

# FILTERS, FAIR USE & FEEDBACK: USER-GENERATED CONTENT PRINCIPLES AND THE DMCA

By Michael S. Sawyer

In the Web 2.0<sup>1</sup> era, internet business models increasingly shifted to user-generated content (UGC).<sup>2</sup> UGC sites rely on their users to contribute

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1. For a full discussion of the meaning of this term, see Tim O’Reilly, *What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software*, O’REILLY, Sept. 30, 2005, <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>. *But see* Posting of Tim Bray to ongoing, *Web 2.0 or Not?*, <http://www.tbray.org/ongoing/When/200x/2005/08/09/Web-2.0> (Aug. 11, 2005) (arguing that the term “Web 2.0” is used too broadly to have real meaning); *see also* Posting of Robin Wauters to TechCrunch, *The Death of “Web 2.0”*, <http://www.techcrunch.com/2009/02/14/the-death-of-web-20/> (Feb. 14, 2009) (reporting that usage of the term “Web 2.0” is declining).

2. The accuracy of this now-ubiquitous term is questionable. Some question whether creators of content can fairly be classified as users. *See, e.g.*, Posting of Scott Karp to Blog Herald, *Death of the User*, <http://www.blogherald.com/2006/12/27/death-of-the-user/> (Dec. 27, 2006 20:53). Yet much of the content is really studio-generated and only user-appropriated. Posting of Scott Karp to Publishing 2.0, *A Lot of User-Generated Content Is Really User-Appropriated Content*, <http://publishing2.com/2006/11/18/a-lot-of-user-generated-content-is-really-user-appropriated-content/> (Nov. 18, 2006). Other names have gained traction. UGC is called “user-created content” overseas, but the UCC acronym has been converted to “user-copied content” by critics. *See* SACHA WUNSCH-VINCENT & GRAHAM VICKERY, ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *PARTICIPATIVE WEB: USER-CREATED CONTENT 1* (2007), <http://www.oecd.org/dataoecd/57/14/38393115.pdf> (indicating that UGC is called “user-created content” overseas); Posting of Danny Kim to <http://publishing2.com/2006/11/18/a-lot-of-user-generated-content-is-really-user-appropriated-content/> (Nov. 20, 2006 00:34 PST).

For analysis of other legal issues related to user-generated content, see Niva Elkin-Koren, *Governing Access to Users-Generated-Content: The Changing Nature of Private Ordering in Digital Networks*, in *GOVERNANCE, REGULATIONS, AND POWERS ON THE INTERNET* (E. Brousseau et. al. eds., forthcoming 2009), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1321164](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1321164); Tom W. Bell, *The Specter of Copyism v. Blockheaded Authors: How User-Generated Content Affects Copyright Policy*, 10 VAND. J. ENT. & TECH. L. 841 (2008) (providing an economic view of UGC and predicting that UGC will drive down the costs and increase accessibility for all content); Greg Lastowka, *User-Generated Content and Virtual Worlds*, 10 VAN. J. ENT. & TECH. L. 893 (2008); Edward Lee, *Warming Up to User-Generated Content*, 2008 U. ILL.

content. Blogs, wikis, social-networking sites, and video-sharing sites (e.g., YouTube) are among the most popular UGC technologies. These technologies have revolutionized media by enabling individuals to reach a global audience and facilitate communication on an unprecedented scale.

Copyright owners, however, are troubled by the onslaught of UGC. Not only does UGC represent another competitor in an already crowded media marketplace,<sup>3</sup> but a significant portion of technologies designed for UGC in fact end up unlawfully offering copyrighted material.<sup>4</sup> A user may upload a music video to YouTube or a news article may be wholly copied into a personal blog. Copyright owners are unable to protect their works effectively by suing uploaders because the quantity of UGC is so large.<sup>5</sup> For example, thirteen hours of video is uploaded to YouTube every minute.<sup>6</sup>

Copyright owners are thus forced to target UGC sites to protect their works. They may sue sites hosting infringing UGC under theories of sec-

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L. REV. 1459 (arguing that UGC informal copyright practices act as important gap-fillers in copyright law); Tal Z. Zarsky, *Law and Online Social Networks: Mapping the Challenges and Promises of User-Generated Information Flows*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 741 (2008).

3. Jonathan Handel, *Is Content Worthless*, HUFFINGTON POST, April 11, 2008, [http://www.huffingtonpost.com/jonathan-handel/is-content-worthless\\_b\\_96195.html](http://www.huffingtonpost.com/jonathan-handel/is-content-worthless_b_96195.html). UGC's ability to displace traditional media has earned its own name—crowdsourcing. See, e.g., Jeff Howe, *The Rise of Crowdsourcing*, WIRED, June 2006, <http://www.wired.com/wired/archive/14.06/crowds.html>.

4. No one knows for sure what percentage of UGC is copyrighted material, and the percentage likely varies widely between different sites. One study claims that less than six percent of all views on YouTube, the most popular UGC video site, were of copyrighted material. BRI HOLT, HEIDI R. LYNN & MICHAEL SOWERS, VIDMETER.COM, ANALYSIS OF COPYRIGHTED VIDEOS ON YOUTUBE.COM 2 (2007), [http://www.vidmeter.com/i/vidmeter\\_copyright\\_report.pdf](http://www.vidmeter.com/i/vidmeter_copyright_report.pdf). The methodology of that study, however, is questionable because it treats UGC as not covered by copyright unless a successful DMCA take-down notice has issued. *Id.* at 1-2. Another study, which actually viewed a random sample of video material, concluded that twelve percent of the videos posted on YouTube are infringing. Digital Ethnography, YouTube Statistics (2008), <http://ksudigg.wetpaint.com/page/YouTube+Statistics>. But that study took place in March 2008, after YouTube had already begun testing filtering technology to block infringing content before it is uploaded. See Mark Hefflinger, *Google to Test In-House YouTube Content Filter with Disney*, TIME WARNER, DIGITAL MEDIA WIRE, June 12, 2007, <http://www.dmwmedia.com/news/2007/06/12/google-to-test-in-house-youtube-content-filter-with-disney-time-warner>.

5. "Chasing individual consumers is time consuming and is a teaspoon solution to an ocean problem . . ." Randal C. Picker, *Copyright as Entry Policy: The Case of Digital Distribution*, 47 ANTITRUST BULL. 423, 442 (2002).

6. Brian Stelter, *Some Media Companies Choose to Profit from Pirated YouTube Clips*, N.Y. TIMES, Aug. 16, 2008 at C1.

ondary liability, but these sites are often able to seek shelter under the Digital Millennium Copyright Act (DMCA) safe harbors<sup>7</sup> or other copyright doctrines.<sup>8</sup> The DMCA generally places the burden on copyright owners to locate the infringing material and issue takedown notices.<sup>9</sup> This burden to police infringing activity may be one that copyright owners cannot, or at least should not, bear. The sheer volume of infringing material on the Internet makes human policing very costly. Because UGC sites such as YouTube profit from the infringing activity, either directly or indirectly, some have argued that UGC sites ought to bear some costs of policing infringing material.<sup>10</sup> Moreover, UGC sites may be in the best position to develop technological solutions that decrease or eliminate the need for costly human review.

A recent initiative seeks to partially shift this burden to the UGC sites on a voluntary basis. In October 2007, several UGC sites, including MySpace, Veoh, DailyMotion, and Soapbox (via Microsoft),<sup>11</sup> collaborated with large content companies, including Disney, CBS, NBC Universal, and Viacom, in proposing “Principles for User Generated Content Services” (UGC Principles).<sup>12</sup> The major change proposed in the UGC Principles is the recommendation that UGC sites should use copyright filtering technology. This technology compares uploaded material against samples of copyrighted material (Reference Material) provided by copyright owners.<sup>13</sup> If uploaded material matches any Reference Material, then the uploaded material must either be blocked before it is ever uploaded, or licensed from the copyright owner.<sup>14</sup> The initiative seeks to have copyright owners and UGC sites cooperate to implement filtering technology “in a manner that effectively balances legitimate interests in (1) blocking in-

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7. 17 U.S.C. § 512 (2006).

8. *E.g.*, *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984) (borrowing the “staple article of commerce doctrine” from patent law to excuse technologies enabling copyright infringement as long as they have “commercially significant noninfringing uses”).

9. Sites have to takedown infringement if it is “apparent.” 17 U.S.C. § 512(c)(1)(A)(ii) (2006). However, courts interpreting this requirement take a narrow view of when infringement is apparent. *See infra* Section I.B.1.

10. *See* Brandon Brown, Note, *Fortifying the Safe Harbors: Reevaluating the DMCA in a Web 2.0 World*, 23 BERKELEY TECH. L.J. 437, 463-66 (2008).

11. Posting of Michael Arrington to TechCrunch, Microsoft SoapBox Just Launched, <http://www.techcrunch.com/2006/09/18/microsoft-soapbox-to-launch-on-tuesday/> (Sept. 18, 2006).

12. Principles for User Generated Content Services, <http://ugcprinciples.com> (last visited Feb. 4, 2009) [hereinafter UGC Principles].

13. *Id.*

14. *Id.*

fringing user-uploaded content, (2) allowing wholly original and authorized uploads, and (3) accommodating fair use.”<sup>15</sup>

The UGC Principles propose a difficult task—creating technology that can distinguish between copyright infringement and fair use. Given how challenging fair use determinations are for courts to evaluate, it is difficult to believe that any technological solution could reach accurate determinations. In recognition of the difficulties of implementing technology capable of applying fair use doctrine, the Electronic Frontier Foundation (EFF) has proposed “Fair Use Principles for User Generated Video Content” (Fair Use Principles).<sup>16</sup> The Fair Use Principles recommend quantitative standards to evaluate fair use and erring on the side of fair use when removing or blocking potentially infringing content.<sup>17</sup> Despite the EFF’s proposal, UGC sites appear to be implementing filters and erring on the side of removal.<sup>18</sup>

This Note argues that when the policing burden shifts from copyright owners to UGC sites, fair-use considerations are in danger of being largely dropped because technological filters are unable to accommodate them. Part I discusses the relevant technical and legal background and demonstrates several ways in which technology has outpaced the law. Part II examines the UGC Principles and EFF Fair Use Principles and contrasts them with the status quo. Part III explains why copyright filters<sup>19</sup> cannot accommodate fair use, and describes why the risk-averse nature of large companies in the industry may lead to expansion of copyright protection and contraction of the safe harbors through feedback loops, including the “standard technical measures” requirement of section 512(i). Part IV recognizes that there are actually two policing burdens, the technological burden to identify potentially infringing content and the human burden to evaluate fair use of potentially infringing content, and surveys obstacles to establishing a two-stage policing system.

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15. *Id.*

16. Electronic Frontier Foundation, Fair Use Principles for User Generated Video Content, <http://www.eff.org/issues/ip-and-free-speech/fair-use-principles-usergen> (last visited Feb. 4, 2009) [hereinafter Fair Use Principles].

17. *Id.*

18. See Julian Sanchez, *EFF Seeks Mashup Makers to Fight YouTube Filtering*, ARS TECHNICA, Feb. 3, 2009, <http://arstechnica.com/telecom/news/2009/02/eff-seeks-mashup-makers-to-fight-youtube-filtering.ars>.

19. Proponents of filtering technology refer to it as identification technology, but then usually use it to automatically filter “identified content.” For this reason, the author opts to use the term “copyright filter.” Other pieces use the term “content filter,” but that term is most frequently used to describe technology that filters out objectionable content, such as pornography.

## I. BACKGROUND

### A. UGC on the Internet

UGC is creative material published by users outside of their professional routines.<sup>20</sup> UGC has been present on the Internet at least since GeoCities enabled users to create personal web “communities” in the early 1990s.<sup>21</sup> UGC shows up on traditional websites in the form of consumer reviews and discussion sections, but UGC did not become a real headache for copyright owners until Web 2.0. With Web 2.0, technology entrepreneurs began to create web applications, treating the Internet as a platform rather than a mere data conduit.<sup>22</sup> Many of these web applications rely on users to upload content, some of which is unlicensed copyrighted material.

Several web applications demonstrate the potential of UGC as well as the problems it creates. Applications such as Blogger enable users to create a blog—a simple website analogous to an online journal. Blogs take on many different forms ranging from personal journals to corporate blogs, but all enable users to easily post content on the Internet. Blogs create problems at both ends of the copyright spectrum. For example, the Associate Press sent DMCA takedown notices to blogs that quoted small portions of AP articles.<sup>23</sup> However, bloggers themselves have copyright complaints; they are concerned that other blogs are stealing their content and depriving them of advertising revenue.<sup>24</sup>

Other web applications, such as YouTube, allow users to post video content online. Some of these sites have become incredibly popular. For example, YouTube is the third most visited web domain in the world and fourth most visited in the United States.<sup>25</sup> YouTube has enabled unprecedented participation in multimedia culture, most notably in the 2008 presi-

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20. WUNSCH-VINCENT & VICKERY, *supra* note 2, at 8.

21. See *Beverly Hills Internet, Builder of Interactive Cyber Cities, Launches 4 More Virtual Communities Linked to Real Places*, BUSINESS WIRE, July 5, 1995, available at [http://findarticles.com/p/articles/mi\\_m0EIN/is\\_1995\\_July\\_5/ai\\_17190114](http://findarticles.com/p/articles/mi_m0EIN/is_1995_July_5/ai_17190114).

22. O'Reilly, *supra* note 1.

23. Posting of Michael Kwun to Electronic Frontier Foundation Deeplinks Blog, *Biting the Hand that Feeds (Traffic to) Them*, <http://www.eff.org/deeplinks/2008/06/biting-hand-feeds-traffic-them> (June 17, 2008).

24. Posting of Tibi Puiu to Lost Art of Blogging, *Protect Your Blog and Counter Copyright Thefts*, <http://www.lostartofblogging.com/protect-your-blog-and-counter-copyright-thefts> (Jan. 23, 2008).

25. Alexa, *Global Top Sites*, [http://www.alexa.com/site/ds/top\\_sites?ts\\_mode=global&lang=none](http://www.alexa.com/site/ds/top_sites?ts_mode=global&lang=none) (last visited Feb. 4, 2009); Alexa, *Top Sites in United States*, [http://www.alexa.com/site/ds/top\\_sites?cc=US&ts\\_mode=country&lang=none](http://www.alexa.com/site/ds/top_sites?cc=US&ts_mode=country&lang=none) (last visited Feb. 4, 2009).

dential election when thirty-five percent of Americans watched online video pertaining to the election.<sup>26</sup> Not only did users upload their own political videos, but presidential candidates used YouTube to communicate with the public as well.<sup>27</sup>

Nonetheless, many criticize YouTube for its handling of copyright. Content owners claim that YouTube purposefully built its user base through massive copyright infringement.<sup>28</sup> Viacom is currently suing YouTube over copyright infringement for one billion dollars.<sup>29</sup> Others, including presidential candidate John McCain, criticize YouTube's handling of DMCA takedown notices and claim that they give too much credit to copyright claims.<sup>30</sup> The ten-year-old DMCA lies at the heart of most criticisms.

## B. DMCA

In 1998, the DMCA created safe harbors that limit online service providers' (OSPs) liability for copyright infringement.<sup>31</sup> These safe harbors protect OSPs from monetary liability for material that is transmitted over networks,<sup>32</sup> cached on a server,<sup>33</sup> linked to,<sup>34</sup> or stored at the direction of a user.<sup>35</sup> These limitations were intended to "ensure that the efficiency of

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26. LEE RAINIE & AARON SMITH, PEW INTERNET & AMERICAN LIFE PROJECT, THE INTERNET AND THE 2008 ELECTION II (2008), <http://www.pewinternet.org/Reports/2008/The-Internet-and-the-2008-Election>.

27. Jose Antonio Vargas, *The YouTube Presidency*, WASH. POST, Nov. 14, 2008 (44 Blog), [http://voices.washingtonpost.com/44/2008/11/14/the\\_youtube\\_presidency.html](http://voices.washingtonpost.com/44/2008/11/14/the_youtube_presidency.html).

28. See, e.g., First Amended Complaint ¶ 37, Viacom Int'l Inc. v. YouTube, Inc., No. 1:07-cv-02103, 2008 WL 2062868 (S.D.N.Y. Apr. 24, 2008). For an appraisal of issues in the Viacom lawsuit against YouTube, see Branwen Buckley, *SueTube: Web 2.0 and Copyright Infringement*, 31 Colum. J.L. & Arts 235 (2008).

29. First Amended Complaint, *supra* note 28, ¶ 10.

30. Letter from Trevor Potter, General Counsel, McCain for America, to Chad Hurley, CEO, YouTube, LLC (Oct. 13, 2008), *available at* <http://image.guardian.co.uk/sys-files/Media/documents/2008/10/15/mccainletter.pdf>. For YouTube's response, see Letter from Zahavah Levine, Chief Counsel, YouTube, to Trevor Potter, General Counsel, McCain-Palin 2008 (Oct. 14, 2008), *available at* [http://www.eff.org/files/08-10-14YouTube Response to Sen. McCain.pdf](http://www.eff.org/files/08-10-14YouTube%20Response%20to%20Sen.%20McCain.pdf).

31. 17 U.S.C. § 512 (2006). "These safe harbors limit liability but 'do not affect the question of ultimate liability under the various doctrines of direct, vicarious, and contributory liability.'" Perfect 10, Inc. v. CCBill LLC, 488 F.3d 1102, 1109 (9th Cir. 2007) (quoting Perfect 10, Inc. v. Cybernet Ventures, Inc., 213 F. Supp. 2d 1146, 1174 (C.D. Cal. 2002)).

32. 17 U.S.C. § 512(a).

33. *Id.* § 512(b).

34. *Id.* § 512(d).

35. *Id.* § 512(c).

the Internet will continue to improve and that the variety and quality of services on the Internet will continue to expand.”<sup>36</sup>

These limitations, however, do not come for free: OSPs must adopt and implement certain policies in order to qualify. In order to be eligible for any of the four safe harbors, OSPs must satisfy two generic policies.<sup>37</sup> First, they must adopt and reasonably implement a plan to terminate the accounts of repeat infringers and must notify users of this plan.<sup>38</sup> Second, they must also accommodate “standard technical measures” used by copyright owners to identify infringing material.<sup>39</sup> The DMCA does not, however, extend the safe harbors in all circumstances to eligible OSPs; each safe harbor has separate statutory requirements limiting its applicability.

To qualify for the section 512(c) safe harbor, which precludes OSP liability for storing user content, OSPs must satisfy three additional requirements. First, the OSP cannot have actual knowledge that infringing content is on its system or be “aware of facts or circumstances from which infringing activity is apparent,” and if it later becomes aware of such content, the OSP must expeditiously remove the content from its system.<sup>40</sup> Second, the OSP cannot receive a direct financial benefit from any infringing activity which it has the right and ability to control.<sup>41</sup> Finally, an OSP must expeditiously remove infringing content if it receives a takedown notice from the copyright owner.<sup>42</sup>

These five requirements (two generic and three specific to section 512(c)) appear to allocate the copyright policing burden to content owners. If a hosting site is designed so that its owners lack knowledge of infringement, do not receive a direct financial benefit from infringement that they have the right and ability to control, and reasonably implement a policy to terminate repeat infringers, the DMCA places the burden on copyright owners to issue takedown notices and use standard technical measures to protect copyright.<sup>43</sup> Yet this burden worsens as technological innovations

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36. S. REP. NO. 105-190, at 8 (1998).

37. 17 U.S.C. § 512(i)(1).

38. *Id.* § 512(i)(1)(A).

39. *Id.* §§ 512(i)(1)(B), 512(i)(2).

40. *Id.* § 512(c)(1)(A).

41. *Id.* § 512(c)(1)(B).

42. *Id.* § 512(c)(1)(C).

43. *See* 17 U.S.C. § 512(m) (“Nothing in this section shall be construed to condition the applicability of subsections (a) through (d) on . . . a service provider monitoring its service or affirmatively seeking facts indicating infringing activity, except to the extent consistent with a standard technical measure . . .”).

enable cheap copying on a large scale.<sup>44</sup> Courts have recognized this shift and used theories of secondary liability to punish technological innovators attempting to profit by enabling copyright infringement.<sup>45</sup> Thus, technological innovators may face liability for failing to police infringement on their networks despite the section 512(c) safe harbor.<sup>46</sup>

Most UGC sites are designed to gain the section 512(c) safe harbor—keeping the policing burden on content owners—but several ambiguities create uncertainty as to exactly what policies the safe harbor requires. There are at least four possible indeterminacies in the law.<sup>47</sup> First, there is no consensus on what constitutes “circumstances from which infringing activity is apparent.”<sup>48</sup> Second, it remains unclear how to prove that a site received a “direct” financial benefit from infringement.<sup>49</sup> Third, many questions remain about when service providers are deemed to have the

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44. See, e.g., TOM STEINERT-THRELKELD, ZDNET UNDERCOVER: THE YOUTUBE FILE 4 (2008), <http://whitepapers.zdnet.com/abstract.aspx?docid=393305>.

45. See Peter S. Menell & David Nimmer, *Legal Realism in Action: Indirect Copyright Liability's Continuing Tort Framework and Sony's De Facto Demise*, 55 UCLA L. REV. 143, 150-55, 177-87 (2007) (discussing how courts have effectively applied tort law principles in indirect copyright infringement cases, specifically *Napster*, *Aimster*, and *Grokster*, to assign liability to technological innovators “whose product, albeit capable of substantial noninfringing use, was in fact used more for the purpose of committing copyright infringement”).

46. See, e.g., *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1023 (9th Cir. 2001) (holding that Napster had to fully exercise its ability to police infringing content on its network to avoid vicarious liability). There is a possibility that secondary liability could trump any safe harbor, see Posting of Eric Goldman to Technology & Marketing Law Blog, *Io v. Veoh Comments—a Terrific 512(c) Defense-Side Win*, [http://blog.ericgoldman.org/archives/2008/09/io\\_v\\_veoh\\_comme.htm](http://blog.ericgoldman.org/archives/2008/09/io_v_veoh_comme.htm) (Sept. 1, 2008 21:54 PST), but most commentators and courts appear to assume that the DMCA safe harbors preclude monetary liability for all infringement, not just direct infringement. Legislative history supports the majority viewpoint. H.R. REP. NO. 105-796, at 73 (1998) (Conf. Rep.) (“The limitations in subsections (a) through (d) protect qualifying service providers from liability for all monetary relief for direct, vicarious and contributory infringement.”) Of course, legislative history for a 1998 Act cannot speak to the inducement liability established in *Grokster*. See *MGM Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 936-37 (2005).

47. For a discussion of other statutory ambiguities, see Jane C. Ginsburg, *Separating the Sony Sheep from the Grokster Goats: Reckoning the Future Business Plans of Copyright-Dependent Technology Entrepreneurs*, 50 ARIZ. L. REV. 577, 592-602 (2007) (analyzing the terms “service provider” and “storage at the direction of a user” in relation to new business models, such as YouTube, which alter the format of user-uploaded content before making it available online).

48. Cf. 17 U.S.C. § 512(c)(1)(A)(ii).

49. Cf. *id.* § 512(c)(1)(B).



“right and ability” to control infringement.<sup>50</sup> Finally, there is virtually no case law elucidating the “standard technical measures” requirement.<sup>51</sup>

### 1. *Apparent Infringing Activity*

To qualify for the section 512(c) safe harbor, OSPs are required to expeditiously remove infringing material once they have actual knowledge of infringing activity or are “aware of facts or circumstances from which infringing activity is apparent.”<sup>52</sup> The circumstances which make infringing activity apparent are called “red flags.”<sup>53</sup> The few cases analyzing possible red flags do not establish clear standards separating red flags from excusable ignorance.

Two cases imply that the red flags must be rather obvious and that the defendant must see them. In *Perfect 10, Inc. v. CCBill LLC*, the Ninth Circuit held that references to pornographic material as “illegal” and “stolen” were not sufficient to make infringement apparent because such descriptions may just “be an attempt to increase the salacious appeal” of titillating photographs.<sup>54</sup> In *Io Group, Inc. v. Veoh Networks, Inc.*, the Northern District of California held that the presence of the plaintiff’s trademarks in a user-uploaded pornographic video did not make infringement apparent to the UGC site because there was no evidence that the site was aware of the trademarks.<sup>55</sup> Both courts enforced the statutory requirement that the service provider have subjective awareness of factors making infringement apparent.<sup>56</sup>

Neither case provides much guidance on how to prove subjective awareness of such factors, but it appears that plaintiffs may face a difficult task even if the public is generally aware of infringing material on the website. Some plaintiffs attempt to prove subjective awareness by demonstrating wide public knowledge of infringing material,<sup>57</sup> but no court has yet addressed whether such evidence will restrict the safe harbor for all works or just the works with demonstrated awareness. Copyright infringement is ordinarily evaluated on a work-by-work basis; knowledge of

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50. *Cf. id.*

51. *Cf. id.* § 512(i)(2).

52. *Id.* § 512(c)(1)(A)(ii).

53. *Perfect 10, Inc. v. CCBill LLC*, 481 F.3d 751, 763 (9th Cir. 2007), *amended by Perfect 10, Inc. v. CCBill LLC*, 488 F.3d 1102 (9th Cir. 2007).

54. 488 F.3d at 1114.

55. 586 F. Supp. 2d 1132, 1148-49 (N.D. Cal. 2008).

56. *See CCBill*, 488 F.3d at 1114; *Io Group*, 586 F. Supp. 2d at 1148-49.

57. *See, e.g.*, First Amended Complaint, *supra* note 28, ¶ 37 (“The rampant infringement of Plaintiffs’ copyrights on YouTube is open and notorious and has been the subject of numerous news reports.”).

some infringement does not mean knowledge of all infringements.<sup>58</sup> It is unclear if the safe harbor eligibility will also be evaluated on a work-by-work basis.<sup>59</sup>

Restrictions on the amount of policing that service providers must perform seem to indicate that the safe harbor will be evaluated by work, not by site. Section 512(m) clarifies that safe harbor eligibility is not to be conditioned on a service provider “monitoring its service or affirmatively seeking facts indicating infringing activity.” In *CCBill*, the Ninth Circuit held that service providers do not bear the burden to investigate suspicious websites, such as lists of passwords or pictures labeled “stolen,” to determine whether they contain infringing material.<sup>60</sup> Thus, it seems unlikely the presence of some infringing material on a site would trigger a duty to scan the entire site for infringements.

These restrictions, however, seem to encourage willful ignorance. If the knowledge requirement only limits the safe harbor when service providers have specific subjective awareness of red flags, then service providers may be encouraged to design their sites as to minimize their awareness of red flags. Such incentives seem contrary to a developing tort framework in digital copyright cases that punishes sites primarily designed to profit from infringement.<sup>61</sup> Indeed, Professor Ginsburg has argued for greater liability to counter this moral hazard.<sup>62</sup>

## 2. *Direct Financial Benefit*

The DMCA adopts the language of the common law vicarious liability standard as an eligibility condition for the 512(c) safe harbor; sites are not eligible if they receive a direct financial benefit from infringing activity which they have a right and ability to control.<sup>63</sup> The direct-financial-benefit prong adopts settled meaning from general common-law princi-

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58. *Cf.* *Hendrickson v. Amazon.com, Inc.*, 298 F. Supp. 2d 914, 916-17 (C.D. Cal. 2003) (holding that DMCA notices were insufficient to force takedowns of all future instances of the work).

59. In *CCBill*, the Ninth Circuit seemed to indicate that safe harbor eligibility could be evaluated on a site-by-site basis rather than a work-by-work basis due to the section 512(i)(1)(A) requirement that service providers reasonably implement a repeat infringer policy. 488 F.3d at 1113. It held that a defendant’s “response to adequate non-party notifications is relevant in determining whether they reasonably implemented their policy against repeat infringers.” *Id.* Unfortunately, this site-by-site evaluation relies on DMCA takedown notifications, so it fails to elucidate the knowledge standard as applied to service providers. *Id.*

60. *Id.* at 1114.

61. *See* Menell & Nimmer, *supra* note 45, at 150-55, 177-87.

62. *See* Ginsburg, *supra* note 47, at 597-98.

63. *See* 17 U.S.C. § 512(c)(1)(B) (2006); *CCBill*, 488 F.3d at 1117-18.

ples.<sup>64</sup> The case law implies that using infringing content to build or expand a user base constitutes a direct financial benefit (though proving it is another matter). It is less clear how to evaluate the context in which ads are displayed on a site—an important UGC issue.

Case law demonstrates that infringing activity that increases a user base is considered a direct financial benefit. In *Ellison v. Robertson*, the Ninth Circuit held that directness of a financial benefit hinges on “whether the infringing activity constitutes a draw for subscribers, not just an added benefit.”<sup>65</sup> Thus, when a business attracts subscribers and their fees by using infringing activity, there is a sufficient nexus for the benefit to be considered direct. Similarly, if infringing activity attracts users who do not pay fees but do aid the business through increased ad revenue, then the business still reaps a direct financial benefit from the infringing activity.<sup>66</sup>

While the law may be clear that attracting users through infringing activity will constitute a direct financial benefit, it is silent on how to prove it. Professor Ginsburg observes that the problem of proof may lock UGC sites and copyright owners in a “vicious circle.”<sup>67</sup> One way to show proof is to compare user traffic after the UGC sites are ordered to remove all infringing material. But if this is the only method, then copyright owners cannot prove their case without first procuring the remedy they seek.<sup>68</sup>

It is also unclear when the nexus between advertising and infringing activity is sufficiently close to constitute a direct financial benefit. For example, YouTube does not display ads next to potentially infringing content.<sup>69</sup> But YouTube may attract users with infringing content, and these new users may then venture to view other, ad-supported, noninfringing content. Is that relationship sufficiently direct? No case is clearly on point. In *Fonovisa, Inc. v. Cherry Auction, Inc.*, the court held that a flea market owner received a direct financial benefit from infringing sales by a flea market vendor because the owner’s revenue from admissions fees, parking fees, and concessions sales increased as more people came to the flea market.<sup>70</sup> YouTube’s situation is somewhat like the flea market.<sup>71</sup> Though

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64. *CCBill*, 488 F.3d at 1117-18.

65. 357 F.3d 1072, 1079 (9th Cir. 2004).

66. *Arista Records, Inc. v. MP3Board, Inc.*, No. 00 Civ. 4660 (SHS), 2002 WL 1997918, at \*11 (S.D.N.Y. Aug. 29, 2002).

67. Ginsburg, *supra* note 47, at 599-600.

68. *Id.*

69. Andy Greenberg, *YouTube’s Filter Fails to Please*, FORBES, Oct. 18, 2007, [http://www.forbes.com/2007/10/18/google-viacom-video-tech-cx\\_ag\\_1018youtube.html](http://www.forbes.com/2007/10/18/google-viacom-video-tech-cx_ag_1018youtube.html).

70. 76 F.3d 259, 263 (9th Cir. 1996).

71. Copyright owners may dispute this claim by arguing that an internet company’s valuation is directly tied to the size of its user base. *See, e.g.*, First Amended Complaint,

it does not receive ad revenue for each unique user to its site, it does receive revenue for views of noninfringing, ad-supported content. Therefore, YouTube would be like a flea market receiving revenue from noninfringing concessions sales but not receiving revenue from admissions or parking. *Fonovisa* may have reached a different result if the flea market did not charge for admission or parking.

### 3. *Right and Ability to Control*

Even if UGC sites derive a direct financial benefit from infringing activity, they will not lose safe harbor protection unless they have the right and ability to control such infringing activity.<sup>72</sup> Just as with the direct-financial-benefit prong, the right-and-ability-to-control prong adopts the common law standard for vicarious liability.<sup>73</sup> Courts do not, however, always follow the common law standard, which typically turns on the ability to block infringing use.<sup>74</sup> Instead, courts may require “something more,” such as an ability to locate the infringing use.<sup>75</sup> The departure from the common law standard is justified in order to preserve the integrity of the DMCA. If the mere ability to block access constituted the right and ability to control infringing activity, then the right-and-ability-to-control prong would conflict with the section 512(c)(1)(C) requirement that sites be able to remove infringing content upon receipt of a takedown notice. Moreover, section 512(m) states that the safe harbors are not conditioned on service providers actively policing content.<sup>76</sup> Thus, “something more” is required than the mere technical ability to block access.

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*supra* note 28, ¶ 37 (“Indeed, the presence of infringing copyrighted material on YouTube is fully intended by Defendants as a critical part of their business plan to drive traffic and increase YouTube’s network, market share and enterprise value, as reflected in the purchase price of \$1.65 billion Google paid for YouTube . . .”).

72. 17 U.S.C. § 512(c)(1)(B) (2006).

73. *See* Perfect 10, Inc. v. CCBill LLC, 488 F.3d 1102, 1117-18 (9th Cir. 2007) (citing *Ellison v. Robertson*, 357 F.3d 1072, 1078 (9th Cir. 2004)).

74. *Compare* A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1023-24 (9th Cir. 2001) (holding that Napster had the “right and ability to control” infringing content because it could search its system for names of copyrighted songs and then delete the songs from the listing), *with* *Hendrickson v. eBay, Inc.*, 165 F. Supp. 2d 1082, 1093-94 (C.D. Cal. 2001) (holding that eBay lacked the “right and ability to control” infringing content even though it was able to voluntarily search its system for infringing content).

75. *See, e.g.,* *Io Group, Inc. v. Veoh Networks, Inc.*, 586 F. Supp. 2d 1132, 1151 (N.D. Cal. 2008) (“the pertinent inquiry is not whether Veoh has the right and ability to control it [sic] system, but rather, whether it has the right and ability to control the *infringing activity*”).

76. 17 U.S.C. § 512(m) (2006).

For service providers that have the ability to remove infringing material, the “something more” requirement appears to be a technological ability to locate infringing material amidst a sea of noninfringing material. In *Perfect 10, Inc. v. Amazon.com, Inc.*, the Ninth Circuit has interpreted the ability-to-control standard to mean practical, not just theoretical ability.<sup>77</sup> When considering vicarious liability for Google Image Search, the Ninth Circuit affirmed a district court’s holding that Google lacked the practical ability to control infringing activity because its technology was incapable of comparing every image on the web to every copyrighted image in existence.<sup>78</sup> In *Io v. Veoh*, the district court held that a video-sharing website lacked the practical ability to control infringing activity where it could not locate infringing content with simple text searches because content could be mislabeled.<sup>79</sup> If the site had technology that could search the video content itself, and not just the text labeling the video, the *Io* court may have reached a different conclusion.

Despite this apparently clear standard, it appears that courts may still return to tort principles to evaluate whether a service provider has the right and ability to control infringing activity. Professor Ginsburg predicts that the true “something more” requirement will depend on whether the business is focused on illegitimate uses (the “*Grokster* goats”) or legitimate uses (the “*Sony* sheep”).<sup>80</sup> Her prediction is bolstered by the manner in which the *Io* court distinguished *Napster*. When discussing the ability to control infringing activity, the *Io* court distinguished *Napster* on the grounds that the *Napster* service was devoted to copyright infringement, whereas the *Veoh* service did not encourage infringement.<sup>81</sup> The good faith of a service, however, has little to do with its practical ability to locate infringing material.

#### 4. *Standard Technical Measures*

The DMCA requires service providers to accommodate and not interfere with “standard technical measures” used by copyright owners to identify infringing material.<sup>82</sup> Standard technical measures must meet three requirements. First, they must be “developed pursuant to a broad consen-

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77. 508 F.3d 1146, 1173 (9th Cir. 2007) (discussing the right and ability to control standard under a vicarious infringement test but still involving a service provider’s eligibility for safe harbors under the DMCA).

78. *Id.* at 1174 (“Without image-recognition technology, Google lacks the practical ability to police the infringing activities of third-party websites.”).

79. *Io Group*, 586 F. Supp. 2d at 1153.

80. Ginsburg, *supra* note 47, at 601-02.

81. *Io Group*, 586 F. Supp. 2d at 1153.

82. 17 U.S.C. § 512(i)(1)(B) (2006).

sus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process.”<sup>83</sup> Second, standard technical measures must be available on reasonable and nondiscriminatory terms.<sup>84</sup> Finally, they must not impose substantial costs on service providers.<sup>85</sup> Very few cases have interpreted these requirements.<sup>86</sup>

Indeed, there is only one reported case considering whether certain technology qualifies as a standard technical measure. In *Perfect 10, Inc. v. CCBill LLC*, a website host and credit card processor disabled a copyright owner’s access to a members-only area of a website alleged to host infringing material.<sup>87</sup> The site claimed it disabled access only because the copyright owner ceased paying for access.<sup>88</sup> The Ninth Circuit remanded to the district court to determine whether granting copyright owners free access to a pay area of the website imposed a substantial cost on service providers.<sup>89</sup> The Supreme Court denied the copyright owner’s petition for certiorari and the parties stipulated to dismissal, so the district court never considered whether free access would have been a substantial cost to the service provider.

It should not be surprising that there is so little litigation involving standard technical measures because there are historically few incentives for service providers to agree to such measures. Despite the strong urging of both the House and the Senate to start serious discussions on standard technical measures,<sup>90</sup> service providers had very little statutory incentive to engage copyright owners in discussions.<sup>91</sup> Indeed, if there are no standard technical measures, then service providers are better able to profit from infringing activity and avoid any costs associated with compliance. However, as discussed below, the UGC Principles may signal a change in such financial incentives.

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83. *Id.* § 512(i)(2)(A).

84. *Id.* § 512(i)(2)(B).

85. *Id.* § 512(i)(2)(C).

86. A Westlaw search of all federal cases for the phrase “standard technical measures” returns only 13 results as of March 15, 2009. Most cases simply note that safe harbor eligibility is conditioned on accommodating standard technical measures.

87. 488 F.3d 1102, 1115 (9th Cir. 2007).

88. *Id.*

89. *Id.*

90. H.R. REP. NO. 105-551, pt. 2, at 61 (1998); S. REP. NO. 105-190, at 52 (1998).

91. 3 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT, § 12B.02[B][3][b] (2008). (“Given the incentives of the various parties whose consensus is required before any such technical measures can win adoption, it seems unlikely ...that the need for any such monitoring will eventuate.”).

## C. Fair Use

### 1. Basic Background

Fair use allows the use of copyrighted material without the owner's permission in the context of criticism, comment, news reporting, or educational settings.<sup>92</sup> Fair use is a traditional First Amendment safeguard that prevents copyright law from hindering free speech.<sup>93</sup> The doctrine can be traced back to Justice Story's opinion in *Folsom v. Marsh*<sup>94</sup> and has since been codified at 17 U.S.C. § 107.

Section 107 states a four-factor test for evaluating fair use. The factors are the purpose and character of the use, the nature of the use, the amount and substantiality of the taking, and the effect on the market for the copyrighted work.<sup>95</sup> The first and fourth factors are usually considered most important.<sup>96</sup>

Fair use is a highly context-dependent test, and there are few clear rules. Judge Learned Hand called the issue of fair use "the most troublesome in the whole law of copyright."<sup>97</sup> For example, sometimes it is acceptable to copy an entire work,<sup>98</sup> but other times it is unacceptable to even copy a small portion.<sup>99</sup>

### 2. *Lenz v. Universal: Fair Use and the DMCA*

DMCA takedowns will inevitably ensnare fair uses of content. If such takedowns are issued in bad-faith, then copyright owners can face liability.<sup>100</sup> In *Lenz v. Universal Music Corp.*, the plaintiff uploaded to YouTube a short home video of a baby dancing with copyrighted music by the musician Prince playing in the background.<sup>101</sup> Even though the sound quality was terrible and the music could only be heard for about twenty

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92. 17 U.S.C. § 107 (2006).

93. *See Eldred v. Ashcroft*, 537 U.S. 186, 220-21 (2003).

94. 9 F. Cas. 342 (C.C.D. Mass.) (No. 4,901).

95. 17 U.S.C. § 107 (2006).

96. Barton Beebe, *An Empirical Study of U.S. Copyright Fair Use Opinions*, 156 U. PA. L. REV. 549, 616 (2008).

97. *Dellar v. Samuel Goldwyn, Inc.*, 104 F.2d 661, 662 (2d Cir. 1939) (per curiam).

98. *See, e.g., Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984); *Sega Enters., Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992); *Higgins v. Detroit Educ. Television Found.*, 4 F. Supp. 2d 701, 707 (E.D. Mich. 1998).

99. *See, e.g., Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 564 (1985); *Nihon Keizai Shimbun, Inc. v. Comline Bus. Data, Inc.*, 166 F.3d 65, 73 (2d Cir. 1999).

100. *See Lenz v. Universal Music Corp.*, 572 F. Supp. 2d 1150, 1155-56 (N.D. Cal. 2008).

101. *Id.* at 1151-52.

seconds, Universal issued a DMCA takedown notice alleging copyright infringement.<sup>102</sup> The plaintiff sued Universal alleging misrepresentation under section 512(f) of the DMCA,<sup>103</sup> which assigns liability to anyone “who knowingly materially misrepresents . . . that material or activity is infringing.”<sup>104</sup> Universal moved to dismiss, advancing two arguments why it should not have been held liable under section 512(f). First, it argued that though fair use excused *liability*, the material was still *infringing*.<sup>105</sup> Second, it argued that the plaintiff could not prove that it issued the takedown notice in bad faith.<sup>106</sup> Judge Fogel rejected both arguments and denied the motion to dismiss.<sup>107</sup>

Judge Fogel avoided the thorny issue of whether fair use is a right or a defense,<sup>108</sup> but he rejected Universal’s claim that failure to consider fair use cannot be a basis for section 512(f) liability.<sup>109</sup> While noting that he could have relied on Supreme Court opinions stating that fair use is not an

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102. *Id.* at 1152.

103. *Id.*

104. 17 U.S.C. § 512(f) (2006).

105. “Fair use is an *affirmative defense* to conduct that otherwise infringes one or more of the exclusive rights of copyright under Section 106.” Motion to Dismiss at 9, *Lenz*, 572 F. Supp. 2d 1150 (No. CV 07-03783), 2008 WL 2242356 at \*11.

106. “Although Plaintiff does assert ‘[o]n information and belief’ that Universal had ‘actual subjective knowledge’ that Plaintiff’s posting was non-infringing, Plaintiff fails to back up this conclusory averment with any allegations that justify an inference of actual knowledge.” *Id.* (citation omitted).

107. *Lenz*, 572 F. Supp. 2d at 1154, 1156-57.

108. This issue has been discussed in the case law, *see, e.g.*, *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532, 1542 n.22 (11th Cir. 1996) (expressing Judge Birch’s personal viewpoint that fair use is a right after it was codified at section 107 by the 1976 act); *White v. Samsung Elecs. Am., Inc.*, 989 F.2d 1512, 1517 (9th Cir. 1993) (Kozinski, J., dissenting) (“Copyright law specifically gives the world at large the right to make ‘fair use’ parodies, parodies that don’t borrow too much of the original.”), in legal academia, *see, e.g.*, Wendy J. Gordon & Daniel Bahls, *The Public’s Right to Fair Use: Amending Section 107 to Avoid the “Fared Use” Fallacy*, 2007 UTAH L. REV. 619, 655 (arguing that section 107 should explicitly state that fair use is a right); David R. Johnstone, *Debunking Fair Use Rights and Copyduty under U.S. Copyright Law*, 52 J. COPYRIGHT SOC’Y U.S.A. 345, 387 (2005) (critiquing the reasoning of Judge Birch, Judge Kozinski, Prof. Patterson, Prof. Lessig and several others in concluding that fair use is a right), and in the blogosphere, *see, e.g.*, Groklaw, *Fair Use: Affirmative Defense or Right? Do I Have to Choose?*, <http://www.groklaw.net/article.php?story=20070907195435565> (Sept. 9, 2007 1:40 PM EDT) (arguing that fair use is both a right and a defense); Posting of Patrick Ross to The Copyright Alliance Blog, *The Remix Culture*, <http://blog.copyrightalliance.org/2008/07/the-remix-culture/> (July 7, 2008) (arguing that fair use is a defense, and therefore not a right).

109. *Lenz*, 572 F. Supp. 2d at 1154-56.



infringement of copyright,<sup>110</sup> Judge Fogel based his reasoning on the purpose and scheme of the DMCA. He examined the takedown notice guidelines, which require the issuer of the takedown notice to have “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>111</sup> Because fair use is a lawful use of copyright, he concluded that the purpose of section 512(f)—preventing the abuse of takedown notices—would be circumvented if copyright owners were able to issue takedown notices without first considering fair use.<sup>112</sup>

Judge Fogel resolved the second issue in a more favorable way for Universal. He held that copyright owners would only be liable under section 512(f) for subjectively bad-faith takedown notices.<sup>113</sup> He also doubted that the plaintiff would be able to prove that Universal acted with subjective bad faith and indicated that the case could easily result in summary judgment for the defendant.<sup>114</sup>

One element of the case has a perplexing quality. Why would Universal issue a takedown notice for a heavily-distorted, twenty-second long song clip accompanied by video of a cute dancing baby? Surely no rational person could argue that the short clip would have a negative effect on the potential market for the underlying sound recording. A longer, high-fidelity clip of the song can be found for free on iTunes. Commentator Sherwin Siy suggests that Universal was using an automated system to issue takedown notices without any human review.<sup>115</sup> He argues that the title of the video, “Let’s Go Crazy #1,” was close enough to the title of the song, “Let’s Go Crazy,” that a text-searching program coupled with an audio analyzer could have matched them.<sup>116</sup>

There is no clear evidence to establish whether Universal used an automated system without human review. But if it did use such a system, would that use coupled with the knowledge that automated systems cannot accommodate fair use<sup>117</sup> be sufficient to establish subjective bad faith?

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110. *Id.* at 1154 n.4.

111. *Id.* at 1154 (quoting 17 U.S.C. § 512(c)(3)(A)(v)).

112. *Id.* at 1156.

113. *Id.*

114. *See id.*

115. Posting of Sherwin Siy to Public Knowledge Policy Blog, Of Dancing Babies and Overzealous Takedowns: When “Fair Use Is Hard!” Doesn’t Cut It, <http://www.publicknowledge.org/node/1718> (Aug. 21, 2008 18:16 PST).

116. *Id.*

117. *See infra* Section III.A.

This question points to perhaps the most troubling aspect of *Lenz* for copyright owners. Judge Fogel observed:

The DMCA already requires copyright owners to make an initial review of the potentially infringing material prior to sending a takedown notice; indeed, it would be impossible to meet any of the requirements of Section 512(c) without doing so. A consideration of the applicability of the fair use doctrine simply is part of that initial review.<sup>118</sup>

While noting that a “full *investigation*” is not required, Judge Fogel nonetheless required a good-faith fair-use evaluation to avoid section 512(f) liability.<sup>119</sup> If purely automated systems cannot accommodate fair-use doctrine, then it seems unlikely that a copyright owner could meet Judge Fogel’s requirement of a good-faith fair-use evaluation with a purely automated system.<sup>120</sup>

### 3. *Fair Use and Digital Rights Management Technology*

UGC copyright filters are not the first attempt to fuse technology and fair use. Digital Rights Management technology (DRM)<sup>121</sup> protects content from being unlawfully copied, but it usually fails to provide access to content for fair use. DRM generally protects copyrighted work by distributing the work in encrypted form and only providing the decryption key to certain authorized machines or player software. Unfortunately, DRM’s attempts to prevent unauthorized copying usually prevent fair-use copying, thus appropriating broader protection through technical means than allowed by copyright law.<sup>122</sup>

Despite being largely unable to accommodate fair use, DRM technology has been extensively implemented across all media. The film and TV

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118. *Lenz*, 572 F. Supp. 2d at 1155.

119. *Id.* at 1156.

120. *See* Rossi v. Motion Picture Ass’n of Am. Inc., 391 F.3d 1000, 1003-05 n.7 (9th Cir. 2004) (implying that automated takedown systems lacking a human review component may be evidence of bad-faith takedown).

121. Just as with user-generated content, *see supra* text accompanying note 2, the term “digital rights management” is controversial. Fair use proponents argue that “digital restrictions management” is more appropriate because the technology restricts rights, such as fair use, previously available. *See* Free Software Foundation, Digital Restrictions Management and Treacherous Computing, <http://www.fsf.org/campaigns/drm.html> (last visited Feb. 4, 2009).

122. *See* Jerome H. Reichman, Graeme B. Dinwoodie & Pamela Samuelson, *A Reverse Notice and Takedown Regime to Enable Public Interest Uses of Technically Protected Copyrighted Works*, 22 BERKELEY TECH. L.J. 981, 1019, 1022-24 (2007).

industry has incorporated DRM into DVDs,<sup>123</sup> Blu-ray discs,<sup>124</sup> and personal computers.<sup>125</sup> The music industry has explored DRM in CDs,<sup>126</sup> digital downloads,<sup>127</sup> and internet radio.<sup>128</sup> Even the publishing industry has implemented DRM in electronic books<sup>129</sup> and audiobooks.<sup>130</sup>

Nonetheless, the chilling forecasts made by opponents of DRM technology have not been fully realized because an unlocked version of the content can usually be located with relatively little hardship for tech-savvy users. DRM is easily circumvented primarily for two reasons. First, any lock can eventually be picked. The latest example of this is BD+, the second generation DRM technology used in high-definition Blu-ray discs. Industry analysts expected BD+ to withstand cracking attempts for at least 10 years.<sup>131</sup> Yet, less than a year and a half later an internet group called Doom9 cracked the BD+ standard and distributed source code enabling copying.<sup>132</sup> Second, every digital technology has an “analog hole,” which means that protected digital content must eventually be converted to an unprotected, human-readable analog form.<sup>133</sup> There are many different proposals to plug the analog hole, including High-bandwidth Digital Copy Protection (HDCP), which would encrypt video content all the way to the

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123. Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 309 (S.D.N.Y. 2000), *aff'd sub nom.*, Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001).

124. Erik Gruenwedel, *Blu-ray's Copy-Protection Advantage*, HOME MEDIA MAGAZINE, July 8-14, 2007, at 10.

125. *E.g.*, David Chartier, *Apple Brings HDCP to a New Aluminum MacBook Near You*, ARS TECHNICA, Nov. 17, 2008, <http://arstechnica.com/apple/news/2008/11/apple-brings-hdcp-to-a-new-aluminum-macbook-near-you.ars>.

126. Bruce Schneier, *Real Story of the Rogue Rootkit*, WIRED, Nov. 17, 2005, <http://www.wired.com/politics/security/commentary/securitymatters/2005/11/69601>.

127. Jim Wagner, *Apple Hit by Lawsuit*, INTERNETNEWS, Jan. 6, 2005, <http://www.internetnews.com/bus-news/article.php/3455431>.

128. Posting of William Patry to The Patry Copyright Blog, DRMs and Internet Use, <http://williampatry.blogspot.com/2007/07/drms-and-internet-radio.html> (July 17, 2007).

129. Rob Beschizza, *Killed By DRM: e-Books*, WIRED, Apr. 26, 2007 (Gadget Labs Blog), [http://blog.wired.com/gadgets/2007/04/killed\\_by\\_drm\\_e.html](http://blog.wired.com/gadgets/2007/04/killed_by_drm_e.html).

130. Derrick Story, *Why I Won't Be Adding Audible.com to My Xmas Card List*, O'REILLY, Jan. 3, 2003 (Mac DevCenter Blog), [http://www.oreillynet.com/mac/blog/2003/01/why\\_i\\_wont\\_be\\_adding\\_audibleco.html](http://www.oreillynet.com/mac/blog/2003/01/why_i_wont_be_adding_audibleco.html).

131. Gruenwedel, *supra* note 124, at 10.

132. Posting of “Oopho2ei” to Doom9's Forum, <http://forum.doom9.org/showthread.php?t=140571&page=15> (Oct. 28, 2008 19:28 PST).

133. 151 CONG. REC. E2,569-70 (2006) (statement of Rep. Sensenbrenner).

screen (the final analog hole).<sup>134</sup> It remains unclear whether any of these proposals will be successful.

Though unable to prevent determined piracy, DRM has had a significant impact on the casual user.<sup>135</sup> Because of DMCA penalties for circumventing technological protection measures,<sup>136</sup> technologies enabling DRM circumvention for fair uses remain largely unavailable through legitimate markets. Thus, DRM can prevent users from copying lawfully-obtained content to new devices.<sup>137</sup> Such restrictions have frustrated users to the point that many content owners are now beginning to offer DRM-free versions of their content as a marketing tool.<sup>138</sup>

Because user dissatisfaction led to DRM-free content (at least in some media), fair-use concerns may seem less critical than some commentators make them out to be. But fair-use concerns for UGC copyright filters are qualitatively different because copyright filters do not just attempt to directly restrict access to content, like DRM, but instead restrict access to distribution. Whereas DRM prevents access to a single piece of content that may possibly be found unencrypted elsewhere, copyright filters threaten to quash an entire medium without accommodations for fair use.

#### D. Video Identification Technology

Automatically matching uploaded content to a copyrighted work is a difficult—but important—task requiring the cooperation of content owners and UGC sites. For this technology to work, content owners must upload copyrighted works (or at least identifying data about those works) to a central database, and UGC sites must provide similar data about uploaded works to enable comparison. The primary comparison method is

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134. George Leopold, Rick Merritt & Junko Yoshida, *Plugging the Analog Hole*, EE TIMES, Sept. 20, 2002, <http://www.eetimes.com/issue/fp/OEG20020920S0062>; see also Thomas S. Fletcher, *American Library Ass'n v. FCC: Charting the Future of Content Protection for Digital Television*, 21 BERKELEY TECH. L. J. 613, 617-20 (2006) (surveying the possible solutions and analyzing the legal implications).

135. See *The Analog Hole: Can Congress Protect Copyright and Promote Innovation: Hearing Before the S. Comm. on the Judiciary*, 109th Cong. 8-9 (2006) (statement of Gary J. Shapiro, President and CEO, Consumer Electronics Association).

136. 17 U.S.C. § 1203 (2006).

137. See, e.g., Barry Collins, *Q&A: Microsoft Defends Return to DRM*, PC PRO, Jan. 22, 2009, <http://www.pcpro.co.uk/news/245859/qa-microsoft-defends-return-to-drm.html>.

138. See, e.g., Brad Stone, *Want to Copy iTunes Music? Go Ahead, Apple Says*, N.Y. TIMES, Jan. 7, 2009, at B1; Eliot Van Buskirk, *Random House Ditches Audiobook DRM after Watermark Experiment*, WIRED, Feb. 25, 2008 (Listening Post Blog), <http://blog.wired.com/music/2008/02/random-house-di.html>.

based on a video “fingerprint.”<sup>139</sup> Companies like Audible Magic and YouTube use this method to analyze “perceptual characteristics” of a media file in order to create a unique fingerprint.<sup>140</sup> This matching does not rely on digital watermarks, text, or metadata, but instead relies on the actual sounds and images in the video.<sup>141</sup> Creators claim their technologies match videos even if they are differently encoded, compressed, or distorted.<sup>142</sup> Preliminary tests indicate that existing identification technologies do not come close to identifying all matches.<sup>143</sup> However, later anecdotal experiences with YouTube’s Content ID system indicate that it matches many uses of copyrighted material, including arguable fair uses.<sup>144</sup>

To analyze the potential impact of this technology, it may be tempting to draw a parallel between video identification technology and other protection technologies, such as DRM. But such an analogy is inapt. Certainly, there will be some back and forth between the technology developers and copyright infringers just as hackers would race to break each new DRM technology. For example, copyright infringers might determine that they are able to circumvent the identification technology by deleting every fifteenth frame or adding a border to a video clip.<sup>145</sup> But there are two im-

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139. Aaron Weiss, *Content Filters*, 12 NETWORKER 24, 29-30 (Mar. 2008). Vobile markets its technology with a similar forensic analogy—VideoDNA™. Vobile, Technology Overview, <http://vobileinc.com/videodna.htm> (last visited Feb. 6, 2009).

140. Audible Magic, Content Identification Services, <http://www.audiblemagic.com/products-services/contentsvcs/> (last visited Feb. 6, 2009).

141. *Id.*

142. *Id.*

143. *See, e.g.*, STEINERT-THRELKELD, *supra* note 44, at 3, 7 (reporting that YouTube’s VideoID system works anywhere from three to eighty percent of the time); Liz Gannes, *Does Digital Fingerprinting Work?: An Investigative Report*, NewTeeVee, June 8, 2007, <http://newteevee.com/2007/06/08/does-digital-fingerprinting-work-an-investigative-report/> (describing how supposedly “blocked” videos could be uploaded to multiple video sharing websites); *see also* Chris Palmer & Seth Schoen, Staff Technologists, Electronic Frontier Foundation, *Debunking Audible Magic—Again* (July 20, 2004), [http://w2.eff.org/share/audible\\_magic.php?f=audible\\_magic2.html](http://w2.eff.org/share/audible_magic.php?f=audible_magic2.html) (explaining how encryption can defeat Audible Magic’s filtering technology on college campuses); Posting of “enigmax” to TorrentFreak, *ISP: It’s Impossible For Us to Stop Illegal*, <http://torrentfreak.com/isp-its-impossible-for-us-to-stop-illegal-p2p-080923/> (Sept. 23, 2008) (describing how a Belgian ISP could not implement Audible Magic’s filter to block infringing peer-to-peer traffic despite a court order requiring that it do so).

144. Posting of Fred von Lohmann to Electronic Frontier Foundation Deeplinks Blog, *YouTube’s January Fair Use Massacre*, <http://www.eff.org/deeplinks/2009/01/youtubes-january-fair-use-massacre> (Feb. 3, 2009).

145. The examples of possible workarounds are seemingly limitless. Potential solutions include removing every *n*th frame, slightly desynchronizing the audio and video,

portant distinctions. First, this technology is much more adaptable because its central location enables quick changes, whereas the distributed model of DRM (the distributor, content, and player all need to incorporate the protection) makes it difficult to fix without rolling out a second generation of technology.<sup>146</sup> Second, the engineering problem is much more difficult than DRM. Rather than designing a lock as with DRM, technologists now have the much more difficult task of designing a visual recognition system akin to the human eye. The problem is difficult enough before even contemplating questions of fair use.

## II. UGC PRINCIPLES

This Part will compare the UGC Principles to the DMCA status quo. It will then examine the fair-use accommodations in the UGC Principles and contrast them to the EFF Fair Use Principles. Finally, this Part will discuss the licensing provisions in the UGC Principles in the context of the larger battle for distribution.

The UGC Principles propose a new framework for policing infringing material that is very different from the DMCA notice-and-takedown framework. The UGC Principles recommend two principal changes. First, they would require UGC sites to adopt “Identification Technology,”<sup>147</sup> while the DMCA only requires UGC sites to accommodate “standard technical measures” used by copyright owners.<sup>148</sup> The Identification Technology is not a particular product, but rather any copyright filter that will compare uploaded content to a database of Reference Material supplied by copyright owners.<sup>149</sup> If the uploaded material matches the database, then the UGC site must block it unless the copyright owner has provided alternate directions (such as an agreement to license the content in exchange for ad revenue).<sup>150</sup> This requirement may represent an explicit shift in the policing burden from copyright owners to UGC sites because UGC sites are required to implement the Identification Technology (pre-

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intermittently distorting video or audio, shifting half the picture one pixel to the left, etc. Perhaps none of these ideas would work, but technologically savvy users would most likely be able to find several workarounds.

146. See Hal R. Varian, *Kaizen, That Continuous Improvement Strategy, Finds Its Ideal Environment*, N.Y. TIMES, Feb. 8, 2007, at C3.

147. UGC Principles, *supra* note 12, ¶ 3.

148. See 17 U.S.C. § 512(i)(1)(B) (2006).

149. UGC Principles, *supra* note 12, ¶ 3a.

150. *Id.* ¶ 3a, c.

sumably by designing it, at significant cost, or purchasing it from third-party vendors).<sup>151</sup>

The second major difference between the UGC Principles and the current notice-and-takedown framework is that the UGC Principles remove the user protections provided by the counter notification process in the DMCA. When UGC sites block uploads and periodically remove matching content from the site,<sup>152</sup> users will likely be unable to force uploads and repost content because they lack a right to post content to a particular site.<sup>153</sup> Under the current system, UGC sites get to play a neutral role where users can effectively “force” a repost of removed material, within ten to fourteen days, by issuing a counter notification under section 512(g)(3). If content is removed without a takedown notice,<sup>154</sup> users cannot threaten suit against copyright owners, for they played no part in the removal other than contributing reference material. Users cannot sue the UGC site because the sites can prevent suit with their terms-of-use agreements. Thus, users are left without legal recourse to upload fair use of content.

Indeed, the UGC Principles say very little about fair use. They only require that copyright owners consider fair use when making infringement claims,<sup>155</sup> and that “Identification Technology is implemented in a manner that effectively balances legitimate interests in (1) blocking infringing user-uploaded content, (2) allowing wholly original and authorized uploads, and (3) accommodating fair use.”<sup>156</sup> The UGC Principles provide no indication of how fair use would be weighted in this balancing test.

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151. It is unclear whether the DMCA would require UGC sites to adopt some kind of filtering technology. *See infra* Section III.C.

152. UGC Principles, *supra* note 12, ¶ 3h.

153. There is no statutory right to upload content and most terms of service state that content can be removed at any time for any reason. *See, e.g.,* YouTube, Terms of Service, <http://www.youtube.com/t/terms> (last visited Feb. 6, 2009) (“YouTube may remove such User Submissions and/or terminate a User’s access for uploading such material in violation of these Terms of Service at any time, without prior notice and at its sole discretion.”)

154. Note that the UGC Principles preserve the option for content owners to issue DMCA takedown notices, UGC Principles, *supra* note 12, ¶¶ 6-9, but it is not clear how frequently copyright owners will issue takedown notices if Identification Technology is effective. Indeed, if a copyright owner wants to avoid issuing DMCA takedown notices (due to possible liability for an automated takedown system), *see supra* Section I.C.2, upon identifying infringing material, the copyright owner could simply upload that infringing material as Reference Material for the Identification Technology.

155. UGC Principles, *supra* note 12, ¶ 6. The DMCA requires the same considerations. *Lenz v. Universal Music Corp.*, 572 F. Supp. 2d 1150, 1155 (N.D. Cal. 2008).

156. UGC Principles, *supra* note 12, ¶ 3d.

Concerned that the UGC Principles do not give adequate consideration to fair use, the Electronic Frontier Foundation proposed the Fair Use Principles.<sup>157</sup> These principles generally advocate giving a wide berth to creative uses and erring on the side of fair use. In particular, the EFF recommends that content only be blocked if both the audio and video tracks match the same work and ninety percent or more of the uploaded content comes from a single work.<sup>158</sup> The Fair Use Principles also recommend the preservation of the notice and takedown procedures of the DMCA when removing content in direct opposition to the UGC Principles' requirement that the Identification Technology automatically remove material.<sup>159</sup> Finally, the Fair Use Principles encourage dialogue between content owners and users with an informal "dolphin" hotline to resolve fair-use takedowns.<sup>160</sup> These recommendations address two of the three primary shortfalls in the UGC Principles for accommodating fair use: erroneous blocking and a lack of remedies to erroneous blocking.

The EFF Fair Use Principles, however, do not address the third fair-use shortfall: the possibility that the licensing option in the UGC Principles may cause "digital sharecropping." When an uploaded work is matched to copyrighted material, the copyright owner can choose to block or license the material.<sup>161</sup> But a technological match might actually be a fair use, causing the copyright owner to obtain licensing revenues on works which should not warrant it. This blurs the line between fair use and derivative works. Worse, authors who uploaded the fair use will be denied opportunities to tap into the advertising revenue generated by their original work.<sup>162</sup> Unlike previous accusations of digital sharecropping,<sup>163</sup> which lacked a coercive analog to actual sharecropping, the licensing option could coerce users by restricting access to the entire online video me-

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157. Fair Use Principles, *supra* note 16.

158. *Id.* Note that this standard has obvious flaws. A ten second clip of a two-hour movie would be blockable, but a video consisting of three two-hour movies appended together would not be blockable.

159. *Id.*

160. *Id.* It is called a dolphin hotline because fair uses are caught in an infringement sweep just like dolphins caught in a tuna net. *See id.*

161. UGC Principles, *supra* note 12, ¶ 3a, c.

162. *See, e.g.,* Brian Stelter, *YouTube Videos Pull in Real Money*, N.Y. TIMES, Dec. 11, 2008, at A1.

163. *See, e.g.,* Lawrence Lessig, *Lucasfilm's Phantom Menace*, WASH. POST, July 12, 2007, at A23; Posting of Nicholas Carr to Rough Type, *Sharecropping the Long Tail*, [http://www.roughtype.com/archives/2006/12/sharecropping\\_t.php](http://www.roughtype.com/archives/2006/12/sharecropping_t.php) (Dec. 19, 2006 08:55 PST).



dium.<sup>164</sup> Thus, independent creators may be left with two options: sign over monetization rights for their fair use or lose access to the most popular online distribution channels.

Perhaps it should not be surprising that the UGC Principles threaten to shut users out of revenue streams because the UGC Principles are just a single front in the larger battle for control of the online video medium. Content identification not only enables copyright owners to monetize their content, but it also helps them establish a foothold for their own online video sites (or the video sites of their choice).<sup>165</sup> Control of the site gives the copyright owner more control over the type and quantity of advertising.<sup>166</sup> Moreover, as a site's popularity grows, the copyright owner will gain a built-in audience for new content, enabling successful launches of new content franchises.<sup>167</sup> As media titans and internet upstarts race for control of this new medium, it is too easy for them to forget that users are creators too. After all, when multi-industry agreements such as the UGC Principles are forged, users do not even have a seat at the negotiating table.

### III. FILTERS CANNOT FULLY ACCOMMODATE FAIR USE, BUT THEY MAY ALTER FAIR-USE DOCTRINE

This Part will explain why any purely automated filter cannot fully accommodate fair use. It will then consider two consequences of the framework and Identification Technology proposed in the UGC Principles. First, the automatic blocking scheme eliminates important fair-use safeguards and will restrict casual, spontaneous fair use. Second, the licensing option and inter-industry nature of the proposals could have profound feedback effects on copyright law.

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164. Previous accusations involve particular sites, not entire mediums. These situations lacked coercion because users seeking to monetize their contributions could go to (or create) a different site within the same medium. If the UGC Principles become a legal requirement, *see infra* Section III.C, the entire medium will be restricted.

165. *See, e.g.,* Kate Kaye, *Viacom Flexes Digital Muscle in Uphill Video Control Battle*, CLICKZ, Feb. 13, 2007, <http://www.clickz.com/3624975>.

166. *See, e.g.,* Press Release, Brightcove, *Brightcove Announces Distribution Partnerships with Bebo, Meebo, RockYou, Slide, and Veoh* (Apr. 7, 2008), <http://www.brightcove.com/about-us/newsroom/press-releases/?ID=267>.

167. This is similar to the way that broadcast television stations would try to launch new shows by placing them immediately after successful hits. NBC did this in the 1990s with its hit shows, *Seinfeld* and *Friends*. Stephen Battaglio, *NBC Gets Nothing from Seinfeld for Christmas*, HOLLYWOOD REP., Dec. 29, 1997, at 1.

### A. Fair Use Computer?

The general question of whether technology can evaluate fair use is not new. Professors Burk and Cohen have already considered this issue in relation to DRM technology:

Building the range of possible uses and outcomes into computer code would require both a bewildering degree of complexity and an impossible level of prescience. There is currently no good algorithm that is capable of producing such an analysis. Relatedly, fair use is a dynamic, equitable doctrine designed to respond to changing conditions of use. Programmed fair use functionality, in contrast, is relatively static. At least for now, there is no feasible way to build rights management code that approximates both the individual results of judicial determinations and the overall dynamism of fair use jurisprudence.<sup>168</sup>

Incorporating fair use into Identification Technology presents three similar problems, albeit with a few new wrinkles. Technology is generally unable to handle the qualitative nature of fair-use doctrine, to incorporate information external to the work into a fair-use determination, or to consider the separable nature of digital works.

The first and largest problem involves the qualitative nature of fair-use doctrine. Computers excel at computation and quantitative analysis. Fair-use doctrine, however, strongly resists quantitative characterization. The first two fair-use factors, “purpose and character of the use” and “nature of the copyrighted work,”<sup>169</sup> are primarily qualitative. Even though the third fair-use factor, “the amount and substantiality of the portion used in relation to the copyrighted work as a whole,”<sup>170</sup> requires quantitative analysis, that factor is by no means determinative. Professor Beebe’s empirical fair-use study shows that when an entire work was copied, courts found fair use twenty-seven percent of the time.<sup>171</sup> Yet, when courts determined that the “heart” or “essence” of a work had been taken, they found fair use only five percent of the time.<sup>172</sup> There is no conceivable way that a computer

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168. Dan L. Burk & Julie E. Cohen, *Fair Use Infrastructure for Rights Management Systems*, 15 HARV. J.L. & TECH. 41, 56 (2001).

169. 17 U.S.C. § 107 (2006).

170. *Id.*

171. Beebe, *supra* note 96, at 616.

172. *Id.*

could reliably determine whether someone had copied the “heart” or “essence” of a work.<sup>173</sup> Such determinations can only be made by a human.

Second, fair-use determinations involve information external to the work itself. For example, in order to assess the fourth factor, “the effect of the use upon the potential market for or value of the copyrighted work,”<sup>174</sup> the technology must consider information about the market that is not contained in the uploaded work.<sup>175</sup> To program a computer to acquire and consider such information would require solving the hardest type of problem in artificial intelligence.<sup>176</sup> Current computer systems are not able to analyze these markets the way a human being could.<sup>177</sup>

Third, digital works are easily separable, and an analysis of only portions of a work may prevent proper fair-use analysis. Consider *Campbell v. Acuff-Rose*,<sup>178</sup> where 2 Live Crew took a very identifiable bass riff and some lyrics from “Oh, Pretty Woman,” a song by Roy Orbison.<sup>179</sup> The Supreme Court held the use was fair because 2 Live Crew parodied the song, but indicated that a less transformative use would likely not be fair.<sup>180</sup> If the Court had mechanically analyzed just the copied lyrics and music, it may well have reached a different determination. Similarly, erroneous determinations can easily occur with online video. For instance, commentary accompanying embedded videos can easily transform the videos into a portion of a “critical video essay,” such as movie review ac-

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173. See Burk & Cohen, *supra* note 168, at 56; Edward W. Felten, *A Skeptical View of DRM and Fair Use*, COMM’NS. OF THE ASS’N FOR COMPUTING MACH., Apr. 2003, at 56, 58.

174. 17 U.S.C. 107. A majority of courts used to consider this to be the most important factor, but since *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994), only about one quarter of cases continue to express this view. Beebe, *supra* note 96, at 616-17.

175. See Felten, *supra* note 173, at 58.

176. See *id.*

177. *Id.*

178. 510 U.S. 569 (1994).

179. *Id.* at 588.

180. The Supreme Court stated:

For the purposes of copyright law, the nub of the definitions, and the heart of any parodist’s claim to quote from existing material, is the use of some elements of a prior author’s composition to create a new one that, at least in part, comments on that author’s works. If, on the contrary, the commentary has no critical bearing on the substance or style of the original composition, which the alleged infringer merely uses to get attention or to avoid the drudgery in working up something fresh, the claim to fairness in borrowing from another’s work diminishes accordingly (if it does not vanish), and other factors, like the extent of its commerciality, loom larger.

*Id.* at 580 (citation omitted).

companying a film clip, which should be protected under fair use.<sup>181</sup> Text overlays or annotations commenting on an uploaded video may also make the underlying work fair use.<sup>182</sup>

Some may be tempted to blame fair-use doctrine, rather than technology, for erroneous determinations. After all, fair-use doctrine contains large gray areas, including cases where even experienced judges would reach conflicting decisions.<sup>183</sup> Yet, the inexactness of judicial fair-use determinations does not excuse the limitations of identification technology. Judges reach conflicting decisions due to differences in balancing the four fair-use factors, but technology reaches erroneous decisions due to its innate inability to consider certain factors, such as the nature of a use or the market effect.<sup>184</sup> When judges reach differing fair-use conclusions, the underlying fair-use question is usually a marginal one.<sup>185</sup> But when poor technology prevents a fair use of content, it is far more likely to be profoundly wrong.<sup>186</sup>

Nonetheless, if the technology cannot fully accommodate fair use, perhaps it can get pretty close. Indeed, Richard Cotton, General Counsel of NBC Universal (a supporter of the UGC Principles), claims that filters are getting very good at distinguishing fair uses.<sup>187</sup> None of these claims have been proven, and until they do, any claims that technology can properly evaluate fair use remain dubious.<sup>188</sup>

## B. Implications of an Automatic Blocking Process

Even though technological filters are currently incapable of accommodating fair-use doctrine, they could be immensely helpful in pointing out potentially infringing content. Yet, the UGC Principles harm fair use by

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181. See Posting of Karina Longworth to SpoutBlog, YouTube Cracking Down on Critical Video Essays, <http://blog.spout.com/2009/01/12/youtube-cracking-down-on-critical-video-essays/> (Jan. 12, 2009).

182. See YouTube, YouTube Video Annotations, [http://www.youtube.com/t/annotations\\_about](http://www.youtube.com/t/annotations_about) (last visited Feb. 6, 2009). Some may think such a problem is easily solved by allowing all uploads with overlays, but infringers could easily recognize and abuse such a tactic.

183. See Felten, *supra* note 173, at 58.

184. See *id.*

185. See, e.g., *Williams & Wilkins Co. v. United States*, 487 F.2d 1345 (Ct. Cl. 1973) (holding in a 4-3 decision that government employee copying of single articles from medical journals for research purposes was fair use), *aff'd by an equally divided court*, 420 U.S. 376 (1975).

186. See Siy, *supra* note 115.

187. *YouTube's 75 Percent Solution: Closing Down Illegal Videos* (ZDNet Webcast Nov. 2008), <http://whitepapers.zdnet.com/abstract.aspx?docid=393306&promo=100510>.

188. See Felten, *supra* note 115, at 58-59.

requiring an essentially automatic filtering process,<sup>189</sup> in which UGC sites block matching uploads before they are ever available on the site.<sup>190</sup> This Section will explain why an automated blocking scheme deprives users of two important fair-use safeguards—the DMCA counter-notification system and public concern over erroneous takedowns. It will also compare YouTube’s Content ID system to the process proposed by the UGC Principles. This Section will then discuss how the automated blocking scheme may not prevent determined infringers, but will deter casual, spontaneous fair uses (just like DRM) because navigating the scheme will likely require significant technical and legal knowledge.

The automated blocking scheme proposed in the UGC Principles could destroy the counter-notification process, an important statutory safeguard for free speech. The scheme bypasses the DMCA takedown and counter-notification balance by requiring the UGC site to block matching content, thus rendering takedown notices from copyright owners unnecessary. Under the DMCA, UGC sites do not need to arbitrate disputes and can avoid liability by removing content upon receipt of a takedown notice and replacing content upon receipt of a counter notification.<sup>191</sup> Counter notifications enable users to contest erroneous takedowns, and UGC sites have tended to restore content as a matter of course upon receipt of a counter notification.<sup>192</sup> UGC sites replace content upon receipt of counter notifications because there is very little economic incentive for them to ignore the counter notification. However, if the UGC Principles shift the costly bur-

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189. The Filtering Process allows UGC sites to utilize human review, at their own expense, in addition to Identification Technology when blocking content. UGC Principles, *supra* note 12, ¶ 3f. However, UGC sites have very little incentive to utilize expensive human review because they likely face no liability for blocking fair uses. UGC sites could, and probably do, preserve the right to block content for any reason in their terms of use. *See, e.g.*, YouTube, Terms of Service, <http://www.youtube.com/t/terms> (last visited Feb. 6, 2009); *see also* Letter from Zahavah Levine, *supra* note 30 (stating that YouTube will not engage in substantive review before taking down videos).

190. “UGC Service should use the Identification Technology to block such matching content before that content would otherwise be made available on its service (‘Filtering Process’).” UGC Principles, *supra* note 12, ¶ 3c. The only way the content will be uploaded is if the content owner has indicated a preference other than blocking such as licensing or leaving up the content. *Id.*

191. *See* 17 U.S.C. § 512(c)(1)(C), (g) (2006).

192. Unfortunately, restored content may then be subjected to future takedown notices. *See, e.g.*, Jacqui Cheng, *NFL Fumbles DMCA Takedown Battle, Could Face Sanctions*, ARS TECHNICA, Mar. 20, 2007, <http://arstechnica.com/business/news/2007/03/nfl-fumbles-dmca-takedown-battle-could-face-sanctions.ars>.

den of human review<sup>193</sup> to UGC sites,<sup>194</sup> then UGC sites will face financial pressure to ignore counter notifications. Such financial pressure would not be problematic if there was counterbalancing liability for ignoring counter notifications. Yet, the only possible liability would be a contractual one.<sup>195</sup> Thus, if UGC sites properly structure their terms of use, then they will face no liability for failing to restore content upon receipt of a counter notification. By turning UGC sites into fair-use arbitrators, the UGC Principles could effectively deprive users of their only legal mechanism to contest erroneous blocking.

By blocking content before it is publicly available, the UGC Principles also deprive users of an important nonlegal mechanism to contest erroneous takedowns—the wisdom of crowds. The public can recognize when content has been wrongly removed. Erroneously removed content can generate headlines, but erroneously blocked content is unlikely to generate sufficient public concern. Social bookmarking sites such as Digg and del.icio.us provide constant updates of the “hottest” links on the Internet. When such links are taken down after significant interest has been generated, users may backlash until the links are replaced.<sup>196</sup> If the links are never up there to begin with, the public would not know what it was missing.

One such example involves the Church of Scientology, which aggressively uses the DMCA to scour the Internet of disparaging information.<sup>197</sup> On January 14, 2008, a Scientology promotional video featuring Tom

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193. See STEINERT-THRELKELD, *supra* note 44, at 4 (“Viacom employs between one and two dozen people at any given time just to watch videos uploaded to YouTube for infringement.”).

194. See UGC Principles, *supra* note 12, ¶ 3f (proposing that UGC sites do human review in addition to filtering technology).

195. The DMCA exempts service providers from liability for good-faith takedowns except when it receives a counter notification. 17 U.S.C. § 512(g)(1) (2006). Upon receipt of a counter notification, service providers must repost the material within 10-14 days to preserve the liability exemption. 17 U.S.C. § 512(g)(2) (2006). Yet, service providers have no need for an exemption absent an underlying cause for liability.

196. See, e.g., Mike Nizza, *The Day Digg Users Revolted*, N.Y. TIMES, May 2, 2007 (The Lede Blog), <http://thelede.blogs.nytimes.com/2007/05/02/the-day-the-digg-users-revolted/?scp=1&sq=digg&st=cse>.

197. See, e.g., Cyndy Aleo-Carreira, *Bogus Anti-Scientology DMCA Notices Sent to YouTube Linked to Wikipedia User*, INDUSTRY STANDARD, Sept. 8, 2008, <http://www.thestandard.com/news/2008/09/08/youtube-slammed-dmcas-over-anti-scientology-content>; Posting of “CmdrTaco” to Slashdot, *Scientologists Force Comment Off Slashdot*, <http://slashdot.org/yro/01/03/16/1256226.shtml> (Mar. 16, 2001 08:05 PST); Truth About Scientology, *DMCA Complaint from Scientology*, <http://www.truthaboutscientology.com/dmca.html> (last visited Feb. 6, 2009).

Cruise, which the Church of Scientology presumably owned, was uploaded to YouTube.<sup>198</sup> The Church of Scientology promptly filed a takedown notice.<sup>199</sup> After a few hours, YouTube removed the video, but a different website, Gawker, retained a copy.<sup>200</sup> Gawker promptly received a DMCA takedown notice but kept the video up under a claim of fair use.<sup>201</sup> Due to the public outcry, the video was back up on YouTube within three days.<sup>202</sup> The video is quite arguably fair use, but even under the lenient EFF ninety percent standard<sup>203</sup> the video would never have been uploaded under an automatic blocking regime. In an automatic blocking regime, the public and other news organizations may never have known about the video. The very anonymity provided by UGC sites may have been critical to the initial leaking of the video because the Church of Scientology has a history of harassing its critics and the press.<sup>204</sup>

YouTube's new Content ID system fails to preserve the public concern fair-use safeguard that was critical to distributing the Scientology video, but it does preserve the counter-notification fair-use safeguard. Copyright owners can set rules for handling videos matched to their content through YouTube's Content ID system. When copyright owners choose to block videos, YouTube allows users to contest such blocking through a dispute process that parallels the DMCA counter-notification process.<sup>205</sup> In this way, YouTube preserves the neutral status it has under the DMCA. Yet

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198. Posting of Seth to Defamer, Secret Tom Cruise Scientology Indoctrination Video Finally Hits Web; Proves He Is Even Crazier Than We Ever Imagined, <http://defamer.com/344781/secret-tom-cruise-scientology-indoctrination-video-finally-hits-web-proves-he-is-even-crazier-than-we-ever-imagined> (Jan. 14, 2008 15:57 PST).

199. *Id.*

200. Nick Denton, *The Cruise Indoctrination Video Scientology Tried to Suppress*, GAWKER, Jan. 15, 2008, <http://gawker.com/5002269/the-cruise-indoctrination-video-scientology-tried-to-suppress>.

201. Nick Denton, *Church of Scientology Claims Copyright Infringement*, GAWKER, Jan. 16, 2008, <http://gawker.com/5002319/church-of-scientology-claims-copyright-infringement>.

202. The video was uploaded again on January 17, 2008. See Posting of "Aleteuk" to YouTube, Tom Cruise Scientology Video—(Original UNCUT), [http://www.youtube.com/watch?v=UFBZ\\_uAbxS0](http://www.youtube.com/watch?v=UFBZ_uAbxS0) (Jan. 17, 2008). Note that the repost could not have been the result of a counter notification, which would take ten days to replace content.

203. See *supra* Part II.

204. Posting of Eva Galperin to Electronic Frontier Foundation Deeplinks Blog, YouTube Anti-Scientology Takedowns: Good News, Bad News, <http://www.eff.org/deeplinks/2008/09/youtube-anti-scientology-takedowns-good-news-bad-n-0> (Sept. 25, 2008); see also Douglas Frantz, *An Ultra-Aggressive Use of Investigators and the Courts*, N.Y. TIMES, Mar. 9, 1997, at 131.

205. See YouTube, Copyright Claim Disputes: Video ID Disputes, <http://www.google.com/support/youtube/bin/answer.py?answer=83768> (last visited Mar. 16, 2009).

because the Content ID system enables automatic blocking of videos, the public does not have an opportunity to render its own fair use judgment. Instead, users must resort to uploading videos protesting automatic blocking.<sup>206</sup> Unfortunately, such protest videos lack the underlying work so the public cannot render an informed fair-use judgment.

Finally, the automatic blocking of content enabled by filters such as YouTube's Content ID system will deter casual or spontaneous fair uses just like DRM deterred casual circumvention of its protection measures. Motivated infringers, however, will still be able to circumvent the automated blocking scheme, just as motivated infringers could crack DRM. Those committed to fair use or infringement will still be able to upload significant portions of copyrighted content simply by understanding how the technological filter works.<sup>207</sup> Users who lack technological savvy will be denied distribution for their lawful content. Indeed, Rick Cotton, General Counsel of NBC Universal, admits that the filter is only intended to be a hurdle and that it will not be able to deter motivated infringers.<sup>208</sup>

There is, however, an important distinction between DRM and filtering when it comes to harming casual fair use. With DRM, each copyrighted work could be released in DRM or non-DRM format. Despite a concerted recording industry push for DRM, consumer backlash against the restrictions eventually led to a market for DRM-free music tracks. However, the feedback effects of the DMCA may mean that once the industry reaches a filtering tipping point, every UGC site must adopt copyright filters that automatically block content. Once that happens, there may be no way to turn back, absent legislative intervention.

### C. Feedback Effects

A feedback loop occurs when the output of a control system is fed back ("looped") as an input to the system. In audio systems, feedback loops produce a rather unpleasant sound. In law, feedback loops may lead to a consistent expansion or contraction of legal rights.<sup>209</sup> The UGC Principles could profoundly alter copyright law through two different feedback loops: (1) the fourth factor of the fair-use test, "the effect of a use upon the potential market for the value of the copyrighted work";<sup>210</sup> and (2) the multi-industry "standard technical measures" requirement of the

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206. See, e.g., Posting of Fred von Lohmann, *supra* note 144.

207. See *supra* text accompanying note 145.

208. *YouTube's 75 Percent Solution*, *supra* note 187.

209. E.g., James Gibson, *Risk Aversion and Rights Accretion in Intellectual Property Law*, 116 YALE L.J. 882, 887-906 (2007).

210. 17 U.S.C. § 107 (2006).



DMCA.<sup>211</sup> The UGC Principles, if widely adopted, could expand copyrights through licensing fair uses and contract safe harbors by establishing, at last, a set of “standard technical measures.”

Professor James Gibson explained how the decisions of risk-averse companies can have feedback effects on fair-use doctrine under the fourth prong of the fair-use test, market effect.<sup>212</sup> He used an example of a filmmaker editing a documentary about manufacturing job losses.<sup>213</sup> The filmmaker wanted to include a clip of a blue collar worker singing a verse from a Bruce Springsteen song about a mill closing.<sup>214</sup> Even if the use was likely fair, the ambiguity of copyright law coupled with the threat of injunctive relief would probably compel the filmmaker to license the song rather than risk litigation which could holdup the release of the movie.<sup>215</sup> As this culture of licensing pervaded the movie industry, a market popped up for licensing likely fair uses of content.<sup>216</sup> Once established, these markets now weigh against fair use on the fourth (and most important) prong of the fair-use test, market effect.<sup>217</sup> Thus, legal ambiguity created a market, which in turn generated more legal ambiguity, which in turn expanded the market, and so on. Or as Professor Gibson states, “Lather, rinse, repeat.”<sup>218</sup>

The UGC Principles might cause a similar accretion of copyrights. Under the UGC Principles, copyright owners can choose to block their content or license it (presumably in exchange for ad revenue).<sup>219</sup> Because it is an automated system, it will capture fair use as well as infringement.<sup>220</sup> Once a licensing market develops for fair uses of content, a feedback loop will again pop up based on the fourth fair-use factor. Imagine two different UGC sites, where site A considers twenty-second clips to be fair use and site B considers only ten-second clips to be fair use.<sup>221</sup> If a

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211. 17 U.S.C. § 512(i) (2006).

212. Gibson, *supra* note 209, at 887-906.

213. *Id.* at 887.

214. *Id.* at 887-88.

215. *See id.* at 887-95.

216. *Id.*

217. *Id.*

218. *Id.* at 884.

219. UGC Principles, *supra* note 12, ¶ 3f.

220. *See supra* Section III.A.

221. This example may be unfair because UGC sites could enable copyright owners to set their own fair use limits. For example, YouTube’s ContentID system allows copyright owners to independently set time limits before content is removed. Nonetheless, if copyright owners are able to license, according to their own rules, very small clips on one site, then UGC sites that do not allow them to license such small clips would still have a negative market effect on the copyright owner’s works.

fifteen second clip of a copyrighted work is used in a mashup on site A, the copyright owner could claim that the fifteen second clip is not fair use because the clip has an effect on the licensing market available on site B. Professor Gibson notes that custom, the usual barrier to such runaway feedback loops, is inapplicable in situations involving new markets recently created by new technology.<sup>222</sup>

Feedback loops created by the UGC Principles would bear another similarity to the movie-licensing feedback loop Professor Gibson discusses—the role of mutual backscratching amongst moneyed players in expanding licensing opportunities. Professor Gibson referenced big, risk-averse movie studios licensing each others' content as a means of expanding markets.<sup>223</sup> A similar type of backscratching could occur under the UGC Principles. UGC sites have a ready-to-go distribution network but they are hesitant to display ads on even likely fair uses because they may lose safe harbor under the direct financial benefit prong of 512(c). Similarly, content owners, nervous about the shifting models of media consumption, seem willing to tap any revenue streams possible.

A second feedback loop could arise (or already has arisen) around the DMCA “standard technical measures” requirement. To be eligible for any of the four DMCA safe harbors, a service provider must accommodate standard technical measures, which the DMCA defines as having four requirements. First, they must be “used by copyright owners to identify or protect copyrighted works.”<sup>224</sup> Second, the measures must be “developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process.”<sup>225</sup> Third, the measures must be “available to any person on reasonable and nondiscriminatory terms.”<sup>226</sup> Finally, the measures must not “impose substantial costs on service providers or substantial burdens on their systems or networks.”<sup>227</sup>

The automatic filtering scheme proposed in the UGC Principles arguably meets these four requirements to qualify as a standard technical measure. First, automatic filters are used by copyright owners to identify mate-

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222. See Gibson, *supra* note 209, at 896-97 (“When the defendant’s use has only recently become possible (e.g., because it uses a new technology), these standards may do little to clear the muddy waters of circularity; who can say whether an unforeseen use is ‘reasonable’ or is ‘likely to be developed’ by the copyright owner?”).

223. See Gibson, *supra* note 209, at 901.

224. 17 U.S.C. § 512(i)(2) (2006).

225. *Id.* § 512(i)(2)(A).

226. *Id.* § 512(i)(2)(B).

227. *Id.* § 512(i)(2)(C).

rial when the copyright owner submits reference material. The fact that the blocking is done by UGC sites instead of copyright owners may or may not matter to a court. Second, a broad consensus of copyright owners and service providers proposed the UGC Principles. All of the commercial broadcast networks and five of the six major movie studios support the UGC Principles.<sup>228</sup> Four major UGC sites also support the principles.<sup>229</sup> YouTube did not support the UGC Principles, but is largely abiding by their recommendations.<sup>230</sup> Thus, there is a fairly large consensus. Third, the technology is arguably being licensed on reasonable and nondiscriminatory terms. Audible Magic, one vendor of copyright filters, has licensed its technology to many UGC companies.<sup>231</sup> It also makes its filtering technology available for free to smaller sites.<sup>232</sup> Moreover, patent case law demonstrates that the “reasonable and nondiscriminatory” requirement can be elusive.<sup>233</sup> Finally, there are open factual and legal questions as to whether identification technology imposes a substantial cost on service providers or a substantial burden on their networks. The costs for the technology are likely to decrease as more vendors produce software, but eventual licensing costs remain uncertain. Moreover, no court has yet interpreted what qualifies as a “substantial cost” or a “substantial burden.” Thus, the automatic filtering scheme proposed in the UGC Principles could qualify as a standard technical measure.

Yet even if the automatic filtering scheme qualifies as a standard technical measure, some may argue that service providers are not required to *implement* every standard technical measure but instead are only required to *accommodate* and not interfere with standard technical measures used

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228. UGC Principles, *supra* note 12. NBC, FOX, CBS, and ABC (through Disney) represent the major broadcast television networks. Paramount (through Viacom), Sony, Universal, Disney, and Fox represent five of the big six film studios. Only Warner Bros. (owned by Time Warner Inc.) did not support the UGC principles.

229. Dailymotion, Soapbox (through Microsoft), Myspace, and Veoh all support the principles. UGC Principles, *supra* note 12.

230. See Google, YouTube Copyright Policy: Video Identification Tool, <http://www.google.com/support/youtube/bin/answer.py?answer=83766> (last visited Feb. 6, 2009); see also Heather Havenstein, *Viacom CEO Dismisses Google Antipiracy Plan*, PC WORLD, Oct. 20, 2007, [http://www.pcworld.com/article/138717/viacom\\_ceo\\_dismisses\\_google\\_antipiracy\\_plan.html](http://www.pcworld.com/article/138717/viacom_ceo_dismisses_google_antipiracy_plan.html).

231. Audible Magic, Content Identification Services Customers, <http://www.audiblemagic.com/clients-partners/contentsvcs.asp> (last visited Feb. 6, 2009).

232. Press Release, Audible Magic, Audible Magic Broadens Reach with Free Service for UGC Websites (Apr. 8, 2008), <http://www.audiblemagic.com/news/press-releases/pr-2008-04-08.asp>.

233. Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CALIF. L. REV. 1889, 1964-65 (2002).

by copyright owners.<sup>234</sup> But what exactly does it mean to “accommodate”? One interpretation of this requirement would be that service providers simply need to make their sites compatible with standard technical measures.<sup>235</sup> Another plausible interpretation would be that service providers must supply standard technical measures on their sites.<sup>236</sup> Section 512(m) lends support to the latter interpretation by limiting a service provider’s duty to “monitor[] its service or affirmatively seek[] facts indicating infringing activity, *except to the extent consistent with a standard technical measure.*”<sup>237</sup> If a court adopts the latter interpretation, a UGC site that did not provide for an automatic filtering system on its site could lose the safe harbor.

Thus, while the fit between the automatic filtering scheme in the UGC Principles and the standard technical measures requirement in the DMCA is not exact, it is close enough that the risk-averse nature of large players in the industry will create a feedback loop. The uncertainty surrounding the standard technical measures requirement will cause risk-averse players to do more than the DMCA requires. Unfortunately, the DMCA’s requirements are based on industry standards. In this way, relatively few industry players can make decisions that snowball into legal mandates for the whole industry.

The industry-wide adoption of Audible Magic’s filtering technology follows this model. MySpace, which is owned by News Corporation,<sup>238</sup> announced a pilot video-filtering program using Audible Magic’s technology in February 2007.<sup>239</sup> Less than two weeks later, news broke that YouTube licensed filtering technology from Audible Magic<sup>240</sup> (although the companies actually formed the agreement in January).<sup>241</sup> Over the next

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234. 17 U.S.C. § 512(i)(1) (2006).

235. THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 8 (4th ed. 2006) (defining accommodate as “[t]o make suitable; adapt”).

236. *Id.* (defining accommodate as “[t]o provide for; supply with”).

237. 17 U.S.C. § 512(m)(1) (emphasis added).

238. Press Release, News Corp., News Corporation to Acquire Intermix Media, Inc. (July 18, 2005), [http://www.newscorp.com/news/news\\_251.html](http://www.newscorp.com/news/news_251.html). News Corporation is a major media conglomerate. News Corporation, Investor Relations, <http://www.newscorp.com/investor/index.html> (last visited Feb. 6, 2009).

239. Press Release, Audible Magic, MySpace Implements Video Filtering System to Block Unauthorized Use of Copyrighted Content (Feb. 12, 2007), <http://www.audiblemagic.com/news/press-releases/pr-2007-02-12.asp>.

240. Elise Ackerman, *YouTube Expected to Filter Content: Sources Say Google Selected Audible’s Technology for Site*, SAN JOSE MERCURY NEWS, Feb. 23, 2007, at BU1.

241. Greenberg, *supra* note 69.

three months, other leading internet video sites, including GoFish,<sup>242</sup> Break.com,<sup>243</sup> Soapbox,<sup>244</sup> and Dailymotion,<sup>245</sup> licensed filtering technology from Audible Magic. By April 2008, Audible Magic announced that it would give a free version of its identification technology away to smaller websites.<sup>246</sup> In light of this industry shift, new UGC sites may be unable to gain safe harbor unless they adopt filtering technology on the same terms as their competitors.

While this example provides anecdotal support for the claim that UGC sites play “follow the leader” in their filtering decisions, it does not illustrate the legal mechanism motivating this behavior. Whereas the fair-use feedback effect occurred through a single statutory loop, the market-effect prong of the fair-use test, the filtering feedback effect could occur through multiple statutory loops. The standard technical measures requirement provides two such loops: broad consensus and substantial costs. While it is clear that the broad consensus prong depends on industry behavior, it is unclear whether a court will look to how much other industry players are paying to determine when costs are substantial. Yet, if every industry peer is licensing some technology, it seems unlikely a UGC site will be able to convince a court that the costs are substantial.

As Web 2.0 matures, these feedback loops threaten to shut out the interests of individual users. The DMCA is essentially a bargain between copyright owners and service providers and only secondarily considers the interests of individual users.<sup>247</sup> Not that long ago, the economic interests of service providers (gaining a large user base) led them to pursue the interests of individuals. Yet, as the interests of copyright owners and service providers begin to merge (creating a shared revenue stream through the

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242. Press Release, Audible Magic, GoFish Partners with Audible Magic (Mar. 7, 2007), <http://www.audiblemagic.com/news/press-releases/pr-2007-03-07.asp>.

243. Press Release, Audible Magic, Audible Magic Licenses Digital Filtering Technology to Break.com (Mar. 15, 2007), <http://www.audiblemagic.com/news/press-releases/pr-2007-03-15.asp>.

244. Press Release, Audible Magic, Microsoft Selects Audible Magic’s Digital Fingerprinting Technology as Filtering Solution for Soapbox Video Site (Mar. 26, 2007), <http://www.audiblemagic.com/news/press-releases/pr-2007-03-26.asp>.

245. Press Release, Audible Magic, Dailymotion Selects Audible Magic’s Fingerprinting Solution for Detecting Copyrighted Video (May 10, 2007), <http://www.audiblemagic.com/news/press-releases/pr-2007-05-10.asp>.

246. Press Release, *supra* note 232.

247. The only statutory right granted to individual users is the weak counter notification remedy which enables users to contest removals of material and “requires” service providers to repost material within ten to fourteen days. *See* 17 U.S.C. § 512(g) (2006). Even this remedy lacks teeth because service providers are not really “required” to repost the material due to the lack of an underlying cause of action. *See supra* Section III.B.

combination of the copyright owner's content and the service provider's user base and distribution system),<sup>248</sup> no player is left to pursue the interests of individual users. New players wishing to provide services that promote the interests of individual users may find the safe harbors closed due to the feedback effects of the actions of current players in the industry.

#### IV. A BETTER WAY

There is a better way. Copyright filters ought to be used to identify—but not automatically block—potentially infringing content. After potentially infringing content is identified, takedowns or blocking should only occur after human review of the content. Section IV.A explains how technological filters separate the copyright policing burden into two separate burdens: the burden to identify infringing content and the burden to evaluate fair use. Section IV.B then considers several obstacles to properly balancing fair use in a policing system.

##### A. Splitting the Burdens

Copyright filters are not the first technology claimed to be capable of emulating a uniquely human ability. In 1770, an inventor claimed to have created a chess automaton, which became known as “the Turk.”<sup>249</sup> The automaton comprised a wooden man seated at a cabinet, which could be opened and appeared to be filled with gears.<sup>250</sup> The inventor would not reveal how the automaton was able to play chess, but he showed audiences the machinery and performed strange motions near the cabinet that misled audiences.<sup>251</sup> In actuality, there was a player seated inside the cabinet, but more than eighty years passed before this secret of the Turk was formally revealed in an article in *The Chess Monthly*.<sup>252</sup> Before the article was published, many believed that the machine was capable of playing chess.<sup>253</sup>

We risk being duped in a similar manner if we believe claims that filtering technology is currently capable of handling fair use without demanding an explanation as to *how* it accommodates fair use. Given the limits of current technology, incorporating fair use seems to be an impossible task.<sup>254</sup> This does not mean it will never happen. Just as technology evolved several hundred years after the Turk to enable a machine's victory

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248. Ben Fritz, *MySpace Cozies up to the Biz*, DAILY VARIETY, Feb. 12, 2007, at 2.

249. TOM STANDAGE, THE TURK 22 (2002).

250. *Id.* at 22-24.

251. *See id.* at 64-65.

252. *Id.* at 194-95.

253. *See id.* at 219.

254. *See supra* Section III.A.

over the best chess player in the world,<sup>255</sup> technology may eventually be able to accommodate fair use. But until such accommodations are explained, we must assume that fair use and technological filters are incompatible.

Thus, the first—and most important—step to preserving fair use in a maturing Web 2.0 world is realizing that the burden to police infringing content is not one burden but two: the burden to identify potentially infringing content (which can be done by technology) and the burden to evaluate fair use of that content (which currently must be done through human review). If we do not separate these burdens then copyright filters may gain widespread appreciation as technological marvels capable of solving the copyright policing problem. Their use may expand to cover all internet traffic, not just content uploaded to UGC sites.<sup>256</sup> If technological filters gain such widespread acceptance under a belief that they are capable of accommodating fair use, then society risks much more than being duped into believing that technology is capable of a task it is not. Instead, society risks the existence of the remix culture<sup>257</sup> made possible by the widespread availability of consumer electronics. It would be sadly ironic if technology ended the culture it helped create.

## B. Obstacles to Splitting the Burden

The important goals of accommodating fair use and preventing copyright infringement are best balanced by using technology to identify potentially infringing material and human review to screen the material before it is taken down. However, there are several obstacles to implementing such a policing system. Some obstacles are economic: human review is expensive and perhaps too slow to identify infringing content before significant damage is done. Other obstacles are legal: several DMCA requirements may prevent UGC sites from implementing a two-stage review system. This section surveys those obstacles and identifies possible solutions.

One economic obstacle is the cost of human review. Content companies currently employ significant numbers of people solely to search the

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255. William Saletan, *Chess Bump*, SLATE, May 11, 2007, <http://www.slate.com/id/2166000/>.

256. Cf. *Free Press*, 23 F.C.C.R. 13028, 13058 ¶ 50 (2008) (stating that network providers may filter content violating copyright law, provided the filtering is application neutral).

257. For a discussion of the relationship between remix culture and technology, see Lawrence Lessig, *In Defense of Piracy*, WALL ST. J., Oct. 11, 2008, at W3.

Internet for infringing content.<sup>258</sup> Without filtering technology, this cost cannot be eliminated because users can re-upload infringing content after review ceases. Moreover, the cost is likely to increase as more UGC sites arise and copyright owners produce more content. Thus, structures that decrease the frequency of human review are necessary.

Filtering technology can decrease the cost of human review in several ways. First, the reviewers will no longer need to search for infringing content because the technology does it for them. Second, when filters are combined with the wisdom of crowds, they may be able to prevent human review of the vast majority of uploaded material because so much uploaded content is hardly ever viewed. So even if it is infringing, copyright owners suffer negligible harm. Thus, costs can be decreased by uploading content and only performing human review on potentially infringing content after the number of views passes a certain threshold. For YouTube, a threshold of approximately 2000 views could eliminate ninety percent of uploaded content.<sup>259</sup>

Even if filtering technology could be used to decrease the cost of human review, there are legal obstacles to implementing such a two-stage review process. Once filtering technology is available, the DMCA may require UGC sites to utilize it to block potentially infringing content before considering fair use with human review. This requirement could manifest itself in restricting the safe harbor under several prongs. First, under the apparent infringing activity prong, UGC sites could be deemed to have constructive knowledge whenever a copyright filter identifies material as potentially infringing.<sup>260</sup> Second, under the right-and-ability-to-control prong, the existence of filtering technology may make UGC sites practically capable of controlling infringing activity by providing them with a location mechanism.<sup>261</sup> Risk-averse UGC sites are likely to recognize these possibilities and automatically block potentially infringing content rather than litigate because eligibility for the entire safe harbor hangs in the balance. Unfortunately, the only way to prevent these statutory uncer-

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258. See, e.g., STEINERT-THRELKELD, *supra* note 44, at 4 (Viacom employs between one and two dozen people at any given time solely to search YouTube for infringing material).

259. Martin Halvey & Mark T. Keane, *Analysis of Online Video Search and Sharing*, in PROCEEDINGS OF THE EIGHTEENTH CONFERENCE ON HYPERTEXT AND HYPERMEDIA 217, 222 (2007), <http://portal.acm.org/citation.cfm?id=1286240>. However, it is not clear that it would eliminate ninety percent of infringing content. Infringing content is likely viewed more frequently than noninfringing content.

260. See *supra* Section I.B.1.

261. See *supra* Section I.B.3.



tainties from turning into legal obstacles is to clarify the legal requirements through litigation or legislation.

A final obstacle, the lack of incentives for the UGC site to invest in human review before blocking content, is economic with legal roots. UGC sites have stronger economic incentives to avoid uploading infringing content than they do to avoid blocking fair use. Not only do they risk losing the safe harbor by uploading infringing content, but they also risk losing licensing agreements and the battle for distribution rights by angering content partners.<sup>262</sup> However, they face little cost from blocking fair use other than some potential lost revenue, but even this cost is minimal because UGC sites are hesitant to monetize content without knowledge that it is not infringing.<sup>263</sup> Blocking fair use may anger users, but users tend to direct most of their anger at the copyright owner requesting blocking rather than the UGC site.<sup>264</sup> Thus, blocking infringing content is a higher priority for UGC sites, so they are unlikely to design policing systems that involve human review.

Copyright owners, on the other hand, have economic incentives to avoid both copyright infringement and blocking fair use. Copyright owners can lose revenue from infringement on UGC sites, but they may gain exposure and expand a fan base.<sup>265</sup> They also risk liability from blocking fair use if they design a system without human review or issue bad-faith takedown notices.<sup>266</sup> Thus, copyright owners have better incentives than UGC sites to design policing systems that contain proper fair-use safeguards.

The differing incentives faced by copyright owners and UGC sites point to several possible changes that could ensure proper fair-use safeguards (e.g., human review before blocking) in a copyright policing system. First, the content and UGC industries could agree to split the burdens: UGC sites could supply the identification technology while copyright owners supply the human review. Unfortunately, it seems that neither industry would agree to such a compromise because it forces both to inter-

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262. See, e.g., Fritz, *supra* note 248 (indicating that copyright filtering is key for UGC sites hoping to partner with Hollywood).

263. Greenberg, *supra* note 69 (“YouTube spokesman Ricardo Reyes counters that YouTube doesn’t place in-video advertising on any clips that could potentially violate copyright laws . . .”).

264. See, e.g., Greg Sandoval, *YouTube Users Caught in Warner Music Spat*, CNET NEWS, Jan. 27, 2009, [http://news.cnet.com/8301-1023\\_3-10150588-93.html](http://news.cnet.com/8301-1023_3-10150588-93.html).

265. See, e.g., Posting of “Q” to Rethinking Basketball, WNBA 2.0: Can Web 2.0 Tools Help the WNBA Build Its Fanbase?, <http://rethinkball.blogspot.com/2008/06/wnba-20-can-wnba-build-fan-base-with.html> (June 24, 2008).

266. See *supra* Section I.C.2.

nalize the large cost of considering fair use, whereas both industries are currently headed towards externalizing the costs of considering fair use.<sup>267</sup>

Alternatively, Congress could amend the DMCA to allow section 512(f) actions against UGC sites for bad-faith removals under the guise of protecting copyright. Such liability would make the UGC site's economic incentives similar to those of copyright owners who can face liability for issuing takedown notices without considering fair use. With balanced economic incentives, UGC sites would be more likely to implement a balanced copyright policing system by utilizing human review or working really hard on making its copyright filter fair-use friendly. While such a change may offer more fair-use protections, it seems unfair to allocate the entire policing responsibility to UGC sites.

## V. CONCLUSION

As industry powers shift the policing burden from copyright owners to UGC sites, the adoption of wholly automated filtering technology threatens to restrict fair use in the UGC medium. Such restrictions are regretful because they will decrease public opinion of filtering technology, which can be a powerful tool that decreases the costs of policing infringing activity. And if implemented in the proper way, copyright filters could help improve fair-use doctrine by providing constructive feedback.<sup>268</sup> Yet when identification technology is adopted without fair-use safeguards, public opinion will sour just as it did with DRM. Unfortunately, this will reinforce the discourse pitting individual users against copyright owners instead of encouraging constructive dialogue on balancing the important tasks of accommodating fair use and preventing copyright infringement.

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267. By shifting fair use considerations to technological filters, both industries are able to claim that the filters accommodate fair use even if the filters actually ensnare significant amounts of fair use.

268. See Beebe, *supra* note 96, at 596-97 (discussing the difference between syntactic feedback and cybernetic feedback).