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Article

# THE FUTURE OF INLINE WEB DESIGNING AFTER PERFECT 10

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## I. Introduction

The Internet has created a challenging environment for applying intellectual property laws because it requires legal policies that were originally devised for physical creations to be adapted to a digital world. For instance, the structure of the domain name system and the development of keyword advertising practices have ***2** raised numerous questions in the context of trademarks.[1] Likewise, the introduction of web-based business models has led to contentious issues in the patent arena.[2] Without question, though, the vast majority of intellectual property disputes involving the Internet are based on copyrights, as the lawsuits regarding Napster,[3] Grokster,[4] and YouTube[5] so markedly demonstrate.

In 2007, copyrights once again took center stage when the Ninth Circuit Court of Appeals addressed the legality of two key Internet practices in Perfect 10, Inc. v. Amazon.com, Inc.[6] One aspect of this case, which perhaps garnered the most attention in the popular press, sanctioned the creation of thumbnail images by search engines.[7] The other topic may be the more significant, though, since it dealt with inline linking and framing (as referred to here as "inline web designing") techniques, which are pervasively used by Internet websites.[8] The decision drew a sigh of relief from website developers because it indicated that inline web designing typically will not infringe the display rights enjoyed by copyright owners.[9] It also formalized a marked turnaround for the court, which previously had resolved the issue differently in an opinion that it later withdrew.[10]

***3** This article evaluates the application of copyright law to inline web designing in light of the Ninth Circuit's decision in Perfect 10 v. Amazon.com.[11] Although the court's conclusion about display rights may require some observers to alter their philosophical orientation regarding the nature of website visits, the result is definitely appropriate, given the structure and operation of the Internet. Nevertheless, the court's legal analysis is not entirely persuasive, and so requires some clarification. Perhaps, more significantly, website developers might be tempted to now assume that all potential uses of inline web designing will steer clear of copyright law, at least when the incorporated material was posted lawfully by the operator of the alternative site.[12] This sweeping conclusion, however, would be a serious mistake because these practices still might violate the copyright owner's derivative rights in their works. Although some authors believe that inline web designing does not implicate derivative rights,[13] the courts have addressed several analogous situations, which demonstrate that they may not agree.[14] Rather, it appears that courts would be willing to rule that inline web designing could, indeed, violate derivative rights depending on the extent of any alterations, the degree of integration, potential economic effects, and the amount of control given to website visitors over the appearance of copyrighted content.[15]

## II. Website Development and the Application of Inline Web Designing Techniques

The task of developing a website can range in complexity from creating a very simple, static one-page site that merely contains text to devising a multi-page dynamic site offering a wide array of information and services based on changing client data[16] and providing opportunities for the user to interact with the website in meaningful ways. Languages used to develop websites have improved dramatically ***4** so that they now allow designers to express more complicated sets of information and permit web browsers to more easily read and interpret the information sent to them for presentation to users. Web browsers also have become more powerful, providing increased functionality and greater opportunities for more work to be done on the end users' computers rather than on the web servers that send out information over the Internet. In this section, we identify and clarify some of the techniques and challenges that developers must consider when building complex web sites. This evaluation provides the necessary background to support our subsequent interpretation of the technology and the ways that it should be treated under copyright law.

Website developers divide the process of creating a website into three major activities that need to be accomplished: (1) defining and organizing the content of the website, (2) writing programs and scripts to allow the website to be dynamic and interactive with individuals viewing the web pages, and (3) designing the layout of each web page so that its appearance is pleasing, easy to use, and best presents the information the designer wishes to convey to users.[17] In discussing these three activities, we will refer to Figure 1. In this graphic, Computer A represents the computer (i.e., a web server) that the website developer uses to store the main web page as well as other information. Computer B represents another computer (i.e., also a web server) on the Internet that holds web pages and additional information that may be accessed by users of the Internet. Computer C is the computer upon which a user runs a web browser program (e.g., Internet Explorer) that enables the user to view the web pages created by the developer.

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

**Figure 1: The Process of Creating a Website**

***5 A. Defining and Organizing the Content of a Website**

Some users might think of a web page as being similar to a page in a book;[18] that is, they believe that all of the information exists on the single piece of paper that makes up a page. With a traditional book, text and images alike are written on the page, essentially being "stored" in the same physical location (i.e., a piece of paper). When readers turn to the next page, they again see all of the information stored in one physical location (i.e., the next piece of paper). Internet users may think that a web page is similar in nature--that the web page exists in a single physical location (i.e., a computer file) and is retrieved from a computer (i.e., Computer A) and presented to them via the web browsers on their computers (i.e., Computer C). While this may be true for very simple web pages, it is not true for ones that are more complex.

Conceptually, the task of creating complex web pages has much in common with the development of traditional books. When authors create printed books, they must first decide what information they want to convey and how they want to present it. They then create their own text, images, and charts while also identifying and legally acquiring other materials from other sources that they want to include in their works. All of these materials are then organized and combined in separate printed pages and published as books for their readers to enjoy.

Developers of complex web pages follow a similar approach, but make some critical changes in the final steps of the process. Just as authors do when writing their books, web designers spend considerable time creating or identifying or both the content for a web page. They also must organize the layout of the web page so that it makes sense to the user, and they write instructions so that the web browser knows exactly how to present the web page content. The major way that a web page differs from a traditional book page is that the content for the web page is stored in separate files and is only combined when the user requests to view the page. That is, when the user is ready to read the page, the web page's content is dynamically retrieved from all the places where the content is kept (stored) and sent to the user's web browser (i.e., Computer C). For example, the text written by the web designer may be stored in a file on his computer (i.e., Computer A) while text that was written by another author may reside in a separate file located on another company's computer (i.e., Computer B). The same may be true for images that are presented on the web page. These images exist in separate files and may be stored on the company's computer (i.e., Computer A) or on another remote computer (i.e., Computer B). When the web page references information that is stored in ***6** particular locations, such as on Computer B, for inclusion in the presentation, the process is called inline linking.[19]

The time to perform the task of creating the web page is measured in fractions of a second rather than the months it takes to print a book. The book is also static and unchanging, while a web page can be modified at a moment's notice by changes in the files that contain the content. Moreover, the actual creation of the web page--that is, the process of combining all the files into the single web page that the user ultimately sees--can take place both at the web developer's computer (i.e., Computer A) and at the user's computer (i.e., Computer C).

Thus, an important task for a web designer is determining how and where to store the content that makes up the web page to be displayed to the user. There are many factors involved in making these decisions, including the ease of changing website content, the ability to share content with others, and the effects on performance that may result from selecting a particular design for storing, referencing, and organizing content. Consider the following examples. Suppose a web developer wishes to include some text (e.g., a disclaimer) in a web page. If the web page references a separate file containing the text, then the developer can easily change the text by simply changing the reference (e.g., changing the reference from disclaimer.htm to newdisclaimer.htm). On the other hand, if all the data that make up the text were stored in the web page file, making the change would be more difficult (e.g., the text would need to be found among all the other information in the web page). Also, if the text is stored in a separate file, then the web developer can easily share that text among several pages that the developer might create by simply referencing that file within the instructions for each separate page. For instance, if one wanted to put the company disclaimer on each page of a website, then it would be far easier to reference the text stored once in an independent location than duplicating the text within all the separate pages.

Decisions about storing content also may affect performance. When a user accesses a web page, the text and image files are stored in a temporary file folder on the user's computer. If the user requests to view the web page again, the browser first

looks to see if it already has the content in its temporary file folder and, if so, uses it rather than asking the web server to send another copy.[20] Thus, storing content in separate files may improve efficiency.

Often a web developer prefers to reference content that is owned by someone else and is stored on a remote computer (i.e., Computer B). Technically, this may be advantageous because the developer doesn't have to use his own storage ***7** capacity to include the content within the developer's website pages. Also, it avoids the legal problems that certainly would arise from the reproduction of copyrighted materials. On the other hand, if the web developer opts to not take possession of the content, then he loses control over it, both in terms of its composition and even its very existence. For instance, the content would disappear from the developer's web page if the owner of that content deleted it, or the content might change if the owner substituted new materials for it.

In addition to the task of separating content into many different files, the web developer can also organize the information within each file in a meaningful manner so that computer programs executed on the web developer's server (e.g., programs written in Java) or executed on the user's computer (e.g., those written in JavaScript) can easily interpret and act on the content being sent. To organize the information within a web page, languages such as HTML, (X)HTML, and XML were developed.[21] HTML is the well-known, well-used Hypertext Markup Language.[22] XML, Extensible Markup Language, is a metalanguage allowing designers to develop XML applications through semantic tags describing information content (e.g., documents) within the web page.[23] XHTML is an XML version of HTML.[24]

For example, using XML, the web developer may include in the web file the following code:

<message>

<to>John</to>

<from>Mary</from>

<subject>Next meeting</subject>

<body>Our next meeting is on Friday at 10am in Room 405</body>

</message>

The XML code (e.g., <message>) does not say how to display information on the web page but, instead, describes what the content is about.[25] A JavaScript program reading the web page can be programmed to perform a specific task (e.g., send an e-mail message) when it encounters the above code. XML tags (also referred to as XML codes) such as <message> and </message> may be created by the web developer and may include a script program written specifically to perform ***8** an action before the web page is interpreted by the web browser.[26] For example, a script could be written to modify the content of the value associated with a tag or to not display content tagged as an advertisement or as being from a particular URL.[27] In fact, the web developer may create many different data structures (i.e., documents) such as an invoice or a receipt, and then write scripts to perform specific actions on the data.[28] Thus, organizing content within a web page using XML provides significantly greater functionality than simply describing the layout of the content using HTML. Of interest here is that this provides greater opportunities for better interpretation and opportunities for modification of web content at the user's computer (i.e., Computer C). This is important when considering the next topic, dynamic websites.

**B. Dynamic Websites**

While a static website that presents the same information to everyone can be beneficial, websites that change content frequently[29] or change content based on who, when, and where the user observes it have proven to be significantly more useful.[30] For instance, the price of a shirt offered on a website may differ depending on the geographic location of the user. Dynamic websites may also accept information provided by users and store it in a company's database. Using personal information to tailor web pages to the user's individual needs makes websites enormously valuable in commerce, education, and other domains. Of importance to our discussion is that a major trend in website development involves decentralizing the processing that makes websites dynamic by using information provided from the owner's server and servers owned by others.[31]

***9** Processing can take many forms. For instance, it can be used to retrieve data from a database, perform spell checking, modify images (e.g., through resizing), allow a user to include selected information on a web page (e.g., one can choose the weather for a particular city on a personal Google home page), or reformat a web page so that it can be displayed on a cell phone rather than on a computer screen. While it has always been true that these functions can be readily accomplished through programming on servers, it is no longer necessary for many of these functions to be relegated there. For example, many user interface issues such as data validation may be easily handled on the client computer.[32] Enhancements to the Internet browser and the increased performance of personal computers have allowed more tasks to be shifted from the servers to users' computers.

As most users now know, the browser has become a fairly complicated application program that includes many features, such as pop-up window blockers, editing functions, communication capabilities, and video display attributes. This increased functionality at the user's computer has occurred in four ways. The first is that newer versions of Internet browsers have been developed with more capabilities designed within them. The second is that other companies have created add-ons for browsers, which provide additional capabilities many users want (e.g., viewing video clips), but that are not provided with the base Internet browser. The third way that functionality has been enhanced is by website developers, who can write specific code that is sent to the end user along with the web page. This code is then executed on the user's computer to provide the desired additional features. Finally, website designers can create their own add-on programs that the user must download and install prior to interacting with the web developer's web site.

The ability to have processing take place at the client level, in addition to the server level, gives designers the opportunity to effect some changes to source material, such as an image, without ever storing the content on their own servers.[33] For example, creating thumbnail images can currently be done on the fly. Another example is provided by the task of checking for the correct spelling of words within a document. Suppose a user has typed some text into a window on a web page. Checking for the correct spelling of that text may occur in three locations. The text can be sent to the web developer's server (i.e., Computer A), checked there for spelling, with the result then transmitted to the user (i.e., Computer C) for acknowledgement and acceptance. Alternatively, the text can be checked for spelling by an add-on program associated with the browser located on the user's ***10** computer (i.e., Computer C). Finally, there can be another server (i.e., Computer B) located on the Internet that specializes in spell checking. The text can be sent there with the results returned to the user. Each method currently has it advantages and drawbacks, but one should expect that these differences will erode as the technologies and techniques continue to advance.

### C. Web Page Presentation

The appearance of the web page must be well designed to attract users and to allow them to easily understand the information that it depicts. HTML is the language traditionally used to define the layout of a web page.[34] This language, however, is restricted in its functionality. For example, when using HTML, web developers must write the same code each time they want to have the same layout for similar material in the web page.[35] Thus, if the web page has five headings that the designer wishes to present in a specific way, the code for making that layout must be repeated five times. And if a change is desired, the change needs to be performed in all five places. In addition, the code to describe how the content is to be presented is commingled with the content.

To improve the task of laying out a web page, languages such as Cascading Style Sheets (CSS) were developed.[36] The CSS language allows the designer to separate the code that defines the layout of the content from the content itself.[37] Thus, in the above example, the developer would create a separate file defining the layout of the heading. Then, a reference to this layout definition would be included for each heading. This separates the definition of the layout from the definition of the content. In addition, this separation allows modifications to be made more easily. If a change is needed, say altering the font, only the file containing the layout code must be modified. When the user then requests to see the web page, the web browser accesses the CSS file and uses the layout definitions for presenting the content. Note, too, that any other web page may also reference this style sheet, thereby providing developers an efficient way to establish consistency in appearance among all the pages in the website. This means that developers may modify the style sheet to effectively make changes to website appearance at the user level, thereby providing greater flexibility for determining where processing takes place.

***11** In addition to the notion of the window, where the browser shows information to the user, is the concept of a frame. The browser window may be thought of as a physical window that is used to present the contents of a web page. Breaking this

physical window into smaller logical windows (i.e., frames) allows designers to think about the presentations for each of the areas separately while constructing a web page. These frames have many features that designers may choose to adopt. For example, they may decide to include scroll bars on the top or bottom or both of the frame. Designers also have the ability to modify or remove each frame's border according to their desires. Coupled with programming capabilities, web developers also may manipulate how content may appear in the frame, such as through resizing a photograph.

When a frame is used to present another person's web page, the frame is similar in nature to inline linking in that it retrieves information from another source and includes it as part of the main web page. For our purposes, this means that inline linking and framing can be evaluated using the same analytical principles, and so we use the term inline web designing within the legal discussion to refer to both kinds of practices.

### D. Final Observations Regarding Website Design

When creating a web site, developers first focus on the requirements that an information system is supposed to perform.[38] In this stage of development, the emphasis is on what is required. It is typical for web designers to assume at the outset that perfect technology exists; that is, the technology is available to accomplish any of the desired requirements.[39] Once the requirements are established, they enter into a design stage where the emphasis is on how the tasks are accomplished.[40] In this stage, technological constraints are applied.[41] The technology may not yet be able to do what is desired or the performance of a particular design may not be optimal (e.g., the task of loading the web page may take too long). Other constraints, such as operational, financial, and scheduling, may also play a role.[42] However, with continual improvements in web ***12** technologies, there is every reason to believe that data may someday be stored anywhere and that processing to modify content on a real-time basis may be done anywhere, either on a server or on the user's computer. One can certainly envision that web developers will soon be able to do almost anything they want on the fly, without directly reproducing the existing content, such as cropping images, modifying text, overwriting images with text, and seamlessly integrating images with surrounding content. Moreover, with increased processing power on the desktop and faster bandwidth, the level of interactivity and user involvement in what is presented will increase. In a real sense, the web site developer is like a museum curator, acquiring resources and collocating them in the window to their world. In addition, new technologies provide increased opportunities for end users to actively participate in the choices that are made about the presentation of available content.

## III. Perfect 10 v. Google, Inc.: The Facts and Decision About Display Rights

The facts that led to the litigation in Perfect 10[43] may be somewhat unique, but the legal conclusions were broad and will have general applicability to more common Internet browsing activities that depend on inline web designing. In a nutshell, Perfect 10 is a publisher of an adult magazine and a web site that both include high-quality photographs of "natural" models posing in the nude.[44] The web site has a members-only area that provides access to premium photographs through a registration and subscription process that costs about $25 per month.[45] Certain members unlawfully copied the privately controlled photographs to their computers and then made them publicly available by posting them on their own web sites.[46]

Google operates a search engine that crawls the web for images in response to a search request and then posts the results as a series of small thumbnail images.[47] A search for Perfect 10 would thereby uncover those images included in the member web sites and then show them on the Google web site as thumbnails along with the other search results.[48] A search customer who clicked on an image would ***13** then see a new web page that showed the thumbnail image on the top portion of the screen.[49] Along with the thumbnail was a statement indicating that the image appeared in the bottom portion of the page in its original context.[50] The bottom portion showed the entire web page that contained the image, including all of its real-time advertising, in a scrollable frame. This frame could be enlarged vertically so that it covered the thumbnail image and other material that appeared on the top portion of the page. Google also provided customers with the ability to click on a link that in effect removed the scrollable inline frame by taking them to the originating web site address.

Perfect 10 sued Google, alleging that Google violated Perfect 10's copyrights in its photographs by creating and displaying the thumbnails on Google's web site and by displaying the full-sized photographs that appeared in the frame through inline web designing.[51] The resolution of the first issue, which is not the subject of this article, merely expanded on the analysis previously employed by the Ninth Circuit in Kelly v. Arriba Soft Corp.,[52] which dealt with a similar form of image search service.[53] Since Google must temporarily make a reproduction of the original images to create the thumbnails, and then shows

the thumbnails on its web site, Google directly infringes the copyright owners' reproduction and display rights unless it can demonstrate that the actions constitute a fair use.[54] In both cases, the court was heavily influenced by the transformative nature of the thumbnail search results.[55] The fair use analysis proved to be more complicated to evaluate in Perfect 10 than in Kelly; Perfect 10 sold reduced-sized images for cell phones, and so it argued that the thumbnails might reduce the market value of its copyrighted works.[56] However, because Perfect 10 provided no evidence that any search customers actually used the photographs in cell phones, the Ninth Circuit ruled that the public benefits from the search engine outweighed the unproven harm ***14** to Perfect 10's cell phone business and so concluded that the display of the thumbnails in the search engine was a fair use.[57]

The other issue addressed by the Ninth Circuit was whether Google had any liability for displaying the full-sized images of Perfect 10's photographs when they were shown within Google's frames of the web sites that had unlawfully posted them.[58] The Ninth Circuit agreed with the district court that inline web designing might be viewed from two different perspectives.[59] One view, which the courts termed the "server test," assumes that the original web site displays the copyrighted photograph from its server, and that the web site engaged in inline web designing merely points to the display made by that server.[60] On the other hand, because the image was actually shown within Google's web site at Google's address, one might assume that Google was actually making the display at its site along with the other information that it chose to post with the photograph.[61] The district court referred to this possibility as the "incorporation test."[62]

The lower court determined that the server test was the more appropriate approach because Google did not store or serve the original image, but rather only made a direct connection for its customers to see the content transferred by the originating web site.[63] The district court also noted that the Copyright Act was intended to encourage the dissemination of information, and it feared that the incorporation test would have a chilling effect on the willingness of web site designers to use a valuable technique that helps customers find information on the Internet.[64]

The Ninth Circuit agreed with the district court that the server test should be adopted based on a strict statutory analysis of the Copyright Act.[65] The court started with the definition of display, which means "to show a copy of it, either directly or by means of a film, slide, television image, or any other device or ***15** process."[66] The court then noted that a copy is defined as a material object in which a work is fixed, and that a work is fixed when it is "sufficiently permanent to permit it to be perceived, reproduced or communicated for more than a transitory duration."[67] Relying on these definitions, the Ninth Circuit determined that the image stored in the computer was the relevant "copy" of the work because it was sufficiently permanent to be fixed under the Copyright Act.[68] The court then leapt to the conclusion that the computer owner shows the copy by means of a device or process when the computer owner fills a computer screen with the image stored on that owner's computer.[69] Based on this determination, the court held that Google did not display a copy of an image when it framed that image through inline imaging because Google's computers did not store the photographic image.[70] In this way, Google may have provided its customers with access to a display, but the display was made by the originating site that actually stored the image in its computers.[71]

The court backed up its conclusions with some focus on the technical operations that allowed Google's users to view Perfect 10's images through inline web designing.[72] According to the court, Google's HTML code did not cause Perfect 10's images to appear on the user's computer screen.[73] Rather, the HTML merely gave the originating computer's address to the user's computer, and then the user's browser interacted with that independent computer to cause the image to appear on the user's screen.[74] From this, it follows that the display resulted solely from the communication between the user's browser and the originator's web site.[75] In this way, Google was not directly involved with the technical aspects of ***16** making the display.[76] Instead, its only possible role was facilitating an operation that was carried out by others.[77]

As will be further noted in the next section, the court's analysis is not totally persuasive, although the result is appropriate. For now, it is enough to point out that the Copyright Act makes it unlawful merely to display a copy of a copyrighted work.[78] Thus, the copy could be one that belongs to someone else;[79] it does not have to be a copy that the individual, in fact, owns.[80] This means that if one had a device that could transmit an image from one place to another, this person could display someone else's work in a separate location simply by pointing the device at that other individual's copyrighted image.[81] Certainly, this would effectuate a public display under the terms of the Copyright Act, despite the fact that this person does not own or possess a personal copy of the work.[82]

The technical discussion was deficient as well. The Ninth Circuit treated HTML merely as instructions that informed computers where to find images displayed by others. This certainly is one way to view the operation, and it is the approach that substantiated the court's conclusions regarding liability for unauthorized displays. However, had the court believed that

Google was, in fact, making a display through inline web designing, it could have appraised Google's HTML instructions more in terms of their functional capabilities. After all, the HTML code initiated a totally automatic procedure that effectively caused a user's computer to request that a display be made on its screen.

Although the court determined that Google did not display Perfect 10's images by including them in its web page, it concluded that Google nonetheless could be held responsible for providing its customers with access to the infringing ***17** content posted by the third-party web sites.[83] Specifically, the Ninth Circuit ruled that Google would be contributorily liable for copyright infringement if it had knowledge that infringing Perfect 10 images were available using its search engine, could take simple measures to prevent further damage to Perfect 10's copyrighted works, and failed to take such steps.[84] For this reason, the court remanded the case back to the district court to determine if Google might be liable under this standard for including the infringing photos within its web site through inline web designing.[85]

In the final analysis, the Perfect 10 litigation has to be regarded as a major victory for web site operators who build their sites with inline web designing techniques. The most important aspect is that web sites relying on inline web designing cannot be held directly liable for copyright infringement on the ground that they display copyrighted works within their sites.[86] Thus, a web site that posts its own copyrighted materials cannot complain that other sites are displaying those same works as part of their offerings as long as those displays are made through inline web designing.[87] Of course, if another site reproduces a protected image and displays its own copy, then all bets are off under the Ninth Circuit's analysis.[88] Also, if a web site then links to the infringing display, it might be liable based on contributory liability principles.[89] Nonetheless, for the most part, Perfect 10 may be seen as a green light to inline web designing, at least with regard to the display right.[90]

Web site operators who build their sites with original content may believe that this result is philosophically inequitable. In their eyes, inline web designing reduces the value of their creative works and amounts to theft of their intellectual property.[91] Also, as mentioned, the court's legal and technical analysis is not ***18** entirely persuasive. However, the court's conclusions are legally defensible, although perhaps by looking at inline web designing from a different angle. This article next considers this alternative approach.

## IV. Inline Web Designing: Two Alternative Analogies

The United States has a long history of protecting intellectual property rights. Patent and copyright laws, for instance, were first established over 200 years ago, and federal trademark policy was derived from a rich tradition of state unfair competition laws.[92] Although federal intellectual property statutes have been amended periodically, most of the major changes were adopted prior to the commercialization of modern digital technologies and the Internet.[93] Thus, these laws, for the most part, were established to address issues that arise in physical or tangible environments. The difficulty that courts have faced recently with the advent of new technologies is that the controversies now often involve intangible matters without physical dimensions.[94] In these instances, courts have typically tried to ground their decisions about controversies in the digital world on analogies that they make to the physical world, where they are much more comfortable.[95]

A couple examples should make it clear how courts rely on analogies to guide their decisions in modern contexts. For instance, courts have struggled with determining how extensively copyrights should protect the user interfaces of computer programs.[96] Early decisions compared user interfaces to maps or directories, which have copyrightable elements along with their useful attributes.[97] More recently, though, the First Circuit analogized the menu commands in a user ***19** interface to the actual buttons on a VCR, which led it to conclude that the interface was an uncopyrightable method of operation.[98] Likewise, in 1995, a court relied on analogies to address the potential copyright liability of an Internet service provider (ISP) that allowed infringing material to be transmitted over its system.[99] In that situation, the judge determined that the ISP was more like a radio station broadcaster than a landlord of a business establishment.[100] This comparison led the judge to conclude that the ISP might be liable for transmitting unauthorized materials after receiving knowledge about the infringements.[101]

Courts have relied heavily on analogies with modern Internet trademark cases as well. Just as one example, the Ninth Circuit claimed that when a web site uses another company's trademark in a metatag to attract customers to the site, the action is like a business that erects a misleading highway sign so that drivers visit its store by mistake.[102] By following this analogy, the court concluded that the metatag might lead to liability through what it termed initial interest confusion.[103]

As noted, the Ninth Circuit's appraisal of display rights over the Internet was not very compelling. Indeed, the court could have used equally persuasive statutory and technical evaluations to reach the opposite result--that inline web designing does

cause a display. Because the court was faced with a difficult choice in a novel environment, the situation begged for it to consider different analogies to help guide and substantiate its decision. Had the court taken this step, its conclusions about inline web designing and display rights would have been much more convincing.

### A. The Private Control Analogy

Some individuals who think about how the Internet is structured probably believe that it is made up of numerous independently run sites that a person can choose to go visit. When these people want to shop at Amazon.com, for instance, they likely believe that the Internet takes them to Amazon's site so that they can browse and purchase desired items. If they decide to look for merchandise at REI instead, they will go to REI's separate Internet location. Thus, one typical perception is that the Internet is largely made up of multiple privately-controlled, but publicly accessible, areas that individuals can freely visit as they wish.

***20** Following this analogy, web site designers effectively decorate their sites so that they appeal to and inform their customers. In a sense, Amazon.com's business is made up of a main entry room and numerous other rooms where it displays the items that it wants customers to view. For efficiency purposes, it may also have small rooms that only house single items, so that it can display those items simultaneously through a communication connection (hereinafter called an "Internet display device") in several of its more prominent display rooms. Customers actually could visit those small rooms and see the single items if they knew where to look for them. Also, Amazon.com might display items controlled by other businesses if those entities gave Amazon permission to use Internet display devices within its premises.

The concept of the private control analogy is somewhat natural for people to grasp, given that it conforms to how the physical world is structured. When a person enters a web address, that individual believes that the Internet takes him to the requested location. Thus, the expectation with a traditional hyperlink is that it transfers the customer from one physical space to another. This action does not have any direct copyright implications because no copyrighted content is copied or displayed by the hyperlinking web site;[104] rather the customer just moves from one place to another.[105] When a business includes an image through inline web designing, that business goes to a different location and uses an Internet display device to beam a display from that place to another.[106] This, of course, would implicate display rights unless the operator has been given permission to make the display at its alternative address.[107] So, if Amazon.com places images in separate rooms for efficiency, it of course grants itself permission to display and organize those images in other rooms that it controls, but it might not wish others to display those images within their sites. If others do so without permission, their actions would violate copyrights unless they fall within a recognized exception such as fair use.[108]

***21** Interestingly, the Ninth Circuit preliminarily adopted this analogy in 2002 when it first seriously considered the legality of inline web designing in Kelly v. Arriba Soft Corp.[109] In that case, Arriba[110] established an image-based search service, similar to that used by Google, which created thumbnails of relevant images.[111] If a user clicked on a thumbnail, the full-sized image would be displayed along with other information through inline web designing.[112] The Ninth Circuit ruled that Arriba created a display of Kelly's photographs "by trolling the web, finding Kelly's images, and then having its program inline link and frame those images within its own web site. Without this program, users would not have been able to view Kelly's images within the context of Arriba's site."[113] The court later withdrew its decision regarding inline web designing for procedural reasons without commenting on the merits of the decision.[114] Thus, one does not know whether the judges determined at that time that they may have made a mistake in their philosophical approach. However, in light of Perfect 10, it is clear that the Ninth Circuit has struggled with the proper way to characterize a display within the context of the Internet. If nothing else, this history also proves that the selection of the proper analogy is not necessarily an easy call.

### B. The Public Auditorium Analogy

Another possible way to view the Internet is to assume that all technically unrestricted content has been placed on the stage of a public auditorium and that everyone has the capability to view that content on screens located at their individual seats. Copyright holders (and others) who place their material on the stage have chosen to display their works so that everyone in the auditorium can see it. The difficult problem for members of the audience is determining what items to view and how to organize them in a meaningful way. After all, there are literally billions of literary and artistic works that individuals and businesses have decided to display on the Internet stage. The role of the Internet web site developer is to take on this task by serving as the conductor who selects, crops, filters, and arranges the previously displayed items in a meaningful way so that

members of the audience may benefit from them.

***22** If this analogy is followed, then a traditional hyperlink does not take a customer to a particular address to view the items at that location. How could it? After all, the customer never leaves his or her seat in the auditorium. Instead, the address is more like a request to a specific conductor to determine what should be visible at that patron's seat on the viewing screen. The conductor may simply show items that he has created and displayed, or illuminate others in addition to (or to the exclusion of) his own. This means that the traditional way of discussing a link or address is improper because one normally talks about "linking to" or "going to" a particular site. However, under the public auditorium analogy, it is more accurate to conceptualize a traditional link or address in passive terms, such as "linking from" or "coming from." Thus, one does not go to Amazon.com; rather it would be more accurate to say that when one requests information, it is displayed from Amazon.com, and more particularly from its "conductor." In light of this analogy, inline web designing simply describes the process through which the conductor illuminates materials that are already being displayed on the public stage. For this reason, the practice of inline web designing would not constitute a display and so, could not violate the display rights under copyright law.

The Ninth Circuit in Perfect 10 reached conclusions that are consistent with this analogy, although the court never articulated or entertained the philosophical framework within its decision.[115] As mentioned, the court's conclusion that a person cannot display a work unless that person owns or controls a copy of that work[116] is clearly wrong, at least as a general rule. For instance, assume that the Hirshhorn Museum of Modern Art in Washington, D.C. houses an exhibit of copyrighted Andy Warhol prints. If someone surreptitiously plants devices that transmit the images to a gallery in Portland, that action should violate Warhol's public display rights, even though this person does not own or control his or her own copies of Warhol's works.[117] Nevertheless, if one evaluates the display right in the more limited context of the public auditorium analogy, as applied to the Internet, then the court's decision is correct. This is because only the person who puts a copy on the public stage is making a display, while others merely point to it for customers to view. Because one cannot choose to put a copy on that stage without controlling the copy, it follows that the copy must reside within that person's computer or server in the first place.

The public display analogy substantiates all of the legal determinations reached by the Ninth Circuit. Perfect 10 displays many of its copyrighted photographs on the Internet, but not on the more common public stage.[118] Rather, ***23** it displays them in a private forum for specific members who pay a required fee.[119] Some of these members unlawfully made copies of these photographs, stored the copies in their computers, and then placed these copies on the unrestricted Internet stage without permission.[120] These members, therefore, have clearly made a public display. However, the so-called public web site conductors, who then highlight these displays for customers, have really done nothing more than point to what those members illegally put out there for all to see. Do these conductors violate Perfect 10's display rights? Typically, the answer is no, unless the conductors can be held responsible for furthering the damage inflicted by the members who unlawfully posted the works on the public stage.[121] The court, therefore, was correct in evaluating this responsibility in terms of contributory liability principles.

### C. The Public Auditorium Analogy is the Correct Formulation

Since the private control analogy leads to far different results regarding display rights than does the public auditorium analogy, it is critical to determine which approach best describes the operation of the Internet. For legal, practical, and technical reasons, the public auditorium analogy is the most appropriate choice.

Copyright is designed to provide the necessary economic incentives for creative individuals to invest time and energy into producing original expressions and to disclose their works to the public.[122] Each of the rights listed in section 106 of the Copyright Act is intended to ensure that copyright holders are not deprived of the requisite economic value in their works.[123] Consider a photographer, let us say Michael Mackey, who takes a magnificent picture of El Capitan in Yosemite National Park. If others could reproduce and distribute copies of that work, then Mackey clearly would be deprived of economic return due to the ready availability of competitive duplicate pieces. However, Mackey also might lose value if legitimate purchasers could publicly display their copies of the work.

Suppose Mackey has sold only one copy of the work to date, although he might be willing to sell more in the future. Lots of people would love to hang such a beautiful photograph in their homes if they had the opportunity. Now suppose the purchaser of that one copy agrees with homeowners to beam a display of the work onto the walls of their residences. This

would, of course, satisfy their demand for the work and so, reduce the value of any copies that Mackey might later wish to ***24** sell. Even if the purchaser hung his copy in his house or in an art gallery, some demand might be satisfied because this provides opportunities for people to fulfill their aesthetic interests. The negative economic effects from such limited displays are considered so minor, though, that the Copyright Act provides an exception for them.[124] However, any display to people who are not in the immediate physical vicinity of the piece is unlawful due to the potential for significant economic harm.[125] Thus, display rights are very much about giving the copyright owner the ability to control the range of people who might have access to view copies of a work.[126]

When a copyright owner displays a work over the Internet, that work can be seen on every computer around the world as long as one knows where to look. Thus, when a web site uses an inline link to include that image, it has not expanded the universe of people having immediate access to the piece. In effect, it has done nothing more than point them in the right direction so that they can see what the copyright owner has already offered them to view. This means that any economic value preserved by display rights is not affected by the act of inline linking to a copyrighted image. Of course, when the members copied Perfect 10's photographs and displayed them without restrictions over the Internet, their actions certainly did increase the range of people who were able to view the works.[127] Thus, their actions did amount to unlawful displays.[128] Indeed, if someone were to copy an unrestricted image from the Internet and repost it from a different address, this would be a display because it increases the potential opportunities for viewers to see the piece.[129] However, simply pointing to those displays, by itself, cannot hurt the economic value of the work.[130]

The public auditorium analogy accurately captures the economic consequences that result from inline web designing. This is because it models the effects of a universal display in a physical environment by hypothesizing the notion of an infinitely visible stage. The private control analogy, on the other hand, leads ***25** to conclusions that are inconsistent with the purposes of display rights under the Copyright Act. Assume that Mackey posts his picture of El Capitan on his personal web site, Mackey.com. Another web site, let us call it Yosemitetreks.com, then adds Mackey's picture to its homepage through inline web designing. Under the private control analogy, this action would constitute a display by Yosemitetreks of Mackey's photograph within Yosemitetreks' premises. For it to be a display under the Copyright Act, though, one would have to determine that the appearance of the photo at the Yosemitetreks address might cause some economic harm to Mackey by expanding the range of those capable of viewing his photograph without his permission. Or, in the alternative, one would have to show that preventing Yosemitetreks from showing the photo within its premises might decrease the number of unauthorized (and potentially uncompensated) views. However, this will not happen because a visitor to Yosemitetreks.com, at the instruction of the web site, could instantaneously and seamlessly leave the site, see the photo at Mackey's site, and then return to Yosemitetreks without expending any time or effort at all.[131] Indeed, the individual could visit both simultaneously by, for instance, viewing Mackey's web site on a cellphone while he is physically within Yosemitetreks' premises.[132] Thus, the fact that Mackey provides instantaneous and immediate access to his facility means that others cannot harm Mackey by making Mackey's copy of his photograph more accessible than Mackey has already made it.

This does not necessarily mean that Mackey cannot find other reasons to complain that his work appears inside the Yosemitetreks locale. He might, for instance, claim that those who view his work at Yosemitetreks might miss an opportunity to see marketing posters that he hangs at his location and that this disrupts his economic relationships with advertisers. This argument fails, however, if Mackey displays that picture from a special room with its own address because he is thereby allowing the public to gain instantaneous and immediate access to the photo without the associated advertising, assuming the individuals know where to find it.[133] The claim is stronger if the only place that Mackey technically permits the public to see the work is in the room that contains the advertising.[134] One can pick holes in this argument, for instance, by demonstrating that Yosemitetreks ***26** needs only provide its customers with a specially constructed cardboard screen before they pop over to Mackey's site. In this way, they could view the photo at Mackey's location without seeing the advertising. However, if nothing else, this issue demonstrates how awkwardly the private control analogy handles the structure of interrelationships over the web.

The public auditorium analogy, on the other hand, provides a ready solution to the problem because Mackey unquestionably is responsible for making the display, no matter how or where it is seen. In addition, the public auditorium analogy might actually provide Mackey legal recourse for the damages that truly bother him. His concern, after all, is not that others see his work, but that they see it in a different way or context, potentially with materials other than he intended. Thus, using the public auditorium analogy, the question is whether the conductor violates Mackey's rights through the composition of elements that are highlighted on customer screens. As we shall see in the next section, the answer depends on how derivative rights may be addressed in this context.

The private control analogy also renders solutions that have undesirable practical consequences. Just for starters, the analogy dictates that all unauthorized uses of inline web designing violate display rights unless they can be justified under fair use principles.[135] However, fair use offers little protection under the circumstances because inline web designing typically involves the presentation of an entire image that has a creative (as opposed to factual or utilitarian) nature in a commercial setting for a purpose that is not transformative.[136] The private control scenario also weakens possible arguments for fair use based on a home use or personal use exception. This is because the display is hypothetically made by a commercial establishment within its domain. Under the public auditorium analogy, though, the display is seen at the viewers' individual seats, which may allow them to legally make certain changes to satisfy their personal needs and preferences. This, too, becomes relevant when dealing with derivative rights.[137]

Another problem with the private control analogy is that businesses may be held strictly liable for copyright infringement, even when they actually get permission from web sites to include their web pages through inline web designing. Suppose that Yosemitetreks negotiates the right to display Mackey's home page through inline web designing techniques. If Mackey's site happens to include any materials that Mackey is not authorized to show, then Yosemitetreks will also display those items without the copyright owner's permission. Unfortunately for Yosemitetreks, copyright law might not give it a break, even ***27** though it made a good faith attempt to handle the situation in a legitimate fashion.[138] Its legal position is no different than a bookstore that sells a book, which, unbeknownst to the store owner, contains infringing material. In this situation, the courts have held the bookstore liable for distributing the offending items, despite the lack of knowledge.[139]

Such a strict standard for inline imaging might have a chilling effect on a useful and common practice that enhances experiences on the web because web designers would have to clear copyright privileges for every single item that they might choose to include within their sites.[140] For practical as well as equitable reasons, knowledge-based principles would lead to a more satisfactory result. This, then, is another reason to prefer the public auditorium analogy; it evaluates responsibility for displays made through inline web designing with contributory liability principles. Choosing an analogy in this way, based on preferred results, is not unprecedented. For instance, the court in Religious Technology Center v. Netcom On-Line Communications Services, Inc. concluded that the legal responsibility of ISPs should be likened to the owner of a copying machine so that it could apply contributory liability principles rather than strict liability principles for direct infringement.[141]

The public auditorium analogy also mirrors the technical architecture of Internet operations more closely than does the notion of private control. As noted in the discussion on web page design, the web site developer may be considered a curator of Internet-based artifacts that are chosen for presentation to particular users.[142] The curator, however, does not need to have possession of the artifacts (i.e., the files stored on his server), but only knowledge of the Internet references to these Internet-based elements. With current technologies, the curator can reorganize the materials and tailor them to individual users. In addition, users are able to decide which portions of the auditorium they wish to focus on or to exclude altogether.

***28** For all of these reasons, the public auditorium analogy is best suited to evaluate a web site's potential legal exposure for providing access to copyrighted materials through inline web designing. Use of this analogy provides a context that supports the Ninth Circuit's conclusion's regarding display rights: namely, that a site using inline web designing cannot be directly liable for copyright infringement, but may be liable under the knowledge-based contributory infringement standard. Although this resolves the debate about display rights and serves as a bright green light to inline web designing in this regard, the decision does not necessarily give web designers a carte blanche to do anything they wish. The next section demonstrates that web sites using inline web designing techniques still might violate a copyright owner's exclusive right to make derivative works under certain circumstances.

## V. Inline Web Designing and Derivative Rights: The Big Question Mark

One of the exclusive rights granted to copyright owners by the Copyright Act is the right "to prepare derivative works based upon the copyrighted work."[143] The statute further defines a derivative work as:

> [A] work based upon one or more preexisting works such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed or adapted.[144] When a web site uses inline web designing, one must address whether that site has recast or adapted a copyrighted work within these terms to constitute infringement of the derivative right.

From one vantage point, one might think that the answer should be no. After all, a web site involved with inline web designing is effectively doing little more than manipulating the way that customers might temporarily view existing materials, such as with borders, blinders, or colored lenses.[145] Under the Copyright Act, a work must be fixed, or have some physical form, to infringe derivative rights.[146] Thus, to some observers, inline web designing does not involve the kind ***29** of permanent alterations required under the law.[147] From another perspective, though, inline web designing does precisely what the statute forbids by consistently repackaging the appearance of copyrighted materials in a manner that is predetermined by HTML code[148] fixed in computer memory. In effect, inline web designing substitutes what copyright owners want customers to view with different perspectives of their work, which might deprive them of licensing or advertising revenue from their original creations. For this reason, according to this position, inline web designing can, indeed, violate derivative rights.[149]

The meaning of derivative rights--and the kinds of actions that violate them--is nebulous, even in the physical world.[150] As one might expect, the issues become even murkier in cyberspace. To date, only one reported case has addressed the issue of inline web designing head-on, and there the judge denied the defendant's motion for summary judgment because the answer was not clear at that stage of the litigation.[151] Thus, web sites that build content with inline web designing must, at least, consider the possibility that their actions might infringe derivative rights.[152] Fortunately, analogous cases do provide some guideposts for appraising the risks raised by various forms of inline web designing.

***30 A. Analogous Cases Involving Physical Alterations**

Several cases involving physical alterations to copyrighted materials in traditional contexts provide insight into how changes made through inline web designing might logically be addressed. Unfortunately, the courts have reached conclusions that often appear contradictory,[153] so it is difficult to make universally definitive judgments about inline web designing. Nevertheless, the opinions do demonstrate that certain kinds of inline web designing practices very likely infringe derivative rights unless protected by fair use principles.[154] In addition, they point to some of the risks that might be involved in other inline web designing situations.[155]

A common practice with inline web designing is to display a copyrighted work surrounded by a "frame" of independently developed materials and images, which might include explanatory statements and advertising.[156] This raises the immediate question whether one who has lawful possession of a copyrighted work, such as a photograph, can simply frame the image and commercially profit from the newly framed version. Interestingly, three cases that involve affixing images to ceramic tiles have raised conflicting, but instructive, opinions in this regard.[157]

In Mirage Editions, Inc. v. Albuquerque A.R.T. Co., the defendant purchased books containing photographs of Patrick Nagel art pieces, removed certain pages, and then mounted the individual pictures (with narrow black borders) on white ceramic tiles, thereby providing the images with a flush frame.[158] The Ninth Circuit determined that the defendant created infringing derivative works because it had recast or transformed the individual images by incorporating them onto the tiles.[159] In a subsequent case, the same defendant purchased individual copyrighted note cards and mounted them in a similar manner on ceramic tiles.[160] An Alaska district court also concluded that this action infringed derivative rights, making the following observation in the process:

> The court cannot agree that permanently affixing a note card to a ceramic tile is not recasting, transforming[,] or adapting the original artwork. Placing a print or painting in a frame and covering it with glass does not recast or transform the work of art. It is ***31** commonly understood that this amounts to only a method of display. Moreover, it is a relatively simple matter to remove the print or painting and display it differently if the owner chooses to do so. Neither of these things is true of the art work affixed to the ceramic tile.[161] Therefore, the court, in this case, concluded that the physical permanence of the adaptation was crucial to its finding of liability.

The final case in the trio was Lee v. A.R.T. Co., in which, again, the defendant mounted copyrighted note cards and lithographs on ceramic tiles.[162] This time, though, the Seventh Circuit disagreed with similar previous cases and determined that the tiles did not create derivative works.[163] The court believed that the distinction between framing art pieces and mounting them to tiles was not persuasive because each method visually changes the way that the works are displayed.[164] In addition, the court was not persuaded that the permanence of the tile process created a meaningful difference with framing because many types of frames are often very difficult to reverse or change.[165] According to the court, "[a]n alteration that includes . . . a complete copy of the original lacks economic significance."[166] Thus, it did not matter if the works were

surrounded by traditional frames or with the borders from ceramic tiles.[167] The Seventh Circuit concluded that the tiles did not create derivative works because the "note cards and lithographs were not 'transformed' in the slightest."[168] Although the art was bonded to a slab of ceramic, "it still depict[ed] exactly what it depicted when it left [the artist's] studio."[169]

Although the Seventh Circuit's decision clearly conflicts with previous results, the tension among the cases provides important insights and observations. First, these cases were difficult for the courts to appraise because the visual appearance of the underlying copyrighted works was not significantly changed when they were physically attached to the tiles. One might presume from its statements that the Seventh Circuit would have ruled differently had the defendant modified the note cards and lithographs before affixing them to the tiles. Indeed, the situation evaluated by the Ninth Circuit regarding the images from Nagel's book actually involved a modification because the single images were only a ***32** portion of the copyrighted compilation that purchasers of the book were intended to view. Thus, one might take the position that the Ninth and Seventh Circuit opinions are somewhat consistent on this basis, although they part ways on other matters. In any event, one can conclude from these decisions that the risks of infringing derivative rights increases when the appearance of the underlying copyrighted work is altered.

The courts also struggled with the nature of integration that is required before a work is transformed under the terms of the Copyright Act. The courts each focused on the issue of physical integration, but, in the end, that probably was not the ultimate basis for their disagreement.[170] The Seventh Circuit was correct that physical attachment cannot be the sole deciding factor.[171] Imagine, for instance, if a commercial art gallery were to display a copyrighted painting with a special hand-drawn frame that integrates so well with the underlying art work that it appears to be a natural extension of the piece. Although the frame is not permanently attached to the painting, there is little doubt that this would create a derivative work. Nonetheless, the Ninth Circuit is also correct that physical attachment could bear significant relevance to the decision regarding derivative works. For instance, if an artist were to take a Mark Di Suvero sculpture and add new girders to the piece, the result no doubt would be seen as a derivative work, despite the fact that the original sculpture remains unchanged by the physical attachments.[172]

The common thread that binds these scenarios, perhaps, is not based on whether the frames or other materials are physically bonded with the copyrighted piece, but whether they are conceptually or artistically integrated with it.[173] Thus, if the viewer can readily and distinctly recognize where the original unmodified piece ends and the new material begins, then the addition of the new material ***33** probably does not create a derivative work.[174] For many situations, this may be an easy call, especially when the additions are on the same dimensional plane, as with common frames. The tiles, however, may have been more difficult to evaluate because they involved changes in depth, as well. In other words, although the lines of demarcation with the tiles, perhaps, were clear in a two-dimensional space, they may have been less recognizable on the third-dimension given that the images were fused down into the tiles.

One final feature of these cases is how the judges allude to the importance of personal control in making their decisions regarding infringement of derivative rights. As noted above, the Alaska district court determined that traditional art framing does not create a derivative work because purchasers maintain the ability to easily change the frame while preserving the integrity of the copyrighted piece.[175] Similarly, the Seventh Circuit was bothered by the potential reach of derivative rights for note cards, wondering whether they might be infringed when purchasers jotted ideas on them, cut them in half, or used them as coasters for drinks.[176] The court worried that a decision favoring the copyright owners might make "criminals out of art collectors and tourists."[177]

The importance of these three factors--modification of the work, conceptual integration, and customer control--can be seen in several other situations that draw parallels with inline web designing. For instance, certain forms of inline web designing may be compared with a collage because existing images and materials are effectively merged into one visual work on the computer screen. William Landes, a prominent legal scholar, argues that an artist who buys photographs and then pastes the unmodified images on a board as a collage should not be found liable for infringing derivative rights because the photographers have already been economically compensated for independent uses of the images.[178] However, he notes that if someone were to draw a moustache on a painting, or rip up the painting and sell the several pieces, then these actions would create infringing derivative works.[179] Thus, it probably is lawful to compose a web page with separate inlined images, as long as those images remain unmodified and are conceptually separated ***34** from each other and any additional materials. However, any further actions raise the level of risk. For example, a court recently determined that the ski company K2 infringed the derivative rights of Chase Jarvis, a photographer, when it combined his photographs into advertisements.[180] The court stated:

> In accordance with his usual practice, Jarvis delivered all of his images to K2 in the form of identical

> square slides. The collage ads did not merely compile these slides as an album might, or as Jarvis' own web[]site does. To the contrary, the ads shrank, expanded, distorted, overlaid[,] and otherwise edited the original images, while also combining them with photos taken by other photographers, additional graphics, the K2 logo[,] and marketing slogans.[181]

In another instructive case, National Geographic selected ten magazine cover photographs, including one shot by Jerry Greenberg, and combined them into a moving visual sequence that morphed one into the other over a span of approximately twenty-five seconds.[182] National Geographic also repositioned Greenberg's photograph from a horizontal presentation into a vertical orientation.[183] The Eleventh Circuit determined that National Geographic prepared a derivative work by altering and combining Greenberg's photograph in this way.[184] By analogy, web site designers who take steps to combine preexisting copyrighted displays in a seamless fashion likely step on derivative rights.

A couple of cases involving traditional print and video products indicate how courts react when purchasers of books and video cassettes include advertising with their copies and then resell them. National Bank of Commerce v. Shaklee Corp. involved the inclusion of advertisements within a book written by Heloise Bowles, a newspaper columnist and author who provided household hints.[185] Specifically, Shaklee contracted with the publisher of Heloise's book, All Around the House, to create a special edition series of the book that contained Shaklee advertisements at the end of each chapter and on the back cover.[186] In effect, Shaklee purchased copies of Heloise's book, added its own advertising to them, and then redistributed ***35** them.[187] The Texas district court ruled that the inclusion of the advertisements violated Heloise's right to protect the integrity of her work and, so, Shaklee infringed her copyright privileges.[188] A Kansas district court reached a contrasting conclusion in Paramount Pictures Corp. v. Video Broadcasting Systems, Inc. when the defendant placed ads on the blank lead-in tape that precedes movies on videotapes.[189] In this situation, the court ruled that the defendant had not created a derivative work because it had not recast, transformed, or adapted the motion picture.[190]

These cases can be reconciled because Shaklee actually changed the content within the four corners of Heloise's book, while Video Broadcasting placed its advertisements outside the clear boundaries of the copyrighted works by preceding them in temporal order. From this, one can be somewhat confident that a web site would infringe derivative rights if it superimposed its own advertisements within a third-party web site display. However, web sites that externally frame these materials with independent advertising probably do not violate derivative rights, especially if the lines of demarcation are clearly drawn. One might have some reservations with this conclusion because the advertisements in Paramount were temporally separate, and so the court did not appraise ads that were spatially separate but offered at the same time, as with inline web designing. Thus, the court may have reached a different conclusion if Video Broadcasting had somehow been able to run its advertisements above the movie while the movie was being displayed. However, if it were possible to place advertisements in this way so that they are clearly separate from the movie without compromising the dimensions or quality of the image, then they probably would pass muster in terms of copyright law.[191]

Sometimes web sites engaged in inline web designing selectively target only a portion of a third-party's display, so that some of the copyrighted material will not be seen on their pages.[192] Two cases demonstrate that this practice may violate derivative rights. The first case was litigated before the Copyright Act was amended in 1976, when it specifically expanded protection for derivative rights.[193] ***36** Still, the court found that the American Broadcasting Companies (ABC) had violated the copyrights in a ninety-minute Monty Python special by deleting twenty-four minutes of material, primarily to allow time for commercials.[194] The court determined that ABC was not authorized to truncate Monty Python's creative work, and, by so doing, it had infringed on Monty Python's right to control how the work is presented to the public.[195]

In the other case, In re Aimster Copyright Litigation,[196] the Seventh Circuit needed to address the application of contributory liability and, so, focused its attention on the landmark Supreme Court decision in the Sony Betamax case.[197] As part of that evaluation, the court noted that commercial-skipping amounted to creating an unauthorized derivative work because it reduced the copyright owner's income from the original program.[198] In making this judgment, the court considered the possibility that a VCR user might be able to create a commercial-free tape of a program by manually pausing the recording function when commercials appeared.[199] This is different than skipping through recorded commercials by using the fast-forward button,[200] a practice that is more analogous to what might be done with inline web designing, because no copy of the work is created. In the next section, we will see that consumers who skip commercials in this way either do not create a derivative work or, if they do, are protected by fair use. However, if commercial establishments that were otherwise authorized to display a work were to skip the accompanying advertisements, then they might, indeed, infringe on derivative rights, just as those who make commercial-free tapes would.[201] This highlights how the concept of customer control may be

very ***37** relevant in addressing these issues.[202] It also demonstrates that web developers who use inline web designing techniques to delete commercials posted on third-party web sites probably infringe their copyrights.[203]

### B. Analogous Situations Involving "Real-Time" Alterations

Although many lessons can be learned by studying analogous cases in traditional physical environments, one still must wonder whether changes that are made to content on the fly, as is done with inline web designing, may infringe on derivative rights. After all, a derivative work must be fixed or satisfy some notion of permanence to be covered by the Copyright Act.[204] Several cases involving video games indicate that real-time changes based on coded instructions can, in fact, violate derivative rights. They, along with decisions regarding Internet adware, also confirm that courts appraise the situations using the three parameters previously mentioned, along with the potential for economic harm. In this regard, consumer control appears to be particularly relevant. In addition, the Family Movie Act, which was passed in 2005, provides further support to the conclusion that real-time changes may infringe derivative rights.[205] Thus, there is little doubt that inline web designing can, indeed, violate copyrights, despite the real-time nature of the alterations.

#### 1. The Video Game Cases and Related Issues

A good place to begin the consideration of real-time changes is with Midway Manufacturing Co. v. Artic International Inc., a case decided by the Seventh Circuit in 1983.[206] In this situation, Midway created video game machines typically found at video arcades, which allowed customers to play games such as Pac-Man and Galaxian.[207] Among other things, Artic designed a circuit board that ***38** purchasers could substitute into Midway's machines so that the game speed would be accelerated.[208] Thus, Artic did not duplicate any of the copyrighted content, nor did it make any permanent alterations to the creative aspects of the game.[209] Rather, it sold computer-based instructions that acted on the game in real-time to speed up the rate of play.[210] The court held that the speeded-up video games were derivative works because "[s]peeding up a video game's action makes the game more challenging and exciting and increases the licensee's revenue per game."[211] In reaching this conclusion, the court distinguished a discotheque that plays forty-five rpm recordings at seventy-eight rpm, which the court thought would probably not infringe derivative rights because the copyright owner would not suffer financial harm.[212] Speeding up video games, by contrast, would create negative economic effects.[213]

In 1992, the Ninth Circuit addressed another situation involving speeded-up video games that on first blush seems to raise the same issues as in Midway. In Lewis Galoob Toys, Inc. v. Nintendo of America, Inc., Galoob sold a device, called the Game Genie, which allowed consumers to alter up to three features of Nintendo games, including the speed that characters moved, when the games were played on Nintendo's home video game machine.[214] The Game Genie worked by blocking the value of a data byte sent by the Nintendo game cartridge to the central processing unit of the Nintendo machine and replacing it with a new value that caused the desired effect.[215] Thus, as in Midway, the defendant simply wrote instructions that caused the game machine to revise characteristics of the visual displays without making any physical or permanent changes to the plaintiff's content. Nevertheless, the Ninth Circuit determined that use of the Game Genie did not infringe Nintendo's derivative rights in its video games.[216]

The primary basis for the court's ruling was that the Game Genie did not create a derivative work.[217] The Ninth Circuit distinguished its previous decision in Mirage Editions, the tile case, because the tiles physically incorporated the copyrighted work, and sales of the tiles might supplant demand for the underlying artwork.[218] The court noted, "[O]ur holding in Mirage Editions would have been ***39** much different if Albuquerque A.R.T. had distributed lenses that merely enabled users to view several artworks simultaneously."[219] The Ninth Circuit also distinguished the decision in Midway because Artic's chip physically replaced one that was originally provided with the machine.[220]

The Ninth Circuit's reliance on physical changes, particularly with reference to Midway, is not entirely consistent or persuasive. Clearly, Artic could have created a plug-in device, similar to Galoob's, that would have been able to speed up game play without physically replacing Midway's chip. Still, one can be confident that this would not have affected the Seventh Circuit's ruling. Thus, the Ninth Circuit's conclusion must be motivated by other factors. Indeed, the court related its fear that a ruling for Nintendo might chill innovation with other forms of add-on programs that benefit consumers in digital realms.[221] As an example, it pointed to spell-checkers, which consumers might use with word-processing programs to visually indicate spelling errors.[222] The court stated, "These applications, as well as countless others, could not be produced and marketed if courts were to conclude that the audiovisual display of a word processor and spell-checker combination is a derivative work based on the display of the word processor alone."[223]

The most sensible and logically coherent explanation for the Ninth Circuit's desire to treat the Game Genie differently than Artic's circuit boards ultimately comes down to consumer control. When video arcades install Artic's revised instructions, consumers are not given control over the game play; rather they have no choice but to play it at a fixed enhanced speed. The Game Genie, on the other hand, simply gives consumers the capability to vary the speed of the original game to the degree that they want to, and only if they choose to do it. In other words, consumers who already possess a legitimate copy of a Nintendo game are merely given a tool that enables them to temporarily change the visual displays in ways under their personal control. Critically, if consumers want to play the game as originally devised, they can simply and easily turn off the Game Genie and return to the basic game that is already in their possession. Making the distinction on the basis of consumer control explains the court's sense that products, such as lenses, kaleidoscopes, and spell-checkers, should not be condemned simply because they might be used at the consumer's discretion to alter visual displays for their personal enjoyment. Likewise, consumers who use VCRs to fast-forward through commercials probably do not create derivative works in the process.

***40** Although the Ninth Circuit determined that the Game Genie did not create a derivative work, it nevertheless evaluated the program in light of a fair use analysis as well.[224] By itself, this demonstrates the court's sense of unease with its analysis about derivative rights because it would not have needed to hedge its bet if it had been certain that its approach had been correct. The fair use analysis, though, substantiates that personal control was a defining factor for the court in reaching its decision that the Game Genie did not infringe Nintendo's derivative rights. The court relied heavily on the purpose and character of the use, noting that "a family's use of a Game Genie for private home enjoyment must be characterized as a non-commercial, nonprofit activity."[225] It also referenced the Supreme Court's fair use analysis in the Sony Betamax case for the notion that "a party who distributes a copyrighted work cannot dictate how that work is to be enjoyed."[226] Along with notions of personal control, the court also emphasized in its fair use analysis that Nintendo had not demonstrated that the Game Genie would negatively affect the value of its copyrighted games.[227] This backs up the conclusion in Midway that economic effects resulting from alterations are relevant to the ultimate decision whether derivative rights have been infringed.

Two other cases involving real-time alterations to displays not only emphasize that such changes may infringe derivative rights, but also show that other factors, such as the degree of conceptual integration, may also influence the outcome of the courts' decisions. The first of these cases, Micro Star v. FormGen Inc., again involved changes made in the context of video games.[228] FormGen created and sold a video game called Duke Nukem 3D, in which players explored a futuristic city infested with evil aliens that the players needed to destroy while trying to find passageways to new levels of game play.[229] The game had 29 different levels, each having different combinations of scenery, aliens, and other challenges.[230] Micro Star sold a CD, called Nuke It, containing files of instructions that could be used by the Duke Nukem game engine to display numerous additional game levels.[231] The Ninth Circuit ruled that Micro Star had infringed FormGen's exclusive right to make derivative works.[232] First and foremost, the court explicitly stated that data files which simply instruct a computer "what to put where" can be ***41** the basis for copyright infringement.[233] Thus, there is little question that HTML files also can infringe copyrights by instructing a computer about where on the screen to locate particular web site displays, despite the real-time nature of the reorganization.

The court also distinguished its previous decision with the Game Genie, claiming that the Game Genie only allowed users to make temporary changes, while Nuke It involved revisions recorded in a permanent form in the data files.[234] The rationale, though, is not compelling because each program relied on permanently recorded instructions that gave users the ability to view the original material in a different way. Nonetheless, the court's gut reaction that the scenarios should be treated differently seems correct. For one, the users had much more control with the Game Genie to determine the extent of the changes they desired to implement. In a sense, the Game Genie was like a volume control, allowing a user simply to fine-tune the degree of changes to meet personal tastes.[235] More importantly, though, Nuke It did not simply allow users to manipulate the existing display; instead it allowed them to enter new realms that were intended to build on the original Duke Nukem storyline and characters.[236] In a very real sense, then, Nuke It involved the addition of new material that integrated conceptually with the original content.[237]

The other important relevant decision involving real-time modifications is RealNetworks, Inc. v. Streambox, Inc.[238] In this case, RealNetworks created and distributed products, such as RealPlayer, that allowed users to enjoy music and videos through streaming over the Internet.[239] RealPlayer also included a search function, which was visually provided with a search bar at the bottom of the user interface.[240] The search function was offered under a contract with another company, Snap! LLC, and the search bar was emblazoned with Snap's logo.[241] When users typed search requests into the search bar, they were next shown a search results page maintained by RealNetworks and Snap that showed third-party ***42** advertising sold by Snap.[242]

Streambox distributed a software plug-in product, called the Ferret, that added a new graphical button to RealNetwork's user interface, which, when clicked, allowed the user to switch between Snap's search engine and one provided by Streambox.[243] RealNetworks sued Streambox, alleging that Streambox's distribution of the Ferret violated its copyright in RealPlayer by creating a derivative work.[244]

The district court judge issued a preliminary injunction, stating that consumers who install the Ferret arguably make a derivative work.[245] Streambox claimed that the Ferret should be likened to the Game Genie, but the judge disagreed, finding that "the alterations to the RealPlayer assume a more concrete form than the altered displays in Galoob."[246] The judge also ruled that RealNetworks might suffer irreparable harm without a preliminary injunction because the Ferret jeopardized RealNetwork's relationship with Snap and, so, might result in lower royalty payments.[247] From this, one again can see that simply giving the consumer the option to make real-time alterations may not, by itself, absolve the distributor from liability for copyright infringement. Other elements, such as modifications to the original content and potential economic consequences, clearly impact the ultimate conclusions reached in the courts.

2. The Adware Cases

Three cases dealing with an adware program distributed by WhenU.com further demonstrate that customer control and conceptual integration are important criteria for appraising derivative works on the Web.[248] WhenU's adware program is designed to determine the types of advertising that might interest consumers based on the sites they visit and to cause windows containing relevant ads to "pop up" as an overlay to accessed web sites.[249] Thus, soon after a customer visits the web site for, let us say, Wilson Sporting Goods, he might see a box displaying an advertisement for Babolat tennis racquets pop up at the bottom right corner of Wilson's site. The clearly delineated box is conspicuously marked with WhenU's ***43** logo and includes the common "X", which allows the customer to completely eliminate the ad.[250] Also, the customer has the ability to move the box around the screen independently from Wilson's underlying site.[251]

Several companies sued WhenU, alleging, among other things, that WhenU created derivative works by modifying the appearance of their web sites.[252] In all of these situations, however, the plaintiffs failed to persuade the courts that their claims held merit.[253] One of the courts compared WhenU's program directly with the Game Genie because the consumer has the ability to easily discontinue the modifications--with adware, by closing or minimizing the pop-up window--and return to the original form.[254] The court believed that, if anything, WhenU's advertisements modify the target sites far less than the Game Genie altered Nintendo's video game experience.[255] This court also distinguished WhenU's adware from traditional Internet framing, which it said involves a more seamless presentation of content from two web addresses.[256] The other courts focused on the transitory nature of the changes and how the user could control them separately from the target web site.[257] For instance, one reflected that WhenU's advertisement boxes are no different than when a notice generated by the user's computer system, such as "incoming mail," pops up in front of any windows the user has open at the time.[258] It claimed that WhenU's ad is a "distinct occurrence" from the underlying web page which is merely another separate window on the user's computer desktop.[259] The other court agreed, claiming that the target web site remains "intact" on the computer screen while the ads only temporarily cover portions of it.[260] It ruled that the ads are not sufficiently fixed or permanent to constitute ***44** derivative works since the boxes could be moved, obscured, or closed entirely with a single click of the mouse.[261]

3. The Family Movie Act of 2005

The Family Movie Act, which became law in 2005, provides additional evidence that real-time modifications to displays may, under certain circumstances, infringe the copyright owner's derivative rights.[262] This law was passed in the midst of copyright disputes between the motion picture industry and new film sanitizing companies,[263] which provided parents opportunities to show major motion pictures while protecting their children from inappropriate images and dialogue. The companies involved with these services used two techniques to achieve their goals. One method was to buy original DVDs of a movie and then record and sell (or rent) one edited version of the film for each original DVD that was purchased.[264] In this way, the movie studios could not claim that they lost sales of their original versions due to the sale (or rental) of the sanitized films. The other technique was to distribute filtering technologies and software that deleted objectionable content while the DVD was being played.[265] Thus, instead of making and distributing permanent copies of edited movies, these companies simply provided tools that temporarily made certain content imperceptible while viewers watched the films.

The legislative solution was codified in section 110 of the Copyright Act, which exempts certain performances and displays from copyright infringement.[266] Specifically, the new provision states:
***45** Notwithstanding the provisions of section 106, the following are not infringements of copyright:

. . .

(11) the making imperceptible, by or at the direction of a member of a private household, of limited portions of audio or video content of a motion picture, during a performance in or transmitted to that household for private home viewing, from an authorized copy of the motion picture, or the creation or provision of a computer program or other technology that enables the making imperceptible and this designed and marketed to be used, at the direction of a member of a private household, for such making imperceptible, if no fixed copy of the altered version of the motion picture is created by such computer program or other technology.[267] Section 110 further indicates that "making imperceptible" does not include the addition of audio or video content that is performed or displayed over or in place of existing content in a motion picture.[268] The new exemption obviously was only intended to provide a safe harbor for companies involved with limited forms of real-time film filtering technologies.[269] Thus, the fact that the law does not specifically protect other methods or uses of film sanitization does not necessarily mean that they are illegal. Nonetheless, the language provides insight into the attitudes that members of Congress might have about these other practices.[270]

The Family Movie Act clearly states that it is intended to only protect filtering tools that give private households the ability to remove undesirable elements from movies shown in the home environment.[271] This follows the philosophical notion articulated in Galoob that consumers do not infringe derivative rights when they choose to make temporary modifications to complete versions of copyrighted materials.[272] However, as in Artic, protection does not extend to commercial establishments that modify content without specific direction from their customers.[273] Thus, the importance of customer control is clearly evident in the ***46** Act. In addition, the law acknowledges that when these companies simply remove content, even in a real-time environment, their actions may raise copyright concerns.[274] This conforms to the reasoning in the Monty Python situation.[275] Finally, in accordance with the decisions in Micro Star and RealNetworks, the law does not protect software that serves to add content to, or replace material in, the original version.[276] Thus, Congress acknowledges that modifications to the original content, and integration of new material, may be relevant to addressing infringement in real-time contexts.

### C. Summary and Applications of Derivative Right Factors

As previously noted, only one court has reached a decision regarding the applicability of derivative rights with inline web designing, and there the judge was too uncertain to grant summary judgment for either party. In Futuredontics, Inc. v. Applied Anagramics, Inc., the defendant (hereinafter called "AAI") used framing to include the Futuredontics web page within its site. AAI surrounded the frame with the AAI logo, information about AAI's operations, and links to AAI's other web pages.[277] Futuredontics claimed that by framing its site, AAI infringed its derivative rights based on the precedent in Mirage Editions.[278] However, at the preliminary stage of the litigation, the court determined that Mirage Editions was distinguishable because surrounding a web page with an electronic border is not the same as affixing an image to a ceramic tile.[279] AAI, on the other hand, alleged that its actions were lawful based on the decision in Galoob because its web site did not incorporate the plaintiff's copyrighted material in a concrete or permanent form.[280] The court, though, concluded that Futuredontics might be able to demonstrate that AAI's web site did violate Futuredontics' derivative rights by recasting its pages, despite the ruling in Galoob.[281] Thus, the court acknowledged that inline web designing techniques might intrude on derivative rights, but left the door open about the criteria that might be appropriate to guide the analysis.

***47** The foregoing analysis of analogous cases in traditional and real-time contexts indicates that web sites using inline imaging need to consider the following factors to appraise their exposure to copyright infringement:

A. User Control Over Appearance of Copyrighted Content

a. Ability to easily view copyrighted content without web site's additional materials

b. Ability to easily remove copyrighted content from additional web site materials

c. Ability to view entire copyrighted work as displayed by copyright owner

i. Ability to easily view complete contents of copyrighted work through scrolling

d. Ability to move copyrighted work independently from web site's additional materials.

B. Extent of Modifications to Copyrighted Content

a. Web site removes content from copyright owner's display

b. Web site adds new content within copyright owner's display

C. Degree of Conceptual Integration with Surrounding Materials

a. Boundaries of inline images are not clearly defined

b. Additional web site materials appear coordinated with copyrighted content

D. Economic Harms

a. Web site removes or obscures advertising from copyrighted content

E. Fair Use Considerations

a. Use permitted, even if web site otherwise violates derivative rights

b. Based on purpose, nature of work, amount shown, and economic effects.

Many times, the application of these factors will lead to clear-cut solutions, such as when the web site includes an entire image within clearly defined borders or, alternatively, when it displays its own advertising in place of ads at the originating site. There may be situations, though, where the factors will be more difficult to balance and assess. For instance, a common practice with framing is to provide access to a third-party web site within scrollable borders at a fixed location on the web site.[282] Based on the listed factors, this practice typically should not violate derivative rights. However, if the web site frames the content by showing ***48** only the key elements that the users likely would seek and obscuring the advertising so that it is only available through unnecessary scrolling, then one might determine that the site has infringed derivative rights.

When applying these factors to Google's image search service, one can readily determine that Google uses inline web designing in a way that does not infringe on derivative rights. The copyrighted content is included in a scrollable box that also can be resized to cover almost all of Google's adjoining materials. The content within the frame is situated logically so that it shows the material located from the top of the source web site, instead of focusing directly on the desired image within the web site. Thus, the viewer is not likely to avoid seeing advertising at the target site by finding the image on Google's service. Also, and perhaps more importantly, Google provides a clear link titled, "Remove Frame," which, when clicked, shows the original image as it is displayed from the target site's web address.[283] In fact, the only factor that weighs against Google at all is that the line of demarcation surrounding the inline image may not be readily apparent to viewers at first blush. However, this aspect is insignificant in light of the other factors which so clearly indicate that Google has acted lawfully. Even if one were to conclude that Google creates a derivative work in this way--and this is extremely unlikely--then Google's use of inline web designing still would probably be considered fair use under the circumstances. This is because the use fits within Google's overall transformative purpose to efficiently provide search results in an informative and non-exploitive fashion.

## VI. Conclusion

The Ninth Circuit correctly ruled in Perfect 10, Inc. v. Amazon.com, Inc. that web sites cannot directly infringe display rights through inline web designing. Nevertheless, web site designers still need to be wary when using these techniques because they may, under certain circumstances, violate the derivative rights of copyright holders. Technological advances provide web designers with significant capabilities for accessing Internet materials and presenting them dynamically in various ways through program-based logic routines. Indeed, web designers may soon have the technical capabilities to do almost anything they desire with preexisting copyrighted materials without being constrained by physical limitations. For this reason, one should expect that emerging uses of inline web designing techniques will soon lead to significant copyright challenges,

despite the decision in Perfect 10.

Footnotes

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[1] See, e.g., Google Inc. v. Am. Blind & Wallpaper, No. C 03-5340 JFM(25), 2007 WL 1159950 (W.D. Cal. Apr. 18, 2007) (addressing whether selling a trademarked term as a keyword to trigger a sponsored link on a web search results page infringes trademark rights).

[2] See, e.g., Lee B. Burgunder, Legal Aspects of Managing Technology 194-203 (3d ed. 2004) (discussing the Amazon.com one-click patent litigation); Alexandra Wilson, Note, Business Method Patents Gone Wild: Narrowing State Street Bank and Shifting to a European Perspective, 12 J. Tech. L. & Pol'y 71, 72-74 (2007) (discussing the reaction to business method patents, many "of which [are] related to Internet business methods, including online algorithmic-type processes and applications"); Julia Alpert Gladstone, Why Patenting Information Technology and Business Methods Is Not Sound Policy: Lessons from History and Prophesies from the Future, 25 Hamline L. Rev. 217, 218-19 (2002) (discussing the history of business method patents and the "polarity of opinion" over Internet-based business method patents).

[3] A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001).

[4] Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913 (2005).

[5] On March 13, 2007, Viacom filed a complaint for copyright infringement in the Southern District of New York against YouTube and its parent, Google, for copyright infringement, seeking over $1 billion in damages. See, e.g., Miguel Helft & Geraldine Fabrikant, Viacom Sues Google Over Video Clips on its Sharing Web Site, N.Y. Times, Mar. 14, 2007, at C1; Michael Fricklas, Editorial, Our Case Against YouTube, Wash. Post, Mar. 24, 2007, at A17.

[6] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146 (9th Cir. 2007).

[7] Id. at 1168. Several of the actions consolidated in this appeal listed Google, Inc. as defendant. Id. at 1146.

[8] Id. at 1160.

[9] See id. at 1162. The court also determined that Google did not infringe Perfect 10's exclusive rights to distribute its photographs because Google only instructed the user's browser where to find the photographs. Id. The web site publisher was responsible for distributing the photographs to the user's computer. Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1162 (9th Cir. 2007).

[10] Kelly v. Arriba Soft Corp., 280 F.3d 934 (9th Cir. 2002), withdrawn and superseded by 336 F.3d 811 (9th Cir. 2003).

[11] Web sites using inline web designing may face other legal risks, such as trademark infringement and breach of contract. This article will leave these risks to be evaluated by others.

[12] The Ninth Circuit determined that a web site might violate copyrights when it knows that it is making infringing material available on its system through inline web designing. See infra note 84 and accompanying text.

[13] See Michael K. Erickson, Emphasizing the Copy in Copyright: Why Noncopying Alterations Do Not Prepare Infringing Derivative

Works, 2005 BYU L. Rev. 1261, 1291-92 & nn.129-131 (2005).

[14] See discussion infra Parts V.A-B.1.

[15] These same considerations may be relevant in other recent controversial contexts, such as ad-stripping and web modification software. See, e.g., Juliet Ye, Debate Over IM Add-Ons in China, Wall St. J., Nov. 29, 2007, at B2; Anne Broache & Declan McCullagh, Web Ad Blocking May Not Be (Entirely) Legal, CNET News.com, Sept. 14, 2007, http://www.news.com/Web-ad-blocking-may-not-be-entirely-legal/2100-1030_3-6207936.html.

[16] For example, Amazon.com presents new books that may interest a customer based on previous purchases that the individual has made.

[17] See Jennifer Kyrnin, The Three Layers of Web Design (Apr. 2, 2008), http://webdesign.about.com/od/intermediatetutorials/a/aa010707.htm (discussing content, style, and behavior as the "[t]hree [l]ayers of [w]eb [d]evelopment"); Jennifer Niederst Robbins, Web Design in a Nutshell: A Desktop Quick Reference 6-7, 9-10 (3d ed. 2006).

[18] Cf. Thyra Rauch et al., Enabling the Book Metaphor for the World Wide Web: Disseminating On-line Information as Dynamic Web Documents, 40 IEEE Transactions Prof. Comm. 111 (1997) (discussing the analogy of Internet materials as books from the perspective of web site developers).

[19] See Robbins, supra note 17 at 179, 192-200, 203-04. Note, too, that there are other techniques for including information from another source such as RSS feeds and mashups. See Raymond Yee, Pro Web 2.0 Mashups: Remixing Data and Web Services ch. 2 (2008) (discussing new techniques for incorporating third-party data into a web site).

[20] See Robbins, supra note 17, at 186, 525 (stating that images should be reused if possible because browsers "temporarily store[] files ... in a cache[,] ... available if that page is called up again").

[21] See Robbins, supra note 17, at 93, 119 (describing the history of HTML, XHTML, and XML).

[22] See Robbins, supra note 17, at 113 (stating that HTML "is the markup language used to turn text documents into web pages").

[23] See Robbins, supra note 17, at 91-104 (describing the use of XML).

[24] Robbins, supra note 17, at 119.

[25] See Robbins, supra note 17, at 93 (stating that XML describes the "structure of a document," not "how it looks").

[26] See Robbins, supra note 17, at 92 (describing XML-compliant applications and the use of document type definitions).

[27] See Yee, supra note 19, at 24. For an example of an ad blocker, see Mozdev Community Organization, Inc., The Adblock Project, http:// adblock.mozdev.org/index.html (last visited Sept. 7, 2008).

[28] See Robbins, supra note 17, at 89 (stating that XML is used for data storage). Note that the development of the document object model (DOM) greatly enhanced the ability to process XML code. See Robbins, supra note 17, at 481, 491 (stating that DOM scripting allows manipulation of XML and labeling the era before DOM scripting as "the Dark Ages").

[29] Updating content frequently encourages users to return often. See, e.g., MSNBC News, http://www.msnbc.msn.com (last visited Sept. 20, 2008) (noting that the stories on the main page are the "top stories" as of a certain time of the day).

[30] A web site's content can be modified based on the IP address of the client computer. See generally Bamshad Mobasher et al., Automatic Personalization Based on Web Usage Mining, Comms. of the ACM, Aug. 2000, at 142-51 (discussing how personalization of web sites works).

[31] In the new Web 2.0 paradigm, web services have provided additional processing for presenting information to the client. As noted in Tim O'Reilly, CEO, O'Reilly Media, Inc., What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software (Sept. 30, 2005), http:// www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html? page=2, there is a clash between a "massive installed base and tightly integrated operating system" with "a system without an owner, tied together by a set of protocols, open standard and agreements for cooperation." See also Yee, supra note 19.

[32] Dan Barrett et al., Essential JavaScript for Web Professionals 87-115 (1st ed. 2000).

[33] See generally Yee, supra note 19 (discussing creating web pages from multiple sources, combining information from various web sites, and writing extensions to browsers such as Firefox, an open-source web browser).

[34] See Robbins, supra note 17, at 113.

[35] Cf. Robbins, supra note 17, at 274 (stating that the Cascading Style Sheets language reduces the work required to change the appearance of multiple web pages).

[36] See Robbins, supra note 17, at 7 (stating that the Cascading Style Sheets language is used to provide presentation instructions to the browser).

[37] See Robbins, supra note 17, at 7 (stating that the structural layer and presentation layer of web sites are separated into markup language and Cascading Style Sheets, respectively).

[38] See Douglas K. Van Duyne et al., The Design of Sites: Patterns for Creating Winning Web Sites 98 (2d ed. 2007) (stating that the first step in the development process of a web site is to "[u]nderstand[] the target customers and their needs").

[39] Stephen M. McMenamin & John F. Palmer, Essential Systems Analysis 16, 34-35 (1st ed. 1984) (discussing an analytical approach to analysis focusing on essential activities unimpeded by technical or managerial constraints).

[40] See id. at 97-115 (describing the web site design process).

[41] See id. at 105-06 (describing the exploration phase of the design process, in which the developer creates several designs that implement site structure and navigation).

[42] See Joseph S. Valacich et al., Essentials of Systems Analysis and Design 81-89 (3d ed. 2006) (discussing project feasibility concerns).

[43] Perfect 10 v. Google, Inc., 416 F. Supp. 2d 828 (C.D. Cal. 2006), aff'd in part, rev'd in part sub nom. Perfect 10, Inc. v. Amazon.com, Inc., 487 F.3d 701 (9th Cir. 2007), opinion amended on reh'g by 508 F.3d 1146 (9th Cir. 2007).

[44] Perfect 10 v. Google, Inc., 416 F. Supp. 2d at 832.

[45] Id.

[46] There was no dispute that the members violated Perfect 10's exclusive rights to reproduce and display their photographs by these actions. Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d at 1169.

[47] Technically, Google created a database by crawling the web and then referenced this database to satisfy a search request. Id. at 1155.

[48] See id.

[49] Id. at 1155-56. By clicking on the image, the customer was "taken" to the web address storing the individual image and shown the full-sized image on this separate web page. Id. This was not an inline link because the image was not displayed within Google's site. See id. at 1156. Rather, it was a traditional hyperlink--sometimes called an outlink--to the alternative address. See id.

[50] Id.

[51] Perfect 10 v. Google, Inc., 416 F. Supp. 2d 828, 838 (C.D. Cal. 2006).

[52] Kelly v. Arriba Soft Corp., 336 F.3d 811 (9th Cir. 2003).

[53] Id. at 815-16.

[54] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1160, 1163 (9th Cir. 2007).

[55] Compare Kelly, 336 F.3d at 818-22 (noting that the thumbnail images at issue did not substitute for the full-sized images, the defendant did not sell or license the thumbnails to any other party, and low resolution of the thumbnails prevented downloaders from attempting to enlarge and sell the images), with Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d at 1164-65 (discussing the significance of the ability of users to download and use the thumbnail images on their cell phones).

[56] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d at 1165-66.

[57] Id. at 1166. The district court ruled that the potential harm to the cell phone market militated against a fair use determination, and so issued a preliminary injunction against Google's display of Perfect 10's images as thumbnails. Perfect 10 v. Google, Inc., 416 F. Supp. 2d 828, 850-51 (C.D. Cal 2006). The Ninth Circuit vacated the preliminary injunction based on its reevaluation of the fair use defense. Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d at 1168.

[58] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d at 1159.

[59] Id. at 1159, 1161.

[60] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1159-60 (9th Cir. 2007); Perfect 10 v. Google, Inc., 416 F. Supp. 2d 828, 839 (C.D. Cal. 2006).

[61] Perfect 10 v. Google, Inc, 416 F. Supp. 2d at 839-40.

[62] Id. at 839.

[63] Id. at 843-44.

[64] Id. at 840 ("To adopt the incorporation test would cause a tremendous chilling effect on the core functionality of the web--its capacity to link, a vital feature of the internet that makes it accessible, creative [,] and valuable.").

[65] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d at 1160.

[66] 17 U.S.C. §101 (2006).

[67] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1160 (9th Cir. 2007) (internal quotations omitted) (quoting 17 U.S.C. §101).

[68] Id. at 1160.

[69] The court indicates that the definition includes communicating the copy of the image to another person's computer screen for viewing. Id. at 1160-61. This same analysis also applies when an infringing image is stored on a desktop and made to appear on an attached screen. Id. at 1160.

[70] Id. In contrast, according to the court, Google did display copies of the thumbnail images because Google actually stored copies of the thumbnails in its computers and communicated the images to computer screens. Id.

[71] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1161 (9th Cir. 2007).

[72] Id.

[73] Id.

[74] Id.

[75] Id.

[76] Id.

[77] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1161 (9th Cir. 2007).

[78] See 17 U.S.C. §§106(5), 501(a) (2006) (Section 501(a) makes the violation of the right to display, granted by section 106(5), an infringing act.).

[79] The original work is also a "copy" under the terms of the Copyright Act. 17 U.S.C. §101 ("The term 'copies' includes the material

object, other than a phonorecord, in which the work is first fixed.").

[80] See 17 U.S.C. §101 (2006) (making the showing of any copy a display by omitting an ownership requirement).

[81] The legislative history of the Copyright Act indicates that a display "would include the projection of an image on a screen or other surface by any method." H.R. Rep. No. 94-1476, at 64 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5677. The legislative history also states that "each and every method by which the images ... comprising ... a display are picked up and conveyed is a 'transmission."' Id.

[82] The Ninth Circuit's legal analysis may also be considered suspect because, technically, Google did cause the customer's computer to make a temporary copy of the copyrighted work in its random access memory to effectuate the display on the screen. See Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1160 (9th Cir. 2007). Courts have previously determined that temporary copies in RAM satisfies the fixation requirement of the Copyright Act. See MAI Sys. Corp. v. Peak Computer Inc., 991 F.2d 511, 517-18 (9th Cir. 1993).

[83] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d at 1172.

[84] Id. The court also determined that Google might be protected from liability for contributory infringement by following the notice and take-down procedures for information location tools contained within section 512(d) of the Digital Millennium Copyright Act. Id. at 1175.

[85] The court held that Amazon.com also might be responsible under the same standard for its image search service that linked to Google's thumbnails and inline images. Id. at 1176. Amazon.com terminated its relationship with Google in 2006. Id. at 1176 n.16.

[86] See id. at 1160-61.

[87] See Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1161 (9th Cir. 2007) (explaining that the web site publisher is the one displaying the work in the context of inline web design).

[88] See id. at 1160-61, 1169 (excluding analysis of the infringing nature of the inline content because it was not disputed on appeal).

[89] See id. at 1170-73 (applying the standard for contributory infringement to Google's actions in the controversy).

[90] See id. at 1160-61 (holding that inline web design is not a display).

[91] This is made evident, in this instance, by the willingness to litigate the issue. See generally Perfect 10 v. Google, Inc., 416 F. Supp. 2d 828 (C.D. Cal. 2006), aff'd in part, rev'd in part sub nom. Perfect 10, Inc. v. Amazon.com, Inc., 487 F.3d 701 (9th Cir. 2007), opinion amended on reh'g by 508 F.3d 1146 (9th Cir. 2007).

[92] Patent Act of 1790, ch. 7, 1 Stat. 109 (repealed 1793); Copyright Act of 1790, ch. 15, 1 Stat. 124 (amended 1831); Trademark Act of 1881, ch. 138, 21 Stat. 502 (repealed 1946).

[93] Patent Act of 1952, ch. 950, 66 Stat. 792 (1952) (codified as amended at 35 U.S.C. §1-376 (2006)); Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976) (codified as amended at 17 U.S.C. §101-1332 (2006)); Lanham Act, ch. 540, 60 Stat. 427 (1946) (codified as amended at 15 U.S.C. §1051-1141 (2006)). The development of the Internet can be traced back to the Advanced Research Projects Agency Network, which established its first link in 1969. Barry M. Leiner et al., A Brief History of the Internet (Dec. 10, 2003), http://www.isoc.org/internet/history/brief.shtml. Commercial use of the Internet did not arise until the mid-1980s, however. Id.

[94] See, e.g., Religious Tech. Ctr. v. Netcom On-Line Commc'n Servs., Inc., 907 F. Supp. 1361, 1365 (N.D. Cal. 1995) (determining whether a bulletin board operator and an Internet access provider are liable for the infringement of a bulletin board user).

[95] See id. at 1375 (comparing the automatic distribution to a radio station's rebroadcast of an infringing program).

[96] See, e.g., Lotus Dev. Corp. v. Borland Int'l, Inc., 49 F.3d 807, 809 (1st Cir. 1996) (determining the scope of protection afforded to a menu command hierarchy).

[97] Lotus Dev. Corp. v. Paperback Software Int'l., 740 F. Supp. 37, 58 (D. Mass. 1990).

[98] Lotus Dev. Corp. v. Borland Int'l, Inc., 49 F.3d at 817.

[99] Religious Tech. Ctr., 907 F. Supp. at 1375.

[100] Id. at 1374-75.

[101] See id. (basing its conclusion on the ISP's retention of control over the server).

[102] Brookfield Commc'ns, Inc. v. West Coast Entm't Corp., 174 F.3d 1036, 1064 (9th Cir. 1999).

[103] Id. at 1066.

[104] Technically, a copy may be made in the cache of the customer's computer, but this copy is considered a fair use for purposes of viewing the display. Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1169-70 (9th Cir. 2007).

[105] The web site providing the hyperlink might be liable for contributory infringement if it knows that infringing material has been posted on the other web site, and it intends for customers to view that material. Cf. Universal City Studios, Inc. v. Corley, 273 F.3d 429, 456-57 (2d Cir. 2001) (holding that an injunction on linking to sites that post DeCSS does not offend First Amendment if "those responsible for the link (a) know at the relevant time that the offending material is on the linked-to site, (b) know that it is circumvention technology that may not be lawfully offered, and (c) create or maintain the link for the purpose of disseminating that technology" (quoting Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 341 (S.D.N.Y. 2000)).

[106] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d at 1159.

[107] See id. at 1159-60 (addressing copyright violations of serving images on the Internet).

[108] Id. at 1159.

[109] See Kelly v. Arriba Soft Corp., 280 F.3d 934, 944-45 (9th Cir. 2002) withdrawn and superseded by Kelly v. Arriba Soft Corp., 336 F.3d 811 (9th Cir. 2003).

[110] Arriba is now known as Ditto.com.

[111] Kelly v. Arriba Soft Corp., 280 F.3d at 938.

[112] Id.

[113] Id. at 947. The court also determined that Arriba's displays could not be justified as fair use because the purpose was not transformative and the display negatively affected Kelly's market opportunities for his works. Id. at 947-948.

[114] Kelly v. Arriba Soft Corp., 336 F.3d. at 822.

[115] See Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1160 (9th Cir. 2007).

[116] Id. at 1159-61 (stating that "[b]ecause Google's computers d [id] not store the photographic images, Google d[id] not have a copy of the images for purposes of the Copyright Act" and, therefore, could not "communicate a copy").

[117] See 17 U.S.C. §106(5) (2006) (giving copyright owners the right to publicly display their works).

[118] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d at 1159-62.

[119] Id. at 1157.

[120] Id.

[121] Id. at 1161.

[122] CCC Info. Servs., Inc. v. Maclean Hunter Mkt. Reports, Inc., 44 F.3d 61, 65-66 (2d Cir. 1994).

[123] Associated Film Distribution Corp. v. Thornburgh, 520 F. Supp. 971, 993 (E.D. Pa. 1981), rev'd by 683 F.2d 808 (3d Cir. 1982).

[124] 17 U.S.C. §109(c) (2006) ("Notwithstanding the provisions of section 106(5), the owner of a particular copy lawfully made under this title ... is entitled, without the authority of the copyright owner, to display that copy publicly, either directly or by the projection of no more than one image at a time, to viewers present at the place where the copy is located."). The Copyright Act also provides other exemptions for limited forms of displays, such as in educational settings. 17 U.S.C. §110.

[125] Video Pipeline, Inc. v. Buena Vista Home Entm't, Inc., 192 F. Supp. 2d 321, 334 (D.N.J. 2002).

[126] Id.

[127] Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1157 (9th Cir. 2007).

[128] Id. at 1169.

[129] For instance, if the copyright holder removed the original image from the Internet, viewers still could see the copy from another

address.

130 Id. at 1161. The action may produce other kinds of harm, such as those related to trademark rights. In addition, inline web designing might violate derivative rights under the Copyright Act. This is discussed in Part V.

131 In fact, the owner of Yosemitetreks really only has to open a window within the store to allow visitors to see Mackey's display of El Capitan from Mackey's site.

132 This would be the result if a computer user opened two windows simultaneously: one from Mackey's address and one from Yosemitetreks.com.

133 In terms of the Internet, this means that if Mackey shows the photograph at his more comprehensive sites through inline web designing, then he also has chosen to provide the public immediate access to view the photograph, in isolation, without the need to see other materials with it.

134 A web page might integrate images, advertising, and text into one file rather than referencing separate files through inline links.

135 See supra notes 109-113 and accompanying text.

136 Perfect 10 v. Google, Inc., 416 F. Supp. 2d at 849 ("Photographs that are meant to be viewed by the public for informative and aesthetic purposes ... are generally creative in nature." (quoting Kelly v. Arriba Soft Corp., 336 F.3d 811, 820 (9th Cir. 2003))).

137 See infra Part V.

138 It is possible that Yosemitetreks would be protected in this situation under section 512(d) of the Digital Millennium Copyright Act, which limits the liability of service providers for "infringement of copyright by reason of the provider referring or linking users to an online location containing infringing material or infringing activity." 17 U.S.C. §512(d) (2006).

139 See, e.g., Joan Gilsdorf, Copyright Liability of On-Line Service Providers, 66 U. Cin. L. Rev. 619, 635-36 (1998); James Boyle, Intellectual Property Policy Online: A Young Person's Guide, 10 Harvard J. L. & Tech. 47, 72 (1996).

140 The district court noted the problem by stating, "To adopt the incorporation test would cause a tremendous chilling effect on the core functionality of the web-its capacity to link, a vital feature of the internet that makes it accessible, creative and valuable." Perfect 10 v. Google, Inc. 416 F. Supp. 2d at 840.

141 Religious Tech. Ctr. v. Netcom On-Line Commc'ns Servs., Inc., 907 F. Supp. 1361, 1369 (N.D. Cal. 1995).

142 See discussion supra Part II.D.

143 17 U.S.C. §106(2) (2006).

144 17 U.S.C. §101 (2006) (emphasis added).

145 See, e.g., Robbins, supra note 17, at 275 (explaining Cascading Style Sheets, an Internet technology that enables the web designer to control how information is presented).

146 The Copyright Act requires a work to be fixed in a tangible medium of expression to be protected. 17 U.S.C. §102(a) (2006). The Act further provides that a "work is 'fixed' in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." 17 U.S.C. §101. The application of the fixation requirement to derivative works is controversial. See Paul Goldstein, Copyright §65.3.1 (Aspen Publishers) (2d ed. Supp. 2005). Paul Goldstein, in his copyright treatise, argues that derivative works do not have to be fixed in a tangible form to infringe, such as with the performance of a ballet. Id. The Ninth Circuit, in Lewis Galoob Toys, Inc. v. Nintendo, agreed with this position, claiming that a derivative work must be fixed to be protected, but not to infringe. 964 F.2d 965, 968 (9th Cir. 1992). However, the Ninth Circuit indicated that a derivative work must still have form or permanence. Id. at 968. Nimmer and Nimmer argue in their treatise that fixation is required. 2 Melville B. Nimmer & David B. Nimmer, Nimmer on Copyright, § 8.09[A] (2008).

147 See Erickson, supra note 13, at 1290-98 (arguing that "noncopying" alterations, as used in framing and inline linking, should not be considered derivative works).

148 Other languages, such as JavaScript, might be used as well.

149 See Gregory C. Lisby, Web Site Framing: Copyright Infringement Through the Creation of an Unauthorized Derivative Work, 6 Comm. L. & Pol'y 541, 555 (2001).

150 See generally 1 Nimmer & Nimmer, supra note 146, §§3.01, 3.08 (discussing the difficulty and confusion involved with defining "derivative works").

151 Futuredontics, Inc. v. Applied Anagramics, Inc., 45 U.S.P.Q.2d (BNA) 2005 (C.D. Cal. 1997). In another suit involving inline web designing, a number of news providers, such as the Washington Post, sued Total News for framing their content in a scrollable window within its site. The plaintiffs sued generally for violating their exclusive rights under section 106 of the Copyright Act. Washington Post v. Total News, Inc., 97 Civ. 1190 (PKL) (S.D.N.Y. Feb. 20, 1997), available at http://legal.web.aol.com/decisions/dlip/washorde.html. The parties settled the litigation by means of a stipulated order in which Total News agreed to stop framing the material.

152 The Ninth Circuit did not appraise the application of derivative rights with inline web designing in Perfect 10, Inc. v. Amazon.com, Inc. because Perfect 10 apparently did not pursue the claim. Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146 (9th Cir. 2007). The discussion that follows makes it clear that Google was very careful to apply its inline web designing in a way that likely would not violate derivative rights. Id.

153 See, e.g., Lee v. A.R.T. Co., 125 F.3d 580 (7th Cir. 1997); Mirage Editions, Inc. v. Albuquerque A.R.T. Co., 856 F.2d 1341 (9th Cir. 1988); Munoz v. Albuquerque A.R.T. Co., 829 F. Supp. 309 (D. Ala. 1993), aff'd, 38 F.3d 1218 (9th Cir. 1994) (unpublished opinion).

154 Munoz, 829 F. Supp. at 309.

155 Id.

156 See, e.g., Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d at 1156; Kelly v. Arriba Soft Corp., 336 F.3d 811, 815-17 (9th Cir. 2003); Mark Sableman, Link Law Revisited: Internet Linking Law at Five Years, 16 Berkeley Tech. L.J. 1273, 1297-1300 (2001).

157 Lee, 125 F.3d 580; Mirage Editions, 856 F.2d 1341; Munoz, 829 F. Supp. 309.

158 Mirage Editions, 856 F.2d at 1342.

[159] Id. at 1343-44.

[160] Munoz, 829 F. Supp. at 311.

[161] Id. at 314.

[162] Lee v. A.R.T. Co., 125 F.3d 580 (7th Cir. 1997).

[163] Id. at 581-583 (noting that its decision was in conflict with other circuit courts).

[164] Id. at 581.

[165] Id.

[166] Id.

[167] See id.

[168] Lee v. A.R.T. Co., 125 F.3d 580, 582-583 (7th Cir. 1997).

[169] Id. at 582.

[170] The courts considered how derivative rights should be addressed in light of the first sale doctrine, which allows the owner of a copy to sell or otherwise dispose of the possession of the copy. 17 U.S.C. §109(a) (2006). The Ninth Circuit believes that the right to transform is totally separate from the right to dispose, while the Seventh Circuit is more skeptical about the difference in lieu of economic effects. Compare Mirage Editions, Inc. v. Albuquerque A.R.T. Co., 856 F.2d 1341, 1344 (9th Cir. 1988) ("the first sale doctrine does not bar appellees' copyright infringement claims"), with Lee v. A.R.T. Co., 125 F.3d 580, 581 (7th Cir. 1997) ("An alteration that includes (or consumes) a complete copy of the original lacks economic significance.").

[171] The Seventh Circuit explained the Ninth Circuit's position that a derivative work was created with the tiles because the epoxy resin bonds the art to the tile. Lee, 125 F.3d at 581. It then stated, "Our district judge thought this a distinction without a difference, and we agree." Id.

[172] Likewise, an addition to an architectural work is a derivative work, although the owners of buildings have a special exception to make modifications. See 17 U.S.C. §120(b) (2006). The Copyright Act provides, "Notwithstanding the provisions of section 106(2), the owners of a building embodying an architectural work may, without the consent of the author or copyright owner of the architectural work, make or authorize the making of alterations to such building." Id.

[173] The Second Circuit uses a similar standard for appraising copyright protection of useful articles by considering whether the artistic elements of the design are conceptually seperable from the utilitarian ones. Brandir Int'l, Inc. v. Cascade Pac. Lumber Co., 834 F.2d 1142, 1144 (2d Cir. 1987); Kieselstein-Cord v. Accessories by Pearl, Inc., 632 F.2d 989, 993 (2d Cir. 1980).

[174] Brandir, 834 F.2d at 1144; Kieselstein-Cord, 632 F.2d at 993.

[175] Munoz v. Albuquerque A.R.T. Co., 829 F. Supp. 309, 314 (D. Ala. 1993), aff'd, 38 F.3d 1218 (9th Cir. 1994) (unpublished

opinion).

176 Lee v. A.R.T. Co., 125 F.3d 580, 582 (7th Cir. 1997).

177 Id.

178 William Landes, Copyright, Borrowed Images and Appropriation Art: An Economic Approach, 9 Geo. Mason L. Rev. 1, 18 (2000). Regarding collages, Landes notes that "a literal-minded court could find that a trivial or minor alteration is an unauthorized derivative work not protected by the first-sale doctrine." Id. See also Erickson, supra note 13, at 1316-17 (holding that a collage is not a derivative work of its component images.).

179 Landes, supra note 178, at 9.

180 Jarvis v. K2 Inc., 486 F.3d 526, 527-28 (9th Cir. 2007).

181 Id. at 531 (citation omitted).

182 Greenberg v. Nat'l Geographic Soc'y, 244 F.3d 1267, 1269, 1274 (11th Cir. 2001), rev'd and remanded, 488 F. 3d. 1331 (11th Cir. 2007), vacated and rehearing en banc granted, 497 F.3d 1213 (11th Cir. 2007).

183 Id. at 1274.

184 Id. An Eleventh Circuit panel subsequently reversed the decisions regarding certain aspects of this case and vacated the previous orders regarding willful infringement and damages. Greenberg v. Nat'l Geographic Soc'y, 488 F. 3d 1331 (9th Cir. 2007). However, the court did not change its conclusions regarding the video sequence, although it allowed the defendant to raise other defenses to liability, such as contractual authorization and laches. Id. at 1339-41. The Eleventh Circuit then vacated this panel opinion and decided to rehear the arguments en banc. Greenberg v. Nat'l Geographic Soc'y, 497 F.3d 1213 (11th Cir. 2007).

185 Nat'l Bank of Commerce v. Shaklee Corp., 503 F. Supp. 533, 535 (W.D. Tex. 1980).

186 Id. at 537-38.

187 Id. at 537.

188 Id. at 544.

189 Paramount Pictures Corp. v. Video Broad. Sys., Inc., 724 F. Supp. 808, 812 (D. Kan. 1989).

190 Id. at 820-21.

191 As discussed later, this would be especially true if viewers had the option to turn off or remove the advertising feature at their discretion. See supra notes 248-261 and accompanying text.

192 See, e.g., U.S. Patent No. 6,593,944 (filed May 18, 2000) (describing a method for displaying only certain portions of a web site on

a device with a small display).

193 The previous version of the Copyright Act was passed in 1909. Copyright Act of 1909, ch. 320, 35 Stat. 1075. The statute, as amended prior to 1976, provided that copyright owners had the exclusive rights "[t]o translate the copyrighted work into other languages or dialects, or make any other version thereof, if it be a literary work; to dramatize it if it be a nondramatic work; to convert it into a novel or other nondramatic work if it be a drama; to arrange or adapt it if it be a musical work; to complete, execute, and finish it if it be a model or design for a work of art." Id. at §1(b).

194 Gilliam v. Am. Broad. Cos., 538 F.2d 14, 25 (2d Cir. 1976).

195 Id. at 21. Contra Cleanflicks of Colo., LLC. v. Soderbergh, 433 F. Supp. 2d. 1236 (D. Colo. 2006) (holding that reproductions of films that are edited to remove "offensive" language are not derivative works because they are not "transformative," although they violate the reproduction right).

196 In re Aimster Copyright Litig., 334 F.3d 647, 648 (7th Cir. 2003).

197 See generally Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417 (1984).

198 Aimster, 334 F.3d at 647-648.

199 Sony, 464 U.S. at 423.

200 See id. at 483 n.35 (stating that library builders can use the pause feature while all users can use the fast-forward feature).

201 This point is made clear in Midway Mfg. Co. v. Artic Int'l, Inc. 710 F.2d 1009 (4th Cir. 1983). The court stated that if a discotheque licensee were to play a forty-five rpm record at seventy-eight rpm, the action probably would not be an infringement because the "record licensors would not care if their licensees play them at that speed." Id. at 1013. Clearly, film copyright holders, such as motion picture companies, would care if commercial establishments skipped advertisements while displaying their works since this would disrupt their financial relationships with sponsors.

202 Due to customer control, an individual who voluntarily installs and uses ad-blocking software probably does not infringe copyrights, just as the consumer who uses the VCR to fast-forward through commercials.

203 Web sites that show commercials on their pages have a compilation copyright in the combination of the two separate elements. Cf. 17 U.S.C. §101 (2006). Even if the advertisements are placed by third-party providers, web sites still may claim copyright protection in the creative decision to include an advertisement meeting certain aesthetic or geometric criteria in a specific location. Cf. id. The Copyright Act defines a compilation as "a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship." Id.

204 See 17 U.S.C. §102 (2006).

205 Family Movie Act of 2005, Pub. L. No. 109-9, 119 Stat. 218 (codified at 17 U.S.C. §110 (2006)).

206 Midway Mfg. Co. v. Artic Int'l Inc., 704 F.2d 1009 (7th Cir. 1983).

[207] Id. at 1010-11.

[208] Id. at 1010.

[209] See Erickson, supra note 13, at 1327-28.

[210] Id.

[211] Id. at 1013.

[212] Id.

[213] Midway Mfg. Co. v. Artic Int'l Inc., 704 F.2d 1009, 1013 (7th Cir. 1983).

[214] Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965, 967 (9th Cir. 1992).

[215] Id.

[216] Id. at 969.

[217] Id. at 968-69.

[218] Id. at 968.

[219] Id.

[220] Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965, 969 (9th Cir. 1992).

[221] Id.

[222] Id.

[223] Id.

[224] Id. at 969-72.

[225] Id. at 970.

[226] Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965, 971 (9th Cir. 1992).

[227] Id.

[228] Micro Star v. FormGen Inc., 154 F.3d 1107 (9th Cir. 1998).

[229] Id. at 1109.

[230] Id.

[231] Id.

[232] See id. at 1114 (granting a preliminary injunction).

[233] Id. at 1110. The court stated that the displays generated by the data files were recorded in a sufficiently permanent form by the data files themselves. Id. at 1111-12.

[234] Micro Star v. FormGen Inc., 154 F.3d 1107, 1111 (9th Cir. 1998).

[235] The choices with Nuke It were more discrete: the user either could decide to enter the additional level or to not enter. See id. at 1110 ("player selects one of the N/I levals").

[236] Id. at 1112.

[237] The court compared the stories created by the Nuke It data files to book sequels that tell new tales of Duke's fabulous adventures. Id.

[238] RealNetworks, Inc. v. Streambox, Inc., No. 2:99CV02070, 2000 WL 127311 (W.D. Wash. Jan. 18, 2000).

[239] Id. at *2.

[240] Id. at *3.

[241] Id.

[242] Id. at *3-4.

[243] Id. at *6.

[244] RealNetworks, Inc. v. Streambox, Inc., No. 2:99CV02070, 2000 WL 127311, at *11 (W.D. Wash. Jan. 18, 2000).

[245] Id. at *12-13.

[246] Id. at *11.

[247] Id. at *12.

[248] 1-800 Contacts, Inc. v. WhenU.com, 309 F. Supp. 2d 467 (S.D.N.Y. 2003), rev'd on other grounds, 414 F.3d 400 (2d Cir. 2005); Wells Fargo & Co. v. WhenU.com, Inc., 293 F. Supp. 2d 734 (E.D. Mich. 2003); U-Haul Int'l, Inc. v. WhenU.com, Inc., 279 F. Supp. 2d 723 (E.D. Va. 2003).

[249] 1-800 Contacts, 309 F. Supp. 2d at 476.

[250] Id. at 477-78.

[251] Id. at 487.

[252] Wells Fargo, 293 F. Supp. 2d at 734; U-Haul, 309 F. Supp. 2d at 467.

[253] 1-800 Contacts, 309 F. Supp. 2d at 485-88; Wells Fargo, 293 F. Supp. 2d at 769-71; U-Haul, 279 F. Supp. 2d at 729-31.

[254] Wells Fargo, 293 F. Supp.2d at 770.

[255] Id.

[256] Id. at 748-49.

[257] U-Haul Int'l, Inc. v. WhenU.com, Inc., 279 F. Supp. 2d 723, 730-31 (E.D. Va. 2003); 1-800 Contacts, Inc. v. WhenU.com, 309 F. Supp. 2d 467, 486-87 (S.D.N.Y. 2003), rev'd on other grounds, 414 F.3d 400 (2d Cir. 2005).

[258] U-Haul, 279 F. Supp. 2d at 729. The court worried that a ruling for the plaintiff would mean that many common practices involving simultaneously opened windows also would have to be condemned as infringing derivative works. Id. at 731. Accord 1-800 Contacts, 309 F. Supp. 2d at 487-88 ("A definition of 'derivative work' that sweeps within the scope of the copyright law a multi-tasking Internet shopper whose word-processing program obscures the screen display of Plaintiff's web site is indeed 'jarring,' and not supported by the definition [of derivative work].").

[259] U-Haul, 279 F. Supp. 2d at 731.

[260] 1-800 Contacts, 309 F. Supp. 2d at 487.

[261] Id.

[262] Family Movie Act of 2005, Pub. L. No. 109-9, §202(a), 119 Stat. 218, 223-24 (codified at 17 U.S.C. §110 (2006)).

[263] See, e.g., Comment, FECA Matter: An Epic Copyright Infringement Trial, Congressional Interference, and the Diminution of Moral Rights in the United States of America, 7 J. Marshall Rev. Intell. Prop. L. 376, 376-83 (2008); Note, Balancing the Scales:

Expanding the Family Movie Act to Protect Consumers After Clean Flicks of Colorado, LLC v. Soderbergh, 81 Cal. L. Rev. 351, 367-70 (2008).

264 The most notable company involved with sanitizing movies in this way was CleanFlicks, which was enjoined in 2006 from distributing its edited films. See CleanFlicks of Colo. LLC v. Soderbergh, 433 F. Supp. 2d 1236 (D. Colo. 2006).

265 An example of a company that distributes DVD players with filtering technologies is ClearPlay. Information about ClearPlay can be found on its web site at http://www.clearplay.com.

266 Although the amendments from the law are contained within exemptions for public display and performance rights, they nonetheless are most applicable to derivative rights since the new provisions only protect actions in private home environments, which were already excluded by the definition of "publicly" in section 101. For instance, to perform or display a work "publicly" means "to perform or display it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered." 17 U.S.C. §101 (2006).

267 17 U.S.C. §110(11) (emphasis added).

268 Id.

269 The Family Movie Act also added the following statement to section 110: "Nothing in paragraph (11) shall be construed to imply further rights under section 106 of this title, or to have any effect on defenses or limitations on rights granted under any other section of this title or under any other paragraph of this section." 17 U.S.C. §110.

270 A Colorado district court determined that companies selling edited versions of the films violated the film studios' copyrights. In that decision, the court noted the passage of the Family Movie Act, and stated: "The legislative history shows that the amendment was not intended to exempt actions resulting in fixed copies of altered works which the House Committee believed illegal. Thus, the appropriate branch of government had the opportunity to make the policy choice now urged and rejected it." CleanFlicks of Colo., LLC v. Soderbergh, 443 F. Supp. 2d 1236, 1240 (D. Colo. 2000).

271 Family Movie Act of 2005, 17 U.S.C. §110 (2006).

272 Lewis Galoob Toys, Inc. v. Nintendo of Am., 964 F.2d 965, 968-69 (9th Cir. 1992).

273 Midway Mfg. Co. v. Artic Int'l, Inc., 704 F.2d 1009, 1013-14 (7th Cir. 1983).

274 See Gilliam v. Am. Broad. Cos., Inc., 538 F.2d 14, 21 (2d Cir. 1976) (finding harm when edited versions of works are broadcast).

275 See id.

276 Micro Star v. FormaGen Inc., 154 F.3d 1107, 1112 (9th Cir. 1998).

277 Futuredontics, Inc. v. Applied Anagramics, Inc., 45 U.S.P.Q.2d (BNA) 2005, 2009 (C.D. Cal. 1998).

278 See id. at 2010.

[279] Id.

[280] See id.

[281] See id.

[282] See Robbins, supra note 17, at 203-04.

[283] For an example of this, visit http://images.google.com and search for "TIPLJ." Click on any of the resulting images, and then click on "Remove Frame," which is located in the upper right corner of the screen.