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ALL RIGHTS RESERVED*: DOES GOOGLE'S "IMAGE SEARCH" INFRINGE VESTED EXCLUSIVE RIGHTS GRANTED UNDER THE COPYRIGHT LAW?

EUGENE GORYUNOV**

The copyright system has become the most extensive regulator "of speech and culture... [and] will help determine the richness and strength of democracy in the twenty-first century."

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INTRODUCTION

Search engines such as Google.com provide a tremendous public benefit by enhancing, improving, and mainstreaming information-gathering techniques on the Internet. After the dot-com bubble burst in 2001, Google claimed a domineering position in the marketplace, securing its niche as “the nexus of human curiosity.” Google’s corporate mission to make the world’s information more accessible and more useful is revealing of its vast influence in today’s world. Google provides an ever-improving search technology that is capable of scouring billions of web sites, news articles, literary works, images, and videos in the

4. Robert F. Reilly, et al., Value & Cents: Update on Study of Discount for Lack of Marketability, 24-5 ABIJ 42, 46 (2005); Howard Kurtz, Who Blew the Dot-Com Bubble?: The Cautionary Tale of Henry Blodget, WASH. POST, Mar. 12, 2001, at C1. Lasting from approximately 1997 to 2001, stock markets saw rapid growth in Internet companies based on speculative earning projections. Id. This period, known as the “dot-com bubble,” saw the founding of many Internet-based companies, fueled mainly by the rapid increase in stock prices, widely available venture capital funding, and excessive developer confidence. Id.
8. See Claburn, supra note 6, at 40 (explaining that Google invests roughly fifty percent of its capital expenditures in developing its information technology infrastructure and exploring and developing new search technology and services).
9. See Gulli & Signorini, infra note 13 and accompanying texts.
10. See Google opens up 200 years of news, BBC NEWS, Sept. 6, 2006, http://news.bbc.co.uk/2/hi/business/5317942.stm (describing Google’s new search technology which allows users to search hundreds of free and charged-for news sources. Id. The service also allows the user to view articles from a “timeline” so as to allow a “historical overview” of “key time periods.” Id. Anurag Acharya, Google engineer, has explained that the earliest searchable story is from “somewhere in the mid-1700s.” Id.
"Indexable Web." Google features not only search functionality, but also several Internet-based services that have further solidified its online empire.\textsuperscript{14}

Recently, different aspects of Google's search technology and services have come under fire in a series of lawsuits, alleging contributory, vicarious, and direct copyright infringement.\textsuperscript{15} If

\texttt{/googlebooks/about.html} (last visited Feb. 12, 2008) (explaining that the benefit of the new search functionality is to provide users the opportunity to explore books that match their search criteria). The service also offers users access to browse and print the full text of "older works out of copyright." \textit{See} Vaidhyanathan, supra note 1 (discussing the functionality of Google's Book Search). Vaidhyanathan quoted Kevin Kelly, executive editor of \textit{Wired} Magazine, to propose that the eventuality of Google's plan to scan millions of books is that (1) works with "marginal" popularity will find greater public exposure, (2) the "universal library" will increase our grasp of history, and (3) such library of all books will "cultivate a new sense of authority." \textit{Id.}

\textit{See} Google's Empire, infra note 14 (explaining that Google Video is the answer to Apple's video download service through iTunes). As a part of the service, Google has an agreement with CBS to offer for purchase "blockbuster hits, such as CSI and Survivor." \textit{Id.}

\textit{See} A. Gulli & A. Signorini, \textit{The Indexable Web Is More Than 11.5 Billion Pages}, May 2005, \texttt{http://www.cs.uiowa.edu/~asignori/web-size/size-indexable-web.pdf} (describing Internet population calculation model and estimating that as of the end of January 2005 the size of the publicly indexable Internet is at least 11.5 billion pages); \textit{see also} Brief of Amicus Curiae by the Electric Frontier Foundation, American Library Association, Medical Library Association, American Association of Law Libraries, Association of Research Libraries, and Special Libraries Association in Support of Google, Inc. at 23, Perfect 10, Inc. v. Google, Inc., No. 06-55405 (9th Cir. Jul. 11, 2006) [hereinafter Google's Amicus Curiae Brief] (stating that in 2005, Yahoo!, Inc. estimated that the internet contained over nineteen billion web documents and 1.6 billion images (internal citation omitted)).

\textit{See} Alfred Hermida, \textit{Google's Online Empire}, BBC NEWS, Jul. 3, 2006, \texttt{http://news.bbc.co.uk/2/hi/technology/5132806.stm} [hereinafter "Google's Empire"] (describing Google's "portfolio of services"). The provided services include Google Earth and Google Maps, which combine "satellite imagery and maps" allowing users to graphically view and get directions to anywhere on the planet. \textit{Id.} Gmail, Google's free email suite that comes complete with calendar, contacts, chat, and spreadsheet functionality is also provided in the services. About Gmail, \texttt{http://mail.google.com/mail/help/intl/en/about.html} (last visited Feb. 12, 2008). Google also provides users with a desktop-based utility "Google Toolbar" which integrates into the user's web browser and provides "enhanced" searching, language "translation," "pop-up blocker," quick access to "Gmail," and many other customization features. Google Toolbar Help, Toolbar Features, \texttt{http://www.google.com/support/toolbar/bin/static.py?page=features.html&hl=en&v=4} (last visited Feb. 12, 2008).

\textit{Kelly}, 336 F.3d at 816 (demanding a motion for preliminary injunction based on allegations of copyright infringements arising out of Google's image search); \textit{Perfect 10}, 416 F. Supp. 2d at 831 (requesting a motion for preliminary injunction based on allegations of vicarious, contributory, and direct copyright infringement arising out of Google's Image Search); \textit{Field} v. Google Inc., 412 F. Supp. 2d 1106, 1110 (D. Nev. 2006) (alleging damages resulting from Google's automatic caching functionality); \textit{Agence France Presse (AFP)} v. Google Inc., No. 05-00546 (D.C. Mar. 17, 2005) (demanding a
handled without foresight, these lawsuits have the potential to have a "seismic impact upon the operation of search engines and, therefore, the utility of the Internet itself."16

This Comment will explore and seek to derive a balance between public interest in the disclosure of a creative work and a copyright owner's exclusive rights granted under copyright law. Part I provides a brief overview of the purpose, history, and evolution of the American copyright system. Part II describes the technology involved in Google's "Image Search" and its functionality. Parts III and IV engage in an analysis of copyright infringement jurisprudence as it applies to Google's use of thumbnail copies of full-sized images as a part of its Image Search technology. Part V argues that, in light of copyright jurisprudence, Google's use of thumbnail images in its Image Search is fair and noninfringing. In order to preserve the usefulness of the Internet, this Comment proposes that courts recognize an interpretation of copyright jurisprudence that will promote easy access to information, while preserving copyright protections.

I. COPYRIGHT PROTECTIONS

A. Brief History and Purpose of the Modern American Copyright Law

Article I, Section 8, Clause 8 of the Constitution grants Congress the power to legislate copyright and patent laws to "promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."17 This exclusive right, however, is not a natural right, but rather a "Right" bestowed to the holder of the copyright or patent as a course of law. Thomas Jefferson, author of the Patent Act of 1790, explained that the Constitution did not recognize natural property rights of the author inherent in his intellectual product;18 rather, Jefferson

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17. U.S. CONST. art. 1 § 8, cl. 8.
18. See Graham v. John Deere Co., 383 U.S. 1, 9 (1966) (citing a letter written by Thomas Jefferson to Isaac McPherson (Aug. 1813)). Justice Clark explained that Thomas Jefferson rejected the natural-rights theory in intellectual property and recognized that the constitutional grant to Congress of the power to create a patent and copyright monopoly was not intended to secure natural rights in property to the invention or creative work, but to reward and induce the disclosure of new knowledge. The letter, in pertinent part stated, "[i]nventions . . . cannot, in nature, be subject of property. Society
appreciated that the Constitution permitted Congress to grant property rights, by means of a limited monopoly, to the author as a reward for his creative time and effort. This economic incentive underlying the copyright law is deemed to encourage the inventive spirit. Personal financial gain serves as the most viable manner in which to foster creative artistic expression for the public good. Thus, with the public good being the primary concern, the limited monopoly granted to authors and inventors is just a "secondary consideration."

Although federal copyright law originated with the passage of the U.S. Constitution, prior to its ratification, twelve of the thirteen original colonies had enacted some form of copyright laws. The First Congress exercised its constitutional power "[t]o promote the Progress of Science and useful Arts" by enacting the first federal copyright act, the Copyright Act of 1790. The purpose of the Copyright Act of 1790 was to encourage learning by granting authors the exclusive right to print, publish, and sell copies of their work for a term of fourteen years with the right to

may give an exclusive right to the profits arising from them, as an encouragement to men to pursue ideas which may produce utility." Id. (citing VI WRITINGS OF THOMAS JEFFERSON, at 180-81 (Washington ed.)).

19. Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975).

20. See MARSHALL A. LEAFFER, UNDERSTANDING COPYRIGHT LAW 23 (Matthew Bender & Co., Inc. ed. 4 2005) (1943) [hereinafter LEAFFER] (discussing that an author "who cannot recoup his investment will not create"). But see Vaidhyanathan, supra note 1 (explaining the copyright download paradox that "sometimes free stuff sells stuff."). By analogy, if every copyright infringement replaced a sale of the creative work, no commercial industry would survive. Id.

21. See 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT 1-1 §1.03[A] (Mark Wasserman et al. eds., Matthew Bender & Co., Inc. rev. 70 2006)(1963) [hereinafter NIMMER] (explaining that "[t]he primary purpose of copyright is not to reward the author, but is rather to secure the general benefits derived by the public from the labors of the author"). The encouragement of intellectual works, by way of "economic incentives granted to authors and inventors" is a means to an end. Universal City Studios, Inc. v. Sony Corp., 659 F.2d 963, 965 (9th Cir. 1981) rev'd 464 U.S. 417 (1984); see also Vaidhyanathan, supra note 1 (noting that for most of its history, the copyright law has successfully protected the "integrity of creative works" while creating a foundation for future creators to "build on the cultural foundation around them").

22. See Mazer v. Stein, 347 U.S. 201, 219 (1954) (expressing that "encouragement of individual efforts by personal gain" is the means to achieving the end of continued creative contributions).

23. Twentieth Century, 422 U.S. at 156.


Delaware was the only colony that did not adopt a copyright statute. Id.


27. Copyright Act of 1790, 1 Stat. 124 (1790) (superseded by the Copyright Act of 1909).
The John Marshall Law Review renew once for an additional fourteen years.\textsuperscript{28} The next major copyright reform\textsuperscript{29} occurred with the Copyright Act of 1909,\textsuperscript{30} which added additional exclusive rights,\textsuperscript{31} increased the scope of copyrightable subject matter,\textsuperscript{32} added the requirement of notice of copyright, and extended the copyright term from fourteen to twenty-eight years, with the right to renew once for another twenty-eight years.\textsuperscript{33} The last major revision to the copyright law took place with the Copyright Act of 1976.\textsuperscript{34} Under the Act of 1976, authors, as the original owners of the copyright,\textsuperscript{35} are granted a bundle of exclusive rights\textsuperscript{36} over all creative works created and

\begin{itemize}
  \item[28.] Id.; see John Presper, Copyright Restoration under § 104A: Rethinking Copyright Law's First Amendment Immunity, 18 CONN. J. INT'L L. 431, 433-34 (2002) (explaining that the Act was signed into law by George Washington on May 31, 1790 and published throughout the country shortly thereafter). A majority of the Act was borrowed from the 1710 Statute of Anne - the first copyright law in the United Kingdom enacted during the reign of Queen Anne. Id. The Act, however, did not extend copyright protection to foreign authors, and allowed U.S. publishers to “pirate” international works. LEAFFER, supra note 20, at 7.
  \item[29.] See LEAFFER, supra note 20, at 7 (explaining that, “in December 1905, President Theodore Roosevelt called for a complete revision of the copyright law to meet modern conditions.”).
  \item[31.] The Act of 1909 expanded the copyright subject matter to include “all the writings of an author.” 35 Stat. 1075 at 1076; see LEAFFER, supra note 20, at 8 (discussing new features of the Act of 1909).
  \item[32.] With the addition of new categories of copyrightable materials, such as drawings or plastic works of a scientific or technical nature, 35 Stat. 1075 at 1077, Congress tried to develop an Act that would maintain the balance between an owner’s exclusive rights and public interest in disclosure of the creative work. LEAFFER, supra note 20, at 8. The House of Representatives Report explains that: The main object to be desired in expanding copyright protection accorded to music has been to give the composer an adequate return for the value of his composition, and it has been a serious and difficult task to combine the protection of the composer with the protection of the public, and to so frame an act that it would accomplish the double purpose for securing to the composer an adequate return for all use made of his composition and at the same time prevent the formation of oppressive monopolies, which might be founded upon the very rights granted to the composer for the purpose of protecting his interests. H.R. Rep. No. 60-2222, at 7 (1909).
  \item[33.] Pub. L. No. 60-349 (1909).
  \item[35.] See 17 U.S.C. § 201(a) (explaining that copyright in any work that falls within the subject matter of the Act is initially vested in the “author or authors of the work”). However, if the work in question was made for hire, the employer for whom the work was prepared “is considered the author,” for purposes of the Act. 17 U.S.C. § 201(b). The Act defines “work for hire” as a “work prepared by an employee within the scope of his or her employment.” 17 U.S.C. § 101(1).
  \item[36.] 17 U.S.C. § 106. The author was given exclusive rights to do and to
embodied in any tangible medium. Additionally, the Act of 1976 provides automatic protection for all new works in all new media formats "now known or later developed," codifies the "fair use" exception, and clarifies conflicts in judicial statutory interpretation.

B. Fair Use Exception

Prior to the Act of 1976, courts developed an equitable "fair use" defense that excluded certain secondary uses of an original work from liability for copyright infringement. Adopting the view authorize any of the following:

1. to reproduce the copyrighted work in copies or phonorecords;
2. to prepare derivative works based upon the copyrighted work;
3. 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;
4. in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly;
5. in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly; and
6. in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.

Id.

37. See 17 U.S.C. § 102 (2006) (stating that copyright protection is extended to all creative works "fixed in any tangible medium of expression").

38. Id.


40. The Act of 1976 does not extend copyright protection to "any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." 17 U.S.C. § 102(b). The Act also brought an end to the renewal provision by adopting a single copyright term that lasts for the duration of the author's life plus 70 years. 17 U.S.C. § 302(a). The Berne Convention Implementation Act of 1988, Oct. 31, 1988, 102 Stat. 2853, amended the Act of 1976, making notice of copyright optional rather than mandatory. This amendment resulted from the entry of the United States into the BC, ending American isolation from the mainstream of world copyright law.

41. See Folsom v. Marsh, 9 F. Cas. 342, 348 (C.C.D. Mass. 1841) (No. 4,901) (holding that in determining the availability of the fair use defense, the court must "look to the nature and objects of the selections made, the quantity and value of the materials used, and the degree in which the use may prejudice the sale, or diminish the profits, or supersede the objects, of the original work"). The term "fair use" was first used twenty-eight years later in Lawrence v. Dana, 15 F. Cas. 26, 58 (C.C.D. Mass. 1869) (No. 8,136). The fair use doctrine applies as a limit to the copyright protections of intellectual property, but it has never been applied to tangible property. In fact, the most important "difference between intellectual property and other forms of property is the fair use defense." Dana S. Ciolino, Rethinking the Compatibility of Moral Rights and Fair Use, 54 WASH. & LEE L. REV. 33, 56 (1997). Judge Leval of
held by a majority of circuits, Congress codified the Fair Use Doctrine, which provides that the use of a copyrighted work for purposes such as "criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright." This doctrine was created to allow courts to avoid the rigid application of the copyright statute when it would interfere with the encouragement of artistic creativity. Because the original doctrine was developed as an equitable measure, Section 107 of the copyright statute does not attempt to define fair use. Instead, Section 107 provides four factors that courts should consider in determining whether the secondary use made of a copyrighted work in any particular case is a fair use within the language, purpose, and intent of the statute. These factors are:

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

(2) the nature of the copyrighted work;

(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

(4) the effect of the use upon the potential market for or value of the copyrighted work.

These fair use factors, while strictly enumerate in the statute, merely serve as illustrations of what should be considered by the court in making a fair use determination. The factors are not express limitations on the relevant circumstances that may be considered, and provide only general guidelines as to what kinds of uses were likely envisioned by Congress as being fair. Nor

the United States District Court for the Southern District of New York has explained that the fair use doctrine is not a "bizarre, occasionally tolerated departure" from general property law, but that it is a "necessary part" of the overall design of the copyright monopoly. Pierre N. Leval, Toward a Fair Use Standard, 103 Harv. L. Rev. 1105, 1110 (1990).


43. See Campbell v. Acuff-Rose Music, 510 U.S. 569, 577 (1994) (explaining that the fair use defense was intended to prevent "stif[ling] the very creativity which th[e] [copyright] law is designed to foster.")

44. See H.R. Rep. No. 94-1476, 65-66 (1976) (explaining that due to the equitable nature of the doctrine, "no generally applicable definition is possible"); see also Campbell, 510 U.S. at 577 (explaining that the fair use analysis always "calls for a case-by-case" analysis).


46. Id.

47. See Nimmer, supra note 21, at 4-13 §13.05[A][1][a] n.44 (explaining that Section 107 provides a list of factors that "will tend to render a use 'fair,'" but this list is "not an exhaustive enumeration").

48. Campbell, 510 U.S. at 577-78.
does Section 107 apportion any weight to any of the fair use factors,49 leaving such determination to the discretion of the courts50 on a case-by-case basis.51 In applying the fair use exception, courts must consider the ultimate purpose of the copyright law and determine if such purpose would be better furthered by allowing the secondary use in question, rather than restricting it.52

II. GOOGLE'S IMAGE SEARCH TECHNOLOGY

To appreciate the legal issues stemming from Google's Image Search technology, one must gain a basic understanding of the technologies and their functionality in a typical Internet search. An Internet search engine is comprised of three major components: (1) a "spider" that crawls the web to create a catalogue of full text documents; (2) the catalogue that, in turn, becomes a searchable "index" containing information collected by the spider; and (3) an "index-searching software" that searches the index based on the user requests.

An "image search" engine, like a text search engine, uses the spider/index/index-searching software combination. However, rather than creating a catalogue of text, the spider creates a catalogue of "thumbnails," corresponding to full-sized images found on the web.55 The catalogue is indexed by the filename associated with the image. The index-searching software returns a page of thumbnails that match the user's input.56

49. Sony, 464 U.S. at 476 (Blackmun, J., dissenting).
50. NIMMER, supra note 21, at 4-13 § 13.05[A] at n.32.
51. Campbell, 510 U.S. at 577. Fair use jurisprudence can be stated generally in the Golden Rule: "Take not from others to such an extent and in such a manner that you would be resentful if they so took from you." NIMMER, supra note 21, at 4-13 § 13.05[A] (quoting McDonald, Non-infringing Uses, 9 BULL. COPYRIGHT SOC. 466, 468 (1962)).
52. See Castle Rock Entm't v. Carol Publ'g Group, 150 F.3d 132, 141 (2d Cir. 1998) (explaining that in applying the fair use test, courts should inquire into whether the purpose of the copyright law "would be better served by allowing [a certain] use than by preventing it").
54. See infra Part II.C (describing what constitutes a thumbnail and how is it used in the context of an image search engine).
55. Id.; see also Ditto.com, Copyright, http://www.ditto.com/copyright.aspx (last visited Feb. 12, 2008) [hereinafter Ditto.com Copyrights] (describing the necessity of thumbnails and the basic functionality of the "visual search mechanism"). Image search technology can be more useful than a regular textual search. Id. Ditto.com acknowledges that many of the images are protected by copyrights and that by locating and displaying the images, Ditto.com "does not hold, grant or imply any license to use these pictures for any purpose other than viewing them on the web." Id.
56. Supra Part II.
For example, when the user searches for pictures of the “Eiffel Tower,” the index-searching software will create a result page of “cached” thumbnails. These thumbnails represent images located on the Internet with filenames that contain the exact words or similar words or phrases to those entered by the user. Clicking on any thumbnail takes the user to a new split-frame page where the top portion contains Google's logo, thumbnail, information about the picture, a statement that the image may be subject to copyright, and a link to the original web site that contains the original full-size image represented by the thumbnail. The bottom portion of the split-frame page contains the framed original site, in its entirety, by means of an inline link. This allows the user to view the image in its original and intended context, as well as view other information and images contained on the corresponding web page. Clicking on the link to the original web site or the “Remove Frame” link in the upper right hand corner closes the top frame containing Google's information, leaving the original web site on the screen.

A. System Caching

As Google's spider crawls through the web, it creates a catalogue of all searchable material on the Internet. This catalogue is then stored as “system cache” on Google's servers located at its "server farms." The purpose of this cache is twofold. First, it allows Google to provide a quick response to the user's search query. Second, this cache serves as backup in case the original page is unavailable for live viewing or has been removed by the owner.

Google's system caching has recently been subject to copyright litigation, but ultimately the court found that under

57. For example: Print and download size. Eg. 1200 x 1600 pixels – 675k.
59. See supra Part II (discussing search engine technology).
61. Google has between 200,000 and 450,000 servers spread out over sixty-five data centers. In declining to disclose the true number of servers, Google explains that this information is considered to be its most strategic advantage over the competition. However, another reason for this silence is attributed to the fact that any quoted number is outdated at almost the very moment it is cited. Claburn, supra note 6, at 36.
62. Id.
64. See Field, 412 F. Supp. 2d at 1109 (describing that plaintiff alleged that Google infringed his copyright to the contents of his personal web page by making a copy of the web page into Google's cache).
the Digital Millennium Copyright Act, Google's cache qualified for the caching "safe harbor" reserved for online service providers. The court also found that Google's use of "system cache" is a fair use of copyrighted works. The court noted that Google's cache was transformative of the original copyrighted material because it served a different purpose than that served by the original. Under these circumstances, the court concluded that Google's cache was not a replacement for the original, did not function as its substitute, and was within the scope of the fair use exception.

B. Framing and In-Line Linking

Both framing and in-line linking allow the author to create hybrid web pages that contain both local and remote third-party content. Both methods differ from the use of a hyperlink. While a hyperlink actually takes the user to the referenced web page, framing and in-line linking display remote information without the user leaving the current page.

Framing is a method of subdividing the currently viewed page into independent frames, with each displaying different local or remote contents. The framed remote content functions no differently in the frame than it does on the original page. This

66. 17 U.S.C. § 512 (b)(1)(C); see 17 U.S.C. § 512 (b) (2006) (providing that a service provider "shall not be liable for monetary relief... or for injunctive or equitable relief, for infringement of copyright by reason of... storage of material on a system... controlled or operated by or for the service provider" when "the storage is carried out through an automatic technical process for the purpose of making the material available to users of the system.").
68. Id. at 1118.
69. See id. at 1119 (noting that Google's cache enables users to access content when the original page is inaccessible). Even assuming that the plaintiff's original web page was intended to serve an "artistic purpose," Google's use of the cache was to "improve access to information on the Internet." Id. at 1118.
70. Id. at 1118.
71. See Kara Beal, The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions, 1998 BYU L. REV. 703, 725 (1998) (noting that hyperlinks are fundamental to the functionality of the Internet and that "by publishing a site, the owner is impliedly licensing all hypertext links"). The author notes that this implied license is not without limit and that it is subject to fair use determinations. Id. at 726.
73. Matthew C. Staples, Kelly v. Arriba Soft Corp., 18 BERKELEY TECH. L. J. 69, 72 (2003); see also Lloyd L. Rich, The Publishing Law Center, Internet Legal Issues: Framing, http://www.publaw.com/framing.html (1999) (explaining that while the user is viewing content from multiple sources at the same time, the "URL address contained in the user's browser continues
allows the user to view a multitude of content "simultaneously" without ever leaving the current framing page.\textsuperscript{74} In-line linking also allows the author to integrate remote content into his own page.\textsuperscript{76} However, in-line linking, unlike framing, creates a seamless page,\textsuperscript{77} and the user is typically unaware that the information being displayed on the current page is being pulled from a remote page.\textsuperscript{78} This process allows the remote page to be "incorporated by reference," while its content remains stored on another website without the use of frames.\textsuperscript{79}

\textbf{C. Thumbnail Images}

A thumbnail image is a smaller scale, lower resolution, digital reproduction\textsuperscript{80} of a full-size digital image.\textsuperscript{81} Google's Image Search technology uses thumbnails as a means to link, organize, and deliver corresponding full-sized images located on the Internet.\textsuperscript{82} The use of thumbnails is necessary and indispensable in facilitating the internal and external visual search engine mechanism\textsuperscript{83} in locating and displaying images that match the to display only the address of the framing page"). The benefit of framing allows the authors to "capitalize on the design layout of their web site by keeping advertising and certain web site material fixed within a particular frame" without having that information interfere with any of the content which the web site was designed to display. \textit{Id.}

\textsuperscript{74} \textit{Perfect 10}, 416 F. Supp. 2d. at 833.
\textsuperscript{75} \textit{See supra} Part II (providing an example of framing in the context of searching for the "Eiffel Tower" on Google "Image Search"); \textit{see also Perfect 10}, 416 F. Supp. 2d. at 833 (explaining that when the user clicks on a certain "thumbnail returned as the result of a Google Image Search, his computer pulls up a page comprised of two distinct frames, one hosted by Google and a second hosted by the underlying website[]” The court also explained that the second frame contains the "original web page on which the original image was found." \textit{Id.} The court also clarified that Google “neither stores nor served any of the content . . . displayed in the lower frame.” \textit{Id.} at 834.
\textsuperscript{76} Scherb, \textit{supra} note 72, at 1808.
\textsuperscript{77} \textit{See id.} (discussing that the difference between framing and in-line linking is that in-line linking “content is not boxed off but seamlessly and indistinguishably integrated” into the page).
\textsuperscript{78} \textit{See Staples, supra} note 73 (explaining that operators can prevent others from in-line linking to their content “through simple programming techniques”).
\textsuperscript{79} \textit{See Perfect 10}, 416 F. Supp. 2d at 838 (citing \textit{Kelly}, 336 F.3d at 816).
\textsuperscript{80} The Conference on Fair Use (CONFU), A PROPOSAL FOR EDUCATIONAL FAIR USE GUIDELINES FOR DIGITAL IMAGES, Section 1.4 (1996 draft), http://www.utsystem.edu/ogc/intellectualproperty/imagguid.htm.
\textsuperscript{81} \textit{See Perfect 10}, 416 F. Supp. 2d at 833 n.4 (explaining that a thumbnail's smaller size allows more images to “be displayed at the same time on a single page or screen”).
\textsuperscript{82} Staples, \textit{supra} note 73, at 70.
\textsuperscript{83} \textit{See}, e.g., http://www.ditto.com/copyright.aspx (explaining that visual images create stark differences in comparing search results and are “an improvement versus wading through cryptic text excerpts”).
user's query. By definition, a copy of the full-sized image needs to be made to create the thumbnail. 84

Copyright lawsuits involving the creation and display of thumbnails have reached conflicting results. These differences are the focus of this Comment and will be discussed and reconciled in Parts III and V.

III. DIRECT COPYRIGHT INFRINGEMENT

Direct copyright infringement is expressly prohibited by the Act of 1976. 85 A prima facia case for direct liability requires a clear showing (1) of ownership of a valid copyright, 86 and (2) a violation of one of the exclusive rights 87 granted under copyright law. 88 Even if valid ownership has been established, inability to show a violation of an exclusive right will preclude a finding of infringement. 89 The technology that serves as an integral part of a visual search engine 90 directly implicates the right of public display 91 – an expressly recognized exclusive right. 92

A. Display and “In-Line Linking and Framing”

In Kelly v. Arriba Soft Corp., 93 the Ninth Circuit was confronted with an opportunity to settle the dispute of whether in-line linking and framing 94 constitute copyright infringement. 95 The

84. Staples, supra note 73, at 70-71.
85. See 17 U.S.C. § 106 (providing that the “owner of copyright under this title has the exclusive rights to do and to authorize” any reproduction of the copyrighted work) (emphasis added).
86. LEAFFER, supra note 20, at 407. Ownership requires a showing of “originality, copyrightable subject matter, compliance with statutory formalities, and the necessary citizenship status.” Id. Copyright registration “constitutes prima facia evidence of ownership.” Id. (citing 17 U.S.C. § 401(c)).
88. See Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 361 (1991) (holding that the second element of direct copyright infringement is the “copying of constituent elements” of the original work). But see LEAFFER, supra note 20, at 408 (explaining that “copying is a term of art” and requires a showing (1) that the defendant “actually copied the copyrighted work in creating his own” and (2) that “defendant's copying amounted to an improper appropriation).
89. See LEAFFER, supra note 20, at 407 (explaining that the exclusive rights granted to a copyright owner “create the boundaries between an infringement and an allowable use of a copyrighted work”).
90. See supra Part II and accompanying text.
91. See 17 U.S.C. § 101 (defining “display” as the conduct of directly or indirectly “show[ing] a copy of” the work).
92. See 17 U.S.C. § 106(5) (providing that the copyright owner has the exclusive right to “display the copyrighted work publicly”).
93. 336 F.3d 811 (9th Cir. 2003).
94. See supra Part II.C (explaining that inline linking and framing allows the user to incorporate content located on other web pages by reference); see also notes 71-79 and accompanying texts (describing the differences between
court held that using thumbnails of full-sized images constitutes fair use, and reached this conclusion without entertaining a discussion of whether in-line linking and framing are actionable as a violation of copyright protection.96

Early in 2006, however, the District Court for the Central District of California, in *Perfect 10 v. Google, Inc.*, 97 addressed the issue of in-line linking and framing directly. Judge Alvin Howard Matz determined that there are at least two tests for defining "display" for in-line linking and framing: the "server" test and the "incorporation" test.98 Application of the "server" test results in a

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95. *Kelly*, 336 F.3d at 817. The defendant, Arriba Soft, operated a visual search engine, similar to the one operated by Google. *Id.* at 815. Arriba's spider crawled the Internet, created thumbnails of images, and later used these thumbnails to present search results back to the user. *Id.*. Kelly, a professional photographer, offered his photographs for sale through an Internet website. After Arriba's spider indexed the page and created thumbnails of Kelly's full-sized images, Kelly brought suit for copyright infringement. *Id.* at 816. On appeal, the Ninth Circuit found in favor of Arriba, holding that the creation and display of thumbnails of Kelly's copyrighted full-sized images for the purpose of indexing was a transformative fair use. *Id.* at 822; see also Jean-Luc Piotraut, *An Authors' Rights-Based Copyright Law: The Fairness And Morality Of French And American Law Compared*, 24 CARDOZO ARTS & ENT. L.J. 549, 594-95 (2006) (arguing that the Ninth Circuit decision in *Kelly*, applying the fair use defense to the creation and display of thumbnail images, is in line with international copyright practices). Piotraut explains that the French IP Code provides exceptions from copyright violation for certain uses, unavailable under the American copyright law, such as:

> Complete or partial reproductions of works of graphic or three-dimensional art intended to appear in the catalogue of a judicial sale held in France, in the form of the copies of the said catalogue made available to the public prior to the sale for the sole purpose of describing the works of art offered for sale, as well as any acts necessary for the accomplishment of a jurisdictional or administrative procedure provided by law, or undertaken for public safety reasons.

*Id.* (internal citation omitted).

While the purpose and scope of fair use in America and France is quite different, the jurisprudence of both countries leads to a "similar legal conclusion." *Id.* at 595 n.360.

96. LEAFFER, *supra* note 20, at 373 n.410.

97. *Perfect 10*, 416 F. Supp. 2d at 828. There, P10 published an adult magazine and operated a subscription-based adult website which featured high-quality nude photographs of "natural" models. *Id.* at 831-32. Google's spider indexed and created thumbnail images of full-sized images copyrighted by P10 but located on third-party web pages that did not have permission from P10 to display such images. *Id.* at 832-33. P10 sued for injunctive relief alleging that Google was directly liable for creating and displaying thumbnails of P10's copyrighted images. *Id.* The court found that Google's creation and display of thumbnails of these images was not fair use, and granted the injunction. *Id.* at 845. The author of this comment disputes the ultimate holding of this case.

finding that the “server where the original image resides is the one that is ‘displaying’ the image.” On the other hand, application of the “incorporation” test results in a finding that the host web page that caused the image to be displayed is the one engaged in public display. Because Judge Matz realized that “[t]o adopt the incorporation test would cause a tremendous chilling effect on the core functionality of the web,” he adopted the “server” test for determining whether the lower frame in Google’s Image Search was “displaying” the images in question.

B. Display and “Thumbnails”

When delivering the user’s search results, the visual search engine creates and displays thumbnails of full-sized copyright images found on the Internet -implicating two exclusive rights granted under the copyright statute. However, before concluding that direct copyright infringement has occurred, the court must determine if such secondary use is fair under the language of the Act of 1976, and excluded from infringement liability. In doing

99. See id. at 839 (discussing that the server where the original image is stored is the one “sending ones and zeroes over the internet to the user’s browser”). Under this test, a web page displays an image only if the image is stored on the same server that is storing the web page in question. Id.

100. See id. (explaining that “display” under the “incorporation” test is the “mere act of incorporating content into a web page that is then pulled by the browser”). In effect, any page that incorporates material located on another server via in-line linking or framing would be “displaying” the image opening that page to potential copyright violations. Id.

101. See id. at 840 (opining that adopting the incorporation test for defining “display” would adversely impact the Internet’s “capacity to link, a vital feature... that makes it accessible, creative, and valuable”).

102. See id. at 843-44 (opining that the adoption of the test is in the best interest of the Internet). Judge Matz based his adoption of the test on the reasoning that 1) the “test is based on what happens at the technological-level... and thus reflects the reality of how content actually travels over the [I]nternet[;]” 2) the adoption of this test “neither invites” copyright infringements nor “flatly precludes liability,” but merely precludes a search engine “from being held directly liable for in-line linking [and] framing infringing content stored on third-party web pages[;]” 3) while both the “server” and “incorporation” test can be easily understood and applied by courts, the “incorporation” test “fails to acknowledge the interconnected nature of the web, both in its physical and logical connections and in its ability to aggregate and present content from multiple sources simultaneously[;]” and 4) the “server” test maintains “the delicate balance for which copyright law strives.” Id.

103. See supra Part II and accompanying text for a discussion of how a visual search engines technology operates.

104. H.R. REP. NO. 94-1476, (1976), as printed in 17 U.S.C. § 107 (2006); see also Castle Rock, 150 F.3d at 141 (opining that “the ultimate test of fair use, therefore, is whether the copyright law’s goal of promot[ing] the Progress of Science and useful Arts, would be better served by allowing the use than by preventing it.” (internal citation omitted)). As Justice Story explained in
so, the court must consider the very purpose of the copyright law — "to promote the Progress of Science." In fact, it has been suggested that courts should recognize the constitutional purpose of the copyright law as a fifth factor in determining that tools used for information gathering and locating favor a finding of fair use.

1. Purpose and Character of Use

The first fair use factor involves an inquiry into whether the secondary use of the copyrighted work is "commercial" in nature. However, a finding that the secondary use is "commercial" does not preclude a finding of fair use. Instead, the would-be

*Emerson v. Davies:*

In truth, in literature, in science and in art, there are, and can be, few, if any, things, which, in an abstract sense, are strictly new and original throughout. Every book in literature, science and art, borrows, and must necessarily borrow, and use much which was well known and used before. No man creates a new language for himself, at least if he be a wise man, in writing a book. He contents himself with the use of language already known and used and understood by others. No man writes exclusively from his own thoughts, unaided and uninstructed by the thoughts of others. The thoughts of every man are, more or less, a combination of what other men have thought and expressed, although they may be modified, exalted, or improved by his own genius or reflection.

8 F. Cas. 615, 619 (C.C.D. Ma. 1845).

105. See Campbell, 510 U.S. at 575 (acknowledging that "[f]rom the infancy of copyright protection, some opportunity for fair use of copyrighted materials has been thought necessary to fulfill copyright's very purpose").

106. U.S. CONST. art. I, § 8, cl. 8; see also Campbell, 510 U.S. at 575.

107. Sony, 464 U.S. at 448 n.31 (discussing that the fair use exception was created as an "equitable rule of reason" and therefore "no generally applicable definition is possible, and each case raising the question must be decided on its own facts"). By recognizing the purpose and intent of the copyright system "as a fifth relevant fair use factor," courts would be able to consider the policy underlying the copyright law in determining whether a certain use is fair. Dotan Oliar, Making Sense of the Intellectual Property Clause: Promotion of Progress as a Limitation on Congress's Intellectual Property Power, 94 GEO. L.J. 1771, 1840 (2006).

108. Oliar, supra note 107, at 1840. Associate Professor Oliar suggests that such adoption would provide for a simpler application of the fair use factors and allow courts to find fair use where progress of science would require it. Id. He argues that considering policy and the progress of science would help courts avoid manipulating the other fair use factors in finding that "information location tools favor a fair use finding." Id.

109. 17 U.S.C. § 107(1). The statute expressly requires an inquiry into whether the secondary "use is of a commercial nature or is for nonprofit educational purposes." Id. Focus on the economic impact of the secondary use "shows this factor's obvious connection with the fourth [statutory] factor." LEAFFER, supra note 20, at 476.

110. See LEAFFER, supra note 20, at 476 (explaining that a finding that some use was for a "commercial purpose will not conclusively negate a finding of fair use").
infringer can swing the scales back in his favor by showing that the secondary use is "transformative," as opposed to "consumptive."\textsuperscript{112}

\textbf{a. Commercial Use}

Courts have defined "commercial" use very broadly.\textsuperscript{113} Although commercial use tends to "cut against a fair use defense,"\textsuperscript{114} the court may consider "whether the alleged infringing use was primarily for public benefit or for private commercial gain."\textsuperscript{115}

\textbf{b. Productive/Transformative Use}

The Supreme Court has explained that the central purpose of the first fair use factor is to determine whether the secondary use "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." In effect, an inquiry under this factor asks "whether and to what extent the new work is 'transformative.'"\textsuperscript{116} Transformative use\textsuperscript{116} is one that is "productive"\textsuperscript{119} and employs the

\begin{itemize}
  \item[111.] See NIMMER, supra note 21, at 4-13 § 13.05[A][1][c]. Professor Nimmer discusses that just because some use is found to be "commercial" does not preclude the fair use analysis nor precludes the possibility of the finding of fair use. \textit{Id.}
  \item[112.] See Perfect 10, 416 F. Supp. 2d at 847 (quoting Kelly, 336 F.3d at 818). The court defined "consumptive use" as one where the "defendant's 'use of the images merely supersede[s] the object of the originals . . . instead [of] add[ing] a further purpose or different character.'\textsuperscript{113} \textit{Id.}
  \item[113.] See NIMMER, supra note 21, at 4-13 § 13.05[A][1][c] (providing examples from one extreme, where the "defendant's use of a copyrighted work in an advertising" campaign will not likely justify a fair use defense, to the other, where the "defendant's usage constitutes advertising as an extension of its own work of authorship" is much more likely to fall within the language of the fair use exception). \textit{Id.}
  \item[114.] Id.
  \item[115.] MCA, Inc. v. Wilson, 677 F.2d 180, 182 (2d Cir. 1981).
  \item[116.] Campbell, 510 U.S. at 579 (quoting Folsom v. Marsh, 9 F. Cas. 342, 348 (C.C.D.Ma. 1841).
  \item[117.] See id. (explaining that even though Section 107 does not require transformative use to qualify for the fair use defense, the purpose of the copyright law, "is generally furthered by the creation of transformative works"); see also Matthew D. Bunker, Eroding Fair Use: The "Transformative" Use Doctrine After Campbell, 7 COMM. L. & POL'Y 1, 4 (2002) (explaining that while the transformative requirement is not included enumerated in the four fair use factors, the first factor has been the "prime site for the infiltration of the 'transformative use' doctrine").
original work in a "different manner or for a different purpose from the original." Thus, "the more transformative the [secondary use], the less will be the significance of other factors, like commercialism" in the fair use analysis. The rationale is that without such transformation, the new work would "supersede[] the . . . original." On the other hand, when the transformative secondary use "adds value to the original," it becomes a new creative work itself and is in line with the purpose of the copyright law and is within the original intent of the protection afforded by the fair use doctrine.

For example, in Kelly, the Ninth Circuit held that even though Arriba's use of thumbnails of Kelly's images was commercial, it weighed "only slightly against a finding of fair use" because Arriba had neither used Kelly's images to promote its search engine nor tried to profit by selling the same. Because Arriba was using Kelly's images for a completely different purpose than intended by Kelly, the court reasoned that when a

other than the fame of the celebrity, it may be presumed that sufficient transformative elements are present; Field, 412 F. Supp. 2d at 1117-19 (finding that website caching by a search engine is transformative and weighs heavily in favor of a fair use finding following Kelly's analysis).

119. Leval, supra note 41, at 1111. Finding of a "productive use" requires that the "copier himself is engaged in creating a work of authorship whereby he adds his own original contribution to that which is copied." NIMMER, supra note 21, at 4-13 § 13.05[A][1][b].

120. Leval, supra note 41, at 1111. Judge Leval explained that because the word "productive" has the possibility of "encompass[ing] any copying for a socially useful purpose," the term "transformative" use is more appropriate. See also NIMMER, supra note 21, at 4-13 § 13.05[A][1][b] (citing Am. Geophysical Union v. Texaco Inc., 802 F. Supp. 1, 11-12 (S.D.N.Y. 1992)).

121. Campbell, 510 U.S. at 579.

122. Id. at 591.

123. Leval, supra note 41, at 1111.

124. Id.

125. 336 F.3d at 811.

126. Id. at 818.

127. Id.

128. Judge Nelson was very instructive in his reasoning for finding transformative use. He found that even though Arriba "made exact replications of Kelly's images, the thumbnails were much smaller, lower-resolution images that served an entirely different function than Kelly's original images." Id. at 819 (emphasis added). Kelly's images are artistic and creative works "used to portray scenes from the American West." Arriba's use of thumbnails of Kelly's images was "used as a tool to help index and improve access to images on the Internet and their related web sites." Id. The court further rejected Kelly's contention that the creation of thumbnails did not add anything to his copyrighted images and is thus not transformative. Id. Judge Nelson held that Arriba's conduct was "more than merely a retransmission of Kelly's images in a different medium." Id. In fact, the court recognized that Arriba's use of thumbnails serves a different function than Kelly's use and "promotes the goals of the Copyright Act and the fair use exception" by enhancing information-gathering techniques on the Internet. Id. at 820. In
visual search engine, like Arriba, creates and displays thumbnails of copyrighted images such use is transformative and weighs heavily in favor of finding fair use.\(^\text{129}\)

2. **Nature of the Copyrighted Work**

The purpose of the second fair use factor is to afford different levels of protection depending on the nature of the copyrighted work.\(^\text{130}\) The "more creative a work, the more protection" it should be afforded; the more informational or functional the work, the more likely it will be that the court will find a valid fair use defense.\(^\text{131}\) Photographs, the copyrighted works in question here, which are intended for public viewing for "informative and aesthetic purposes," have generally been found to be creative in nature.\(^\text{132}\)

Whether the copyrighted work is published or unpublished has been interpreted as a "critical element of its nature,"\(^\text{133}\) given the copyright owner's right to first publication.\(^\text{134}\) However, the fact that the work has not been published is "not necessarily determinative" in negating the fair use defense.\(^\text{135}\) Due to the

\(^{\text{dicta, the court noted that it "would be unlikely that anyone would use Arriba's thumbnails for illustrative or aesthetic purposes because enlarging them sacrifices their clarity," the images did not supersede Kelly's use of the images, and were transformative. Id. at 819.}}\(^\text{129}\)

\(^{\text{130. See LEAFFER, supra note 20, at 478 (explaining that the basic idea behind this factor is the rationale that "to support the public interest there should be greater access to some kinds of works than others").}}\(^\text{130}\)

\(^{\text{131. See NIMMER, supra note 21, at 4-13 § 13.05[A][2][a] (reasoning that this differentiation results from the recognition that "some works are closer to the core of intended copyright protection than others"). Consideration of the copyright subject matter point out that the more informational the work, "the broader should be the scope of the fair use defense." Id.; see also A&M Records v. Napster, Inc., 239 F.3d 1004, 1016 (9th Cir. 2001) (opining that creative works are "closer to the core of intended copyright protection than are more fact-based works") (citing Campbell, 510 U.S. at 586).}}\(^\text{131}\)

\(^{\text{132. Kelly, 336 F.3d at 820; accord Elvis Presley Enters. v. Passport Video, 349 F.3d 622, 629 (9th Cir. 2003) (holding that "photographs taken for aesthetic purposes, are creative in nature and thus fit squarely within the core of copyright protection.").}}\(^\text{132}\)

\(^{\text{133. See Kelly, 336 F.3d at 820 (opining that secondary uses of "published works are more likely to qualify as fair use because the first appearance of the artist's expression has already occurred").}}\(^\text{133}\)

\(^{\text{134. See NIMMER, supra note 21, at 4-13 § 13.05[A][2][a] (discussing that under ordinary circumstances, the exclusive right to first publication granted to a copyright owner will outweigh a claim of fair use).}}\(^\text{134}\)

\(^{\text{135. Harper & Row, Publishers, Inc. v. Nation Enter., 471 U.S. 539, 554 (1985). But see Salinger v. Random House, Inc. 650 F. Supp. 413, 417-18 (1986) (interpreting Harper & Row as holding that unpublished works negate the applicability of the fair use defense); see LEAFFER, supra note 20, at 479 (explaining that these contradictory decisions lead to the amendment of Section 107 providing that "[t]he fact that a work is unpublished shall not}}\(^\text{135}\)
conflicting interpretations given to the "nature" of a copyrighted work, Professor Nimmer has suggested that this factor "more typically recedes into insignificance in the greater fair use calculus" and does not weigh heavily for or against a finding of fair use.

3. Amount and Substantiality of the Portion Used

The third factor focuses on whether the secondary user "has taken more than is necessary to satisfy" his particular fair use purpose. Any determination under this factor necessarily requires a "qualitative [and] quantitative" inquiry by the court. Although it has been held that verbatim copying does not preclude a finding of fair use, because all four fair use factors must be considered before a determination is made, the copying of an entire work tends to be quantitatively excessive. Where the secondary user only takes as much as is needed for his intended secondary use, this factor will not weigh against a finding of fair use.

itself bar a finding of fair use if such finding is made upon consideration of all the above factors.” 17 U.S.C. § 107. For example, in Kelly, the Ninth Circuit found that Kelly's photographs were creative. Kelly, 336 F.3d at 820. However, the fact that they had "appeared on the Internet before Arriba used them in its search" was determinative on the fact that Kelly had exercised his right of first publication. Id. There, the court concluded, in light of additional considerations, that this factor weight "only slightly" in favor of the copyright owner. Id.

136. NIMMER, supra note 21, at 4-13 § 13.05[A][2][a]; See also Campbell, 510 U.S. at 586 (proposing that the creative nature of a copied work is not determinative on the negation of the fair use defense).

137. See LEAFFER, supra note 20, at 480 (analogizing copyright necessity to the tort self-defense where the effectiveness of the defense will be judged by its "necessity and proportionality" to the threatened force and stating that "excessive force abrogates the privilege").

138. LEAFFER, supra note 20, at 481 (citing Meeropol v. Nizer, 560 F.2d 1061 (2d Cir. 1977)); see also Harper & Row, 471 U.S. at 569 (finding that verbatim copying of only 300 words out of a total of 200,000 words from the copyright owner's book was excessive because the words in question constituted the heart of the book). But see NIMMER, supra note 21, at 4-13 § 13.05[A][3] (discussing that one case held that it was "fair to copy a whole magazine cover as part of comparative advertising").

139. Kelly, 336 F.3d at 820.

140. Id.

141. Id. at 821. The court held that Arriba did in fact create thumbnails of each of Kelly's images. However, the court found that it "was reasonable to do so in light of Arriba's use of the thumbnails" in allowing users to better identify the information that they were seeking. Id. The court pointed out that copying "necessary for... [an] intended use" will not negate a fair use defense. Id.
4. Effect of the Use upon the Potential Market for and Value of the Copyrighted Work

The final enumerated fair use factor is generally considered the single most important element in a fair use determination, but it cannot be used to substitute for any of the other statutory factors. Courts are required to engage in an analysis considering not only the "extent of market harm caused by [the secondary use]," but also "whether [such] unrestricted and widespread [secondary use] would result in a substantially adverse impact on the potential market for the original." Under this factor, the copyright owner need only show a "meaningful likelihood of future harm" to the market occupied by his original work.

Generally, the filling of a "market niche that the copyright owner had no interest in occupying," or copying that is "complementary to, rather than a substitute for, the copyrighted work, does not harm the market for the copyrighted work," making finding of fair use more likely. It is also widely accepted that "the more transformative the new work, the less likely the new

143. See *Nimmer*, supra note 21, at 4-13 § 13.05[A][4] (discussing that this last factor attempts to strike "a balance "between the benefit the public will derive if the use is permitted and the personal gain the copyright owner will receive if the use is denied").
144. See *Leaffer*, supra note 20, at 481 (pointing out that "if the market for the copyright owner's work is harmed, the incentives for creativity that the copyright monopoly is designed to encourage will not work"). As such, the ultimate test is whether the secondary use "tends to interfere with [the] marketability [of the original], or fulfills the demand for the original." *Id.* at 482.
145. *Nimmer*, supra note 21, at 4-13 § 13.05[A][4]. A potential market is defined as an immediate or a delayed market, and thus includes harm to derivative works. *Id.* Professor Nimmer explains "it is a given in every fair use case that plaintiff suffers a loss of a potential market if that potential is defined as the theoretical market for licensing the very use at bar." *Id.*
146. *Nimmer*, supra note 21, at 4-13 § 13.05[A][4]; accord *Campbell*, 510 U.S. at 590; accord *Harper & Row*, 471 U.S. at 568; *Kelly*, 336 F.3d at 821.
147. *Leaffer*, supra note 20, at 482. The plaintiff need not show actual harm, although "quantifiable harm, such as a lost contract, is the best evidence of harm to the market" of a copyrighted work. *Id.*
149. *Leaffer*, supra note 20, at 482.
150. In *Kelly*, the court found that thumbnails "would not be a substitute for the full-sized images because the thumbnails lose their clarity when enlarged." *Kelly*, 336 F.3d at 821. Judge Nelson explained that if a user wanted to view Kelly's higher quality images, he would have to visit Kelly's web page. *Id.* The court noted that this approach "would hold true whether the thumbnails are solely in Arriba's database or are more widespread and found in other search engine databases." *Id.* In short, the court found that Arriba's use of thumbnails of Kelly's full-sized images did not supersede the need for the full-sized originals because the thumbnails served an entirely different function.
work's use of copyrighted materials will affect the market" for the original material.¹⁵¹

IV. SECONDARY LIABILITY FOR DIRECT COPYRIGHT INFRINGEMENT

The express language of the Act of 1976 prohibits only direct copyright infringement.¹⁵² Nonetheless, the simple absence of express language providing for secondary liability¹⁵³ does not preclude courts from imposing liability for copyright infringement on parties who have not personally engaged in the infringing activity.¹⁵⁴ Generally, liability for contributory infringement occurs when an individual or entity intentionally induces or encourages direct infringement by a third party.¹⁵⁵ One can be found liable for vicarious infringement by directly profiting from direct infringement by a third party, while refusing to lawfully stop or limit the direct infringement.¹⁵⁶ The argument for imposing secondary liability is strongly rooted in the policy that when a service provider, such as Google, is utilized to commit infringement, it becomes nearly impossible to enforce vested

than Kelly's original images. Id.

¹⁵¹. *Elvis Presley Enters.*, 349 F.3d at 631. The Supreme Court explained that a transformative work is less likely to have an adverse impact on the market of the original than a work that merely supersedes the copyrighted work. *Campbell*, 510 U.S. at 591. The Court concluded that a secondary use that supersedes the purpose of the original serves as its market replacement, and will likely cause market harm. *Id.*

¹⁵². 17 U.S.C. § 501(a). Section 501(a) of the Act provides that "[a]nyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 122... is an infringer of the copyright" and will be subject to liability under the Act. Conversely, someone who has been given "permission" to use the work by the copyright owner or who makes a "fair use" of the work is not an infringer. *Id.*

¹⁵³. See NiMmer, supra note 21, at 3-12 § 12.04[A] (explaining that unlike direct liability, secondary liability theories, such as contributory and vicarious liability, though not explicitly stated in the Act of 1976, are equally applicable to copyright infringement cases); see also Leaffer, supra note 20, at 426 (explaining that both contributory and vicarious liability originated in tort law and "stem[] from the principle that one who directly contributes to another's infringement should be held accountable").

¹⁵⁴. See Sony, 464 U.S. at 434-35 (comparing the Patent Act to the Copyright Act). Justice Stevens reasoned that the imposition of secondary liability on contributory infringers in Section 271 (b) of Title 35 of the Patent Act, absent any "express language in the copyright statute" to the contrary, does not preclude courts from imposing secondary liability on parties "who have not themselves engaged in the infringing activity." *Id.* Because Congress was given the power to protect patents and copyrights in the same constitutional clause, and since the "line[] between direct infringement, contributory infringement and vicarious liability [is] not clearly drawn," courts are allowed to engage in such comparison. *Id.* at n.17


¹⁵⁶. *Id.*
exclusive rights in the copyrighted work against all direct infringers effectively. The only practical alternative is to “go against the distributor of the copying device” under secondary liability theories, such as contributory and vicarious infringement.

A. Contributory Liability

Contributory liability evolved from the tort concept of enterprise liability, which holds that where one party directly contributes to a third party’s infringement, that party should be held accountable. A prima facia cause of action for contributory liability requires a showing of “(1) direct infringement by a primary infringer, (2) knowledge of the infringement, and (3) material contribution to the infringement.” Unlike vicarious liability, contributory liability does not have a required element of supervision.

After direct infringement by a primary infringer is established, courts must evaluate the knowledge requirement. Knowledge of third-party infringing use can be satisfied by either actual or constructive knowledge. However, constructive knowledge is not presumed where the service, like Google, is capable of “infringing and substantially noninfringing uses.” Under such circumstances, only “actual knowledge of specific acts

157. See id. (noting that prosecuting individual direct infringers would be impracticable given the great number of infringers, cost of litigation, and that many are direct infringers are judgment-proof).

158. Id.

159. NIMMER, supra note 21, at 3-12 § 12.04[A][3]; see also LEAFFER, supra note 20, at 426 (discussing that secondary liability for contributory infringement is derived from Section 106, which “grants the copyright owner the exclusive right to authorize others to exploit the exclusive rights of ownership” (emphasis added)). The common law doctrine is applicable under the copyright law and will result in a finding of joint and several liability where one “knowingly participates in or furthers a tortious act.” Id.

160. LEAFFER, supra note 20, at 426.

161. MGM Studios, Inc. v. Grokster Ltd., 380 F.3d 1154, 1160 (9th Cir. 2004) rev’d on other grounds, 545 U.S. 913 (2005) [hereinafter Grokster I].

162. See NIMMER, supra note 21, at 3-12 § 12.04[A][3] (demonstrating that an advertising company that places noninfringing advertisements for the sale of infringing records being sold by a third party may be found secondarily liable for contributory infringement if it can be shown that the company knew, or had reason to know of the infringing nature of the records).

163. See Napster, 239 F.3d at 1020 (discussing that to satisfy the knowledge element, the secondary infringer is required to “know or have reason to know of direct infringement”).

164. See Sony, 464 U.S. at 442 (adopting a modified “staple article of commerce” doctrine from patent law). The Supreme Court’s holding in Sony is discussed in more detail infra, note 170.
of infringement" will suffice, as long as there is sufficiently clear and specific notice of the infringing uses.

The third requirement of material contribution requires that the secondary infringer engage in "personal conduct that encourages or assists the infringement." Merely providing a means to achieve direct infringement, and even encouraging the directly infringing activity through advertisement, is not sufficient to establish contributory liability for copyright infringement. Instead, an online service provider must actively encourage users to visit infringing web pages or induce/encourage web pages to serve infringing content to satisfy the material contribution requirement.

In *Universal City Studios, Inc. v. Sony Corp.*, the Supreme Court held that the manufacturer of a product that is "capable of substantial noninfringing uses," absent evidence of express or implied intent to promote infringing uses of the product, could not be held liable as a contributory infringer solely on the basis of its distribution or knowledge that the product may be put to infringing use. The Seventh Circuit, in *In re Aimster Copyright Litigation*, applied this holding to online service providers.

165. *Napster*, 239 F.3d at 1021.
166. *See Perfect 10*, 416 F. Supp. 2d at 854 (explaining that sufficient notice is intended to give the service provider an opportunity to remedy the infringing use). Such notice must be complete and specific. *Id.* Notice that provides incomplete information, such as truncated URLs, ellipses in URL address, or listing an entire domain as infringing will not be sufficient to place the service provider on notice. *Id.*
167. *Napster*, 239 F.3d at 1019.
168. *See Sony*, 464 U.S. at 436 (explaining that it would be a "generalization that cannot withstand scrutiny" to conclude otherwise).
169. *See Perfect 10*, 416 F. Supp. 2d at 856 (reasoning that only directed and intentional conduct will be sufficient to establish material contribution).
170. 464 U.S. 417 (1984). There, Sony had produced, marketed, and sold the Betamax video recorder, the predecessor of the VCR. *Id.* at 419. Universal City Studios claimed that the device allowed users to record and distribute copyrighted shows, thus infringing upon its copyrights. *Id.* at 420. The facts presented at trial revealed that while Sony was aware that the Betamax was being used for a wide variety of purposes, including some that were in fact infringing, predominant use involved a "time-shifting" process — recording a show now for a viewing later. *Id.* at 423. The Court reasoned that once Sony sold the recorder, it lost all control over its use, and that since the product was not produced for the principle purpose of facilitating copyright infringements, Sony could not be held liable as a contributory infringer, even though it was aware of the infringing uses. *Id.* at 442.
171. *Id.* at 442.
172. *Id.*
173. 334 F.3d 643 (7th Cir. 2003). There, Aimster service was being used to exchange music and other files using the AOL Instant Messenger for its communication infrastructure. *Id.* at 646. Users would download the Aimster software from Aimster’s web site free of charge. *Id.* Aimster’s software, once installed, connected to the Aimster server, which organized music that
The court determined that when an online service is capable of both infringing and noninfringing use, the mere knowledge by the service provider of such infringing activities is an insufficient basis to find contributory liability. To be liable, the service provider must engage in affirmative conduct to further the infringing use, when considered in light of the totality of surrounding circumstances. Consideration can be given to the active encouragement of the infringing use, to the failure to take reasonable measures to prevent infringing use, or to willful blindness to the fact that the service is being used for infringing purposes. If the infringing uses are substantial, then to avoid liability as a contributory infringer, the provider of the service must demonstrate that it would have been disproportionately costly for him to eliminate or substantially reduce the infringing uses by third parties.

The Supreme Court, in Metro-Goldwyn-Mayer (MGM) Studios, Inc. v. Grokster Ltd., attempted to settle some individual users were sharing, provided search capabilities, but did not make copies of the music itself. The Aimster tutorial provided, as its only examples, instructions on how to share and download copyrighted music, and the tutorial itself was found to be "an invitation to infringement." A paid service, Club Aimster, enabled members to download the "Top 40" tracks of popular music with a click of button. Judge Posner noted that the fact that Aimster did not maintain the copyrighted files on its servers distinguished it from Napster and prevented it from being a direct copyright infringer. The court held that a service must show both that the service is capable of actual noninfringing uses, and also show that such uses are probable. The court found that Aimster failed to show either actual or probable future noninfringing uses of its service and as such could not invoke the Sony contributory liability shield.

See LEAFFER, supra note 20, at 429 (stating that the Aimster court disagreed with Napster's holding that actual knowledge of specific infringing uses was sufficient to deem a "facilitator a contributory infringer"). Instead Judge Posner opined that Sony stood for the proposition that once noninfringing uses were shown by substantial evidence, a cost-benefit analysis should be applied to determine how burdensome it would be to eliminate or reduce the infringing uses. Aimster, 334 F.3d at 653.

See id. (holding that the evidence produced in discovery showed that Aimster was created as a "Napster Alternative").

See id. at 650 (explaining that "willful blindness is knowledge" in the copyright law where constructive knowledge of direct infringement may be enough to find liability). The court found that the would-be infringer does not obtain immunity "by using encryption to shield itself from actual knowledge" of infringing uses of its service. Id. at 651. Such affirmative conduct to prevent the acquisition of actual knowledge is the same as the notion of willful blindness, which is as culpable as positive knowledge. Id.

Id. at 653.

545 U.S. 913 (2005). There, MGM, copyright owner, filed a suit for damages and injunctive relief against defendants, software distributors Grokster, Ltd. and StreamCast Networks, Inc., alleging that they knowingly and intentionally distributed their software with the purpose of enabling users
"disarray" among circuit courts in relation to the application of contributory liability to online service providers.\textsuperscript{180} The Court referred to its earlier decision in \textit{Sony} as a means to hold a product liable only "where an article is 'good for nothing else' but infringement."\textsuperscript{181} Yet, where a product or service was "capable of substantial noninfringing uses,"\textsuperscript{182} intent to induce infringement was the controlling factor in the determination of liability.\textsuperscript{183} Thus, the Court preserved the \textit{Sony} principle, but rested its decision on the common law inducement theory rationale of "attempting to induce infringement."\textsuperscript{184} The Court held that mere knowledge that a product is capable of, and/or is actually being used to infringe copyrights, is not enough to find liability.\textsuperscript{185} Instead, the plaintiff must demonstrate that the online service provider took active steps to promote and encourage direct infringement by third

to infringe on copyrights. \textit{Id.} at 918. Discovery revealed that both defendants distributed their software free of charge through their web site. \textit{Id.} Both defendants were aware that their software was being used primarily to download copyrighted files, however, as a result of their system structure, they had no knowledge of which material was being downloaded and when. \textit{Id.} The facts showed that the defendants acquired actual knowledge of the infringing uses of their software through user emails asking for guidance on how to use the software to infringe copyrights, and that such guidance was given. \textit{Id.} at 922-23. When the Supreme Court shut down Napster, Grokster and StreamCast were actively advertising themselves as the "Napster Alternative" and the next Napster. \textit{Id.} at 924. Additionally, neither defendant made an effort to "filter copyrighted material... or otherwise impede the sharing of copyrighted files." \textit{Id.} at 926. The Court held that the Ninth Circuit misapplied \textit{Sony} when it found that the defendants were not liable as contributory infringers because neither had actual knowledge of the infringing uses of its product nor materially contribute to the primary infringements. \textit{Id.} at 934-35. The Court held that a distributor/manufacturer that distributes a product with the intent that it be used to infringe copyrights, as demonstrated by a "clear expression or other affirmative steps taken to foster infringement," is liable for the resulting acts of infringement by the users of its product. \textit{Id.} at 919. The Court reasoned that there was sufficient evidence to find that the defendants expressed their inducing message to their users, and that the "unlawful objective is unmistakable." \textit{Id.} at 940. The Court held that the district court erred in granting summary judgment for the defendants due to a preponderance of the evidence for a contrary decision, and remanded the case for a reconsideration of MGM’s motion for summary judgment. \textit{Id.}

\textsuperscript{180} See \textit{LEAFFER}, supra note 20, at 429 (explaining that the substantial differences between the rationale for the Ninth Circuit holding in \textit{Napster} and the Seventh Circuit holding in \textit{Aimster} prompted the Supreme Court to reconcile the law).

\textsuperscript{181} \textit{Grokster II}, 545 U.S. at 931-32.

\textsuperscript{182} \textit{Id.} (citing \textit{Sony}, 464 U.S. at 442).

\textsuperscript{183} \textit{Id.} at 931-34.

\textsuperscript{184} \textit{Id.} at 929-30. The court explained that like contributory liability, the inducement theory requires "evidence of actual infringement by recipients of the device" or software. \textit{Id.} at 940.

\textsuperscript{185} \textit{Id.}
A basic example of this is an advertising scheme that directly aims at promoting an infringing use or instructing third parties how to engage in an infringing use. Under both the Sony and Grokster tests, even if actual knowledge by the service provider is shown, contributory liability will not attach unless the service provider affirmatively attempted to induce direct infringement.

B. Vicarious Liability

Vicarious liability for copyright infringement grew out of the agency doctrine of respondeat superior, but has been held to exceed the "traditional scope of the master-servant theory" because it does not require the existence of an agency relationship as a prerequisite for applicability. Liability under this theory requires a "(1) direct infringement by a primary party, (2) a direct financial benefit to the defendant, and (3) the right and ability to supervise the infringers." Lack of knowledge by the online service provider that his service is being used for infringing purposes does not constitute a defense.

Once direct infringement is proved, direct financial benefit can be shown where the "availability of infringing material acts as

186. See id. (opining that the evidence must show an affirmative intent that the product be used to infringe).
187. See NIMMER, supra note 21, at 3-12 § 12.04[A][3] (discussing the dichotomy between product engineering design, on the one hand, and intent of the manufacturer/distributor as to how the device/service would be used on the other, Sony and Grokster II respectively). These differing tests may lead to some individual products or services being held liable under one ruling but not under the other. Id.; see also Grokster II, 545 U.S. at 957 (Ginsburg, J., concurring) (explaining that the ruling in Sony "shelters VCRs, typewriters, tape recorders, photocopiers, computers, cassette players, compact disc burners, digital video recorders, MP3 players, Internet search engines, and peer-to-peer software[,]" but that it does not shelter "descramblers, even if one could theoretically use a descrambler in a noninfringing way"). For further discussion, see LEAFFER, supra note 20, at 429-30.
188. See NIMMER, supra note 21, at 3-12 § 12.04[A][2] (drawing an example of vicarious liability where the infringer is an employee of a corporation, then the corporation may be held liable).
189. Id.
190. See LEAFFER, supra note 20, at 432 (explaining that vicarious liability does not rest on the master-servant doctrine). It is based instead on the "right or power to control the infringing acts while financially benefiting from them." Id.
191. Grokster I, 380 F.3d at 1164. The court cited to Napster, 239 F.3d at 1036, to explain that vicarious liability requires a "sufficiently supervisory relationship" to the primary infringer. Id.
192. See NIMMER, supra note 21, at 3-12 § 12.04[A][2] (citing a myriad of cases holding that knowledge of infringing activities is not required when the defendant has a direct financial benefit and has the right and ability to supervise the infringers).
a draw for customers." In fact, it has been suggested that even absent the receipt of any revenue, a future hope to "monetize" is sufficient to satisfy this factor. The requirement of the right and ability to supervise can be presumed when an online service provider has the exclusive and unilateral ability to block infringers’ access to a particular environment for any reason whatsoever. Although an agency relationship has been found unnecessary to establish vicarious liability, the Ninth Circuit has recently stated that where the direct infringers were not acting as agents of the service provider, the service provider cannot be held vicariously liable for the conduct of the users.

V. PERFECTING PERFECT 10

Perfect 10, Inc. ("P10"), adult web site operator and magazine publisher, filed suit seeking a preliminary injunction against Google alleging both primary and secondary copyright infringement. P10's claims arose out of Google's use of in-line linking, framing, and its creation and display of thumbnail copies of P10's copyrighted full-sized images as a part of Google's Image

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193. Napster, 239 F.3d at 1023. The court cites to Fonovisa, Inc. v. Cherry Auction, Inc., 76 F.3d 259 (9th Cir. 1996), to support the proposition that direct financial benefit may be shown "where infringing performances enhance the attractiveness of a venue").

194. See NIMMER, supra note 21, at 3-12 § 12.04[A][2] (explaining that even though the express language of the statute states otherwise, "an obvious and direct financial interest is now understood to encompass a possible, indirect benefit").

195. See Napster, 239 F.3d at 1023 (explaining that to escape the imposition of vicarious liability, a service provider must exercise its "reserved right to police" to the fullest extent); see also Perfect 10, 416 F. Supp. 2d at 857 (discussing that the complete and absolute ability of a service provider to remove access to a certain subject matter rendering it completely inaccessible within the given environment is determinative on the right and ability to supervise). The nature of the system as a "closed-universe" versus an "open, web-based service" is conclusive on this aspect of the analysis. Id.

196. Aimster, 334 F.3d at 654.

197. Perfect 10 ("P10") publishes an adult magazine "PERFECT 10" and operated an adult web site "perfect10.com" featuring high-quality, nude photographs of "natural" models. Perfect 10, 416 F. Supp. 2d at 831-32.

198. See id. at 832 (noting that P10 has in fact obtained registered copyrights for its photographs from the United States Copyright Office). P10 argues that Google is a directly infringing its copyrights because it is creating and displaying thumbnail copies of full-sized copyrighted images located on Perfect 10's web page. Id. at 837. Additionally, P10 argues that there are many third party web sites that are also directly infringing its copyrights by displaying full-sized copies of P10's copyrighted images without express permission from Perfect 10. Id. However, since many of these web sites and their operators are judgment-proof, P10 claims that Google should be held contributorily and vicariously liable for copyright infringement because it creates and displays thumbnail copies of full-size images located on directly infringing web sites. Id.
Search technology. Essentially, the court in *Perfect 10* was faced with four issues: (1) whether Google was displaying images by using in-line linking and framing; (2) whether creation and display of thumbnail copies of full-sized images for search purposes constituted fair use; (3) whether Google could be held liable for contributory infringement; and (4) whether Google could be held vicariously liable for the infringing activities of its users.

What makes this case, at first blush, appear distinct from *Kelly*, which held that the use of thumbnails for search purposes was fair use, is that shortly before initiating litigation, P10 entered into a licensing agreement with Fonestarz Media Limited. The agreement provided for the sale and distribution of reduced-size versions of P10's images for use on cellular phones in the United Kingdom.

This Comment proposes that the language of *Kelly* and Section 107 make it clear that Google's use of thumbnails falls under the Ninth Circuit's decision in *Kelly*, and is fair and noninfringing. In light of the purpose of the copyright law, existence of a licensing agreement with Fonestarz does not distinguish *Perfect 10* from *Kelly* and is not a sufficient basis for departing from well-established precedent.

**A. Proper Application of the "Server" Test to In-Line Linking and Framing**

As a threshold matter, Judge Matz was correct in finding that Google was not displaying infringing images located on third-party web pages by using in-line linking and framing. Only the server where the infringing images are stored should be found, as a matter of law, to be transmitting and displaying the images for the purposes of direct copyright infringement. The court properly

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199. *See supra* Parts III & IV for a discussion of both direct and secondary infringement. The author of this comment contends that the Judge Matz was correct in his recitation of both primary and secondary liability jurisprudence. However, the author argues that the court abused its discretion in the application of primary liability case law.

200. 336 F.3d at 811; *see supra* Part III for a more in-depth discussion.

201. *See Kelly*, 336 F.3d at 818 (holding that use of thumbnail copies of copyrighted full-size images was fair use because it was transformative of the purpose intended of the original work).

202. *See Perfect 10*, 416 F. Supp. 2d at 832 (explaining that Fonestarz is a company based in the United Kingdom that specializes in the sale of cellular phone accessories, including but not limited to, ring tones, screen savers, background images, etc.). While there are some questions as to why P10 entered into such agreement, the record points out that it has sold approximately 6,000 images per month in England since the time of the licensing agreement. *Id.*

203. *Id.*


205. *See supra* Part III. A (providing authority on the proposition that
concluded that the application of the “incorporation” test would have an adverse effect on the Internet because many, if not most, web pages that innocently use third-party images would immediately become direct copyright infringers.\textsuperscript{206} By applying the “server” test, Judge Matz properly held that Google’s use of in-line linking and framing does not constitute a “display” of images and cannot serve as a basis for finding direct liability.\textsuperscript{207}

B. Misapplication of the Fair Use Defense to Thumbnails

The district court found that P10 established the likelihood that Google had directly infringed its copyrights by creating and displaying thumbnail copies of P10’s full-size images.\textsuperscript{208} However, under the facts of the case, and prior judicial decisions, the court improperly applied factors one and four in its fair use analysis. On appeal, the Ninth Circuit reversed the district court’s decision in Perfect 10 concerning the application of the fair use defense.\textsuperscript{209} Writing for the court, Judge Ikuta explained that the four enumerated factors of the fair use defense may not be treated in isolation. Rather, each element is to be explored, and “the results weighted together, in light of the purposes of copyright.”\textsuperscript{210}

1. First Fair Use Factor

In his district court opinion, Judge Matz acknowledged that the proper determination under the first fair use factor must involve a two-prong analysis into the commercial and productive nature of the secondary use.\textsuperscript{211} Having analyzed the facts on record, he found that Google’s use of thumbnails was highly transformative but also commercial in nature.\textsuperscript{212} However, the court abused its discretion by apportioning excessive weight to the commercial nature of Google’s secondary use and ignoring the

\begin{itemize}
  \item application of the server test to in-line linking and framing is more logical to the disbursed nature of the Internet).
  \item \textsuperscript{206} See supra note 101 and accompanying text (discussing that acceptance of the “incorporation test” would have a “chilling effect” on the functionality of the Internet because any web page that pulls or frames information contained on another server may potentially be found directly liable for copyright infringement).
  \item \textsuperscript{207} \textit{Perfect 10}, 416 F. Supp. 2d at 840.
  \item \textsuperscript{208} \textit{Id.} at 851. Since this was a motion for preliminary injunctive relief, P10 was required to show the likelihood of success on the merits. \textit{Id.}
  \item \textsuperscript{209} \textit{Perfect 10}, Inc. v. Amazon.com, Inc., 487 F.3d 701, 710 (9th Cir. 2007) [hereinafter \textit{Perfect 10 II}].
  \item \textsuperscript{210} See \textit{id.} at 720 (citing \textit{Campbell}, 510 U.S. at 577-78).
  \item \textsuperscript{211} See \textit{id.} at 845 (citing Nimmer, the court agreed that inquiry was required into whether the use in question was commercial versus noncommercial and whether it was consumptive versus productive in nature); Part III.B.1 for additional discussion.
  \item \textsuperscript{212} \textit{Perfect 10}, 416 F. Supp. 2d at 849.
\end{itemize}
highly transformative secondary use of the technology, which weighs in favor of fair use as a matter of law.

The first prong requires analysis of whether and to what extent the secondary use is commercial in nature. Courts define commercial use very broadly. Commerciality will depend on whether the accused-infringer's own use, and not the use by third parties, is commercial. Specifically, the Ninth Circuit in Kelly held that when a web site does not use the copyrighted images to directly promote its own web site nor attempts to profit by selling the images, its use is more incidental and weighs only slightly against a finding of fair use.

The parties did not dispute that Google utilizes a revenue-sharing advertisement program called AdSense. This program allows third-party web sites to carry Google-generated advertising and share in the profits generated per click-through. Based on the nature of the program, the court found that Google's AdSense did not materially contribute to the infringing activities of Google's users. At this point, the court improperly shifted its analysis away from activities of Google, the accused infringer, to those of third-party web pages. Although it is recognized that Google makes a profit from AdSense, Google itself does not promote its

213. See supra note 109 and accompanying text.
214. See supra notes 113-115 and accompanying text (discussing the definition and examples of commercial use).
216. Id. In Kelly, the court found that the incidental use made of the copyrighted images was “less exploitative in nature than more traditional types of commercial use.” 336 F.3d at 818.
217. See Perfect 10, 416 F. Supp. 2d at 846. (discussing that Google splits advertisement-generated funds with any site that carries Google-generated advertisements). However, Google is not responsible for the data that is being served on third party web sites and cannot control what content is displayed on those web sites. Id. at 855.
218. See id. (explaining that in order to receive click-through credit any user browsing on a web site must actively click on an advertising banner located on the third party web page, because only such active click will create a record and cause profit-sharing to accrue).
219. See id. at 856 (discussing that AdSense could not have contributed to the infringing uses made by third party web sites because such infringing web sites potentially existed long before Google created its “Image Search” technology and would continue to exist even after Google’s “Image Search” would be shut down).
220. Id. at 846.
221. While Google is generally supported by revenue generated from its advertising/marketing scheme, “Image Search has no advertising.” Second Brief on Cross-Appeal at 16, Perfect 10, Inc. v. Google, Inc., No. 06-55405 (9th Cir. Jul. 11, 2006) [hereinafter Google’s Appellate Brief]. Google's counsel explained that while Google did have a “brief test period where Image Search has advertisements, that practice was discontinued.” Id. at 16 n.3. In addition, the terms and conditions of participation in Google's AdSense program prohibit the display of “Google ads on web pages with MP3, Video,
Image Search by using P10's copyrighted images nor does it attempt to profit by selling the images. Thus, the court should have found, as in Kelly, that any financial benefit to Google from AdSense was merely incidental and weighed only slightly in favor of P10 on the first prong of analysis under this factor.

Analysis under the second prong asks whether the secondary use constitutes a new work of creative expression and is transformative of the original or if it functions as a substitute for the original in the market. A work becomes transformative when it utilizes the original work in a different manner or for a different purpose than originally intended.

Judge Matz recognized that the entertainment use made of the full-size images by P10 was substantially different from the Internet location and information use made of the thumbnails by Google. Based on this finding, he held that Google's secondary use was highly transformative of the original purpose intended by P10. However, he also held that Google's use of thumbnail copies was consumptive of P10's use of similar reduced-size images for sale to cellular phone users.

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222. See Perfect 10, 416 F. Supp. 2d at 848 (explaining that Google "does not profit from providing adult content, but from locating, managing, and making information generally more accessible").
223. Kelly, 336 F.3d at 818.
224. Judge Matz was bound by stare decisis to follow the analysis set forth in Kelly because the Central District of California is bound by the Ninth Circuit precedent. See Google's Appellate Brief, infra note 221, at 52 (arguing persuasively that any differences between Kelly and Perfect 10 are insubstantially to warrant a departure from well-established, and followed precedent); see also Bill Graham Archives v. Dorling Kindersley Ltd., 448 F.3d 608 (2d Cir. 2006) (citing Kelly to hold that a publisher's secondary use of reduced-sized images of the copyright owner's posters was fair use).
225. See supra notes 116-124 and accompanying text (providing examples of transformative use to support the proposition that when the secondary use is sufficiently transformative from the originally intended use, it does not supersede the original copyrighted product).
227. Id.
228. Id. at 849 (citing Kelly, the court found that the substantial differences between the primary and the secondary use, one for entertainment/aesthetic purposes and one for indexing and cataloging purposes, rendered the secondary use highly transformative and weighted heavily in favor of finding fair use).
229. Id. (opining that users may be able to use the thumbnail copies generated by Google as background images for their cellular phones without incurring an expense from purchasing reduced-size images from P10 and Fonestarz). While arguably thumbnail copies are substantially similar to reduced-size images, the image quality is inherently different. See id. at 833, n.4 (defining a thumbnail as a "lower-resolution... version of a full-size image").
Although the court correctly stated the law, it misinterpreted the holding in *Kelly*. There, the Ninth Circuit held that when a secondary use is found to be highly transformative, it weighs heavily in favor of fair use, even if the use is also commercial in nature. Having found that Google's secondary use was highly transformative of the original, the court should have recognized, as the Supreme Court did in *Campbell*, that other factors, like commerciality of the use, become less important in an analysis under this factor. Additionally, even though Google's use was commercial, the court should have recognized, as in *Kelly*, that the highly transformative nature of Google's secondary use represents a new form of creative expression and cannot be consumptive of the original. These findings weigh heavily in favor of Google and a finding of fair use. Finally, considerations of the public benefit derived from Google's Image Search and the speculative and minimal loss of value to P10's full-size images indicates that the court was clearly erroneous in finding that this factor weighed in favor of P10.

In reversing the district court's decision in *Perfect 10*, the Ninth Circuit concluded that the first fair use factor weighed in Google's favor because Google's use of thumbnails is highly transformative and provides an enormous "social benefit by incorporating an original work into a new work, namely, an electronic reference tool." Such transformative secondary use,

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230. *See supra* notes 125-129 and accompanying test (discussing that a balance between transformative and commercial use must be established in any fair use analysis).
232. *See supra* notes 121-124 and accompanying text (explaining that when the secondary use is sufficiently transformative it "adds value to the original" and becomes a new form of creative expression, inline with the purpose of the copyright law).
233. *See Kelly*, 336 F.3d at 820 (explaining that courts should consider the public interest, as the basis for the purpose of the copyright law, in determining if society would be better served by allowing the secondary use as fair); *see also supra* note 115 and accompanying text (citing *MCA* for the proposition that while fair use and commercial motivation a can exist side by side, the courts may inquire into the purpose of the secondary use to determine if it was motivated strictly for the public interest or for selfish, private commercial gain).
234. *Kelly*, 336 F.3d at 820.
235. *See supra* note 129 and accompanying text (explaining that a highly transformative secondary use weights heavily in favor of finding fair use).
236. *See Google's Amicus Curiae Brief, supra* note 13, at 29 (arguing that the "mere fact that commercial search engines turn a profit should not 'trump' . . . the enormous public benefit they provide" (internal citation omitted)).
237. *Perfect 10 II*, 487 F.3d at 723.
238. *See id.* at 721 (citing *Campbell*, 510 U.S. at 579; *Harper & Row*, 471 U.S. at 556-57; *Sony*, 464 U.S. at 431-32).
"particularly in light of its public benefit, outweighs Google's superseding and commercial uses of the thumbnails."  

2. Fourth Fair Use Factor

Judge Matz announced that the fourth fair use factor requires an inquiry into the extent of market harm and whether continued secondary use would have an adverse impact on the market of the original. The copyright owner does not have to show actual market harm, just a meaningful likelihood of future market harm. More importantly, Judge Matz recognized that the more transformative the secondary use, the less likely it would harm the market of the original. He also recognized that when a secondary use fills a market niche that the copyright owner never intended to occupy, there can be no substantial adverse market impact. Having properly recognized relevant jurisprudence, the court abused its discretion in finding that Google’s secondary use of thumbnail copies of P10’s full-size images had an adverse effect on P10’s market.

The facts of the case led the court to note that there was a remote possibility that P10’s market for the sale of reduced-size

239. Id. at 723.
240. See Perfect 10, 416 F. Supp. 2d at 850 (citing Kelly for the position that the double inquiry required under this factor is intended to ensure that the current and any future market impact would be considered by the court in its determination); see also supra notes 144-146 and accompanying text (discussing that when a potential market is adversely impacted, the financial encouragement of the copyright act may lose its affectivity and may interfere with future artistic expression and development).
241. See supra note 147 and accompanying text (explaining that market injury can be both current and future-oriented, and as such requires an inquiry into both the current and future markets that the copyright owner may wish to enter).
242. Id.
243. See supra notes 150-151 and accompanying text (expressing that the Supreme Court decision in Campbell is controlling and further suggesting that when secondary use is highly transformative of the original work, the relevant jurisprudence compels the courts to find that such secondary use is fair within the language of the copyright law and also furthers the purpose of the same).
244. See supra note 148 and accompanying text (citing Twin Peaks to express that when an accused-infringer produces items for a neglected market segment, fair use may reasonably be found as long as the other three enumerated fair use factors are sufficiently satisfied toward a finding of fair use).
245. See supra note 149 and accompanying text (espousing that when the secondary use is complementary, rather than substitutive, adverse impact to the market of the original work is greatly reduced and weights in favor of finding fair use). When, as in Perfect 10, the secondary use is in a different market and does not interfere with any established markets enjoyed by the original work, any adverse market impact is merely incidental and does not weigh heavily against a fair use defense. See supra notes 144-151 and accompanying text.
images for use on cellular phones may be adversely affected because users may be less likely to buy images from P10 and Fonestarz if they could potentially get them for free through Google. However, and more importantly, the court found that Google's secondary use was highly transformative because it was intended for information gathering and search delivery. The court further identified that Google's use of thumbnails filled a market niche that P10 never intended to occupy because its business is focused on aesthetic and creative delivery of adult content.

Although it is possible that a user of Google's Image Search could go through the long and difficult process of transferring Google's thumbnail to a cellular phone, such use is highly speculative. The reviewing court must first limit its market impact analysis to the American cellular phone market. If the court had done so, it would have found that Google's use does not interfere with P10's U.S. cellular phone market because U.S. cellular phone carriers are committed to providing only "PG-rated" enhancements on their networks. Second, the court must determine whether such use is likely to occur. This inquiry

246. See Perfect 10, 416 F. Supp. 2d at 851 (assuming, without factual support, that the cellular phone market for reduced-size images may have grown faster if Google was not creating and displaying thumbnail copies of P10's copyrighted images).
247. Id. at 849.
248. Id.
249. See infra note 253 and the cited reference for more details (explaining that the user would have to copy the thumbnail to a personal computer in the form of an image, adjust the resolution of the new image so that it would properly fit a cellular phone screen without any distortions, transfer the image to the cellular phone, and go through the process of set it as a background).
250. See infra note 253 and accompanying text.
251. See Google's Appellate Brief, supra note 221, at 60 (arguing that when analyzing market impact, courts must limit their considerations to the American market and not a "worldwide" market).
252. See id. at 60 n.17 (citing P10's exhibit ERG299, Google's counsel showed that American market impact is "limited by other factors" primarily by the reluctance of U.S. cellular phone carriers "to allow adult content" and their current commitment to "serve up PG-rated fare").
253. At least one commentator has suggested that determination of market impact requires an inquiry into the ease with which a certain impact can be brought about. Britton Payne, Imperfect 10: Digital Advances and Market Impact in Fair Use Analysis, 17 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 279 (2006).

The author proposes that even though thumbnail images can be moved to cellular phones, courts need to inquire into how practicable it would be for the average cellular phone user to move suspect thumbnail images from the Internet, to the computer, to the cellular phone. Id. at 289. He explains that the process requires a specialized software package to initiate communication between the computer and the cellular phone. Id. at 289-90. The author also points out that the average thumbnail dimensions are 320 x 240 pixels, while
would have shown that even though such use was possible, it was highly unlikely given its highly technical nature.\textsuperscript{254}

These considerations aside, the district court found Google's secondary use to be highly transformative\textsuperscript{255} and to occupy a market niche that P10 never intended to address.\textsuperscript{256} This, in itself, should have led Judge Matz to hold, as in \textit{Kelly},\textsuperscript{257} that Google's use does not supersede P10's full-size images in either the full-size or reduced-size image market. By finding that this factor weighed in P10's favor, the court was clearly erroneous as to its application of relevant jurisprudence.

On appeal, the Ninth Circuit held that the fourth fair use factor favored neither party.\textsuperscript{258} The court held that the district court erred when it found that Google's secondary use had an adverse impact on P10's cellular phone market for selling reduced-sized images.\textsuperscript{259} Despite reasoning that users of Google could obtain and use thumbnails free of charge, the district court did not make a finding that Google's users had in fact downloaded thumbnail images for cellular phone use.\textsuperscript{260} Any such "potential harm" to P10's market remained hypothetical in nature.\textsuperscript{261}

3. \textit{Considerations of Social Policy and the Purpose of the Copyright Law}

Before coming to any final conclusion regarding fair use, a court must consider the public policy and purpose underlying the Copyright Act.\textsuperscript{262} There have been several suggestions that courts should adopt public policy concerns as a fifth relevant fair use factor, and not simply as a secondary consideration.\textsuperscript{263} This would

the highest available cellular phone display is 240 x 240 pixels. \textit{Id}. at 291. This means that the image would have to be reformatted to fit the cellular phone screen and would inevitably loose quality in the process – the determinative issue in \textit{Kelly}. \textit{Id}. at 291-92.

254. \textit{See supra} note 253 and accompanying text.


256. \textit{Id}.

257. \textit{Kelly}, 336 F.3d at 818.

258. \textit{Perfect 10 II}, 487 F.3d at 723.

259. \textit{Id}.

260. \textit{Id}. at 724.

261. \textit{Id}.

262. \textit{See supra} notes 105-106 (opining that the furtherance of creative development is the driving force behind the copyright law and that financial compensation to the author is a secondary consideration). The very purpose of the copyright law is enumerated in the Constitution as a means "to promote the Progress of Science and useful Arts," U.S. CONST. art. 1 § 8, cl. 8. The furtherance of such a purpose is the driving force behind the copyright law.

263. \textit{See supra} notes 107-108 and accompanying text (explaining that fair use should be found where the progress of science and technology reasonably requires such use to be allowed, rather than restricted); \textit{see also supra} notes 47-51 and accompanying text (noting that since the four enumerated fair use factors are suggestive and nonexclusive, such expansion would not contravene
allow courts to apply the fair use exception in situations where analysis under the four itemized fair use factors yields a borderline result. With additional latitude, courts could find fair use where it would be required by policy and equity.

Equitable considerations in line with the policy of the copyright law, in turn, would allow courts to find that information locating, delivering, and standardizing tools, such as Google, favor a finding of fair use because the information-retrieval purpose would be substantially different from the creative or aesthetic purpose intended of the original. Such a finding should solidify the fair use analysis in favor of Google. The secondary use of thumbnails for search purposes is consistent with the purpose of the copyright law, and thus fair and noninfringing.

This analysis was in fact undertaken by the Ninth Circuit. After having analyzed each enumerated fair use factor individually, the court weighed all of the factors together "in light of the purposes of copyright." In balancing Google's highly transformative use of thumbnails against the "unproven use" of Google's thumbnails for cellular phone downloads, in light of the other fair use factors and the purpose of copyright, the Ninth Circuit concluded that Google's use of P10's thumbnails was fair use. As such, the court vacated the preliminary injunction against Google.

The decision of the Ninth Circuit has been heralded as a "big win for fair use." By upholding the underlying social policies of fair use and freedom on the Internet, the court declined to put copyright owners "completely in charge of how and when search engines" could use freely available content on the Internet. Moreover, it gives search engines "the ability to take advantage of computer technology in search for and use of information."

the language of Section 107).

264. Id.
265. See supra notes 107-108 and accompanying text (discussing that the fair use exception is equitable in nature and allows courts to avoid unjust results from a strict application of the copyright law and sometimes unworkable fair use factors).
266. See supra Parts I.A & I.B for further discussion.
267. See supra notes 107-108 and accompanying text.
268. Perfect 10 II, 487 F.3d at 725.
269. Id.
270. Id.
272. Id. (citing Jason Schultz, EFF).
C. Proper Application of Secondary Liability Jurisprudence

To have found Google contributorily liable for direct infringement by its users, P10 had to establish that Google had actual knowledge of specific acts of infringement by its users and that it materially contributed or induced its users to infringe.²⁷⁴ It is not sufficient to show that Google provided the means for infringement; rather, an actual and affirmative intent to induce infringement must be shown.²⁷⁸

As to the first prong, Judge Matz assumed that Google had sufficient notice²⁷⁶ of infringing activities by its users.²⁷⁷ However, the court found that Google did not materially contribute to these activities.²⁷⁸ The court reasoned that websites serving infringing content existed long before Google's Image Search came into existence and would likely continue to exist long after.²⁷⁹ Under the facts of the case, Judge Matz properly concluded that Google could not be held liable for contributory infringement.²⁸⁰

²⁷⁴ See supra notes 159-162 and accompanying text (explaining the elements of a prima facia case); see also supra notes 163-169 and accompanying text (extrapolating on the elements of a claim for contributory infringement and discussing relevant jurisprudence).

²⁷⁵ See supra notes 167-169 and accompanying text (discussing that actual affirmative intent to cause direct infringement by a third-party is required); see also supra notes 170-187 and accompanying text (discussing relevant jurisprudence involving the common law inducement theory and analyzing the similarities and differences between intent and inducement for contributory liability).

²⁷⁶ See Google's Appellate Brief, supra note 221, at 21 (questioning whether P10 provided sufficient notice to Google). Google argued that the notice provided by P10 were "vastly overbroad, dealing often with unrelated third parties and non-copyright issues ... [and] they were incomplete ... in light of the DMCA's notice requirements set forth in § 512(c)(3)." Id. Google's counsel also made an argument for collateral estoppel by pointing out that a previous court has held that P10's "similar notices [of copyright infringement] to be defective." Id. (citing Perfect 10 v. CCBill, LLC, 340 F. Supp. 2d 1077, 1096-97 (C.D. Cal. 2004)).

²⁷⁷ See Perfect 10, 416 F. Supp. 2d at 854 (opining that since P10 has failed to carry its burden to show material contribution by Google to the infringing activities of third-party users, the court is not required to make conclusive findings as to actual knowledge of infringing activities). The court chose to presume actual knowledge because the evidence presented by both P10 and Google was inconsistent on some material considerations. Id. For instance, P10 alleged, through Dr. Zada, that it began sending Google notices of direct copyright infringement as early as May 2001. Id. at 854. However, Google claimed that such notice was not sufficiently definite such as to allow it to take preventive actions. Id.

²⁷⁸ Id. at 856.

²⁷⁹ See id. (opining that even though Google may have arguably provided the means for displaying or potentially enhancing third-party directly infringing activities, providing the means without active inducement or encouragement is not enough to satisfy a finding of contributory infringement).

²⁸⁰ Id.
As to vicarious liability, the court determined that P10 must sufficiently show that Google received a direct financial benefit from the infringing activities of its users and had the right and ability to supervise the users' activities. Judge Matz found that Google received a direct financial benefit from directly infringing activities of its users as a result of its AdSense program. However, the court concluded that Google did not have the ability to supervise user activity because it did not have the ability to unilaterally prevent access to infringing materials. As a result, Judge Matz was correct in finding that Google could not be held vicariously liable for infringing activities of its users.

VI. CONCLUSION

The undisputed purpose of the copyright law is to encourage the development of creative expressions by granting a limited monopoly to the author of an original work. The creative progress may be inhibited if a secondary work serves as a substitute for the original without itself being a new form of creative expression. Because the purpose of the copyright law is to promote progress, Congress provided the fair use defense, which allows the court to avoid the strict application of liability under the copyright law by finding some secondary uses that may otherwise be infringing to be fair and noninfringing as a matter of law.

When Google creates and displays thumbnail copies of full-sized copyrighted images, regardless of whether the original

281. Id.; see also supra note 191 and accompanying text (stating the elements for a prima facia case of vicarious liability).
282. See Perfect 10, 416 F. Supp. 2d at 857 (discussing that direct financial benefit can be found where there is even a “future hope to monetize”); see also supra notes 193-194 and accompanying text (citing relevant case law to explain the meaning and requirements for a finding of direct financial benefit).
283. See Perfect 10, 416 F. Supp. 2d at 857 (opining that Google does not have the ability to supervise the content that it serves to users because by removing access to the information from Google’s database does not render the information completely inaccessible); see also supra notes 195-196 (explaining the requirements for finding supervisory ability on the part of an alleged secondary infringer); Google’s Appellate Brief, supra note 221, at 19 (pointing out that since web publishers participating in AdSense are posting pornographic images contrary to Google’s AdSense “terms and conditions” is additional proof that Google lacks the power to control third-party infringing conduct).
284. Perfect 10, 416 F. Supp. 2d at 858.
285. See supra Part I.A (discussing the development and purpose of the modern copyright act).
286. Id.
287. See supra Part I.B (explaining the basis for the development of the fair use defense); see also supra Part III.B (applying the fair use defense to Google’s use of thumbnail copies of P10’s full-sized copyrighted images).
288. Id.
images are located on third-party infringing web pages or on the copyright owner's web page, it is using the thumbnail copies for a completely different purpose — creative and aesthetic versus information gathering and organizing, respectively — as was originally intended by the copyright owner. Additionally, when the secondary use is highly transformative, as is the case with Google, it falls squarely within the language of the fair use exception, and is in accordance with the purpose of the copyright law.

Recognition that Internet search engines like Google provide an immense public benefit, including exposure to many resources that may otherwise not be easily accessible, must lead to the conclusion that limiting the functionality of search engines would have a disastrous effect on the utility of the Internet. In effect, all search engines, news aggregators and individual bloggers, who innocently post thumbnails on their sites, would become direct copyright infringers subject to the full range of penalties under the Act of 1976. Therefore, the finding that Google's use of thumbnails is fair and noninfringing furthers the ability of Internet service providers to develop new and creative means to deliver and organize information while preserving complete copyright protection of the enumerated rights held by copyright owners.

290. Jeannine Guttmann, How We Got Into A Blog Jam, ME SUNDAY TELEGRAM, July 23, 2006, at C1 (discussing how a recent study has found that approximately "12 million American adults, or 8 percent of all Internet users" have and keep a blog).