

EXHIBIT 21

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
NORFOLK DIVISION**

I/P ENGINE, INC.,

Plaintiff,

v.

AOL, INC. et al.,

Defendants.

Civ. Action No. 2:11-cv-512

**PLAINTIFF I/P ENGINE, INC'S SECOND PRELIMINARY DISCLOSURE OF
ASSERTED CLAIMS AND INFRINGEMENT CONTENTIONS
AS TO GOOGLE ADWORDS AND GOOGLE ADSENSE FOR SEARCH**

Plaintiff I/P Engine, Inc. ("I/P Engine") hereby makes the following Disclosure of Asserted Claims and Infringement Contentions for U.S. Patent Nos. 6,314,420 ("the '420 patent") and 6,775,664 ("the '664 patent").

A. Identification of Asserted Claims and Infringing Products

Defendant Google, Inc.'s ("Google") products, methods and systems promoted under the names of Google AdWords and Google AdSense for Search¹ (collectively "Google AdWords") are accused of infringing at least the following claims:

- claims 10, 14, 15, 25, 27 and 28 of the '420 patent; and
- claims 1, 5, 6, 21, 22, 26, 28 and 38 of the '664 patent.

Each asserted claim of the '420 and '664 patents are reproduced in the attached claim charts. The left column of the claim charts includes the language of each claim; each limitation of each claim is listed separately. The right column of the claim charts includes the features of

¹ Google AdWords and Google AdSense for Search appear to refer to the same system. Google Adwords facilitates creating and running advertisements, while Google AdSense for Search enables websites to display the Adwords advertisements in response to search queries. IPE0000009; IPE0000031; IPE0000045.

Google AdWords that I/P Engine contends infringe each corresponding limitation in the claim based on evidence currently available to I/P Engine. Based on the attached claim charts, Google is liable for direct infringement of the '420 and '664 patents.

These claim charts can be, and will be, supplemented and/or amended based upon discovery, additional evidence, further investigation, and/or the claim construction by the Court.

B. Identification of Infringing Structure, Acts, and/or Materials

As demonstrated by the attached claim charts and as described in Google's marketing materials, Google's technical document production, and other publicly available sources, each limitation of each claim of the '420 and '664 patents asserted against Google is literally present in Google AdWords. If Google contends that any limitation of any of the asserted claims is not literally present in Google AdWords, any such limitation of the asserted claims is present under the doctrine of equivalents because the difference(s), if any, between Google AdWords, and what is literally claimed in the asserted claims is(are) insubstantial. I/P Engine will provide contentions under the doctrine of equivalents if, after, and when Google identifies which elements it contends are not present in Google AdWords.

C. Identification of Priority Date

Each of the asserted claims of the '420 and '664 patents are entitled to a priority date at least as early as the effective date of the '420 patent, i.e., December 3, 1998 (based on the filing date of the patent application, U.S. Patent Application No. 09/204,149, that issued as the '420 patent). Additionally, each of the asserted claims of the '420 and '664 patents may be entitled to an earlier effective date based on, without limitation, the filing of earlier related patent applications.

D. Indirect Infringement Disclosures

As demonstrated by the attached claim charts and the contentions as to other defendants, the use of Google AdWords directly infringes the asserted claims of the '420 and '664 patents and establishes the prerequisite act of direct infringement. Google has also had knowledge of the '420 and '664 patents at least as early as the filing date of this lawsuit, September 15, 2011 (D.I. 001).

Google, via its marketing materials and other publicly available sources, provides, sells, offers for sale, and/or promotes the infringing products, methods and systems of Google AdWords to its members of the Google Search Network, advertisers and/or end users that use the infringing Google AdWords. IPE0000001-IPE0000010; IPE0000025-IPE0000030; IPE0000058-IPE0000060. Based on these marketing materials and uses, Google intends for its members of the Google Search Network, advertisers and/or end users to use Google AdWords in an infringing manner. Thus, Google intends to cause infringement of the '420 and '664 patents.

By making, using, providing, selling, and/or promoting its infringing Google AdWords, and by continuing to provide, sell, offer for sale, and/or promote its infringing Google AdWords, with the intention of causing at least some members of the Google Search Network, advertisers and/or end users to use Google AdWords in an infringing manner, Google actively and knowingly aids and abets infringement of the '420 and '664 patents and is liable under induced infringement.

In addition, Google AdWords is a material part of the claimed invention of the '420 and '664 patents. Google AdWords is especially made or especially adapted for use with only infringing search engine systems and/or search systems. Furthermore, Google AdWords is not a staple article. Google AdWords is not a commodity of commerce and can only be used with

infringing search engine systems and/or search systems. Google AdWords is also not suitable for substantial non-infringing uses. Therefore, Google is liable as a contributory infringer.

These contentions are preliminary, are based on known publicly available information and Google's initial technical production, and are subject to change based on the Court's claim construction. I/P Engine reserves the right to amend and/or supplement these infringement contentions if and when further information regarding Google AdWords becomes available and/or for other good cause.

Dated: February 17, 2012

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CLAIM CHART FOR INFRINGEMENT OF U.S. PATENT NO. 6,314,420

Google AdWords

CLAIM 10	GOOGLE ADWORDS
<p>a. A search engine system comprising:</p>	<p>The preamble is typically not a limitation and thus no comparison needs to be made between the accused system, Google AdWords, and the preamble. See, e.g., <i>Symantec Corp. v. Computer Associate Intern., Inc.</i>, 522 F.3d 1279, 1288 (Fed. Cir. 2008) (“Absent clear reliance on the preamble in the prosecution history, or in situations where it is necessary to provide antecedent basis for the body of the claim, the preamble generally is not limiting.”)(quotation omitted). However, Google AdWords includes a search engine system.</p> <p>Google AdWords includes a search engine system that searches for information (e.g., advertisements) relevant to a search query. For example, when a user enters a search query into the search bar on Google’s website and selects the “search” button, the user is presented a list of information, e.g., advertisements. See IPE0000051-IPE0000052. In certain configurations, these advertisements are displayed as “Sponsored Links” next to, above, and/or below the website results. <i>Id.</i>; see also G-IPE-0008836.</p> <p>Google AdWords is also used to display advertisements in response to search queries on websites in the “Google Search Network.” IPE0000065; see also IPE0000054-IPE0000057 (describing various locations that AdWords advertisements will appear, including the “Google Network” which includes partner websites); G-IPE-0008837 (showing “Ads on Google sites”); G-IPE-0008842 (showing AdSense network).</p> <p>“Search queries are received by one of the Google Web Servers (GWS) . . . It passes that information to an Ad Server to choose a set of ads to return.” G-IPE-0009731. “For a search results page, the end user visits google.com (or an AdSense for Search partner), enters a query, and sees results with ads.” G-IPE-</p>

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b. a system for scanning a network to make a demand search for informons relevant to a query from an individual user;

0009727. "On a search results page, we pick ads directly based on the user query
...." *Id.*

Google AdWords includes a system for scanning a network to make a demand search for information relevant to a query from a user. For example, the search bar on Google's website (www.google.com) and other "search network" sites allows a user to enter a search query and run a demand search. See section a. In response to the query, the system conducts a demand search for information. See IPE0000051-IPE0000053.

Google uses distributed databases in its systems, and the databases distribute information across several locations on a network. IPE0000011-IPE0000024; see also IPE0000026(showing distributed systems).

[REDACTED]

[REDACTED]

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[REDACTED]

Additionally, the system collects information on landing pages of advertisements on the Internet. IPE0000066 (“[t]he AdWords system retrieves advertiser landing pages to help us better understand the relevance and quality of your AdWords ads as a whole. . . . To fully understand the quality of your specified page, the system may follow other links on the page.”); *see also* G-IPE-0146189; G-IPE-0171697.

c. a content-based filter system for receiving the informons from the scanning system and for filtering the informons on the basis of applicable content profile data for relevance to the query; and

Google AdWords includes a system for receiving the information from the scanning system and for filtering the information on the basis of applicable content profile data for relevance to the query. For example, Google AdWords receives and filters advertisements on the basis of content data (e.g., ad text, keyword, and landing page attributes) for relevance to the query. IPE0000058. “AdWords uses a dynamic variable called ‘Quality Score’ to evaluate keyword relevance” and that “Quality Score is based [in part] on . . . the relevance of your

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ad text, keyword, and landing page.” *Id.*; see also IPE0000061-IPE0000062 (“[t]he Quality Score for Ad Rank on Google and the search network is determined by . . . the relevance of the keyword and the matched ad to the search query” and that “[h]aving relevant keywords and ad text . . . will result in a higher position for your ad.”).

[REDACTED]

[REDACTED]

d. a feedback system for receiving collaborative feedback data from system users relative to informons considered by such users;

Google AdWords includes a system that receives feedback data from system users, the feedback data being related to the website information returned as results and considered by users. For example, Google AdWords receives feedback (in the form of clickthrough data) about information, e.g., advertisements, considered by the other users. See IPE0000064 (“Millions of users click on AdWords ads every day. Every single one of those clicks – and the even more numerous impressions associated with them – is analyzed by our filters (stage 1), which operate in real-time.”). Google AdWords uses the “dynamic variable called ‘Quality Score’ to evaluate keyword relevance.” IPE0000058. In AdWords, a component of the “Quality Score” is based on an advertisement’s “clickthrough rate (CTR)” *Id.*; see also IPE0000061-

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IPE0000062 (“[t]he historical clickthrough rate (CTR) of the keyword and the matched ad on Google; if the ad is appearing on a search network page, its CTR on that search network partner is also considered” and that “[h]aving . . . a strong CTR on Google . . . will result in a higher position for your ad.”). Google says that, of the three components of Quality Score, CTR is “the biggest one by far” and that “by allowing users to vote with their clicks, we have millions of people that are helping us to decide which ads are best for each search query.” IPE0000073. The CTR is feedback data from system users on advertisements considered by the users.

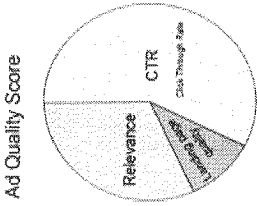
[REDACTED]

e. the filter system combining pertaining feedback data from the feedback system with the content profile data in filtering each informant for relevance to the query.

Google AdWords includes a system that combines pertaining feedback data with content data in filtering information for relevance to the query. For example, Google states that AdWords uses a “Quality Score” to evaluate an advertisement’s relevance. IPE0000063.

[REDACTED]

The Quality Score is a combination of factors including feedback data, i.e., “[a]

<p>CLAIM 10</p>	<p style="text-align: center;">GOOGLE ADWORDS</p> <p>keyword's clickthrough rate (CTR)," and content data, i.e., "the relevance of your ad text, keyword, and landing page." <i>Id.</i>; see also IPE0000062 ("Having relevant keywords and ad text [and] a strong CTR on Google . . . will result in a higher position for your ad.")</p> <div style="background-color: black; width: 100%; height: 100px; margin: 10px 0;"></div> <p>Further, the "Ad Quality Score" is illustrated as including three factors: "Relevance," "CTR," and "Landing page quality." See G-IPE-0008850:</p> <div style="text-align: center;">  <p>Ad Quality Score</p> <p>Three factors:</p> <ul style="list-style-type: none"> Relevance CTR Landing Page Quality </div>
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<p>CLAIM 14</p>	<p style="text-align: center;">GOOGLE ADWORDS</p> <p>The system of claim 10 wherein the collaborative feedback data comprises passive feedback data.</p> <p>Google AdWords collects and uses feedback data in the form of CTR. See claim 10 section d. The CTR recorded by Google AdWords is passive feedback data.</p>
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CLAIM 15	GOOGLE ADWORDS
The system of claim 14 wherein the passive feedback data is obtained by passively monitoring the actual response to a proposed informon.	Google AdWords passively monitors a user's behavior related to proposed advertisements. Google AdWords records the clickthrough rates of each respective advertisement. See claim 10 section d.

CLAIM 25	GOOGLE ADWORDS
a. A method for operating a search engine system comprising:	<p>The preamble is typically not a limitation and thus no comparison needs to be made between the accused system, Google AdWords, and the preamble. See, e.g., <i>Symantec Corp. v. Computer Associate Intern., Inc.</i>, 522 F.3d 1279, 1288 (Fed. Cir. 2008) (“Absent clear reliance on the preamble in the prosecution history, or in situations where it is necessary to provide antecedent basis for the body of the claim, the preamble generally is not limiting.”)(quotation omitted). However, Google AdWords includes a method for operating a search engine system.</p> <p>Google AdWords includes a search engine system that searches for information (e.g., advertisements) relevant to a search query. For example, when a user enters a search query into the search bar on Google’s website and selects the “search” button, the user is presented a list of information, e.g., advertisements. See IPE0000051-IPE0000052. In certain configurations, these advertisements are displayed as “Sponsored Links” next to, above, and/or below the website results. <i>Id.</i>; see also G-IPE-0008836.</p> <p>Google AdWords is also used to display advertisements in response to search queries on websites in the “Google Search Network.” IPE0000065; see also IPE0000054-IPE0000057 (describing various locations that AdWords advertisements will appear, including the “Google Network” which includes partner websites); G-IPE-0008837 (showing “Ads on Google sites”); G-IPE-</p>

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0008842 (showing AdSense network).

"Search queries are received by one of the Google Web Servers (GWS) . . . It passes that information to an Ad Server to choose a set of ads to return." G-IPE-0009731. "For a search results page, the end user visits google.com (or an AdSense for Search partner), enters a query, and sees results with ads." G-IPE-0009727. "On a search results page, we pick ads directly based on the user query . . ." *Id.*

b. scanning a network to make a demand search for informons relevant to a query from an individual user;

Google AdWords scans a network to make a demand search for information (e.g., advertisements) relevant to a query from a user. For example, the search bar on Google's website (www.google.com) and other "search network" sites allows a user to enter a search query and run a demand search. See section a. In response to the query, the system conducts a demand search for information. See IPE0000051-IPE0000053.

Google uses distributed databases in its systems, and the databases distribute information across several locations on a network. IPE0000011-IPE0000024; see also IPE0000026 (showing distributed systems). "Ad Server is the common term for the set of machines and processes that together pick a set of ads, given a query and possibly extra hints." G-IPE-0009734. "The component that is in charge of the server is an Ad Mixer." *Id.*

"To suggest ads for the auction, the first thing the shards must do (in step 3) is to find all of the eligible creatives or products, those that 'match the query'" G-IPE-0009735.

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GOOGLE ADWORDS

[REDACTED]

Additionally, the system collects information on landing pages of advertisements on the Internet. IPE0000066 (“[t]he AdWords system retrieves advertiser landing pages to help us better understand the relevance and quality of your AdWords ads as a whole. . . . To fully understand the quality of your specified page, the system may follow other links on the page.”); *see also* G-IPE-0146189; G-IPE-0171697.

c. receiving the informons in a content-based

Google AdWords receives information from the scanning system and filters the

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filter system from the scanning system and filtering the informons on the basis of applicable content profile data for relevance to the query;

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information on the basis of applicable content profile data for relevance to the query. For example, Google AdWords receives and filters advertisements on the basis of content data (e.g., ad text, keyword, and landing page attributes) for relevance to the query. IPE0000058. "AdWords uses a dynamic variable called 'Quality Score' to evaluate keyword relevance" and that "Quality Score is based [in part] on . . . the relevance of your ad text, keyword, and landing page." *Id.*; see also IPE0000061-IPE0000062 ("[t]he Quality Score for Ad Rank on Google and the search network is determined by . . . the relevance of the keyword and the matched ad to the search query" and that "[h]aving relevant keywords and ad text . . . will result in a higher position for your ad.").



d. receiving collaborative feedback data from system users relative to informons considered by such users; and

Google AdWords also receives feedback data from system users, the feedback data being related to the website information returned as results and considered by users. For example, Google AdWords receives feedback (in the form of clickthrough data) about information, e.g., advertisements, considered by the other users. See IPE0000064 ("Millions of users click on AdWords ads every day. Every single one of those clicks – and the even more numerous impressions

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associated with them – is analyzed by our filters (stage 1), which operate in real-time.”). Google AdWords uses the “dynamic variable called ‘Quality Score’ to evaluate keyword relevance.” IPE0000058. In AdWords, a component of the “Quality Score” is based on an advertisement’s “clickthrough rate (CTR)” *Id.*; see also IPE0000061-IPE0000062 (“[t]he historical clickthrough rate (CTR) of the keyword and the matched ad on Google; if the ad is appearing on a search network page, its CTR on that search network partner is also considered” and that “[h]aving . . . a strong CTR on Google . . . will result in a higher position for your ad.”). Google says that, of the three components of Quality Score, CTR is “the biggest one by far” and that “by allowing users to vote with their clicks, we have millions of people that are helping us to decide which ads are best for each search query.” IPE0000073. The CTR is feedback from system users relative to advertisements considered by the users.

[REDACTED]

e. combining pertaining feedback data with the content profile data in filtering each informon for relevance to the query.

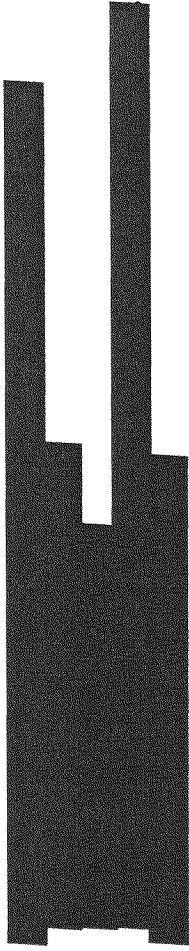
Google AdWords combines pertaining feedback data with content data in filtering information for relevance to the query. For example, Google AdWords uses a “Quality Score” to filter advertisements. IPE0000063.

[REDACTED]

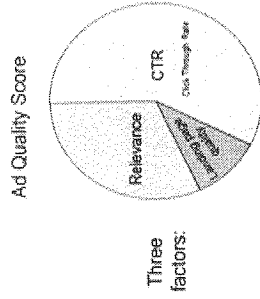
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The Quality Score is a combination of factors including feedback data, i.e., “[a] keyword’s clickthrough rate (CTR),” and content data, i.e., “the relevance of your ad text, keyword, and landing page.” *Id.*; see also IPE0000062 (“Having relevant keywords and ad text [and] a strong CTR on Google . . . will result in a higher position for your ad.”).



Further, the “Ad Quality Score” is illustrated as including three factors: “Relevance,” “CTR,” and “Landing page quality.” See G-IPE-0008850:



CLAIM 27

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The method of claim 25 wherein the collaborative feedback data provides passive feedback data.

Google AdWords collects and uses feedback data in the form of CTR. See claim 25 section d. The CTR recorded by Google AdWords is passive feedback data.

CLAIM 28	GOOGLE ADWORDS
<p>The method of claim 27 wherein the passive feedback data is obtained by passively monitoring the actual response to a proposed informon.</p>	<p>Google AdWords passively monitors a user's behavior related to proposed advertisements. Google AdWords records the clickthrough rates of each respective advertisement. See claim 25 section d.</p>

CLAIM CHART FOR INFRINGEMENT OF U.S. PATENT NO. 6,775,664

Google AdWords

CLAIM 1	GOOGLE ADWORDS
<p>a. A search system comprising:</p>	<p>The preamble is typically not a limitation and thus no comparison needs to be made between the accused system, Google AdWords, and the preamble. See, e.g., <i>Symantec Corp. v. Computer Associate Intern., Inc.</i>, 522 F.3d 1279, 1288 (Fed. Cir. 2008) (“Absent clear reliance on the preamble in the prosecution history, or in situations where it is necessary to provide antecedent basis for the body of the claim, the preamble generally is not limiting.”)(quotation omitted). However, Google AdWords includes a search system.</p> <p>Google AdWords includes a system that searches for information (e.g., advertisements) relevant to a search query. For example, when a user enters a search query into the search bar on Google’s website and selects the “search” button, the user is presented a list of information, e.g., advertisements. See IPE0000051-IPE0000052. In certain configurations, these advertisements are displayed as “Sponsored Links” next to, above, and/or below the website results. <i>Id.</i>; see also G-IPE-0008836.</p> <p>Google AdWords is also used to display advertisements in response to search queries on websites in the “Google Search Network.” IPE0000065; see also IPE0000054-IPE0000057 (describing various locations that AdWords advertisements will appear, including the “Google Network” which includes partner websites); G-IPE-0008837 (showing “Ads on Google sites”); G-IPE-0008842 (showing AdSense network).</p> <p>“Search queries are received by one of the Google Web Servers (GWS) . . . It passes that information to an Ad Server to choose a set of ads to return.” G-IPE-0009731. “For a search results page, the end user visits google.com (or an AdSense for Search partner), enters a query, and sees results with ads.” G-IPE-0009727. “On a search results page, we pick ads directly based on the user query</p>

CLAIM 1	GOOGLE ADWORDS
<p>b. a scanning system for searching for information relevant to a query from a user. For example, the search bar on Google's website (www.google.com) and other "search network" sites allows a user to enter a search query and run a demand search. See section a. In response to the query, the system conducts a demand search for information. See IPE0000051-IPE0000053. Google AdWords searches for the information, in part, on the basis of content data (e.g., ad text, keyword, and landing page attributes) for relevance to the query. IPE0000058. Google states that "AdWords uses a dynamic variable called 'Quality Score' to evaluate keyword relevance" and that "Quality Score is based [in part] on . . . the relevance of your ad text, keyword, and landing page." <i>Id.</i>; see also IPE0000061-IPE0000062 ("[t]he Quality Score for Ad Rank on Google and the search network is determined by . . . the relevance of the keyword and the matched ad to the search query" and that "[h]aving relevant keywords and ad text . . . will result in a higher position for your ad.").</p>	<p>...". <i>Id.</i></p> <p>Google AdWords includes a system for searching for information relevant to a query from a user. For example, the search bar on Google's website (www.google.com) and other "search network" sites allows a user to enter a search query and run a demand search. See section a. In response to the query, the system conducts a demand search for information. See IPE0000051-IPE0000053. Google AdWords searches for the information, in part, on the basis of content data (e.g., ad text, keyword, and landing page attributes) for relevance to the query. IPE0000058. Google states that "AdWords uses a dynamic variable called 'Quality Score' to evaluate keyword relevance" and that "Quality Score is based [in part] on . . . the relevance of your ad text, keyword, and landing page." <i>Id.</i>; see also IPE0000061-IPE0000062 ("[t]he Quality Score for Ad Rank on Google and the search network is determined by . . . the relevance of the keyword and the matched ad to the search query" and that "[h]aving relevant keywords and ad text . . . will result in a higher position for your ad.").</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
<p>c. a feedback system for receiving information</p>	<p>Google AdWords includes a system for receiving information found to be</p>

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found to be relevant to the query by other users;
and

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relevant to the query by users of the system. For example, Google AdWords receives feedback (in the form of clickthrough data) about information, e.g., advertisements, considered by the other users. See IPE0000064 (“Millions of users click on AdWords ads every day. Every single one of those clicks – and the even more numerous impressions associated with them – is analyzed by our filters (stage 1), which operate in real-time.”). Google AdWords uses the “dynamic variable called ‘Quality Score’ to evaluate keyword relevance.” IPE0000058. In AdWords, a component of the “Quality Score” is based on an advertisement’s “clickthrough rate (CTR)” *Id.*; see also IPE0000061- IPE0000062 (“[t]he historical clickthrough rate (CTR) of the keyword and the matched ad on Google; if the ad is appearing on a search network page, its CTR on that search network partner is also considered” and that “[h]aving . . . a strong CTR on Google . . . will result in a higher position for your ad.”). Google says that, of the three components of Quality Score, CTR is “the biggest one by far” and that “by allowing users to vote with their clicks, we have millions of people that are helping us to decide which ads are best for each search query.” IPE0000073. The CTR is feedback on advertisements other users found to be relevant to the query.



d. content-based filter system for combining the information from the feedback system with the information from the scanning system and for

Google AdWords includes a system for combining information from the feedback system with information from the scanning system to filter information for relevance to the query. For example, Google states that AdWords uses a

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filtering the combined information for relevance to at least one of the query and the first user.

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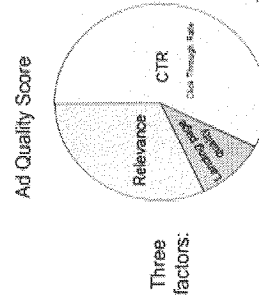
“Quality Score” to evaluate an advertisement’s relevance. IPE0000063.

[REDACTED]

The Quality Score is a combination of factors including feedback data, i.e., “[a] keyword’s clickthrough rate (CTR),” and content data, i.e., “the relevance of your ad text, keyword, and landing page.” *Id.*; see also IPE0000062 (“Having relevant keywords and ad text [and] a strong CTR on Google . . . will result in a higher position for your ad.”).

[REDACTED]

Further, the “Ad Quality Score” is illustrated as including three factors: “Relevance,” “CTR,” and “Landing page quality.” See G-IPE-0008850:



CLAIM 5	GOOGLE ADWORDS
The search system of claim 1 wherein the filtered information is an advertisement.	Google AdWords filters advertisements. See claim 1 sections a-d.

CLAIM 6	GOOGLE ADWORDS
The search system of claim 1 further comprising an information delivery system for delivering the filtered information to the first user.	Google AdWords delivers information to a user in the form of links to websites with short descriptions. See IPE000051-IPE000053 (displaying an example search for "grill").

CLAIM 21	GOOGLE ADWORDS
The search system of claim 1 wherein the content-based filter system filters by extracting features from the information.	Google AdWords extracts features (e.g., text) from an advertisement to perform content-based filtering. IPE000058.

CLAIM 22	GOOGLE ADWORDS
The search system of claim 21 wherein the extracted features comprise content data indicative of the relevance to the at least one of the query and the user.	In Google AdWords, the extracted features described in claim 21 are content data that is used to indicate the relevance of an item to the user's query. See claim 1 section b.

CLAIM 26	GOOGLE ADWORDS
a. A method for obtaining information relevant to a first user comprising:	The preamble is typically not a limitation and thus no comparison needs to be made between the accused system, Google AdWords, and the preamble. See,

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e.g., Symantec Corp. v. Computer Associate Intern., Inc., 522 F.3d 1279, 1288 (Fed. Cir. 2008)(“Absent clear reliance on the preamble in the prosecution history, or in situations where it is necessary to provide antecedent basis for the body of the claim, the preamble generally is not limiting.”)(quotation omitted). However, Google AdWords includes a method for obtaining information relevant to a first user.

Google AdWords includes a method for obtaining information relevant to a user. For example, when a user enters a search query into the search bar on Google’s website and selects the “search” button, the user is presented a list of information, e.g., advertisements. *See* IPE0000051-IPE0000052. In certain configurations, these advertisements are displayed as “Sponsored Links” next to, above, and/or below the website results. *Id.*; *see also* G-IPE-0008836.

Google AdWords also includes methods for obtaining information relevant to a user for the purpose of displaying search results and/or advertisements on websites in the “Google Search Network.” IPE0000065; *see also* IPE0000054-IPE0000057 (describing various locations that AdWords advertisements will appear, including the “Google Network” which includes partner websites); G-IPE-0008837 (showing “Ads on Google sites”); G-IPE-0008842 (showing AdSense network).

“Search queries are received by one of the Google Web Servers (GWS) . . . It passes that information to an Ad Server to choose a set of ads to return.” G-IPE-0009731. “For a search results page, the end user visits google.com (or an AdSense for Search partner), enters a query, and sees results with ads.” G-IPE-0009727. “On a search results page, we pick ads directly based on the user query” *Id.*

b. searching for information relevant to a query associated with a first user in a plurality of users;

Google AdWords searches for information relevant to a query associated with a user. For example, the search bar on Google’s website (www.google.com) and other “search network” sites allows a user to enter a search query and run a demand search. *See* section a. In response to the query, the system conducts a

demand search for information. See IPE0000051-IPE0000053. Google AdWords searches the information, in part, on the basis of content data (e.g., ad text, keyword, and landing page attributes) for relevance to the query. IPE0000058. Google states that “AdWords uses a dynamic variable called ‘Quality Score’ to evaluate keyword relevance” and that “Quality Score is based [in part] on . . . the relevance of your ad text, keyword, and landing page.” *Id.*; see also IPE0000061-IPE0000062 (“[t]he Quality Score for Ad Rank on Google and the search network is determined by . . . the relevance of the keyword and the matched ad to the search query” and that “[h]aving relevant keywords and ad text . . . will result in a higher position for your ad.”).

[REDACTED]

c. receiving information found to be relevant to the query by other users;

Google AdWords receives information found to be relevant to the query by users of the system. For example, Google AdWords receives feedback (in the form of clickthrough data) about information, e.g., advertisements, considered by the other users. See IPE0000064 (“Millions of users click on AdWords ads every day. Every single one of those clicks – and the even more numerous impressions associated with them – is analyzed by our filters (stage 1), which operate in real-

time.”). Google AdWords uses the “dynamic variable called ‘Quality Score’ to evaluate keyword relevance.” IPE0000058. In AdWords, a component of the “Quality Score” is based on an advertisement’s “clickthrough rate (CTR)” *Id.*; see also IPE0000061-IPE0000062 (“[t]he historical clickthrough rate (CTR) of the keyword and the matched ad on Google; if the ad is appearing on a search network page, its CTR on that search network partner is also considered” and that “[h]aving . . . a strong CTR on Google . . . will result in a higher position for your ad.”). Google says that, of the three components of Quality Score, CTR is “the biggest one by far” and that “by allowing users to vote with their clicks, we have millions of people that are helping us to decide which ads are best for each search query.” IPE0000073. The CTR is feedback on advertisements that other users found relevant to the query.



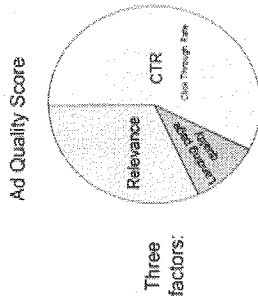
Google AdWords combines information found to be relevant to the query with the searched information. For example, Google states that AdWords uses a “Quality Score” to evaluate an advertisement’s relevance. IPE0000063. The Quality Score is a combination of factors including feedback data, i.e., “[a] keyword’s clickthrough rate (CTR),” and content data, i.e., “the relevance of your ad text, keyword, and landing page.” *Id.*; see also IPE0000062 (“Having relevant keywords and ad text [and] a strong CTR on Google . . . will result in a higher position for your ad.”).

d. combining the information found to be relevant to the query by other users with the searched information; and

Google AdWords combines information found to be relevant to the query with the searched information. For example, Google states that AdWords uses a “Quality Score” to evaluate an advertisement’s relevance. IPE0000063. The Quality Score is a combination of factors including feedback data, i.e., “[a] keyword’s clickthrough rate (CTR),” and content data, i.e., “the relevance of your ad text, keyword, and landing page.” *Id.*; see also IPE0000062 (“Having relevant keywords and ad text [and] a strong CTR on Google . . . will result in a higher position for your ad.”).

[Redacted]

Further, the "Ad Quality Score" is illustrated as including three factors: "Relevance," "CTR," and "Landing page quality." See G-IPE-0008850:

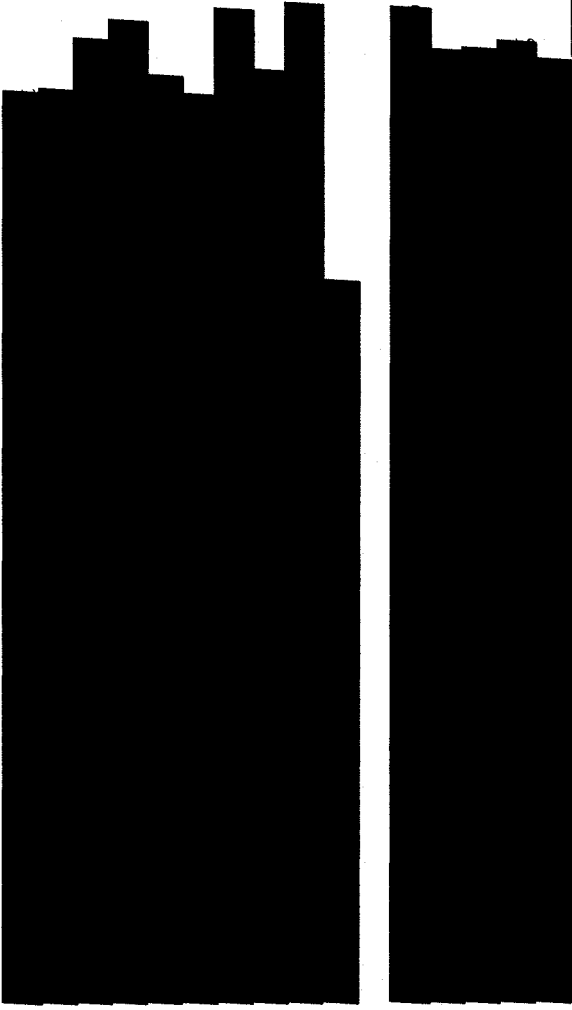


e. content-based filtering the combined information for relevance to at least one of the query and the first user.

Google AdWords calculates a "Quality Score" for each advertisement, which combines content and feedback information. See claim 26 section d. The "Quality Score" is used to determine the relevance of the advertisement to the query and/or the user. IPE0000058 ("For AdWords ads, the most important factor in relevance and ranking is the ad's quality, also called the Quality Score.").

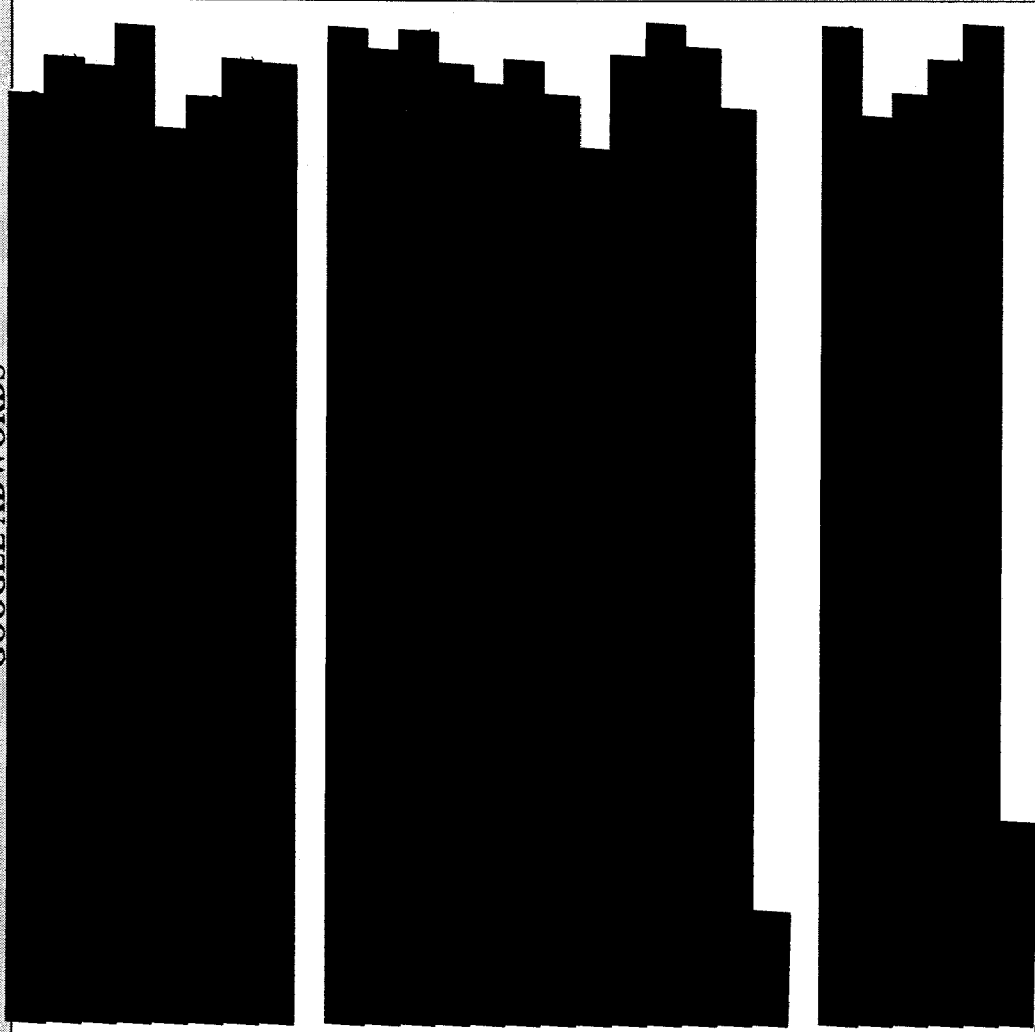
[Redacted]

CLAIM 28	GOOGLE ADWORDS
28. The method of claim 26 further comprising the step of delivering the filtered information to the first user.	Google AdWords delivers filtered information to a user in the form of links to websites with short descriptions. See IPE0000051-IPE0000053 (displaying an example search for "grill").

CLAIM 38	GOOGLE ADWORDS
38. The method of claim 26 wherein the searching step comprises scanning a network in response to a demand search for the information relevant to the query associated with the first user.	<p>Google AdWords scans a network in response to a demand search for information relevant to a query from a user. For example, the search bar on Google's website (www.google.com) and other "search network" sites allows a user to enter a search query and run a demand search. See claim 26 section b. In response to the query, the system conducts a demand search for information. See IPE0000051-IPE0000053. Google uses distributed databases in its systems, and the databases distribute information across several locations on a network. IPE0000011-IPE0000024; see also IPE0000026(showing distributed systems).</p> 

CLAIM 38

GOOGLE ADWORDS



CERTIFICATE OF SERVICE

I hereby certify that on this 17th day of February, 2012, the foregoing **PLAINTIFF I/P ENGINE, INC.'S SECOND PRELIMINARY DISCLOSURE OF ASSERTED CLAIMS AND INFRINGEMENT CONTENTIONS AS TO GOOGLE ADWORDS AND GOOGLE ADSENSE FOR SEARCH**, was served via email, on the following:

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