

EXHIBIT 5

Summary of Opinions

Google's Adwords Infringes IPE Patents

Quality Score

Quality Score is an estimate of how relevant your ads, keywords, and landing page are to a person seeing your ad. Having a *high* Quality Score means that our systems think your ad, keyword, and landing page are all relevant and useful to someone looking at your ad. Having a *low* Quality Score, on the other hand, means that your ads, keywords, and landing page probably aren't as relevant and useful to someone looking at your ad.

Example

Suppose Sam is looking for a pair of striped socks. And let's say you own a website that specializes in socks. Wouldn't it be great if Sam types "striped socks" into Google search, sees your ad about striped socks, clicks your ad, and then lands on your webpage where he buys some spiffy new striped socks?



In this example, Sam searches and finds exactly what he's looking for. That's what we consider a great user experience, and that's what can earn you a high Quality Score.

Summary of Opinions

Google's Adwords Infringes IPE Patents because its "Quality Score" is based on content and collaborative data.

How we calculate Quality Score

Every time someone does a search that triggers your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a number of different things related to your account, like the following:

- **Your keyword's past clickthrough rate (CTR):** How often that keyword led to clicks on your ad
- **Your display URL's past CTR:** How often you received clicks with your display URL
- **Your account history:** The overall CTR of all the ads and keywords in your account
- **The quality of your landing page:** How relevant, transparent, and easy-to-navigate your page is
- **Your keyword/ad relevance:** How relevant your keyword is to your ads
- **Your keyword/search relevance:** How relevant your keyword is to what a customer searches for
- **Geographic performance:** How successful your account has been in the regions you're targeting
- **Your ad's performance on a site:** How well your ad's been doing on this and similar sites (if you're targeting the Display Network)
- **Your targeted devices:** How well your ads have been performing on different types of devices, like desktops/laptops, mobile devices, and tablets – you get different Quality Scores for different types of devices

COLLABORATIVE

CONTENT

<http://support.google.com/adwords/bin/answer.py?hl=en&answer=2454010>



7/17/2012
IPE 0022875

[bin/answer.py?hl=en&answer=2454010](http://support.google.com/adwords/bin/answer.py?hl=en&answer=2454010)

7/17/2012
IPE 0022876

[bin/answer.py?hl=en&answer=2454010](http://support.google.com/adwords/bin/answer.py?hl=en&answer=2454010)

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IPE 0022877

Summary of Opinions

Google's Adwords Infringes IPE Patents because it uses quality score to filter ads.

How Quality Score affects you

As mentioned above, we calculate a Quality Score every time someone does a search for one of your keywords. This Quality Score is then used in several different ways, affecting the following things in your account:

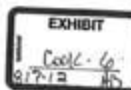
- **Ad auction eligibility:** Higher Quality Scores make it easier and cheaper for a keyword to enter the ad auction.
- **Your keyword's actual cost-per-click (CPC) :** Higher Quality Scores lead to lower CPCs. That means you pay less per click when your keyword has a higher Quality Score.
- **Your keyword's first page bid estimate :** Higher Quality Scores lead to lower first page bid estimates. That means it's easier for your ad to show on the first page of search results when your keyword has a higher Quality Score.
- **Your keyword's top of page bid estimate:** Higher Quality Scores lead to lower top of page bid estimates. That means it's easier for your ad to show towards the top of the page when your keyword has a higher Quality Score.
- **Ad position:** Higher Quality Scores lead to higher ad positions. That means your ad can show up higher on the page when your keyword has a higher Quality Score.

Checking your Quality Score

You can check your Quality Score by looking within your Keywords tab. There are a couple ways to check your Quality Score, as shown below.

Run a keyword diagnosis:

1. Click the Campaigns tab at the top.
2. Select the Keywords tab.
3. Click the white speech bubble next to any keyword's status to see details about that keyword's Quality Score. You'll



<http://support.google.com/adwords/bin/answer.py?hl=en&answer=2454010>

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the day, we show you a single Quality Score that gives you an estimate of that keyword's

igger's your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a

rate (CTR): How often that keyword led to clicks on your ad

er often you received clicks with your display URL.

CTR of all the ads and keywords in your account

How relevant, transparent, and easy-to-navigate your page is

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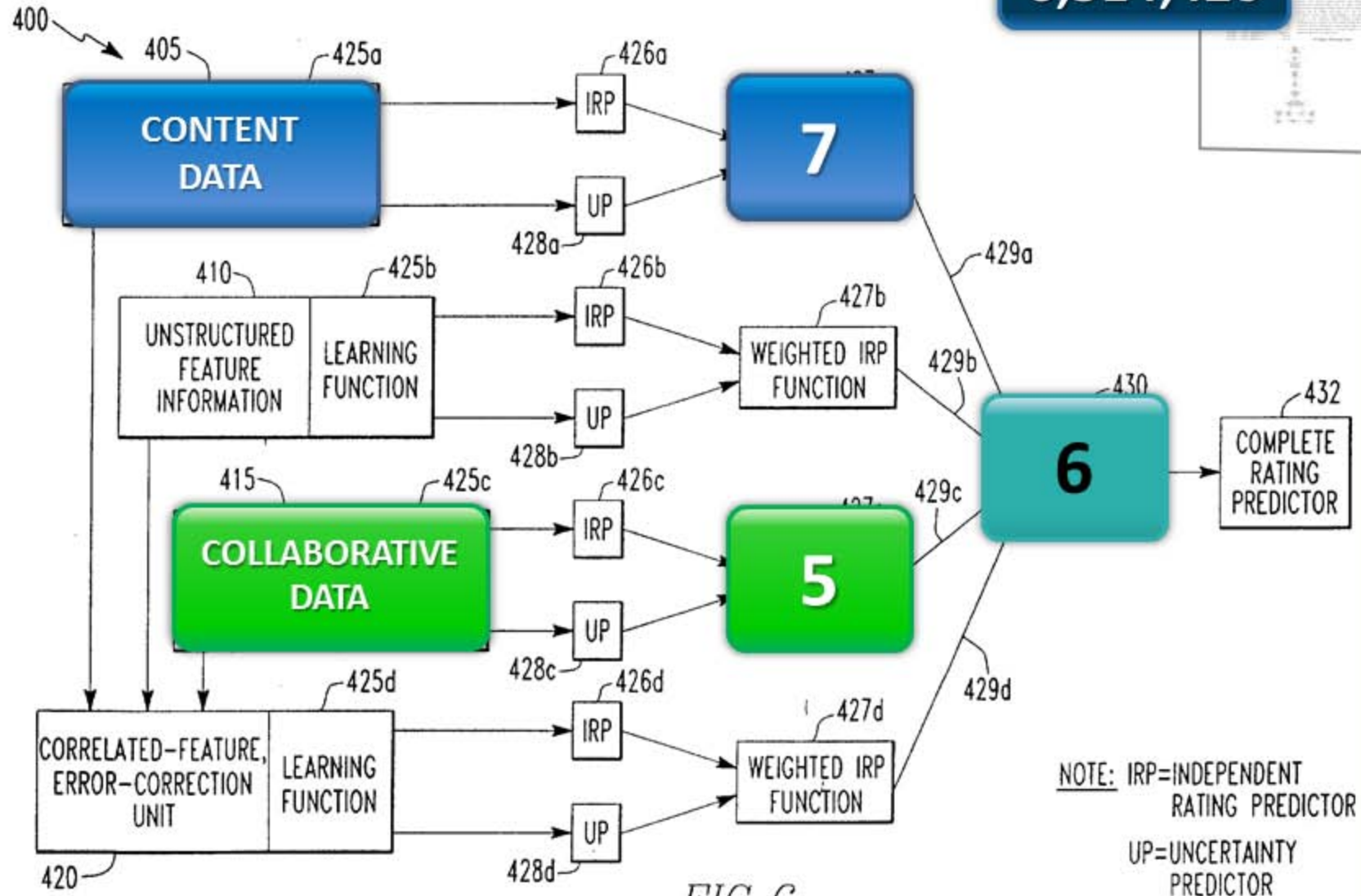


FIG. 6

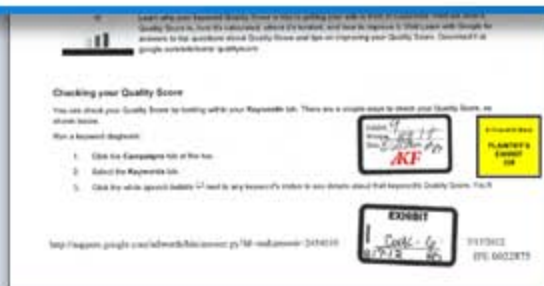
Adwords Infringes the '420 Patent

Claim 10

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

Every time someone does a search that triggers your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a number of different things related to your account, like the following:

- **Your keyword/ad relevance:** How relevant your keyword is to your ads
- **Your keyword/search relevance:** How relevant your keyword is to what a customer searches for



Adwords Infringes the '420 Patent

Claim 10

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

“Collaborative feedback data” means “data from system users with similar interests or needs regarding what informons such users found to be relevant”



Every time someone does a search that triggers your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a number of different things related to your account, like the following:

- **Your keyword's past clickthrough rate (CTR):** How often that keyword led to clicks on your ad



Adwords Infringes the '420 Patent

Claim 10

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

How we calculate Quality Score

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Quality Score

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google.com/ads/learn/qualityscore

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<http://support.google.com/adwords/bin/answer.py?hl=en&answer=2454010>

Exhibit 9
Witness
Date 8/17/12
AKF

2:11-cv-811 (RAJ)
PLAINTIFF'S
EXHIBIT
338

EXHIBIT
Cook - 6
8/17/12 MS

7/17/2012
IPE 0022875

Use of Content & Collaborative Filtering For Search Ads

2005 — 2006 — 2007 — 2008 — 2009 — 2010 — 2011 — 2012

7/17/2012



How we calculate Quality Score

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Adwords Infringes the '420 Patent

Claim 25

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



Every time someone does a search that triggers your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a number of different things related to your account, like the following:

- **Your keyword/ad relevance:** How relevant your keyword is to your ads
- **Your keyword/search relevance:** How relevant your keyword is to what a customer searches for



Adwords Infringes the '420 Patent

Claim 25

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

“Collaborative feedback data” means “data from system users with similar interests or needs regarding what informons such users found to be relevant”



Every time someone does a search that triggers your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a number of different things related to your account, like the following:

- **Your keyword's past clickthrough rate (CTR):** How often that keyword led to clicks on your ad



Adwords Infringes the '420 Patent

Claim 25

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

The image shows a screenshot of the Google AdWords Quality Score help page. The page title is "Quality Score - AdWords Help" and it is on "Page 1 of 3". The main heading is "How we calculate Quality Score". Below this, there is a paragraph explaining that Quality Score is calculated based on various factors. A list of factors is provided, with several items highlighted by blue boxes. Two callout boxes are present: a green one labeled "COLLABORATIVE" pointing to the CTR factors, and a blue one labeled "CONTENT" pointing to the keyword/ad and keyword/search relevance factors.

Quality Score - AdWords Help Page 1 of 3

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http://support.google.com/adwords/answer/3114118
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Adwords Infringes the '664 Patent

Claim 1

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



Every time someone does a search that triggers your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a number of different things related to your account, like the following:

- **Your keyword/ad relevance:** How relevant your keyword is to your ads
- **Your keyword/search relevance:** How relevant your keyword is to what a customer searches for



Adwords Infringes the '664 Patent

Claim 1

a feedback system for receiving information found to be relevant to the query by other users; and



Every time someone does a search that triggers your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a number of different things related to your account, like the following:

- **Your keyword's past clickthrough rate (CTR):** How often that keyword led to clicks on your ad



Adwords Infringes the '664 Patent

Claim 1

a content-based filter system for combining the information from the feedback system with the information from the scanning system and for filtering the combined information for relevance to at least one of the query and the first user.

How we calculate Quality Score

Every time someone does a search that triggers your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a number of different things related to your account, like the following:

- **Your keyword's past clickthrough rate (CTR):** How often that keyword led to clicks on your ad
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COLLABORATIVE

CONTENT

Adwords Infringes the '664 Patent

Claim 26

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



Every time someone does a search that triggers your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a number of different things related to your account, like the following:

- **Your keyword/ad relevance:** How relevant your keyword is to your ads
- **Your keyword/search relevance:** How relevant your keyword is to what a customer searches for



Adwords Infringes the '664 Patent

Claim 26

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



Every time someone does a search that triggers your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a number of different things related to your account, like the following:

- **Your keyword's past clickthrough rate (CTR):** How often that keyword led to clicks on your ad



Adwords Infringes the '664 Patent

Claim 26

combining the information found to be relevant to the query by other users with the searched information; and content-based filtering the combined information for relevance to at least one of the query and the first user.

How we calculate Quality Score

Every time someone does a search that triggers your ad, we calculate a Quality Score. To calculate this Quality Score, we look at a number of different things related to your account, like the following:

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