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## Off with the Head? How Eliminating Search and Index Functionality Reduces Secondary Liability in Peer-to-Peer File-Sharing Cases

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OFF WITH THE HEAD? HOW ELIMINATING SEARCH AND  
INDEX FUNCTIONALITY REDUCES SECONDARY LIABILITY  
IN PEER-TO-PEER FILE-SHARING CASES

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ABSTRACT

*Peer-to-peer file-sharing service providers (P2Ps) allow Internet users to exchange electronic content, including music, movies, and other digital works. In Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., the Supreme Court unanimously disarmed such P2Ps by holding that it is unlawful to distribute programs that induce others to commit copyright infringement. Evolved technologies, such as dot-torrent, allow mass file exchanges between third-party users--an attempt to remove the P2P from the file-sharing equation. The court in Columbia Pictures Industries, Inc. v. Fung, however, imputed inducement from the search and index functionality of the P2P's software, as well as the P2P's encouraging behavior. The court in Arista Records LLC v. Lime Group LLC determined that LimeWire's entire business model was founded on inducement. In both Fung and Lime Group, the P2P's intent was deduced from its outward acts. In Perfect 10, Inc. v. RapidShare, the court noted that RapidShare did not provide search and indexing capability*

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<sup>\*</sup> Luke M. Rona, University of Washington School of Law, Class of 2012. While any defects in this note are completely my own, I would like to thank external reviewer Mary Rasenberger of Skadden, Arps, Slate, Meagher & Flom, LLP for her insightful views into the landscape of recent copyright decisions in this field (the article does not represent her personal views or the views of her firm), as well as student editor Jeff Doty for his thoughtful comments and support throughout the research and writing process.

*and actively policed its servers when notified of infringement. This technological-behavioral standard of inducement suggests that P2Ps cannot avoid secondary liability under the guise of removing themselves as the “head” of the file-sharing process.*

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## INTRODUCTION

As technology evolves, the music and movie industries confront new challenges to the enforcement of their copyrights. The collision of peer-to-peer (P2P) file-sharing technologies and the copyright industry was first highlighted by the downfall of the Napster music sharing platform.<sup>1</sup> Soon thereafter, the Supreme Court developed a standard for P2P secondary liability based on intent, as evidenced by outward acts or statements.<sup>2</sup> This standard did not target P2P

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<sup>1</sup> See *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1019-20 (9th Cir. 2001) (citing *Gershwin Publ’g Corp. v. Columbia Artists Mgmt., Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971) (finding Napster liable for contributory copyright infringement as “one who, with knowledge of the infringing activity, induces, causes, or materially contributes to the infringing conduct of another”)).

<sup>2</sup> See *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 919 (2005) (holding that anyone who distributes a “device with the object of promoting

technologies as pure technology, but considered how they were actually used and were intended to be used, as well as whether the P2P specifically promoted and encouraged infringement. Three recent district court file-sharing cases emphasize the importance of search and index functionality as a means of facilitating infringement in determining secondary liability for copyright infringement. These decisions evaluate search capability and indexing of popular copyrighted material under the *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster*<sup>3</sup> line of cases. In *Columbia Pictures Industries, Inc. v. Fung*,<sup>4</sup> the court termed the defendants' dot-torrent file technology "nothing more than old wine in a new bottle" that induced infringement on a massive scale.<sup>5</sup> In *Arista Records LLC v. Lime Group LLC*,<sup>6</sup> the court noted how defendant LimeWire fostered infringement through search and index capability and did not "implement any meaningful infringement-reduction strategies."<sup>7</sup>

The court in *Perfect 10, Inc. v. RapidShare A.G.*,<sup>8</sup> on the other hand, observed that RapidShare's online storage locations neither indexed uploaded files nor allowed users to search for files.<sup>9</sup> Moreover, the court concluded that the plaintiff had not provided evidence that RapidShare's system was designed, disseminated, or promoted expressly for purposes of facilitating infringement. Despite its directly housing the potentially infringing files, RapidShare was not secondarily liable for infringement.<sup>10</sup> From a technological standpoint, search and indexing functionality unites these three decisions. When a P2P has actively and intentionally encouraged its

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its use to infringe copyright, as shown by clear expression or other affirmative steps to foster infringement, is liable for the resulting acts of infringement by third parties").

<sup>3</sup> *Id.*

<sup>4</sup> *Columbia Pictures Indus., Inc. v. Fung*, 2009 WL 6355911 (C.D. Cal. Dec. 21, 2009).

<sup>5</sup> *Id.* at \*19.

<sup>6</sup> *Arista Records LLC v. Lime Group LLC*, 2011 WL 1742029 (S.D.N.Y. May 2, 2011).

<sup>7</sup> *Id.* at \*21.

<sup>8</sup> *Perfect 10, Inc. v. RapidShare A.G.*, No. 09-CV-2596 H (S.D. Cal. May 18, 2010), available at <http://www.docstoc.com/docs/39107375/Perfect-10-v-Rapidshare---order-denying-preliminary-injunction-0100518>.

<sup>9</sup> *Id.* at \*11.

<sup>10</sup> *Id.*

users to upload, find, and aggregate copyrighted material, courts have found secondary liability under a theory of inducement. *Fung* and *Lime Group* demonstrate that P2Ps cannot avoid secondary liability by distancing themselves from the infringing activity simply through the use of technology that decentralizes the infringing file transfers and even the indexing thereof.<sup>11</sup>

To date, courts have found inducement liability when specifically examining P2P services, rather than services that host content or other services that fall under the umbrella category of “service providers”<sup>12</sup> as defined in subsection 512(k)(1)(B) of the DMCA. Indeed, a number of other service providers have found shelter under the safe harbor provisions<sup>13</sup> of the DMCA.<sup>14</sup> Policy concerns, as well

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<sup>11</sup> See also *In re Aimster Copyright Litig.*, 334 F.3d 643, 650 (7th Cir. 2003) (noting that “willful blindness is knowledge, in copyright law (where indeed it may be enough that the defendant *should* have known of the direct infringement). . . .”) (citing *Casella v. Morris*, 820 F.2d 362, 365 (11th Cir. 1987); 2 Paul Goldstein, *Copyright* § 6.1 p. 6:6 (2d ed. 2003)). Evolved technologies cannot insulate a service provider from potential contributory liability where the service provider looks the other way.

<sup>12</sup> The term “service provider” under the Digital Millennium Copyright Act, 17 U.S.C. § 512(k)(1)(A), (B) (2006) is defined as:

(A) As used in subsection (a), the term “service provider” means an entity offering the transmission, routing, or providing of connections for digital online communications, between or among points specified by a user, of material of the user’s choosing, without modification to the content of the material as sent or received.

(B) As used in this section, other than subsection (a), the term “service provider” means a provider of online services or network access, or the operator of facilities therefor, and includes an entity described in subparagraph (A).

<sup>13</sup> 17 U.S.C. § 512 §§(a)-(d) (2006) establishes four categories of safe harbors to “provide protection from liability for: (1) transitory digital network communications; (2) system caching; (3) information residing on systems or networks at the direction of users; and (4) information location tools.” *Perfect 10, Inc. v. CCBill LLC*, 488 F.3d 1102, 1109 (9th Cir. 2007) (citing *Ellison v. Robertson*, 357 F.3d 1072, 1076 (9th Cir. 2004)). To qualify for any of the four safe harbors, a service provider must meet the requirements of the applicable subsection as well as those of § 512(i), including whether the service provider “has adopted and reasonably implemented . . . a policy that provides for the termination in appropriate circumstances of subscribers and account holders of the service provider’s system or network who are repeat infringers.” *CCBill*, 488 F.3d at 1109.

<sup>14</sup> Many recent cases have found in favor of defendant service providers under various safe harbor provisions. These cases do not, however, appear to involve

as which particular court was hearing the case, have likely contributed to the outcome of these cases.<sup>15</sup>

Following a survey of file-sharing technologies generally and an overview of inducement liability, this Article examines the role that search and index functionality and the P2P's conduct have played in *Fung*, *Lime Group*, and *RapidShare*. Combined, these cases suggest that a mutually reinforcing technological-behavioral standard has emerged for P2Ps, whereby search and indexing capacity, among other technologies, can be imputed as evidence of behavioral intent to promote infringement. Moreover, this standard appears to be different than that which courts apply to other service providers.<sup>16</sup>

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analogous peer-to-peer file-sharing service providers with search and indexing capabilities. Several cases focus on the notification provisions of the DMCA for removal of content and the reasonable implementation of a policy for terminating the accounts of repeat infringers under 17 U.S.C. § 512(i)(1)(a). *See CCBill*, 488 F.3d at 1109. Other courts have explicitly found safe harbor protection for defendant service providers, primarily under § 512(c). *See, e.g.,* *Wolk v. Kodak Imaging Network, Inc.*, 2011 U.S. Dist. LEXIS 27541, at \*5-8, \*24 (S.D.N.Y. Mar. 17, 2011) (finding that Photobucket had a reasonable policy for removing repeat infringers under § 512(i)(1)(a) and that Photobucket met the safe harbor provisions of § 512(c), resulting in a denial of plaintiff's request for a preliminary injunction); *Perfect 10, Inc. v. Google, Inc.*, 2010 U.S. Dist. LEXIS 75071, at \*22, \*26, \*29 (C.D. Cal. July 26, 2010) (finding that Google's treatment of Perfect 10's "Group A" and "Group C" infringement notices met the requirements of the safe harbor under § 512(d) for Google's Web and Image Search, warranting summary judgment, but finding that the adequacy Google's processing of Perfect 10's "Group B" notices was in dispute, precluding summary judgment); *Viacom Int'l, Inc. v. YouTube, Inc.*, 718 F. Supp. 2d 514, 526, 529 (S.D.N.Y. 2010) (granting summary judgment for YouTube, which qualified for protection under § 512(c)); *UMG Recordings, Inc. v. Veoh Networks, Inc.*, 665 F. Supp. 2d 1099, 1118 (C.D. Cal. 2009) (granting summary judgment for Veoh under § 512(c) safe harbor protection); *Io Group, Inc. v. Veoh Networks, Inc.*, 586 F. Supp. 2d 1132, 1145, 1155 (N.D. Cal. 2008) (granting summary judgment for Veoh under § 512(c) safe harbor protection).

<sup>15</sup> The *UMG v. Veoh* and *Viacom v. YouTube* cases are both on appeal in the Ninth and Second Circuits, respectively.

<sup>16</sup> *See YouTube*, 718 F. Supp. 2d at 525-26 (observing that "[*Grokster*] and its progeny . . . have little application here. *Grokster*, *Fung*, and *Lime Group* involved peer-to-peer file-sharing networks which are not covered by the safe harbor provisions of § 512(c) of the DMCA. The *Grokster* and *Lime Group* opinions do not even mention the DMCA. *Fung* was an admitted copyright thief whose DMCA defense under § 512(d) was denied on undisputed evidence of 'purposeful, culpable

## I. FILE-SHARING TECHNOLOGY ROADMAP: *NAPSTER*, *GROKSTER* & TORRENT

Peer-to-peer networks are decentralized systems that allow third-party users to access files stored on other users' systems. These systems do not store files in a central location.<sup>17</sup> Napster, one of the original file-sharing programs, provided a "search index" that served as [its] collective directory for the files available on the [Napster] server at any given time."<sup>18</sup> Individual users could access files from other Napster users, many of which contained pirated material subject to copyright. The *Napster* court noted how the software allowed third-party users to locate copyrighted .mp3 files through this search function and a "hotlist" function.<sup>19</sup> Similar to other peer-to-peer networks, "the actual files shared never passed through or resided on the Napster servers."<sup>20</sup> The files located in third-party "libraries," however, were indexed by the Napster software.<sup>21</sup>

Post-Napster, technology evolved so that third-party users could search for files but the service provider did not affirmatively organize the files: "[u]nlike Napster, there was no central indexing of available files. Instead, an individual scanning through the Grokster software would enter a search term and the software itself, through use of a supernode—or indexing computer—would contact other computers seeking matching files."<sup>22</sup> The supernode computer would send the relevant information for the queried file, such as an IP address where

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expression and conduct' aimed at promoting infringing uses of the [W]eb sites" (citing *Columbia Pictures Indus., Inc. v. Fung*, 2009 WL 6355911, at \*56 (C.D. Cal. Dec. 21, 2009)).

<sup>17</sup> *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 920 (2005).

<sup>18</sup> *A&M Records, Inc. v. Napster, Inc.* 239 F.3d 1004, 1011-13 (9th Cir. 2001).

<sup>19</sup> *Id.* at 1012. The "hotlist" feature allowed Napster users to track other users' names from whom they had previously downloaded files. When those "hotlisted" users logged onto the Napster system, their file libraries were immediately available for viewing. Again, the .mp3 files themselves were not stored on the Napster system.

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> *Columbia Pictures Indus., Inc. v. Fung*, 2009 WL 6355911, at \*2 (C.D. Cal. Dec. 21, 2009) (citing *Grokster*, 545 U.S. at 921).

the file was located, back to the requesting user.<sup>23</sup> The process distanced the P2P from third-party infringement, as the “searching user would then download directly from the relevant computer” and the transfer would be complete between the two third-party users.<sup>24</sup> A further variant of this technology involves no supernodes, but “[i]nstead, the peer computers communicate directly with each other through the network and requests go directly to other connected users.”<sup>25</sup>

The goal of these new technologies is clear: make the P2P less of an “engine” and more of a “station,” thereby shifting responsibility for infringement to third-parties who travel through the station, instead of the P2P leading them to infringement. The Bit-Torrent<sup>26</sup> technology further distanced the P2P from the peer-to-peer file sharing process by employing Internet portals that accessed dot-torrent files, not the actual files for the copyrighted materials. Bit-Torrent is similar to prior peer-to-peer file sharing technologies in that the files reside on third-party user computers,<sup>27</sup> but it differs in that the user first accesses a dot-torrent file—generally through a third-party website—and then can use those dot-torrent files to download content from multiple other users’ computers.<sup>28</sup> Torrent networks have a unique larger-scale download process that involves downloading small bits of files from multiple users to assemble a complete file.<sup>29</sup> Unlike previous peer-to-peer networks, the torrent process “enables users to identify, locate, and download a copy of the actual content item referenced by the dot-torrent file.”<sup>30</sup> Though the

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<sup>23</sup> *Id.*

<sup>24</sup> *Id.*

<sup>25</sup> *Id.* (citing *Grokster*, 545 U.S. at 922).

<sup>26</sup> The files are “referred to as ‘dot-torrent’ files in reference to their file extension name. The dot-torrent files do not contain the actual content item searched for; rather, the dot-torrent file contains the data used by the Bit-Torrent client to retrieve the content through a peer-to-peer transfer.” *Columbia Pictures Indus., Inc. v. Fung*, 2009 WL 6355911, at \*2 (C.D. Cal. Dec. 21, 2009). The *Fung* case also uses the term “bit” to refer to the torrent files or the software client that manages the uploading and downloading of the torrent files.

<sup>27</sup> *Id.* at \*1

<sup>28</sup> *Id.* at \*1-2.

<sup>29</sup> *Id.* at \*2.

<sup>30</sup> *Id.* at \*3.



dot-torrent files are accessible through [third-party] websites, a P2P necessarily still creates and distributes the software that facilitates the file transfer process.<sup>31</sup>

Standing alone, a torrent client application does not possess the ability to search other computers for files, because users must “visit a torrent site for the purpose of locating dot-torrent files containing the content that they wish to download.”<sup>32</sup> Because third-party user actions direct searches through third-party Web sites, the torrent technology was conceived as “headless,”<sup>33</sup> in an effort by the software client providers to avoid direct involvement and liability in the file-sharing equation. But court decisions have continued to frustrate these efforts where the P2P’s activities constitute unlawful inducement of third parties to commit copyright infringement.

## II. INDUCEMENT LIABILITY FOR FILE-SHARING COPYRIGHT INFRINGEMENT

Contributory copyright infringement is a form of secondary liability<sup>34</sup> with “roots in the tort-law concepts of enterprise liability and imputed intent.”<sup>35</sup> Napster was liable to the extent that it had reasonable knowledge that infringing files were available on its system for download and, inter alia, failed to prevent the “viral distribution” of those copyrighted works.<sup>36</sup> A party contributorily

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<sup>31</sup> *Id.*

<sup>32</sup> *Id.*

<sup>33</sup> By using the term “headless,” I do not mean strictly the P2P’s “head” as the point from which a transmission emanates. Viewed more broadly, “head” refers to the P2P’s behavior and intent, including the relationship between the technology the P2P creates and any intent that can be imputed to the P2P from the creation of that technology. A theoretically “headless” P2P could not be secondarily liable for inducement under *Grokster* because there could be no intent.

<sup>34</sup> While not formally addressed in this Article, the umbrella of secondary liability also includes vicarious liability, an extended form of “master-servant” liability where the defendant has the right and ability to supervise the infringing activities and also has a direct financial interest in them. Nimmer observes how vicarious liability originated “in the context of landlords of premises where infringement takes place.” See 3 MELVILLE B. NIMMER & DAVID NIMMER, *NIMMER ON COPYRIGHT* § 12.04[A][2] (2010).

<sup>35</sup> *Perfect 10 v. Visa Int’l Serv. Ass’n*, 494 F.3d 788, 794-95 (9th Cir. 2007).

<sup>36</sup> *A&M Records, Inc. v. Napster, Inc.* 239 F.3d 1004, 1027 (9th Cir. 2001).

infringes when he (1) has knowledge of a third-party's infringement and (2) induces, causes, or materially contributes to the infringing conduct."<sup>37</sup> It is consequently unlawful to knowingly "engage[] in personal conduct that encourages or assists the infringement."<sup>38</sup> As is true for any theory of secondary liability, the plaintiff must show direct infringement of copyrights by third parties.<sup>39</sup>

The Supreme Court in *Grokster* articulated a standard for contributory liability for services that provide a technology or service that enables infringement, referred to as "inducement" liability.<sup>40</sup> Under *Grokster*, inducement to infringe looks at clear evidence of encouragement to infringe by the distributor of the product or service.<sup>41</sup> *Grokster* sent "inducing messages"<sup>42</sup> to its users, such as distributing an "electronic newsletter containing links to articles promoting its software's ability to access popular copyrighted music," and expressly advertised to former Napster users.<sup>43</sup> These messages were "evidence of the distributors' words and deeds going beyond distribution as such[,] show[ing] a purpose to cause and profit from third-party acts of copyright infringement."<sup>44</sup> Inducement liability cannot be premised on the "mere knowledge of infringing potential or actual infringing. ... The inducement rule, instead, premises liability

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*Napster* was decided on a "site and facilities" theory of contributory liability: Napster encouraged and materially contributed to direct infringement by providing the site and facilities for infringement, and indexing was one of the facilities it provided, indeed the primary one. *Id.* at 1022.

<sup>37</sup> *Id.* at 1019.

<sup>38</sup> *Id.*

<sup>39</sup> *Id.* at 1004, 1013 n. 2.

<sup>40</sup> *Grokster*, 545 U.S. at 930. The courts have created several theories of contributory copyright infringement, including the provision of a staple article of commerce that has no substantial non-infringing use per the Supreme Court's decision in *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984) (holding that the manufacturer of the Betamax video tape recorder was not a contributory infringer). See 3 MELVILLE B. NIMMER & DAVID NIMMER, *NIMMER ON COPYRIGHT* § 12.04[A][3] (2010). While courts often mislabel or blur the distinctions between vicarious and contributory infringement, or different strands of liability within contributory infringement, this Article focuses on the inducement prong of contributory liability.

<sup>41</sup> *Grokster*, 545 U.S. at 936.

<sup>42</sup> *Id.* at 937.

<sup>43</sup> *Id.* at 925-26.

<sup>44</sup> *Id.* at 941.

on purposeful, culpable expression and conduct. . . .”<sup>45</sup> A P2P who distributes a device or software with the intent of promoting its use to foster infringement (and does so promote its use) may be liable under a theory of inducement.<sup>46</sup>

### III. SEARCH AND INDEXING FUNCTIONALITY

P2P software distributors have been unable to eliminate inducement liability by further developing P2P filing-sharing technology to mask any direct involvement of the P2P provider in the infringing activities. Instead, courts continue to examine the P2P’s intention and the impact of the technology, rather than just the functional capabilities of the technology itself.<sup>47</sup> Providing search and indexing functionality, however, does not doom a P2P if it can meet the requirements for a DMCA safe harbor, beginning with the basic premise that the P2P is not aware of the infringement.<sup>48</sup>

Viewed together, the following three cases show that offering search and indexing capabilities exposes file-sharing services to liability when coupled with behavior indicating an intent to promote infringement.

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<sup>45</sup> *Id.* at 936-37.

<sup>46</sup> *See id.*

<sup>47</sup> *See* Columbia Pictures v. Fung, 2009 WL 6355911, at \*19 (C.D. Cal. Dec. 21, 2009).

<sup>48</sup> One of the safe harbors for service providers enacted with the Digital Millennium Copyright Act, 17 U.S.C. § 512(d), provides a safe harbor affirmative defense to contributory liability resulting from third-party copyright infringement for “information location tools.” To immunize itself from secondary liability under the safe harbor, a service provider must satisfy three separate prongs (in addition to the general requirements under subsection 512(i)). The party “[1] does not know . . . or have reason to know . . . of infringing activities, or removes infringing materials upon receipt of such knowledge; and [2] does not profit from infringement where it has the power to control the infringement . . . ; and [3] upon receiving notice . . . from the copyright holder, removes the infringing material . . . .” *Fung*, 2009 WL 6355911, at \*16. This safe harbor for “information location tools” applies to “copyright infringement resulting from the use of information location tools by service providers, which include directories, indexes, references, pointers and hypertext links.” *See* Perfect 10, Inc. v. Cybernet Ventures, Inc., 213 F. Supp. 2d 1146, 1175 (C.D. Cal. 2002).

### A. Columbia Pictures v. Fung: *Intent to Induce*

Defendant Gary Fung operated several websites<sup>49</sup> that allowed users to download copyrighted material through a torrent structure.<sup>50</sup> Users accessed movies, television shows, sound recordings, software programs, video games, and other content for free by connecting with other users offering these files.<sup>51</sup> The Fung sites contained several features that organized the content for third-party users, including “Top Searches,” “Top 20 Movies,” and “Top 20 Most Downloaded Torrents.”<sup>52</sup> Every file in the “Top Searches” category was copyrighted, and Plaintiffs’ expert further maintained that 95 percent of total downloads involved copyrighted material.<sup>53</sup> Furthermore, Fung’s sites contained headers with the term “warez,”<sup>54</sup> and actively promoted copyright infringement through slogans and commentary in discussion forums on his websites.<sup>55</sup>

Through the lens of *Grokster* inducement liability, the court characterized Fung’s aggregation of infringing content into “browseable categories” containing “further information about the works contained in the [torrent] files” as “disseminated messages designed to stimulate inducement.”<sup>56</sup> Fung maintained that his system was “headless,” entirely driven by third-party user activity.<sup>57</sup> The court disagreed, noting that Fung actively created the framework for

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<sup>49</sup> The Fung sites included: [www.isohunt.com](http://www.isohunt.com), [www.torrentbox.com](http://www.torrentbox.com), [www.podtropolis.com](http://www.podtropolis.com), and [www.ed2k-it.com](http://www.ed2k-it.com).

<sup>50</sup> The court explained that “Bit-Torrent technology relies on a variety of mechanisms in order to accomplish the ultimate downloading of a given file, including: (1) a software application that users download, which is commonly referred to as a ‘client application’; (2) websites, also known as ‘torrent sites,’ which allow users to select ‘dot-torrent’ files that they wish to download; and (3) servers, also known as ‘trackers,’ that manage the download process. The client applications and trackers work together through the use of ‘Bit-Torrent protocol’ which standardizes the client-client and client-tracker communications.” *Columbia Pictures v. Fung*, 2009 WL 6355911, at \*2 (C.D. Cal. Dec. 21, 2009).

<sup>51</sup> *Id.*

<sup>52</sup> *Id.*

<sup>53</sup> *Id.*

<sup>54</sup> The term “warez” refers to pirated content.

<sup>55</sup> *Id.* at \*5, \*12.

<sup>56</sup> *Id.* at \*11.

<sup>57</sup> *Id.*

the infringing activity by designing the websites, including “a feature that collects users’ most commonly searched-for titles[,] . . . and never remov[ing] these lists.”<sup>58</sup> Fung’s design was probative of his “knowledge of ongoing infringement and failure to prevent such infringement.”<sup>59</sup> Posting messages in discussion forums that provided tips on how to search for certain copyrighted material, allowing “moderators” or “admins” to review the forums and assist third-party user queries, and commenting on third-party user aggregation lists of copyrighted works was indicative of an active role in encouraging infringement.<sup>60</sup>

The court also noted that Fung employed “spider” programs (tracking software) that found and retrieved copies of dot-torrent files.<sup>61</sup> Together, these factors—indexing material, allowing users to search, advertising content, commenting on content, and offering a “spider” to seek out files—meant Fung had merely “improved the functioning of his websites with respect to infringing uses.”<sup>62</sup>

The *Fung* court construed search and index functionality, along with other contextual behavior mentioned above, as the inducing “message” that encouraged third-party infringement of copyrights. As such, Fung’s network was not a headless “proprietary” network that merely allowed users to download files from each other’s computers, but instead improved upon previous technologies to allow faster download of infringing materials.<sup>63</sup> The court weighed the provision of search and index capacity as strong evidence of inducement, a factor which, along with other behavioral evidence, also had a significant impact on the courts’ determination of inducement liability in the *Lime Group* and *RapidShare* cases.

#### B. Arista Records v. Lime Group: *Intent to Induce*

LimeWire (“LW”) is a peer-to-peer file-sharing program that

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<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

<sup>60</sup> *Id.* at \*12-13.

<sup>61</sup> *Id.* at \*14.

<sup>62</sup> *Id.*

<sup>63</sup> *Id.* at \*19.

allows users to download and share digital files.<sup>64</sup> Unlike the torrent technology in *Fung*, the LW software locates files on a single network where users can search for files on other computers.<sup>65</sup> Once a file is located, the LW client transfers a digital copy from the source computer to the recipient's computer.<sup>66</sup> Several record companies sued LW for copyright infringement, arguing that LW users employed the software to obtain and share unauthorized copies of the companies' sound recordings, and that LW facilitated this infringement by distributing and maintaining LW software.<sup>67</sup>

In addition to the "inducing message" framework for secondary liability, *Grokster* also supplied other behavioral measures of proving intent to induce infringement.<sup>68</sup> The *Lime Group* court divided these factors into five categories: (1) awareness of substantial infringement by users; (2) efforts to attract infringing users; (3) efforts to assist users to commit infringement; (4) dependence on infringing use for the success of its business; and (5) failure to mitigate infringing activities.<sup>69</sup> Taken together, the court found "overwhelming evidence" that LW fostered infringement.<sup>70</sup>

First, LW was aware of substantial infringement by LW users through LW's effort to convert LW users who were sharing unauthorized digital music recordings into customers of LW's online music store.<sup>71</sup> LW's "Conversion Plan" acknowledged that "(1) 25% of LW's users were 'hardcore pirates'; (2) 25% of users were 'morally persuadable'; (3) 20% of users were legally aware; and (4) 30% of users were 'samplers and convenience users.'"<sup>72</sup> The Conversion Plan was supposed to introduce features that would block infringing uses and transition users to the online store, but those

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<sup>64</sup> *Arista Records LLC v. Lime Group LLC*, 2011 WL 1742029, at \*2 (S.D.N.Y. May 2, 2011).

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*

<sup>68</sup> *Id.* at \*15 (citing *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 938-39 (2005)).

<sup>69</sup> *Arista Records*, 2011 WL 1742029 at \*16.

<sup>70</sup> *Id.*

<sup>71</sup> *Id.* at \*17.

<sup>72</sup> *Id.*

features were never implemented.<sup>73</sup> Numerous emails from LW users, as well as a collection of articles kept by LW employees entitled “Knowledge of Infringement” clearly established LW’s knowledge.<sup>74</sup>

Second, LW made an effort to attract infringing users who formerly found files using the Napster software.<sup>75</sup> LW contemplated using college campus advertising to leverage Napster’s ban and strategically placed LW website advertisements under certain Google search queries, including “napster mp3” and “napster download,” among others.<sup>76</sup>

Third, LW optimized the software client’s features to enable third-party copyright infringement. Similar to Fung, LW created search functionality that allowed users to browse by genre, including “Classic Rock” and “Top 40.”<sup>77</sup> LW employees tested the search functionality of the LW client using Sinead O’Connor’s copyrighted song “Nothing Compares 2 U,” and actively assisted users who requested technical assistance with the LW client’s functionality.<sup>78</sup>

Fourth, LW depended on infringing use for commercial success.<sup>79</sup> LW’s software client was widely available online for free download, and LW depended on the selling of advertising, thereby tying revenue to the size of its user base.<sup>80</sup> The free LW client also served as a platform to introduce users to LW’s other offerings, including LW Pro, a premium service, and the LW online store. The court concluded that LW’s “commercial success . . . is derived largely from the high-volume use of LW, most of which is infringing.”<sup>81</sup>

Finally, LW failed to mitigate the infringing activities.<sup>82</sup> Numerous available technological barriers and design choices to

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<sup>73</sup> *Id.* at \*17, \*20.

<sup>74</sup> *Id.* at \*17.

<sup>75</sup> *Id.*

<sup>76</sup> *Id.* at \*17-18.

<sup>77</sup> *Id.* at \*18.

<sup>78</sup> *Id.*

<sup>79</sup> Plaintiff’s expert conducted a random sample of 1,800 files requested for download for free distribution and found that 93% were protected by copyright or highly likely to be protected. *Id.* at \*3.

<sup>80</sup> *Id.* at \*19.

<sup>81</sup> *Id.*

<sup>82</sup> *Id.* at \*20.

reduce infringement could have been implemented, including: hash-based filtering,<sup>83</sup> acoustic fingerprinting,<sup>84</sup> and user education.<sup>85</sup>

Both the *Fung and Lime Group* courts looked at the technology and the behavior of the P2P to find evidence of intent to promote infringement. The *Lime Group* court also examined commercial factors. Both *Fung* and *LW* offered search and index functionality to their users, and both provided direct assistance and support. *Grokster* very clearly provides that to be liable for inducement, a P2P must have an intent to induce infringement, as well as a technology used to infringe. This contrasts with the decision in *Sony*,<sup>86</sup> where there was no evidence of an actual intent to induce and the Court held that such an intent could not be induced from the technology itself unless there were no substantial non-infringing uses. *Grokster* established that the provider of a technology used to infringe can be liable even if that technology has substantial non-infringing uses (does not meet the *Sony* standard) where evidence of intent to induce infringement can actually be shown. In *Grokster*, *Fung*, and *Lime Group*, the courts looked to the totality of the evidence to find an intent to induce.

### C. Perfect 10 v. RapidShare: *Technological-Behavioral Standard*

RapidShare is a file-hosting program that allows users to store files on its servers and to “share” the URLs for files so stored, rather than a P2P service.<sup>87</sup> RapidShare’s servers “automatically generate a

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<sup>83</sup> Hash-based filtering “utilizes a digital file’s ‘hash,’ which is a numeric representation of a file based on a complex algorithm, to identify and block infringing files.” *Id.* at \*30 n.28.

<sup>84</sup> Acoustic fingerprinting “can monitor the uploading or downloading of digital files. . . . If the acoustic fingerprint of a particular file matches a copyright-protected files present in the existing database, the transfer of that file may be blocked.” *Id.* at \*30 n.30.

<sup>85</sup> *Id.* at \*20.

<sup>86</sup> See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 439 (1984) (“Sony certainly does not ‘intentionally [induce]’ its customers to make infringing uses of respondents’ copyrights, nor does it supply its products to identified individuals known by it to be engaging in continuing infringement of respondents’ copyrights”) (citing *Inwood Labs. v. Ives Labs.*, 456 U.S. 844, 885 (1982)).

<sup>87</sup> *Perfect 10, Inc. v. RapidShare*, No. 09-CV-2596 H, at \*2 (S.D. Cal. May 18, 2010).



unique download link (a URL) for each uploaded file and send that link to the user who uploaded the file.”<sup>88</sup> The file itself remains on RapidShare’s servers, but once the user receives the link, “she can email the link to friends, post it on her Web site for others to access, or keep it confidential, among other potential uses.”<sup>89</sup> Perfect 10 (P10), whose business involves the creation and sale of adult entertainment photos, videos, and other media, claimed direct infringement by third parties, that P10 owned the copyrights to some of the works at issue, and that those works were available for download from RapidShare’s servers.<sup>90</sup>

The court’s order denied P10’s motion for a preliminary injunction, finding that P10 did not meet its burden for showing a likelihood of success on the merits.<sup>91</sup> The court observed how RapidShare’s website “did not index user materials and did not allow users to search for specific files.”<sup>92</sup> Comparing RapidShare’s contribution to infringement to prior cases finding liability, the court noted that “the public cannot enter rapidshare.com and browse through a catalog for desired materials,” nor could a RapidShare user “find a specific song from a peer’s library because RapidShare does not index its files.”<sup>93</sup> The RapidShare service as a means of sharing files was headless, as “all communication regarding the location of files [was] user driven.”<sup>94</sup> RapidShare did not provide an “integrated service” allowing for search and download that might be used to impute intent on the part of RapidShare.<sup>95</sup>

Furthermore, from a behavioral standpoint, RapidShare took measures to prevent further damage to the copyright owners by locating and removing infringing materials.<sup>96</sup> “[T]here [were] substantial lawful uses” of RapidShare’s servers, which “provided users with a secure location to store and access files from anywhere

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<sup>88</sup> *Id.* at \*2-3.

<sup>89</sup> *Id.* at \*3.

<sup>90</sup> *Id.* at \*8.

<sup>91</sup> *Id.* at \*4, \*11.

<sup>92</sup> *Id.*

<sup>93</sup> *Id.* at \*6.

<sup>94</sup> *Id.* at \*8.

<sup>95</sup> *Id.*

<sup>96</sup> *Id.* at \*9

that there is Internet access.”<sup>97</sup> In other words, RapidShare’s server was essentially an unfiltered repository because it had no itemized and searchable index.<sup>98</sup> This technology did not expose RapidShare to inducement liability because there was no evidence of intent to induce infringement and RapidShare has many legitimate uses. RapidShare simply unlocked the online storage space for individual users to upload and store files. There was no advertising targeted to known infringers, no indexing, and no ability to search for files.<sup>99</sup>

Here again, the court’s emphasis on search and indexing capability was an important factor in the contributory liability analysis under the *Napster* “site and facilities” framework.<sup>100</sup>

#### IV. SYNTHESIS: NO SUCH THING AS HEADLESS

Fung’s provision of search and index functionality in his software client and his administration of his websites and forums provided a head that affirmatively invited infringing use of available copyrighted material by third parties. LW created search and index capability and was not only aware of infringement but designed a business model around it, relying on infringing use to gain commercial success. In contrast, RapidShare housed potentially infringing content on its own servers but provided no search or index capability, did not actively encourage any third-party file-sharing through its software or server, and deleted infringing material upon receipt of a DMCA notice from copyright holders. RapidShare, in essence, was a disconnected

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<sup>97</sup> *Id.* at \*11.

<sup>98</sup> There are, however, dozens if not hundreds of external services that provide indexing for RapidShare.

<sup>99</sup> The *YouTube* court’s discussion of *Grokster* is telling: “The Grokster model does not comport with that of a service provider who furnishes a platform on which its users post and access all sorts of materials as they wish, while the provider is unaware of its content . . . and removes identified material when [it] learns [the content] infringes.” *Viacom Int’l, Inc. v. YouTube, Inc.*, 718 F. Supp. 2d 514, 525 (S.D.N.Y. 2010). The court also noted that an email from the *plaintiff* saying “the difference between YouTube’s behavior and Grokster’s is staggering.” *Id.* Both of these observations seem to apply to RapidShare, in contradistinction to Fung and Lime Group.

<sup>100</sup> *RapidShare*, No. 09-CV-2596 H, at \*8 (citing *A&M Records, Inc. v. Napster, Inc.* 239 F.3d 1004, 1022 (9th Cir. 2001)).

storage depot.

What these three cases have in common is the courts' emphasis on the provision of search and indexing functionality, presumably on the theory that if a service does not provide users with a means to locate infringing material, as well as upload it, the service must not have been designed specifically to promote illegal file sharing. As directed by *Grokster*, each of the three courts looked toward actions and behavior of the P2P for evidence of intent to foster infringement, analyzing whether the provision of the technology, joined with such behavior, could be analogized to sending inducing messages to encourage the infringement. Even where the court found that RapidShare's storage technology was not designed to facilitate third-party infringement, the court still examined RapidShare's behavioral response. The RapidShare service allowed users to upload infringing files (it did not filter the files), but did not index the files, nor allow users to search for files. Although third parties found ways to use the RapidShare e-mailed hyperlinks to infringe, the court weighed RapidShare's behavior, especially its active removal of P10's copyrighted files, in RapidShare's favor.

Under the technological-behavioral standard applied by the courts, a head is still necessary, to respond to third-party infringement and reduce the P2P's potential exposure to secondary liability.<sup>101</sup>

## CONCLUSION

Despite the evolution of decentralized file-sharing technologies, the *Fung* court construed search and indexing functionality as the equivalent of sending a message encouraging third-party users to infringe (along with Fung's literal inducement through his words and actions). As demonstrated by the extensive list of behavioral and business factors in *Lime Group*, courts will look at the totality of the

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<sup>101</sup> This duty to respond should not be construed as a duty to monitor: the "DMCA notification procedures place the burden of policing copyright infringement—identifying the potentially infringing material and adequately documenting infringement—squarely on the owners of the copyright. We decline to shift a substantial burden from the copyright owner to the provider . . ." *Viacom Int'l, Inc. v. YouTube, Inc.*, 718 F. Supp. 2d 514, 523 (S.D.N.Y. 2010) (citing *Perfect 10, Inc. v. CCBill LLC*, 488 F.3d 1102, 1113 (9th Cir. 2007)).

defendant's actions. Ultimately, the courts in *Fung* and *Lime Group* determined that search and indexing capability, along with affirmative marketing, profit from infringement, and user support features, created a "head" that sent an inducing message to third-party users to infringe. The *RapidShare* court tacitly acknowledged that a head can never truly be absent: RapidShare's removal of the infringing files, once receiving notice of third-party infringement, reduced potential liability. Though inducement liability under *Grokster* technically requires more than just knowledge of infringement or potential for infringement, *RapidShare* suggests a higher level of care once P2Ps are notified of copyright infringement.<sup>102</sup> A P2P can never completely remove itself from the file-sharing process; remedying specific known illegal uses may counteract allegations of inducing message through silence. The idea of an evolved, headless P2P, immune from secondary liability for the infringement of its users, is a fiction that has not survived judicial scrutiny.

#### PRACTICE POINTERS

- Inducement liability under *Grokster* may be found where the defendant encourages infringement through the provision of search and indexing technology that provides access to infringing material, as well as through other behavioral factors indicating an intent to induce infringement.
- Providing search and index capacity that facilitates finding and access to infringing materials may be treated as significant evidence of intent to induce; however, purely behavioral factors

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<sup>102</sup> An interesting question is when knowledge becomes intent – if RapidShare did not specifically design the service to be infringing but third parties started using it that way, and RapidShare knew of that use and also realized it benefited from the infringement but did not take simple measures to discourage it, should RapidShare be liable, as raised by Mary Rasenberger. This is essentially the focus of *Viacom Int'l, Inc. v. YouTube, Inc.*, 718 F. Supp. 2d 514 (S.D.N.Y. 2010). While the service apparently was not originally designed to facilitate infringement, the founders intentionally kept infringing content up (even specific infringing content that they had identified) because they realized the infringing content was driving traffic to the YouTube site and increasing its value.

will also affect a court's determination of inducement.

- Even if valid potential uses for the technology exist, P2Ps should still take affirmative steps to mitigate illegal infringement, including removing infringing files about which they have been notified.
- A possible DMCA affirmative defense exists for websites with search and index functionality, provided the P2P meets the requirements set out in the safe harbor provisions of 17 U.S.C. § 512.