

CRS Report for Congress

Internet Search Engines: Copyright's "Fair Use" in Reproduction and Public Display Rights

Updated July 12, 2007

Robin Jeweler
Legislative Attorney
American Law Division



Prepared for Members and
Committees of Congress

Internet Search Engines: Copyright's "Fair Use" in Reproduction and Public Display Rights

Summary

Hyperlinking, in-line linking, caching, framing, thumbnails. Terms that describe Internet functionality pose interpretative challenges for the courts as they determine how these activities relate to a copyright holder's traditional right to control reproduction, display, and distribution of protected works. At issue is whether basic operation of the Internet, in some cases, constitutes or facilitates copyright infringement. If so, is the activity a "fair use" protected by the Copyright Act? These issues frequently implicate search engines, which scan the web to allow users to find content for uses, both legitimate and illegitimate.

In 2003, the Ninth Circuit Court of Appeals decided *Kelly v. Arriba Soft Corp.*, holding that a search engine's online display of "thumbnail" images was a fair use of copyright protected work. More recently, a U.S. district court considered an Internet search engine's caching, linking, and the display of thumbnails in a context other than that approved in *Kelly*. In *Field v. Google*, the district court found that Google's system of displaying cached images did not infringe the content owner's copyright. And in *Perfect 10 v. Amazon.com Inc.*, the Ninth Circuit revisited and expanded upon its holding in *Kelly*, finding that a search engine's use of thumbnail images and practice of in-line linking, framing, and caching were not infringing. But it left open the question of possible secondary liability for contributory copyright infringement and possible immunity under the Digital Millennium Copyright Act.

Taken together, these cases indicate a willingness by the courts to acknowledge the social utility of online indexing, and factor it into fair use analysis; to adapt copyright law to the core functionality and purpose of Internet, even when that means requiring content owners to affirmatively act, such as by the use of meta-tags; and to consider and balance conflicts between useful functions, such as online indexing and caching, against emerging, viable new markets for content owners.

Contents

Introduction	1
Kelly v. Arriba Soft Corp.: Thumbnail Images	1
Factual and Procedural Background	1
The Ninth Circuit's Decision	2
Field v. Google: Caching	4
Perfect 10 v. Amazon.com: In-line Linking and Thumbnail Images	7
Perfect 10 v. Google in U.S. district court	7
Perfect 10 v. Amazon.com in the Ninth Circuit Court of Appeals	10
Conclusion	13

Internet Search Engines: Copyright's "Fair Use" in Reproduction and Public Display Rights

Introduction

Hyperlinking, in-line linking, caching, framing, thumbnails. Terms that describe Internet functionality pose interpretative challenges for the courts as they determine how these activities relate to a copyright holder's traditional right to control reproduction, display, and distribution of protected works. At issue is whether basic operation of the Internet, in some cases, constitutes or facilitates copyright infringement. If so, is the activity a "fair use" protected by the Copyright Act? These issues frequently implicate search engines, which scan the web to allow users to find posted content. Both the posted content and the end-use thereof may be legitimate or infringing.

In 2003, the Ninth Circuit Court of Appeals decided *Kelly v. Arriba Soft Corp.*, which held that a search engine's online display of protected "thumbnail" images was a fair use of copyright protected work. More recently, courts have considered an Internet search engine's caching, linking, and the display of thumbnails in a context other than that approved in *Kelly*. In *Field v. Google*, a U.S. district court found that Google's system of displaying cached images did not infringe the content owner's copyright. And in *Perfect 10 v. Amazon.com Inc.*, the Ninth Circuit reconsidered issues relating to a search engine's practice using thumbnail images, in-line linking, and framing, finding the uses to be noninfringing. They are discussed below.

Kelly v. Arriba Soft Corp.: Thumbnail Images

*Kelly v. Arriba Soft Corp.*¹ is a significant Internet copyright case arising from the Ninth Circuit Court of Appeals. There, the court addressed the interface between the public's fair use rights and two of a copyright holder's exclusive rights — those of reproduction and public display.

Factual and Procedural Background. In *Kelly*, the defendant Arriba operated a "visual search engine" that allowed users to search for and retrieve images from the Internet. To provide this functionality, Arriba developed a computer program that would "crawl" the Internet searching for images to index. It would then download full-sized copies of those images onto Arriba's server and generate lower

¹ 336 F.3d 811 (9th Cir. 2003).

resolution thumbnails. Once the thumbnails were created, the program deleted the full-sized originals from the server.

Arriba altered its display format several times. In response to a search query, the search engine produced a “Results” page, which listed of a number of reduced, “thumbnail” images. When a user would double-click these images, a full-sized version of the image would appear. From January 1999 to June 1999, the full-sized images were produced by “in-line linking,” a process that retrieved the full-sized image from the original website and displayed it on the Arriba Web page. From July 1999 until sometime after August 2000, the results page contained thumbnails accompanied by a “Source” link and a “Details” link. The “Details” link produced a separate screen containing the thumbnail image and a link to the originating site. Clicking the “Source” link would produce two new windows on top of the Arriba page. The window in the forefront contained the full-sized image, imported directly from the originating website. Underneath that was another window displaying the originating Web page. This technique is known as framing, where an image from a second website is viewed within a frame that is pulled into the primary site’s Web page. Currently, when a user clicks on the thumbnail, the user is sent to the originating site via an “out line” link (a link that directs the user from the linking-site to the linked-to site).²

Arriba’s crawler copied 35 of Kelly’s copyrighted photographs into the Arriba database. Kelly sued Arriba for copyright infringement, complaining of Arriba’s thumbnails, as well as its in-line and framing links. The district court ruled that Arriba’s use of both the thumbnails and the full-sized images was a fair use.³ Kelly appealed to the Ninth Circuit Court of Appeals.

The Ninth Circuit’s Decision. On appeal, the Ninth Circuit affirmed the district court’s finding that the reproduction of images to create the thumbnails and their display by Arriba’s search engine was a fair use. But it reversed the lower court holding that Arriba’s in-line display of the larger image was a fair use as well.⁴

Thumbnails. An owner of a copyright has the exclusive right to reproduce copies of the work.⁵ To establish a claim of copyright infringement by reproduction, the plaintiff must show ownership of the copyright and copying by the defendant. There was “no dispute that Kelly owned the copyright to the images and that Arriba

² Arriba Soft subsequently changed its name to “Ditto.com”.

³ Kelly v. Arriba Soft Corp., 77 F. Supp. 2d 1116 (C.D. Cal. 1999).

⁴ An earlier decision, subsequently withdrawn by the Ninth Circuit Court of Appeals and often referred to in judicial opinions as *Kelly I*, held that the in-line display of the larger image of Kelly’s work was *not* a fair use and was therefore infringing. Kelly v. Arriba Soft Corp., 280 F.3d 934 (9th Cir. 2002). In its revised opinion, referred to as *Kelly II*, discussed above, the court determined that the issue of in-line linking had not been adequately raised by the parties and should not have been decided by the district court.

⁵ See 17 U.S.C. §106.

copied those images. Therefore,” the court ruled, “Kelly established a prima facie case of copyright infringement.”⁶

However, a claim of copyright infringement is subject to certain statutory exceptions, including the fair use exception.⁷ This exception “permits courts to avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which that statute is designed to foster.”⁸

To determine whether Arriba’s use of Kelly’s images was a fair use, the court weighed four statutorily-prescribed factors: (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;⁹ (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.¹⁰

Applying the first factor, the court noted that the “more transformative the new work, the less important the other factors, including commercialism, become”¹¹ and held that the thumbnails were transformative because they were “much smaller, lower-resolution images that served an entirely different function than Kelly’s original images.”¹² Furthermore, it would be unlikely “that anyone would use Arriba’s thumbnails for illustrative or aesthetic purposes because enlarging them sacrifices their clarity,” the court found.¹³ Thus, the first fair use factor weighed in favor of Arriba.

The court held that the second factor, the nature of the copyrighted work, weighed slightly in favor of Kelly because the photographs were creative in nature.¹⁴

⁶ *Kelly*, 336 F.3d at 817.

⁷ 17 U.S.C. §107.

⁸ *Dr. Seuss Enters., L.P. v. Penguin Books USA, Inc.*, 109 F.3d 1394, 1399 (9th Cir. 1997).

⁹ The Supreme Court has held that “the central purpose of this investigation is to see ... whether the new work merely supersede[s] the objects of the original creation, or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message; it asks, in other words, whether and to what extent the new work is transformative.” *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994).

¹⁰ 17 U.S.C. § 107.

¹¹ *Kelly*, 330 F.3d at 818 n. 14, *citing Campbell*, 510 U.S. at 579.

¹² *Kelly*, 330 F.3d at 818. While Kelly’s images were artistic works used for illustrative purposes and to portray scenes from the American West in an aesthetic manner, Arriba’s use of Kelly’s images in the thumbnails was unrelated to any aesthetic purpose. Arriba’s search engine functions as a tool to help index and improve access to images on the Internet and their related websites.

¹³ *Id.* at 819.

¹⁴ *Id.* at 820.

The third factor, the amount and substantiality of the portion used, was deemed not to weigh in either party's favor, even though Arriba copied the entire image.¹⁵

Finally, the court held that the fourth factor, the effect of the use on the potential market for or value of the copyrighted work, weighed in favor of Arriba. The fourth factor required the court to consider "not only the extent of market harm caused by the particular actions of the alleged infringer, but also whether unrestricted and widespread conduct of the sort engaged in by the defendant ... would result in a substantially adverse impact on the potential market for the original."¹⁶ The court found that Arriba's creation and use of the thumbnails would not harm the market for or value of Kelly's images.¹⁷ Accordingly, on balance, the court found that the display of the thumbnails was a fair use.

Field v. Google: Caching

In *Field v. Google*,¹⁸ a U.S. district court considered a claim for copyright infringement against the Internet search engine, Google. Field sought statutory damages and injunctive relief against Google for permitting Internet users to access copies of images temporarily stored on its online repository, or cache. In the course of granting summary judgment for Google, the court explained the caching process:

There are billions of Web pages accessible on the Internet. It would be impossible for Google to locate and index or catalog them manually. Accordingly, Google, like other search engines, uses an automated program (called the "Googlebot") to continuously crawl across the Internet, to locate and analyze available Web pages, and to catalog those Web pages into Google's searchable Web index.

As part of this process, Google makes and analyzes a copy of each Web page that it finds, and stores the HTML code from those pages in a temporary repository called a cache. Once Google indexes and stores a Web page in the cache, it can include that page, as appropriate, in the search results it displays to users in response to their queries.

¹⁵ While wholesale copying does not preclude fair use per se, copying an entire work militates against a finding of fair use. However, the extent of permissible copying varies with the purpose and character of the use. "If the secondary user only copies as much as is necessary for his or her intended use, then this factor will not weigh against him or her." *Id.* at 821. Applying this principle, the court found that if Arriba only copied part of the image, it would be more difficult to identify it, thereby reducing the usefulness of the visual search engine. Therefore, the court concluded, it was reasonable to copy the entire image.

¹⁶ *Id.* at 821, citing *Campbell*, 510 U.S. at 590. See also, 3 M. Nimmer & D. Nimmer, NIMMER ON COPYRIGHT § 13.05[A][4], at 13-102.61 (1993).

¹⁷ Kelly, 330 F.3d at *id.* The court emphasized that "Arriba's use of Kelly's images would not harm Kelly's ability to sell or license his full-sized images. Arriba does not sell or license its thumbnails to other parties. Anyone who downloaded the thumbnails would not be successful selling the full-sized images because of the low-resolution of the thumbnails. There would be no way to view, create, or sell a clear, full-sized image without going to Kelly's websites." *Id.* at 821-822.

¹⁸ 412 F. Supp.2d 1106 (D. Nev. 2006).

When Google displays Web pages in its search results, the first item appearing in each result is the title of a Web page which, if clicked by the user, will take the user to the online location of that page. The title is followed by a short “snippet” from the Web page in smaller font. Following the snippet, Google typically provides the full URL for the page. Then, in the same smaller font, Google often displays another link labeled “Cached.”

When clicked, the “Cached” link directs an Internet user to the archival copy of a Web page stored in Google’s system cache, rather than to the original Web site for that page. By clicking on the “Cached” link for a page, a user can view the “snapshot” of that page, as it appeared the last time the site was visited and analyzed by the Googlebot.¹⁹

The court emphasized that there are numerous, industry-wide mechanisms, such as “meta-tags,” for website owners to use communicate with Internet search engines. Owners can instruct crawlers, or robots, *not* to analyze or display a site in its web index. Owners posting on the Internet can use a Google-specific “no-archive” meta-tag to instruct the search engine not to provide cached links to a website. In view of these well-established means for communicating with Internet search engines, the court concluded that the plaintiff “decided to manufacture a claim for copyright infringement against Google in the hopes of making money from Google’s standard practice.”²⁰

Despite its acknowledgment of the plaintiff’s rather dubious motives, the court nevertheless discussed the merits of the copyright infringement claims. Specifically, the plaintiff did *not* claim that Google committed infringement when the Googlebot made initial copies of Field’s copyrighted Web pages and stored them in its cache. Rather, the alleged infringing activity occurred when a Google user clicked on a cached link to the Web page and downloaded a copy of those pages from Google’s computers.

Assuming, for the purposes of summary judgment, that Google’s display of cached links to Field’s work did constitute direct copyright infringement, the court considered four defenses raised by Google, and found in its favor on all counts.

Implied License. First, the court found that the plaintiff had granted Google an implied, nonexclusive license to display the work because “[c]onsent to use the copyrighted work need not be manifested verbally and may be inferred based on silence where the copyright holder knows of the use and encourages it.”²¹ Field’s failure to use meta-tags to instruct the search engine not to cache could reasonably be interpreted as a grant of a license for that use.

Estoppel. The court invoked the facts supporting its finding of an implied license to support the equitable argument that Field was precluded from asserting a copyright claim. The court reiterated that Field could have prevented the caching,

¹⁹ *Id.* at 1110-1111 (references and footnotes omitted).

²⁰ *Id.* at 1113.

²¹ *Id.* at 1116.

did not do so, and allowed Google to detrimentally rely on the absence of meta-tags. Had Google known the defendant's objection to displaying cached versions of its website, it would not have done so.

Fair Use. In a detailed analysis, the court concluded that Google's cache satisfies the statutory criteria for a fair use:

- **Purpose and character of use.** The search engine's use of the protected material is transformative. Rather than serving an artistic function, its display of the images served an archival function, allowing users to access content when the original page is inaccessible.
- **Nature of the copyrighted works.** Even assuming the copyrighted images are creative, Field published his works on the Internet, making them available to world for free; he added code to his site to ensure that all search engines would include his website in their search listings.
- **Amount and substantiality of the use.** The court found that Google's display of entire Web pages in its cached links serves multiple transformative and socially valuable purposes. It cited the U.S. Supreme Court's decision in *Sony Corp. v. Universal Studios, Inc.*²² and *Kelly, supra*, as examples where copying of an entire work is a fair use.
- **The effect of the use upon the potential market for or value of the copyrighted work.** Although the plaintiff distributed his images on the Internet for free, he argued that Google's activity undercut licensing fees that he could potentially develop by selling access to cached links to his website. The court found that there was no evidence of an existing or developing market for licensing search engines the right to allow access to Web pages through cached links.
- **Good Faith.** In addition to the statutory criteria of 17 U.S.C. § 107, the court considered equitable factors and found the Google operates in good faith because it honors industry-wide protocols to refrain from caching where so instructed. Conversely, the plaintiff deliberately ignored the protocols available to him in order to establish a claim for copyright infringement.

The Digital Millennium Copyright Act (DMCA). Finally, the court held that Google is protected by the safe harbor provision of the DMCA, which states that "[a] service provider shall not be liable for monetary relief ... for infringement of

²² 464 U.S. 417 (1984)(holding that in-home recording, *i.e.*, "time-shifting" of free broadcast tv is a fair use).

copyright by reason of the intermediate and temporary storage of material on a system or network controlled or operated by or for the service provider[.]”²³

Perfect 10 v. Amazon.com: In-line Linking and Thumbnail Images

Procedural Background. More recently, in *Perfect 10 v. Amazon.com*, the Ninth Circuit revisited and expanded upon several of the issues that it had considered earlier in *Kelly*. Perfect 10, a company that markets and sells copyrighted images of nude models, filed actions to enjoin Google and Amazon.com from infringing its copyrighted photographs. Specifically, it sought to prevent Google’s display of thumbnail images on its Image Search function, and to prevent both Google and Amazon from linking to third-party websites that provided full-sized, infringing versions of the images.

The district court found that in-line linking and framing were permissible, non-infringing uses of protected content. Therefore, it did not enjoin Google from linking to third-party websites that display full-sized infringing versions of the images, holding that Perfect 10 was not likely to prevail on its claim that Google violated its display or distribution rights by linking to these images. But the district court did enter a preliminary injunction against Google for its creation and public display of the thumbnail versions of Perfect 10’s images. In a separate action, the court declined to preliminarily enjoin Amazon.com from giving users access to similar information provided to Amazon.com by Google.

The Court of Appeals affirmed the district court’s holding with respect to the permissibility of in-line linking and framing. But it reversed the holding with respect to the use of thumbnail images, finding the use to be fair despite the potential of the thumbnails to encroach upon a potential commercial market for their use. It left open the questions of possible liability for contributory copyright infringement and/or immunity therefor under the DMCA, remanding the case to the district court for appropriate findings. These decisions are examined below.²⁴

Perfect 10 v. Google in U.S. district court. In *Perfect 10 v. Google*,²⁵ a U.S. district court considered the issue of thumbnails in a different context from that of *Kelly*. Perfect 10 (P10) publishes an adult magazine and operates a subscription website that features copyrighted photographs of nude models. Its proprietary website is not available to public search. Other websites, however, display, without permission, images and content from P10. Google, in response to image search inquiries, displayed thumbnail copies of P10’s photos and linked to the third-party websites, which hosted and served the full-sized, infringing images. P10 filed suit

²³ 17 U.S.C. § 512(b).

²⁴ Although Google and Amazon.com were separately named defendants in actions that were subsequently consolidated, the issues examined and the majority of the courts’ analyses focus on the issues as they relate to Google, as does this report.

²⁵ 416 F. Supp.2d 828 (C.D.Ca.. 2006), *aff’d in part, rev’d in part sub nom* Perfect 10 v. Amazon.com, 487 F.3d 701 (9th Cir. 2007).

against Google, claiming, among other things, direct, contributory, and vicarious copyright infringement.

As framed by the district court, the issues before it pitted IP rights against “the dazzling capacity of internet technology to assemble, organize, store, access, and display intellectual property ‘content’[.] ...[The] issue, in a nutshell, is: does a search engine infringe copyrighted images when it displays them on an ‘image search’ function in the form of ‘thumbnails’ but not infringe when, through in-line linking, it displays copyrighted images served by another website?”²⁶

For the reasons discussed below, the district court found that Google’s in-line linking to and framing of infringing full-size images posted on third-party websites was not infringing, but that its display of thumbnail images was likely to be considered infringing.²⁷

Linking and Framing. With respect to in-line linking and framing of full-size images from third-party websites, the court considered, not whether the activity was infringing, but a more preliminary question. Is linking or framing a “display” for copyright purposes? If it does not come within the ambit of the copyright holder’s exclusive rights, it is not necessary to reach the question of copyright infringement.

Linking is a basic function of the Internet. The term “hyperlinking” is used to describe text or images, that when clicked by a user, transport him to a different webpage. “In-line linking” is somewhat different. It refers to the process whereby a webpage incorporates by reference content stored on and served by another website.

The parties before the court offered two theories for considering whether in-line linking is a display: the “server” test advocated by Google and the “incorporation” test advocated by P10. The server test defines a display as the “act of *serving* content over the web — *i.e.*, physically sending ones and zeroes over the internet to the user’s browser.”²⁸ The “incorporation” test would adopt a visual perspective wherein a display occurs from the act of incorporating content into a webpage that is pulled up by the browser. P10 argued that the webpage that incorporates the content through in-line linking causes the “appearance” of copyrighted content and is therefore “displaying” it for copyright purposes, regardless of where it is stored.

Reviewing precedent, the court acknowledged that there is substantial authority to the effect that traditional hyperlinking does *not* support claims of direct copyright infringement because there is no copying or display involved.²⁹ But there is little discussion of in-line linking.³⁰

²⁶ 416 F. Supp. at 831.

²⁷ Because the action before the court was a motion for a preliminary injunction, the court cast its findings as “probabilities of success” on the various claims.

²⁸ *Id.* at 839.

²⁹ *Id.* at 842.

³⁰ The Ninth Circuit found it to be copyright infringement in its subsequently withdrawn (continued...)

The court adopted the “server” test and held that a site that in-line links to another does not itself “display” the content for copyright purposes. Among the reasons given for its determination is that the server test is more technologically appropriate and better reflects the reality of how content travels over the Internet. Further it viewed the server test as liability “neutral.” Application of the test doesn’t invite infringing activities by search engines, nor does it preclude all liability. It would, more narrowly, “preclude search engines from being held directly liable for in-line linking and/or framing infringing content stored on third-party websites.”³¹ The direct infringers were the websites that “stole” P10’s full-size images and posted them on the Internet. Finally, the court reasoned, that

[T]he server test maintains, however uneasily, the delicate balance for which copyright law strives — *i.e.*, between encouraging the creation of creative works and encouraging the dissemination of information. Merely to index the web so that users can more readily find the information they seek should not constitute direct infringement, but to *host* and *serve* infringing content may directly violate the rights of copyright holders.”³²

Thumbnail Images. Applying the server test to the thumbnail images, it was clear that Google did display them. Google acknowledged that it copied and stored them on its own servers. The issue then became, like that in *Kelly*, whether Google’s use of P10’s images as thumbnails was a fair use. Analyzing statutory fair use criteria, the court concluded that Google’s use of the thumbnails was *not* a fair use:

Purpose and character of use. Google’s use of the thumbnails was a commercial use; it derived commercial benefit in the form of increased user traffic and advertising revenue. In *Kelly*, the Court of Appeals acknowledged that Arriba’s use of thumbnails was commercial, yet concluded that search results were more “incidental and less exploitative” than other traditional commercial uses. Here, the commercial nature of Google’s use was distinguishable because Google derived specific revenue from an ad sharing program with the third-party websites that hosted the infringing images.

P10 had entered into a licensing agreement with others for the sale and distribution of its reduced-size images for download to and use on cell phones. A significant factor supporting a finding of fair use is a court’s determination that the use is transformative, discussed *supra*. Although the court found that Google’s use of thumbnails to simplify and expedite access to information was transformative, it found it to be “consumptive” as well, *i.e.*, the use merely supersedes the object of the original instead of adding a further purpose or different character. Google’s thumbnails superceded, or usurped, the market for the sale of reduced-size images, because cell phone users could download and save the images directly from Google.

³⁰ (...continued)
opinion in *Kelly I*. See note 4 *supra*.

³¹ *Id.* at 844.

³² *Id.* (emphasis in original). Conversely, “[t]o adopt the incorporation test would cause a tremendous chilling effect on the core functionality of the web — its capacity to link, a vital feature of the internet that makes it accessible, creative, and valuable.” *Id.* at 840.

Nature of the copyrighted works. Use of published works, including images, are more likely to qualify as a fair use because the first appearance of the creative expression has already occurred.

Amount and substantiality of the use. As in *Kelly*, the court found that Google used no more of the image than necessary to achieve the objective of providing effective image-search capability.

The effect of the use upon the potential market for or value of the copyrighted work. While Google's use of thumbnails did *not* harm the market for copyrighted full-size images, it *did* cause harm to the *potential* market for sales of P10's reduced-size images to cell phone users.

The court also considered and rejected P10's allegation that Google was guilty of contributory and vicarious copyright infringement liability.

Perfect 10 v. Amazon.com in the Ninth Circuit Court of Appeals.

Linking and Framing. In tacitly adopting the "server" test and affirming the district court's finding that linking and framing did not violate the copyright holder's rights of display and reproduction, the Court of Appeals made several observations. It considered P10's contention that when Google frames a full-size image, it gives the "impression" that it is showing the image. The court acknowledged that linking and framing may cause some computer users to believe they are viewing a Google Web page when, in fact, Google, through HTML instructions, has directed the user's browser to the website publisher's computer that stores the image. But the Copyright Act, unlike the Trademark Act, does not protect a copyright holder against acts that may cause consumer confusion.³³ The same logic obtains with respect to the display of cached webpages. Even if the cache copies are no longer available on the third-party's website, it is the website publisher's computer, not Google's, that stores and displays the infringing cached image.

Thumbnail Images. In reversing the lower court's determination that Google's display of thumbnail images was not a fair use, the Court of Appeals reconsidered the weight to be accorded to the statutory factors. It differed with the district court's analysis regarding character of use and market impact.

Purpose and character of use. The court laid major emphasis, and weight, on the transformative nature of a search engine's display as an electronic reference tool:

Although an image may have been created originally to serve an entertainment, aesthetic, or informative function, a search engine transforms the image into a pointer directing a user to a source of information. ... [A] search engine provides social benefit by incorporating an original work into a new work, namely, an

³³ 487 F.3d 701 at 717.

electronic reference tool. ... In other words, a search engine puts images “in a different context” so that they are “transformed into a new creation.”³⁴

The court considered the judicial rule that “parody” is a fair use, and concluded that “[i]ndeed, a search engine may be more transformative than a parody because a search engine provides an entirely new use for the original work, while a parody typically has the same entertainment purpose as the original work.”³⁵

The fact that Google profited from its AdSense advertising program and that P10’s market for the sale of thumbnail images could be superceded by the Google display did not outweigh the public interest value of the transformative use, in the court’s opinion. It noted the absence of evidence that downloads of thumbnails for mobile phone use actually occurred. Hence, the court’s analysis of thumbnails from *Kelly* was controlling:

Accordingly, we disagree with the district court’s conclusion that because Google’s use of the thumbnails could supersede Perfect 10’s cell phone download use and because the use was more commercial than Arriba’s, this fair use factor weighed “slightly” in favor of Perfect 10. Instead, we conclude that the transformative nature of Google’s use is more significant than any incidental superseding use or the minor commercial aspects of Google’s search engine and website. Therefore, the district court erred in determining this factor weighed in favor of Perfect 10.³⁶

Effect of use on the market. Similarly, with respect to P10’s market for the sale of its full-sized images, the court rejected the argument that market harm may be presumed if the intended use of an image is for commercial gain. Market harm to a copyright holder will not be “readily inferred” when an arguably infringing use is otherwise transformative. And, since the “potential harm” to the market for the sale of thumbnails was hypothetical, the court concluded that the significant transformative use outweighed the unproven use of Google’s thumbnails for cell phone downloads. It vacated the district court’s preliminary injunction regarding Google’s use of thumbnails.

Likewise, the copying function related to caching of full-sized images performed automatically is a transformative, and, ultimately, a fair use, so long as the cache copies no more than necessary to assist the Internet user and the copying has no more than a minimal effect on the owner’s right, while having a considerable public benefit.³⁷

Secondary Liability. The Court of Appeals opinion devotes considerable attention to the question of Google’s possible liability for secondary copyright infringement, that is, contributory and/or vicarious infringement. It was uncontested that third-party websites were posting infringing copies of P10’s images. The court

³⁴ *Id.* at 721 (citations omitted).

³⁵ *Id.*

³⁶ *Id.* at 723 (citations omitted).

³⁷ *Id.* at 726.

rejected the assertion that Google’s automatic caching of copies of full-sized images from third-party sites was direct infringement. But it reversed the district court’s determination that P10 was not likely to succeed with a claim for secondary liability against Google, and remanded the case for reconsideration in light of its opinion.

As defined by the Supreme Court, “[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.”³⁸ As applied by the Ninth Circuit, “a computer system operator can be held contributorily liable if it ‘has actual knowledge that specific infringing material is available using its system,’ and can ‘take simple measures to prevent further damage’ to copyrighted works, yet continues to provide access to infringing works.”³⁹

The Court of Appeals first considered whether Google intentionally encouraged infringement. The district court held that 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 significant revenues to the infringing websites.⁴⁰ But the Court of Appeals disagreed, reasoning:

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.⁴¹

With respect to vicarious infringement, 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.”⁴² The court found that P10 did not demonstrate that Google has the legal right to stop or limit direct infringement by third-party websites.

Because the district court determined that P10 was unlikely to succeed on its contributory and vicarious liability claims, it did not reach Google’s arguments that it qualified for immunity from liability under the DMCA, 17 U.S.C. § 512. The district court was directed to consider whether Google was entitled to the limitations on liability provided by title II of the DMCA on remand.

³⁸ *Id.* at 726 citing *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 930 (2005) (internal citations and footnotes omitted).

³⁹ *Id.* at 729 (citations omitted).

⁴⁰ 416 F.Supp.2d at 854-56.

⁴¹ 487 F.3d at 729.

⁴² *Id.* at 729 -730.

Conclusion

It is no coincidence that search engines are frequently-named defendants in online copyright infringement litigation. Their role in Internet connectivity is vital. The infringement liability implications of that role are arguably more complex than a preliminary determination whether an individual website is posting infringing content.

In the DMCA, Congress amended the Copyright Act to create a safe harbor for the Internet service provider that operates as a “passive conduit” for transmission and exchange of third-party offerings. As the sophistication of Internet mass-offerings grow, from text and images to broader audiovisual formats, the function of the search engines is likely to increase in scope and sophistication as well. A valuable component is the actual search and indexing function which enables Internet users to post and find content. Most prominent search engines are, however, commercial, profit-making entities who benefit from traffic generated by their search capabilities. Providing search capability creates and satisfies an important market, but what impact does it have on emerging ones?

As the courts apply traditional copyright principles to the Internet, they must factor in its functionality and architecture. In *Kelly*, the Ninth Circuit grappled with the concept of displaying thumbnail images as a search tool. It found the use to be highly transformative, socially valuable, and “fair,” but reserved judgment on the questions of in-line linking and framing. In *Field*, the district court considered caching, finding it to be fair as well. Of great significance to the court was the fact that content owners can control the ability of search engines to search and/or cache their websites. In *Perfect 10*, the Ninth Circuit considered thumbnail displays in a different context: namely, where a search engine displays thumbnails of infringing images and derives advertising revenue that is more closely linked to the posting. Although plaintiff had persuaded the lower court that the thumbnails, though transformative of the full-size images, could or would undermine a developing market for reduced-size images, the Court of Appeals reaffirmed the fair use analysis derived from *Kelly*. And, it took up where *Kelly* left off, holding that in-line linking and framing were not displays for copyright purposes. But the court left open the possibility that a search engine’s actual conduct with respect to infringing content could be proven to be contributory infringement.

Taken together, these cases indicate a willingness by the courts to acknowledge the social utility of online indexing, and factor it into fair use analysis; to adapt copyright law to the core functionality and purpose of Internet, even when that means requiring content owners to act affirmatively, such as by the use of meta-tags; and to weigh and balance conflicts between useful functions, such as online indexing and caching, against emerging, viable new markets for content owners.