August 27, 2012

Much Ado About Something -- An Empirical Analysis of Trademarks as Keywords

David J. Franklyn
David Hyman

Available at: https://works.bepress.com/david_franklyn/2/
Much Ado About Something – An Empirical Analysis of Trademarks as Keywords

David Franklyn
University of San Francisco School of Law

David A. Hyman
University of Illinois College of Law and College of Medicine

University of Illinois
Program in Law, Behavior and Social Science Research Paper No. LE12-15

This paper can be downloaded without charge from the Social Science Research Network electronic library at:
http://ssrn.com/abstract=2110364
Trademarks as Keywords: Much Ado About Something?
David Franklyn & David A. Hyman

Abstract

Disgruntled trademark owners have filed more than one hundred lawsuits in the United States and Europe, claiming that their trademarks should not be sold by search engines for use as keywords. Despite the volume of litigation, there has been little independent empirical work on consumer goals and expectations when they use trademarks as search terms; on whether consumers are actually confused by search results; and on which entities are buying trademarks as keywords. Instead, judges have relied heavily on their own intuitions, based on little more than armchair empiricism, to resolve such matters.

We report on the results of a two-part study, including three online consumer surveys, and a coding study of the results when 2,500 trademarks were run through three search engines. Consumer goals and expectations turn out to be quite heterogeneous: a majority of consumers use brand names to search primarily for the branded goods, but most consumers are open to purchasing competing products. We find little evidence of consumer confusion regarding the source of goods, but only a small minority of consumers correctly and consistently distinguished paid ads from unpaid search results. We also find that the aggregate risk of consumer confusion is low, because most of the ads triggered by the use of trademarks as keywords are for authorized sellers or the trademark owners themselves. However, a sizeable percentage of survey respondents thought it was unfair and inappropriate for one company to purchase another company’s trademark as a keyword, independent of confusion as to source.

Although we do find some evidence of confusion, the types of confusion we document do not map neatly onto the categories recognized by U.S. trademark law. Our findings suggest that the development of the doctrine in this area has not been well served by the reliance of judges on casual empiricism in resolving these disputes. Much remains to be done to ensure that trademark doctrine is empirically well-grounded, and “fits” the on-line context.

---

1 Franklyn is Professor of Law; Executive Director, McCarthy Institute for Intellectual Property and Technology Law and Director, Center for the Empirical Study of Trademark Law at the University of San Francisco School of Law. Hyman is Richard W. and Marie L. Corman Professor, University of Illinois College of Law; Academic Affiliate, McCarthy Institute and Center for the Empirical Study of Trademark Law.

Financial support for this project was received from the McCarthy Institute, University of San Francisco, and the University of Illinois. We appreciate helpful comments we received from Professors Thomas McCarthy and from Robert Lawless. Our research assistant, Craig Hawkins, provided invaluable assistance.
Google, Bing and Yahoo are the primary gateways to the Internet for most people in the world. These three search engines are also the foundation of online commerce. Google is worth approximately $200 billion, and Yahoo is worth $18 billion. These lofty market capitalizations are almost entirely attributable to the income generated by advertising that accompanies search results. Most searches result in one or more paid ads appearing alongside the unpaid (organic or algorithmic) results.

The specific ads that appear are selected because they relate to the search terms (“keywords”) entered by the user. For example, a search for “bicycle” will return ads from stores and websites selling bikes, and bike manufacturers. A search for “wedding” will return ads from stores and websites selling wedding supplies, wedding dresses, and wedding cakes. A search for “mesothelioma” will return ads from plaintiffs’ attorneys. Each of these entities pays the search engine if their ad is clicked on, irrespective of whether a sale is ultimately made.

Conflicts quickly arose when Google started selling keywords that were also trademarks. The problem is straightforward. If I run a search for American Airlines, and Delta Airlines comes up as a paid ad (because Delta purchased “American Airlines” as a keyword), does American Airlines have any recourse – and if so, against whom? Google? Delta Airlines? Both? Neither? What about if Travelocity (which sells flights on both American and Delta Airlines) comes up? Should the outcome turn on whether the paid Ad uses the words “American Airlines” in the ad text?

Trademark law is intended to prevent confusion about the origins of trademarked goods and services – but is it plausible that a consumer who searches for American Airlines, and then buys a ticket on Delta Airlines is


3 It is difficult to put a value on Bing, since it is part of Microsoft, but one set of analysts estimated it was worth at least $11 billion. Robert Cyran & Martin Hutchinson, At Microsoft, Bing Too Costly, N.Y. Times B2 July 24, 2011, at http://www.nytimes.com/2011/07/25/business/bing-becomes-a-costly-distraction-for-microsoft-breakingviews.html.

4 Advertising revenue made up 97% of Google’s revenues in 2011. Google Inc. 10Q for the period ending March 31, 2012, at http://investor.google.com/pdf/20120331_google_10Q.pdf. For Yahoo, the figure is 80%. Yahoo Inc. 10Q for the period ending March 31, 2012, at http://tinyurl.com/74fdmme. See also Steven Levy, Secret of Googlenomics: Data-Fueled Recipe Brews Profitability, Wired May 22, 2009, at http://www.wired.com/culture/culturereviews/magazine/17-06/nep_googlenomics (“All of a sudden, we realized we were in the auction business” (quoting Eric Schmidt, second CEO of Google).

5 Earlier disputes had involved the use of trademarks as domain names and metatags. See Dan Burk, Cybermarks, 94 MINNESOTA L. REV. 1375 (2010).
Much Ado About Something?

actually confused about which carrier they will be flying on? Even if the consumer is not confused about the airline they ultimately select, does (initial) diversion of attention create a potential cause of action?

Should the mode or level of trade make any difference in the analysis? Searchers can obtain a reservation for a room at a Hyatt hotel either directly from Hyatt’s website or from a travel website (e.g., Orbitz, Travelocity, getaroom.com). Hyatt makes more money if searchers make reservations directly with them. Does Hyatt have a valid complaint if travel websites purchase the Hyatt trademark as a keyword? Should the outcome turn on where consumers ultimately make reservations after searching for “Hyatt”? Does the fact that Hyatt makes less money if reservations are made through travel websites have any legal significance?

Of course, Hyatt can capture some of these reservations if it bids on its own trademark – but should Hyatt have to pay for the use of a trademark it already owns? Hyatt could prohibit travel websites with which it does business from purchasing its trademark as a keyword – but that would leave the field open to its competitors to buy higher placement for their ads.

---

6 See Jane L. Levere, American Airlines in Fee Battle With Web Agencies, N.Y. Times, Jan. 4, 2011, at http://www.nytimes.com/2011/01/05/business/05air.html?pagewanted=all. See also Peter M. Ripin, Keyword Confusion, Hospitality.net, May 1, 2007, at http://www.hospitalitynet.org/news/4031253.html (noting that hotels “have to pay a commission of approximately 18% to 30% to online travel agencies,” and “since a hotel’s own branded website produces the highest average daily rate it is clearly in the hotel’s best interest to drive Internet business to its own site rather than to an online travel agent.”)

7 Early on, companies used pop-up ads to try and divert traffic from competitors. See Peter Ripin, Hotel Internet Marketers Beware: Pop-up And Keyword Advertising Threaten Your On-line Brand, Oct. 26, 2004, at http://www.wiredhotelier.com/news//4021026.html (“a recently published report stated that a number of our most prominent companies were now using popup ads to target their competitors’ websites including Best Western whose ads appeared on 208 other sites including those of Comfort Inn and Day’s Inn; Thrifty Rent A Car whose ads were aimed at Dollar-Rent-A-Car and Enterprise Rent-A-Car and Verizon DSL whose ads were triggered by visits to the sites of broadband provider competitors.”)

8 Cf. Johanna Jainchill, Carnival brands’ keyword rule gives rivals a boost, Jan 31, 2010, at http://www.travelweekly.com/Cruise-Travel/Carnival-brands’-keyword-rule-gives-rivals-a-boost/ (“Carnival Corp. brands’ decision to prohibit travel agencies from bidding on their trademarks as keywords in online search engines led to what would seem
What if someone searches for Rolex? If Seiko and a seller of counterfeit Rolexes and a watch store selling Rolex and Seiko all purchase Rolex as a keyword, does Rolex have a case against any or all of them? If Rolex has a case, what needs to be established? Does the bare fact that a competitor or counterfeiter purchased another company’s trademark as a keyword establish the necessary elements of trademark infringement? Are there any defenses available to those who purchased a trademark to use as a keyword, and to the search engine that sold it? For example, does it matter if the resulting ad is simply comparative: our watches have the same design features as a Rolex, but cost less? Does it matter that the watch store sells both Seiko and Rolex? Does it matter if the individual who conducted the search was using Rolex as a generic term for expensive watches?

These questions are not law school hypotheticals. In well over one hundred cases in U.S. and foreign courts, disgruntled trademark owners have sued Google and other search engines, as well as the entities that have purchased trademarks as keywords. Courts have varied in their approach to these cases, in many instances showing considerable skepticism about the merits, while in other instances expanding trademark law to sweep in conduct outside the traditional ambit of trademark doctrine. However, judges in both camps have routinely engaged in armchair empiricism, making casual assumptions about why consumers use trademarks as search terms, consumer knowledge about the difference between paid and unpaid links, and the likelihood of confusion when competitors purchase one another’s trademarks.

The sale of keywords (whether trademarked or not) also raises interesting consumer protection issues. As noted previously, a search engine typically returns both paid and unpaid results. Consumer protection law has long required a “clear and conspicuous” disclosure of paid content. Are search engines complying with these requirements? How to be an unintended consequence: a higher placement for the sponsored links of competing cruise lines. . . ‘It doesn’t make sense that Carnival would prefer to have their competition’s website right up at the top of the search results, instead of people who actually sell Carnival cruises,’ said one cruise seller and former Carnival keyword bidder, who asked to remain anonymous.”) Marriott and Intercontinental Hotels have taken similar steps. Five Cruise Lines ban agencies from bidding on keywords, Jan. 6, 2010, at http://atwonline.com/it-distribution/news/five-cruise-lines-ban-agencies-bidding-keywords-0309-0.

9 A list of the filed cases we have been able to identify as of June, 2012 is available from the authors on request, and will be posted as a web appendix.

10 See infra notes 69 – 88, and accompanying text for discussion of six specific instances of judicial armchair empiricism.

have search engines changed their descriptions of paid content over time? Do changes made by search engines result in greater awareness of the difference between paid and unpaid content, and changes in click-through behavior? These issues have not resulted in any litigation to date, although the Federal Trade Commission has expressed concern about search engine labeling practices and search page architecture.¹²

As a starting point for investigating these issues, we designed and conducted an empirical investigation composed of two distinct parts. The first part involved running approximately 2,500 trademarks through three search engines, and coding the paid search output. The second part involved three separate surveys of regular internet users about their knowledge regarding search page architecture and paid and unpaid search results, what they were seeking when they used a trademark as a search term, whether they ever experienced diversion or confusion, and whether they believe that it is fair and appropriate for one company to use another company’s trademarks as keywords.

Our findings suggest that there is less to the issue of trademark infringement -- and more to the consumer protection issues -- than the volume of litigation in these two areas might suggest. First, most trademarked keywords are not bought by competitors of the trademark owner or by other entities that would be in a position to cause the type of consumer confusion that trademark law focuses on. Second, although survey respondents acknowledged they had sometimes been diverted or confused by search results, responses to other questions make it clear that most were not, on the whole, confused by paid links or the use of trademarks as keywords.

Consumer goals and expectations when using trademarks as search terms are also very heterogeneous: although a majority of consumers use trademarks to search for the trademarked product only, sizeable minorities use trademarks to search for the trademarked product along with similar competing products sold by other companies. Further, of those that click-through to a paid link after searching for a trademarked product, a near majority expects to find the trademarked product along with competing products, or only competing products. As we discuss below, these and other findings are largely inconsistent with the assumptions that judges have used to resolve keyword cases.

On the other hand, we found that survey respondents had considerable difficulty telling the difference between paid and unpaid links. Probably not coincidentally, survey respondents pay little attention to the labels used by search engines. In general, survey respondents wanted more information and better labeling of search results (i.e., labels that are larger and clearer, with greater separation of paid and unpaid links). These findings suggest that search engines are not doing an effective job of clearly and conspicuously differentiating paid search results.

Perhaps our most intriguing finding is the sizeable mismatch between consumer expectations and the protections provided by U.S. trademark law. In our third survey, we presented respondents with a screenshot of search output where three competitors had purchased another company’s trademark as a keyword. Most survey respondents were not confused about the origin of the resulting three ads – that is, they did not believe the ads were somehow affiliated with the trademark owner. However, we also asked respondents whether they thought such conduct was “fair and appropriate.” After we exclude those who were unsure or had no opinion, survey respondents were evenly split on whether such conduct was unfair and inappropriate, even without any confusion as to source, sponsorship, or affiliation. This mismatch between consumer expectations and U.S. trademark law raises obvious questions about the desirability of recognizing a cause of action for taking unfair advantage of a trademark, similar to the cause of action recognized by European trademark law.

Our findings make it clear that trademark law is poorly suited, on both theoretical and practical levels, to address the issues raise by the use of trademarks as keywords. Stated differently, although we find some evidence of consumer confusion, the types of confusion we document do not map neatly onto the categories recognized by U.S. trademark law. Our findings also suggest that the development of the doctrine in this area has not been well served by the reliance of judges on casual empiricism in resolving disputes.

Part I provides background on search engines and keyword searches. Part II outlines the extensive litigation, both foreign and domestic, over the use of trademarks as keywords, and identifies six assumptions that judges

---

For two of the three ads, 53% of those who had an opinion thought it was unfair and inappropriate. For the third ad, 42% of those who had an opinion thought it was unfair and inappropriate. For each ad, 25% of those responding did not have an opinion.

Of course, if one believes that trademark law is primarily or exclusively about protecting the property rights of trademark owners, the mismatch between consumer expectations and U.S. trademark law is of less significance.
have made in resolving these cases. Part III briefly highlights our findings from a separate paper on what entities are purchasing trademarks as keywords. Part IV focuses on the results of three surveys of consumer knowledge and expectations when they use trademarks as search terms. Part V discusses our findings, and Part VI concludes.

I. Some Background on Search Engines and Keywords

We focus in this article on Google, because it is the dominant search engine. However, where appropriate, we describe differences in the way in which Google, Bing, and Yahoo present and label search results.

A. Search Engine Output Architecture and Labeling

We are confident that every reader of this article already knows how Google organizes its search output. However, for those happy few who have no knowledge of Google’s search page architecture, but for some reason have chosen to read this article, Figure 1 is a screenshot of the results when Mercedes was used as a search term.

\[\text{Figure 1: Screenshot of Google search results for Mercedes.}\]

This screenshot was captured on December 16, 2011, and used as part of the third survey, as described below. After the research on this article was completed, Google revised the architecture of its search output page, and created a new section for “sponsored” sellers of products. [http://googlecommerce.blogspot.com/2012/05/building-better-shopping-experience.html](http://googlecommerce.blogspot.com/2012/05/building-better-shopping-experience.html). The new section is labeled “Sponsored.” See [http://tinyurl.com/6qskmx8](http://tinyurl.com/6qskmx8). Thus, Google is now simultaneously using “Ads” and “Sponsored” to refer to paid content. We discuss this development in greater detail below.

\[\text{15 This screenshot was captured on December 16, 2011, and used as part of the third survey, as described below. After the research on this article was completed, Google revised the architecture of its search output page, and created a new section for “sponsored” sellers of products. [http://googlecommerce.blogspot.com/2012/05/building-better-shopping-experience.html](http://googlecommerce.blogspot.com/2012/05/building-better-shopping-experience.html). The new section is labeled “Sponsored.” See [http://tinyurl.com/6qskmx8](http://tinyurl.com/6qskmx8). Thus, Google is now simultaneously using “ Ads” and “Sponsored” to refer to paid content. We discuss this development in greater detail below.}\]
As Figure 1 reflects, Google’s search output has several discrete zones. The top-most zone is a small search box, with links to various types of search output (e.g., web, images, videos, maps, news, shopping, mail, and “more”). Immediately beneath that zone, one finds three columns of information. The left-most column largely replicates the links in the top zone, along with links to change the region that Google uses as the search location, and a tool with which to specify the time period searched. The central column has a colored box at the top with various search results and associated links, which are labeled “Ads”.

16 As Professor Benjamin Edelman has pointed out, the label “Ads” is so small it almost fits inside the “O” in the Google masthead. Benjamin Edelman, A Closer Look at Google’s Advertisement Labels, Nov. 10, 2010, at http://www.benedelman.org/adlabeling/google-nov2010.html.
The links in the colored box in the central column and the entirety of the right column are all paid results. Each link that appears in these zones of the search results page is there because the site won the right to appear by bidding in an auction of “keywords” run by Google. Conversely, the links in the central column that do not appear in a colored box are unpaid (“organic” or “algorithmic”) content, which appear as a result of Google’s search program.

Bing labels its paid links using the same terminology (“Ads”) and the same search page architecture. Yahoo uses the same search page architecture, but it labels paid links with the term “Sponsored Results.”

Prior to November 2010, Google labeled paid links as “Sponsored Links.” Prior to April, 2011, Bing labeled paid links as “Sponsored Sites.” Other search engines used a wide array of labels to identify paid links: Featured Listings, Premier Listings, Recommended Sites, Search Partners, Matching Results, Sponsor Matches, and Spotlight have been employed at one time or another.

B. Keyword Auctions

Google began a program of selling ads based on specific keywords (the AdWords program) in 2000. The program took its current form in 2002, and was expanded to include trademarks as keywords in 2004. We discuss below the circumstances under which trademarks may be included in ad text.

Individuals and entities bid to have their ad appear when specified keywords are used as search terms. Whether a particular ad appears

---

17 We describe the keyword auction in greater detail in Part I.B.
18 Google is increasingly trying to customize its results, so the reference to “algorithmic” search is an oversimplification. For an alternative formulation of Google’s search methodology, See Google, Our Search: Google Technology, Apr. 1, 2002, at http://www.google.com/onceuponatime/technology/pigeonrank.html.
20 See Hippsley, supra note 12.
24 See Jim Jansen, Understanding Sponsored Search: Core Elements of Keyword Advertising (Cambridge 2011). See also Peter O’Connor, Trademark Infringement in Pay-
depends on various factors, including the details of the search query; the amount that is bid; past performance of the ad in the context of such searches (i.e., click-through rates), and whether and how the bid is limited by the bidder (e.g., bidders can select among various options which affect whether which keyword matching option is selected, and whether the bid is targeted by location, time, search device employed, and language.)\textsuperscript{25} When consumers click on an ad, the entity that purchased the keyword in question pays Google the amount they bid, irrespective of whether any sale results.\textsuperscript{26}

AdWords and the imbedded pay-per-click ("PPC") payment model are responsible for the overwhelming majority of Google’s income – and for Google’s extraordinary market capitalization. For example, in 2010, revenue from advertising (almost all of which was attributable to keyword searches) totaled $28.2 billion – 96% of Google’s operating income.\textsuperscript{27} Bing and Yahoo use a similar PPC model.

Trademarks account for a material share of this advertising revenue. According to an internal Google document, trademarked keywords accounted for 7% of Google’s total keyword revenues in 2004, even though Google would honor requests from trademark owners to disable the use of trademarks in keywords and ad text.\textsuperscript{28} In 2009, Google estimated that allowing the use of trademarks in ad text (which it had previously sharply limited) would result in at least $100 million, and potentially more than $1 billion in annual revenues.\textsuperscript{29}

C. Search Engine Policies Regarding Trademark Usage

Google, Bing & Yahoo have very detailed policies regarding trademark usage and infringement. (Bing and Yahoo’s policies are identical, because of a 2009 agreement between Microsoft & Yahoo). As of 2009, Google allowed trademarks to be purchased as keywords in over 190 countries.\textsuperscript{30}

\textsuperscript{25}See \textit{Per-Click Advertising, in Contemporary Research in E-Branding} (IGI Global 2009).

\textsuperscript{26}See generally \url{http://support.google.com/adwords/bin/topic.py?hl=en&topic=1713940} and \url{http://support.google.com/adwords/bin/answer.py?hl=en&answer=6100&topic=16083&ctx=topic}.

\textsuperscript{27}Google also has a small program that allows bids based on conversion to actual sales, known as cost-per-acquisition bidding. \textit{See} \url{http://investor.google.com/financial/tables.html}.

\textsuperscript{28}Rosetta Stone Joint Appendix, 41: 4265 & 4675.

\textsuperscript{29}Rosetta Stone Joint Appendix, 41: 4382-4383.

\textsuperscript{30}See \url{http://searchengineland.com/google-adwords-opens-up-trademarked-bidding-to-most-countries-18628}. See also \url{http://blog.brandverity.com/228/google-modifies-global-}
Because the policies vary by region, and by whether the trademark appears in the ad text or is only used as a keyword, we have broken out our discussion accordingly.

i) Trademarks as Keywords

(1) United States

All three major search engines allow trademarks to be purchased as keywords, and none of the three have a formal policy for investigating or disallowing future purchases in response to complaints by the trademark owner. Google has had this policy since 2004, when it first allowed trademarks to be sold as keywords, while Bing & Yahoo did not formally announce this policy until 2011.

(2) European Union

Google began selling trademarks as keywords in the United Kingdom and Ireland in 2008. It expanded this policy to other European countries in 2009, and again in 2010. If a trademark owner complains, Google will conduct a limited investigation to determine whether a specific ad in combination with a specific keyword creates confusion as to the origin of the advertised goods and services. If Google concludes the ad and keyword combination is confusing, it will remove the specific ad causing the confusion.

In Europe, Bing & Yahoo have a policy on the use of trademarks as keywords only in the United Kingdom and France. In both countries, Bing & Yahoo prohibit the use of a trademark as keyword if the advertiser is a competitor of the trademark owner. If the advertiser is a non-competing

[adwords-trademark-policy/]

31 See http://support.google.com/adwordspolicy/bin/answer.py?hl=en&answer=144298 and http://advertising.microsoft.com/small-business/support-center/search-advertising/editorial-faq
35 http://support.google.com/adwordspolicy/bin/answer.py?hl=en&answer=144298.
third party, Bing & Yahoo permits the use of a keyword trademark so long as the advertiser’s primary offering is not goods or services that compete with the trademark owner, and the advertiser is either an informational site or is using the term in a descriptive sense. Bing & Yahoo also permit the use of a keyword that corresponds to a trademark if the advertiser is selling authentic trademarked goods.

(3) Other Regions

Google prohibits the use of trademarks as keywords in Australia, Brazil, China, Hong Kong, New Zealand, North Korea, South Korea, Macau and Taiwan. However, a trademark owner must file a complaint before Google will disallow further purchases. Google’s review of the complaint is limited to determining whether the complainant’s protected trademark has been purchased as a keyword.

In Singapore, Bing & Yahoo’s keyword policy mirrors its policies for France and the United Kingdom. In other countries, Bing & Yahoo have no stated policy with regard to the use of trademarks as keywords.

ii) Trademarks in Ad text

(1) United States

Prior to 2009, Google would not allow trademarks to be used in ad text, and would remove such ads in response to complaints by the trademark owner. Since then, Google allows trademarks to appear in ad text so long as doing so constitutes “fair use” and the advertiser is an informational site, a reseller, or a seller of components, replacement parts, or compatible products. If a trademark owner complains about the use of its trademark in ad text, Google will conduct an investigation to assess compliance with its policies. Alternatively, a company may request Google to prohibit all use of its trademark by all advertisers; Google does not allow for

---

39 Id.
40 http://support.google.com/adwordspolicy/bin/answer.py?hl=en&answer=144298.
44 What is Google's trademark policy for resellers and informational sites?, at http://support.google.com/adwordspolicy/bin/answer.py?hl=en&answer=145626.
45 Id.
conditional authorizations.\(^{45}\)

Like Google, Bing & Yahoo allow trademarks to appear in ad text so long as doing so constitutes “fair use,” although Bing & Yahoo’s definition of fair use is more expansive than Google.\(^{46}\) Like Google, Bing & Yahoo’s enforcement policy is complaint-driven.\(^{47}\)

(2) European Union

Since 2010, Google’s policy in the United Kingdom and Ireland is identical to its policy in the United States.\(^{48}\) In the rest of the European Union, Google prohibits the use of trademarks in ad text.\(^{49}\) If a trademark owner files a complaint, Google will conduct an investigation, and remove the trademark and prevent the advertiser from using the trademark in ad text in the future.\(^{50}\)

Bing & Yahoo only have formal policies for France and the United Kingdom.\(^{51}\) The policy in France is similar that in the United States, but more restrictive, since the trademark may only be used in a descriptive sense or to advertise informational sites.\(^{52}\) Thus, the website’s principal offering must not be goods or services competitive with those of the trademark owner. In the United Kingdom, competitors may use the trademark in ad text, but only to compare the advertiser’s products to those of the competitor and only when the comparison is supported by

\(^{45}\) http://support.google.com/adwordspolicy/bin/answer.py?hl=en&answer=106476

\(^{46}\) http://advertising.microsoft.com/small-business/support-center/search-advertising/intellectual-property-guidelines; Fair uses are defined by Bing and Yahoo as: (1) Use by a reseller of authentic goods or services, (2) use by an informational website about goods or services represented by the trademark, (3) descriptive use, i.e., ordinary dictionary uses of a term, and (4) uses for comparative advertising so long as the advertising is supported by independent research. Id.

\(^{47}\) http://advertising.microsoft.com/small-business/support-center/search-advertising/intellectual-property-guidelines


\(^{49}\) http://support.google.com/adwordspolicy/bin/answer.py?hl=en&answer=144298. This policy also applies to countries belonging to the European Free Trade Zone. In these regions, Google does allow the use of a term in ad text corresponding to a trademark if the term is being used descriptively or generically, i.e. the term is not being used as a trademark. Id.

\(^{50}\) Adwords Policy on trademarks in ads – scope of investigation, available at http://support.google.com/adwordspolicy/bin/answer.py?hl=en&answer=144298


Trademarks as Keywords

independent research.53

(3) Other regions

In all other regions, Google prohibits the use of trademarks in ad text.54 Google does not proactively prevent the use of trademarks in ad text, but it will investigate once a trademark owner files a complaint with Google. If an advertiser is found to be using a trademark in ad text, Google will require the advertiser to remove the trademark from the ad text and prevent the advertiser from using it in the future.

In Singapore, Bing & Yahoo’s policy for the use of trademarks in ad text is identical with their policy for France.55 Otherwise, Bing & Yahoo have no country-specific policies.

II. Search controversies

The sale and purchase of trademarks as keywords has given rise to multiple lawsuits, both domestically and internationally. In the U.S., lawsuits have been framed around the issue of whether such transactions give rise to actionable confusion under trademark law. These disputes have also given rise to a massive outpouring of academic scholarship. Part II.A reviews the case law, and Part II.B reviews the academic scholarship.

A. Case Law

i) Overview

As noted previously, in more than one hundred cases, trademark owners have sued search engines and those who purchased their trademarks as keywords for trademark infringement.56 Activity has not been limited to the courts; some trademark owners attempted to create an “Astroturf” movement to discourage consumers from clicking on paid links from advertisers “using brand names they aren’t affiliated with or authorized to use.”57

53 http://advertising.microsoft.com/uk/small-business/support-center/search-advertising/intellectual-property-guidelines. Further, the trademark must be presented within the context of the research and the research must be prominently featured on the advertiser’s landing page. Id.
54 http://support.google.com/adwordspolicy/bin/answer.py?hl=en&answer=144298.
56 We considered listing all of the cases, but chose to spare our readers. Anyone interested in a list can contact the authors.
57 See Alliance Against Bait & Click, at http://www.stopscads.org/aboutscads.html/. See also Kate Kaye, Alliance of Search Advertisers Has Familiar Ring, ClickZ, Apr. 22, 2009, at http://www.clickz.com/clickz/news/1703461/alliance-search-advertisers-has-familiar-ring (“The Alliance Against Bait and Click (AABC) includes companies and
Trademark infringement turns on whether there is a likelihood of confusion.\(^58\) To establish liability, the plaintiff must show that defendant's use of a trademark leads to confusion as to source (i.e., some consumers think the defendant's goods actually are those of the plaintiff), sponsorship (i.e., that plaintiff has "sponsored" the defendant to produce the goods), or affiliation (i.e., that the plaintiff and defendant are legally related entities).\(^59\) Once likelihood of confusion is established, harm is presumed, and plaintiffs may obtain injunctive relief and provable damages, including the profits derived by the defendant from infringing sales.\(^60\)

Courts have developed complex multi-factor tests to assess whether there is a likelihood of confusion. The factors include: (1) the strength of the mark; (2) proximity of the goods; (3) similarity of the marks; (4) evidence of actual confusion; (5) marketing channels used; (6) type of goods and degree of purchaser care; (7) defendant's intent; (8) likelihood of expansion of product lines.\(^61\) To be sure, the Circuit Courts of Appeals vary as to how many factors are included, and there is some evidence that District courts focus on only a few factors in deciding such cases.\(^62\) Regardless, confusion is presumed to be more likely if the marks are highly similar, the goods or services are alike, the defendant chose to use a similar mark in order to "free ride" on the goodwill of the plaintiff, the relevant consuming public is unsophisticated, and the parties sell to the same pool of customers.

Courts have had difficulty applying this framework to keyword cases, and have responded by emphasizing the importance of some factors, and ignoring others.\(^63\) Some courts have focused on "diversion," and imposed liability on the basis of "initial interest confusion."\(^64\) Other courts

---

\(^{58}\) **McCarthy on Trademarks and Unfair Competition** § 23:1 (4th ed.).


\(^{60}\) See 5 McCarthy on Trademarks and Unfair Competition § 30:47 (4th ed.).

\(^{61}\) See, e.g., AMF, Inc. v. Sleekcraft Boats, 599 F.2d 341, 348-349 (9th Cir. 1979).


have said that mere diversion does not constitute trademark infringement; it must be shown that a searcher that was looking for X and was diverted to Y’s website went there (at least initially) because she thought Y was affiliated with or sponsored by X.  

How much confusion must be shown to warrant relief? The plaintiff must show that an “appreciable” (i.e., more than trivial but less than substantial) number of relevant consumers are likely to be confused if defendant’s activities are allowed to proceed. Litigants may (but need not) offer survey evidence to prove or disprove the likelihood of confusion. Courts have been unimpressed if the survey evidence shows that 10-15% of respondents are confused, but higher figures have been associated with greater success.

ii) Judicial assumptions

In deciding keyword cases, judges have routinely made assumptions, based on “casual” or “armchair” empiricism, that have substantially affected the outcome. We have identified six specific areas in which judges have made such assumptions: (i) consumer goals and expectations when trademarks are used as search terms; (ii) advertiser (and/or search engine) intent when purchasing or selling a trademarked keyword; (iii) consumer understanding of search page architecture and labeling of results; (iv) the significance of the trademark appearing in the ad text; (v) the likelihood of diversion; and (vi) the likelihood of confusion. We analyze each assumption in turn.

(1) Consumer Goals and Expectations

Understanding consumer goals and expectations is critical to the determination of whether diversion is likely to occur, and is important (but less critical) in determining whether there is a likelihood of confusion. Consider two types of consumers: Consumer #1 has “narrow” preferences and Consumer #2 has “broad” preferences. When Consumer #1 types

---

Communications Corporation, 354 F.3d 1020 (9th Cir. 2004).


66 4 McCarthy on Trademarks and Unfair Competition § 23:2 (4th ed.).

67 Beebe, supra note 62.

68 Sara Lee, 81 F.3d 467, note 15 (concluding that plaintiff must show at least 10% confusion to prevail). See also 4 McCarthy on Trademarks and Unfair Competition § 23:2 (4th ed.).

trademark “X” into a search engine, she is only looking for products bearing that trademark, and expects to see such products, and no others. Consumer #2, on the other hand, focuses on the product category, rather than the specific brand. When Consumer #2 types trademark “X” into a search engine, she is using it as a generic description of a category of goods – and could have equally well typed in trademarks “Y” and “Z” (which compete with products bearing trademark “X.”) Consumer #2 welcomes information on products bearing trademarks “Y” and “Z,” and would be disappointed if her search engine provided only information on products bearing trademark “X.”

It is certainly plausible (if not extremely likely) that Consumer #1 can be “diverted” by paid links for products bearing trademarks “Y” and “Z.” In like fashion, it is implausible (if not impossible) for Consumer #2 to be diverted when presented with the same search output, since her original goals encompassed products bearing all three trademarks.

Matters get even more complex if consumer expectations (based on past on-line and off-line experiences) are that a search for products bearing trademark “X” will also result in information regarding products bearing trademarks “Y” and “Z.” The case for diversion of Consumer #1 is weaker if they expect to receive information on trademarks “Y” and “Z,” irrespective of the fact they are only searching for products bearing trademark “X.” Stated more directly, a consumer must have both a fixed destination in mind (i.e., the specific branded product that they used as a search term) and not expect to encounter other branded products along the way in order for the claim they have been diverted to be meaningful. The relative proportion of consumers that have broad v. narrow preferences and expectations complicates matters further.

How does the diversity of consumer goals and expectations affect the likelihood of confusion? Consumer goals and expectations do not map as neatly onto the risk of confusion as they do onto the risk of diversion.

\[70\] See, e.g., Memorandum of Amicus Curiae Public Citizen, GEICO v. Google 9 (July 30, 2004), at http://www.citizen.org/documents/ACF4F0.pdf (“The fundamental flaw in GEICO’s submission is its apparent assumption that any member of the public who uses a search engine to conduct a search using the term “GEICO” must necessarily be searching for GEICO’s official site, and only for that site, and hence is likely to experience confusion about whether all of the ensuing search results are linked to GEICO’s own site. . . the mere fact that the user is looking for information that has some bearing on a trademarked word, such as “GEICO,” does not necessarily mean that the user wants to know only who owns the trademark and what the owner wants to convey.”).

If anything, our example of “broad preferences” is too narrow; Public Citizen lists more than a dozen reasons why a consumer might use a trademark as a search term, few of which are contained within our definition of “broad preferences.”
However, it seems reasonable that the likelihood of confusion is somewhat greater among those who are only interested in and expect to receive information on the branded good they searched for, while the likelihood of confusion is somewhat lessened (but still possible) among those who have more expansive goals and expectations. Thus, all else being equal, the distribution of goals and expectations among a population should have a material impact on the frequency with which confusion is found.

Strikingly, rather than wrestle with these issues, or demand the parties provide direct evidence on these points, many judges have simply assumed that when a trademark is used as a search term, the consumer is interested only in goods bearing that trademark, or in the company that owns that trademark. For example, in *Network Automation*, the Ninth Circuit stated that consumers conducting a search with the trademark in question (“Activebatch”) “are presumably looking for [the] specific product and not a category of goods.” The same assumption was made by the district courts in *Rosetta Stone*, *Storus*, *Binder*, and *Australian Gold*. In *Hearts on Fire*, the court did not go quite as far, but still noted that a factor to be considered in the confusion analysis was “the specific context of a consumer who has deliberately searched for trademarked diamonds only to find a sponsored link to a diamond retailer.” This framing, and the underlying assumption on which it is based, makes it considerably easier for courts to conclude that diversion has taken place and/or confusion is likely.

Ultimately, the distribution of goals and expectations among consumers is an empirical question. Perhaps the stylized categories we have presented accurately capture what is going on. Alternatively, more categories may need to be employed, or it may be useful to think about consumer goals and expectations arrayed along a spectrum.

Consumers may also switch categories depending on what product or service they are searching for. So, consumers may use trademarks as a generic reference for some categories of goods and services (i.e., Hertz = rental cars), and use trademarks to search for specific products for other categories of goods and services (i.e., Macbook = Apple computers). Regardless, judges should not simply assumed that consumers have

---


72 *Network Automation*, Inc. 638 F.3d at 1154.

73 *Australian Gold*, Inc. v. Hatfield, 436 F.3d at 1238.

74 *Hearts on Fire*, 603 F.Supp. at 289.
homogenous goals and expectations, and are all equally susceptible to
diversion and/or confusion.

(2) Intent

In trademark infringement cases, courts have inferred “bad” intent
when defendants knowingly use a mark that is similar or identical to that of
a competitor. This approach has been transferred wholesale to the world,
with no consideration given to whether a different approach might be
appropriate for keyword searches. In both Binder and Storus, the District
Courts treated the fact that another entity’s trademark had been purchased as
a keyword as dispositive on the issue of intent. In Rosetta Stone, the
Fourth Circuit concluded that a rational jury could infer bad intent from
Google’s financial incentive to sell trademarks as keywords, and their
knowledge that doing so significantly heightened the risk of consumer
confusion, based on Google’s internal research.

(3) Consumer knowledge of and attentiveness to search
architecture, paid links, and labels

Courts routinely assume that consumers are knowledgeable about
search architecture and the labels on paid links. These assumptions are
material: consumers that understand search architecture and can
differentiate paid ads from unpaid search results are more likely to
understand that ads may come from sources other than the trademark owner
– even if they used the trademark as a search term in the first place.
Conversely, if consumers do not understand search architecture and the fact
that some links are paid ads, they are arguably more prone to confusion.

Thus, in Playboy v. Netscape, the Ninth Circuit upheld the district
court’s determination that initial interest confusion had occurred when
“consumers saw banner advertisements that were ‘confusingly labeled or
not labeled at all.’” The Ninth Circuit expressly observed that clear
labeling “might eliminate the likelihood of initial interest confusion that

75 Courts have not elaborated on whether it is the intent to confuse or the intent to free-
ride off an established trademark that is problematic.
76 Harry J. Binder, et al. v. Disability Group, Inc. et al., 772 F.Supp.2d 1172, 1181-
1183 (C.D. Cal. 2011); Storus Corp. v. Arora Marketing, Inc., 2008 U.S. Dist. LEXIS
77 See Rosetta Stone v. Google, Inc., 676 F.3d 144, 155-156 (4th Cir. 2012).,
Unfortunately, although the opinion references the prior research, the actual documents
remain under seal. The authors are in the process of moving for unsealing this portion of
the record.
78 Playboy Enterprises, Inc. v. Netscape Communications Corp., 354 F.3d 1020, 1022
(9th Cir. 2004).
exists in this case.” 79 In Network Automation, the Ninth Circuit emphasized the importance of search architecture and labeling: although the defendant had not “clearly identified itself in the text of its ads, Google and Bing have portioned their search results pages so that the advertisement appear in separately labeled sections for ‘sponsored’ links. 80 The labeling and appearance of the advertisements as they appear on the results page . . . must be considered as a whole.” 81 Indeed, the Ninth Circuit concluded that the “labeling and appearance of the advertisements and the surrounding context on the screen displaying the results page” was one of the most important factors in a trademark/keyword case. 82 Similarly, in Rosetta Stone, the district court observed that confusion was unlikely because consumers “are able to distinguish between [s]ponsored [l]inks and organic results displayed on Google’s search results page.” 83

(4) Appearance of plaintiff’s mark in defendant’s Ad text

Courts have placed considerable weight on whether the Ad text includes the trademark in question, reasoning that the risk of confusion is far higher if the trademark actually appears in the paid link. 84 Conversely, courts have been more willing to infer confusion if the Ad text includes the trademark in question. 85 Thus, in GEICO, the district court dismissed plaintiff’s trademark infringement claims against Google for Ad text that did not include the Geico trademark during the trial, while finding that Geico had demonstrated a likelihood of confusion (and therefore, violation of the Lanham Act) for Sponsored Links that use Geico’s trademarks in their headings or text. 86

(5) Diversion

Some courts have used the doctrine of initial interest confusion to resolve keyword cases where there was evidence of consumer diversion, but not much (if any) evidence of actual consumer confusion. 87 In these cases, courts have effectively assumed that diversion is a type of harm for which

79 Id. at 1025 note 16 and 1030 note 43.
80 Network Automation, Inc., 638 F.3d at 1148-1149.
81 Network Automation, Inc., 638 F.3d at 1154.
82 Id.
83 Rosetta Stone, 730 F.Supp.2d at 546. The Fourth Circuit disagreed, finding enough evidence of confusion regarding sponsored links to send the case to the jury.
87 Storus Corp., 2008 U.S. Dist. LEXIS at *15; Australian Gold, Inc. v. Hatfield, 436 F.3d 1228, at 1232-1233 (10th Cir. 2006).
trademark law provides a remedy, virtually independent of evidence of consumer confusion. It is not entirely clear whether courts that take this step actually believe, as an empirical matter, that diversion is equivalent to confusion, or are simply seeking to prohibit conduct they believe is normatively undesirable by stretching existing doctrinal framework.

(6) Likelihood of confusion

The multi-factor test was developed to resolve disputes involving trademark infringement in the off-line world. Courts have used the same framework to resolve keyword cases – discarding the factors that don’t apply, and then mechanically applying the remaining factors. Insufficient consideration has been given to whether the analysis should involve different criteria, tied to the realities of search behavior on the Internet. Courts have simply assumed that the same set of factors will “work” to cost-effectively identify confusion as to source, sponsorship, and affiliation on the Internet. But, this approach means that the factors, which were developed to guide the analysis of whether there was a likelihood of confusion in an off-line world, have effectively become dispositive endpoints in their own right, particularly when they do not apply neatly to an on-line search environment.

B. Academic Scholarship

More than fifty law review articles and student notes have been written about trademark infringement in the context of keyword advertising. We cannot begin to count the number of presentations made by practicing lawyers at CLE sessions on the subject.

Much of this work focuses on the “trademark use” controversy that was hot at the outset of keyword litigation. As that issue has waned in significance, articles and notes have focused on the applicability of the initial interest confusion framework to keyword searches. There has been considerable debate over whether the initial interest confusion framework fits the on-line world.

---

89 A list of the articles is available from the authors on request, and will be posted as a web appendix.
90 The debate was over whether the defendant-advertisers and search engines were using plaintiff’s mark as a trademark. That controversy has largely subsided – with virtually all courts holding that the sale of trademarks as keywords may be actionable, as long as infringement, in the form of confusion or dilution is shown. See, e.g., Rescuecom Corporation v. Google, Inc. 562 F.3d 123 (2nd Cir. 2009).
91 See supra note 89.
92 See, e.g., Eric Goldman, Deregulating Relevancy in Internet Trademark Law, 54 EMORY L.J. 507, 509 (2005) (arguing that initial interest confusion doctrine is “predicated
Trademarks as Keywords

Strikingly, although there is a veritable mountain of materials on the legal issues raised by the use of trademarks as keywords, we have found very little empirical work on the subject – and none of it has been published in the law reviews.93 O’Connor studied the use of trademarks as keywords for a sample of 90 hotels in Europe, Asia, and the U.S., and found that “abuse is rampant,” with ads for third-party websites appearing in a clear majority of searches.94 Rosso & Jansen analyzed the frequency of “piggybacking” ads for 100 prominent trademarks and found that although “piggybacking” was common (64% - 94%), competitors accounted for only 2.7% - 6.4% of such ads.95 Further, very few of the piggybacking ads placed by competitors used the trademark in ad text.96 Rosso & Jansen concluded that “competitive piggybacking does not appear to be a deceptive or widespread phenomenon.”97

Several studies focused on other issues related to the use of trademarks as keywords. Chiou and Tucker studied the impact of including trademarks in ad text for hotel reservations, and found that such advertising actually increased the demand for reservations from the hotel’s own website (i.e., consumers clicked less often on paid ads, and more often on the

93 One article, reporting the results of a survey appeared in the Trademark Reporter. Because the survey was conducted on behalf of one of the parties in a lawsuit involving the purchase of trademarks as keywords, we address it below. See note 107, infra.
94 Peter O’Connor, An Analysis of Hotel Trademark Abuse in Pay-Per-Click Search Advertising, 9 INFORMATION AND COMMUNICATION TECHNOLOGIES IN TOURISM 377 (2007) (385 (finding that ads appeared in 74% of searches, and third parties accounted for 89% of the ads).
95 Mark A. Rosso & Bernard J. Jansen, Brand Names as Keywords in Sponsored Search Advertising, 27 COMMUNICATIONS OF THE ASSOCIATION FOR INFORMATION SYSTEMS, 81 (2010). The most common form of piggy-backing is promotion of the brand by a reseller, or some other function that assists in selling the product such as coupons or free samples. Such “promotional piggybacking” accounted for 55% - 78% of ads, depending on the search engine. Id. at 27. “Orthogonal” piggybacking, which typically involved information websites about the brand or the underlying company, accounted for 16% - 42% of ads, depending on the search engine.
96 Id. at 89 (“the use of trademarked terms by competitors is extremely low. As shown in Table 6, those six competitive piggybacking ad occurrences are the result of just two ads. . . .”).
97 Id.
Much Ado About Something?

organic link for the hotel itself). They suggested that such “channel substitution” resulted from the fact that paid ads could no longer effectively differentiate themselves once all sites included the trademark. In an unpublished doctoral dissertation, Shin developed a model for predicting when companies will and won’t purchase their own trademarks as a keyword. Edelman & Gilchrest studied the impact of label text on click-throughs, and found that the use of “Paid Advertisements” resulted in 25%-27% lower click-through than “Sponsored links” or “Ads,” respectively.

Somewhat dated surveys also make it clear that consumers are not all that familiar with the differences between paid and unpaid links. A 2004 survey found considerable suspicion about sponsored links, and “low expectation[s]” about the value of such results. Not surprisingly, respondents reported that they preferred to click on non-paid links. In a 2004 survey, 62% of respondents were unaware that search engines provided both paid and unpaid search results. Among those who were aware of the distinction, fewer than half (47%) said they could always tell which results were paid. Finally, a 2003 survey found that respondents paid little attention to labels and search architecture, but thought the term “sponsored” was vague and confusing.

C. Private Litigation -- Consumer Surveys

Private litigation involving claims of trademark infringement has generated multiple surveys of consumer confusion. Table 1 specifies the

---

104 Id.
rate of confusion quantified by thirteen expert reports offered in eleven different cases. For ten of these surveys, we had the full expert report, while for the other three surveys, we rely on the description of the survey in the court’s opinion.
Table 1: Surveys Presented in Litigation

<table>
<thead>
<tr>
<th>Case Name</th>
<th>Presented By</th>
<th>Rate of Confusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Airlines</td>
<td>Defendant</td>
<td>0%-2%</td>
</tr>
<tr>
<td>GEICO</td>
<td>Defendant</td>
<td>&lt; 10%</td>
</tr>
<tr>
<td>1-800 Contacts, Inc.</td>
<td>Plaintiff</td>
<td>12%-38%</td>
</tr>
<tr>
<td>Rosetta Stone</td>
<td>Plaintiff</td>
<td>17%</td>
</tr>
<tr>
<td>American Airlines</td>
<td>Plaintiff</td>
<td>20%-32%</td>
</tr>
<tr>
<td>CNG Financial</td>
<td>Plaintiff</td>
<td>21%-38%</td>
</tr>
<tr>
<td>American Blind</td>
<td>Plaintiff</td>
<td>29%-32%</td>
</tr>
<tr>
<td>FPX</td>
<td>Plaintiff</td>
<td>42%-71%</td>
</tr>
<tr>
<td>Mary Kay</td>
<td>Plaintiff</td>
<td>45%</td>
</tr>
<tr>
<td>TrafficSchool.com</td>
<td>Plaintiff</td>
<td>50%-96%</td>
</tr>
<tr>
<td>Fair Isaac</td>
<td>Plaintiff</td>
<td>&gt; 65%</td>
</tr>
<tr>
<td>GEICO</td>
<td>Plaintiff</td>
<td>67%-69%</td>
</tr>
<tr>
<td>Harry Binder</td>
<td>Plaintiff</td>
<td>90%</td>
</tr>
</tbody>
</table>

Sample size unknown for Trafficschool.com and Geico-Plaintiff. Sample for other reports ranged from 270 (Geico-Defendant) to 1,000 (1-800 Contacts, Inc), with the exception of Harry Binder (17).

Not surprisingly, defendant’s experts invariably find low levels of confusion, while plaintiff’s experts invariably find higher levels of

---

confusion. In two cases, we have reports on the rate of confusion found by experts for each side. In *American Airlines*, the defense expert found a rate of confusion of 0-2%, while plaintiff’s expert found a rate of confusion of 20-32%. In *GEICO*, the defense’s expert found a rate of confusion of <10%, while plaintiff’s expert found a rate of confusion of 67-69%.

Finally, the 4th Circuit’s opinion in *Rosetta Stone* references some research conducted by Google in 2004. Unfortunately, the actual study remains under seal, but the opinion states that Google found that the inclusion of a trademark in ad text (whether in the title or body) led to a “very high” degree of consumer confusion, because “94% of users were confused at least once” during the study.120

III. Empirical Findings: Coding Study

As described previously, there have been numerous lawsuits arising out of the use of trademarks as keywords in Internet searches. But, little is known about the frequency with which such transactions occur – let alone

---

119 A similar dynamic prevails in antitrust cases. See George J. Stigler, *The Economists and the Problem of Monopoly*, in The Economist as Preacher and Other Essays (Chicago: University of Chicago Press, 1982), 38, 51 (“Consider the problem of defining a market within which the existence of competition or some form of monopoly is to be determined. The typical antitrust case is an almost impudent exercise in economic gerrymandering. The plaintiff sets the market, at a maximum, as one state in area and including only aperture-priority SLR cameras selling between $200 and $250. This might be called J-Shermanizing the market, after Senator John Sherman. The defendant will in turn insist that the market is worldwide, and includes not only all cameras, but also portrait artists and possibly transportation media because a visit is a substitute for a picture. This might also be called T-Shermanizing the market, this time after the Senator’s brother, General William Tecumseh Sherman. Depending on who convinces the judge, the concentration ratios will be awesome or trivial, with a large influence on his verdict.”)

120 Rosetta Stone v. Google, Inc., 676 F.3d 144, 158 (4th Cir. 2012). Rosetta Stone’s brief in Opposition to Google’s Motion for Summary Judgment provides further detail on the research conducted by Google:

- Preliminary results ‘indicate[d] that confusion remains high when TM’s are allowed in the body but not in the ad title. For a user, it seems to make little difference whether s/he sees a TM in the ad title or ad body - the likelihood of confusion remains high. This inference is also supported by qualitative/anecdotal data, i.e., responses by our subjects to open-ended questions asked at the end of the experiment. This suggests that the only effective TM policy for US/Canada is:

  1. Allow TM usage for keywords
  2. Do not allow TM usage in ad text - title or body.

- ‘87.5% of users were confused at least once during Experiment 2, and 76% of the users were confused at least once during Experiment 4.’ (Ex. 33.)

- "Overall very high rate of trademark confusion (30-40% on average per user) . . . 94% of users were confused at least once during the study." (Ex. 35.)

Rosetta Stone Ltd.’s Opposition to Google Inc.’s Motion to Exclude Expert Report and Opinion of Dr. Kent Van Liere, Volume 8, Tab 45 to Joint Appendix (Apr. 9, 2010).
who is doing the purchasing. We accordingly performed a study to determine who was purchasing trademarks as keywords. Because this study is the focus of another article, we provide only a thumbnail description of this other study and one of its findings here.

We obtained a list of approximately 2,500 trademarks from the International Trademark Association, and developed a computer program to run an Internet search for each trademark through the three most prominent search engines (Bing, Google & Yahoo). For each trademark/search engine combination, the program captured a pdf of the web page that would have been viewed had one clicked through each of the first ten paid links. We then developed a standardized coding protocol for classifying the search output, using eleven categories, including whether the paid link was for the trademark owner, an entity selling the trademarked goods as well as competing goods, or an entity selling competing goods exclusively. Research assistants from the University of San Francisco coded the first five paid links for each trademark/search engine combination. Table 2 contains details on the coding categories, and our results, sorted from most to least frequent.

\footnotesize
\[121\] A list of the trademarks is available from the authors on request, and will be posted as a web appendix.
\footnotesize
\[122\] As noted previously, we describe this study, and the steps we took to ensure inter-rater reliability in greater detail in a separate article.
Table 2:

<table>
<thead>
<tr>
<th>Type of Paid Link</th>
<th>% of Paid Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor of TM products and competing products</td>
<td>27%</td>
</tr>
<tr>
<td>Collateral information/sales opportunity vendor</td>
<td>24%</td>
</tr>
<tr>
<td>TM owner</td>
<td>13%</td>
</tr>
<tr>
<td>Vendor of competing products only</td>
<td>6%</td>
</tr>
<tr>
<td>Generic use</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
<tr>
<td>Vendor of collateral/complementary goods/services</td>
<td>5%</td>
</tr>
<tr>
<td>Vendor of TM products only</td>
<td>3%</td>
</tr>
<tr>
<td>Collateral information provider</td>
<td>3%</td>
</tr>
<tr>
<td>Employment website</td>
<td>2%</td>
</tr>
<tr>
<td>Coupon website</td>
<td>2%</td>
</tr>
</tbody>
</table>

Coding Results for 2,463 trademarks, totaling 18,733 paid links (3,982 for Google; 5,396 for Bing, and 9,355 for Yahoo.

As Table 2 indicates, vendors of the trademarked good and competing products account for 27% of paid links; collateral information/sales opportunity vendors (who provide a gateway through which to purchase the trademarked good) account for 24% of paid links; and the trademark owner accounts for 13% of paid links. Only 6% of paid links are purchased by entities selling exclusively competing goods. Thus, the overwhelming majority of paid links are unlikely to give rise to the types of consumer confusion at stake in the lawsuits that have been brought. Our findings are consistent with those of an earlier, smaller study of high-profile trademarks.123

IV. Empirical Findings: Surveys

A. Overview

We now turn to the results of three separate online surveys: two from 2010 and one from 2012. The authors were responsible for the specific questions that were asked, and the analysis of the results of those surveys, although a private survey firm assisted in the design of all three surveys and was responsible for administering the surveys.124 An Appendix summarizes basic demographic information about those who participated in

123 See Rosso & Jansen, supra note 97, and accompanying text.
each of the three surveys, but we obtained a broad cross-section of the population in each survey.

B. Background on Surveys

i) 1st Survey

The first survey was conducted between May 17, 2010 and May 22, 2010. The survey had a total of forty-six questions: thirty-seven substantive questions, and nine demographic questions. The 1st survey focused on how consumers searched for information on the Internet, their degree of knowledge about paid v. unpaid search results, and whether they perceived they had been “diverted” from what they were searching for by the results they received.

ii) 2nd Survey

The second survey was conducted between October 25th and November 5th, 2010. The 2nd survey had a total of forty-five questions: thirty-six substantive, and nine demographic. The second survey focused on search architecture and labels, with a primary focus on the difference between paid and unpaid search results.

iii) 3rd Survey

The third survey was conducted between February 1st and February 14, 2012. The 3rd survey had a total of 48 questions: 38 substantive and 10 demographic. The third survey focused on search architecture and labels; consumer goals and expectations trademarks are used as search terms; the degree of consumer confusion; and attitudes regarding the fairness of a company purchasing its competitors’ trademarks as keywords.

C. Findings

We break our findings down as follows: (i) consumer knowledge of search page architecture; (ii) consumer knowledge of search page labeling; (iii) adequacy of disclosure of paid links; (iv) consumer propensity to click on paid links; (v) consumer goals and expectations when trademarks are used as search terms; (vi) diversion and confusion; and (vii) fairness norms.

i) Consumer knowledge of search page architecture

As noted previously, assumptions about consumer knowledge of search page architecture figure prominently in litigation over the use of trademarks as keywords. In all three surveys, we found considerable variation in consumer knowledge of search page architecture. When we asked survey respondents whether they were familiar with how search

125 See supra notes 80 - 85, and accompanying text.
results are organized, 27% responded they were very familiar, 33% responded they were familiar, while 25% were somewhat familiar, and 15% were either not very familiar or not at all familiar.\textsuperscript{126} Table 3 presents the results when we asked survey respondents more detailed questions about sponsored/paid links, and whether they knew where paid results appeared on the search page.

**Table 3: Consumer knowledge of search page architecture**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aware that search companies are paid to feature certain sites more prominently?\textsuperscript{127}</td>
<td>61%</td>
<td>27%</td>
<td>12%</td>
</tr>
<tr>
<td>Know the difference between sponsored and unsponsored search results?\textsuperscript{128}</td>
<td>42%</td>
<td>31%</td>
<td>27%</td>
</tr>
<tr>
<td>Easy to distinguish between paid and unpaid search results?\textsuperscript{129}</td>
<td>36%</td>
<td>42%</td>
<td>22%</td>
</tr>
<tr>
<td>Know where the paid results usually appear?\textsuperscript{130}</td>
<td>35%</td>
<td>38%</td>
<td>27%</td>
</tr>
</tbody>
</table>

These results indicate that a substantial percentage of survey respondents are unaware of basic facts about search page architecture and labeling. To probe this issue further, we presented survey respondents with Figure 2, which is a modified version of Figure 1.

\textsuperscript{126} Survey 2, Question 5.
\textsuperscript{127} Survey 2, Question 17.
\textsuperscript{128} Survey 1, Question 14 & Survey 2, Question 13. Survey 1, Question 14 is the upper row in Table 4.
\textsuperscript{129} Survey 2, Question 20. In a different survey, we asked survey respondents who knew the difference between sponsored and non-sponsored links whether sponsored links were clearly designated from those that were non-sponsored. 66% answered yes, 14% answered no, and 20% were unsure. Survey 1, Question 16.
\textsuperscript{130} Survey 2, Question 21.
We then asked survey respondents to directly specify whether particular regions of Figure 2 were made up of paid or unpaid links. We added a fanciful control (“links selected by Google’s special marketing team”) and also allowed respondents to select “don’t know/not sure,” and “other.” Obviously, for sections A & B, the correct answer is “paid links,” while for section C, the correct answer is “unpaid links.” Table 4 presents the results, with the percentage providing the correct result bolded.
Table 4: Source of Links

<table>
<thead>
<tr>
<th>Panel A</th>
<th>Section</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A(^{131})</td>
<td>B(^{132})</td>
<td>C(^{133})</td>
</tr>
<tr>
<td>Unpaid links</td>
<td></td>
<td>15%</td>
<td>24%</td>
<td>51%</td>
</tr>
<tr>
<td>Paid links</td>
<td></td>
<td>46%</td>
<td>38%</td>
<td>16%</td>
</tr>
<tr>
<td>Google's special marketing team</td>
<td></td>
<td>17%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Don't know/not sure</td>
<td></td>
<td>21%</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Panel B: Cumulative Performance

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All 3 correct</td>
<td>16%</td>
</tr>
<tr>
<td>2 of 3 correct</td>
<td>30%</td>
</tr>
<tr>
<td>1 of 3 correct</td>
<td>27%</td>
</tr>
<tr>
<td>0 of 3 correct</td>
<td>27%</td>
</tr>
</tbody>
</table>

Strikingly, only for Section C did more than half of survey respondents answer the question correctly – and then only just. In addition, between 11% and 17% of survey respondents selected the fanciful response we included as a control, and 20% or more of survey respondents did not know or were unsure for all three sections.

If we focus on cumulative correct responses, the results are far worse. As Table 4, Panel B reflects, only 16% of survey respondents correctly answered whether all three sections in Figure 2 included paid or unpaid links. If we focus only on Sections A & B, only 21% of survey respondents correctly answered that these sections of Figure 2 included paid links.

These findings indicate a considerable degree of consumer uncertainty and confusion about which content is paid v. unpaid, and about search page architecture more generally.

ii) Adequacy of Disclosure of Paid Links

As noted previously, search engines are required to clearly and conspicuously disclose paid content, so that consumers can be aware of and distinguish between compensated advertising and unpaid opinion/news.

\(^{131}\) Survey 3, Question 7.
\(^{132}\) Survey 3, Question 8.
\(^{133}\) Survey 3, Question 9.
content.\textsuperscript{134} We asked a series of questions to determine whether survey respondents thought that Google’s disclosure was “clear” and whether it was “conspicuous,” and the most important reason they thought so. We also asked whether they wanted more information about the differences between paid and unpaid links, and for their suggestions for improving search page architecture and labeling. We present the results in Table 5.

**Table 5: Search Architecture**

<table>
<thead>
<tr>
<th>Clear &amp; Conspicuous Disclosure of Paid v. Unpaid Links?</th>
<th>Clear\textsuperscript{135}</th>
<th>Conspicuous\textsuperscript{136}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>47%</td>
<td>46%</td>
</tr>
<tr>
<td>No</td>
<td>36%</td>
<td>37%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>17%</td>
<td>17%</td>
</tr>
</tbody>
</table>

**Panel B: Why is disclosure clear & conspicuous?**

<table>
<thead>
<tr>
<th></th>
<th>Why Clear\textsuperscript{137}</th>
<th>Why Conspicuous\textsuperscript{138}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid links in specific section of search page</td>
<td>30%</td>
<td>29%</td>
</tr>
<tr>
<td>Paid links in shaded box</td>
<td>35%</td>
<td>34%</td>
</tr>
<tr>
<td>Paid links in section with label Ads</td>
<td>32%</td>
<td>30%</td>
</tr>
<tr>
<td>Not sure/Do not know</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Panel C: Suggested Improvements in Labels/Search Architecture\textsuperscript{139}**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>More clearly marked boundaries between paid/unpaid links</td>
<td>45%</td>
</tr>
<tr>
<td>Change font or size of label for paid links</td>
<td>19%</td>
</tr>
<tr>
<td>Change words used in label for paid links</td>
<td>17%</td>
</tr>
</tbody>
</table>

\textsuperscript{134} See supra notes 10 - 11, and accompanying text.
\textsuperscript{135} Survey 3, Question 11.
\textsuperscript{136} Survey 3, Question 13.
\textsuperscript{137} Survey 3, Question 12.
\textsuperscript{138} Survey 3, Question 14.
\textsuperscript{139} Survey 3, Question 15.
As Table 5 reflects, just under half of survey respondents thought the distinction between paid and unpaid links was clear and almost exactly the same percentage thought the distinction was conspicuous.\textsuperscript{140} There was little agreement on why the distinction was clear and conspicuous, with roughly a third of survey respondents picking each of the three primary options (paid links in separate section; paid links in shaded box; paid links labeled “Ads”). There was also little consensus on the best way to improve search output to make the distinction clear and conspicuous, although one choice (more clearly marked boundaries between paid and unpaid links) got more than twice as many mentions as the next most popular choice.

Finally, we asked survey respondents whether they wanted more information on the difference between paid and unpaid links. Interestingly, although there was considerable consumer dissatisfaction with the status quo, only 47% of survey respondents wanted more information; 27% of survey respondents did not want more information, and 26% didn’t care one way or another.\textsuperscript{141}

\textbf{iii) Consumer preferences and expectations}

What are consumers actually searching for when they use a trademark as a search term? As noted previously, understanding consumer preferences and expectations is necessary to assess whether diversion and/or confusion is likely to occur.\textsuperscript{142} We began by asking survey respondents that had searched for a particular brand of product whether they were usually interested in finding information about that brand, or whether they were also interested in getting information about similar products from other brands. 47% of survey respondents indicated they usually wanted information about the specific brand they had searched for, while 31% usually wanted information about similar products from other brands, and 22% had no preference.\textsuperscript{143}

A later survey asked more specifically what survey respondents

\textsuperscript{140} The survey asked first whether the disclosure of paid content was “clear,” and then two questions later asked whether the disclosure of paid content was “conspicuous.” Because we obtained almost exactly identical responses, it is possible (but by no means a given) that survey respondents did not distinguish between these two elements in responding, but treated them together.

\textsuperscript{141} Survey 3, Question 16.

\textsuperscript{142} See supra notes 70 - 76, and accompanying text.

\textsuperscript{143} Survey 1, Question 10.
were looking for when they used the brand name of a product as a search term. We also asked what they expected to find if they clicked on a paid link. Table 6 details the responses.

**Table 6: Respondent Goals/Expectations**

<table>
<thead>
<tr>
<th>What I'm looking for</th>
<th>What I expect to find</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products bearing that brand name only</td>
<td>65%</td>
</tr>
<tr>
<td>Products bearing that brand name and similar competing brand names</td>
<td>34%</td>
</tr>
<tr>
<td>Similar competing brand names only</td>
<td>N/A</td>
</tr>
<tr>
<td>Products having nothing to do with the brand name</td>
<td>N/A</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
</tbody>
</table>

These findings indicate that survey respondents have diverse preferences and expectations when they use brand names as search terms. Although a clear majority (65%) are only looking for products bearing the brand name, substantially fewer (45%) expect to find only products bearing that brand name when they click through. We probe the issue of expectations further below.

**iv) Consumer attentiveness to search architecture and labels**

Judges have assumed that consumers pay attention to search architecture and labels in deciding which links to click upon. We accordingly asked survey respondents how search architecture affected which links they clicked on. We found little evidence that survey respondents pay attention to search architecture. More specifically, 56% reported they pay no attention to where on the search results page the links are located; 60% reported they pay no attention to whether the link is in a shaded box; and 48% reported they pay no attention to whether the link is labeled a Sponsored Link or Sponsored Result. A near-majority reported that they simply click on the first link they see the brand for which they are searching.

---

144 Survey 3, Question 21
145 Survey 3, question 22.
146 Survey 2, Questions 9, 11, and 12.
147 Survey 1, Question yy.
We also tested whether survey respondents were attentive to labels by taking advantage of the fact that Google and Bing had switched labels in late-2010 and mid-2011, from “Sponsored Links” and “Sponsored Sites” to “Ads.” In our third survey (conducted during February, 2012), we asked respondents whether they had seen one or more specific labels during the preceding two months.\(^\text{148}\) During this period, only “Ads” and “Sponsored Results” were being used, but we included the label Google had discontinued more than a year earlier (“Sponsored Links”) as well as a fanciful response (“Commercial Ads”). Table 7, Panel A presents the responses to this question, with the two labels actually in use during the survey period bolded.\(^\text{149}\)

Table 7: Knowledge of Labels

<table>
<thead>
<tr>
<th>Panel A: Observed Labels during January, 2012</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsored Links</td>
<td>55%</td>
</tr>
<tr>
<td>Sponsored Results</td>
<td>49%</td>
</tr>
<tr>
<td>Ads</td>
<td>46%</td>
</tr>
<tr>
<td>Commercial Ads</td>
<td>33%</td>
</tr>
<tr>
<td>Not noticed any labels</td>
<td>22%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: How Accurately Do Respondents Identify Labels?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Identified Only Labels in Use</td>
<td>13%</td>
</tr>
<tr>
<td>Identified Some Labels in Use, and Some Not in Use</td>
<td>51%</td>
</tr>
<tr>
<td>Identified Only Labels Not in Use</td>
<td>13%</td>
</tr>
<tr>
<td>Didn’t Notice Any Labels</td>
<td>22%</td>
</tr>
</tbody>
</table>

As Table 7, Panel A reflects, roughly half of survey respondents reported seeing labels that were actually being used during the specified time period (46% for “Ads” and 49% for “Sponsored Results”). However, more than half of survey respondents also reported seeing a label that had not been used for more than a year (55% for “Sponsored Links”) – and 33% reported seeing a label that had never been used (“Commercial Ads”). Finally, 22% of survey respondents reported not noticing any labels.


\(^\text{149}\) Survey 3, Question 4.
Much Ado About Something?

Table 7, Panel B aggregates the responses in Table 8, Panel A into those respondents who provided correct responses only (Ads and/or Sponsored Results, and no other responses); those who had mixed responses (Commercial Ads and/or Sponsored Links, combined with correct responses) v. those who had wrong responses (Commercial Ads and/or Sponsored Links only); and those who were oblivious (i.e., those who didn’t notice any labels). Only 13% of survey respondents could correctly identify labels that had been in use for more than a year. 13% of survey respondents picked completely wrong answers, and 22% of survey respondents didn’t notice any labels at all. These results call into question the utility of the labels currently being employed; the size and prominence of the text in which these labels are presented; and whether ordinary consumers notice labels to begin with.

What label do consumers actually prefer? Before and after Google and Bing adopted “Ads” as the label for paid links, we asked respondents what label they wanted search engines to use to designate paid links. Table 8 shows the results, with the labels in use during the survey period bolded.

Table 8: Consumer Preferences for Paid Link Label

<table>
<thead>
<tr>
<th></th>
<th>2010 Survey(^{150})</th>
<th>2012 Survey(^{151})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid Ads/Paid Advertisements</td>
<td>26%</td>
<td>35%</td>
</tr>
<tr>
<td>Sponsored Links</td>
<td>17%</td>
<td>13%</td>
</tr>
<tr>
<td>Sponsored Results</td>
<td>12%</td>
<td>17%</td>
</tr>
<tr>
<td>Ads or Advertisements</td>
<td>10%</td>
<td>13%</td>
</tr>
<tr>
<td>Not sure/no opinion</td>
<td>34%</td>
<td>19%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

As Table 8 reflects, “Paid Ads or Paid Advertisements” was the most preferred option – but it only garnered 26% - 35% of survey respondents. Strikingly, “Ads or Advertisements” was the preferred choice of only 10% of survey respondents in 2010 – and after more than a year of Google and Bing using “Ads” to label paid links, its position was essentially unchanged at 13%. “Not sure/no opinion” which was the choice of fully a third of survey respondents in 2010, and 19% in 2012. These results indicate that most consumers pay little attention to labels, and existing

\(^{150}\) Survey 2, Question 24.  
^{151}\) Survey 3, Question 18.
labels fail to effectively communicate which content is paid v. unpaid.

v) Paid Link Click-Through and Confusion

In some cases, courts have effectively assumed that harm (in the form of initial interest confusion) necessarily results when consumers search for a trademark, and paid links for a competitor appear.\footnote{See supra note 89, and accompanying text.} Courts have also assumed that the inclusion of the trademark in ad text increases the likelihood of diversion and/or confusion.\footnote{See supra notes 87 - 88, and accompanying text.}

To probe these issues, we used a screenshot of paid ads from a real search – specifically, Figure 3 (which is the right hand column from Figure 1) to examine these issues.
Figure 3 includes three paid ads by competitors (Infiniti, BMW, and Gorgeous Luxury Vehicles) that appeared in response to a search for “Mercedes.” The Infiniti Ad combines an explicit reference to Mercedes and clear disclosure that the website is from a competitor.\textsuperscript{154} The BMW Ad does not reference Mercedes, but the heading, url and ad text all reference BMW. The Gorgeous Luxury Vehicle Ad does not reference Mercedes, but

\textsuperscript{154} The heading and url both reference Infiniti, and the ad text states “compare Mercedes to Infiniti on the Official Infiniti USA Website.”
the heading does not exclude the possibility, since Mercedes is clearly a “gorgeous luxury vehicle.” However, the url and ad text both reference Livermore Audi.

For each of these ads, we asked respondents whether they would click through.\textsuperscript{155} As Table 9 reflects, between 41\% and 52\% of survey respondents answered “yes” or “maybe” to this question, with Gorgeous Luxury Vehicles having the highest percentage of click-through.

Table 9: Willing to click-through on a specific ad?

<table>
<thead>
<tr>
<th></th>
<th>Infiniti\textsuperscript{156}</th>
<th>BMW\textsuperscript{157}</th>
<th>Gorgeous Luxury Vehicles\textsuperscript{158}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>10%</td>
<td>11%</td>
<td>16%</td>
</tr>
<tr>
<td>Maybe</td>
<td>31%</td>
<td>32%</td>
<td>36%</td>
</tr>
<tr>
<td>No</td>
<td>52%</td>
<td>49%</td>
<td>40%</td>
</tr>
<tr>
<td>Not sure/Don’t know</td>
<td>6%</td>
<td>8%</td>
<td>8%</td>
</tr>
</tbody>
</table>

We also asked survey respondents who answered “yes” or “maybe” to the preceding question why they would click on links for Infiniti, BMW, and Gorgeous Luxury Vehicles when they had searched for Mercedes. Table 10 provides the responses to this question.

\textsuperscript{155} The specific question was as follows: “If you had run a search for Mercedes and got these results, would you click on the link for Infiniti/BMW/Gorgeous Luxury Vehicles?” Thus, we did not tell survey respondents why they had used Mercedes as a search term, and left them free to answer the click-through question based on their own goals and expectations.

\textsuperscript{156} Survey 3, Question 23.

\textsuperscript{157} Survey 3, Question 28.

\textsuperscript{158} Survey 3, Question 33.
Table 10: Reasons For Clicking on Paid Link

<table>
<thead>
<tr>
<th>Reason</th>
<th>Infiniti(^{159})</th>
<th>BMW(^{160})</th>
<th>Gorgeous Luxury Vehicles(^{161})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open to competing products</td>
<td>52%</td>
<td>53%</td>
<td>36%</td>
</tr>
<tr>
<td>Expect to find information on Mercedes</td>
<td>22%</td>
<td>25%</td>
<td>37%</td>
</tr>
<tr>
<td>Using Mercedes as a generic description</td>
<td>10%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Affiliation or sponsorship arrangement</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Not sure/Don’t know</td>
<td>2%</td>
<td>N/A</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table 11 indicates that a distinct minority of survey respondents (22% to 37%, depending on the ad) click through because they expect to find information on the trademarked good at the paid site. Instead, we find that most survey respondents (48% to 65%, depending on the ad) click through because they have broad preferences, and are interested in a range of luxury cars, even though they had used Mercedes as the search term.\(^{162}\)

Does ad text matter? Mercedes is only mentioned in the Infiniti ad text -- not in the BMW and Gorgeous Luxury Vehicles ad text. However, willingness to click through and the expectation of finding information on Mercedes is highest for Gorgeous Luxury Vehicles, and substantially lower for Infiniti and BMW.\(^{163}\) Thus, at least in this setting, ad text does not appear to be decisive.

\textbf{vi) Diversion and Confusion}

Some courts have used diversion as a proxy for confusion.\(^{164}\) We accordingly began by asking survey respondents whether they perceived

\(^{159}\) Survey 3, Question 24.

\(^{160}\) Survey 3, Question 29.

\(^{161}\) Survey 3, Question 34.

\(^{162}\) To obtain figures for those with broad preferences, we sum those who are open to competing products, and those who are using Mercedes as a generic term for luxury cars.

\(^{163}\) See supra notes 154-156, and accompanying text.

\(^{164}\) See supra note 89, and accompanying text.
they had ever been diverted. 58% responded that they had been diverted, 29% indicated they had not been diverted, and 13% were not sure.\textsuperscript{165} We then asked those who stated they had been diverted what they found at the site they had been diverted to, and allowed them to select more than one response. Almost 60% responded that they had been taken to a site that sold or serviced the product, rather than the company’s Official website.\textsuperscript{166} 48% responded that they had been taken to a site selling something different, and 39% responded that they had been taken to the site of a competitor.\textsuperscript{167}

The fact that the most popular response was that it was diversion to be directed to a site that sold or serviced the product one had searched for indicates some of the difficulties with the concept of diversion. We also asked survey respondents that reported being diverted what they usually did next, and allowed them to select more than one response. 61% reported that they went back and did the Internet search again, while 44% went to other links from the original search.\textsuperscript{168} 20% responded that they looked at the site they had been diverted to, and 14% closed down the web browser or shut down their computer.\textsuperscript{169}

In order to probe this issue more deeply, we included several questions in our survey regarding the Mercedes paid links in Figure 3 (from Infiniti, BMW, and Gorgeous Luxury Vehicles) about what survey respondents would do if they clicked through and didn’t find any information on Mercedes at the link.\textsuperscript{170} Table 11 presents the results, for each of the three paid links.

---

\textsuperscript{165} Survey 1, Question 18.
\textsuperscript{166} Survey 1, Question 20.
\textsuperscript{167} Id.
\textsuperscript{168} Survey 1, Question 24.
\textsuperscript{169} Id.
\textsuperscript{170} As noted previously, we did not prompt survey respondents as to why they had used Mercedes as a search term, leaving them free to answer subsequent questions based on their own goals and expectations. See supra note 162.
Table 11: Searcher behavior after click-through

<table>
<thead>
<tr>
<th></th>
<th>Infiniti\textsuperscript{171}</th>
<th>BMW\textsuperscript{172}</th>
<th>Gorgeous Luxury Vehicles\textsuperscript{173}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go back and find Mercedes link</td>
<td>62%</td>
<td>60%</td>
<td>64%</td>
</tr>
<tr>
<td>Stay at site</td>
<td>25%</td>
<td>28%</td>
<td>23%</td>
</tr>
<tr>
<td>Not sure/don’t know</td>
<td>13%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

As Table 11 indicates, if the click-through did not result in the desired information, a clear majority of survey respondents would simply go back and try another link. However, roughly 25% of survey respondents would stay at the site they had clicked through, even if it did not have information on Mercedes.

Finally, we asked survey respondents why they thought these three paid links had appeared when the search had been for Mercedes. Table 12 provides the results, with the correct response (the link had been paid for, and was an ad) in bold. As before, we included a fanciful response (“link selected by Google’s special marketing team”) as a control.

\textsuperscript{171} Survey 3, Question 25.
\textsuperscript{172} Survey 3, Question 30.
\textsuperscript{173} Survey 3, Question 35.
Table 12: Reasons the paid link appeared

<table>
<thead>
<tr>
<th>Paid Link</th>
<th>Infiniti\textsuperscript{174}</th>
<th>BMW\textsuperscript{175}</th>
<th>Gorgeous Luxury Vehicles\textsuperscript{176}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google’s special marketing team selected link for inclusion</td>
<td>15%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Mercedes has relationship with Infiniti and authorized link</td>
<td>14%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Not sure/Do not know</td>
<td>21%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

A bare/near majority selected the correct response – that Infiniti, BMW, and Gorgeous Luxury Vehicles had paid Google to have their links appear. Not sure/don’t know was the next most popular – followed by our fanciful response. Between 10% and 14% of survey respondents thought the links were authorized by Mercedes – meaning only a modest percentage of survey respondents appear to be confused as to source, sponsorship, or affiliation. Thus, our findings indicate that there is considerable confusion as to why the paid links appear – but this confusion was not primarily about source, sponsorship, and affiliation.

\textbf{vii) Fairness Norms}

Under American trademark law, there is generally no liability for an unauthorized use of a trademark unless that use causes consumer confusion as to source, sponsorship, or affiliation. However, we tested whether survey respondents’ norms regarding fairness caused them to reach conclusions different than those recognized by existing trademark law. Accordingly, we asked survey respondents whether they thought it was “fair and appropriate” for a link for a competitor (specifically, Infiniti, BMW and Gorgeous Luxury Vehicles) to show up as a paid ad when the search was for Mercedes.\textsuperscript{177} Table 13 provides the results.

\textsuperscript{174} Survey 3, Question 26.
\textsuperscript{175} Survey 3, Question 31.
\textsuperscript{176} Survey 3, Question 36.
\textsuperscript{177} We deliberately asked a compound question “fair and appropriate,” rather than “fair or appropriate,” or asking separately about “fair” and “appropriate.” We believed the more restrictive criteria (“fair and appropriate”) was the best way to capture whether survey respondents had a different view of the equities than would be captured by a focus on confusion.
Table 13: Fairness norms regarding piggybacking

<table>
<thead>
<tr>
<th>Was it fair and appropriate for the paid link to appear?</th>
<th>Infiniti(^{178})</th>
<th>BMW(^{179})</th>
<th>Gorgeous Luxury Vehicles(^{180})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>35%</td>
<td>35%</td>
<td>44%</td>
</tr>
<tr>
<td>No</td>
<td>39%</td>
<td>40%</td>
<td>32%</td>
</tr>
<tr>
<td>Don't know/not sure</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
</tr>
</tbody>
</table>

A surprisingly high number of survey respondents believe it was unfair and inappropriate for paid ads for Infiniti, BMW, and Gorgeous Luxury Vehicles to appear in response to a search for Mercedes. After excluding those who didn’t know/weren’t sure, 53% of survey respondents thought it was unfair and inappropriate for Infiniti and BMW to have their paid links appear, while 42% thought it was unfair and inappropriate for Gorgeous Luxury Vehicles to have its paid link appear. Thus, even in the absence of much evidence of confusion as to source, sponsorship, and affiliation, we find a considerable degree of hostility to the use of trademarks as keywords by competitors.

viii) Regression Analysis

As noted previously, we collected detailed demographic information on survey respondents. We conducted extensive regression analysis to determine whether any of these demographic factors predicted increased knowledge of search architecture, labels and the like. The results were generally unimpressive. We did find some evidence that younger and better educated survey respondents reported greater familiarity with search architecture, and demonstrated slightly greater knowledge about the existence and location of paid links. However, ignorance and obliviousness regarding the labels used cut across all demographic groups. Further detail regarding our regression analysis is available from the authors upon request.

V. Discussion

Our findings paint a rich and complicated picture of consumer goals and expectations, and the environment in which trademarks are bought and sold as keywords. We focus on eight different issues.

A. Limitations of our findings

\(^{178}\) Survey 3, Question 27.
\(^{179}\) Survey 3, Question 32.
\(^{180}\) Survey 3, Question 37.
Our findings raise as many questions as they answer – and our answers are necessarily tentative, given the specific questions we asked, and the fact that we cannot ask follow-up questions in on-line survey. Although survey respondents reflect a broad cross-section of the population, it does not follow that our results are representative of those who would be selected to serve on a jury deciding a dispute involving the use of trademarks as keywords.

Our questions on propensity to click-through were in the context of a single search for a luxury car (Mercedes) that is unaffordable for most of the population, and for the survey population. Different results might be obtained with a trademark for a product that is purchased more frequently and/or is more affordable. Similarly, “Gorgeous Luxury Vehicles” is an unusual legend for a website; survey respondents might be more willing to click through because they are interested in pictures of gorgeous luxury vehicles, rather than being interested in a Mercedes, Infiniti, or BMW.

An additional limitation is that the surveys asked those participating what they had done previously, or would do in response to a specified situation. Asking people to remember or predict their own behavior is quite different than observing their actual behavior. Finally, responses to particular questions may be affected by survey respondents’ interpretation of the goals of the survey. So, survey respondents might conclude that there is something problematic about the use of trademarks as keywords from the simple fact that we constructed a survey devoted to the issue. Additional work will be required to address these limitations, to the extent they are remediable.

B. Framing of the trademark/keyword debate

The entire debate over the use of trademarks as keywords has played out in the context of litigation where keywords are bought by the plaintiff’s direct competitors. Yet, our findings indicate that such cases represent an extremely small minority of keyword purchases. Indeed, as Table 2 indicates, in our sample of roughly 2,500 trademarks, covering almost 19,000 ads, most of the ads bear no resemblance to the ones that have given rise to litigation. Indeed, we find that trademark owners account for twice as many ads as those purchased by their direct competitors.

Further, consumer expectations are both contextual and heterogeneous. Far more is going on in this (virtual) space than the fixation on competitor purchases of trademarks would suggest. As such, there are likely to be substantial transaction costs and real economic losses associated with a blanket prohibition on the use of trademarks as keywords, or a “mother may I” system requiring advance consent of the trademark owner.
C. Search page architecture and labels

Courts that have handled trademark/keywords disputes have been clear that search page architecture and labels matter. More specifically, courts have assumed that consumers are knowledgeable about the organization of search page output, and that the labels that are used by search engines effectively signal to consumers the difference between paid and unpaid content.

But, our findings suggest that the details of search page architecture and labeling are a mystery to many consumers. Only 21% of survey respondents correctly identified both paid sections on Figure 2. And, more than half of survey respondents reported seeing a label that had not been used for more than a year; 33% reported seeing a label that had never been used; and 22% of survey respondents reported not noticing any labels whatsoever. Only 13% of survey respondents answered our questions about labeling practices correctly – and some of them probably guessed. These findings suggest that judges should not assume very much in the way of consumer knowledge of search page architecture and labeling – with obvious implications for the analysis of the likelihood of confusion, at least when someone other than the trademark owner purchases a trademark as a keyword.\footnote{See supra notes 10-11 & 90, and accompanying text.} More concretely, the likelihood of diversion and/or confusion is higher when consumers are unable to identify which content constitutes ads.

We think our findings also warrant further evaluation by those responsible for consumer protection issues on the Internet.\footnote{Id.} Survey respondents were not of one mind on the best way to improve the disclosure of paid content – but it is fairly obvious that the current approach is not working if the goal is to clearly and conspicuously designate paid content.

D. Trademark inclusion in ad text

Courts and search engines have assumed that whether the trademark is included in the ad text matters. For example, in GEICO, the district court dismissed all claims for ad text that did not include the Geico trademark, while allowing claims that included the trademark in ad text or headings to go forward.\footnote{See supra notes 86-88, and accompanying text.} Similarly, in most of the world, Google will not investigate further unless the trademark appears in the ad text – while in the United States, a trademark may be used in ad text only when it amounts to comparative advertising and nominative fair use.\footnote{See supra notes 44-46, and accompanying text. But, is the inclusion of}
the trademark in ad text that important?

Our findings on this issue are mixed. On the one hand, 51% of respondents to our first survey stated that when conducting a search they go to the first site where they see the name of the product they are looking for. Thus, for many people, the appearance of a trademark in the ad text could lure the searcher to that site. On the other hand, in our third survey, we presented survey respondents with three different ads, only one of which contained the trademark used in the search. We found that survey respondents were most likely to click through to an ad that did not contain the trademark, and were also more likely to expect to find information about the trademarked product at that site than at the site that used the trademark in ad text.

To be sure, context is important. The site that used the trademark in ad text was explicitly comparative (“Compare Mercedes to Infiniti at the official Infiniti USA website), while the site with higher click through and higher expectations had ad text that allowed for the possibility of finding information about Mercedes without actually using the trademark in ad text (i.e., “Gorgeous Luxury Vehicles”). But, this explanation is less compelling when the same percentage of survey respondents expected to find information on Mercedes at the paid link that was explicitly comparative (Infiniti) and one that didn’t include the trademark at all (BMW).

These findings suggest that consumer perceptions in this area are highly context-dependent, and the presence or absence of a trademark in ad text is far from dispositive. Further research will be necessary to determine the actual impact of including a trademark in the ad text – but reliance on inclusion/exclusion as the primary factor in determining whether there is actionable confusion substantially oversimplifies a complex dynamic.

Busy judges understandably look for shortcuts in deciding complex cases – and reliance on whether the trademark was included in the ad text as a primary basis for inferring whether there was a likelihood of confusion probably seemed like a plausible assumption at the time – but this decision rule probably cannot hold the weight that has been put on it.

E. Intent

Judges have been known to lower the boom on entities that were too aggressive in purchasing the trademarks of direct competitors for use as keywords. Similarly, in Rosetta Stone, the Fourth Circuit made a series of adverse inferences about Google’s intent, based on Googles’ dismissal of

http://support.google.com/adwordspolicy/bin/answer.py?hl=en&answer=144298.

185 See, e.g., Harry J. Binder, 772 F.Supp.2d at 1182 (C.D. Cal. 2011).
its internal studies indicating a high likelihood of confusion, and on Google’s economic self-interest to sell trademarks as keywords.

It is tempting to dismiss such cases as simply the trademark variation of the “pigs get fat, hogs get slaughtered” rule. Yet, the diversity of consumer goals and expectations when using trademarks as search terms suggests that more skepticism is appropriate before flatly condemning purchases by direct competitors, or using the fact of such purchases to determine bad intent among purchasers and search engines. Stated more directly, if many consumers use trademarks to signify categories of products (e.g., Mercedes = luxury cars, rather than simply cars made by Mercedes), it is hard to see why direct competitors should be prohibited from purchasing such trademarks as keywords, or the fact of such purchases should be deemed to establish bad intent, as long as the purchaser does not independently create actionable confusion.

F. Diversion

How common is diversion? In our first survey, we found that many consumers reported clicking on the first site for which they see the name of what they are searching for. And, when we directly asked survey respondents whether they had experienced diversion (without limiting our inquiry to paid links or to the use of trademarks as search terms), a majority responded they had. Finally, in our third survey, a majority of survey respondents stated that when they use trademarks as search term they are only interested in the brand-name product, but if they do click through to a paid link, they will linger on it, even if the link did not include information on what they had searched for originally. These findings suggest that diversion is fairly common.

Other findings suggest that targeting diversion under existing trademark law will be quite challenging. In order to be diverted one must have a specific destination in mind (i.e., a fixed goal) and not be open to alternatives (i.e., narrowly specified expectations). However, consumers actually have quite heterogeneous goals and expectations. Most ads are unlikely to give rise to confusion as to source. Click-through rates are often low, and consumers can readily click-back if they do not find what they want. Given all these factors, the actual probability of diversion turns out to be quite modest.\footnote{For example, if those with fixed goals and narrowly specified expectations make up 45% of the population, and those who click through make up 40% of the population, and those who linger make up 25% of the population, the combined probability is 45% x 40% x 25% = 4.5%.}

Consumer behavior is also important: Internet search has a random
walk aspect for many users, who go looking for X, stumble upon Y, Z and A, poke at A a bit, and then gets distracted by B. Indeed, the central metaphor -- that users are “surfing the Internet” -- indicates the casual and contingent nature of the search process. When search behavior is so unpredictable that we are unable to specify a baseline against which to measure diversion, the task of differentiating diversion from ordinary search behavior is going to be challenging.

Finally, when we asked survey respondents to give an example of diversion, the most frequent response was being taken to a site that sold or serviced what the consumer had searched for, but not to the company’s official site. We are skeptical that this outcome actually represents diversion – and if it does, we doubt the administrability of a system that treats it as such.

Thus, even though there are reasons for being concerned about diversion, the evidence is mixed, and there are real implementation challenges in operationalizing a prohibition. But, to focus on diversion is to miss what is at stake in these cases. Competitors sue one another for keyword purchases (and sue search engines for keyword sales) because they believe such conduct represents (mis)appropriation of the signaling value of their trademarks, so as to steer consumers and sales elsewhere. As this formulation indicates, the real complaint of trademark owners is unfair competition – and they are using an initial interest framework because trademark doctrine doesn’t really map onto the conduct they are complaining about. We return to this issue below.

G. Likelihood of Confusion

Apart from cases involving dilution, likelihood of confusion must be proven to establish trademark infringement. As noted previously, the focus is whether an appreciable number of relevant consumers are likely to mistakenly believe that the defendant’s goods come from the plaintiff or that the plaintiff has sponsored the defendant or the plaintiff and defendant

---

187 See Jean Arthur Polly, *Birth of a Metaphor--The Nascence of Surfing the Internet*, http://www.netmom.com/about-net-mom/25-meet-net-mom/26-surfing-the-internet.html (“In casting about for a title for the article, I weighed many possible metaphors. I wanted something that expressed the fun I had using the Internet, as well as hit on the skill, and yes, endurance necessary to use it well. I also needed something that would evoke a sense of randomness, chaos, and even danger. I wanted something fishy, net-like, nautical.”).

188 Owners of “famous” marks have the right to commence a civil action against anyone who commences use of a mark likely to cause dilution by tarnishment or dilution by blurring any time after the owner’s mark has become famous. 15 U.S.C. § 1125(c)(1). Famous marks are those that are widely recognized in the United States. 15 U.S.C. § 1125(c)(2)(A).
are affiliated. Thus, in the keyword context, a plaintiff would have to demonstrate a likelihood of confusion with regard to source, sponsorship, or affiliation.

One initial challenge: source, sponsorship, and affiliation does not map directly or easily onto the factual setting in which trademarks as used as keywords. Should we be testing to find out whether an appreciable number of users mistakenly believe that the trademark owner owns, or has some corporate affiliation, or licenses its trademark to the specific linked site in issue? Or, should we be testing whether an appreciable number of users mistakenly believe that they can purchase the trademarked good (or obtain information on the same) at the specific linked site in issue? Should these determinations be made based on the text of the paid link itself, or on the website after one clicks through, or on the naked fact that the offending paid link appeared after a trademark was used as a search term? How much confusion (in percentage terms) needs to be demonstrated for the case to go to a jury? Should it matter if defendant’s employees and experts are unable to identify which ads are confusing with regard to source, sponsorship, and affiliation?\textsuperscript{189} Finally, should it matter that most of the paid links that result from keyword searches for trademarks pose no likelihood of confusion? Unfortunately, the consumer confusion surveys that were done in all but one of the litigated cases provide little insight into these issues.\textsuperscript{190}

We document a considerable degree of confusion – but it is not really the type of confusion recognized by current trademark doctrine. Thus, in our 3\textsuperscript{rd} survey, we asked respondents why they thought Infiniti, BMW, and Gorgeous Luxury Vehicles had shown up in a search for Mercedes. Between 21\% and 23\% of those responding didn’t know or were unsure, and an additional 15\% to 20\% picked a fanciful response added as a control (e.g., “Google’s special marketing team selected the link for inclusion”). Only 10\% to 14\% of respondents thought that “Mercedes has a special relationship with Infiniti/BMW/Gorgeous Luxury Vehicles, and authorized this link to appear when someone searches for Mercedes.” In the aggregate, this means that almost half of those responding were confused as to why ads for Infiniti, BMW & Gorgeous Luxury Vehicles appeared in response to a search for Mercedes – although only the last (and smallest) group reported being confused as to source, sponsorship, or affiliation.

\textsuperscript{189} For example, in Rosetta Stone, several of Google’s in-house attorneys were unable to determine which Ads were placed by Rosetta Stone, competitors of Rosetta Stone, or counterfeiters. Rosetta Stone, 676 F.3d at 158.

\textsuperscript{190} In FPX, the plaintiff’s expert separately asked whether users thought that specific paid ads were sponsored by or affiliated with the trademark owner, or that the linked site was related to the trademark owner. FPX, LLC v. Google, Inc., 2011 WL 4783376 (E.D. Tex. 2011).
When we asked a similar question to determine why survey respondents would click through on an ad, a smaller percentage (9%) responded that they believed there was an affiliation or sponsorship agreement between Infiniti/BMW/Gorgeous Luxury Vehicles and Mercedes. Strikingly, in responding to the same question, 22% (Infiniti), 25% (BMW) and 37% (Gorgeous Luxury Vehicles) of survey respondents indicated they expected to find information on Mercedes at the paid link. Infiniti’s ad certainly implies that a user should expect to receive such information (“Compare Mercedes to Infiniti on the Official Infiniti USA Website), while BMW’s ad does not (and Gorgeous Luxury Vehicles is silent, but is at least open to the possibility) – but Infiniti had the lowest percentage of users expecting to find information on Mercedes of the three!

Finally, we asked users what they would expect to find when they clicked on a paid link after using a trademark as a search term. A near-majority (45%) expected that the paid links would only provide information about products bearing the trademark. A smaller number (39%) expected that the paid links would provide information about both products bearing that trademark and competing brand name products, while 10% expected information only about competing brand name products, and 6% expected to find information about products having nothing to do with the brand name used as a search term. Of course, these are aggregate findings – and Figure 1 makes it clear that survey respondents are actually over-estimating the frequency of keyword purchases by competitors (which should make claims of confusion harder to sustain).

Viewed broadly, these findings provide evidence of confusion -- but the confusion is not really about source, sponsorship, or affiliation. Instead, users appear to be confused (or, to use less loaded phrasing, uncertain) about what they will find when they click on paid links. For the paid links in Figure 3, a material number of survey respondents believe that when they click on a paid link for Infiniti, BMW, or Gorgeous Luxury Vehicles, they will find information about the product they were searching for (Mercedes), while comparable numbers have no such expectations. Regardless, if consumers are using trademarks as search terms because they are interested only in the trademarked product, the mismatch between consumer expectations and the reality of what they will find at paid links will predictably increase consumer search costs.

To the extent we do find evidence of confusion as to source, sponsorship, and affiliation it is at the low end of the range found in earlier cases (as documented in Table 1). Of course, likelihood of confusion is context-dependent. We only tested one search term (Mercedes) and three paid ads involving well-known automotive companies that compete with
Mercedes. All three paid ads in Figure 3 included the trademarks of those competitors, either in the ad heading, ad text or the URL. Other combinations of trademarks and Ads might well generate higher levels of confusion as to source, sponsorship, and affiliation. Indeed, given the prominence of the brands in question, it is somewhat disconcerting to find that fully 11% of survey respondents thought BMW was affiliated with Mercedes, and 14% of respondents thought Infiniti was affiliated with Mercedes.

To summarize, we find little evidence of confusion in the traditional sense, but there is plenty of uncertainty about what clicking on a paid link will reveal. We focus below on whether a “diversion-as-free-riding” rationale could supply an alternative basis for addressing this issue even if evidence of confusion in the traditional sense is lacking.

H. Whither Trademark Law: Confusion, Free-Riding, or Both?

Although nationally famous trademarks are also protected against dilution, American trademark law focuses on confusion of source, sponsorship or affiliation. Conversely, most European countries grant trademark owners protection against those who would “take unfair advantage of well-known marks.” To what extent does this broader approach track the moral intuitions of ordinary Americans about the boundaries of appropriate trademark use? Our most surprising finding is that wholly apart from whether there is actionable confusion as to source, sponsorship or affiliation, survey respondents are split on the fairness and appropriateness of direct competitors purchasing trademarks as keywords. These findings suggest that concerns about free-riding have considerable salience for ordinary consumers, even though they are largely ignored by the traditional focus on confusion.

The adoption of the initial interest confusion framework – even in circumstances where confusion is difficult to establish indicates that some courts are ready to take the leap, despite scathing criticism from some academics. And, there is precedent, under state and federal law for prohibitions against the unjustified free-riding on reputation. For example, the right of publicity, which has been recognized by many states, makes it illegal to misappropriate another person’s name (whether or not trademarked) without that person’s consent. Under federal law, the Anti-
Cybersquatting Protection Act ("ACPA") makes it illegal to register a domain name that includes a third party's trademark, if a bad faith intent to profit accompanies the registration or use of that domain name. Finally, ICANN's Uniform Dispute Resolution Policy uses a framework similar to the ACPA’s bad-faith intent based approach to determine domain name ownership. Although the law need not track moral intuitions – particularly when public opinion is evenly split -- it is worth considering whether the current boundaries of trademark law are optimal.

I. The Perils of Casual Empiricism

Our findings are suggestive, rather than determinative, and much remains to be learned about how consumers understand and use the online search environment. The search process is also dynamic – while we conducted this research, Bing and Google changed the labels they used to describe paid links; and Google reconfigured its paid link space and began using a label it had discontinued more than a year earlier.

That said, our findings call into question many of the assumptions made by judges in resolving disputes arising out of the use of trademarks as keywords. As noted previously, judges made assumptions about (i) consumer goals and expectations when trademarks are used as search terms; (ii) advertiser (and/or search engine) intent when purchasing or selling a trademarked keyword; (iii) consumer understanding of search page architecture and labeling of results; (iv) the significance of the trademark appearing in the ad text; (v) the likelihood of diversion; and (vi) the likelihood of confusion. Each of the assumptions was doubtless plausible at the time, but such casual empiricism should give way to actual evidence on the subject when it is available.

VI. Conclusion

All empirical work has limitations and deficiencies. This study is no exception. But, our study provides a far better foundation for discussion and analysis of the legal and policy issues associated with the use of trademarks as keywords than the casual empiricism that courts have engaged in to date in order to resolve such disputes.

common law in at least 18 states). Interestingly, these right of publicity statutes are available to any trademark owner whose name is their trademark; and in such instances, proof of consumer confusion would not be required.


195 http://archive.icann.org/en/udrp/udrp-policy-24oct99.htm. Among the elements that must be proven in order to win a transfer of a domain name under the UDRP Policy is that the domain name has been registered and is being used in bad faith.
### Appendix: Demographics of Survey Respondents

<table>
<thead>
<tr>
<th>Attribute</th>
<th>1st Survey</th>
<th>2nd Survey</th>
<th>3rd Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Survey</td>
<td>May, 2010</td>
<td>Oct. – Nov, 2010</td>
<td>Feb. 2010</td>
</tr>
<tr>
<td>Participants</td>
<td>1,002</td>
<td>1,003</td>
<td>1,003</td>
</tr>
<tr>
<td>Gender</td>
<td>% Male</td>
<td>49%</td>
<td>50%</td>
</tr>
<tr>
<td>Education</td>
<td>% High school</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td>% Some college</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td></td>
<td>% BA or graduate degree</td>
<td>41%</td>
<td>42%</td>
</tr>
<tr>
<td>Age</td>
<td>18-24</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>25-44</td>
<td>39%</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>45-64</td>
<td>34%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>&gt;65</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Family Status</td>
<td>Single</td>
<td>48%</td>
<td>47%</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>45%</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td>Living Together</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>% with children at home</td>
<td>31%</td>
<td>33%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>White</td>
<td>73%</td>
<td>72%</td>
</tr>
<tr>
<td></td>
<td>African American</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>Mixed Race/Other</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Household Income</td>
<td>&lt;$50k</td>
<td>41%</td>
<td>42%</td>
</tr>
<tr>
<td></td>
<td>$50k-$100k</td>
<td>39%</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>&gt;$100k</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>