PERFECT 10 v. AMAZON.COM

508 F.3d 1146 (9th Cir. 2007)

EDITED

IKUTA, Circuit Judge:

In this appeal, we consider a copyright owner's efforts to stop an Internet search engine from facilitating access to infringing images. Perfect 10, Inc. sued Google Inc., for infringing Perfect 10's copyrighted photographs of nude models, among other claims. Perfect 10 brought a similar action against Amazon.com and its subsidiary A9.com (collectively, "Amazon.com"). The district court preliminarily enjoined Google from creating and publicly displaying thumbnail versions of Perfect 10's images, *Perfect 10 v. Google, Inc.*, 416 F. Supp. 2d 828 (C.D. Cal. 2006), but did not enjoin Google from linking to third-party websites that display infringing full-size versions of Perfect 10's images. Nor did the district court preliminarily enjoin Amazon.com from giving users access to information provided by Google. Perfect 10 and Google both appeal the district court's order. We have jurisdiction pursuant to 28 U.S.C. § 1292(a)(1).

The district court handled this complex case in a particularly thoughtful and skillful manner. Nonetheless, the district court erred on certain issues, as we will further explain below. We affirm in part, reverse in part, and remand.

I

Background

Google's computers, along with millions of others, are connected to networks known collectively as the "Internet." "The Internet is a world-wide network of networks . . . all sharing a common communications technology." *Religious Tech. Ctr. v. Netcom On-Line Commc'n Servs., Inc.*, 923 F. Supp. 1231, 1238 n.1 (N.D. Cal. 1995). Computer owners can provide information stored on their computers to other users connected to the Internet through a medium called a webpage. A webpage consists of text interspersed with instructions written in Hypertext Markup Language ("HTML") that is stored in a computer. No images are stored

on a webpage; rather, the HTML instructions on the webpage provide an address for where the images are stored, whether in the webpage publisher's computer or some other computer. In general, webpages are publicly available and can be accessed by computers connected to the Internet through the use of a web browser.

Google operates a search engine, a software program that automatically accesses thousands of websites (collections of webpages) and indexes them within a database stored on Google's computers. When a Google user accesses the Google website and types in a search query, Google's software searches its database for websites responsive to that search query. Google then sends relevant information from its index of websites to the user's computer. Google's search engines can provide results in the form of text, images, or videos.

The Google search engine that provides responses in the form of images is called "Google Image Search." In response to a search query, Google Image Search identifies text in its database responsive to the query and then communicates to users the images associated with the relevant text. Google's software cannot recognize and index the images themselves. Google Image Search provides search results as a webpage of small images called "thumbnails," which are stored in Google's servers. The thumbnail images are reduced, lower-resolution versions of full-sized images stored on third-party computers.

When a user clicks on a thumbnail image, the user's browser program interprets HTML instructions on Google's webpage. These HTML instructions direct the user's browser to cause a rectangular area (a "window") to appear on the user's computer screen. The window has two separate areas of information. The browser fills the top section of the screen with information from the Google webpage, including the thumbnail image and text. The HTML instructions also give the user's browser the address of the website publisher's computer that stores the full-size version of the thumbnail. By following the HTML instructions to access the third-party webpage, the user's browser connects to the website publisher's computer, downloads the full-size image, and makes the image appear at the bottom of the window on the user's screen. Google does not store the images that

² The website publisher may not actually store the photographic images used on its webpages in its own computer, but may provide HTML instructions directing the user's browser to some further computer that stores the image. Because this distinction does not affect our analysis, for convenience, we will assume that the website publisher stores all images used on its webpages in the website publisher's own computer.

fill this lower part of the window and does not communicate the images to the user; Google simply provides HTML instructions directing a user's browser to access a third-party website. However, the top part of the window (containing the information from the Google webpage) appears to frame and comment on the bottom part of the window. Thus, the user's window appears to be filled with a single integrated presentation of the full-size image, but it is actually an image from a third-party website framed by information from Google's website. The process by which the webpage directs a user's browser to incorporate content from different computers into a single window is referred to as "in-line linking." *Kelly v. Arriba Soft Corp.*, 336 F.3d 811, 816 (9th Cir. 2003). The term "framing" refers to the process by which information from one computer appears to frame and annotate the in-line linked content from another computer. *Perfect 10*, 416 F. Supp. 2d at 833-34.

Google also stores webpage content in its cache.³ For each cached webpage, Google's cache contains the text of the web-page as it appeared at the time Google indexed the page, but does not store images from the webpage. *Id.* at 833. Google may provide a link to a cached webpage in response to a user's search query. However, Google's cache version of the webpage is not automatically updated when the webpage is revised by its owner. So if the webpage owner updates its webpage to remove the HTML instructions for finding an infringing image, a browser communicating directly with the webpage would not be able to access that image. However, Google's cache copy of the webpage would still have the old HTML instructions for the infringing image. Unless the owner of the computer changed the HTML address of the infringing image, or otherwise rendered the image unavailable, a browser accessing Google's cache copy of the website could still access the image where it is stored on the website publisher's computer. In other words, Google's cache copy could provide a user's browser with valid

³ Generally, a "cache" is "a computer memory with very short access time used for storage of frequently or recently used instructions or data." *United States v. Ziegler*, 474 F.3d 1184, 1186 n.3 (9th Cir. 2007) (quoting MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 171 (11th ed. 2003)). There are two types of caches at issue in this case. A user's personal computer has an internal cache that saves copies of webpages and images that the user has recently viewed so that the user can more rapidly revisit these webpages and images. Google's computers also have a cache which serves a variety of purposes. Among other things, Google's cache saves copies of a large number of webpages so that Google's search engine can efficiently organize and index these webpages.

directions to an infringing image even though the updated webpage no longer includes that infringing image.

In addition to its search engine operations, Google generates revenue through a business program called "AdSense." Under this program, the owner of a website can register with Google to become an AdSense "partner." The website owner then places HTML instructions on its webpages that signal Google's server to place advertising on the webpages that is relevant to the webpages' content. Google's computer program selects the advertising automatically by means of an algorithm. AdSense participants agree to share the revenues that flow from such advertising with Google.

Google also generated revenues through an agreement with Amazon.com that allowed Amazon.com to in-line link to Google's search results. Amazon.com gave its users the impression that Amazon.com was providing search results, but Google communicated the search results directly to Ama-zon.com's users. Amazon.com routed users' search queries to Google and automatically transmitted Google's responses (i.e., HTML instructions for linking to Google's search results) back to its users.

Perfect 10 markets and sells copyrighted images of nude models. Among other enterprises, it operates a subscription website on the Internet. Subscribers pay a monthly fee to view Perfect 10 images in a "members' area" of the site. Subscribers must use a password to log into the members' area. Google does not include these password-protected images from the members' area in Google's index or database. Perfect 10 has also licensed Fonestarz Media Limited to sell and distribute Perfect 10's reduced-size copyrighted images for download and use on cell phones.

Some website publishers republish Perfect 10's images on the Internet without authorization. Once this occurs, Google's search engine may automatically index the webpages containing these images and provide thumbnail versions of images in response to user inquiries. When a user clicks on the thumbnail image returned by Google's search engine, the user's browser accesses the third-party webpage and in-line links to the full-sized infringing image stored on the website publisher's computer. This image appears, in its original context, on the lower portion of the window on the user's computer screen framed by information from Google's webpage.

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Direct Infringement

Perfect 10 claims that Google's search engine program directly infringes two exclusive rights granted to copyright holders: its display rights and its distribution rights. "Plaintiffs must satisfy two requirements to present a prima facie case of direct infringement: (1) they must show ownership of the allegedly infringed material and (2) they must demonstrate that the alleged infringers violate at least one exclusive right granted to copyright holders under 17 U.S.C. § 106." *Napster*, 239 F.3d at 1013; *see* 17 U.S.C. § 501(a). Even if a plaintiff satisfies these two requirements and makes a prima facie case of direct infringement, the defendant may avoid liability if it can establish that its use of the images is a "fair use" as set forth in 17 U.S.C. § 107. *See Kelly*, 336 F.3d at 817.

Perfect 10's ownership of at least some of the images at issue is not disputed. See Perfect 10, 416 F. Supp. 2d at 836. The district court held that Perfect 10 was likely to prevail in its claim that Google violated Perfect 10's display right with respect to the infringing thumbnails. Id. at 844. However, the district court concluded that Perfect 10 was not likely to prevail on its claim that Google violated either Perfect 10's display or distribution right with respect to its full-size infringing images. Id. at 844-45. We review these rulings for an abuse of discretion. Napster, 239 F.3d at 1013.

A. Display Right

In considering whether Perfect 10 made a prima facie case of violation of its display right, the district court reasoned that a computer owner that stores an image as electronic information and serves that electronic information directly to the user ("i.e., physically sending ones and zeroes over the [I]nternet to the user's browser," *Perfect 10*, 416 F. Supp. 2d at 839) is displaying the electronic information in violation of a copyright holder's exclusive display right. *Id.* at 843-45; *see* 17 U.S.C. § 106(5). Conversely, the owner of a computer that does not store and serve the electronic information to a user is not displaying that information, even if such owner in-line links to or frames the electronic information. *Perfect 10*, 416 F. Supp. 2d at 843-45. The district court referred to

this test as the "server test." *Id.* at 838-39.

Applying the server test, the district court concluded that Perfect 10 was likely to succeed in its claim that Google's thumbnails constituted direct infringement but was unlikely to succeed in its claim that Google's in-line linking to full-size infringing images constituted a direct infringement. *Id.* at 843-45. As explained below, because this analysis comports with the language of the Copyright Act, we agree with the district court's resolution of both these issues.

We have not previously addressed the question when a computer displays a copyrighted work for purposes of section 106(5). Section 106(5) states that a copyright owner has the exclusive right "to display the copyrighted work publicly." The Copyright Act explains that "display" means "to show a copy of it, either directly or by means of a film, slide, television image, or any other device or process" 17 U.S.C. § 101. Section 101 defines "copies" as "material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." *Id.* Finally, the Copyright Act provides that "[a] work is 'fixed' in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." *Id.*

We must now apply these definitions to the facts of this case. A photographic image is a work that is "fixed' in a tangible medium of expression," for purposes of the Copyright Act, when embodied (i.e., stored) in a computer's server (or hard disk, or other storage device). The image stored in the computer is the "copy" of the work for purposes of copyright law. See MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511, 517-18 (9th Cir. 1993) (a computer makes a "copy" of a software program when it transfers the program from a third party's computer (or other storage device) into its own memory, because the copy of the program recorded in the computer is "fixed" in a manner that is "sufficiently permanent orstable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration" (quoting 17 U.S.C. § 101)). The computer owner shows a copy "by means of a . . . device or process" when the owner uses the computer to fill the computer screen with the photographic image stored on

that computer, or by communicating the stored image electronically to another person's computer. 17 U.S.C. § 101. In sum, based on the plain language of the statute, a person displays a photographic image by using a computer to fill a computer screen with a copy of the photographic image fixed in the computer's memory. There is no dispute that Google's computers store thumbnail versions of Perfect 10's copyrighted images and communicate copies of those thumbnails to Google's users. Therefore, Perfect 10 has made a prima facie case that Google's communication of its stored thumbnail images directly infringes Perfect 10's display right.

Google does not, however, display a copy of full-size infringing photographic images for purposes of the Copyright Act when Google frames in-line linked images that appear on a user's computer screen. Because Google's computers do not store the photographic images, Google does not have a copy of the images for purposes of the Copyright Act. In other words, Google does not have any "material objects . . . in which a work is fixed . . . and from which the work can be perceived, reproduced, or otherwise communicated" and thus cannot communicate a copy. 17 U.S.C. § 101.

Instead of communicating a copy of the image, Google provides HTML instructions that direct a user's browser to a website publisher's computer that stores the full-size photographic image. Providing these HTML instructions is not equivalent to showing a copy. First, the HTML instructions are lines of text, not a photographic image. Second, HTML instructions do not themselves cause infringing images to appear on the user's computer screen. The HTML merely gives the address of the image to the user's browser. The browser then interacts with the computer that stores the infringing image. It is this interaction that causes an infringing image to appear on the user's computer screen. Google may facilitate the user's access to infringing images. However, such assistance raises only contributory liability issues, *see Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 929-30 (2005), *Napster*, 239 F.3d at 1019, and does not constitute direct infringement of the copyright owner's display rights.

Perfect 10 argues that Google displays a copy of the full-size images by framing the full-size images, which gives the impression that Google is showing the image within a single Google webpage. While in-line linking and framing may cause some computer users to believe they are viewing a single Google webpage, the Copyright Act, unlike the Trademark Act, does not protect a copyright holder against acts that cause consumer confusion. *Cf.* 15 U.S.C. § 1114(1) (providing that a person who uses a trademark in a manner likely to cause confusion shall be liable in a civil action to the trademark registrant).⁷

Nor does our ruling that a computer owner does not display a copy of an image when it communicates only the HTML address of the copy erroneously collapse the display right in section 106(5) into the reproduction right set forth in section 106(1). Nothing in the Copyright Act prevents the various rights protected in section 106 from overlapping. Indeed, under some circumstances, more than one right must be infringed in order for an infringement claim to arise. For example, a "Game Genie" device that allowed a player to alter features of a Nintendo computer game did not infringe Nintendo's right to prepare derivative works because the Game Genie did not incorporate any portion of the game itself. See Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965, 967 (9th Cir. 1992). We held that a copyright holder's right to create derivative works is not infringed unless the alleged derivative work "incorporate[s] a protected work in some concrete or permanent 'form.' " Id. In other words, in some contexts, the claimant must be able to claim infringement of its reproduction right in order to claim infringement of its right to prepare derivative works.

Because Google's cache merely stores the text of webpages, our analysis of whether Google's search engine program potentially infringes Perfect 10's display and distribution rights is equally applicable to Google's cache. Perfect 10 is not likely to succeed in showing that a cached webpage that in-line links to full-size infringing images violates such rights. For purposes of this analysis, it is irrelevant whether cache copies direct a user's browser to third-party images that are no longer available on the third party's website, because it is the website publisher's computer, rather than Google's computer, that stores and displays the infringing

⁷ Perfect 10 also argues that Google violates Perfect 10's right to display full-size images because Google's in-line linking meets the Copyright Act's definition of "to perform or display a work 'publicly.' "17 U.S.C. § 101. This phrase means "to transmit or otherwise communicate a performance or display of the work to . . . the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times." *Id.* Perfect 10 is mistaken. Google's activities do not meet this definition because Google transmits or communicates only an address which directs a user's browser to the location where a copy of the full-size image is displayed. Google does not communicate a display of the work itself.

image.

B. Distribution Right

The district court also concluded that Perfect 10 would not likely prevail on its claim that Google directly infringed Perfect 10's right to distribute its full-size images. *Perfect 10*, 416 F. Supp. 2d at 844-45. The district court reasoned that distribution requires an "actual dissemination" of a copy. *Id.* at 844. Because Google did not communicate the full-size images to the user's computer, Google did not distribute these images. *Id.*

Again, the district court's conclusion on this point is consistent with the language of the Copyright Act. Section 106(3) provides that the copyright owner has the exclusive right "to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending." 17 U.S.C. § 106(3). As noted, "copies" means "material objects . . . in which a work is fixed." 17 U.S.C. § 101. The Supreme Court has indicated that in the electronic context, copies may be distributed electronically. See N.Y. Times Co. v. Tasini, 533 U.S. 483, 498 (2001) (a computer database program distributed copies of newspaper articles stored in its computerized database by selling copies of those articles through its database service). Google's search engine communicates HTML instructions that tell a user's browser where to find full-size images on a website publisher's computer, but Google does not itself distribute copies of the infringing photographs. It is the website publisher's computer that distributes copies of the images by transmitting the photographic image electronically to the user's computer. As in *Tasini*, the user can then obtain copies by downloading the photo or printing it.

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.... Accordingly, the district court correctly concluded that Perfect 10 does not have a likelihood of success in proving that Google violates Perfect 10's distribution rights with respect to full-size images.

C. Fair Use Defense

Because Perfect 10 has succeeded in showing it would prevail in its prima facie

case that Google's thumbnail images infringe Perfect 10's display rights, the burden shifts to Google to show that it will likely succeed in establishing an affirmative defense. Google contends that its use of thumbnails is a fair use of the images and therefore does not constitute an infringement of Perfect 10's copyright. See 17 U.S.C. § 107.

The fair use defense permits the use of copyrighted works without the copyright owner's consent under certain situations. The defense encourages and allows the development of new ideas that build on earlier ones, thus providing a necessary counterbalance to the copyright law's goal of protecting creators' work product.

[The Court concludes that Google is likely to prove that its use of thumbnail images in its search engine qualifies as fair use under § 107.]

IV

Secondary Liability for Copyright Infringement

We now turn to the district court's ruling that Google is unlikely to be secondarily liable for its in-line linking to infringing full-size images under the doctrines of contributory and vicarious infringement. The district court ruled that Perfect 10 did not have a likelihood of proving success on the merits of either its contributory infringement or vicarious infringement claims with respect to the full-size images. See Perfect 10, 416 F. Supp. 2d at 856, 858. In reviewing the district court's conclusions, we are guided by the Supreme Court's recent interpretation of secondary liability, namely: "[o]ne infringes contributorily by intentionally inducing or encouraging direct infringement, and infringes vicariously by profiting from direct infringement while declining to exercise a right to stop or limit it." Grokster, 545 U.S. at 930 (internal citations omitted).

Direct Infringement by Third Parties. As a threshold matter, before we examine Perfect 10's claims that Google is secondarily liable, Perfect 10 must establish that there has been direct infringement by third parties. See Napster, 239 F.3d at 1013 n.2 ("Secondary liability for copyright infringement does not exist in the absence of direct infringement by a third party.").

Perfect 10 alleges that third parties directly infringed its images in three ways. First, Perfect 10 claims that third-party websites directly infringed its copyright by

reproducing, displaying, and distributing unauthorized copies of Perfect 10's images. Google does not dispute this claim on appeal.

Second, Perfect 10 claims that individual users of Google's search engine directly infringed Perfect 10's copyrights by storing full-size infringing images on their computers. We agree with the district court's conclusion that Perfect 10 failed to provide sufficient evidence to support this claim. *See Perfect 10*, 416 F. Supp. 2d at 852. There is no evidence in the record directly establishing that users of Google's search engine have stored infringing images on their computers, and the district court did not err in declining to infer the existence of such evidence.

Finally, Perfect 10 contends that users who link to infringing websites automatically make "cache" copies of full-size images and thereby directly infringe Perfect 10's reproduction right. The district court rejected this argument, holding that any such reproduction was likely a "fair use." Id. at 852 n.17. The district court reasoned that "[l]ocal caching by the browsers of individual users is noncommercial, transformative, and no more than necessary to achieve the objectives of decreasing network latency and minimizing unnecessary bandwidth usage (essential to the [I]nternet). It has a minimal impact on the potential market for the original work" Id. We agree; even assuming such automatic copying could constitute direct infringement, it is a fair use in this context. The copying function performed automatically by a user's computer to assist in accessing the Internet is a transformative use. Moreover, as noted by the district court, a cache copies no more than is necessary to assist the user in Internet use. It is designed to enhance an individual's computer use, not to supersede the copyright holders' exploitation of their works. Such automatic background copying has no more than a minimal effect on Perfect 10's rights, but a considerable public benefit. Because the four fair use factors weigh in favor of concluding that cache copying constitutes a fair use, Google has established a likelihood of success on this issue. Accordingly, Perfect 10 has not carried its burden of showing that users' cache copies of Perfect 10's full-size images constitute direct infringement.

Therefore, we must assess Perfect 10's arguments that Google is secondarily liable in light of the direct infringement that is undisputed by the parties: third-party websites' reproducing, displaying, and distributing unauthorized copies of Perfect 10's images on the Internet. *Id.* at 852.

A. Contributory Infringement

In order for Perfect 10 to show it will likely succeed in its contributory liability claim against Google, it must establish that Google's activities meet the definition of contributory liability recently enunciated in *Grokster*. Within the general rule that "[o]ne infringes contributorily by intentionally inducing or encouraging direct infringement," *Grokster*, 545 U.S. at 930, the Court has defined two categories of contributory liability: "Liability under our jurisprudence may be predicated on actively encouraging (or inducing) infringement through specific acts (as the Court's opinion develops) or on distributing a product distributees use to infringe copyrights, if the product is not capable of 'substantial' or 'commercially significant' noninfringing uses." *Id.* at 942 (Ginsburg, J., concurring) (quoting *Sony*, 464 U.S. at 442); *see also id.* at 936-37.

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... Grokster tells us that contribution to infringement must be intentional for liability to arise. Grokster, 545 U.S. at 930. However, Grokster also directs us to analyze contributory liability in light of "rules of fault-based liability derived from the common law," id. at 934-35, and common law principles establish that intent may be imputed. ... Therefore, under Grokster, an actor may be contributorily liable for intentionally encouraging direct infringement if the actor knowingly takes steps that are substantially certain to result in such direct infringement.

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In [A&M Record v.] Napster, we considered claims that the operator of an electronic file sharing system was contributorily liable for assisting individual users to swap copyrighted music files stored on their home computers with other users of the system. Napster, 239 F.3d at 1011-13, 1019-22. We stated that "if a computer system operator learns of specific infringing material available on his system and fails to purge such material from the system, the operator knows of and contributes to direct infringement." Id. at 1021. Because Napster knew of the availability of infringing music files, assisted users in accessing such files, and failed to block access to such files, we concluded that Napster materially contributed to infringement. Id. at 1022.

The Napster test for contributory liability was modeled on the influential district court decision in Religious Technology Center v. Netcom On-Line Communication Services, Inc. (Netcom), 907 F. Supp. 1361, 1365-66 (N.D. Cal. 1995). See Napster, 239 F.3d at 1021. In Netcom, a disgruntled former Scientology minister posted

allegedly infringing copies of Scientological works on an electronic bulletin board service. *Netcom*, 907 F. Supp. at 1365-66. The messages were stored on the bulletin board operator's computer, then automatically copied onto Netcom's computer, and from there copied onto other computers comprising "a worldwide community" of electronic bulletin board systems. *Id.* at 1366-67 & n.4 (internal quotation omitted). *Netcom* held that if plaintiffs could prove that Netcom knew or should have known that the minister infringed plaintiffs' copyrights, "Netcom [would] be liable for contributory infringement since its failure to simply cancel [the former minister's] infringing message and thereby stop an infringing copy from being distributed worldwide constitute[d] substantial participation in [the former minister's] public distribution of the message." *Id.* at 1374.

Although neither *Napster* nor *Netcom* expressly required a finding of intent, those cases are consistent with *Grokster* because both decisions ruled that a service provider's knowing failure to prevent infringing actions could be the basis for imposing contributory liability. Under such circumstances, intent may be imputed. In addition, Napster and Netcom are consistent with the longstanding requirement that an actor's contribution to infringement must be material to warrant the imposition of contributory liability. [Citation.] Both *Napster* and *Netcom* acknowledge that services or products that facilitate access to websites throughout the world can significantly magnify the effects of otherwise immaterial infringing activities. See Napster, 239 F.3d at 1022; Netcom, 907 F. Supp. at 1375. The Supreme Court has acknowledged that "[t]he argument for imposing indirect liability" is particularly "powerful" when individuals using the defendant's software could make a huge number of infringing downloads every day. Grokster, 545 U.S. at 929. Moreover, copyright holders cannot protect their rights in a meaningful way unless they can hold providers of such services or products accountable for their actions pursuant to a test such as that enunciated in Napster. See id. at 929-30 ("When a widely shared service or product is used to commit infringement, it may be impossible to enforce rights in the protected work effectively against all direct infringers, the only practical alternative being to go against the distributor of the copying device for secondary liability on a theory of contributory or vicarious infringement."). Accordingly, we hold that a computer system operator can be held contributorily liable if it "has actual knowledge that *specific* infringing material is available using its system," *Napster*, 239 F.3d at 1022, and can "take simple measures to prevent further damage" to copyrighted works, *Netcom*, 907 F. Supp. at 1375, yet continues to provide access to infringing works.

Here, the district court held that even assuming Google had actual knowledge of

infringing material available on its system, Google did not materially contribute to infringing conduct because it did not undertake any substantial promotional or advertising efforts to encourage visits to infringing websites, nor provide a significant revenue stream to the infringing websites. *Perfect 10*, 416 F. Supp. 2d at 854-56. This analysis is erroneous. There is no dispute that Google substantially assists websites to distribute their infringing copies to a worldwide market and assists a worldwide audience of users to access infringing materials. We cannot discount the effect of such a service on copyright owners, even though Google's assistance is available to all websites, not just infringing ones. Applying our test, Google could be held contributorily liable if it had knowledge that infringing Perfect 10 images were available using its search engine, could take simple measures to prevent further damage to Perfect 10's copyrighted works, and failed to take such steps.

The district court did not resolve the factual disputes over the adequacy of Perfect 10's notices to Google and Google's responses to these notices. Moreover, there are factual disputes over whether there are reasonable and feasible means for Google to refrain from providing access to infringing images. Therefore, we must remand this claim to the district court for further consideration whether Perfect 10 would likely succeed in establishing that Google was contributorily liable for in-line linking to full-size infringing images under the test enunciated today.

B. Vicarious Infringement

Perfect 10 also challenges the district court's conclusion that it is not likely to prevail on a theory of vicarious liability against Google. *Perfect 10*, 416 F. Supp. 2d at 856-58. *Grokster* states that one "infringes vicariously by profiting from direct infringement while declining to exercise a right to stop or limit it." *Grokster*, 545 U.S. at 930. As this formulation indicates, to succeed in imposing vicarious liability, a plaintiff must establish that the defendant exercises the requisite control over the direct infringer and that the defendant derives a direct financial benefit from the direct infringement. *See id. Grokster* further explains the "control" element of the vicarious liability test as the defendant's "right and ability to supervise the direct infringer." *Id.* at 930 n.9. Thus, under *Grokster*, a defendant exercises control over a direct infringer when he has both a legal right to stop or limit the directly infringing conduct, as well as the practical ability to do so.

We evaluate Perfect 10's arguments that Google is vicariously liable in light of the direct infringement that is undisputed by the parties, namely, the third-party

websites' reproduction, display, and distribution of unauthorized copies of Perfect 10's images on the Internet. *Perfect 10*, 416 F. Supp. 2d at 852; *see supra* Section IV.A. In order to prevail at this preliminary injunction stage, Perfect 10 must demonstrate a likelihood of success in establishing that Google has the right and ability to stop or limit the infringing activities of third party websites. In addition, Perfect 10 must establish a likelihood of proving that Google derives a direct financial benefit from such activities. Perfect 10 has not met this burden.

With respect to the "control" element set forth in *Grokster*, Perfect 10 has not demonstrated a likelihood of showing that Google has the legal right to stop or limit the direct infringement of third-party websites.

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Moreover, the district court found that Google lacks the practical ability to police the third-party websites' infringing conduct. *Id.* at 857-58. Specifically, the court found that Google's supervisory power is limited because "Google's software lacks the ability to analyze every image on the [I]nternet, compare each image to all the other copyrighted images that exist in the world . . and determine whether a certain image on the web infringes someone's copyright." *Id.* at 858. The district court also concluded that Perfect 10's suggestions regarding measures Google could implement to prevent its web crawler from indexing infringing websites and to block access to infringing images were not workable. *Id.* at 858 n.25. Rather, the suggestions suffered from both "imprecision and overbreadth." *Id.* We hold that these findings are not clearly erroneous. Without image-recognition technology, Google lacks the practical ability to police the infringing activities of third-party websites.

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Because we conclude that Perfect 10 has not shown a likelihood of establishing Google's right and ability to stop or limit the directly infringing conduct of third-party websites, we agree with the district court's conclusion that Perfect 10 "has not established a likelihood of proving the [control] prong necessary for vicarious liability." *Perfect 10*, 416 F. Supp. 2d at 858.

C. Digital Millennium Copyright Act

Google claims that it qualifies for the limitations on liability set forth in title II of the DMCA, 17 U.S.C. § 512. In particular, section 512(d) limits the liability of a

service provider "for infringement of copyright by reason of the provider referring or linking users to an online location containing infringing material or infringing activity, by using information location tools, including a directory, index, reference, pointer, or hypertext link" if the service provider meets certain criteria. We have held that the limitations on liability contained in 17 U.S.C. § 512 protect secondary infringers as well as direct infringers. *Napster*, 239 F.3d at 1025.

The parties dispute whether Google meets the specified criteria. Perfect 10 claims that it sent qualifying notices to Google and Google did not act expeditiously to remove the infringing material. Google claims that Perfect 10's notices did not comply with the notice provisions of section 512 and were not adequate to inform Google of the location of the infringing images on the Internet or identify the underlying copyrighted work. Google also claims that it responded to all notices it received by investigating the webpages identified by Perfect 10 and suppressing links to any webpages that Google confirmed were infringing.

Because the district court determined that Perfect 10 was unlikely to succeed on its contributory and vicarious liability claims, it did not reach Google's arguments under section 512. In revisiting the question of Perfect 10's likelihood of success on its contributory infringement claims, the district court should also consider whether Google would likely succeed in showing that it was entitled to the limitations on injunctive relief provided by title II of the DMCA.

. . . .

VI

We conclude that Google's fair use defense is likely to succeed at trial, and therefore we reverse the district court's determination that Google's thumbnail versions of Perfect 10's images likely constituted a direct infringement. The district court also erred in its secondary liability analysis because it failed to consider whether Google and Amazon.com knew of infringing activities yet failed to take reasonable and feasible steps to refrain from providing access to infringing images. Therefore we must also reverse the district court's holding that Perfect 10 was unlikely to succeed on the merits of its secondary liability claims. Due to this error, the district court did not consider whether Google and Amazon.com are entitled to the limitations on liability set forth in title II of the DMCA. The question whether Google and Amazon.com are secondarily liable, and whether they can limit that liability pursuant to title II of the DMCA, raise fact-intensive inquiries, potentially requiring further fact finding, and thus can best be resolved by the district court on

remand. We therefore remand this matter to the district court for further proceedings consistent with this decision.

Because the district court will need to reconsider the appropriate scope of injunctive relief after addressing these secondary liability issues, we do not address the parties' arguments regarding the scope of the injunction issued by the district court. For the same reason, we do not address the parties' dispute over whether the district court abused its discretion in determining that Perfect 10 satisfied the irreparable harm element of a preliminary injunction.

Therefore, we reverse the district court's ruling and vacate the preliminary injunction regarding Google's use of thumbnail versions of Perfect 10's images. We reverse the district court's rejection of the claims that Google and Amazon.com are secondarily liable for infringement of Perfect 10's full-size images. We otherwise affirm the rulings of the district court. We remand this matter for further proceedings consistent with this opinion. Each party shall bear its own costs on appeal. See FED. R. APP. P. 39(a)(4).

AFFIRMED IN PART; REVERSED IN PART; REMANDED.