

The Challenges of Logo and Image Searches on the Internet

istorically the Internet developed as a text-based (typewritten character) system.

Everyone by now is familiar with entering key-



words in Internet search engines and reviewing the results to find relevant information. For brand protection purposes, from both a marketing and legal perspective, the Internet works very well in locating both authorized and unauthorized uses of word trademarks. This permits brand owners to effectively monitor and police the proper use of

their valuable trademarks online, and to enforce their rights against unauthorized users, infringers, and counterfeiters.

Until very recently, brand owners and marketers have had almost no tools available to them to search for and detect the use of logos, icons, graphics, photographs, and other non-textual imagery. This has been a hindrance, since the improper or unauthorized use of design trademarks like logos and other iconic images can be just as damaging as the improper or unauthorized use of a word mark.

Help may be on the way. The last few years have brought much-needed developments in image search systems, which can convert an image into an algorithm and compare it automatically with similar online images.

Traditionally, searches for design marks had to be carried out manually by trained professional researchers because no self-executed searching was possible. With the advent of computers and the Internet, that changed somewhat. Self-executed design mark "search" systems were developed, using numeric codes for each of the various elements of a design (e.g. 12345 for "horse"). Entering the numeric codes for such elements would retrieve all design marks assigned such codes. The United States Patent

and Trademark Office's publicly available Trademark Electronic Search System ("TESS," accessible at www.uspto.gov/main/trademarks.htm,) uses this system, but has been criticized for inconsistent coding of designs and for inaccurate or incomplete search results. Some private sector trademark search services have developed improved numeric design code systems and databases.

No matter how well thought out a numeric design code system is, it still requires human participation in initially interpreting the design to be searched, in breaking down the design into its constituent elements, in determining and searching all of the relevant design codes for those elements (alone and in combination), and in assessing the quality of the results. And such design mark searches are currently confined to federal design mark registrations and applications. No similar coding system exists for any of the state trademark office registries or for the vast volume of common law design marks. For design marks outside the USA, the availability of effective search tools is even more sporadic.

Another alternative for federal design marks uses the "mark description" field to search for particular designs; the disadvantage is that the mark owner may or may not use the same words in the mark description that the searcher thinks to use in the search.

Some investigative firms offer their own version of a design mark search by scouring metadata and other hidden website text for keywords that indicate the nature or description of the designs employed on the website. Again, this search system has inherent limitations due to the different keywords that a website may employ versus what the searcher thinks to enter into the search query.

On the common law side of things, some trademark search vendors are now offering what they describe as "Web Common Law" design searches that consult the image catalogues of several larger search engines (e.g., Google Image, Yahoo Image, Zuula.com). Again, these searches still are text-based in how the search queries are formulated, but the search vendors claim that the results are superior to self-help searching because of the expertise of their researchers.

Recently a new approach to design searches has been developed, utilizing software that can actually detect identical or similar images. Only a few companies have publicized their efforts to date, the leader of which is the company Idée Inc., of Toronto, Canada (www.ideeinc.com), which is offering a service called "Tineye" (www.tineye.com). Tineye's software converts the image to be searched into a "unique and compact digital signature or fingerprint, then compares this fingerprint to every other image in our index to retrieve matches."

As intriguing as this sounds, Tineye has some draw-backs. First, it does not literally crawl the entire Web looking for identical or similar images. It can only consult the images in Tineye's own database that have been similarly fingerprinted. Thus the number of "hits" retrieved in a search directly depends on the number of images Tineye has captured, fingerprinted, and retained in its database. While Tineye's website says it constantly adds more images, and claims to have indexed more than one billion images to date, the database is still of necessity a small subset of everything available on the Web.

The Tineye software also does not actually compare the images, but instead the similarity of the digital fingerprints. This means that Tineye does not necessarily identify and retrieve images that might be considered "similar" from a trademark infringement or other legal perspective. While Tineye may have immediate value for monitoring and policing the use of one's own logo, it cannot as yet be employed as a self-help logo clearance or infringement detection tool.

Tineye's software cannot "read", and therefore cannot capture and fingerprint, imagery in certain formats, such as Flash technology. Moreover, Tineye currently accepts images to be searched only in the following formats: JPEG, PNG, and GIF. There are also limitations regarding dimension, resolution, and size of images.

Nonetheless, the potential of an application like Tineye is enormous. By signing up for the free Beta version, the user can view sample searches for the logos of such well-known companies as Starbucks, Converse, and 7-Eleven. Tineye currently has the capability to rank retrieved images in order of closeness as a match, and has a "Compare Images" tool that allows the user to highlight the differences between any two retrieved images. Another nice feature of Tineye is that each image retrieved contains the URL from which it was originally obtained, making it easy to go back to its source.

While new design search tools are far from perfect, they offer a glimpse of what the future may hold. For the first time, marketing and legal representatives of trademark owners can see how their logos are used on the Web and who uses them. Perhaps they can some day search directly on the Web to clear new logos and other graphic icons of interest. So stay tuned.

About Curtis Krechevsky

Curt Krechevsky is a partner and Chair of the Trademark & Copyright Department at Cantor Colburn LLP. Mr. Krechevsky's practice focuses on trademark, unfair competition, copyright, rights of publicity and privacy, Internet, advertising, marketing, promotions, licensing, and trade secrets law. With over two decades of both law-firm and corporate experience handling national and international matters in these areas, Mr. Krechevsky provides a business-oriented, pragmatic, innovative, and cost-sensitive approach to advising and representing clients of all sizes and from diverse industries.

About Cantor Colburn LLP

Cantor Colburn LLP is a full service intellectual property law firm that provides clients worldwide with the counseling and representation that allow them to enjoy the full value of their intellectual property assets. Cantor Colburn has offices in Hartford, Washington, D.C., Atlanta, and Detroit. For more information, visit www.cantorcolburn.com.

