Harvard Journal of Law & Technology  
Volume 26, Number 2 Spring 2013  

TRADEMARKS AS SEARCH ENGINE KEYWORDS:  
MUCH ADO ABOUT SOMETHING?  

David J. Franklyn & David A. Hyman*  

TABLE OF CONTENTS  

I. INTRODUCTION ................................................................. 482  

II. BACKGROUND ON THE ISSUES ......................................... 485  
   A. Overview ........................................................................ 485  
   B. Search Engine Output Architecture and Labeling ............... 488  
   C. Keyword Auctions .......................................................... 490  
   D. Search Engine Policies Regarding Trademark Usage .......... 492  
      1. United States ................................................................ 493  
      2. European Union .......................................................... 494  
      3. Other Regions .............................................................. 495  

III. SEARCH CONTROVERSIES OVER TRADEMARKED  
    KEYWORDS ..................................................................... 496  
   A. Case Law ...................................................................... 496  
      1. Overview .................................................................... 496  
      2. Judicial Assumptions ..................................................... 499  
         A. Consumer Goals and Expectations .............................. 499  
         B. Intent ..................................................................... 501  
      C. Consumer Knowledge of and Attentiveness to  
         Search Page Architecture and Labels ............................. 502  
   D. Appearance of Plaintiff’s Mark in Defendant’s Ad  
      Text ............................................................................ 503  
      E. Likelihood of Diversion ............................................... 503  
      F. Likelihood of Confusion ............................................... 504  
   B. Academic Scholarship ..................................................... 504  
   C. Private Litigation — Consumer Surveys ............................ 506  

* 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 H. Ross and Helen Workman Chair in Law, 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 the helpful comments we received from Professors Eric Goldman, Robert Lawless, Thomas McCarthy, Peter Molk, Mark Rosso, and Rebecca Tushnet, and comments when the paper was presented at the University of Alabama and the University of Illinois. Finally, Craig Hawkins, then a McCarthy Institute Senior Research Fellow and student at the University of San Francisco School of Law, provided invaluable assistance.
I. INTRODUCTION

Google, Bing, and Yahoo are the primary gateways to the Internet for most people in the United States. Google is worth more than $260 billion.

billion, and Yahoo is worth more than $25 billion. These lofty market capitalizations are almost entirely attributable to the income generated by the 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 as well as 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 its ad is clicked on, irrespective of whether a sale is ultimately made.

When search engines began offering ads using trademarks as keywords, disgruntled trademark owners filed more than one hundred lawsuits in the United States and Europe. Despite the volume of litigation, there has been little independent empirical work on consumer goals and expectations when using 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 2500 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.\footnote{6} We find little evidence of traditional actionable consumer confusion regarding the source of goods, but only a small minority of consumers correctly and consistently distinguished paid ads from unpaid search results,\footnote{7} or noticed the labels that search engines use to differentiate paid ads from unpaid search results.\footnote{8}

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.\footnote{9} Perhaps our most intriguing finding is the sizeable mismatch between consumer sentiments and the protections provided by U.S. trademark law. After we excluded those who were unsure or had no opinion, survey respondents were evenly split on whether it was fair and appropriate for competitors to purchase one another’s trademarks for use as keywords, even without any confusion as to source, sponsorship, or affiliation.\footnote{10} These findings may explain why European trademark law recognizes a cause of action for taking unfair advantage of a trademark.\footnote{11} Although the law need not precisely match common moral intuitions, our findings suggest that it may be desirable to create a similar cause of action under U.S. trademark law.

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.

\footnote{6} See infra Table 6.
\footnote{7} See infra Table 4, Panel B.
\footnote{8} See infra Table 7.
\footnote{9} See infra Table 2.
\footnote{10} For two of the three ads, approximately 53% of those who had an opinion thought it was not fair and appropriate. For the third ad, 42% of those who had an opinion thought it was not fair and appropriate. For each ad, 25% of those responding did not have an opinion. See infra Table 13.
\footnote{11} A European Union directive protects trademark owners from taking unfair advantage of the distinctive character of a registered mark. See generally Council Directive 89/104, art. 5, 1988 O.J. (L 40) (EU). This prohibition allows a trademark owner to stop others from using marks that are identical or similar to the registered mark when doing so “takes unfair advantage of, or is detrimental to, the distinctive character or the repute of the trade mark.” Id. at 6–7. An advertiser takes unfair advantage when they select a keyword that is similar or identical to an established trademark, “in order to benefit from the power of attraction, the reputation and the prestige of that mark and to exploit, without paying any financial compensation, the marketing effort expended by the proprietor of the mark in order to create and maintain the mark’s image.” L’Oreal SA v. Bellure NV, Case C-487/07, para 50, 2009 ECJ EUR-Lex LEXIS 532 (June 18, 2009).

However, if an advertiser that selects a reputable trademark as a keyword is only doing so to present an alternative to the trademark owner’s goods or services, that use is fair competition as long as the advertiser does not blur, tarnish, or adversely affect the primary trademark. Interflora Inc., Interflora British Unit v. Marks & Spencer plc, Flowers Direct Online Ltd., Case C-323/09, 2011 ECJ EUR-Lex LEXIS 2120 (Sept. 22, 2011).
Much remains to be done to ensure that trademark doctrine is empirically well-grounded, and “fits” the online context.

Part II provides some context for this dispute, including background on search engines and keyword searches. Part III outlines the extensive litigation, both foreign and domestic, over the use of trademarks as keywords, and identifies six assumptions that judges have made in resolving these cases. Part IV presents our empirical results. Part V discusses our findings, and Part VI concludes.

II. BACKGROUND ON THE ISSUES

A. Overview

In 2004, Google started selling keywords that were also trademarks. 12 Conflict quickly arose. The problem is straightforward. If I run a search for American Airlines, and Delta Airlines appears in a paid ad on the search output page because Delta Airlines purchased “American Airlines” as a keyword, does American Airlines have any recourse? If so, against whom? Google? Delta Airlines? Both? Neither? What if Travelocity, which sells flights on both American Airlines and Delta Airlines, appears in a paid ad? Should the outcome turn on whether the paid ad uses the words “American Airlines” in the ad text?

Trademark law is primarily 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 was ever confused about which carrier he will be flying on? Even if the consumer is not confused about the airline he ultimately selects, should diversion of attention, however temporary, create a cause of action?

Should the mode or level of trade make any difference in the analysis? For example, 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, etc.). Hyatt makes more money if searchers deal directly with them, instead of going through a travel website. 13 Does Hyatt have a valid complaint if travel


13. See Peter M. Ripin, Keyword Confusion, HOSPITALITY.NET (May 1, 2007), http://www.hospitalitynet.org/news/4031253.html (noting that hotels “have to pay a commission of approximately 18–30% to the online travel agency,” and “[s]ince 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”). See also Jane L. Levere, American Airlines in Fee Battle with Web Agencies, N.Y. TIMES, Jan. 5, 2011, at B1 (noting that “to sell an average, round-trip domestic ticket, American must pay $10 to $12, for global distribution and agency incentive fees, on online agency book-
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.

What if someone searches for Rolex, and three ads come up: one for Seiko, one for a seller of counterfeit Rolexes, and one for a store

ings, while it costs the carrier only $2 to $3 — for administrative and marketing expenses — to sell the same ticket on its own Web site”).

Early on, companies used pop-up ads to try to divert traffic from competitors. Peter M. Ripin, Hotel Internet Marketers Beware: Pop-up and Keyword Advertising Threaten Your On-line Brand, WIREDHOTELIER.COM (Oct. 26, 2004), http://www.wiredhotelier.com/news/4021026.html. One commenter at the time noted a prominent example:

[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.

Id.

14. See Scott Cleland, Google 21st Century Robber Baron, FORBES (Sept. 19, 2011), http://www.forbes.com/sites/scottcleland/2011/09/19/google-21st-century-robber-baron ("Google shortchanges trademark owners by forcing them to buy their own trademark property as keyword advertising in order to protect their businesses from Google selling their trademarks to competitors. In the physical world this scheme is known as a protection racket."). Trademark owners have made similar complaints about the Internet Corporation for Assigned Names and Numbers’ addition of new top-level domains. Dennis S. Prahl & Eric Null, The New Generic Top-Level Domain Program: A New Era of Risk for Trademark Owners and the Internet, 101 TRADEMARK REP. 1757, 1759 (2011).

15. Cf. Johanna Jainchill, Carnival Brands’ Keyword Rule Gives Rivals a Boost, TRAVEL WKLY. (Jan. 31, 2010), http://www.travelweekly.com/Cruise-Travel/Carnival-brands’-keyword-rule-gives-rivals-a-boost (describing a similar situation after cruise lines restricted travel agencies from using their trademarks). An observer noted the greater prominence of rival sites once the travel agencies ceased advertising:

Carnival Corp. brands’ decision to prohibit travel agencies from bidding on their trademarks as keywords in online search engines led to what would seem 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 . . . .”

Id. (quoting an anonymous cruise seller and former Carnival keyword bidder).

Marriott and Intercontinental Hotels have also prohibited online travel agencies from bidding on their trademarks. Five Cruise Lines Ban Agencies from Bidding on Keywords, AIR TRANSPORT WORLD (Jan. 6, 2010), http://atwonline.com/it-distribution/news/five-cruise-lines-ban-agencies-bidding-keywords-0309-0.
suing genuine Rolex and Seiko watches. 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 pur-
chased another company’s trademark as a keyword establish the
necessary elements of trademark infringement? Are there any defens-
es available to those who purchased a trademark to use as a keyword,
and to the search engine that sold it? Does it matter if the resulting ad
is simply comparative? For example, “our watches have the same de-
sign features as a Rolex, but cost less.” Does it matter that the store
sells both Rolex and Seiko watches? Does it matter if the individual
who conducted the search was using Rolex as a generic proxy 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 en-
tities that have purchased trademarks as keywords. Courts have
varied in their approaches to these cases, in many instances showing
considerable skepticism about the merits, while in other instances
expanding the law to include conduct outside the traditional ambit of
trademark doctrine. Judges in both camps have routinely engaged in
armchair empiricism, making casual assumptions about such matters
as 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 for use as search engine keywords.

The sale of search engine 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 requires a “clear and conspicuous” discl-

16. See supra note 5.
where consumers know they are not going to plaintiff’s site because the defendant improp-
erly benefits from the owner’s goodwill); Partners for Health and Home, L.P. v. Yang, 98
U.S.P.Q.2d 1462, 1467 (C.D. Cal. 2010) (stating that actual confusion is not needed to find
initial interest confusion since initial interest confusion is based on defendant’s misapprop-
riation of plaintiff’s goodwill); Partners for Health and Home, L.P. v. Yang, No. CV 09-
use of a competitor’s trademark as a keyword constitutes infringement absent circumstances
negating confusion); Austl. Gold, Inc. v. Hatfield, 436 F.3d 1228, 1238 (10th Cir. 2006)
(“Initial interest confusion results when a consumer seeks a particular trademark holder’s
product and instead is lured to the product of a competitor by the competitor’s use of the
same or a similar mark.”).
19. For discussion of six specific types of judicial armchair empiricism, see infra Part
III.A.2.
Are search engines complying with these requirements? How 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? Do these changes affect click-through behavior? The Federal Trade Commission has expressed concern about the labeling and page architecture of search engine results, but has not brought any cases to date.21

We focus on Google in this Article 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.

B. Search Engine Output Architecture and Labeling

We are confident that every reader of this Article has a general understanding of 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 in 2011.22

---


22. This screenshot was captured on December 16, 2011 and used as part of the third survey, as described below. We have modified the image so that it is easier to see the different regions of the search output.

After research for this Article was completed, Google revised the architecture of its search output page and created a new “Google Shopping” section. Sameer Samat, Building a Better Shopping Experience, GOOGLE COM. BLOG (May 31, 2012), http://googlecommerce.blogspot.com/2012/05/building-better-shopping-experience.html. The new section, which appears under either Section 1 or Section 2 in Figure 1, is labeled “Sponsored.” Id. Thus, Google is simultaneously using the terms “Ads” and “Sponsored” to refer to paid content. The impact of these changes on consumer perceptions is the subject of an ongoing empirical study.
As Figure 1 reflects, Google’s search output from 2011 has several discrete sections. At the top of the page is a small search box, with links to various types of search output (e.g., web, images, videos, maps, news, shopping, mail, and “more”). To the left, a 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. Below and to the right are three sections containing search information. The shaded top section, Sec-
tion A, contains various search results and associated links, which are labeled “Ads.” The right-hand column, Section B, contains more search results and associated links, and is labeled “Ads” as well, though the background is not shaded. Finally, underneath Section A and to the left of Section B is Section C, with more search results and associated links.

The links in Section A and Section B are all paid ads. Each link that appears in these areas of the search results page is there because the relevant site won the right to appear by bidding in an auction of keywords run by Google. Conversely, the links in Section C 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 labels paid links with the term “Sponsored Results” but uses the same search page architecture as Bing.

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 have used a wide array of labels to identify paid links at one time or another, including “Featured Listings,” “Premier Listings,” “Recommended Sites,” “Search Partners,” and “Spotlight.”

C. Keyword Auctions

Google began AdWords, a program of selling ads based on specific keywords, in 2000. AdWords took its current payment-per-
click form in 2002.32 In 2004, Google eliminated many restrictions on the use of trademarks as keywords.33 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.34 Whether a particular ad appears 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.35 For example, bidders can target their ads by location, time, search device employed, and language.36 When consumers click on an ad, the entity that purchased the keyword in question pays Google the amount it bid, irrespective of whether any sale results.37

AdWords and the associated 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 totaled $28.2 billion, 96% of Google’s total revenues.38 By 2011, revenue from advertising had

33. Greg Lastowka, Google’s Law, 73 BROOK. L. REV. 1327, 1359–60 (2008). Prior to 2004, Google allowed trademarks to be used as keywords, but would remove such ads if trademark owners complained. After 2004, Google no longer responded to complaints regarding the use of trademarks as keywords, meaning that their use was unrestricted. Id. at 1360.
34. JIM JANSSEN, UNDERSTANDING SPONSORED SEARCH: CORE ELEMENTS OF KEYWORD ADVERTISING 177 (2011); Peter O’Connor, Trademark Infringement in Pay-Per-Click Advertising, in CONTEMPORARY RESEARCH IN E-MARKETING 148, 149 (Subir Bandyopadhyay ed., 2009).
37. See Cost-Per-Click Bidding, supra note 4. Google also has a program that allows bids based on conversion to actual sales, known as cost-per-acquisition bidding. Cost-Per-Acquisition (CPA), GOOGLE, http://support.google.com/adwords/answer/2472713 (last visited May 9, 2013).
climbed to more than $36 billion. 39 Bing and Yahoo use a similar PPC model. 40

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 honored requests from trademark owners to disable the use of trademarks in keywords and ad text for part of that period. 41 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 in increased annual revenues. 42

D. Search Engine Policies Regarding Trademark Usage

Google, Bing, and Yahoo have very detailed policies regarding trademark usage and infringement. Bing and Yahoo’s policies are identical because of a search alliance agreement between Microsoft and Yahoo. 43 As of 2009, Google allowed trademarks to be purchased as keywords in more than 190 countries. 44 Because the policies vary by region, we have broken out our discussion accordingly.

To the extent these search engines police the use of trademarks — which varies based on the jurisdiction and on whether the trademark is being used as a keyword or in ad text — they do so using an approach analogous to the “notice and takedown” system through which online copyright infringement disputes are handled pursuant to the Digital Millennium Copyright Act. 45 Thus, search engines do not actively

police the use of trademarks as keywords, but instead respond to complaints by trademark owners, and then only when those complaints fall within the boundaries that the search engines have set. 46

1. United States

In the United States, all three major search engines allow trademarks to be purchased as keywords, and none of the three has a formal policy for investigating or disallowing future purchases in response to complaints by the trademark owner. 47 Google has had this policy since 2004, when it first allowed trademarks to be sold as keywords, 48 while Bing and Yahoo did not formally announce this policy until 2011. 49

Prior to 2009, Google did not allow trademarks to be used in ad text, and removed such ads in response to complaints by the trademark owner. 50 Since then, Google has allowed 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. 51 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. 52 Alternatively, a company may request that Google prohibit all use of its trademark in ad text by all advertisers. 53

Like Google, Bing and Yahoo allow trademarks to appear in ad text so long as doing so constitutes fair use, although Bing and Ya-

46. E.g., AdWords Trademark Policy, GOOGLE, http://support.google.com/adwordspolicy/bin/answer.py?hl=en&answer=6118 (last visited May 9, 2013) (“If a trademark owner files a complaint with Google about the use of their trademark in AdWords ads, Google will investigate and may enforce certain restrictions on the use of that trademark in AdWords ads and as keywords.”).
48. See supra note 33.
52. Id.
53. AdWords Trademark Policy, supra note 46.
hoo’s definition of fair use is more expansive than that of Google’s.\textsuperscript{54} Bing and Yahoo’s enforcement policy is complaint-driven.\textsuperscript{55}

2. European Union

Google began selling trademarks as keywords in the United Kingdom and Ireland in 2008.\textsuperscript{56} It expanded this policy to other European countries in 2009,\textsuperscript{57} and again in 2010.\textsuperscript{58} 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.\textsuperscript{59} If Google concludes that the ad and keyword combination is confusing, it will remove the specific ad causing the confusion.\textsuperscript{60}

In Europe, Bing and Yahoo have a policy on the use of trademarks as keywords only in the United Kingdom, France, Italy, and Ireland.\textsuperscript{61} In these countries, Bing and Yahoo prohibit the use of a trademark as a keyword if the advertiser is a competitor of the trademark owner.\textsuperscript{62} If the advertiser is a noncompeting third party, Bing and Yahoo explicitly permit 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.\textsuperscript{63} Bing and Yahoo also permit the use of a keyword that corresponds to a trademark if the advertiser is selling authentic trademarked goods.\textsuperscript{64}

For ad text, Google’s policy in Canada, the United Kingdom, and Ireland has been identical to its policy in the United States since

\textsuperscript{54} 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. See Intellectual Property Guidelines, BING ADS, http://advertising.microsoft.com/small-business/support-center/search-advertising/intellectual-property-guidelines (last visited May 9, 2013).

\textsuperscript{55} See id.

\textsuperscript{56} Schwartz, AdWords Opens Up Trademarked Bidding, supra note 44; Kevin May, Travel Brands Unite with Other Retailers in Legal Threat Against Google, TRAVOLUTION (May 23, 2008), http://www.travolution.co.uk/articles/2008/05/23/1436/travel-brands-unite-with-other-retailers-in-legal-threat-against.html.

\textsuperscript{57} See generally AdWords Trademark Policy, supra note 46.


\textsuperscript{59} AdWords Trademark Policy, supra note 46.

\textsuperscript{60} See id.

\textsuperscript{61} Intellectual Property Guidelines, supra note 54.

\textsuperscript{62} See id.

\textsuperscript{63} See id.

\textsuperscript{64} Id.
2010. In the rest of the European Union, Google restricts the use of trademarks in ad text. If a trademark owner files a complaint, Google will investigate, and may disapprove future use of that ad.

As with trademarks as keywords, Bing and Yahoo only have formal policies for ad text in the United Kingdom, France, Italy, and Ireland. The policy is similar to that in the United States, but more restrictive, since the trademark may only be used in a descriptive sense or to advertise informational sites. Thus, the website’s principal offering must not be goods or services competitive with those of the trademark owner.

3. Other Regions

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

Google generally restricts the use of trademarks in ad text in all other regions. 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 disapprove future use of that ad.

In Singapore, Bing and Yahoo’s keyword policy and policy toward the use of trademarks in ad text mirrors its policies for the United Kingdom, France, Italy, and Ireland. Bing and Yahoo have no other country-specific policies.

---

66. This policy also applies to countries belonging to the European Free Trade Area. 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, such as when the term is not being used as a trademark. See AdWords Trademark Policy, supra note 46.
67. See id.
68. See Intellectual Property Guidelines, supra note 54.
69. Id.
70. AdWords Trademark Policy, supra note 46.
71. Id.
72. Id.
73. See AdWords Trademark Policy, supra note 46.
74. See id.
75. Intellectual Property Guidelines, supra note 54.
III. SEARCH CONTROVERSIES OVER TRADMARKED KEYSWORDS

As detailed below, the sale and purchase of trademarks as keywords has given rise to multiple lawsuits, both domestically and internationally. In the United States, 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 III.A reviews the case law, and Part III.B reviews the academic scholarship. Part III.C analyzes the surveys of consumer confusion that private litigants have provided in connection with the litigation described in Part III.A.

A. Case Law

1. Overview

In the United States, no federal statute explicitly prohibits the use of trademarks as search engine keywords. Trademark owners have accordingly turned to existing doctrines in trademark law for a potential remedy. There are two main doctrinal frameworks through which these cases may be viewed: (1) the likelihood of confusion (i.e., traditional trademark infringement analysis); or (2) the dilution cause of action. However, since at least 2006, dilution law in the United States has clearly been limited to cases of blurring or tarnishment, neither of which readily applies to most keyword cases.

The paradigmatic example of blurring is when a company uses a close facsimile to a famous mark, like Google, for a wholly unrelated

76. See infra Part II.A.
77. State statutory and common law also does not generally give rise to a cause of action for misappropriation in these circumstances. Interestingly, several states have right of publicity statutes that generally make it illegal to misappropriate another person’s name or likeness — irrespective of whether such acts cause consumer confusion as to source, sponsorship, or affiliation. In this respect, right of publicity law is much closer to a general law of misappropriation than is trademark law. We are only aware of one case where someone has brought a keyword case against a competitor or a search engine based on a right of publicity claim. See Habush v. Cannon, 828 N.W.2d 876, 882–84 (Wis. Ct. App. 2013)(finding that Cannon, a personal injury lawyer, was not in violation of Wisconsin’s right of privacy law when he purchased the name of fellow personal injury lawyer Habush as a keyword).

One of us (Franklyn) was retained as an expert by the defense in this case and provided a declaration relating to the trademark law implications of Cannon’s conduct. The McCarthy Institute is currently conducting an empirical study of the frequency with which celebrity names are purchased as keywords.

type of goods or services, like Googli Pancakes. In such a case, Google may be able to prove that consumers “think of” Google when hearing or seeing the Googli Pancakes brand name. As a result, the Google mark is commercially diminished as a unique and strong brand identifier, because it is now associated with multiple sources in the minds of consumers.\(^79\) If the pancakes taste bad, or are advertised with pornographic or violent images, Google may also have a tarnishment claim, again assuming consumers actually think of Google when they hear or see ads for Googli Pancakes. Dilution by blurring or tarnishment however, is specifically limited to nationally famous trademarks,\(^80\) and it was designed for cases in which a third party uses a famous mark, or close facsimile thereof, on goods or services that are different than the goods or services upon which the famous mark owner is using them.\(^81\) But, most of the litigation involving trademarks as search engine keywords features competitors who are selling similar goods to those bearing the trademark, which is quite different than the typical dilution by blurring or by tarnishment cause of action.

Not surprisingly, trademark owners have accordingly framed the dispute around traditional likelihood of consumer confusion trademark infringement, which turns on whether there is a likelihood of confusion as to “affiliation, sponsorship, or association.”\(^82\) To establish liability, the plaintiff must show that the defendant’s use of a trademark leads to confusion as to source (i.e., some consumers think

---

79. See Tiffany Inc. v. eBay, Inc., 576 F. Supp. 2d 463, 524 (S.D.N.Y. 2008), aff’d in part, remanded in part, 600 F.3d 93 (2d Cir. 2010) (“Trademark dilution claims usually arise where a defendant has used the plaintiff’s trademark to directly identify a different product of the defendant” and such use “may ‘dilute’ or weaken the ability of [plaintiff’s] famous mark to ‘clearly identify and distinguish only one source’”) (citing 4 J. Thomas McCarthy, McCarthy on Trademarks and Unfair Competition § 24:67 (4th ed. 2012)).


81. See, e.g., Holiday Inns, Inc. v. Holiday Out in America, 481 F.2d 445, 450 (5th Cir. 1973) (“Dilution is a concept most applicable where a subsequent user uses the trademark of a prior user for a product so dissimilar from the product of the prior user that there is no likelihood of confusion of the products or sources . . . .”). Importantly, the Lanham Act makes clear that dilution is actionable “regardless of the presence or absence of actual or likely confusion, of competition, or of actual economic injury.” See 15 U.S.C. § 1125(c)(1) (2006); see also Tiffany, 576 F.Supp.2d at 524.

82. 4 J. Thomas McCarthy, McCarthy on Trademarks and Unfair Competition § 23:1 (4th ed. 2012) [hereinafter 4 McCarthy].Trademark owners have also sought to raise awareness among consumers about the practice of third parties using brand names they are not affiliated with or authorized to use. See Kate Kaye, Alliance of Search Advertisers Has Familiar Ring, ClickZ: (Apr. 22, 2009), http://www.clickz.com/clickz/news/1703461/alliance-search-advertisers-has-familiar-ring (“The Alliance Against Bait and Click (AABC) includes companies and individuals whose names have become synonymous with the fight against the use of trademarked terms to target online ads . . . .”).
the defendant’s goods actually are those of the plaintiff), sponsorship (i.e., that plaintiff has endorsed the defendant’s goods), or affiliation (i.e., that the plaintiff and defendant are legally related entities). Once likelihood of confusion is established, harm is usually presumed, and plaintiffs may obtain injunctive relief and provable damages, including the profits derived by the defendant from infringing sales.

Courts have developed complex multifactor 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, and (8) likelihood of expansion of product lines. 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. Regardless, courts are more likely to find confusion 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. Some courts have focused on “diversion,” and imposed liability on that basis alone. Other courts have said that mere diversion does not constitute trademark infringement; it must be shown that a searcher who 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.

If mere diversion is insufficient, 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

---

85. E.g., AMF, Inc. v. Sleekcraft Boats, 599 F.2d 341, 348–49 (9th Cir. 1979).
87. See generally AMF, Inc., 599 F.2d 341.
allowed to proceed.\textsuperscript{91} Litigants may, but need not, offer survey evidence to prove or disprove the likelihood of confusion.\textsuperscript{92} 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.\textsuperscript{93}

2. Judicial Assumptions

In deciding keyword cases, judges have routinely made assumptions, based on casual or “armchair” empiricism, that have substantially affected the outcomes of the cases. We have identified six specific areas in which judges have made such assumptions: (1) consumer goals and expectations when trademarks are used as search terms, (2) advertiser or search engine intent when purchasing or selling a trademarked keyword, (3) consumer knowledge of and attentiveness to search page architecture and labeling of results, (4) the significance of the trademark appearing in the ad text, (5) the likelihood of diversion, and (6) the likelihood of confusion. We analyze each assumption in turn.

A. Consumer Goals and Expectations

Understanding consumer goals and expectations is critical in determining 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 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 proxy term to describe a category of goods. She 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.\textsuperscript{94}

\textsuperscript{91} See 4 McCarthy, supra note 82, § 23:2.


\textsuperscript{93} See Sara Lee Corp. v. Kayser-Roth Corp., 81 F.3d 455, 467 (4th Cir. 1996) (concluding that below 10% confusion is usually insufficient, but that even half of a claimed 30–40% figure would be significant); see also 4 McCarthy, supra note 82, § 23:2.

It is certainly plausible, if not extremely likely, that Consumer #1 can be diverted by paid links for products bearing trademarks Y and Z. Conversely, 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 consumers expect, based on past online and offline experiences, that a search for products bearing trademark X will also result in information for products bearing trademarks Y and Z. The case for diversion of Consumer #1 is weaker if she now expects, based on past experiences, to receive information on trademarks Y and Z, irrespective of the fact that she is only searching for products bearing trademark X. Stated more directly, for a meaningful claim of diversion to arise, the consumer must have both a fixed destination in mind, such as the specific branded product that she used as a search term, and must not have expected to encounter other branded products along the way. The relative proportion of consumers who have broad versus narrow preferences and/or expectations complicates matters further.

Consumer goals and expectations map less neatly onto the risk of confusion than they do onto the risk of diversion. However, it is plausible to assume that the likelihood of confusion is somewhat greater among those who are only interested in and expect to receive information about the branded good they searched for, while the likelihood of confusion is somewhat lessened among those who have more expansive goals or expectations. Thus, all else being equal, the distribution of goals and expectations within a population should have a material impact on the frequency with which courts find confusion.

Strikingly, rather than wrestle with these issues or demand that 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, Inc. v. Advanced Systems Concepts, Inc., the Ninth Circuit stated that consumers conducting a search with the trademark in question

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 . . . But 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.

*Id.* 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.” *Id.* at 10–11.
(Activebatch) “are presumably looking for [the] specific product, and not a category of goods.”95 The same assumption was made by the district courts in Rosetta Stone Ltd. v. Google, Inc.,96 Storus Corp. v. Aroa Marketing,97 Harry J. Binder v. Disability Group, Inc.,98 and Australian Gold, Inc. v. Hatfield.99 In Hearts on Fire Co. v. Blue Nile, Inc., 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 . . . .” 100 This framing, and the underlying assumption on which it is based, makes it considerably easier for courts to conclude that actionable diversion has taken place, or that there is a likelihood of confusion.

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. For example, consumers may use trademarks as a generic proxy term for some categories of goods and services (e.g., Hertz for rental cars), but use other trademarks to search for specific products (e.g., Macbook for laptops made by Apple). Regardless, judges should not simply assume that consumers have homogenous goals and expectations, and are all equally susceptible to diversion or confusion.

B. 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 online world, with no consideration given to whether a different approach might be appropriate for keyword searches. For instance, in

95. 638 F.3d 1137, 1154 (9th Cir. 2011).
96. See 676 F.3d 144, 158–59 (4th Cir. 2012).
97. See 87 U.S.P.Q.2d 1032, 1037 (N.D. Cal 2008).
99. See 436 F.3d 1228, 1238 (10th Cir. 2006).
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. 102 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, as well as Google’s knowledge, based on its internal research, that doing so significantly heightened the risk of consumer confusion. 103 But if consumers routinely use trademarks as generic proxy terms, to refer to broad classes of goods, it does not make sense to automatically infer bad intent when advertisers use a trademark as a keyword.

C. Consumer Knowledge of and Attentiveness to Search Page Architecture and Labels

Courts routinely assume that consumers are knowledgeable about and rely upon search page architecture and the labels on paid links. Thus, in Playboy v. Netscape, the Ninth Circuit found a potential for initial interest confusion when consumers saw banner advertisements that were “confusingly labeled or not labeled at all.” 104 The Ninth Circuit expressly observed that clear labeling “might eliminate the likelihood of initial interest confusion that exists in this case.” 105 In Network Automation, the Ninth Circuit emphasized the importance of search page architecture and labeling:

[E]ven if [the Defendant] has not clearly identified itself in the text of its ads, Google and Bing have partitioned their search results pages so that the advertisements appear in separately labeled sections for “sponsored” links. The labeling and appearance of the advertisements as they appear on the results page . . . must be considered as a whole.

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. 107 Similarly, in Rosetta Stone, the district court observed that confusion was unlikely because consumers

---

103. See 676 F.3d at 155–56. Unfortunately, although the opinion references the prior research, the actual studies remain under seal. The authors are in the process of moving to unseal this portion of the record.
104. 354 F.3d 1020, 1023, 1034 (9th Cir. 2004).
105. Id. at 1030 n.43.
106. 638 F.3d 1137, 1154 (9th Cir. 2011).
107. Id.
“are able to distinguish between the Sponsored Links and organic results displayed on Google’s search results page.”

These assumptions are material: consumers who understand search page 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 page architecture and the fact that some links are paid ads, they are arguably more prone to confusion. Because the degree of consumer knowledge about search page architecture and the fact that some links are paid ads is ultimately an empirical question, the assumption that consumers are knowledgeable about such matters weights the dice heavily against a finding of confusion.

D. Appearance of Plaintiff’s Mark in Defendant’s Ad Text

Courts have placed considerable weight on whether the ad heading or text includes the trademark in question, reasoning that the risk of confusion is far higher if the trademark actually appears in the ad itself. Accordingly, courts have been more willing to infer confusion if the ad text includes the trademark in question. Thus, in the GEICO trial, the district court dismissed the plaintiff’s trademark infringement claims against Google for ad text that did not include the GEICO trademark, while finding that GEICO had demonstrated a likelihood of confusion, and therefore a violation of the Lanham Act, for sponsored links that use GEICO’s trademarks in their headings or text.

As noted earlier, it is ultimately an empirical question whether the inclusion of the trademark in ad text increases the risk of confusion, but the judicial assumption that it does means that advertisers can dramatically lower the likelihood that courts will find confusion simply by omitting the trademark from ad text.

E. Likelihood of Diversion

Some courts have found in favor of the trademark owner when there was evidence of consumer diversion, but not much, if any, evidence of a likelihood of consumer confusion. In these cases, courts

108. 730 F. Supp. 2d 531, 545 (E.D. Va. 2010). The Fourth Circuit disagreed, finding enough evidence of confusion regarding sponsored links to send the case to the jury. Rosetta Stone Ltd., 676 F.3d at 144.
110. Rosetta Stone Ltd., 676 F.3d at 156.
have effectively assumed that diversion is a type of harm for which 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 that diversion is legally equivalent to confusion, or are simply seeking to prohibit conduct they believe is normatively undesirable by stretching the existing doctrinal framework.

F. Likelihood of Confusion

The multifactor test described above in Part III.A.1 was developed to resolve disputes involving trademark infringement in the offline world. However, courts have used the same framework to resolve search engine keyword cases, discarding the factors that do not fit, and then 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, or affiliation on the Internet. But this approach means that factors that were developed to analyze likelihood of confusion in an offline world have effectively become dispositive endpoints in their own right, even when they are ill-suited to an online 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 hotly debated at the outset of keyword litigation. As that issue has waned in significance, articles and notes have increasingly focused on whether the initial interest confusion doctrine fits the online world.

113. See, e.g., Rosetta Stone Ltd., 676 F.3d at 153–54.
114. A list of the articles is available from the authors on request.
115. The debate was over whether the defendant-advertisers and search engines were using plaintiff’s mark as a trademark. E.g., Stacey L. Dogan & Mark A. Lemley, Trademark and Consumer Search Costs on the Internet, 41 Hous. L. Rev. 777 (2004). 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 Corp. v. Google Inc., 562 F.3d 123, 130–31 (2d Cir. 2009).
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. O’Connor studied the use of trademarks as keywords for a sample of ninety hotels in Europe, Asia, and the United States, and found that “abuse is rampant,” with ads for third-party websites appearing in a clear majority of searches. Rosso and Jansen analyzed the frequency at which third parties’ ads appeared in response to searches for 100 prominent trademarks and found that although such situations were common, occurring in 64–93% of searches, competitors accounted for only 2.7–6.4% of “piggybacking” ads. Further, very few of the piggybacking ads placed by competitors used the trademark in ad text. Rosso and Jansen concluded that “competitive piggybacking does not appear to be a deceptive or widespread phenomenon.”

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 — consumers clicked less often on paid ads, and more often on the 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

---


117. 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 Jacoby & Saleman, infra note 132.


119. Rosso & Jansen, supra note 101, at 88. The most common forms of piggybacking are resellers’ promotion of the brand or other functions that assist 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. Orthogonal piggybacking, the results of which usually included informational websites about the brand or the underlying company, accounted for 16–42% of ads, depending on the search engine. Id.

120. Id. at 89 (“[T]he 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 . . . .”).

121. Id. at 81.

122. Lesley Chiou & Catherine Tucker, How Does the Use of Trademarks by Third-Party Sellers Affect Online Search?, 31 MARKETING SCI. 819, 819 (2012).
included the trademark. In an unpublished doctoral dissertation, Shin developed a model for predicting when companies will and will not purchase their own trademarks as keywords. Edelman and Gilchrist studied the impact of label text on click-throughs, and found that the use of “Paid Advertisements” resulted in a 25–27% lower click-through rate than “Sponsored links” or “Ads,” respectively.

Somewhat dated surveys also make it clear that consumers are not particularly familiar with the differences between paid and unpaid links, but distrust the former. 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. A 2003 survey found that respondents took little notice of labels and search page architecture, but they thought the term “sponsored” was vague and confusing. Finally, a survey reported in a 2006 article 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 unpaid links.

C. Private Litigation — Consumer Surveys

Private litigation involving claims of trademark infringement has generated multiple surveys of consumer confusion. Table 1 specifies the rate of confusion quantified by thirteen expert reports offered in


125. Edelman & Gilchrist, supra note 26, at 10.


127. Id. at ii.


130. Id. at 1958–59. This preference may help explain the emergence of software that enables Internet searchers to block virtually all paid links and ads. Noam Cohen, Whiting Out the Ads, but at What Cost?, N.Y. TIMES, Sept. 3, 2007, at C3.
eleven different cases. For eight of these surveys, we had the full expert report, while for the other five surveys, we rely on the description of the survey in the court’s opinion or in other materials.
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 Airlines¹³¹</td>
<td>Defendant</td>
<td>0–2%</td>
</tr>
<tr>
<td>GEICO¹³²</td>
<td>Defendant</td>
<td>&lt; 10%</td>
</tr>
<tr>
<td>1-800 Contacts, Inc.¹³³</td>
<td>Plaintiff</td>
<td>12–38%</td>
</tr>
<tr>
<td>Rosetta Stone¹³⁴</td>
<td>Plaintiff</td>
<td>17%</td>
</tr>
<tr>
<td>American Airlines¹³⁵</td>
<td>Plaintiff</td>
<td>20–32%</td>
</tr>
<tr>
<td>CNG Financial¹³⁶</td>
<td>Plaintiff</td>
<td>21–38%</td>
</tr>
<tr>
<td>American Blinds¹³⁷</td>
<td>Plaintiff</td>
<td>29%</td>
</tr>
<tr>
<td>FPX¹³⁸</td>
<td>Plaintiff</td>
<td>42–71%</td>
</tr>
<tr>
<td>Mary Kay¹³⁹</td>
<td>Plaintiff</td>
<td>45%</td>
</tr>
<tr>
<td>Trafficschool.com¹⁴⁰</td>
<td>Plaintiff</td>
<td>approx. 50–96%</td>
</tr>
<tr>
<td>Fair Isaac¹⁴¹</td>
<td>Plaintiff</td>
<td>&gt; 65%</td>
</tr>
<tr>
<td>GEICO¹⁴²</td>
<td>Plaintiff</td>
<td>68–70%</td>
</tr>
<tr>
<td>Harry Binder¹⁴³</td>
<td>Plaintiff</td>
<td>88–94%</td>
</tr>
</tbody>
</table>

Sample size unknown for Trafficschool.com and GEICO plaintiff results. Sample for other reports ranged from 271 (GEICO defendant results) to 1055 (1-800 Contacts, Inc.), with the exception of Harry Binder (17).

Not surprisingly, defendants’ experts invariably find low levels of confusion, while plaintiffs’ 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 the plaintiff’s expert found a rate of confusion of 20–32%. In GEICO, the defense expert found a rate of confusion of < 10%, while the plaintiff’s expert found a rate of confusion of 68–70%.

Finally, the Fourth Circuit’s opinion in Rosetta Stone references 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, noting that “94% of users were confused at least once” during the study.

144. George Stigler identified a similar dynamic in antitrust cases:

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.


145. Supra notes 131 and 135.
146. Supra notes 132 and 142.
147. This case was settled before trial. Rosetta Stone and Google Settle Trademark Lawsuit, REUTERS (Oct. 31, 2012), http://www.reuters.com/article/2012/10/31/us-usa-court-rosettastone-google-idUSBRE89U1GE20121031.
148. Rosetta Stone Ltd. v. Google, Inc., 676 F.3d 144, 158 (4th Cir. 2012) (quoting Google survey). Rosetta Stone’s filing 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.” (Ex. 33.)
- “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. 34.)
IV. EMPIRICAL FINDINGS

A. 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 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 brief description of this other study and one of its central findings here.

We obtained a list of approximately 2500 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, and Yahoo). For each trademark/search engine combination, the program captured a PDF file 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. McCarthy Institute research fellows 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.

---

• “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’s Opposition to Google’s Motion for Summary Judgment at 9, Rosetta Stone Ltd. v. Google, Inc., 676 F.3d 144 (4th Cir. 2012) (No. 1:09cv736 (GBL/TCB)), available at http://digitalcommons.law.scu.edu/appendix/82. The authors have sought to have this information unsealed — so far without success.

149. A list of the trademarks is available from the authors on request. INTA’s current list of trademarks is searchable online. Trademark Checklist, INT’L TRADEMARK ASS’N, http://applications.inta.org/apps/trademark_checklist (last visited May 9, 2013).

150. As noted previously, we describe this study and the steps we took to ensure inter-rater reliability in greater detail in a separate article. See David A. Hyman & David Franklyn, Trademarks as Keywords: Who, What, When? (2013) (unpublished manuscript) (on file with authors).
Table 2: Coding Results

<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 TM products only</td>
<td>6%</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>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 2463 trademarks, totaling 18,733 paid links (3982 for Google; 5396 for Bing, and 9355 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.  

B. Surveys

1. 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 firm assisted in the design of two of the three surveys, and another firm was responsible for obtaining

151. A collateral information/sales opportunity vendor would be a site like pricegrabber.com or eBay.
152. Rosso & Jansen, supra note 101, at 93.
153. Hertz Research assisted us in the design of the first two surveys.
the panel of survey respondents and administering the surveys. An Appendix to this Article summarizes basic demographic information about those who participated in each of the three surveys, but we obtained a broad cross-section of the population in each survey. All three surveys had roughly 1000 respondents.

2. Background on Surveys

A. 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. It focused on how consumers searched for information on the Internet, their degree of knowledge about paid and unpaid search results, and whether they perceived they had been “diverted” from what they were searching for by the results they received.

B. 2nd Survey

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

C. 3rd Survey

The third survey was conducted between February 1, 2012, and February 14, 2012. The third survey had a total of forty-eight questions: thirty-eight substantive and ten demographic. It focused on search page architecture and labels, consumer goals and expectations in using trademarks as search terms, the degree of consumer confusion, and attitudes regarding the fairness of a company purchasing its competitors’ trademarks as keywords.

154. Survey respondents were recruited, and the survey was administered by Survey Sampling International (“SSI”). SSI maintains a database of individuals willing to participate in online surveys. They invited individuals from this database to participate in our survey and paid participants a nominal amount ($5 per survey).

Respondents are recruited from online advertising and affiliate partnerships (through social media such as blogs and forums) as well as from third party databases. All respondents indicate they would like to participate in market research and must verify an e-mail address to be opted into participating. SSI then asks for basic demographic information, including the respondent’s address, for verification.
3. Survey Findings

We break our findings down as follows: (1) consumer knowledge of search page architecture, (2) adequacy of disclosure of paid links, (3) consumer goals and expectations when trademarks are used as search terms, (4) consumer attentiveness to search page architecture and labeling, (5) consumer propensity to click on paid links, (6) diversion and confusion, and (7) fairness norms.

A. 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 results are organized, 27% responded that they were very familiar, 33% responded that they were familiar, while 25% were somewhat familiar, and 15% were either not very familiar or not at all familiar. 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>
<thead>
<tr>
<th>Table 3: Consumer knowledge of search page architecture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Aware that search companies are paid to feature certain sites more prominently?</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>61%</td>
</tr>
<tr>
<td>Know the difference between sponsored and unsponsored search results?</td>
</tr>
<tr>
<td>42%</td>
</tr>
<tr>
<td>36%</td>
</tr>
<tr>
<td>Easy to distinguish between paid and unpaid search results?</td>
</tr>
<tr>
<td>35%</td>
</tr>
<tr>
<td>Know where the paid results usually appear?</td>
</tr>
<tr>
<td>43%</td>
</tr>
</tbody>
</table>

155. See supra Part III.A.2.
156. Survey 2, Question 5.
157. Survey 2, Question 17.
158. We asked this question in both Survey 1 and Survey 2. The upper row is for Survey 1, Question 14, and the lower row is for Survey 2, Question 13.
159. Survey 2, Question 20. In Survey 1, Question 16, we asked survey respondents that knew the difference between sponsored and unsponsored links whether sponsored links were clearly designated from those that were not sponsored. 66% answered yes, 14% answered no, and 20% were unsure.
160. Survey 2, Question 21.
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.

Figure 2: Google Search of “Mercedes,” Sections Clearly Labeled

We then asked survey respondents 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 and 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>
<thead>
<tr>
<th>Panel A</th>
<th>Section</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpaid links</td>
<td>15%</td>
<td>24%</td>
<td>51%</td>
<td></td>
</tr>
<tr>
<td>Paid links</td>
<td>46%</td>
<td>38%</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Google’s special marketing team</td>
<td>17%</td>
<td>15%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Not sure/Do not know</td>
<td>21%</td>
<td>22%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

Panel B: Cumulative Performance

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All 3 correct</td>
<td>16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 of 3 correct</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 of 3 correct (paid only)</td>
<td>21%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 of 3 correct</td>
<td>27%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 of 3 correct</td>
<td>27%</td>
<td></td>
<td></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 paid Ads (sections A and B), Table 4, Panel B indicates only 21% of survey respondents answered correctly.

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

**B. Adequacy of Disclosure of Paid Links**

As noted previously, the Federal Trade Commission has issued a statement requiring search engines to clearly and conspicuously disclose paid content, so that consumers can be aware of and distinguish between compensated advertising and unpaid opinion or news content.\(^{164}\) We asked a series of questions to determine whether survey

---

161. Survey 3, Question 7.
162. Survey 3, Question 8.
163. Survey 3, Question 9.
164. See supra notes 20–21 and accompanying text. To our knowledge the FTC has not brought any enforcement actions pursuant to this policy against search engines. There is
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>
<thead>
<tr>
<th></th>
<th></th>
<th></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>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></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>

<table>
<thead>
<tr>
<th>Panel C: Suggested Improvements in Labels/Architecture169</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>
<tr>
<td>Not sure/Do not know</td>
<td>15%</td>
</tr>
</tbody>
</table>

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 conspicu-

165. Survey 3, Question 11.
166. Survey 3, Question 13.
167. Survey 3, Question 12.
168. Survey 3, Question 14.
169. Survey 3, Question 15.
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 clearer, 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% did not care one way or another.

C. 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 or confusion is likely to occur. We began by asking survey respondents who 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. A near majority, 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.

A later survey asked more specifically what survey respondents were looking for when they used the brand name of a product as a

170. 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 that survey respondents did not distinguish between these two elements in responding.

171. Cf. Jansen & Reznick, supra note 129, at 1959 (finding that consumers are skeptical of reliability and utility of paid ads). Such skepticism is not new. John E. Calfee & Debra Jones Ringold, The 70% Majority: Enduring Consumer Beliefs About Advertising, 13 J. PUB. POL’Y & MARKETING 228, 228 (1994) (“What we find in the data is a remarkably consistent majority view that advertising is useful and at the same time prone both to exaggeration and the use of persuasion to encourage unnecessary purchases. Consumers also consistently support regulation of advertising, or more precisely, they support stronger regulation.”).

172. Survey 3, Question 16.
173. See supra Part III.A.2.A.
174. Survey 1, Question 10.
search term. We also asked what they expected to find if they clicked on a paid link. Table 6 details the responses.

<table>
<thead>
<tr>
<th>Table 6: Respondent Goals/Expectations</th>
<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>
<td>45%</td>
</tr>
<tr>
<td>Products bearing that brand name and similar competing brand names</td>
<td>34%</td>
<td>39%</td>
</tr>
<tr>
<td>Similar competing brand names only</td>
<td>N/A</td>
<td>10%</td>
</tr>
<tr>
<td>Products having nothing to do with the brand name</td>
<td>N/A</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</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.

**D. Consumer Attentiveness to Search Page Architecture and Labels**

Judges have assumed that consumers pay attention to search page architecture and labels in deciding which links to click upon. We accordingly asked survey respondents how search page architecture affected which links they clicked on. We found little evidence that survey respondents pay attention to search page architecture. More specifically, 56% reported that they pay no attention to where on the search results page the links are located, 60% reported that they pay no attention to whether the link is in a shaded box, and 48% reported that 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 for which they see the brand they are interested in, irrespective of whether the link is paid or unpaid.

We also tested whether survey respondents were attentive to labels by taking advantage of the fact that Google and Bing had

---

175. Survey 3, Question 21.  
176. Survey 3, Question 22.  
177. See supra Part III.A.2.  
178. Survey 2, Questions 9, 11, and 12.  
179. Survey 1, Question 12.
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. 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.

<table>
<thead>
<tr>
<th>Table 7: Knowledge of Labels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel A: Observed Labels during January, 2012</td>
</tr>
<tr>
<td>Sponsored Links</td>
</tr>
<tr>
<td>Sponsored Results</td>
</tr>
<tr>
<td>Ads</td>
</tr>
<tr>
<td>Commercial Ads</td>
</tr>
<tr>
<td>Didn’t notice any labels</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: How Accurately Do Respondents Identify Labels?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identified only labels in use</td>
</tr>
<tr>
<td>Identified some labels in use, and some not in use</td>
</tr>
<tr>
<td>Identified only labels not in use</td>
</tr>
<tr>
<td>Didn’t notice any labels</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.

Table 7, Panel B aggregates the responses in Panel A into those respondents who provided correct responses only, those who had a mix of correct and incorrect responses, those who had wrong responses only, and 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. Another 13% of survey respondents picked completely wrong answers, and 22% of survey respondents didn’t notice

180. See supra notes 26 and 28.
182. Survey 3, Question 4. As the numbering of this question indicates, we asked respondents which labels they recalled seeing before we showed them Figure 2.
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>
<thead>
<tr>
<th>Table 8: Consumer Preferences for Paid Link Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid Ads/Paid Advertisements</td>
</tr>
<tr>
<td>Sponsored Links</td>
</tr>
<tr>
<td>Sponsored Results</td>
</tr>
<tr>
<td>Ads or Advertisements</td>
</tr>
<tr>
<td>Not sure/No opinion</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

As Table 8 reflects, “Paid Ads/Paid Advertisements” was the most preferred option, but it only garnered 26–35% of survey respondents. Strikingly, “Ads/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” 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 labels fail to effectively communicate which content is paid rather than unpaid.

E. Paid Link Click-Through

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.¹⁸⁵ Courts have also assumed that the inclusion of the trademark in ad text increases the likelihood of diversion and/or confusion.¹⁸⁶

We used Figure 3, which is a screenshot of the right-side column of Figure 1 to examine these issues.

¹⁸³. Survey 2, Question 24.
¹⁸⁴. Survey 3, Question 18.
¹⁸⁵. See supra note 112 and accompanying text.
¹⁸⁶. See supra Part III.A.2.D.
Ads - Why these ads?

**Mercedes-Benz Dealership**
www.autobahnmotors.com
Belmont, CA - Your Mercedes Dealer. Browse our Inventory Online. 700 Island Parkway, Belmont, US-CA

**Mercedes-Benz Of Marin**
www.mercedesbenzofmarin.com/Luxury
R.A.B. Motors, located in Marin Authorized Dealership Since 1962

**Authorized Mercedes-Benz**
www.beshoffmotorcars.com
Beshoff MotorCars Mercedes-Benz Factory Parts & Quality Service

**Official Infiniti Site**
www.infinitiusa.com
Compare Mercedes to Infiniti on the Official Infiniti USA Website.

**Pre-Owned BMW Vehicles**
www.bmwusa.com/Certified
Official BMW Certified Pre-Owned Site. Find your next vehicle here.

**Gorgeous Luxury Vehicles**
www.livermoreaudi.com
Come See Our Huge Selection & Amazing Prices At Livermore Audi

Figure 3: Paid Ads in Response to a Search for Mercedes

The last three ads in Figure 3 are for competitors of Mercedes (Infiniti, BMW, and Gorgeous Luxury Vehicles”). The Infiniti ad combines an explicit reference to Mercedes and clear disclosure that the
website is from a competitor. The BMW ad does not reference Mercedes, and the heading, URL and ad text all reference BMW. The Gorgeous Luxury Vehicles ad does not reference Mercedes, but the heading does not exclude the possibility, since Mercedes is 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. As Table 9 reflects, between 41% and 52% of survey respondents answered “yes” (10–16%) or “maybe” (31–36%) to this question, with Gorgeous Luxury Vehicles having the highest percentage of self-reported click-through.

<table>
<thead>
<tr>
<th>Table 9: Willing to Click Through on a Specific Ad?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Maybe</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Not sure/Do not know</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, or Gorgeous Luxury Vehicles when they had searched for Mercedes. Table 10 provides the responses to this question.

---

187. The heading and website address both reference Infiniti, and the ad text states “compare Mercedes to Infiniti on the Official Infiniti USA Website.”
188. 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.
189. Survey 3, Question 23.
190. Survey 3, Question 28.
191. Survey 3, Question 33.
Table 10: Reasons For Clicking on Paid Link

<table>
<thead>
<tr>
<th>Reason</th>
<th>Infiniti 192</th>
<th>BMW 193</th>
<th>Gorgeous Luxury Vehicles 194</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/Do not know</td>
<td>2%</td>
<td>N/A</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table 10 indicates that only a minority of survey respondents (22–37% depending on the ad), click through because they expect to find information on the trademarked good at the paid site. Most survey respondents (48–65% depending on the ad), click through because they have broad preferences, and are interested in a range of luxury cars. 195

Does ad text matter? Mercedes is only mentioned in the Infiniti ad text, not in the BMW or 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. 196 Thus, at least in this setting, ad text does not appear to be decisive.

F. Diversion and Confusion

Some courts have used diversion as a proxy for confusion. 197 Accordingly, we began by asking survey respondents whether they perceived that they had ever been diverted. 198 Of those asked, 58%...
responded that they had been diverted, 29% indicated they had not been diverted, and 13% were not sure.199 We then asked those who stated they had been diverted what they found at the site to which they had been diverted, 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 in which they were interested, rather than the website of the product’s manufacturer.200 Another 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.201

Some of the difficulties with using diversion as a proxy for likelihood of confusion/infringement are indicated by the fact that a majority of respondents thought it was diversion when they were directed to a site that sold or serviced the product in question. We also asked respondents who reported being diverted what they usually did next, and again allowed them to select more than one response. Of those respondents, 61% reported that they went back and did the Internet search again, while 44% visited other sites returned by the original search.202 Another 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.203

In order to probe this issue more deeply, we included several questions in our survey regarding the three paid links in Figure 3 purchased by competitors of Mercedes (i.e., Infiniti, BMW, and Gorgeous Luxury Vehicles). Specifically, we asked what survey respondents would do if they clicked through and didn’t find any information on Mercedes.204 Table 11 presents the results for each of the three paid links.

199. Survey 1, Question 18.
200. Survey 1, Question 20.
201. Id.
202. Survey 1, Question 24.
203. Id.
204. As noted previously, we did not prompt survey respondents as to why they had used Mercedes as a search term, thus leaving them free to answer subsequent questions based on their own goals and expectations. See supra note 195.
Table 11: Searcher Behavior after Click-Through

<table>
<thead>
<tr>
<th></th>
<th>Infiniti 205</th>
<th>BMW 206</th>
<th>Gorgeous Luxury Vehicles 207</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 relevant site, even if it did not have information on Mercedes.

Finally, we asked survey respondents why they thought these three paid links had appeared in a search for Mercedes. Table 12 provides the results, with the correct response, that 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.

Table 12: Reasons the Paid Link Appeared

<table>
<thead>
<tr>
<th>Paid Link</th>
<th>Infiniti 208</th>
<th>BMW 209</th>
<th>Gorgeous Luxury Vehicles 210</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link selected by Google’s special marketing team</td>
<td>49%</td>
<td>51%</td>
<td>46%</td>
</tr>
<tr>
<td>Mercedes has relationship with website and authorized link</td>
<td>15%</td>
<td>16%</td>
<td>20%</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>

---

205. Survey 3, Question 25.
206. Survey 3, Question 30.
207. Survey 3, Question 35.
209. Survey 3, Question 31.
210. Survey 3, Question 36.
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/do not know was the next most popular response, followed by our fanciful control. Between 10% and 14% of survey respondents thought the links were authorized by Mercedes, meaning that 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, or affiliation.

G. Fairness Norms

Under U.S. trademark law, there is generally no liability for an unauthorized use of a trademark unless that use causes or is likely to cause consumer confusion as to source, sponsorship, or affiliation.211 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.212 Table 13 provides the results.

<table>
<thead>
<tr>
<th>Was it fair and appropriate for the paid link to appear?</th>
<th>Infiniti213</th>
<th>BMW214</th>
<th>Gorgeous Luxury Vehicles215</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 did not believe it was “fair and appropriate” for paid ads for Infiniti, BMW, and Gorgeous Luxury Vehicles to appear in response to a search for Mer-

211. 4 McCarthy, supra note 82 § 23:8.
212. 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 likelihood of confusion.
213. Survey 3, Question 27.
214. Survey 3, Question 32.
215. Survey 3, Question 37.
cedes. After excluding those who responded “don’t know/not sure,” 53% of survey respondents did not believe it was “fair and appropriate” for Infiniti and BMW to have their paid links appear, while 42% had that view for Gorgeous Luxury Vehicles. 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.

**H. 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 engine site architecture and labels. The results were generally unimpressive. We did find some evidence that younger and better-educated survey respondents reported greater familiarity with site 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 search engine keywords. We discuss some of the implications of our findings below.

**A. Limitations of Our Findings**

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 online surveys. Although survey respondents reflect a broad cross-section of the population, it does not automatically follow that our results are representative of the population as a whole, let alone those who would be selected to serve on a jury deciding a dispute involving the use of trademarks as keywords.

---

216. If we do not exclude those who responded “don’t know/not sure,” a smaller but still significant percentage (32% to 40%) of survey respondents thought it was not “fair and appropriate” for paid ads for Infiniti, BMW, and Gorgeous Luxury Vehicles to appear in response to a search for Mercedes. See supra Table 13 and accompanying text.  
217. See infra Appendix.
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 or is more affordable, or in instances where the ad text is more misleading. We also do not address the issues raised by counterfeit goods. “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 participants 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 Trademarks as Keywords Debate

The entire debate over the use of trademarks as keywords has played out in the context of litigation over the use of trademarked keywords 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 2500 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.

218. Id.
219. To our knowledge, none of the links in Figures 1 & 3 involve counterfeit goods, but the same cannot be said of all disputes involving the use of trademarks as keywords. For example, in Rosetta Stone, the plaintiff complained that Google was allowing third parties to purchase its trademark as a keyword to sell counterfeit goods. 676 F.3d at 152 (4th Cir. 2012). Similar concerns caused Tiffany to (unsuccessfully) sue eBay. See supra note 78. It is difficult to measure the frequency with which counterfeit goods are sold by using trademarks as keywords, but such transactions obviously involve quite different dynamics than those we study in this Article. See also note 244, infra (Google personnel unable to identify whether ads for Rosetta Stone involved counterfeit goods).
220. See supra Table 2.
221. Id.
222. Id.
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 disputes over trademarks as keywords have been clear that search page architecture and labeling 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. 223

However, our findings suggest that the details of search page architecture and labeling are a mystery to many consumers. 224 Only 21% of survey respondents correctly identified both paid sections on Figure 2. 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. 225 These findings suggest that judges should not assume a high level of consumer knowledge of search page architecture and labeling.

A change in the assumed level of consumer knowledge has 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. More concretely, the likelihood of diversion and/or confusion is higher when consumers are unable to identify which content constitutes ads.

223. See supra Part III.A.2.C.

224. Our findings are consistent with earlier research indicating consumers pay little attention to the labeling of search output. Rosso added labels classifying search output by genre and discovered only a little over 50% (17 of 32) of subjects reported even noticing the labels. Mark A. Rosso, Using Genre to Improve Web Search 152 (2005) (unpublished Ph.D. dissertation, University of North Carolina at Chapel Hill), available at http://ils.unc.edu/~rossm/Rosso_dissertation.pdf. Google apparently encountered similar dynamics when it was testing spelling correction (“did you mean: . . .”), since many users reported not noticing the phrasing or suggestion. E-mail from Mark A. Rosso, Assistant Professor of Computer Info. Sys., N.C. Cent. Univ. Sch. of Bus., to David A. Hyman, H. Ross and Helen Workman Chair in Law, Univ. of Ill. Coll. of Law (Nov. 25, 2012) (on file with author).

225. See supra Table 7.
We think our findings warrant further evaluation by those responsible for consumer protection issues on the Internet. Survey respondents were not of one mind on the best way to improve the disclosure of paid content, but it is obvious that the current approach is not working.

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.226 Similarly, in most of the world, Google will not investigate a complaint unless the trademark appears in the ad text,227 while in the United States, a trademark may be used in ad text only when it amounts to comparative advertising and nominative fair use.228 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.229 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.230

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 (“Gorgeous Luxury Vehicles”).231 But, this explanation is less compelling when similar percentages of survey respondents expected to find information on Mercedes at the paid link

227. AdWords Trademark Policy, supra note 46.
228. See e.g., New Kids on the Block v. News Am. Publ’g, Inc., 971 F.2d 302 (9th Cir. 1992).
229. See supra note 179.
230. See supra Figure 3, Tables 9–10 and accompanying text.
231. Id.
that was explicitly comparative (Infiniti) and one that didn’t include the trademark at all (BMW).\textsuperscript{232}

These findings suggest that consumer perceptions in this area are highly context-dependent, and that 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 or 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. 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. This particular decision rule, however, probably cannot hold the weight that has been put on it.

\textit{E. Intent}

Judges have been known to lower the boom on entities that deceptively used the trademarks of direct competitors in keyword advertising.\textsuperscript{233} For example, in \textit{Rosetta Stone}, the Fourth Circuit made a series of adverse inferences about Google’s intent, based on Google’s dismissal of its own internal studies indicating a high likelihood of confusion and on Google’s economic self-interest to sell trademarks as keywords.\textsuperscript{234}

It is tempting to dismiss such cases as simply the trademark variation of the “pigs get fat, hogs get slaughtered” rule.\textsuperscript{235} 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

\\[
\text{\textsuperscript{232} See supra Table 10.}
\]

\\[
\text{\textsuperscript{233} E.g., Binder v. Disability Grp., Inc., 772 F. Supp. 2d 1172, 1182–83 (C.D. Cal. 2011).}
\]

\\[
\text{\textsuperscript{234} 676 F.3d 144, 156 (4th Cir. 2012).}
\]

\\[
\text{\textsuperscript{235} Of course, whether the defendants in keyword cases are, in fact, “hogs” is an empirical question. Professor Eric Goldman analyzed the results of six such suits and found evidence that purchasing a competitor’s trademarks as keywords is a dubious business strategy, and suing competitors for doing so is even more dubious:}
\]

Brand owners usually are wasting money — often, a LOT of money — bringing lawsuits over purportedly lost business attributable to competitive keyword advertising. In fact, there’s good reason to believe that brand owners lose little, if any, profits from the practice; and even if they do, the costs of the law vastly exceed those lost profits, making the litigation unprofitable.

purchases to infer bad intent among ad purchasers and search engines. Stated more directly, if many users of search engines employ trademarks as generic proxy terms, to signify categories of products, it is hard to see why direct competitors should be prohibited from purchasing such trademarks as keywords. Nor should the fact of such purchases 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 result featuring the name of what they are searching for. 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 that they had. Finally, in our third survey, a majority of survey respondents stated that when they use trademarks as a search term they are only interested in the brand-name product. When presented with Figure 3, roughly a quarter of survey respondents indicated they would stay on the linked page, even if the page did not include information on the product for which they had originally searched. These findings suggest that diversion of some form is fairly common.

Other findings suggest, however, that diversion is not a major problem, and targeting “harmful diversion” under existing trademark law will be quite challenging. Diversion cannot harm consumers unless they have both a specific destination in mind, and are not interested in alternatives. 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 harmful diversion appears to be relatively modest.

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 get distracted by B. Indeed, the

236. See supra note 179.
237. See supra note 199.
238. See supra note 175.
239. See supra Table 11.
240. See supra Table 12.
241. 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 stay at the linked page for an appreciable amount of time make up 25% of those who click through, the combined probability of harmful diversion is 45% x 40% x 25% = 4.5%.
central metaphor — that users are “surfing the Internet” — indicates the casual and contingent nature of the search process. 242 When search behavior is so unpredictable that we are unable to specify a baseline against which to measure diversion, the task of differentiating harmful diversion from ordinary search behavior is 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. 243 We are skeptical that this outcome actually represents diversion in any form that is or ought to be legally actionable, 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 misappropriates 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 diversion/confusion 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, that the plaintiff has sponsored the defendant, or that the plaintiff and defendant are affiliated. One initial challenge is that source, sponsorship, and affiliation are not categories that map direct-

242. See Jean Armour Polly, Birth of a Metaphor — The Nascence of Surfing the Internet, NETMOM.COM (Mar. 22, 2008, 9:00 AM), http://www.netmom.com/about-net-mom/25-meet-net-mom/26-surfing-the-internet.html. The person who coined the metaphor described the logic of her choice of words:

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.

Id.

243. See supra note 200.
ly or easily onto the online search setting in which trademarks are 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 at 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 at 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 simple 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?244 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.245

We document a considerable degree of confusion, but it is not the type of confusion recognized by current trademark doctrine. We find a modest amount of confusion on source, sponsorship, and affiliation, but we find considerably more confusion and uncertainty regarding whether a particular link is an ad or not, why particular links appeared in response to a given search, and what the user expects to find if they click on a particular link.

Thus, in our third 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 15–20% picked a fanciful response added as a control.246 Only 10–14% 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.”247 In the aggregate, this means that almost half of those responding were confused as to why ads for Infiniti, BMW, and Gorgeous Luxury Vehicles appeared in

244. For example, in Rosetta Stone v. Google, Inc., several of Google’s in-house attorneys were unable to determine which ads were placed by Rosetta Stone, competitors of Rosetta Stone, unauthorized resellers, and counterfeiters. 676 F.3d 144, 158 (4th Cir. 2012).
245. In FPX, LLC v. Google, Inc., 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. An Empirical Analysis, supra note 138, at 8.
246. See supra Table 12.
247. Id.
response to a search for Mercedes, but less than 15% reported confusion as to source, sponsorship, or affiliation.

When we asked a similar question to determine why survey respondents would click 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.\textsuperscript{248} 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.\textsuperscript{249} Infiniti’s ad (“Compare Mercedes to Infiniti on the Official Infiniti USA Website”) certainly implies that a user should expect to receive such information, while BMW and Gorgeous Luxury Vehicles’ ads do not, but Infiniti had the lowest percentage of users expecting to find information on Mercedes of the three.\textsuperscript{250}

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.\textsuperscript{251} 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.\textsuperscript{252} Of course, these are aggregate findings. Table 2 makes it clear that survey respondents are actually over-estimating the frequency of keyword purchases by competitors, which should make claims of confusion even harder to sustain.

Viewed broadly, these findings provide evidence of confusion, but the confusion is not 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 many other have no such expectations.\textsuperscript{253} 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

\textsuperscript{248} See supra Table 10.
\textsuperscript{249} Id.
\textsuperscript{250} See supra Figure 3.
\textsuperscript{251} See supra Table 6.
\textsuperscript{252} Id.
\textsuperscript{253} See supra Table 10.
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.\textsuperscript{254} 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, or 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.\textsuperscript{255}

To summarize, we find little evidence of confusion in the traditional sense, but there is plenty of uncertainty about other matters. Such uncertainty is not actionable under existing trademark law, and the FTC guidelines only require disclosure of advertising to be “clear and conspicuous.”\textsuperscript{256} 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.

\section*{H. Survey Complexities}

In a blog post, Professor Rebecca Tushnet suggests that we may have overstated the number of survey respondents who are confused about search page architecture.\textsuperscript{257} In particular, she states:

I have some quibbles with the interpretations, particularly with respect to the control/distractor question about Google’s selection of ads that isn’t really a control since a reasonable consumer might well think that Google’s marketing department selects ads. Someone who selected that “control” to classify a link seems likely to understand that the link is there because Google hopes to get paid for it, even if they’re confused about conscious/case-by-case selection. Adding those

\textsuperscript{254} See supra Table 1.  
\textsuperscript{255} See supra Table 12.  
\textsuperscript{256} See supra note 21.  
\textsuperscript{257} Rebecca Tushnet, \textit{Empirical Study on Trademarks as Keywords}, REBECCA TUSHNET’S 43\textit{(B)LOG} (Aug. 28, 2012, 10:32 AM), http://tushnet.blogspot.com/2012/08/empirical-study-on-trademarks-as.html.
responses to the “paid advertising” responses changes
some results significantly. 258

We agree with Professor Tushnet that our fanciful control (“link
selected by Google’s special marketing team”) does not expressly
indicate whether or not payment would result to Google, but we do
not agree that this fact undercuts our analysis. For each of the three
questions that included this fanciful control, 259 our goal was to offer
an answer that was clearly correct, and other answers that were either
wrong, or not nearly as “correct” as the right answer. We drafted the
fanciful control to try and give people the option of a response that
was wrong, but looked plausible, in order to give us some insight into
the number of people who were guessing, misinformed, or confused.

The “special marketing team” response is not the best answer to
any of the three questions for it was offered, which is why we did not
treat it as a correct response. There is no such thing as a Google “spe-
cial marketing team,” and even if there was, the mythical special mar-
teting team doesn’t select the links that end up in the paid and unpaid
sections of Google’s search output, which is what the question was
about.

Further, the “special marketing team” cannot be counted as the
correct answer to questions about both paid and unpaid sections of the
search output page. As Table 4 reflects, 15–17% of survey respond-
ents picked the fanciful response for Sections A & B, the paid regions
of Google’s search output, but 11% picked the fanciful response for
Section C, an unpaid region of Google’s search output page. We view
these findings as further evidence of generalized confusion or uncer-
tainty about search output architecture.

Finally, in a follow-up survey conducted after receiving Professor
Tushnet’s original comments, we asked exactly the same question,
and gave survey respondents the same answers, but added language
that made it clear that our fanciful control did not involve payment to
Google. 260 The results were effectively unchanged: 13% of survey
respondents selected the fanciful control for Section A, and 17% of
survey respondents selected it for Section B (the paid regions of
Google’s search output). Fully 19% of survey respondents picked the
fanciful control for Section C (the unpaid region of the search output
page). Thus, we do not believe the issue identified by Professor Tush-
net changes the results of our analysis.

258. Id.
259. See supra Table 4.
260. Specifically, the fanciful control in the follow-up survey was as follows: “Links se-
lected by Google’s special marketing team. The listed companies do not pay Google to
appear in this section.”
We appreciate Professor Tushnet’s careful review of our methodology and findings. No matter how carefully one designs a survey, ambiguities and weaknesses are discovered only after the survey has been fielded. Our three surveys and the fanciful control we constructed for the third survey are no exception to that rule.

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

Although nationally famous trademarks are also protected against dilution, American trademark law focuses on confusion over source, sponsorship, or affiliation.261 Conversely, some European countries grant trademark owners protection against those who would take unfair advantage of well-known marks.262 To what extent does the European 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 whether it is “fair and appropriate” for direct competitors to purchase one another’s 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 U.S. focus on confusion. The adoption of the initial interest confusion framework — even in circumstances where confusion is difficult to establish — seems to indicate that some courts are willing to use trademark law to address such free-riding, despite scathing criticism from some academics and judges.263

---


263. For example, Judge Berzon of the Ninth Circuit has written that online users who are diverted to competing websites after searching for a trademarked term are likely not confused, but are rather making legitimate consumer choices:

There is a big difference between hijacking a customer to another website by making the customer think he or she is visiting the trademark holder’s website (even if only briefly), which is what may be happening in this case when the banner advertisements are not labeled, and just distracting a potential customer with another choice, when it is clear that it is a choice. True, when the search engine list generated by the search for the trademark ensconced in a metatag comes up, an internet user might choose to visit westcoastvideo.com, the defendant’s website in Brookfield, instead of the plaintiff’s moviefab.com website, but such choices do not constitute trademark infringement off the internet, and I cannot understand why they should on the internet.

For example, consider the following scenario: I walk into Macy’s and ask for the Calvin Klein section and am directed upstairs to the second floor. Once I get to the second floor, on my way to the Calvin Klein section, I notice a more prominently displayed line of
State and federal law sometimes prohibits unjustified free-riding on another’s reputation. In 2007, Utah banned competitive keyword advertising. The sponsor of the legislation argued that such advertising was a form of “identify theft,” which he analogized to “carjacking” someone else’s trademark, and bemoaned the fact that “in some cases people invest millions on their trademark, only to have their customers’ online word searches shanghaied by a pirate who bought off the search engines.” Similarly, the right of publicity, which has been recognized by many states, allows individuals to control the commercial use of their identities. 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, the Internet Corporation for Assigned Names and Numbers (“ICANN”) has a Uniform Domain Name Dispute Resolution Policy (“UDRP”), which uses a framework similar to the ACPA’s bad-faith-intent-based approach to determine domain name ownership.

To be sure, social norms regarding fairness can evolve, and there are social costs to over-regulation. These costs can be large in dynam-
ic spaces, such as online search. But, the alternative is to rely solely on an ex post confusion-based liability regime, which has its own uncertainties and costs as well. It remains to be seen whether regulation that is explicitly framed around an anti-free-riding rationale would out-perform the confusion-based legal regime that currently governs this space. Rather than analyzing the dispute over keyword advertising through only the traditional confusion-based framework, we should at least consider the costs and benefits of a different approach.

J. The Perils of Casual Empiricism

Our findings are more suggestive 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. 271

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: (1) consumer goals and expectations when trademarks are used as search terms, (2) advertiser (and/or search engine) intent when purchasing or selling a trademarked keyword, (3) consumer understanding of search page architecture and labeling of results, (4) the significance of the trademark appearing in the ad text, (5) the likelihood of diversion, and (6) the likelihood of confusion. Assumptions in each of these areas were doubtless plausible at the time, but such casual empiricism should give way to actual evidence on the subject when it is available. 272

K. What is Really at Stake?

Framing the controversy over the use of trademarks as search engine keywords obscures what is really at stake. Trademark owners

270. Professor Eric Goldman has argued against regulation of keyword search advertising on various grounds. In his view, the absence of trademark liability has allowed search tools to evolve organically, in response to consumer demand. See, e.g., Eric Goldman, With Its Australian Court Victory, Google Moves Closer to Legitimizing Keyword Advertising Globally (Forbes Cross-Post), ERIC GOLDMAN TECH. & MARKETING L. BLOG (Feb. 19, 2013 9:32 AM), http://blog.ericgoldman.org/archives/2013/02/with_its_aust.htm.
271. See supra notes 28–29 and accompanying text.
272. We do not mean to suggest that there is no role for armchair empiricism, nor that empirical evidence must be presented on each and every aspect of every dispute. There are efficiencies to armchair empiricism in this area of the law — as there are in other areas of the law. The challenge is to decide when to insist on actual empirical evidence, instead of relying on armchair empiricism.
have a Lockean rights-based claim to profit from (and, to a reasonable extent, control) the property they have created, including the right to profit from the collateral value of their marks when used as Internet search terms. At the same time, Google has created and popularized the platform that makes the same trademarks valuable as search terms, and therefore has its own competing Lockean rights-based claim to profit from the sale of any and all search terms on that platform. Finally, consumers have diverse preferences and goals. Markets, together with the institutions that enable them, are typically best justified as means by which such preferences can be maximized. Some consumers that use a trademark as a search term prefer to be able to choose from a diverse range of goods and services. The ads that accompany search results benefit them by supporting Google’s free search services, and allowing them the opportunity to buy products that they were not necessarily thinking about, but were at least open to. Other consumers are only interested in products bearing the specific trademark they entered as a search term. They too benefit from the free search services that Google provides, and they can only be diverted if they click on the “wrong” paid ad.

Given the complex nature of these competing claims — pitting rights against rights, and rights against social utility — we should stop pretending that these disputes present a straightforward legal issue that only requires the parsing of a trademark statute or the application of a multi-factor likelihood of confusion test. Indeed, analyzing these issues within the boundaries set by existing trademark doctrine, whether consumer confusion or dilution, obscures the real choice that judges and legislators will have to make.

VI. Conclusion

Our findings indicate that the issues raised by the use of trademarks as keywords are complex and multidimensional. That said, our findings suggest that using diversion as a proxy for likelihood of confusion is unlikely to generate satisfactory results. Diversion is not the same thing as likelihood of confusion, and trying to force evidence of diversion into a box labeled “initial interest confusion” will not make diversion into trademark infringement.

Next, there is considerable evidence of consumer confusion and uncertainty, but it is not the sort of consumer confusion at which trademark law is directed. Instead, consumers are confused and uncertain as to which sections of search output are paid and which are unpaid, why particular links appear in response to any given search, and what exactly consumers should expect to find when they click on any given link.
Our findings also provide some evidence that consumer expectations regarding “fair and appropriate” use of trademarks do not map neatly onto the type of protections provided by U.S. trademark law. It remains to be seen whether trademark law should be harmonized with consumer expectations — or vice-versa.

Finally, it is important to recognize that 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.
## APPENDIX ONE: TABLES

Demographics of Survey Respondents\(^{273}\)

<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>1002</td>
<td>1003</td>
<td>1003</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>

\(^{273}\) Percentages in each category may not add up to 100% due to rounding.