



**Response of Eric Schmidt, Executive Chairman, Google Inc.
Before the Senate Committee on the Judiciary
Subcommittee on Antitrust, Competition Policy, and Consumer Rights**

**Hearing on “The Power of Google: Serving Consumers or Threatening Competition?”
September 21, 2011**

Questions for the Record from Senator Al Franken for Eric Schmidt

- 1. In your testimony you stated that you are not aware of “any unnecessary or strange boosts or biases” in Google’s algorithms for Google’s own products and services. Can you confirm that Google does not give its own services an unfair advantage in its organic search results?**

Google’s search results seek to achieve one fundamental thing: to connect users to the information they seek. We do this in two key ways. First, we started with conventional search—the traditional ten blue links — which involved crawling and indexing the web and returning results based on general responsiveness. Second, starting in 2001, we began to incorporate search results designed to respond to signals that a user is looking for specific types of information—a map, an image, a local business, a product, a news update, etc. We sometimes call these “thematic” search results.

Other major search engines also incorporate thematic and conventional search results on their search results pages. In fact, the first efforts at blending thematic and conventional search results by other general search engines date back to the late 1990s. It reflects the effort to achieve what one industry expert described in 2001 as the “Holy Grail” of search: “The real Holy Grail of all this will be when search engines can detect the type of search we are doing and feed out more targeted results from appropriate databases.”¹

These universal search results are not separate “products and services” from Google. Rather, the incorporation of thematic and conventional results in universal search reflects Google’s effort to connect users to the information that is most responsive to their queries. Because of this, the question of whether we give an “unfair advantage” to our “products and services” is based on an inaccurate premise. These universal search results *are* our search service—they are not some separate “Google content” that can be “favored.”

That said, in keeping with our focus on quality and delivering the most relevant results for consumers, Google constantly experiments with new ways to provide the most relevant information in response to a user’s query. For example, for certain queries, where Google is highly confident that the user wants a specific answer, Google will provide that answer prominently on the page. These direct answers are known as “oneboxes.” Oneboxes are generally displayed to convey an answer that is clear and straightforward, for example, movie showtimes, weather forecasts, mathematical calculations, stock prices, sports scores, and so on. Microsoft’s Bing and Yahoo! display similar “oneboxes” prominently in their results as well, demonstrating their belief that these results are useful for consumers.

¹ Danny Sullivan, “Being Search Boxed to Death”, Search Engine Watch, March 4, 2001, <http://searchenginewatch.com/article/2065235/Being-Search-Boxed-To-Death>.

The decision whether to display a onebox is determined based on Google's assessment of user intent. Contrary to what some of Google's critics suggest, Google does not make money when users click on oneboxes. In fact, the opposite is true: oneboxes that are responsive to what users are looking for may draw users away from the ads displayed on the page. Nonetheless, because oneboxes help Google deliver a satisfying experience to users, Google believes that by displaying them we are enhancing user satisfaction, which is in the long-term best interest of the company.

In some instances, Google has licensed data from third parties for use in our oneboxes. In other instances, we have developed this data ourselves. In either case, whether users are searching for a weather forecast, a mathematical calculation (e.g., [pounds to grams]), or a stock price, Google's user studies confirm that users seeking this type of information generally do not want to click through to multiple options, whether in the form of ads or more natural links. Rather, users want a quick, direct answer that they can trust is correct. Oneboxes provide fast, accurate answers in response to this user demand.

In sum, we view our thematic search results as part of our search results, not as a separate product or service. With respect to a page on a Google-owned site such as YouTube that is crawled and ranked within our search results, such a page is not placed higher than an identical page would be if it were owned by another company.

2. Please explain why Google's products (such as Google Places and Shopping) are not clearly labeled as Google products in your organic search results. Would Google consider clearly labeling these items so consumers understand these products are owned by Google?

As I explained in answer to Question 1, thematic search results (such as Places and Shopping) incorporated in universal search results are not separate "products" from Google. Rather, the incorporation of thematic and conventional results in universal search reflects Google's effort to connect users to the information that is most responsive to their queries. These universal search results *are* our search service—they are not separate "Google content."

In response to a query seeking local information, for example, Google may either group local results together, or may distribute local results throughout our search results. Either way, Google is simply trying to organize and display local business results so as to save users time by displaying local information in the most effective manner, in order to eliminate the need to conduct multiple searches. As with any of Google's search results, local business listings are ranked according to likely relevance. For example, typing in a query for [shoe repair 22203] will typically return local business listings organized by geographic proximity to that zip code. The ranking of local business results is not affected by payment.

3. What factors does Google consider in making the decision when and where to rank "answers" above "links" (such as to a metasearch site like Nextag)? Has Google considered providing search "answers" that are not owned or controlled by Google, for example pointing to products listed on a different product comparison service other than Google Shopping?

Thematic search results for particular types of content (video, images, news articles, products, and so on) are incorporated when our consumer testing and data analysis shows that those results algorithms are most likely to deliver the results sought by our users. As I noted in my response to Question 1, oneboxes are displayed when Google believes it is likely that a user is seeking a specific answer, and they often contain information or data that are licensed from third parties.

4. During his testimony, Nextag CEO Jeffrey Katz stated that Google offers "unique ad placements, which competitors such as [Nextag] can't even purchase." Does Google prevent companies from purchasing certain ads? If so, what process does Google use to determine who is eligible to bid for certain ads?

NexTag is a valued customer of Google's that advertises extensively through our traditional AdWords system. What Mr. Katz was referring to was a discrete ad format where users see a specific product's picture and price. Our user studies have found that users expect to be able to purchase a product when they click on advertisements containing a product's picture and price. Accordingly, we require advertisers that use this format to direct their advertisement to a page where the product can be sold. As of this past September, we were working with NexTag to set up Product Listing Ads for the products sold directly through the site.

5. During Mr. Stoppleman's testimony, he indicated that Yelp had difficulty removing its content from Google Places's reviews, and he was told Google would only remove Yelp content from its site if Yelp "de-indexed" its website.

a. Please describe, in detail, the official process for a company to challenge Google's use of its content in a manner which the company believes is inappropriate?

Every site owner has the option to use the robots exclusion protocol, also referred to as robots.txt, to indicate to Google or any other search engine that they do not want particular webpages, or even an entire site, to be crawled and indexed.² Site owners can easily exclude certain sites or portions of sites from being indexed, and can also specify different protocols for different search engines. The robots.txt protocol, which has been in place for over 17 years, can be utilized either by writing a new robots.txt file,³ or by accessing one of many publicly available robots.txt files.⁴

In addition, Google regularly engages in business conversations with people in the search industry, from industry pundits to local businesses to SEO firms to site owners of websites both large and small. When Yelp raised issues with the way Google indexed Yelp content in Google's local search results, Google willingly engaged in a series of business conversations with Yelp in an attempt to address Yelp's numerous concerns.

b. Does Google "scrape" content from other websites? If so, please list the websites where Google is appropriating content and indicate whether any of these companies have complained to Google about this practice.

Google believes strongly in protecting copyright and other intellectual property rights. Google relies, as does every other major search engine, on the established doctrine of fair use in order to display snippets of text in our search results, giving users a preview of the type of content they can find for a given link. Indeed, snippets are an important feature of search generally, and they drive traffic to websites. Google previously displayed review snippets from sites such as Yelp and TripAdvisor in our thematic local search results.

² robots.txt is an industry standard that allows a site owner to control how search engines access their web site. Access can be controlled at multiple levels – the entire site, through individual directories, pages of a specific type, or even individual pages. Basically, robots.txt is a structured text file that can indicate to web-crawling robots that certain parts of a given server are off-limits. This allows search engines such as Google to determine which parts of a website a site owner wants to display in search results, and which parts to keep private and non-searchable. Dan Crow, "Controlling How Search Engines Access and Index Your Website", The Official Google Blog, January 26, 2007, <http://googleblog.blogspot.com/2007/01/controlling-how-search-engines-access.html>.

³ There are a number of resources available online that provide users with information on coding robots.txt files. See e.g. About/robots.txt, August 23, 2010, <http://www.robotstxt.org/robotstxt.html>.

⁴ A non-comprehensive list of robots.txt files submitted by independent programmers is available here: <http://www.robotstxt.org/db.html>.

Google's practice of displaying review snippets did not disadvantage review sites—in fact, quite the opposite. In fact, Google sends millions of clicks a month to Yelp, TripAdvisor, and other review sites. Google facilitates free traffic to both Yelp and TripAdvisor, and each of the sites has reaped the benefits of this free user exposure.

Yelp has aired numerous concerns in the press over the past few years, and although Google tries to act responsibly in response to website concerns, ultimately Google builds our search results and search-related products for the benefit of users, not websites. At all times, Google's primary motivation has been improving the search experience for our users by providing the most relevant and useful information in response to their queries. In the end, if users are unhappy with the answers Google provides, the openness of the web ensures that they can easily switch to Yelp or any other site with just one click.

- 6. Many small businesses depend upon the Internet for customers to find them. I have heard from a number of Minnesota businesses that are concerned that the quality assessment measures Google rolled out in “Panda” will prevent them from competing with larger companies that can invest more in “search engine optimization.” What is Google doing to address this concern and ensure that small businesses are not unfairly impacted by these changes?**

Google's ongoing aim is to ensure that we return search results that provide users with best answers. We developed the Panda algorithm in response to feedback from our users who wanted more relevant answers and a better user experience. While Google aims to provide users with websites that are likely to be the most useful for our users, over the past few years, websites with low-value content have learned how to game Google's algorithms so that they often outranked better websites. The Panda algorithm simply more adeptly ranks high-quality sites—sites with original content and information such as research, in-depth reports, thoughtful analysis, etc.—regardless of the size of the business in question.

Panda was a set of algorithm changes intended to improve the quality of search results and make it harder for poor quality sites to rank highly in Google's search algorithms. Panda does not prevent small businesses from competing with larger companies. We work hard to make sure that all companies' websites are ranked according to their usefulness to queries, and we continually keep small businesses in mind when we test out new algorithms and evaluate possible improvements to the algorithms.

- 7. In your testimony, you estimated that just over two-thirds of Android phones were shipped with Google products pre-installed. Please confirm the exact percentage of Android phones that are shipped with Google products pre-installed, and please specify which apps are pre-loaded or bundled, including Google Maps; Google Places; Google +; Google Shopping; Gmail; Latitude, etc..**

As I mentioned in my testimony, my estimate of the number of phones that come with Google products pre-installed was “not too precise.” It was, in fact, an educated guess. Android's code is open-sourced, meaning that manufacturers are free to obtain the Android source code and create Android phones without Google's knowledge or involvement.⁵ Because Google does not know the total number of Android-powered phones, it is not possible to confirm the percentage of Android phones that ship with Google products pre-installed.

Google does not demand that smartphone manufacturers make Google the default search engine as a condition of using the Android operating system. Android is a free, open source platform for mobile devices. The complete Android source code is available for download for free from the Android Open Source Project

⁵ See Android Open Source Project, “Downloading the Source Tree”, <http://source.android.com/source/downloading.html>.

website.⁶ Any developer or manufacturer can use, modify, and distribute the Android operating system without Google's permission or any payment to Google. For example, Amazon recently announced the Kindle Fire—its new tablet device—using the Android source code without Google's involvement. This is one of the exciting and innovative aspects of Android that will help foster innovation and competition in the smartphone market.

One of the greatest benefits of Android is that it fosters competition at every level of the mobile market—including among application developers. Google respects the freedom of manufacturers to choose which applications should be pre-loaded on Android devices. Google does not condition access to or use of Android on pre-installation of any Google applications or on making Google the default search engine.

Manufacturers can choose to pre-install Google applications on Android devices, but they can also choose to pre-install competing search applications like Yahoo! and Microsoft's Bing. Many Android devices have pre-installed the Microsoft Bing and Yahoo! search applications. No matter which applications come pre-installed, the user can easily download Yahoo!, Microsoft's Bing, and Google applications for free from the Android Market.⁷ In addition, Android gives manufacturers the freedom to pre-install third-party app stores, like the Amazon Appstore for Android, where a user can download a variety of apps, including Microsoft's Bing.⁸

8. I have heard complaints that it is difficult to delete pre-loaded apps from Android phones. Please explain the process to delete pre-loaded apps, and how it compares to the process for deleting other apps that are not pre-installed on a phone.

During the manufacturing process, a manufacturer typically loads a mobile device with a complete system image consisting of the operating system and pre-loaded applications. The system image is loaded into read-only memory, which for technical reasons cannot be modified by the user. Because Android devices are manufactured in this manner, the user cannot alter the Android platform itself or any pre-loaded applications. As a result, any application that is pre-installed and part of the system image cannot be deleted. This is not an issue limited to Android; both Apple's iOS and Microsoft's Windows Phone are loaded as system images that prevent modifying the operating system or removing pre-loaded applications.

But Android is designed, more than any other mobile operating system, to allow users to fully personalize their mobile devices. Users are given ample freedom to modify the user interface and features of their Android devices. Users can easily move any applications they do not wish to use away from the home screen or into folders, can easily install one of over 300,000 applications available in the Android Market and other applications sources, and can use these applications to the exclusion of any pre-loaded software.

⁶ See Android Open Source Project, "Downloading the Source Tree", accessed on November 1, 2011, <http://source.android.com/source/downloading.html>.

⁷ Users can access the Microsoft Bing Search application here: https://market.android.com/details?id=com.microsoft.bing&feature=search_result; the Yahoo! Search application here: https://market.android.com/details?id=com.yahoo.mobile.client.android.yahoo&feature=search_result; and the Google Search application here: https://market.android.com/details?id=com.google.android.googlequicksearchbox&feature=search_result.

⁸ Amazon makes the Microsoft Bing Search application available here: <http://www.amazon.com/Microsoft-Corporation-Bing/dp/B004T54Y2M/>

Furthermore, the new version of the Android platform (Android 4.0: Ice Cream Sandwich) allows the user to disable pre-loaded applications. Although the application cannot truly be deleted for the reasons described above, a disabled application is hidden from view and cannot be launched unless the user re-enables it.

9. How does Google define whether an application is “compatible” with the Android operating system? What steps has Google taken to help application developers to understand how applications are assessed for compatibility so they are not barred from the Android market?

Google does not define whether applications are “compatible” with the Android operating system. Google has, however, undertaken extensive efforts to protect consumers and application developers to ensure their applications run seamlessly on all Android devices. Google, with the support of our Android partners, has identified certain specifications, such as minimum screen size and security features, that help ensure applications run flawlessly across device models. These specifications are reflected in the Android Compatibility Definition Document (“CDD”), which is published on Android Open Source Project’s website. Google and our partners believe that this baseline preserves the maximum amount of manufacturer freedom to customize Android, while simultaneously protecting Android developers, who need consistency and rely on minimum elements appearing on all Android devices, and Android customers, who may legitimately expect that Android applications will run on their Android devices.

Application developers seeking to create an application that runs on the Android operating system can use the Android application programming interfaces (“APIs”) that are made available through the Android operating system. Developers can also download the Android software development kit (“SDK”), and Android native development kit (“NDK”), which are all available for free on the Android developer website.⁹ These tools allow anyone to create rich, innovative applications that can be distributed on Android devices.

10. If a copyright or trademark owner alerts Google that a website or application is operating illegally, what process does Google take against those sites and applications? Is there a way to expedite this process?

When we are notified by a rightsholder of infringing activity or material, we act promptly to address the issue. The nature of our response depends on the Google product that is involved—if we are hosting the content in question, we can remove it; if it involves advertising on an infringing site, we can remove the ads and terminate the site’s account; if infringing material is appearing in search results, we can prevent those links from appearing in future search results.

For example, on YouTube, we don’t even wait to be notified—we proactively employ our Content ID tools to match every video against our database of “claimed” audio and video before it appears on the site. This powerful technology scans the more than 48 hours of video uploaded to YouTube every minute and, within seconds, compares it against more than six million references files provided by participating rightsholders. This is possible because YouTube is a video hosting service, which means the videos reside on servers that we control. Content ID has proven to be an enormous success and is being used by a long list of content owners worldwide to make their own choices about how, where, when, or whether they want their content to appear on YouTube. In addition to our Content ID system, we also have developed a sophisticated Digital Millennium Copyright Act (“DMCA”) takedown system, the Content Verification Program (“CVP”), for reliable, high-volume submitters. The response time for those using our CVP system is effectively immediate.

In contrast, where web search is concerned, Google has no ability to “take down” the sites that exist on the web, because we don’t control the web. Instead, when copyright owners notify us of infringing material appearing in search results, we remove it from future results. While we have always processed takedown

⁹ Android Developers, Download the Android SDK, accessed November 1, 2011, <http://developer.android.com/sdk/index.html>.

notices expeditiously, over the past several months, we have dramatically improved our turnaround time for DMCA notices for web search. We did this by building new tools for reliable, high-volume submitters. These tools are now being successfully used by more than a dozen content industry partners who together account for more than 75% of all URLs submitted in DMCA takedowns for web search. Our goal was to reduce average response time for these notices to less than 24 hours. In fact, we've exceeded that goal. Current average response time is now less than seven hours.

We also employ a wide array of procedures and expend considerable financial resources to prevent our advertising products from being used to monetize material that infringes copyright. For example, our AdSense program enables website publishers to display ads alongside their content. Our policies prohibit the use of this program for infringing sites, and we use automated and manual review to weed out abuse. Last year, we took action on our own initiative against nearly 12,000 sites for violating this policy. And in 2011, we have already taken action against more than 12,000 sites.

We also respond promptly when we are notified that our advertising products are being used by infringing sites. We recently agreed to improve our AdSense anti-piracy review procedures and are working together with rightsholders on better ways to identify websites that violate our policies.

Google also expends great effort to fight the challenge of counterfeit goods. Just as in the offline world, people misuse legitimate online services to try to market counterfeit goods. This abuse hurts our users and our business; combating it is central to Google's operations. In the last year, we shut down approximately 95,000 accounts for attempting to use sponsored links to advertise counterfeit goods, and more than 95% of these accounts were discovered through our own detection efforts. Even more ads themselves were blocked on suspicion of policy violations. Our automated tools analyze thousands of signals to help prevent bad ads from being shown in sponsored links. Last year alone we invested \$60 million in efforts to prevent violations of our ad policies.

We also have a fast and easy complaint form for brand owners to notify us of ads for potentially counterfeit goods. Earlier this year, Google announced that for brand owners who use this form responsibly, we will commit to an average response time of 24 hours or less. Brand owner feedback is an important way in which we improve our systems—as we get more data about bad ads, we get better at counteracting the new ways that bad actors try to game the system.

- a. If a property holder alerts Google that a new incarnation of the website or application has become available, how quickly does Google take action against this new site or application?**

As mentioned above, the response time for DMCA notices varies depending on the Google product that is involved. For DMCA takedown notices submitted through our new tools, which together account for more than 75% of all URLs submitted in DMCA takedowns for web search, we are happy to announce that we've exceeded our goal of reducing average response time to less than 24 hours. Current average response times are now less than seven hours.

- b. Does Google have a system in place to screen out applications that appear to advertise intellectual property infringement in the title or description of the application (i.e. – a “Freemusicdownload” app) before these applications are listed in the Android marketplace?**

Android Market provides a platform for independent developers to distribute software applications (“apps”). Our policies on Android Market are clear: applications that infringe copyrights, or otherwise violate the law, are prohibited. All Android Market developers must agree to the Developer Distribution Agreement (“DDA”) before submitting any apps. Section 7.2 of the DDA provides, “if Google is notified by you or otherwise becomes aware and determines in its sole discretion that a Product . . . violates the intellectual

property rights or any other rights of any third party . . . Google may remove the Product from the Market.”¹⁰ Further, the Android Market Developer Program Policies (the “Content Policy”), incorporated by reference into the DDA, provide:

Intellectual Property: Don’t infringe on the intellectual property rights of others, including patent, trademark, trade secret, copyright, and other proprietary rights. We will respond to clear notices of alleged copyright infringement. For more information or to file a DMCA request, please visit our copyright procedures.

Illegal Activities: Keep it legal. Don’t engage in unlawful activities on this product.¹¹

The Content Policy also states: “Serious or repeated violations of the Developer Distribution Agreement or this Content Policy will result in account termination. Repeated infringement of intellectual property rights, including copyright, will also result in account termination.”¹² Correspondingly, we take steps to terminate the accounts of developers who are repeat infringers. Furthermore, we attempt to detect and terminate other accounts created by developers who have been previously terminated for repeat infringement and other policy violations. We also require all developers to register with Google Checkout and pay \$25. This basic authentication step acts as a filter to keep out spammers and other bad actors. Typically, after three policy violations of any kind, we terminate the developer account. In addition, we also ban related accounts whether or not those accounts have directly incurred any policy violations.

Our practice is to remove an application pursuant to the Content Policy if we become aware, through formal DMCA complaints or otherwise, that such application violates those policies.

We offer a web form designed to enable rightsholders to submit DMCA notices electronically for Android Market. During 2010, Google removed 1,026 applications through our DMCA copyright process for Android Market. Through September 2011, Google has removed 1,960 applications through our DMCA copyright process for Android Market.

Our response time for DMCA copyright notices for Android Market has varied depending on the incoming volume of notices and the app in question. Currently, our average response time is less than 48 hours for notices submitted electronically through our web form.

11. What measures does Google take to make sure that its ads are not placed on websites engaged in copyright or trademark infringement? Please explain if these policies are consistent across all Google advertising products, including AdSense, DoubleClick, and AdMob.

Our policies prohibit the use of our AdSense and AdMob programs on web pages (AdSense) or apps (AdMob) that include infringing materials or seek to sell counterfeit goods. DoubleClick is an ad management and ad serving platform. As with our other advertising tools, we are prepared to take appropriate action, including account termination, where DoubleClick publishers are shown to be using our product to serve ads on infringing content.

¹⁰ Android, “Android Market Developer Distribution Agreement”, accessed November 1, 2011, <http://www.android.com/us/developer-distribution-agreement.html>.

¹¹ Android, “Android Market Developer Program Policies”, accessed November 1, 2011, <http://www.android.com/us/developer-content-policy.html>.

¹² *Id.*

It is generally through the AdSense program that Google places ads on other websites. We employ a wide array of procedures to prevent infringing sites from using our ads products, and we expend considerable financial resources to find and eject advertisers and publishers who violate our policies. For example, publishers who want to join the AdSense program are vetted upon joining for their compliance with program policies. In addition, automated systems monitor the pages on which AdSense ads appear and bring potentially problematic material to the attention of human reviewers. Finally, Google responds swiftly when notified by a rightsholder that our AdSense program is being used to monetize infringing or counterfeit sites and we have policies in place to terminate the accounts of repeat offenders. The volume of complaints in this regard is not high and represents far less than 1% of all our AdSense partner sites.

Moreover, Google has long enabled advertisers directly to control where their ads appear. Using available exclusion tools for our ad programs, advertisers can exclude domains of their choosing from displaying their ads (whether because of infringement or any other concern). Similarly, if an advertiser discovers its ads running on an objectionable site that it had not previously been aware of, that advertiser can use the tools to prevent any future appearances on that site.

While we are proud of the policies and procedures we have in place to prevent improper use of our ads products, we are always striving to improve. We continue to work with rightsholders to identify, and, when appropriate, expel violators from the AdSense program.

In addition, Google is helping to lead industry-wide solutions to prevent legitimate ads from appearing on illegitimate sites through our work with the Interactive Advertising Bureau (“IAB”), comprised of more than 460 leading media and technology companies. The IAB has established quality assurance guidelines through which participating advertising companies will take standardized steps to enhance buyer control over the placement and context of advertising and build brand safety. Despite the best efforts of the online advertising industry, however, technologically sophisticated players use tactics like “cloaking” (showing one version of their site to users and a different version to Google) to evade the protections that Google and other companies put in place. While the industry is aggressively going after those who abuse online advertising programs, it is clearly a cat-and-mouse game, and efforts to legislate in this area must be careful not to target ad platforms for abuses of their systems that could not reasonably be prevented.

12. How many copyright and trademark violators have been expelled from AdSense and other Google advertising services in 2010 and 2011? What measures has Google adopted to prevent violators from re-joining these services using a new account? Does Google have a system in place to pre-screen websites prior to them signing up with one of Google’s advertising services?

For copyright, last year we took action on our own initiative against nearly 12,000 sites for violating our policy against using AdSense for sites infringing copyright. In 2011, we have already taken action against more than 12,000 sites, and we have certified our compliance with IAB’s guidelines. As described above, we employ a wide array of procedures to prevent infringing sites from using our ads products, and we expend considerable financial resources to find and eject advertisers and publishers who violate our policies. For example, publishers who want to join the AdSense program are vetted upon joining for their compliance with program policies. In addition, automated systems monitor the pages on which AdSense ads appear, and bring potentially problematic material to the attention of human reviewers. Finally, Google responds swiftly when notified by a rightsholder that our AdSense program is being used to monetize infringing or counterfeit sites and we have policies in place to terminate the accounts of repeat offenders.

Google also has clear policies against advertising counterfeit goods, and we expend considerable resources to enforce those policies. In the last year, we shut down approximately 95,000 accounts for attempting to use sponsored links to advertise counterfeit goods, and more than 95% of these accounts were discovered through our own detection efforts. Even more ads themselves were blocked on suspicion of policy

violations. Our automated tools analyze thousands of signals to help prevent bad ads from being shown in sponsored links. Last year alone we invested \$60 million in efforts to prevent violations of our ad policies.