copyright holder has authorized them to do so in advance.<sup>105</sup> This leaves the community of rightsholders with several troubling questions: How can someone consider fair use in advance of seeing the result of any Content ID match? Since the video is automatically blocked, tracked, or monetized, can the copyright holder ever satisfactorily discharge its burden? Or, is the service providers’ policy of automatically taking down these videos actually dooming the copyright holder under section 512(f)?

One puzzle arises for those proponents of “notice-and-staydown” as well: Should imposing a “notice-and-staydown” requirement on a service

100. See *Lenz*, 801 F.3d at 1136.

101. Elizabeth McNamara & Samuel M. Bayard, ‘*Lenz*’: Can a Machine Consider Fair Use?, LAW.COM (Sept. 25, 2015), <http://www.law.com/sites/articles/2015/09/25/lenz-can-a-machine-consider-fair-use/>.

102. *Lenz v. Universal Music Corp.*, 815 F.3d 1145, 1154 (9th Cir. 2016). See Corynne McSherry, *Dancing Baby Trial Back on? Another Mixed Ruling in Lenz v. Universal*, ELECTRONIC FRONTIER FOUND. (Mar. 17, 2016), <https://www EFF.org/deeplinks/2016/03/dancing-baby-trial-back-another-mixed-ruling-lenz-v-universal>.

103. See *supra* Part II.

104. Google uses Content ID. See *Hearing on Section 512 of Title 17, supra* note 6. Facebook and SoundCloud use Audible Magic. See Hartline, *supra* note 23.

105. *Using Content ID*, YOUTUBE, <https://support.google.com/youtube/answer/3244015> (last visited Jan. 16, 2017).

provider moot the *Lenz* duty? If the service provider has the final word on whether a repeatedly uploaded work can be fair use then the uploader has no legal recourse. “Notice-and-staydown” requirements would extend to all content that was successfully taken down following a notification.<sup>106</sup> However, one can imagine a scenario in which content that was successfully taken down following a notification was actually fair use.<sup>107</sup> Some people allow their content to be taken down following a copyright claim because they believe they either would not stand a chance against a copyright holder, or they are unaware of their rights.<sup>108</sup> In this scenario, content that *is fair use* would be taken down *automatically* and the legal owner of that content would not be able to vindicate herself in court. Thus, the *Lenz* duty would not apply to *anyone*. If the legislature were to consider a “notice-and-staydown” provision it would have to anticipate and provide a remedy for the foregoing result.

Another puzzling issue raised by *Lenz* is as follows: When the service provider is the party considering fair use for practical reasons, but the copyright holder is the party with the duty to consider fair use, how far must the copyright holder go to determine whether the service provider adequately considered fair use? Perhaps the copyright holder’s duty to consider fair use is satisfied by the intervening acts of a third-party not before the court, such as the service provider. This is problematic because the service provider qualifies for a safe harbor from litigation, despite the fact that it is the party that is actually performing the (potentially incomplete or mistaken) fair use analysis. At some point a copyright holder himself must perform the fair use analysis for section 512(f) to have any teeth.

And what do we make of *Lenz* II’s excision of the substantial prescriptive passage defining what an adequate fair use consideration might look like? Some wonder whether the use of a technological measure to consider fair use is still permissible under the new rule.<sup>109</sup> To suggest that the use of algorithms is no longer viable would be a major shock to an industry that has been investing in and relying on algorithms for half of a decade.<sup>110</sup> Presumably, if the court had intended to completely proscribe the practice of using content identification systems it would have done so

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106. See *Hearing on Section 512 of Title 17, supra* note 6, at 14.

107. For example, Jim uploads a critique of Bob’s movie. Jim included clips from Bob’s movie for purposes of criticism—by definition, this is fair use under 17 U.S.C. § 107. Digital Millennium Copyright Act, 17 U.S.C. § 107. Bob sends a copyright takedown notification to the service provider. Jim, not realizing there is a procedure for appealing, does not appeal his content takedown. Instead, Jim attempts to re-upload the same critique, and that critique is taken down automatically per the service provider’s notice-and-staydown procedure.

108. See U.S. COPYRIGHT OFFICE, *supra* note 56, at 0118.4–0120.4 (statement of Francesca Coppa).

109. J. Michael Keyes, *Ninth Circuit Does a Two-Step in “Dancing Baby” Case*, LEXOLOGY (Mar. 18, 2016), <https://www.lexology.com/library/detail.aspx?g=78866c32-5f91-4110-a6d8-7f25f77a227b>.

110. See *Hearing on Section 512 of Title 17, supra* note 6, at 98.



in more explicit terms. Nonetheless, the EFF—author of the “Three Strikes Against Fair Use” algorithmic principle—was glad to see the *Lenz II* change, reasoning that automated programs and filters “cannot substitute for a fair use analysis in many cases.”<sup>111</sup>

The court may be trying to broaden copyright holders’ exposure to liability for inappropriate takedown notifications.<sup>112</sup> The court removed the portion of the opinion suggesting that the fair use consideration “need not be searching or intensive.”<sup>113</sup> In omitting that part of the opinion, the court seems to be indicating that the copyright holder’s consideration of fair use must actually be thorough. Prior to both *Lenz I* and *II*, a copyright holder could discharge his or her duty to consider fair use with a cursory investigation or with the use of an algorithm. Now, however, it is not as clear what a copyright holder must do in order to discharge that burden. Is the use of YouTube’s Content ID system enough? What if an individual using the Content Verification Program simply selects every result in a list returned from a search without investigating each of the individual entries?<sup>114</sup> Without the court’s guidance the state of DMCA jurisprudence appears to be foggier than it had been prior to *Lenz*.

If copyright holders have been too quick to submit takedown notifications as some critics have suggested, then they will have to alter their behavior in view of *Lenz* in order to avoid section 512(f) liability.<sup>115</sup> The already overwhelming volume of content is increasing<sup>116</sup> as well as the potential for infringement, but copyright holders will have to do more work than they had been irrespective of the voluminous increase because they now have to specifically consider fair use, perhaps even without the aid of algorithms. It would seem that an algorithmic solution would be more efficient and less costly than having humans do the fair use analysis, but the *Lenz II* court left this possibility questionable due to their omission.

Assuming algorithms are just as capable of considering fair use now as they were before *Lenz II*, who should be building the fair use algorithm? The obvious choice would appear to be the copyright holder, since it is the copyright holder who is supposed to consider fair use in the

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111. McSherry, *supra* note 102.

112. See Keyes, *supra* note 109.

113. Compare *Lenz v. Universal Music Corp.*, 815 F.3d 1145, 1155 (9th Cir. 2015), with *Lenz v. Universal Music Corp.*, 801 F.3d 1126, 1135 (9th Cir. 2015) (stating that the consideration “need not be searching or intensive”).

114. It seems clear that they would do so at the risk of an action under section 512(f). However, one must wonder whether the user-friendly nature of the process—simply click boxes from a list and submit—lends itself to abuse.

115. See *supra* Part II.C.

116. See *Hearing on Section 512 of Title 17, supra* note 6, at 47; *Lenz*, 801 F.3d at 1135 (“We are mindful of the pressing crush of voluminous infringing content that copyright holders face in a digital age.”).

first place. But studies have shown that copyright enforcement agencies (that often sue on behalf of copyright holders) tend to be unreliable, with some sending takedown requests to websites that had been offline for more than eighteen months.<sup>117</sup>

On the other hand, YouTube and Audible Magic *have* already built a substantial infrastructure—investing tens of millions of dollars and substantial research into it.<sup>118</sup> Since these algorithms can work for every copyright holder the value of the technology is multiplied. With such a useful tool already sifting through the data, why should copyright holders build their own tools to perform the subsequent analysis? In fact, if individual rightsholders started building their own content identification systems that could bring about further problems. First, building a program that works in concert with Content ID raises practical problems. Google may not want to develop or share access to its services with copyright holders' algorithms for competitive or other proprietary reasons. Second, a smaller copyright holder and a larger copyright holder have varying means with which to develop such an algorithm, despite the fact that each of their copyrights needs to be enforced.<sup>119</sup> The current one-system-fits-all approach preempts this inequity.

Because it appears that adding a second layer of algorithmic consideration of fair use would not be practicable or equitable, human review is likely necessary as a backstop. In *Lenz I*, the Ninth Circuit's suggestion that algorithms may be capable of adequately considering fair use is likely overly optimistic, which is perhaps the reason that the suggestion was omitted in *Lenz II*.<sup>120</sup> Service providers like Google do not require human review in very close content matches, but do require human review in more difficult cases.<sup>121</sup> In a difficult case, often one where the content of the original work does not completely match in terms of audio track, video track, and content length, maybe a further algorithm should not be employed if a copyright holder wants to discharge the duty to consider fair use required under *Lenz*. At this time an algorithm cannot determine whether someone is commenting on or criticizing an original work, a task which can be difficult even for a human to do. Perhaps the Ninth Circuit was contemplating these reasons when it decided to omit its original language suggesting that an

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117. URBAN ET AL., *supra* note 7, at 90.

118. *Hearing on Section 512 of Title 17, supra* note 6, at 98.

119. See U.S. PATENT & TRADEMARK OFFICE, *Department of Commerce Multistakeholder Forum Improving the Operation of the DMCA Notice and Takedown Policy: Transcript of First Public Meeting* 34:16–38:06 (Mar. 20, 2014), [http://www.uspto.gov/ip/global/copyrights/First\\_Public\\_Meeting-Improving\\_Operation\\_of\\_DMCA\\_Notice\\_and\\_Takedown\\_Policy.pdf](http://www.uspto.gov/ip/global/copyrights/First_Public_Meeting-Improving_Operation_of_DMCA_Notice_and_Takedown_Policy.pdf) (Statement of Ron Yokubaitis, Giganews) (describing small service provider's burden of processing non-standardized notices for a "small company [of] fifty-something people").

120. *Lenz v. Universal Music Corp.*, 815 F.3d 1145, 1155 (9th Cir. 2015). *Cf. Lenz*, 801 F.3d at 1135.

121. See *Resolve Potential Claims, Disputes, and Appeals, supra* note 28.

algorithmic analysis could be sufficient to discharge the *Lenz* duty. Indeed, the dissent in *Lenz I* makes a fair point that human review may be indispensable as a backstop after content identification algorithms filter some content.<sup>122</sup>

The additional human consideration of fair use should not adversely affect copyright holders. Many members of the Recording Industry Association of America and the Motion Picture Association of America routinely make fair use decisions.<sup>123</sup> Industrial copyright holders are well-staffed with copyright attorneys and produce content that is itself fair use.<sup>124</sup> If necessary, copyright holders with sparse or no legal staff may consult with the plurality of public interest groups and legal clinics that can provide fair use advice.<sup>125</sup> Most important, resorting to expert advice is only necessary when the content identification services have found a low-confidence match. As a result, the already filtered queue of potentially infringing works will not be substantially more difficult to sift through while considering fair use.

Humans are necessary, in part, because of how the system for reviewing copyright infringing material has developed. Service providers are often the parties building the filtering algorithms, and therein lies the root of the problem. The confusion introduced following the *Lenz I* opinion is that it treats the copyright holders as the party doing the fair use analysis rather than the service providers. The three parties relevant to the DMCA are: (1) the copyright holder; (2) the service provider; and (3) the individual using the copyrighted work, for either an infringing or a fair use purpose. The fair user has a cause of action against a copyright holder who fails to consider fair use before certifying and sending a takedown notification.<sup>126</sup> This all seems proper, but the intervening actions of the service providers have complicated the scenario: Service providers are now the parties “considering” fair use in an effort to be more compliant with the DMCA and to be more attractive to content producers, who are typically the copyright holders.<sup>127</sup> Therefore, unless a human performs a final review on all of the content matches, the party mistaken in its consideration of fair use would be the service provider and not the copyright holder. This is troubling since the service provider is supposed to be protected from liability under the DMCA.

On balance, a copyright holder is liable for failing to do a final fair use assessment. After all, it is the copyright holder’s duty to verify the

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122. See *Lenz*, 801 F.3d at 1141 n.3 (Smith, C.J., dissenting).

123. Brief of Amici Curiae, *supra* note 55, at 26.

124. *Id.*

125. *Id.* at 27.

126. Digital Millennium Copyright Act, 17 U.S.C. 512(f) (2016); *Lenz*, 801 F.3d at 1129.

127. See, e.g., *Hearing on Section 512 of Title 17*, *supra* note 6, at 47, 49.

facts in its takedown notification before sending it under section 512.<sup>128</sup> Growing evidence suggests that nearly one-third of all takedown requests are questionable at best, and problematic at worst.<sup>129</sup> If some algorithms are capable of performing the fair use analysis required by *Lenz*, the evidence suggests that many rights enforcers are not using those algorithms.<sup>130</sup> If human review is not going to be required, then at the very least the use of ineffective algorithms that send tens of millions of questionable notifications every year<sup>131</sup> should be penalized.

#### CONCLUSION

*Lenz I* was on shaky footing because it gave broad license to the use of algorithms, and *Lenz II* ultimately made the appropriate correction by removing the language providing that explicit license. The suggestion that a fair use assessment can be completed without a human review is something that YouTube's system and others like it do not contemplate.<sup>132</sup> Even though the service provider has created a proactive takedown notification algorithm that contemplates fair use to some extent, the solution should still be that a service provider is still not to be held responsible for a false positive of proper fair use content. This Note argues that the service provider may aid the copyright holder in its content filtering, but a copyright holder must perform a final review of each low-confidence match and view each match with skepticism. A copyright holder may not rely on a list of search results or a list of content matches without a human also performing a final assessment of the possibility of fair use. An algorithm can send the majority of the takedown notifications, but a person must review the cases on the margin.

Service providers should continue to use and improve content identification technologies to better filter infringements. While their efforts cannot *substitute* for a copyright holder's fair use analysis, they can *supplement* that analysis by filtering the obvious infringements before they get to the copyright holder. No complete catalog of fair use possibilities may ever be programmed. But these content identification providers *can* develop techniques to identify commentary over a video, better filter out barely audible songs from match lists, and build up a more accurate confidence rating for alleged matches through trial and error. Content identification services provide an invaluable first line of defense to copyright holders, and the contributions the services make to the music and film industries are easily understated.

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128. 17 U.S.C. §§ 512(c)(3), (f).

129. URBAN ET AL., *supra* note 7, at 96–97.

130. *Id.* at 95.

131. *Id.* at 88.

132. See *Resolve Potential Claims, Disputes, and Appeals*, *supra* note 28 (outlining a process for reviewing “short or low-confidence” matches).

However, service providers that use content identification do have a problem to address. When using content identification services like that used by YouTube, copyright holders can simply check boxes within a list of videos and other content and then type the name of the work used.<sup>133</sup> This process makes it too easy to select all of the boxes and submit the notification. To better recognize the fair user's rights, YouTube should have copyright holders check an additional box affirming that they "have considered fair use" before submission. While it is merely one more box to check in addition to the other clickwrap affirmations noted in Subpart II.A., it may at least cause lazy or negligent copyright holders to think twice. The list of matches that is returned to the copyright holder could also contain a link to a brief overview of the four fair use factors,<sup>134</sup> as well as some common examples of fair use, such as comment and criticism. While this change may not cause a dramatic shift in the amount of fair use content that gets flagged as infringement, it could help provide some further protection for the fair user.

Copyright holders must still consider fair use, and cannot expect content identification services or service providers to do the work for them. A copyright holder must undergo his or her own fair use assessment when affirming that a proposed match is, indeed, infringing. Large copyright administrators should promulgate internal codes of conduct directing their employees to consider the four fair use factors. Companies should train their employees annually on what comment or criticism looks like. If a company receives a counter notification, the employee that sent the original notification should be investigated to ensure that he performed his *Lenz* duty. Ultimately, a company should do everything reasonable to ensure that they are monitoring their employees' takedown notification practices to ensure compliance with *Lenz*. Certainly the use of an algorithm to further filter the results the service provider returns would be appropriate. A company that follows these guidelines would insulate itself against liability, as a company that takes all of these precautions can hardly be said not to have considered fair use before sending takedown notifications.

There are many easily identifiable forms of fair use.<sup>135</sup> Some of these would probably be classified as "low-confidence" matches by a content identification service. For example, the use of a seven-second clip from a television show in a documentary would probably be screened by an algorithm when it checks the duration of the original content against the duration of the new content.<sup>136</sup> Indeed, the use of that clip to show that a

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133. *Copyright Infringement Notification*, *supra* note 33.

134. For a description of the four fair use factors provided in section 107 of the Copyright Act, see *supra* text accompanying note 60.

135. Brief of Amici Curiae, *supra* note 55, at 21.

136. See *Fair Use Principles for User Generated Video Content*, *supra* note 98.

band had risen to prominence would be found “undoubtedly ‘fair,’” and that algorithm would be right to find that it is a low-confidence match.<sup>137</sup> The copyright holder’s role, then, is to look at these low-confidence cases and consider whether it is fair use. The person need not even make the correct determination; she must merely “form[] a subjective *good faith* belief that the allegedly infringing material does not constitute fair use.”<sup>138</sup> But she must be a human in order to form a subjective good faith belief.

Finally, content creators using others’ work for fair use enjoyed a victory in *Lenz*. They should require copyright holders to fulfill their *Lenz* duty by submitting counter claims and counter notifications where appropriate. As of now, there is a widespread perception that YouTube and copyright holders are trampling users’ fair use rights. However, many scholars and content providers are satisfied with the balance that has been struck. Moreover, if fair use is suffering, then it is in part due to the fact that individuals are not informed about their rights or are too afraid to send counter notifications in situations where they have a fair use defense.

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137. *Sofa Entm’t, Inc. v. Dodger Prods.*, 709 F.3d 1273, 1278 (9th Cir. 2013).

138. *Lenz v. Universal Music Corp.*, 815 F.3d 1145, 1154 (9th Cir. 2015).