

NOTE

The Consequences of Search Bias: How Application of the Essential Facilities Doctrine Remedies Google's Unrestricted Monopoly on Search in the United States and Europe

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ABSTRACT

Google's monopoly over Internet search is a serious issue. Tech policy experts describe the Internet as today's equivalent of electricity. Consumers rely on the Internet for social communication, education, work, entertainment, and news. Thus, as consumers deserve fair access to electricity, they should be able to access information available on the Internet. However, search engines essentially control consumers' access to online information, and some search engines, like Google, deny access to the useful information that consumers seek. This behavior is called search bias and is a violation of search neutrality. For example, Google threatened to delist Yelp unless it allowed Google to copy Yelp user reviews of locations on to Google Plus. Google is able to act in this predatory manner because it has a monopoly over Internet search. Despite this predatory behavior that harms consumers, the antitrust enforcement agencies of the United States and the European Union have failed to effectively intervene.

This Note advocates that the essential facilities doctrine is a practical solution to the Google problem. The essential facilities doctrine mandates that when a monopolist holds exclusive control over a facility or resource, access

* J.D., expected May 2015, The George Washington University Law School. I would like to thank Professor William E. Kovacic for his help on this Note.

must be shared as long as allowing access is practical. For example, railroad companies have been ordered to share access to railroad tracks, and telecommunication companies have been ordered to share access to cable networks. Search engines have reached the level of an essential facility because they provide access to the Internet, and Google, with its monopoly over Internet search, is effectively the one essential facility in control of access to the Internet. Google is able to easily share access with other search engines, but instead chooses to use predatory behavior to promote its own products and demote competitors' products in ways that violate antitrust law. Therefore, Google must be ordered, under the essential facilities doctrine, to share access to its resource by fairly allowing websites to be ranked by Google's search engine according to merit and not by whether they compete with Google. This will allow consumers access to online information and will prevent Google from harming competition.

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INTRODUCTION

In today's Internet-dependent era, Internet users expect that their online searches will yield "neutral," or unadulterated and not manually tampered with, results.¹ For example, a runner looking to buy new shoes online who enters "trail running shoes" into a search engine would expect the results to include all of the available websites relevant to her search query.² Moreover, she would expect that the websites on the first results page are the best or most relevant and that the results at the top of the page are of better quality than the results at the bottom. This display of search results is considered neutral in quality;³ however, this is not always how results are displayed because many search engines demonstrate "search bias." For example, the search engine Google preferences its own services, like Google Shopping and Google News, by listing them first on the results page, regardless of their quality relative to other websites.⁴ Moreover, Google has removed relevant websites from the results by demoting websites such that, practically, they may never be found.⁵ This is search bias.⁶ Google is able to assert preference for its own services in a market in which it does not have dominance because of its dominance in the general search market.⁷ This is a violation of antitrust law.⁸

As a result of this biased conduct, the U.S. Federal Trade Commission ("FTC") and the European Union's European Commission ("EC") and its Directorate-General ("DG") for Competition have in-

¹ Herman Tavani, *Search Engines and Ethics*, STAN. ENCYCLOPEDIA PHIL. (Aug. 27, 2012), <http://plato.stanford.edu/archives/fall2012/entries/ethics-search>.

² A search query is the word or string of words that an Internet user enters into the search box on a search engine.

³ See Geoffrey A. Manne & Joshua D. Wright, *If Search Neutrality Is the Answer, What's the Question?*, 2012 COLUM. BUS. L. REV. 151, 155 (citing BLACK'S LAW DICTIONARY 1140 (9th ed. 2009)).

⁴ See Marc Pinter-Krainer, *Google Antitrust Settlement Offer Rejected as "Not Acceptable" by EU Competition Chief*, ONE NEWS PAGE (Dec. 20, 2013), <http://www.onenewspage.com/n/Internet/74w63gmi6/Google-antitrust-settlement-offer-rejected-as-not-acceptable.htm#d5M3weuf2oGi4jLC.99>.

⁵ Jacqui Cheng, *EU Antitrust Enforcers Turn Their Eyes upon Google*, ARS TECHNICA (Feb. 23, 2010, 9:55 PM), <http://arstechnica.com/tech-policy/2010/02/eu-antitrust-enforcers-turn-their-eyes-upon-google/>.

⁶ See *infra* Part I.B.1.

⁷ See Press Release, FTC, Google Agrees to Change Its Business Practices to Resolve FTC Competition Concerns in the Markets for Devices like Smart Phones, Games and Tablets, and in Online Search (Jan. 3, 2013), <http://www.ftc.gov/news-events/press-releases/2013/01/google-agrees-change-its-business-practices-resolve-ftc>.

⁸ See *infra* Part II.C.

vestigated Google for unfair trade practices.⁹ Both investigations focused on whether Google's use of its dominance in search to promote its own services was a violation of antitrust law.¹⁰ In late December 2012, the FTC closed its investigation into Google's practices in exchange for a three-page letter from Google's Chief Legal Officer promising that Google would make and honor a few "commitments" over the next five years.¹¹ The commitments did not remedy search bias as Google merely promised to stop copying content from other websites without permission or accreditation and to stop making its advertisement platform incompatible with those of others to thwart competition.¹² In early February 2014, the EC reached a tentative settlement with Google that had more bite than the FTC's agreement, yet still left consumers vulnerable because the settlement guidelines did not fully restrict Google from violating search neutrality.¹³

As a consequence of the FTC not recognizing, and the EC not fully addressing, Google's lack of search neutrality, two of the world's largest superpowers are failing consumers.¹⁴ Unless a major antitrust agency takes a different approach than those of the FTC and EC,¹⁵ these gross violations of antitrust law will continue to be overlooked and harm consumers worldwide.

This Note argues that antitrust agencies should more strictly enforce search neutrality and should regulate Google under the essential facilities doctrine for using its market power to harm competition. The essential facilities doctrine requires a monopoly with control over

⁹ See, e.g., Matt Swider, *EU Rejects Google's Latest Antitrust Offer, Warns It's Running Out of Time*, TECHRADAR (Dec. 20, 2013), <http://www.techradar.com/news/internet/web/eu-rejects-google-s-latest-antitrust-offer-warns-its-running-out-of-time-1210304>.

¹⁰ See *id.*

¹¹ See generally Letter from David Drummond, Senior Vice President of Corporate Dev. and Chief Legal Officer, Google, to Jon Leibowitz, Chairman, FTC (Dec. 27, 2012), *available at* <http://www.ftc.gov/sites/default/files/attachments/press-releases/google-agrees-change-its-business-practices-resolve-ftc-competition-concerns-markets-devices-smart/130103googleletterchairmanleibowitz.pdf>.

¹² *Id.*

¹³ See generally Tom Körkemeier, *Third of EU Commissioners Oppose Google Antitrust Deal—Officials*, REUTERS, Feb. 13, 2014, *available at* <http://www.reuters.com/article/2014/02/13/eu-google-idUSL5N0LI2JQ20140213> (noting that one-third of the EC members opposed the EU decision because of concerns).

¹⁴ See *infra* Part II.

¹⁵ Most recently, the Competition Commission of India began investigating Google for violating antitrust law by demonstrating search bias. Google faces five billion dollars in fines. Jason Mick, *India Could Rock Google with Its Biggest Antitrust Fine Yet—\$5B USD*, DAILYTECH (Mar. 10, 2014, 8:12 PM), <http://www.dailytech.com/India+Could+Rock+Google+With+Its+Biggest+Antitrust+Fine+Yet++5B+USD/article34488c.htm>.

an essential facility or resource to share access unless there is a greater competitive justification for the behavior.¹⁶ This doctrine applies to Google because its search engine has reached the level of an essential facility in web search.¹⁷ Part I of this Note describes search engines, explains search neutrality, and analyzes how Google violates search neutrality. Part II analyzes how search bias violates antitrust law and details the lack of effective search neutrality enforcement, including the FTC's and EC's investigations into Google's practices. Part III proposes that consumers will benefit if antitrust agencies analyze Google under the essential facilities doctrine to enforce search neutrality.

I. SEARCH NEUTRALITY

"As the cartographers of the Internet, search engines wield great power."¹⁸ The Internet is not just a means to access information, but a major way to participate in the global economy, socialize, reach entertainment, and manage daily life tasks.¹⁹ Tech policy expert Susan Crawford explains that "[t]ruly high-speed wired Internet access is as basic to innovation, economic growth, social communication, and the country's competitiveness as electricity was a century ago."²⁰ The United Nations has even gone so far as to recognize access to the Internet as a human right, which indicates its importance to society.²¹

¹⁶ 3 WILLIAM HOLMES & MELISSA MANGIARACINA, *ANTITRUST LAW HANDBOOK* § 12 (2013). The doctrine was first applied to monopolies over railroads to require companies to share use of their tracks. *Id.*

¹⁷ See *infra* Part III.

¹⁸ Andrew Langford, Note, *gMonopoly: Does Search Bias Warrant Antitrust or Regulatory Intervention?*, 88 IND. L.J. 1559, 1559 (2013).

¹⁹ See Sam Gustin, *Is Broadband Internet Access a Public Utility*, TIME (Jan. 9, 2013), <http://business.time.com/2013/01/09/is-broadband-internet-access-a-public-utility/>.

²⁰ *Id.*

²¹ See Special Rapporteur on Freedom of Opinion and Expression, *Report of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression*, ¶ 67, Human Rights Council, U.N. Doc. A/HRC/17/27 (May 16, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/17session/A.HRC.17.27_en.pdf ("Unlike any other medium, the Internet enables individuals to seek, receive and impart information and ideas of all kinds instantaneously and inexpensively across national borders. By vastly expanding the capacity of individuals to enjoy their right to freedom of opinion and expression, which is an 'enabler' of other human rights, the Internet boosts economic, social and political development, and contributes to the progress of humankind as a whole.").

A. *What Is a Search Engine and How Does It Function?*

Search engines are gateways for Internet users to access the wealth of information that exists online.²² “They are librarians, who bring order to the chaotic online accumulation of information.”²³ Search systems have been developing over the past seven decades since the first information retrieval computer was created in the 1940s.²⁴ Just as computers have vastly improved over these decades, so have search engines.

1. *Defining a Search Engine*

A search engine’s ability to bring order to a vast amount of information is what makes it so powerful. Search engines capitalize on this ability to organize information by selling advertising space next to the organized content on their search results pages.²⁵ Companies purchase ad space next to specified search results because they believe those results are most relevant to the product or service they are selling.²⁶ Thus, search engines are two-sided platforms because they connect the advertisers to Internet users through this targeted advertising.²⁷ The advertising yields large profits and is the main source of income for most search engines, including Google.²⁸ Google’s online advertising program is called AdWords.²⁹ With AdWords, advertisers participate in an auction in which they bid on ninety-five-character ad space.³⁰ Bidders pay anywhere from a few

²² See Marina Lao, *Search, Essential Facilities, and the Antitrust Duty to Deal*, 11 Nw. J. TECH. & INTELL. PROP. 275, 279–80 (2013).

²³ James Grimmelman, *The Structure of Search Engine Law*, 93 IOWA L. REV. 1, 3 (2007).

²⁴ See Tavani, *supra* note 1, at § 2.1.

²⁵ See, e.g., Langford, *supra* note 18, at 1562–63.

²⁶ See *What Is AdWords?*, GOOGLE, <http://www.google.com/ads/learn/market-online/videos/what-is-adwords.html> (last visited Mar. 8, 2015).

²⁷ See, e.g., Langford, *supra* note 18, at 1562–63; James D. Ratliff & Daniel L. Rubinfeld, *Online Advertising: Defining Relevant Markets*, 6 J. COMPETITION L. & ECON. 653, 659–60 (2010) (“In many two-sided advertising scenarios, the profit-making side (the advertisers) must subsidize the consumer side, where the subsidy to the consumer is the provision of the nonadvertising content—typically for free or at least below the average cost of producing and distributing the content—that attracts the consumers in the first place.”).

²⁸ Langford, *supra* note 18, at 1562–64. In 2010, Google’s AdWords program generated revenue of \$8.83 billion in the United States and \$28 billion globally. See Brian J. Smith, Note, *Vertical vs. Core Search: Defining Google’s Market in a Monopolization Case*, 9 N.Y.U. J.L. & BUS. 331, 338 (2012).

²⁹ *What Is AdWords?*, *supra* note 26.

³⁰ Smith, *supra* note 28, at 337.

cents to tens of dollars every time a user clicks on an ad, and most often the ad space at the top of the page costs the most.³¹

There are two structurally different types of search engines: horizontal and vertical.³² Horizontal search engines include Google, Bing, and Yahoo. When the user enters a term into a horizontal search engine, it searches the entire Internet.³³ Google dominates horizontal search and possessed 64.4% of the market in the United States as of January 2015,³⁴ and approximately 90% of the market in Europe.³⁵

In contrast, the vertical search engine is “specialized,” so it searches only one area.³⁶ For example, Amazon is a vertical search engine used to search for items the Internet user can purchase, while Yelp is a vertical search engine used to search restaurant reviews. Some large horizontal search engines, like Google and Yahoo, have vertical search engine subsets such as Google Shopping and Yahoo! Shopping, respectively.³⁷

Recently, the use of vertical search engines has risen, as Yelp, Amazon, Kayak, and eBay have become more popular.³⁸ In July 2010, Internet users conducted 10.2 billion vertical searches and 15.2 billion horizontal searches.³⁹ Ad space on vertical search engines is more valuable to advertisers than on horizontal search engines because the audience is already searching for a specific product or service, allowing advertisers to more easily determine which ads are relevant and will be effective in producing sales.⁴⁰ Although Google has the most widely used horizontal search engine, its vertical search engines are not as popular. For example, Google Play is ranked third

³¹ See *id.* This method of billing per mouse-click is commonly referred to as “pay per-click.”

³² Horizontal and vertical in terms of search engines do not relate or correspond to horizontal or vertical restraints under antitrust law.

³³ See Langford, *supra* note 18, at 1564.

³⁴ *comScore Releases January 2015 U.S. Desktop Search Engine Rankings*, COMSCORE (Feb. 18, 2015), <http://www.comscore.com/Insights/Market-Rankings/comScore-Releases-January-2015-US-Desktop-Search-Engine-Rankings>.

³⁵ David Meyer, *Google May Have Struck an Antitrust Deal in Europe*, BLOOMBERGBUSINESS (Oct. 1, 2013), <http://www.businessweek.com/articles/2013-10-01/google-may-have-struck-an-antitrust-deal-in-europe>.

³⁶ Langford, *supra* note 18, at 1564.

³⁷ See *Shopping*, GOOGLE, <http://www.google.com/shopping> (last visited Mar. 8, 2015); *YAHOO! Shopping*, YAHOO, <http://shopping.yahoo.com/> (last visited Mar. 8, 2015).

³⁸ See Smith, *supra* note 28, at 339.

³⁹ *Id.* at 340.

⁴⁰ See *id.*

among the most visited vertical music playing websites⁴¹ while Google Plus is ranked fifth in social networking sites.⁴²

2. *The Mechanics of the Search Process*

The actual process of an online search works similarly to a librarian using indexes to search through a library of books.⁴³ The steps may vary slightly among search engines, but there are essentially five major steps in a Google search.⁴⁴ First, Google's search engine starts with a crawling and indexing process in which over sixty trillion individual pages are searched for words or phrases similar to the user's search query.⁴⁵ If a user searched for "dog beds," initially the search engine would search its entire index of pages for that phrase and ones similar to it.

Second, the relevant pages selected are sorted by content and "other factors," such as responsiveness of links on the site and number of relevant links to the site. All of this information is organized into an index, which fills over 100 million gigabytes.⁴⁶ To sort by content, Google's algorithms look for clues to understand what information the user intends to discover, and then pull the most relevant sites.⁴⁷ Accordingly, the search engine in the user's search for dog beds would look for clues from its programs about information a user usually seeks when searching for dog beds. The program would recognize that the user likely is not searching for how dog beds are made or the history of the dog bed, but rather for dog beds for purchase.⁴⁸ Then the search engine would utilize other factors to narrow down the pages displayed. For example, a website with fifteen broken links would be excluded even if it had information about dog beds for sale.

In the third step, Google narrows these results once more by interpreting signals to determine whether a page is trustworthy, reputa-

⁴¹ *Top 15 Most Popular Music Websites*, EBIZMBA GUIDE, <http://www.ebizmba.com/articles/music-websites> (last visited Mar. 8, 2015).

⁴² *Top 15 Most Popular Social Networking Sites*, EBIZMBA GUIDE, <http://www.ebizmba.com/articles/social-networking-websites> (last visited Mar. 8, 2015).

⁴³ *See Inside Search, How Search Works*, GOOGLE, http://www.google.com/intl/en_us/insidesearch/howsearchworks/thestory/ (last visited Mar. 8, 2015).

⁴⁴ *Id.*

⁴⁵ *See id.*

⁴⁶ *See id.*

⁴⁷ *Id.*

⁴⁸ *Cf.* Steven Levy, *Exclusive: How Google's Algorithm Rules the Web*, WIRED (Feb. 22, 2010, 12:00 PM), http://www.wired.com/magazine/2010/02/ff_google_algorithm/ (describing how Google uses signals to determine whether it should display commercial or noncommercial pages).

ble, or an authority on the subject.⁴⁹ PageRank is Google's system that makes these signal evaluations, and today it analyzes over two hundred factors about each page.⁵⁰ All search engines now have programs somewhat similar to PageRank that incorporate contextual signals, such as the number and importance of links the page shares with others,⁵¹ but none have been able to duplicate the success or skillfulness of Google's.⁵² For example, PageRank also analyzes the web page title; the "anchor text," which is the visible text that is hyperlinked to another page; the "freshness," which is the age of the web page; whether the page is an expert's site; and various factors personal to the user including safety settings, language, web history, and geographic location in order to favor local results.⁵³ Other search engines are beginning to incorporate some personal factors while generating their search results, but PageRank continues to dominate because Google has billions of Google search results to study and use to improve its algorithm.⁵⁴ Specifically, Google's extensive database enables the company to best determine which results are selected in relation to certain search queries and how search queries are adjusted to find the desired content.⁵⁵ At the end of the PageRank process, each webpage is assigned a rating based on a numerical system where the higher the number, the better the quality of the webpage.⁵⁶ Again, the search engine used for the "dog beds" search would determine the reputability of the different sources, so a web page that has not been updated for three years would be eliminated while a page of dog beds for sale from PetSmart or Amazon would rank near the top.

Fourth, in the most controversial step, Google implements its universal search.⁵⁷ Google's universal search "[b]lends relevant content, such as images, news, maps, videos, and [the user's] personal content, into a single unified search results page."⁵⁸ In doing so, the universal search blends the results of the two structurally different types of

⁴⁹ See *Inside Search, How Search Works*, *supra* note 43.

⁵⁰ See Levy, *supra* note 48.

⁵¹ See *id.*; see also *Inside Search, How Search Works*, *supra* note 43.

⁵² Levy, *supra* note 48.

⁵³ See *Inside Search, How Search Works*, *supra* note 43; Levy, *supra* note 48.

⁵⁴ See Levy, *supra* note 48.

⁵⁵ *Id.*

⁵⁶ See Sergey Brin & Lawrence Page, *The Anatomy of a Large-Scale Hypertextual Web Search Engine*, 30 *COMPUTER NETWORKS & ISDN SYSTEMS* 107, 109–10 (1998). The current PageRank program is thought to use a scale of one to ten, but the exact scale is not known.

⁵⁷ See *Inside Search, How Search Works*, *supra* note 43.

⁵⁸ *Id.*

search engines, vertical and horizontal, into a single results page.⁵⁹ Returning to the dog bed example, at this point a user would see the universal Google search page, which simultaneously displays the horizontal webpage results for dog beds to purchase and Google's vertical search engines, with Google Shopping at the top of the page and Google Images near the middle of the page.

The fifth and final layer of the search is Google's automatic removal of what it deems "spam."⁶⁰ There are several different types of spam, and search engines may evaluate spam differently. Google evaluates things like hidden text (using white text on a white background, locating text behind an image, or setting the font size to zero); keyword stuffing (loading a web page with keywords in lists or out of context in order to manipulate search results); and parked domains (placeholder sites that have minimal unique content).⁶¹ If Google classifies a site as spam, it will attempt to contact the owner of the website to allow the owner to fix the site and then submit the changes back to Google for the site to be considered for reinclusion.⁶² In the dog bed example, a web page called dogbeds.com would be eliminated from the results if it only linked to valid dog bed sellers but did not itself carry any value and was thus just a "parked domain." Throughout this complex process, search engines should ultimately seek to display the most relevant results that the user seeks. In actuality, however, not all search engines display the results in an unbiased and neutral fashion.

B. *What Is Search Neutrality?*

Because search engines are the main way to locate webpages, they must offer an unbiased way to reach this information, or else they may disproportionately maintain influence over consumer lifestyles and the global economy.⁶³ As tech policy expert Susan Crawford explains, the Internet is today's equivalent of electricity.⁶⁴ Just as everyone needs and deserves access to electricity, everyone needs a means to access the information available on the Internet. For the most part,

⁵⁹ See *Google: Universal Search*, SEARCH ENGINE LAND, <http://searchengineland.com/library/google/google-universal-search> (last visited Mar. 8, 2015).

⁶⁰ *Inside Search, How Search Works*, *supra* note 43.

⁶¹ *Id.*

⁶² *Id.*

⁶³ For an example of how Google influences the global economy, consider that in 2010, Google searches in the United States alone generated approximately \$55 billion. See Tavani, *supra* note 1, § 3.4.

⁶⁴ See Gustin, *supra* note 19.

as this cannot be done without a search engine,⁶⁵ society needs search engines that will provide undistorted access to the available information.

1. *Defining Search Neutrality*

Search neutrality is when a search engine produces the most useful results to the Internet user and displays them in order of best to worst quality without much adjustment, as consumers expect.⁶⁶ Conversely, search engine bias is when there has been “manipulation or shaping of search engine results.”⁶⁷ An unbiased search is considered organic because the results are “produce[d] without tampering,”⁶⁸ and the algorithm looks mainly at objective criteria like keywords, reputation of the page, and links.⁶⁹

Notably, neutrality in search does not mean that a search engine is completely unbiased. Scholars continue to attempt to define a method to determine what amount of manipulation constitutes search bias. Some advocate evaluating the first search results page to determine the scope of the search bias by a specific search engine.⁷⁰ Others allege that the level of bias depends on how extreme the manipulation is in total and how specific the search engine is in excluding results.⁷¹

A better approach, however, is to examine why the search engine altered the search results in that specific manner. The explanation for the bias will help in evaluating whether the search engine engages in unfair behavior under antitrust law. There are generally three reasons why a search engine will demonstrate search bias. First, some bias is inherent because the algorithm must search through results and dis-

⁶⁵ After a user finds a website through a search engine, she may thereafter choose to directly enter the web address into her browser to directly access the website, and thus she will no longer need a search engine to locate the information. But unless an ad or friend tells her about the website, the user is not likely to discover the site without first using a search engine.

⁶⁶ See, e.g., Manne & Wright, *supra* note 3, at 155–57.

⁶⁷ Oren Bracha & Frank Pasquale, *Federal Search Commission? Access, Fairness, and Accountability in the Law of Search*, 93 CORNELL L. REV. 1149, 1167 (2008); see also Manne & Wright, *supra* note 3, at 153 (describing search engine bias as the “activities of a search engine exercising its editorial discretion in a manner that advantages its own or affiliated content or that disadvantages rivals”).

⁶⁸ Langford, *supra* note 18, at 1561 n.18.

⁶⁹ Levy, *supra* note 48.

⁷⁰ David A. Hyman & David J. Franklyn, *Search Neutrality, Search Bias and the Limits of Antitrust: An Empirical Perspective on Architecture and Labeling Remedies* 13 (Univ. of Ill. Program in Law, Behavior & Soc. Sci. Research Paper No. LE13-24; Univ. of S.F. Law Research Paper No. 2013-15, 2014), available at <http://ssrn.com/abstract=2260942>.

⁷¹ See Bracha & Pasquale, *supra* note 67, at 1167–71.

criminate among them to choose which pages to reveal.⁷² As discussed, search engines like Google use upward of 200 contextual signals to discriminate between pages after the general indexing process,⁷³ which creates plenty of room for subjectivity because of the sheer number of factors that must be considered. A recent study showed that, in most search engines, nineteen percent of all links produced refer to the search engine's own content.⁷⁴ This type of bias is acceptable because it is the unavoidable result of a process that exists to create the best results for consumers.

The second motivation behind search bias is to personalize the web search to the user.⁷⁵ Personalization, as discussed above in Part I.0, is the way in which search engines track past searches and use that information to tailor current search results to the individual user. Opponents of such practices argue that personalization creates "invisible autopropaganda" that "indoctrinate[s] us with our own ideas."⁷⁶ This argument is not without merit. Search engine users expect to be presented with the same content as other users, but in actuality, search results are tailored to individual users.⁷⁷ Some suspect that search engines go so far as to consistently tailor results based on one's political affiliation.⁷⁸ For example, a web search on "climate change" may yield completely different results for someone the search engine determines to be a Democrat than for someone it determines to be a Republican.⁷⁹ Although this practice violates search neutrality by directly censoring each user's results, the search engine's motivation in applying this practice is still to provide the best or most desirable results for the consumer.⁸⁰ Therefore, because this bias is beyond the current scope of antitrust law, this Note will focus on the third motivation behind search bias, which several courts have already recognized raises antitrust issues.⁸¹

⁷² See Hyman & Franklyn, *supra* note 70, at 4–5.

⁷³ See Levy, *supra* note 48.

⁷⁴ See Hyman & Franklyn, *supra* note 70, at 13 (discussing a study by Edelman, who is a Harvard Business School Professor, and Lockwood).

⁷⁵ See, e.g., ELI PARISER, *THE FILTER BUBBLE: WHAT THE INTERNET IS HIDING FROM YOU* 113–14 (2011).

⁷⁶ *Id.* at 15.

⁷⁷ Tavani, *supra* note 1, § 3.1.3.

⁷⁸ *Id.* § 3.4.

⁷⁹ *Id.*

⁸⁰ *Id.* § 2.4.

⁸¹ See *KinderStart.com, LLC v. Google, Inc.*, No. C 06-2057 JF (RS), 2007 WL 831806, at *3, *7 (N.D. Cal. Mar. 16, 2007); *Search King, Inc. v. Google Tech., Inc.*, No. CIV-02-1457-M,

The third motivation of search bias occurs when a search engine hard codes, or manually programs,⁸² its own websites to the top of a page to promote them with blatant disregard for the algorithm that already determined the best results for consumers. Unlike the other two situations in which search bias occurs, this bias is unnecessary because the search engine manipulates the results solely to favor its own products and raise revenue without considering the quality of the results.⁸³ Thus, search neutrality ends as the search engine faces “mixed incentives.”⁸⁴ The incentive to provide users with the best results loses out to the incentive to promote the search engine’s own services.

Some scholars question whether there is meaningful harm if a search engine lists its own product first when the most relevant results are still listed on the same page. Studies indicate, however, that list order is the most important factor that influences the way in which users select links from search engine results pages.⁸⁵ Therefore, any manipulation of the search result order directly harms consumers as they no longer have the ability to discern which are the most relevant results⁸⁶ and they are not informed otherwise.

Others argue that it is permissible for search engines to hard code their own products first in the search results as long as they are labeled as the search engine’s products. An in-depth study evaluating click-through behavior, however, concluded that the layout and design of the search results page affects behavior far more than any labels.⁸⁷ Layout and design are so influential because user awareness of labeling is extremely low, even for labels that are “far more explicit” than normal, average labels.⁸⁸ Therefore, labeled or not, the hard coding of a search engine’s own products is harmful to consumers and does not provide them with the best access to online information.

2003 WL 21464568, at *3–5 (W.D. Okla. May 27, 2003); *Google, Inc. v. myTriggers.com, Inc.*, No. 09CVH10-14836, 2011 WL 3850286, slip op. at 9 (Ohio Ct. Com. Pl. Aug. 31, 2011).

⁸² *Definition of: Hard Coded*, *Encyclopedia*, PC MAG., <http://www.pcmag.com/encyclopedia/term/44076/hard-coded> (last visited Mar. 8, 2015).

⁸³ See Lao, *supra* note 22, at 280–82.

⁸⁴ *FairSearch Principles for Evaluating Remedies to Google’s Antitrust Violations*, FAIR-SEARCH, <http://www.fairsearch.org/uncategorized/fairsearch-principles-for-evaluating-remedies-to-googles-antitrust-violations/> (last visited Mar. 8, 2015).

⁸⁵ See, e.g., Hyman & Franklyn, *supra* note 70, at 4. The way in which users select links on a page is commonly referred to as “click through” behavior.

⁸⁶ See, e.g., James D. Ratliff & Daniel L. Rubinfeld, *Is There a Market for Organic Search Engine Results and Can Their Manipulation Give Rise to Antitrust Liability?*, 10 J. COMPETITION L. & ECON. 517, 519–21 (2014) (describing how, if Google lists its own products over less relevant results, users experience poorer results).

⁸⁷ See Hyman & Franklyn, *supra* note 70, at 2.

⁸⁸ *Id.*

2. *How Google Violates Search Neutrality*

Google's motivation for its search bias easily settles into the third category discussed above. Google uses hard coding in violation of search neutrality in two situations, both of which are motivated by self-serving reasons. First, Google hard codes its own content to the top of the first search results page in order to promote its own products and increase its own revenue.⁸⁹ For example, when a user conducts a search for "Washington, D.C.," Google's Maps, Images, and News vertical search engines are automatically displayed on the first page along with the other horizontal search results.⁹⁰ These vertical search engines are listed above other results that are more relevant to the Internet user and would be listed first if Google's algorithms were not manually manipulated.⁹¹ Google's former Vice President of Search Products and User Experience even expressly admitted to this practice in a 2007 speech.⁹² She stated that before Google had Google Finance, it was "actually ordering the links based on various published metrics," but once Google Finance was rolled out, Google displayed it first in the search results.⁹³ Moreover, she explained that this has been Google's policy for all subsequent Google products.⁹⁴

Second, Google both threatens and uses hard coding to remove certain websites from its search results to harm these competitors and increase Google's own revenue. For example, Jeremy Stoppelman, Chief Executive Officer of Yelp! Inc., testified in front of Congress that Google threatened to delist Yelp from its horizontal search results if Yelp protested about Google taking original Yelp user reviews and copying them into Google Plus.⁹⁵ This threat is effective because of Google's dominance in horizontal search. A delisting from Google's horizontal search is often the death knell for a website because of the drastic decrease in website traffic. For example, a pet

⁸⁹ See *id.* at 3, 7–9, 13.

⁹⁰ See Benjamin Edelman, *Hard-Coding Bias in Google "Algorithmic" Search Results*, BENEDELMAN.ORG (Nov. 15, 2010), <http://www.benedelman.org/hardcoding/>.

⁹¹ See *id.*

⁹² See GoogleTechTalks, *Seattle Conference on Scalability: Scaling Google for Every User*, YOUTUBE (Oct. 8 2007), at 44:30–45:30, <http://www.youtube.com/watch?v<1UFZSbcxE>.

⁹³ *Id.*

⁹⁴ See *id.*

⁹⁵ *The Power of Google: Serving Customers or Threatening Competition?: Hearing Before the Subcomm. on Antitrust, Competition Policy, and Consumer Rights of the S. Comm. on the Judiciary*, 112th Cong. 37 (2011) (statement of Jeremy Stoppelman, Co-Founder and Chief Executive Officer, Yelp, Inc.).

supply website recently experienced a ninety-six percent decrease in its website traffic after Google removed it from its horizontal search.⁹⁶

Both of these examples are unacceptable violations of search neutrality by Google. The only reasons for which Google should demote websites from its results are irrelevance or spam.⁹⁷ Instead, Google demotes, or threatens to demote, as in the Yelp case, websites when they threaten the competitiveness of its own products.⁹⁸ These acts of self-promotion and selective punishment are not based on the merits of webpages and interfere with consumers' access to the most relevant information.⁹⁹

Some argue that Google does not violate search neutrality because search engines should be able to freely advertise, or list their own websites on their own search engines, just as magazine publishers may freely advertise in their own magazines.¹⁰⁰ This assertion ignores two key facts that differentiate Google and its search engine from a magazine publisher. First, Google represents its search results as listed in order of relevance,¹⁰¹ so listing a less-relevant Google product above a more-relevant non-Google product is deceptive to consumers. Second, as discussed above in the Yelp example, Google abuses its monopoly power by taking actions like threatening to remove a website unless it allows Google to scrape its content.¹⁰² In the magazine

⁹⁶ Sarah E. Needleman & Emily Maltby, *As Google Tweaks Searches, Some Get Lost in the Web*, WALL ST. J., May 17, 2012, at B1.

⁹⁷ Google must, however, adhere to its own policies of notifying websites and allowing a period to correct the error and a process to resubmit the website, as previously discussed. *See supra*, Part I.A.2. Spam, as discussed in Part I.A.2, includes deceptive hidden text or parked domains.

⁹⁸ *See* Cheng, *supra* note 5.

⁹⁹ A useful analogy to fully recognize the harm of this search bias is to compare the Internet to public libraries. The public library system is intended to "serve the information and educational needs of society, with open and equal access for all patrons," which the Supreme Court has generally recognized in its "right to receive" doctrine. Barbara H. Smith, *The First Amendment Right to Receive Online Information in Public Libraries*, 18 COMM. L. & POL'Y 63, 63 (2013) (footnote omitted). Assume public libraries started publishing books. If a library goer searched for a certain subject and was immediately directed to the books the library published, society would not be served with the most relevant or useful information, but the information that will most benefit the library if distributed. Google, with its violations of search neutrality, takes this simple principle and runs wild with it by delisting websites from its search results altogether. In the public library analogy, this is the equivalent of the library not only displaying their own books first, but also completely removing other books on the same subject from the shelves.

¹⁰⁰ *See* Ratliff & Rubinfeld, *supra* note 86, at 525–26.

¹⁰¹ *See See a Page's Importance Using PageRank*, GOOGLE, <https://support.google.com/toolbar/answer/79837?hl=EN> (last visited Mar. 8, 2015).

¹⁰² *See supra* note 95 and accompanying text.

scenario, this is the equivalent of the publisher threatening to remove an article about a business unless the business shares information about its customers with the publisher, which the publisher would in turn use to improve its own advertisements with more detailed information.

II. ENFORCEMENT OF SEARCH NEUTRALITY AGAINST GOOGLE

Despite the importance of search neutrality and the extent of Google's violations, there has been a surprisingly low amount of anti-trust enforcement and litigation.¹⁰³ Each investigation has either failed to fully neutralize Google's search bias or failed to even address it at all. These outcomes are not due to a lack of culpability, but resulted from a lack of adequately pled complaints and a hesitance to regulate new technology.

A. Search Neutrality Under Antitrust Law

Each case against Google and its violations of search neutrality has centered on whether Google abused its monopoly power under section 2 of the Sherman Act.¹⁰⁴ Determining whether a firm has abused its monopoly power is a complex process that requires two steps.¹⁰⁵ First, the firm must have substantial market power, and, second, the firm must have behaved improperly to gain or sustain its market power.¹⁰⁶

To determine whether a business holds substantial market power, the relevant market must be defined.¹⁰⁷ Then direct evidence and circumstantial evidence may be used to prove substantial market power.¹⁰⁸ Acceptable direct evidence includes showing that the busi-

¹⁰³ See, e.g., *KinderStart.com, LLC v. Google, Inc.*, No. C 06-2057 JF (RS), 2007 WL 831806 (N.D. Cal. Mar. 16, 2007); Press Release, FTC, *supra* note 7; Rupert Neate, *EU Investigates Google's Dominance in Search*, TELEGRAPH (Nov. 30, 2010, 12:15 PM), <http://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/8170351/EU-investigates-Google-dominance-in-search.html>.

¹⁰⁴ See Sherman Act, 15 U.S.C. §§ 1–7 (2012); *id.* § 2, 15 U.S.C. § 2 (“Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding \$100,000,000 if a corporation, or, if any other person, \$1,000,000, or by imprisonment not exceeding 10 years, or by both said punishments, in the discretion of the court.”).

¹⁰⁵ See ANDREW I. GAVIL, WILLIAM E. KOVACIC & JONATHAN B. BAKER, *ANTITRUST LAW IN PERSPECTIVE: CASES, CONCEPTS AND PROBLEMS IN COMPETITION POLICY* 582 (2d ed. 2008).

¹⁰⁶ *Id.* at 582–83.

¹⁰⁷ *Id.* at 583.

¹⁰⁸ *Id.* at 479.

ness had an effect on the price or quality of the good or service in the market or that the business intended to exclude competitors from the market.¹⁰⁹

Circumstantial evidence involves an analysis of the relevant product market and then a determination of the business's market share in that relevant product market.¹¹⁰ To define the product market, one must consider how reasonably interchangeable the product is with similar substitute products.¹¹¹ For example, the extent to which firms monitor and respond to marketing decisions of other products or customer testimony about substituting products may be used to determine the cross-elasticity of the demand between the product and its substitutes.¹¹²

Once the relevant product market has been defined, the market share must be calculated.¹¹³ Generally, a market share of less than forty percent indicates there is no illegal monopolization; a market share between forty and seventy percent means there may be illegal monopolization so further analysis of whether the firm behaved improperly is needed; a market share over seventy percent likely means there was illegal monopolization; and a market share over ninety percent is almost a guarantee of illegal monopolization.¹¹⁴ The longer a firm has held its market share, the more likely that there was illegal monopolization.¹¹⁵

The second step in proving an illegal monopoly is showing that the firm behaved improperly to either gain or sustain its market power.¹¹⁶ There are several categories of improper behavior recognized by the courts. These categories include excluding rivals or raising rivals' costs in a manner that is not the mere result of a superior

¹⁰⁹ *Id.* at 480.

¹¹⁰ *Id.* at 481.

¹¹¹ *See id.* But just because two products are competitors does not mean they are necessarily within the same market. *See* *United States v. H & R Block, Inc.*, 833 F. Supp. 2d 36, 51 (D.D.C. 2011); *FTC v. Staples, Inc.*, 970 F. Supp. 1066, 1075 (D.D.C. 1997). To determine whether two products are within the same market, one must look at price, use, and relative qualities of the products. *See* GAVIL ET AL., *supra* note 105, at 488.

¹¹² *See* GAVIL ET AL., *supra* note 105, at 495. Cross-elasticity is the extent to which the prevalence of one product in the market will affect the demand for another in the same market. It is essentially a measure of interchangeability.

¹¹³ *Id.* at 480–81.

¹¹⁴ *See, e.g.*, *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 481 (1992); *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 424 (2d Cir. 1945). Alternatively, in Europe a market share over forty percent is often enough to prove illegal monopolization. *See* RICHARD WHISH & DAVID BAILEY, *COMPETITION LAW* 26 & n.122, 46–47 (7th ed. 2012).

¹¹⁵ *See* GAVIL ET AL., *supra* note 105, at 480 fig.5-4.

¹¹⁶ *Id.* at 582.

product, superior business, or historic element;¹¹⁷ predatory pricing, which is when a firm drastically drops prices to drive competitors out of business or out of the market and then drastically raises prices to recoup more than it lost;¹¹⁸ bundling, which is the discounting of a group of products to the extent that the pricing is predatory;¹¹⁹ refusing to deal with competitors;¹²⁰ adjusting product design for the sole purpose of making the product incompatible with parts made by other firms;¹²¹ and refusing to deal when the firm possesses an essential facility.¹²²

B. Search Neutrality and Antitrust Caselaw

The first case to address search engines and rankings was *Search King, Inc. v. Google Technology, Inc.*¹²³ In this case, Search King sued Google for interfering with its contractual relations after Google decreased its PageRank from eight to four and the company's affiliate's score to zero after Search King had been selling ads on highly ranked websites.¹²⁴ The court found for Google because its PageRank did not contain "provably false connotations," concluding that PageRank is an opinion or expression, not fact, and is thus entitled to "full constitutional protection" under the First Amendment.¹²⁵

The next significant case came four years later with *KinderStart.com, LLC v. Google, Inc.*¹²⁶ In this case, the plaintiff KinderStart, a vertical search engine for information related to young children, alleged that Google violated section 2 of the Sherman Act

¹¹⁷ See *United States v. Microsoft Corp.*, 253 F.3d 34, 54–71 (D.C. Cir. 2001).

¹¹⁸ See *Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 222–25 (1993). The plausibility of recoupment in predatory pricing depends on the firm's production capacity and barriers to entry. See *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 589–92 (1986).

¹¹⁹ See *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883, 894, 896, 906 (9th Cir. 2008).

¹²⁰ See GAVIL ET AL., *supra* note 105, at 849–51. This category, however, has essentially been erased by *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013). As a result of *Actavis*, now the Supreme Court applies a more deferential standard to refusal to deal claims, which often arise in patent disputes. See *id.* at 2237–38.

¹²¹ See *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 288 (2d Cir. 1979).

¹²² Robert Pitofsky, Donna Patterson & Jonathan Hooks, *The Essential Facilities Doctrine Under U.S. Antitrust Law*, 70 ANTITRUST L.J. 443, 445–46 (2002).

¹²³ *Search King, Inc. v. Google Tech., Inc.*, No. CIV-02-1457-M, 2003 WL 21464568 (W.D. Okla. May 27, 2003).

¹²⁴ See *id.* at *1–2.

¹²⁵ *Id.* at *4 (internal quotation marks omitted).

¹²⁶ *KinderStart.com, LLC v. Google, Inc.*, No. C 06-2057 JF (RS), 2007 WL 831806 (N.D. Cal. Mar. 16, 2007).

for monopolization in search and search advertising markets after it stopped listing KinderStart's website in its search results.¹²⁷ Google did not notify KinderStart of the delisting, which resulted in a decrease of over seventy percent in page views and traffic and a decrease of eighty percent in ad revenues for KinderStart.¹²⁸ KinderStart alleged that it did not violate Google's Web Recommendations and that Google "artificially manipulates and deflates PageRanks downward . . . based on events, factors, impression and opinions having no correlation, relation or connection to the . . . PageRank algorithm."¹²⁹ The court found for Google because it determined that KinderStart failed to properly define the relevant market, which is the first step in establishing attempted monopolization.¹³⁰ The court found that a search market was not a "market," relying on *Rebel Oil Co. v. Atlantic Richfield Co.*¹³¹ to narrowly define "market" as "any grouping of sales," which it found did not include the search market because search engines provide searches for free.¹³² The court also found that the search advertising market was not distinct from other forms of advertising on the Internet so the market definition was broader than KinderStart alleged, which meant that Google's market share was not large enough to constitute a monopoly within the general advertising market in contrast to the narrower search advertising market.¹³³ Finally, the court found that KinderStart failed to state a claim because it failed to demonstrate a nexus between the harm it experienced and harm to competition and consumers.¹³⁴

In *Google, Inc. v. myTriggers.com, Inc.*,¹³⁵ Google once again escaped liability in the final search neutrality case that preceded the FTC's and EC's investigations into Google. MyTriggers.com, a vertical search engine that focuses on shopping, counterclaimed after Google filed suit seeking to collect payment for advertising services.¹³⁶ MyTriggers.com alleged that Google was affording its own services and several other vertical search engines preferential treatment by use of unlawful agreements and other anticompetitive restrictions on the

¹²⁷ *Id.* at *2, *4.

¹²⁸ *Id.* at *2–3.

¹²⁹ *Id.* at *3 (internal quotation marks omitted).

¹³⁰ *See id.* at *5.

¹³¹ *Rebel Oil Co. v. Atl. Richfield Co.*, 51 F.3d 1421, 1434 (9th Cir. 1995).

¹³² *KinderStart.com*, 2007 WL 831806, at *5.

¹³³ *Id.* at *5–6.

¹³⁴ *Id.* at *10–11.

¹³⁵ *Google, Inc. v. myTriggers.com, Inc.*, No. 09CVH10-14836, 2011 WL 3850286 (Ohio Ct. Com. Pl. Aug. 31, 2011).

¹³⁶ *Id.* slip op. at 1-2.

search advertising market.¹³⁷ The court found, however, that myTriggers.com failed to allege harm to competition rather than merely to itself, so the harm was not sufficient to overcome the *Twombly* pleading standard.¹³⁸

C. The United States's Investigation into Google and Its Failure to Recognize the Anticompetitive Effects of Search Bias

The FTC first began investigating Google in 2010 to determine whether it demonstrated search bias by manipulating its search algorithms to harm other vertical search engines while unfairly promoting its own.¹³⁹ The investigation centered on Google's "Universal Search,"¹⁴⁰ which is the search mechanism that displays all results on a single page and almost always includes several of Google's vertical search engines.¹⁴¹ The Commission investigated whether this behavior violated section 5 of the Federal Trade Commission Act,¹⁴² which prohibits unfair methods of competition and behavior that may cause significant injury to competition (like monopolization under section 2 of the Sherman Act).¹⁴³ The key issue for the Commission was to determine whether Google excluded certain results to harm competitors or to improve the quality of its search and user experience.¹⁴⁴

The Honorable Jon Leibowitz, Chairman of the FTC, concluded on January 3, 2013, that the FTC would not file a complaint against Google because evidence supported a finding that Google "likely benefited [sic] consumers by prominently displaying its vertical content on its search results page."¹⁴⁵ Even though Google's display of its own

¹³⁷ *Id.* slip op. at 3.

¹³⁸ The *Twombly* pleading standard requires that the plaintiff prove the anticompetitive effects of the alleged illegal conduct in order for the antitrust claim to survive a Rule 12(b)(6) motion. *See id.* slip op. at 8 (citing *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 557 (2007)).

¹³⁹ Press Release, FTC, *supra* note 7.

¹⁴⁰ FTC, STATEMENT OF THE FEDERAL TRADE COMMISSION REGARDING GOOGLE'S SEARCH PRACTICES *In the Matter of Google Inc.* FTC File Number 111-0163, at 1 (2013) [hereinafter FTC STATEMENT], available at http://www.ftc.gov/sites/default/files/documents/public_statements/statement-commission-regarding-googles-search-practices/130103brillgooglesearchstmt.pdf.

¹⁴¹ *See* Levy, *supra* note 48.

¹⁴² Federal Trade Commission Act, 15 U.S.C. §§ 41–58 (2012); *id.* § 5, 15 U.S.C. § 45 (“(1) Unfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce, are hereby declared unlawful. (2) The Commission is hereby empowered and directed to prevent persons, partnerships, or corporations . . . from using unfair methods of competition in or affecting commerce and unfair or deceptive acts or practices in or affecting commerce.”).

¹⁴³ FTC STATEMENT, *supra* note 140, at 2.

¹⁴⁴ *See id.*

¹⁴⁵ *Id.*

vertical search results had the effect of pushing other results “below the fold,” the Commission unanimously decided that Google’s primary goal in referencing its own content was to more quickly respond to users’ search queries and improve user satisfaction.¹⁴⁶ Moreover, the Commission found Google’s practice of “selectively demot[ing] its competitors’ content” was not a concern either.¹⁴⁷ The Commission recognized that Google’s rivals might have lost sales when Google changed its product design, but it relied on the proposition that the adverse effects from competition are not something that competition law punishes.¹⁴⁸ The Commission found that the fact that rival search engines adopted similar product design changes after Google supported that these changes were about user experience and not competition.¹⁴⁹ Finally, the Commission declined to file a complaint even though Jon Leibowitz acknowledged that “some evidence suggested that Google was trying to eliminate competition.”¹⁵⁰

In exchange for the FTC declining to file a complaint, Google’s Senior Vice President of Corporate Development and Chief Legal Officer submitted a three-page Commitment Letter to the Chairman of the FTC.¹⁵¹ The letter includes several commitments to remedy some of the FTC’s initial concerns about misappropriating content from other vertical sites, like Yelp, and states that a violation of these commitments will lead to charges under section 5 of the Federal Trade Commission Act.¹⁵² In addition, when websites opt out, Google is not allowed to delist or threaten to delist the website from its horizontal search results.¹⁵³ Notably, no commitments were made that affect Google preferencing its own products.

The FTC was far too lenient towards Google. Perhaps this was because Google has aggressively sought to develop a strong, positive reputation as a progressive company.¹⁵⁴ Google represents itself to

¹⁴⁶ *Id.* (internal quotation marks omitted).

¹⁴⁷ *Id.* at 1; see also Letter from David Drummond, *supra* note 11.

¹⁴⁸ FTC STATEMENT, *supra* note 140, at 2.

¹⁴⁹ *Id.*; James Grimmelman, *Some Skepticism About Search Neutrality* (N.Y. Law Sch. Legal Studies, Research Paper Series 10/11 # 20, 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1742444.

¹⁵⁰ JON LEIBOWITZ, CHAIRMAN, FTC, GOOGLE PRESS CONFERENCE OPENING REMARKS OF FEDERAL TRADE COMMISSION CHAIRMAN JON LEIBOWITZ AS PREPARED FOR DELIVERY 5 (2013), available at <http://www.ftc.gov/speeches/leibowitz/130103googleleibowitzremarks.pdf>.

¹⁵¹ See Letter from David Drummond, *supra* note 11.

¹⁵² *Id.*

¹⁵³ Press Release, FTC, *supra* note 7.

¹⁵⁴ See Tom Hamburger & Matea Gold, *Google’s Power Play*, WASH. POST, Apr. 13, 2014, at A1 (detailing Google’s lobbying efforts on search). The myth that Google is all about con-

Internet users as an unbiased gateway to access the wealth of information on the Internet¹⁵⁵ when, in reality, it uses deceptive practices and filters search results to favor its own products and services.

There were several problems with the FTC settlement. First, Google's preference for its own products was for its own benefit rather than that of consumers. This is directly evidenced by Google's Vice President of Search Products and User Experience's statement that Google automatically puts its products first without testing what is best for consumers.¹⁵⁶ Google automatically places its products high on the search results page because, as discussed above, placement on a webpage is the determinative factor of where a user will click. Therefore, Google places its results high on the page, if not first, to receive more clicks and ultimately more revenue. Because Google represents that the highest results will be the most relevant, the company's actual strategy is anticompetitive and deceptive.¹⁵⁷

Second, although the FTC acknowledged that Google's displaying of its own vertical search results demoted other results onto subsequent pages, it did not consider the long-term effects on consumers of allowing search bias.¹⁵⁸ While the instant diversity this creates on a universal search page may be beneficial now, consumers will ultimately benefit if further competition is allowed to develop better alternatives. Innovation is also stifled as Google's products and services experience traffic that should have gone to competitors had Google used unbiased search display methods.¹⁵⁹ In addition, the FTC failed to recognize that labeling Google's results while demoting results

sumers with no other motives is debunked when some of Google's most recent anticonsumer actions are more closely examined. See David Kravets, *An Intentional Mistake: The Anatomy of Google's Wi-Fi Sniffing Debacle*, WIRED (May 2, 2012, 7:18 PM), <http://www.wired.com/threatlevel/2012/05/google-wifi-fcc-investigation/> (describing how the software in Google's Street View mapping cars was programmed to intentionally collect private payload data from open Wi-Fi networks as the cars drove by in over a dozen countries); Claire Cain Miller, *The Plus in Google Plus? It's Mostly for Google*, N.Y. TIMES, Feb. 15, 2014, at A1 (describing how Google is not concerned that Facebook offers a better product to consumers because Google Plus provides unprecedented information about users online behavior that may one day be sold for billions to advertisers).

¹⁵⁵ See *Mission Statement*, GOOGLE, www.google.com/about/company (last visited Mar. 8, 2015) ("Google's mission is to organize the world's information and make it universally accessible and useful.").

¹⁵⁶ See GoogleTechTalks, *supra* note 92.

¹⁵⁷ But see Ratliff & Rubinfeld, *supra* note 86, at 541 (asserting that Google does not harm competition when it preferences its own products over that of other companies in Google search results).

¹⁵⁸ See FTC STATEMENT, *supra* note 140, at 2.

¹⁵⁹ See, e.g., Manne & Wright, *supra* note 3, at 181–83.

from others does not meaningfully correct the misrepresentation of the most relevant results because consumers largely do not take labels into consideration, only placement.¹⁶⁰

Third, the FTC failed to adequately reprimand Google for using its horizontal search dominance to suppress other vertical search engines. This mild warning will not serve as a deterrent to Google or future companies.¹⁶¹ As a result, by not enforcing search neutrality, antitrust agencies are actually harming the advancement of technology and lessening the corresponding benefits to consumers in a field where consumers most need protection.

D. The European Union's Investigation into Google and Its Failure to Fully Regulate Google's Violations of Search Neutrality

The EC and DG also investigated Google for charges including an abuse of dominance in horizontal search to gain power in vertical search and the improper display of content copied without permission from other websites.¹⁶² The EC conducted a similarly in-depth investigation of Google; however, in contrast to the FTC commitment letter, the EC required a settlement that was reached only after several proposals and market tests of the proposals.¹⁶³ Like the FTC investigation, the EC's investigation centered on the search issue, and this investigation turned into a four-year ordeal that has not yet been resolved.¹⁶⁴ The EC was otherwise quickly satisfied with the commitments reached—that Google would allow websites to opt out from the collection of their content and that Google could not consider whether a website has opted out when it determines its generic search result rankings.¹⁶⁵

In contrast, the search bias portion of the settlement is extensive, and the Commission has yet to conclude that the “final settlement” of September 2014 is actually final.¹⁶⁶ This settlement, detailed below,

¹⁶⁰ See Hyman & Franklyn, *supra* note 70, at 2.

¹⁶¹ This was demonstrated in the case of Yelp. See *supra* Part I.A.2.

¹⁶² See Joaquín Almunia, Vice President of the European Comm'n Responsible for Competition Policy, Remarks at the European Parliamentary Hearing in Brussels: The Google Antitrust Case: What Is at Stake? (Oct. 1, 2013), available at http://europa.eu/rapid/press-release_SPEECH-13-768_en.pdf.

¹⁶³ Körkemeier, *supra* note 13.

¹⁶⁴ *Search Over: Google, the EU and Antitrust*, ECONOMIST, Feb. 8, 2014, at 63, 63–64.

¹⁶⁵ Proposed Commitments, European Comm'n, Commitments in Case COMP/C-3/39.740—*Foundem and Others*, ¶¶ 8–12 (April 3, 2013) [hereinafter Commitments], available at http://ec.europa.eu/competition/antitrust/cases/dec_docs/39740/39740_8608_5.pdf.

¹⁶⁶ Charles Arthur, *European Commission Reopens Google Antitrust Investigation*, GUARDIAN (Sept. 8, 2014, 12:09 PM), <http://www.theguardian.com/technology/2014/sep/08/euro>

continues to receive extreme amounts of criticism from both companies and politicians, many of whom assert that no deal would have been better than that of Joaquín Almunia, the EU antitrust commissioner.¹⁶⁷ The amount of delay and number of attempts to finalize the settlement are unprecedented for an EC antitrust investigation,¹⁶⁸ which shows the importance of the issues at stake.

The Commission's most recent settlement maintains that if Google displays its own vertical content, it must (1) clearly label that content to indicate that it is a specialized Google result, (2) show users where to find non-Google alternatives, (3) display Google results in an area separate from the generic search results, and (4) provide three links to competing services in a clear manner.¹⁶⁹ Google will select these three rival links from a Vertical Sites Pools program that vertical search engines will apply to join.¹⁷⁰

The selection process is explicitly defined in the settlement. For searches that are not accompanied by paid ads, i.e., a search for "horse," Google must use objective criteria to choose which sites to list, including whether sites deceive consumers, violate security violations or any applicable law, lack responsiveness of links, or have poor overall user experience quality.¹⁷¹ Then Google will choose the three websites with the highest web search rank.¹⁷² Google must also monitor the quality of the consumer experience, and if it is degraded by the display of any of the three websites, Google must contact the monitoring trustee and Commission before removal or even contacting the website.¹⁷³

In other searches that display paid ads, Google again must display the links of three rivals sites, but here Google can charge a per-click fee to the sites.¹⁷⁴ These three websites will be determined through an auction system, or at random from a pool of winning sites, and will be

pean-commission-reopens-google-antitrust-investigation-after-political-storm-over-proposed-settlement; Vanessa Mock, *Google's Tough European Summer: Android and Online Search Probes*, WALL ST. J. REAL TIME BRUSSELS BLOG (Aug. 8, 2014, 6:04 AM), <http://blogs.wsj.com/brussels/2014/08/08/online-search-and-now-android-googles-tough-european-summer/>.

¹⁶⁷ Arthur, *supra* note 166; Mock, *supra* note 166.

¹⁶⁸ Tom Fairless, *EU Prepares to Step Up Google Investigations*, WALL ST. J. (July 22, 2014, 3:01 PM), <http://online.wsj.com/articles/eu-may-revise-googles-antitrust-settlement-says-source-1406046253>.

¹⁶⁹ Commitments, *supra* note 165, ¶¶ 1–2.

¹⁷⁰ *Id.* at Annex 1 ¶ 1(a)–(b).

¹⁷¹ *Id.* at Annex 1 ¶¶ 2–5.

¹⁷² *Id.* at Annex 1 ¶6.

¹⁷³ *Id.* at Annex 1 ¶ 7.

¹⁷⁴ *Id.* at Annex 1 ¶ 8.

charged the highest losing bid.¹⁷⁵ The minimum reserve price may vary but may not exceed ten Euro cents,¹⁷⁶ and competitors will likely pay at least three Euro cents.¹⁷⁷

The settlement is compelling in that it at least addresses search bias and specifically mandates how Google must appoint an independent team to monitor Google's implementation of these commitments that limit Google from completely preferencing its own products.¹⁷⁸ Yet the effectiveness of the settlement ends there. First, the settlement makes the fatal mistake of continuing to allow Google to place its results in the top or most prominent position.¹⁷⁹ Supporters assert that the settlement remedies this issue because it requires Google to label these results as its own; but, as studies have shown, labeling is irrelevant to users and placement is the determinative factor of where the user will click.¹⁸⁰ This treatment is far from allowing users to choose the best alternative by giving them "real choice" between competing products presented in a comparable manner, as Almunia claims the settlement provides.¹⁸¹

Second, the settlement actually increases Google's dominance and weakens rivals, as they have to pay to be displayed equally with Google's content regardless of whether or not they offer content of better or equivalent quality to Google's.¹⁸² Although the per-click

¹⁷⁵ *Id.* at Annex 1 ¶¶ 9–12.

¹⁷⁶ *Id.* at Annex 1 ¶ 11.

¹⁷⁷ See Aoife White, *Google Publishes Concessions Deal to Settle EU Antitrust Probe*, BLOOMBERGBUSINESS (Feb. 14, 2014, 12:59 PM), <http://www.bloomberg.com/news/2014-02-14/google-publishes-concessions-deal-to-settle-eu-antitrust-probe.html>.

¹⁷⁸ See Commitments, *supra* note 165, ¶¶ 1–7, 34–61.

¹⁷⁹ See *infra* Figure 1.

¹⁸⁰ Hyman & Franklyn, *supra* note 70, at 2.

¹⁸¹ Ian Traynor, *Brussels Accepts Google's Third Peace Offering in EU Antitrust Suit*, GUARDIAN (Feb. 5, 2014, 1:58 PM), <http://www.theguardian.com/technology/2014/feb/05/google-third-offer-eu-antitrust-suit-competitors-links-display> (quoting Commissioner Almunia).

¹⁸² Thomas Vinje, *FairSearch Europe Initial View: Google's Proposed Commitments Are Worse than Nothing*, FAIRSEARCH, <http://www.fairsearch.org/deceptive-display/fairsearch-europe-initial-view-googles-proposed-commitments-are-worse-than-nothing/> (last visited Mar. 8, 2015) [hereinafter Vinje, *FairSearch Europe Initial View*] (describing the commitments as worse than doing nothing at all); Thomas Vinje, *FairSearch Europe Urges European Commission to Make Google Proposal Public, Proposal Reinforces Google's Dominant Position Instead of Remediating Problems*, FAIRSEARCH, <http://www.fairsearch.org/search-manipulation/fairsearch-europe-urges-european-commission-to-make-google-proposal-public-proposal-reinforces-googles-dominant-position-instead-of-remediating-problems/> (last visited Mar. 8, 2015) ("To redress Google's abuse of its dominant position, the proposed commitments reportedly would charge competing 'vertical search engines' to display (for example) their travel, accommodation or flight services on a results page in a position where consumers will notice. But Google's own vertical search services will maintain preeminent positions on the search page and will not have to pay for placement. This combination of payment and secondary placement will merely rein-

fees are relatively low, they will accumulate quickly. Moreover, the fees act as a penalty to the rival websites, which have done nothing wrong, and a benefit to Google, which is providing no benefit to websites that it charges to list below its own results when these websites would be listed first on a search engine that respected search neutrality.

Third, the accepted settlement was not subject to a market test. This is especially concerning as the prior two proposals were rejected only after market testing, which quickly revealed their inadequacies.¹⁸³ Some speculate that Commissioner Almunia was under pressure to finalize the Google case before his term ended in 2014.¹⁸⁴ The welfare of consumers should not be so easily subject to administrative fluctuations when there is blatant violation of the law. Consumers deserve more than a hastily reached agreement to protect their rights under antitrust law. Almunia recently described the settlement as a success, as “[n]o other antitrust body has secured such concessions from Google.”¹⁸⁵ Almunia declared success based on the relative harshness of the EC agreement as compared to other agencies’ failures to regulate Google’s search bias. Success, however, should be measured by how well consumers are protected, and the EC’s settlement fails to protect consumers from Google’s search bias.

Moreover, the EC decision is not even fully supported by the EC itself.¹⁸⁶ Commissioners usually accept EC decisions in antitrust cases unanimously,¹⁸⁷ but only two thirds of the commissioners supported

force Google’s dominant position at the expense of competitors, pricing them out of the market and reducing consumer choice.”); *see also* Thomas Claburn, *Google Settles EU Antitrust Case, Rivals Whine*, INFORMATIONWEEK (Feb. 5, 2014, 4:13 PM), <http://www.informationweek.com/mobile/mobile-business/google-settles-eu-antitrust-case-rivals-whine/d/d-id/1113725>.

¹⁸³ *See* Vinje, *FairSearch Europe Initial View*, *supra* note 182. In the second rejected proposal, Google had agreed to include three other rival vertical search engine results directly below its own. This proposal failed after academics performed a market test that revealed Google Shopping would receive 36.7% of clicks while rivals would only receive 5%. The rest of the clicks went to links lower on the page than Google’s horizontal search results. *See Search Over*, *supra* note 164.

¹⁸⁴ James Kanter, *Opposition Grows in Europe to Google Antitrust Proposal*, N.Y. TIMES (Sept. 4, 2014), <http://www.nytimes.com/2014/09/05/technology/opposition-grows-in-europe-to-google-antitrust-proposal.html>.

¹⁸⁵ Claire Cain Miller & Mark Scott, *Google Settles Its European Antitrust Case; Critics Remain*, N.Y. TIMES, Feb. 6, 2014, at B1.

¹⁸⁶ *See* Aoife White & Jim Brunsten, *Google’s Almunia Deal Said to Be Criticized by EU Officials*, BLOOMBERGBUSINESS (Feb. 12, 2014, 11:47 AM), <http://www.bloomberg.com/news/articles/2014-02-12/google-deal-with-almunia-said-to-be-criticized-by-eu-officials>.

¹⁸⁷ *Id.*

this settlement with Google.¹⁸⁸ In addition, in a rare public move, Viviane Reding, the EU's justice commissioner, and Michel Barnier, who leads the financial-services policy section, spoke out against the settlement.¹⁸⁹ In his most recent statements in June 2014, Almunia even conceded the ineffectiveness of the settlement while attempting to justify it in a letter to his fellow EU commissioners stating: "A single competition case cannot by itself address issues that go beyond the scope of competition law by their very nature."¹⁹⁰ In conclusion, the EC failed to adequately protect consumers from harm resulting from Google's violations of search neutrality, and the torturous investigation of the last four years demonstrates that unfortunately, the EC is unlikely to take strong enough actions to protect consumers in the near future.

E. *Google's Monopoly*

The FTC and EC failed to recognize that Google abused its monopoly power. As discussed in Part II.0, in order to establish liability for monopoly, first, it must be shown that the firm has substantial market power, and, second, the firm must have behaved improperly to gain or sustain market power.¹⁹¹ Here, Google has substantial market power. The relevant market is the horizontal search engine market, and there is both direct evidence and circumstantial evidence that Google possesses a monopoly. The direct evidence consists of all of Google's behaviors that allow it to grossly violate search neutrality, delist websites, and preference its own products on its search pages.¹⁹² If Google did not possess a monopoly, other companies could turn to other search engines and users would not use a search engine that does not produce the best results, but instead its own results. The circumstantial evidence is that Google holds close to seventy percent of the market share of search in the United States and ninety percent of the European market.¹⁹³ In assessing the strength of the market, American courts often find that a market share of forty to seventy percent may be a monopoly, while seventy percent and over is usually a monopoly,¹⁹⁴ and European courts find a market share of over forty

¹⁸⁸ Körkemeier, *supra* note 13.

¹⁸⁹ See White & Brunsden, *supra* note 186.

¹⁹⁰ Fairless, *supra* note 168 (quoting Commissioner Almunia).

¹⁹¹ GAVIL ET AL., *supra* note 105, at 582–83.

¹⁹² See *supra* Part I.A.2.

¹⁹³ See *supra* notes 34–35 and accompanying text.

¹⁹⁴ See *supra* note 114 and accompanying text. The seminal case on defining a monopoly by market share is *United States v. Aluminum Co. of America*, 148 F.2d 416 (2d Cir. 1945) and the

percent a monopoly.¹⁹⁵ Moreover, the number of years that Google has dominated search also supports a finding of abuse of monopoly power.¹⁹⁶ Therefore, both the direct and circumstantial evidence supports that Google has a monopoly.

Although the District Court for the Northern District of California in *KinderStart* found that search is not a market,¹⁹⁷ its definition of market was far too narrow. The court made a conclusory finding that because *KinderStart* failed to allege that the search market is a “grouping of sales,” search cannot be a market under antitrust law.¹⁹⁸ To the contrary, the Internet search market constitutes a market in which services are bought and sold. Although users do not directly pay Google each time they search, advertisers pay search engines to access the users.¹⁹⁹ In this way, search engines bring together users and advertisers, similar to how newspapers bring together readers and advertisers. Both search engines and newspapers are two-sided platforms, which, despite having multiple parts, constitute a singular market. To deny that this bundle of services constitutes a market would essentially be to disagree with the Ninth Circuit, which found that newspapers were a market.²⁰⁰ Moreover, the court in *KinderStart* did not find that Internet search could not be a market, but instead found that the plaintiff failed to adequately allege in this case that Internet search met the definition of market.²⁰¹ If both the advertising and search elements of a search engine are considered, then search easily falls within the *Kinderstart* court’s definition of market.

Some argue that the relevant market should include vertical search engines in addition to horizontal search engines because they believe that the two types of search engines are reasonably interchangeable.²⁰² These critics assert all search engines are in some way

court’s standards in this case remain relevant today. *Id.* at 424 (“[Ninety percent] is enough to constitute a monopoly; it is doubtful whether sixty or sixty-four per cent [sic] would be enough; and certainly thirty-three per cent [sic] is not.”); see *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 481 (1992).

¹⁹⁵ See WHISH & BAILEY, *supra* note 114, at 26 & n.122, 46–47.

¹⁹⁶ See GAVIL ET AL., *supra* note 105, at 480 fig.5-4.

¹⁹⁷ See *KinderStart.com, LLC v. Google, Inc.*, C 06-2057 JF (RS), 2007 WL 831806, at *5 (N.D. Cal. Mar. 16, 2007).

¹⁹⁸ See *id.*

¹⁹⁹ See *What Is AdWords?*, *supra* note 26.

²⁰⁰ See *Haw. Newspaper Agency v. Bronster*, 103 F.3d 742, 750 (9th Cir. 1996) (recognizing that newspapers constitute a market while determining whether the newspapers attempting to enter into a joint operating agreement were immune from antitrust law under the Newspaper Preservation Act); see also *Associated Press v. United States*, 326 U.S. 1, 18–19 (1945).

²⁰¹ See *KinderStart.com*, 2007 WL 831806, at *5.

²⁰² See, e.g., Smith, *supra* note 28, at 347.

structurally similar because if a user searches for certain keywords, ads may be targeted to compliment the search.²⁰³ This approach misses a crucial detail. Vertical search engines are targeted to a specific subject and action. For example, the vertical search engine Kayak is used to search the subject of travel and the action to purchase and this makes the ad space near these searches extremely valuable because the target audience is so well-defined and easily captured.²⁰⁴ In contrast, when a user searches for “Bermuda” on Google’s horizontal search engine, advertisers would not want to pay anywhere near the price for ad space on Google as they would on Kayak because the user may be searching “Bermuda” for housing in Bermuda, weather in Bermuda, the history of Bermuda, or the news in Bermuda. One critic argues that the fundamental case *United States v. Microsoft Corp.*²⁰⁵ recognized that product markets are interchangeable if a consumer would switch products when faced with a price increase between five to ten percent.²⁰⁶ The huge loss of return on investment for the horizontal search engine ads in comparison to the vertical search engine ads is worth more than a five to ten percent price increase. Moreover, a narrower approach to defining search engine markets is supported by the FTC’s definition of online search advertising, which it has clearly distinguished from other forms of on-line and offline advertising.²⁰⁷

Second, to constitute a violation of the Sherman Act for monopolization, the party must have demonstrated improper behavior to maintain the monopoly. Jon Leibowitz in the FTC investigation found that Google attempted to “eliminate” competition.²⁰⁸ As discussed above at length, Google consistently violates search neutrality and excludes competitors from meaningfully competing.²⁰⁹ As discussed in Part 0, Google both hard codes its own products to the top of the first search results page and delists other websites or hard codes them to the bottom of the search results page if they fail to participate in be-

²⁰³ See *id.* at 347–48.

²⁰⁴ *Id.*

²⁰⁵ *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001).

²⁰⁶ Smith, *supra* note 28, at 349 & n.79. As a result of this author’s experience working on AdWords campaigns in the marketing department of a software company in Berlin, Germany, this small price change is not near what it would take for an advertiser to move their ads from a vertical to a horizontal search engine.

²⁰⁷ See FTC, STATEMENT OF FEDERAL TRADE COMMISSION CONCERNING GOOGLE/DOUBLECLICK FTC FILE NO. 071-0170, at 7 (2007), available at http://www.ftc.gov/system/files/documents/public_statements/418081/071220googledc-commstmt.pdf.

²⁰⁸ See *supra* note 150 and accompanying text.

²⁰⁹ See *supra* Part I.B.

havior that will increase Google's monopoly power. In a circular manner, Google uses its monopoly power to ensure that it will maintain a monopoly. Google's behavior is controversial because it has the most widely used horizontal search engine in the world,²¹⁰ but its vertical search engines lag far behind. Therefore, when Google uses its horizontal search dominance to preference to its own vertical search engines over all others in its results,²¹¹ it harms both competition, and consumers, by preventing them from seeing the most relevant results in the correct order. This abuse of monopoly power ensures that Google's competitors cannot meaningfully compete,²¹² violating the main goal of competition law—to protect competition, not competitors.²¹³ The abuse consequently allows Google to improperly maintain its market share.

That Google's abusive conduct violates the Sherman Act is also supported by the similarities to the oft-cited *Microsoft* case, in which Microsoft was found to have engaged in numerous instances of anticompetitive conduct.²¹⁴ In *Microsoft*, the United States Court of Appeals for the District of Columbia found that Microsoft had abused its power in the operating systems market by preinstalling its browser, Internet Explorer, on its operating system.²¹⁵ The court considered whether Microsoft had used tying, a behavior where a company forces one product on a user by means of another.²¹⁶ Tying is punished under antitrust law because it harms consumers by taking away consumer choice and harming competition.²¹⁷ In the *Microsoft* case, the district court found that Microsoft was able to increase its power in the browser market by tying its weaker product, its browser, to its stronger product, its operating system.²¹⁸ As a result, competing browsers like Netscape suffered,²¹⁹ and the behavior also prevented

²¹⁰ See Danny Sullivan, *Google Still World's Most Popular Search Engine by Far, but Share of Unique Searchers Dips Slightly*, SEARCH ENGINE LAND (Feb. 11, 2013, 9:00 AM), <http://searchengineland.com/google-worlds-most-popular-search-engine-148089>.

²¹¹ See Press Release, FTC, *supra* note 7.

²¹² Cf. *MCI Commc'ns Corp. v. Am. Tel. & Tel. Co.*, 708 F.2d 1081, 1132–33 (7th Cir. 1983) (listing the four elements of a monopoly under the “essential facilities doctrine,” one of which is “a competitor’s inability practically or reasonably to duplicate the essential facility”).

²¹³ *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962).

²¹⁴ See *United States v. Microsoft Corp.*, 253 F.3d 34, 62–80 (D.C. Cir. 2001).

²¹⁵ *Id.* at 62–67.

²¹⁶ *Id.* at 85 (listing the four elements of a per se tying violation).

²¹⁷ See *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 12–15 (1984), *abrogated on other grounds by Ill. Tool Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28 (2006).

²¹⁸ See *Microsoft*, 253 F.3d at 84–85.

²¹⁹ *Id.* at 60.

new potential rival browsers from “gaining the critical mass of users necessary to attract developer attention away from Windows as the platform for software development.”²²⁰

Similar to the *Microsoft* case where Microsoft was alleged to have increased its dominance in the operating systems market by tying its weaker product to its stronger product, Google uses its dominance in horizontal search to push its own vertical search products by hard coding its vertical search products to the top of its horizontal search pages. Similar to the *Microsoft* case, where preinstalling the browser took consumer choice away, Google takes choice away by hard coding its vertical search products to the top of the horizontal search pages and representing these as the most relevant content. Moreover, just as Microsoft used its operating system to harm Netscape and help Microsoft’s Internet Explorer, Google uses its horizontal search engine to harm Yelp and help Google’s Google Plus.²²¹ Consequently, just as Microsoft’s abuse of monopoly power was a violation of the Sherman Act, so is Google’s.

III. REGULATING GOOGLE UNDER THE ESSENTIAL FACILITIES DOCTRINE

The FTC and EC should have regulated Google’s dominance in horizontal search under the essential facilities doctrine. The essential facilities doctrine provides a means to remedy abuses of monopoly power under section 2 of the Sherman Antitrust Act,²²² and article 102 of the Treaty on the Functioning of the European Union.²²³ The doctrine was first developed and applied to a monopoly over a railroad bridge to require companies to share use of the railroad tracks.²²⁴ The doctrine was later extended and applied to other infrastructure including electric transmission lines, football stadiums, jointly developed downhill ski facilities, and natural gas pipelines.²²⁵ Therefore, the es-

²²⁰ *Id.* The court ultimately vacated the district court’s finding of per se tying and remanded for further consideration, *id.* at 84, but the plaintiffs abandoned the tying claim on remand. *United States v. Microsoft Corp.*, 231 F. Supp. 2d 144, 161 (D.D.C. 2002).

²²¹ In addition, under antitrust precedent, it is important to note that the relevant inquiry is whether Google improperly used exclusionary conduct against rivals, *see Microsoft*, 253 F.3d at 58, and not whether the excluded rivals could have developed into viable substitutes, *see id.* at 79.

²²² HOLMES & MANGIARACINA, *supra* note 16, § 3:12.

²²³ Shanshan Liu, *Antitrust Analysis for Online Search Engines*, JURIST (Mar. 3, 2014), <http://jurist.org/datetime/2014/03/shanshan-liu-google-antitrust.php>.

²²⁴ *See generally* *United States v. Terminal R.R. Ass’n of St. Louis*, 224 U.S. 383, 411–13 (1912).

²²⁵ HOLMES & MANGIARACINA, *supra* note 16, § 3:12.

essential facilities doctrine is applied when there is a monopoly that controls exclusive access to a facility that is essential to society.²²⁶ The doctrine is widely utilized in Europe,²²⁷ and although it originated in the United States, the Supreme Court has still not explicitly embraced it, yet has refused to repudiate it.²²⁸

Some scholars argue the Supreme Court has not recognized the essential facilities doctrine and that because of the recent *Verizon Communications, Inc. v. Law Offices of Curtis V. Trinko*²²⁹ case, there is no duty to deal for an incumbent monopolist.²³⁰ *Trinko* was an AT&T customer who received service on lines owned by Verizon and sued Verizon claiming that it discriminated against AT&T customers by providing them with worse service than its own Verizon customers on its cables.²³¹ The Court unanimously held for Verizon in finding that there is no general duty to deal.²³² However, the Court does not meaningfully address the essential facilities doctrine in its opinion.²³³ Moreover, no lower court cases that apply the essential facilities doctrine have been heard by the Supreme Court and overruled. Therefore although the Supreme Court has not explicitly endorsed the essential facilities doctrine, it has never rejected its use and thus its use is legitimate.

Here, the *Trinko* criticisms are also unfounded because of the substantial differences in facts between the Google case and *Trinko*. In *Trinko*, the Court concluded that because the relevant Act provides that the companies must share facilities, it “makes it unnecessary to impose a judicial doctrine of forced access,” or in other words, the essential facilities doctrine.²³⁴ In this case, however, there is no relevant act that mandates that Google must share its resources with any competitors, and thus, the essential facilities doctrine is necessary.

In addition, some scholars conclude that Google has no duty to deal operating under the assumption that Google “makes no representation or guarantee, explicitly or implicitly, that websites listed in

²²⁶ *Id.*

²²⁷ See Mauro Squitieri, *Refusals to License Under European Union Competition Law After Microsoft*, 11 J. INT'L BUS. & L. 65, 67–68 (2012).

²²⁸ *Verizon Commc'ns, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 410–11 (2004).

²²⁹ *Verizon Commc'ns, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004).

²³⁰ The duty to deal is simply the obligation that the essential facilities doctrine creates for the monopolist.

²³¹ *Trinko*, 540 U.S. at 404–05.

²³² *Id.* at 411.

²³³ See *id.* at 410–11.

²³⁴ *Id.* at 411.

its organic search results are listed in declining order of some metric of relevance.”²³⁵ These analyses are flawed, however, because Google does represent that websites on its search results are listed in declining order of relevance. For example Google’s page on its algorithm states “[y]ou can use PageRank to see a page’s importance, which Google calculates based on things like the number of links leading to that page. Pages with higher PageRank are more likely to appear at the top of Google search results.”²³⁶ Therefore these analyses fail to consider the reality that Google misrepresents its product to consumers.

This Note will apply the essential facilities doctrine under American law as the analysis is more stringent than that of the EU.²³⁷ Therefore, because Google can be regulated under American antitrust law, it will also be able to be regulated under the more lenient laws of the European Union.

The essential facilities doctrine, by definition, only applies to monopolies.²³⁸ As discussed at length, Google has a monopoly in horizontal search.²³⁹ The essential facilities doctrine analysis requires four distinct elements before a monopolist is regulated under its reach.²⁴⁰ First, the monopolist must control a facility or resource that is essential in that competitors need access to the source in order to meaningfully compete with the monopolist in the monopolist’s market.²⁴¹ Second, the competitors must be unable to “practically or reasonably” duplicate the essential facility.²⁴² Third, the monopolist must deny use of the facility to the competitor.²⁴³ Fourth, the reasonable access must be able to be granted to the monopolist’s competitors.²⁴⁴

In the seminal case, *MCI Communications Corp. v. AT&T*,²⁴⁵ the Seventh Circuit addressed AT&T’s abuse of monopoly power under the essential facilities doctrine.²⁴⁶ Specifically, the court found that: AT&T controlled access to local telephone facilities that MCI needed to access to provide its customers with long-distance telephone services; MCI was unable to duplicate these telephone facilities practi-

²³⁵ See Ratliff & Rubinfeld, *supra* note 86, at 533, 538–41.

²³⁶ See *See a Page’s Importance Using PageRank*, *supra* note 101.

²³⁷ See, e.g., Liu, *supra* note 223.

²³⁸ See *MCI Commc’ns Corp. v. Am. Tel. & Tel. Co.*, 708 F.2d 1081, 1132 (7th Cir. 1983).

²³⁹ See *supra* Part II.E.

²⁴⁰ See *MCI*, 708 F.2d at 1132–33.

²⁴¹ *Id.* at 1132.

²⁴² *Id.*

²⁴³ *Id.* at 1133.

²⁴⁴ *Id.*

²⁴⁵ *MCI Commc’ns Corp. v. Am. Tel. & Tel. Co.*, 708 F.2d 1081 (7th Cir. 1983).

²⁴⁶ *Id.* at 1132–33.

cally because MCI would have to install new cables and tear up sidewalks, streets, and lawns and disturb customers in the process; AT&T refused to grant MCI access; and AT&T would easily be able to grant MCI access to its telephone facilities.²⁴⁷ Consequently, the court initially found that AT&T deliberately engaged in efforts to harm MCI and refused to provide access on reasonable terms, which impeded MCI's market entry to the long-distance call market.²⁴⁸ On remand, the case was ultimately settled, which led to the breakup of AT&T.²⁴⁹

The *MCI* case is analogous to the Google case. First, as discussed above, Google currently has a monopoly of the search market, and it prohibits competitors from truly competing with Google search.²⁵⁰ For example, just as MCI needed access to AT&T's phone lines to reach customers, vertical search engines like Yelp need access to Google's horizontal search to reach users.²⁵¹ Without a Google ranking, website traffic drops up to ninety-six percent, so Google's horizontal search is essential for websites to reach consumers.²⁵² Without access to a fair ranking in the world's most used search engine, websites are unable to compete with Google because they cannot access the same audience. Websites are further unable to compete because Google uses unfair tactics to maintain its market share.²⁵³

Second, competitors have not been able to duplicate Google's resource. Google's resource is its ability to access a large percentage of the world's population. Because Google attained this resource through improper tactics, such as blacklisting competitors for improper reasons, it has gained an edge over competitors and it retains this edge through similar tactics. Google's violations of search neutrality and abuse of monopoly power are not something that the market will fix on its own. Google has maintained its monopoly for almost a decade, no competitors appear close to providing true competition, and the longer Google's anticompetitive practices go un-

²⁴⁷ See *id.* at 1133. The Seventh Circuit subsequently reversed liability upon another theory and the case settled; however, the case is widely recognized as essential facilities doctrine precedent. See, e.g., Spencer Weber Waller, *Areeda, Epithets, and Essential Facilities*, 2008 WIS. L. REV. 359, 362–63 & n.21.

²⁴⁸ See *MCI*, 708 F.2d at 1133.

²⁴⁹ See *United States v. Am. Tel. & Tel. Co.*, 552 F. Supp. 131, 165, 170 (D.D.C. 1982); Waller, *supra* note 247, at 379.

²⁵⁰ See *supra* Part II.E.

²⁵¹ See *supra* Part I.B.2.

²⁵² See *supra* Part I.B.2.

²⁵³ See *supra* Part I.B.2.

checked or are not meaningfully punished, the more egregious Google's conduct becomes.²⁵⁴

Third, Google denies use of the facility to its competitors.²⁵⁵ As previously discussed, Google does not fairly compete with other search engines by using anticompetitive tactics to ensure that it maintains a monopoly of the Internet search market. This behavior is intentional and evidenced by Google's manipulations of its algorithmic results by hard coding its products higher and other services' products lower on the search results pages.²⁵⁶

Fourth and finally, Google is capable of granting reasonable access to its facility to its competitors.²⁵⁷ Google could stop hard coding its own products first on its search results pages and hard coding other webpages lower. This approach would simply require Google to "hold all services, including its own, to exactly the same standards, using exactly the same crawling, indexing, ranking, display and penalty algorithms."²⁵⁸ This solution is desirable because it involves minimal regulation of Google. This solution also remains consistent with the fourth step of the essential facilities doctrine, as Google would grant access to its horizontal search to any relevant competitors, and the results would list the most relevant results in the correct order and not preference Google products first. Although this may not be the traditional means of granting access under the doctrine, in the Internet era, access is sufficiently granted if competitors are able to be properly listed on Google's horizontal search. This is the method that the EC attempted to use but failed to fully implement.²⁵⁹ Google does not need to be paid to list other results below or right after its results when these websites should be listed first. It is time for a solution where Google is simply not allowed to give preference to its own products and must rank search results by their quality, as do neutral search engines.

²⁵⁴ See *supra* Part I.B.2 (discussing how Google illegally collects consumer data, blacklists companies who do not use its services, and hard codes its products to the top of its search pages).

²⁵⁵ See *MCI Commc'ns Corp. v. Am. Tel. & Tel. Co.*, 708 F.2d 1081, 1132–33 (7th Cir. 1983).

²⁵⁶ See Edelman, *supra* note 90.

²⁵⁷ See *MCI*, 708 F.2d at 1132–33.

²⁵⁸ Jennifer Baker, *Google Should Be Regulated like Utilities, Say Rivals*, COMPUTERWORLD (June 25, 2013, 3:08 PM), http://www.computerworld.com/s/article/9240337/Google_should_be_regulated_like_utilities_say_rival (quoting Helmut Heinen, President of the Federation of German Newspaper Publishers).

²⁵⁹ See *supra* Part II.D.

Several critics of regulating Google argue that companies already invest significant amounts of money in their technologies and regulation would diminish the rate of innovation.²⁶⁰ Critics additionally assert that because of the “high market velocity” for Internet search, antitrust regulators and courts should not intervene because they will “freeze the evolution” of Internet search.²⁶¹ These scholars, however, fail to take into account that Google’s current abuses of its monopoly power are already freezing the evolution of Internet search because competitors are unable to meaningfully compete with Google. Thus, new innovation must come from Google. Although Google is an innovative company,²⁶² history tells us that competition and necessity are what breed the best innovations, so if Google was pushed by competitors and faced necessity, its innovations would be much more beneficial to consumers.²⁶³ Moreover, because Internet search was a rapidly developing market that has been slowed by the dominance of a single competitor, this is precisely the time when antitrust intervention is needed. Allowing those at the forefront of the tech movement to take advantage of consumers is exactly what antitrust law is designed to prevent.²⁶⁴

Although the essential facilities doctrine has been applied to only concrete resources or facilities in the past,²⁶⁵ it could also be applied to intellectual property.²⁶⁶ Google’s algorithm and dominance of search has become a bottleneck facility, which prevents other competitors from accessing the necessary network.²⁶⁷ Today’s equivalent of electric transmission lines is the Internet. Susan Crawford, a technology policy expert, validly asserts that the Internet “has replaced traditional phone service as the most essential communications utility in the country, and is now as important as electricity was 100 years ago.”²⁶⁸ Therefore, just as electric transmission lines were dominated by a monopoly in the 1970s, and the essential facilities doctrine was required

²⁶⁰ See Mark A. Jamison, *Should Google Be Regulated As a Public Utility?*, 9 J.L. ECON. & POL’Y 223, 245 (2013).

²⁶¹ Daniel A. Crane, *Search Neutrality as an Antitrust Principle*, 19 GEO. MASON L. REV. 1199, 1209 (2012).

²⁶² See Smith, *supra* note 28, at 358–61.

²⁶³ See, e.g., PLATO, *THE REPUBLIC* 60 (Benjamin Jowett trans., 1941) (c. 360 B.C.E.) (describing how necessity spurs inventions).

²⁶⁴ See Baker, *supra* note 258.

²⁶⁵ See HOLMES & MANGIARACINA, *supra* note 16, § 3:12 (noting the essential facilities doctrine has been applied to railroads, football stadiums, and gas pipelines).

²⁶⁶ *Contra* Jamison, *supra* note 260, at 238.

²⁶⁷ See HOLMES & MANGIARACINA, *supra* note 16, § 3:12.

²⁶⁸ See Gustin, *supra* note 19.

to ensure that the facility would be shared and thus better utilized to reach consumers,²⁶⁹ currently Internet search is dominated by Google and requires intervention.²⁷⁰

Contrary to what critics assert,²⁷¹ regulating intellectual property under the essential facilities doctrine does not present more obstacles than regulating physical property. Although intellectual property often retains its value because of its secrecy, Google could be regulated without divulging its intellectual property as discussed. For example, the value of the telephone cable to AT&T in the *MCI* case was a result of AT&T having exclusive access to the cable.²⁷² Therefore the value is not in the property itself, but in having the monopoly. Regulating Google without addressing its algorithm fails to reach the root of the problem. This is seen in the EC's settlement with Google, where the EC provided pages and pages of requirements about how Google must locate similar rivals' results next to Google's own results²⁷³ but failed to address whether Google's results are actually the most relevant and useful to consumers. Therefore, the essential facilities doctrine and method of sharing an essential facility does not undermine the value of intellectual property, but merely makes it more accessible, just as the phone cables were in *MCI*.

Regulating Google's monopoly in a way that will not allow it to violate search neutrality will greatly benefit consumers. Although the Google search dominates, once competitors have the fair opportunity to compete with Google, innovation will drastically increase. This case is analogous to *MCI* where, after AT&T's refusal to deal was challenged and condemned in court, great innovations occurred in regards to phone services.²⁷⁴ These innovations included phones in colors other than black, wall phones, and then car phones, which led to a huge increase in innovations over a relatively short amount of time and ultimately resulted in the small, handheld smartphones of today.²⁷⁵ Google may likewise be limiting the progression of vertical

269 See *Otter Tail Power Co. v. United States*, 410 U.S. 366, 378 (1973).

270 Ramon Tremosa i Balcells & Andreas Schwab, *Resolving EU's Antitrust Case Against Google 'Important for Us All'*, PARLIAMENT MAG. (Sept. 27, 2013), <https://www.theparliamentmagazine.eu/articles/news/resolving-eus-antitrust-case-against-google-important-us-all>.

271 See Jamison, *supra* note 260, at 245–46; Abbott B. Lipsky, Jr. & J. Gregory Sidak, *Essential Facilities*, 51 STAN. L. REV. 1187, 1218–19 (1999).

272 *MCI Commc'ns Corp. v. Am. Tel. & Tel. Co.*, 708 F.2d 1081, 1132–33 (7th Cir. 1983).

273 See *Commitments*, *supra* note 165, ¶ 2.

274 See, e.g., Shannon M. Heim, *Signaling System Seven: A Case Study in Local Telephone Competition*, 13 COMMLAW CONCEPTUS 51, 53–59 (2004) (discussing technological advancements in the telephone industry); see also *MCI*, 708 F.2d at 1132–33.

275 Heim, *supra* note 274, at 53–59.

search engines by using its dominance in the horizontal search market in the same way that AT&T was limiting the progression of phones by using its dominance over telephone cables.

CONCLUSION

Therefore, the United States and the European Union need to increase their enforcement of search neutrality in order to protect competition and consumers. By allowing Google to monopolize the search market worldwide, neither antitrust agency is benefitting consumers. Google's consistent violations of search neutrality, as well as its abuse of monopoly power, make the essential facilities doctrine the ideal manner in which to regulate Google and better protect consumers. Google must be forced to allow fair competition by not using its search engine as a showcase for its own products, but as an actual gateway to the most relevant information that users seek.

APPENDIX

FIGURE 1²⁷⁶

The image shows two screenshots of Google search results for the query "gas grill".

Top Screenshot:

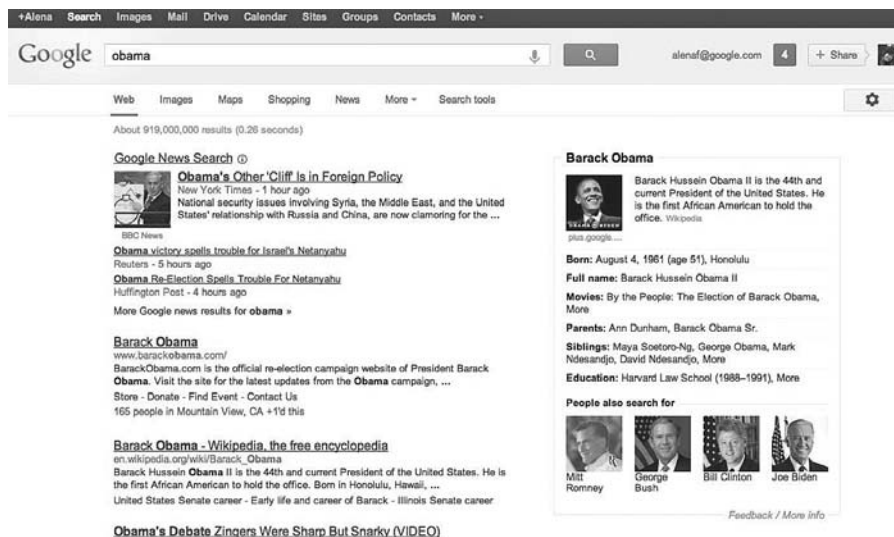
- Search bar: "gas grill"
- Navigation: Web, Shopping, Maps, Images, Videos, More, Search tools
- Results: About 8,240,000 results (0.20 seconds)
- Sponsored:**
 - Shop for **gas grills** on Google
 - Five product listings with images, names, and prices:
 - GP-Grill Gas Grill - black/... £141.96
 - Falcon Dominator... £888.00
 - Outback Omega 250... £129.00
 - Blue Seal Cobra CS9... £897.60
 - Burco 444449459... £850.50
- Ads:**
 - Gasbarbecue nodig? www.vanhattermhoreca.nl/
 - Catering Gas Grills www.nisbets.co.uk/Cooking-Machines

Bottom Screenshot:

- Navigation: Web, Images, Maps, Shopping, More, Search tools
- Results: About 44,000,000 results (0.18 seconds)
- Sponsored:**
 - Google Shopping results
 - Three product listings: GP-Grill Gas Grill, Blacktop 360 Party Hub Gas, and OUTBACK 57cm.
- Alternatives:**
 - Three product listings: Supaprice, Kelkoo, and Shopzilla, each with a "Best stock" or "Great deals" label.
- Ads:**
 - Gas Grill at Amazon www.amazon.com/patio
 - Cheap Gas Grill www.groupon.com/

The example above the line shows how Google currently displays its content first, and the result below the line shows how Google must feature three alternatives as per the EC settlement. This diagram demonstrates how the EC settlement still allows Google to feature its results first to consumers.

²⁷⁶ Source: Press Conference, Joaquín Almunia, Vice President, Eur. Comm'n, Statement on the Google Investigation (Feb. 5, 2014), *available at* http://europa.eu/rapid/press-release_SPEECH-14-93_en.htm (images available for download).

FIGURE 2⁷⁷

This hypothetical shows how Google may still display its results first after the EC settlement. Although the Google results are labeled, as labeling bias precludes consumers from taking labels into consideration, the first place placement will still lead consumers to believe that the Google results are the best and most relevant.