# **EXHIBIT G**

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

I/P ENGINE, INC.,		)	
I/I ENGINE, INC.,		)	
	Plaintiff,	)	
v.		)	Civ. Action No. 2:11-cv-512
AOL, INC. et al.,		)	
	Defendants.	)	

# PLAINTIFF I/P ENGINE, INC.'S PRELIMINARY DISCLOSURE OF ASSERTED CLAIMS AND PRE-DISCOVERY INFRINGEMENT CONTENTIONS AS TO TARGET CORPORATION'S USE OF GOOGLE ADWORDS AND GOOGLE ADSENSE FOR SEARCH

Plaintiff I/P Engine, Inc. ("I/P Engine") hereby makes the following Disclosure of Asserted Claims and Pre-Discovery 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 Target Corporation's ("Target") systems using Google, Inc.'s products, methods and systems promoted under the names of Google AdWords and Google AdSense for Search<sup>1</sup> (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 is reproduced in the attached claim charts. The left column of the claim charts includes the language of each claim; each element of each claim is listed separately. The right column of the claim charts includes the features of

<sup>&</sup>lt;sup>1</sup> 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.

Target's system using Google AdWords (e.g., Target's Website) 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, Target 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 marketing materials and other publicly available sources, each limitation of each claim of the '420 and '664 patents asserted against Target is literally present in Target's system using Google AdWords. If Target contends that any limitation of any of the asserted claims is not literally present in Target's system using Google AdWords, any such limitation of the asserted claims is present under the doctrine of equivalents because the difference(s), if any, between Target's system using 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 Target identifies which elements it contends are not present in Target's system using Google AdWords.

#### **C.** Identification of Priority Date

Each of the asserted claims of the '420 and '664 patents is 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, the use of Target's system using Google AdWords directly infringes the asserted claims of the '420 and '664 patents and establishes the prerequisite act of direct infringement. Target 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).

Target, via publicly available materials, provides, sells, offers for sale, and/or promotes the infringing system to customers that use Target's system using Google AdWords. Based on these materials and uses, Target intends for its customers to use Target's system using Google AdWords in an infringing manner. Thus, Target intends to cause infringement of the '420 and '664 patents.

By making, using, providing and promoting Target's system using Google AdWords, and by continuing to provide and/or promote its website, with the intention of causing at least some customers to use Target's system using Google AdWords in an infringing manner, Target actively and knowingly aids and abets infringement of the '420 and '664 patents and is liable under induced infringement.

In addition, Target's system using Google AdWords is a material part of the claimed invention of the '420 and '664 patents. Target's system using Google AdWords is especially made or especially adapted for use with only infringing search engine systems and/or search systems. Furthermore, Target's system using Google AdWords is not a staple article. Target's system using Google AdWords is not a commodity of commerce and can only be used with infringing search engine systems and/or search systems. Target's system using Google AdWords is also not suitable for substantial non-infringing uses. Therefore, Target is liable as a contributory infringer.

These contentions are preliminary, are based on known publicly available information, 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 Target's system using Google AdWords becomes available and/or for other good cause.

Dated: November 11, 2011 By: /s/ Charles J. Monterio, Jr.

Jeffrey K. Sherwood Frank C. Cimino, Jr. Kenneth W. Brothers DeAnna Allen Charles J. Monterio, Jr. DICKSTEIN SHAPIRO LLP 1825 Eye Street, NW Washington, DC 20006

Telephone: (202) 420-2200 Facsimile: (202) 420-2201

Richard H. Ottinger VANDEVENTER BLACK LLP 500 World Trade Center Norfolk, VA 23510

Telephone: (757) 446-8600 Facsimile: (757) 446-8670

Counsel for Plaintiff I/P Engine, Inc.

4

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

# **Target Website**

CLAIM 10	TARGET WEBSITE
a. A search engine system comprising:	The preamble is typically not a limitation and thus no comparison needs to be made between the accused system, the Target Website, and the preamble. <i>See, e.g., 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, the Target Website includes a search engine system.
	The Target Website ( <a href="www.Target.com">www.Target.com</a> ) includes a search engine system that searches for information (e.g., advertisements) relevant to the search query. For example, when a user enters a search query into the search bar on the Target Website and selects the "search" button, the user is presented with a list of information, e.g., advertisements. See IPE0000672-IPE0000676. The display of advertisements on Target's website is provided by the Google AdWords system. IPE0000676 ("Ads by Google"); see also IPE0000677 (showing that clicking a link redirects through the <a href="www.google.com">www.google.com</a> domain).
b. a system for scanning a network to make a demand search for informons relevant to a query from an individual user;	The Target Website 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 the Target Website allows a user to enter a search query and run a demand search. See section a. In response to the query, the Google AdWords system that the Target Website uses to display advertisements conducts a demand search for information. See IPE0000672-IPE0000676. 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). Additionally, the system collects information on landing pages of advertisements on the Internet. IPE0000066 ("[t]] he AdWords system retrieves

CLAIM 10	TARGET WEBSITE
	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.").
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	The Target Website 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, the Target Website uses the Google AdWords system to display advertisements. IPE0000676. 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." <i>Id.</i> ; <i>see also</i> 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. a feedback system for receiving collaborative	The Target Website includes a system that receives feedback data from system
feedback data from system users relative to	users, the feedback data being related to the website information returned as
informons considered by such users;	results and considered by users. For example, the Target Website uses the Google AdWords system to display advertisements. IPE0000676. Google AdWords receives feedback (in the form of clickthrough data) about information, e.g., advertisements, considered by the other users. <i>See</i> 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)" <i>Id.; see also</i> 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

CLAIM 10	TARGET WEBSITE
	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.
e. the filter system combining pertaining	The Target Website includes a system that combines pertaining feedback data
feedback data from the feedback system with the	with content data in filtering information for relevance to the query. For example
content profile data in filtering each informon	the Target Website uses the Google AdWords system to display advertisements.
for relevance to the query.	IPE0000676. 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.").

CLAIM 14	TARGET WEBSITE
The system of claim 10 wherein the	The Target Website uses the Google AdWords system, which collects and uses
collaborative feedback data comprises passive	feedback data in the form of clickthrough rate. IPE0000676; see claim 10 section
feedback data.	d. The clickthrough rate recorded by Google AdWords is passive feedback data.

CLAIM 15	TARGET WEBSITE
The system of claim 14 wherein the passive	The Target Website uses the Google AdWords system to display advertisements.
feedback data is obtained by passively	IPE0000676. Google AdWords passively monitors a user's behavior related to
monitoring the actual response to a proposed	proposed advertisements. Google AdWords records the clickthrough rates of
informon.	each respective advertisement. See claim 10 section d.

CLAIM 25	TARGET WEBSITE
a. A method for operating a search engine system comprising:	The preamble is typically not a limitation and thus no comparison needs to be made between the accused system, the Target Website, and the preamble. <i>See</i> , <i>e.g.</i> , <i>Symantec Corp. v. Computer Associate Intern.</i> , <i>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, the Target Website includes a method for operating a search engine system.
	The Target Website 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 the Target Website ( <a href="www.target.com">www.target.com</a> ) and selects the "search" button, the user is presented with a list of information, e.g., advertisements. See IPE0000672-IPE0000676. The display of advertisements on Target's website is provided by the Google AdWords system. IPE0000676 ("Ads by Google"); see also IPE0000677 (showing that clicking a link redirects through the <a href="www.google.com">www.google.com</a> domain).
b. scanning a network to make a demand search for informons relevant to a query from an individual user;	The Target Website 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 the Target Website allows a user to enter a search query and run a demand search. <i>See</i> section a. In response to the query, the Google AdWords system that the Target Website uses to display advertisements conducts a demand search for information. <i>See</i> IPE0000672-IPE0000676. Google uses distributed databases in its systems, and the databases distribute information across several locations on a network. IPE0000011-IPE0000024; <i>see also</i> IPE0000026 (showing distributed systems). 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.").
c. receiving the informons in a content-based filter system from the scanning system and	The Target Website receives information from the scanning system and filters the information on the basis of applicable content profile data for relevance to the

CLAIM 25	TARGET WEBSITE
filtering the informons on the basis of applicable	query. For example the Target Website uses the Google AdWords system to
content profile data for relevance to the query;	display advertisements. IPE0000676. Google AdWords receives and filters
content profile data for felevance to the query,	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." <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.").
d. receiving collaborative feedback data from	The Target Website also receives feedback data from system users, the feedback
system users relative to informons considered by	data being related to the website information returned as results and considered
such users; and	by users. For example the Target Website uses the Google AdWords system to
	display advertisements. IPE0000676. 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 from system users relative to advertisements considered by
	the users.

CLAIM 25	TARGET WEBSITE
e. combining pertaining feedback data with the	The Target Website combines pertaining feedback data with content data in
content profile data in filtering each informon	filtering information for relevance to the query. For example the Target Website
for relevance to the query.	uses the Google AdWords system to display advertisements. IPE0000676.
	Google states that AdWords uses a "Quality Score" to rank advertisements.
	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." <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.").

CLAIM 27	TARGET WEBSITE
The method of claim 25 wherein the	The Target Website uses the Google AdWords system, which collects and uses
collaborative feedback data provides passive	feedback data in the form of clickthrough rate. IPE0000676; see claim 10 section
feedback data.	d. The clickthrough rate recorded by Google AdWords is passive feedback data.

CLAIM 28	TARGET WEBSITE
The method of claim 27 wherein the passive	The Target Website uses the Google AdWords system to display advertisements.
feedback data is obtained by passively	IPE0000676. Google AdWords records the clickthrough rates of each respective
monitoring the actual response to a proposed	advertisement. See claim 25 section d.
informon.	

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

### **Target Website**

CLAIM 1	TARGET WEBSITE
a. A search system comprising:	The preamble is typically not a limitation and thus no comparison needs to be made between the accused system, the Target Website, and the preamble. <i>See</i> , <i>e.g.</i> , <i>Symantec Corp. v. Computer Associate Intern.</i> , <i>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, the Target Website includes a search system.
	The Target Website 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 the Target Website and selects the "search" button, the user is presented with a list of information, e.g., advertisements. <i>See</i> IPE0000672-IPE0000676. The display of advertisements on Target's website is provided by the Google AdWords system. IPE0000676 ("Ads by Google"); see also IPE0000677 (showing that clicking a link redirects through the <a href="https://www.google.com">www.google.com</a> domain).
b. a scanning system for searching for information relevant to a query associated with a first user in a plurality of users;	The Target Website includes a system for searching for information relevant to a query from a user. For example, the search bar on the Target Website allows a user to enter a search query and run a demand search. <i>See</i> section a. In response to the query, the Google AdWords system that the Target Website uses to display advertisements conducts a demand search for information. <i>See</i> IPE0000672-IPE0000676. 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> ; <i>see also</i> IPE0000061-IPE0000062 ("[t]he Quality Score for Ad Rank on Google and the search network is determined by the relevance of

CLAIM 1	TARGET WEBSITE
CLAIN I	the keyword and the matched ad to the search query" and that "[h]aving relevant
a a facility and a system for magicine information	keywords and ad text will result in a higher position for your ad.").
c. a feedback system for receiving information	The Target Website includes a system for receiving information found to be
found to be relevant to the query by other users; and	relevant to the query by users of the system. For example the Target Website
and	uses the Google AdWords system to display advertisements. IPE0000676.
	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)" <i>Id.</i> ; 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	The Target Website includes a system for combining information from the
information from the feedback system with the	feedback system with information from the scanning system to filter information
information from the scanning system and for	for relevance to the query. For example the Target Website uses the Google
filtering the combined information for relevance	AdWords system to display advertisements. IPE0000676. Google states that
to at least one of the query and the first user.	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." <i>Id.; see also</i> IPE0000062
	("Having relevant keywords and ad text [and] a strong CTR on Google will
	result in a higher position for your ad.").

CLAIM 5	TARGET WEBSITE
The search system of claim 1 wherein the	The Target Website uses the Google AdWords system to display advertisements.
filtered information is an advertisement.	IPE0000676. Google AdWords filters advertisements. See claim 1 sections a-d.

CLAIM 6	TARGET WEBSITE
The search system of claim 1 further comprising	The Target Website displays information to a user in the form of links to
an information delivery system for delivering the	websites with short descriptions. See IPE0000672-IPE0000676 (displaying an
filtered information to the first user.	example search for "grill").

CLAIM 21	TARGET WEBSITE
The search system of claim 1 wherein the	The Target Website uses Google AdWords to display advertisements.
content-based filter system filters by extracting	IPE0000676. Google AdWords extracts features (e.g., text) from an
features from the information.	advertisement to perform content-based filtering. IPE0000058.

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

CLAIM 26	TARGET WEBSITE
a. A method for obtaining information relevant	The preamble is typically not a limitation and thus no comparison needs to be
to a first user comprising:	made between the accused system, the Target Website, and the preamble. See,
13	

CLAIM 26	TARGET WEBSITE
	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, the Target Website includes a method for obtaining information relevant to a first user.
	The Target Website searches for information (e.g., advertisements) relevant to a user. For example, when a user enters a search query into the search bar on the Target Website and selects the "search" button, the user is presented with a list of information, e.g., advertisements. <i>See</i> IPE0000672-IPE0000676. The display of advertisements on Target's website is provided by the Google AdWords system. IPE0000676 ("Ads by Google"); <i>see also</i> IPE0000677 (showing that clicking a link redirects through the <a href="https://www.google.com">www.google.com</a> domain).
b. searching for information relevant to a query	The Target Website searches for information relevant to a query associated with
associated with a first user in a plurality of users;	a user. For example, the search bar on the Target Website allows a user to enter a search query and run a demand search. <i>See</i> section a. In response to the query, the Google AdWords system that the Target Website uses to display advertisements conducts a demand search for information. <i>See</i> IPE0000672-IPE0000676. 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." <i>Id.</i> ; <i>see also</i> 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.").
c. receiving information found to be relevant to	The Target Website receives information found to be relevant to the query by
the query by other users;	users of the system. For example, the Target Website uses Google AdWords to display advertisements. IPE0000676. Google AdWords receives feedback (in the form of clickthrough data) about information, e.g., advertisements,

CLAIM 26	TARGET WEBSITE
	considered by the other users. <i>See</i> 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
d. combining the information found to be	query.  The Target Website combines information found to be relevant to the query with
relevant to the query by other users with the	the searched information. For example, the Target Website uses Google
searched information; and	AdWords to display advertisements. IPE0000676. 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." <i>Id.; see also</i> IPE0000062 ("Having relevant keywords and ad text [and] a strong CTR on Google will result in a
	higher position for your ad.").
e. content-based filtering the combined	The Target Website uses Google AdWords to display advertisements.
information for relevance to at least one of the	IPE0000676. Google AdWords calculates a "Quality Score" for each
query and the first user.	advertisement, which combines content and feedback information. See claim 26
	section d. The "Quality Score" is used to determine the relevance of the ad 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.").

CLAIM 28	TARGET WEBSITE
28. The method of claim 26 further comprising	The Target Website uses Google AdWords to display advertisements.
the step of delivering the filtered information to	IPE0000676. Google AdWords delivers filtered information to a user in the form
the first user.	of links to websites with short descriptions. See IPE0000672-IPE0000676
	(displaying an example search for "grill").

CLAIM 38	TARGET WEBSITE
38. The method of claim 26 wherein the	The Target Website uses Google AdWords to display advertisements.
searching step comprises scanning a network in	IPE0000676. Google AdWords scans a network in response to a demand search
response to a demand search for the information	for information relevant to a query from a user. For example, the search bar on
relevant to the query associated with the first	the Target Website allows a user to enter a search query and run a demand
user.	search. See section a. In response to the query, the Google AdWords system that
	the Target Website uses to display advertisements conducts a demand search for
	information. See IPE0000672-IPE0000676. 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). 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.").

#### **CERTIFICATE OF SERVICE**

I hereby certify that on this 11th day of November, 2011, the foregoing Plaintiff I/P Engine, Inc's Preliminary Disclosure of Asserted Claims and Pre-Discovery Infringement Contentions as to Target Corporation's Use of Google AdWords and Google AdSense for Search, was served via email, on the following:

Stephen Edward Noona Kaufman & Canoles, P.C. 150 W Main St Suite 2100 Norfolk, VA 23510 senoona@kaufcan.com

David Bilsker
David Perlson
Quinn Emanuel Urquhart & Sullivan LLP
50 California Street, 22nd Floor
San Francisco, CA 94111
davidbilsker@quinnemanuel.com
davidperlson@quinnemanuel.com

Robert L. Burns Finnegan, Henderson, Farabow, Garrett & Dunner, LLP Two Freedom Square 11955 Freedom Drive Reston, VA 20190 robert.burns@finnegan.com

Cortney S. Alexander
Finnegan, Henderson, Farabow, Garrett & Dunner, LLP
3500 SunTrust Plaza
303 Peachtree Street, NE
Atlanta, GA 94111
cortney.alexander@finnegan.com

/s/ Armands Chagnon
Senior Paralegal