

# EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

PERSONALIZED USER MODEL, )  
L.L.P., )  
 )  
Plaintiff, ) C.A. No. 09-525 (JJF)  
 )  
v. )  
 )  
GOOGLE, INC., )  
 )  
Defendant. )  
 )  
\_\_\_\_\_ )

**PLAINTIFF PERSONALIZED USER MODEL, L.L.P.’S FIRST SET  
OF INTERROGATORIES TO DEFENDANT GOOGLE, INC. (NOS. 1-15)**

Pursuant to Rules 26 and 33 of the Federal Rules of Civil Procedure, as well as the Local Rules of this District, Plaintiff Personalized User Model, L.L.P. (“P.U.M.”) requests that Defendant Google, Inc. (“Google”) respond to the interrogatories set forth herein separately and fully, in writing and under oath, within thirty (30) days of service hereof. These interrogatories shall be read and interpreted in accordance with the definitions and instructions set forth below.

**DEFINITIONS**

1. The term “P.U.M.” means Personalized User Model, L.L.P., including all of its current and past officers, directors, agents, employees, consultants, attorneys, and others acting or purporting to act on behalf of Personalized User Model, L.L.P., including all predecessors, subsidiaries, parents, affiliates, and successors.

2. The term “Google” means Google, Inc., including all of its current and past officers, directors, agents, employees, consultants, attorneys, and others acting or purporting to act on behalf of Google, Inc., including all predecessors, subsidiaries, parents, affiliates, and successors.

3. The term “document” is synonymous in meaning and equal in scope to the usage of this term in Federal Rule of Civil Procedure 34(a), including without limitation electronic or computerized data compilations. A draft or non-identical copy is a separate document within the meaning of this term.

4. The term “person” means any natural person or any business, legal or governmental entity, or association.

5. When referring to a person, “to identify” means to give, to the extent known, the person’s full name, present or last known address, and when referring to a natural person, additionally, the present or last known place of employment. Once Google identifies a person in accordance with this paragraph, only the name of that person need be listed in response to subsequent discovery requesting the identification of that person.

6. When referring to documents, “to identify” means to provide, to the extent known, the: (i) type of document; (ii) general subject matter; (iii) date of the document; and (iv) author(s), addressee(s) and recipient(s).

7. The terms “plaintiff” and “defendant,” as well as a party’s full or abbreviated name or a pronoun referring to a party, mean the party and, where applicable, its officers, directors, employees, partners, corporate parent, subsidiaries, or affiliates. This definition is not intended to impose discovery obligations on any person who is not a party to the litigation.

8. The term “concerning” means relating to, referring to, describing, evidencing, or constituting.

9. The terms “all” and “each” when used individually shall be construed as both all and each.

10. The connectives “and” and “or” shall be construed either disjunctively or conjunctively as necessary to bring within the scope of the discovery requests all relevant responses that might otherwise be construed to be outside of its scope.

11. The use of the singular form of any word includes the plural and vice versa.

12. The term “including” means “including but not limited to.”

13. The term “relating to” means relating to, referring to, concerning, mentioning, reflecting, pertaining to, evidencing, involving, describing, depicting, discussing, commenting on, embodying, responding to, supporting, contradicting, or constituting (in whole or part), as necessary to bring within the scope of the discovery request all relevant responses that might otherwise be construed to be outside of its scope.

14. The term “employee” means any director, trustee, officer, employee, partner, corporate parent, subsidiary, affiliate or servant of the designated entity, whether active or retired, full-time or part-time, current or former, and compensated or not.

15. The term “entity” means any individual and any other cognizable entity, including corporations, proprietorships, partnerships, joint ventures, businesses, consortiums, clubs, associations, foundations, governmental agencies or instrumentalities, societies, and orders.

16. The term “infringement,” and any variant thereof, means any form of infringement actionable under United States law, including direct infringement, contributory infringement, inducement to infringe, literal infringement, and infringement under the doctrine of equivalents.

17. The term “affiliate” means any corporation or entity related to Defendant through corporate ownership of stock such as a parent, subsidiary or sister company, or through common directors, officers, and employees, either at the present time or at any time in the past.

18. The term “the ’040 Patent” means U.S. Patent No. 6,981,040 B1, entitled “Automatic, Personalized Online Information and Product Services.”

19. The term “the ’031 Patent” means U.S. Patent No. 7,320,031 B2, entitled “Automatic, Personalized Online Information and Product Services.”

20. The terms “the patents-at-issue” or “the patents-in-suit” mean the ’040 Patent and the ’031 Patent, individually or collectively, and any other asserted patents in this litigation.

21. The term “personalized search” means “more relevant, useful search results, recommendations, and other personalized features that deliver to the user more useful, relevant information on the Internet,” as Google uses that term or variations of it in at least the following links: <http://www.google.com/support/accounts/bin/answer.py?hl=en&answer=54041>,  
<http://www.google.com/support/accounts/bin/answer.py?hl=en&answer=54048>,  
<http://googleblog.blogspot.com/2009/12/personalized-search-for-everyone.html>,  
<http://googleblog.blogspot.com/2005/06/search-gets-personal.html>,  
<https://www.google.com/accounts/ServiceLogin?hl=en&continue=http://www.google.com/history/&nui=1&service=hist>, [www.google.com/press/guides/personalized\\_overview.pdf](http://www.google.com/press/guides/personalized_overview.pdf),  
<http://www.google.com/support/accounts/bin/answer.py?hl=en&answer=54047>,  
<http://www.google.com/support/accounts/bin/answer.py?hl=en&answer=55988>,  
<http://www.google.com/support/accounts/bin/answer.py?hl=en&answer=106230>,  
<http://www.google.com/support/accounts/bin/topic.py?hl=en&topic=14153>,  
and/or as used by Google in its videos on personalized search found at  
<http://www.youtube.com/watch?v=EKuG2M6R4VM> and  
<http://www.youtube.com/watch?v=UsUBnPRtTbI>.

22. The term “Google’s Answer” means Defendant Google, Inc.’s Answer, Defenses and Counterclaims to Personalized User Model, LLP’s Complaint for Patent Infringement (D.I. 8), served September 8, 2009.

### INSTRUCTIONS

1. Grammar and syntax, as used in these interrogatories, shall be construed and interpreted to give proper meaning and consistency to their context. By way of illustration and not by way of limitation, the singular form of words may include the plural and the plural form of words may apply to each individual person and/or thing, and the use of any gender or tense may be construed to include all genders and tenses, wherever appropriate in these interrogatories, to bring within their scope any relevant information which might otherwise be construed to be outside their scope.

2. If Google contends that an answer to an interrogatory is privileged in whole or in part, or otherwise object to any part of an interrogatory, or contend that any identified document should be immune from production during discovery regardless of its relevance, the following information should be supplied:

- (a) The reason(s) or ground(s) for each objection or assertion of privilege; and
- (b) In the case of interrogatories related to documents, the identity of the document in accordance with Definition 4 above.

3. If, after exercising due diligence to secure the information requested, Google is presently unable to answer any of these interrogatories in full, that should be stated in the interrogatory answer to the extent possible.

4. Wherever appropriate, any interrogatory propounded in the disjunctive shall be read as if propounded in the conjunctive, and vice versa.

5. Each answer must be as complete and straightforward as the information reasonably available to Google permits. If an interrogatory cannot be answered completely, answer it to the fullest extent possible. If you do not possess adequate knowledge to fully answer an interrogatory then say so, but make a reasonable and good faith effort to obtain the information by asking other persons or organizations, unless the information is equally available to P.U.M.

6. If Google elects to specify and produce business records in response to any interrogatory, the specification shall be in sufficient detail to permit P.U.M. to locate and identify, as readily as Google case, the business records from which the answer may be ascertained.

7. The following interrogatories are continuing in character and Google's responses are to be supplemented pursuant to Rule 26(e) of the Federal Rules of Civil Procedure.

### **INTERROGATORIES**

#### **INTERROGATORY NO. 1:**

Identify all Google products that constitute, incorporate, utilize, or contain Google's personalized search technology.

#### **INTERROGATORY NO. 2:**

Describe in detail the steps Google uses to display personalized search results. A complete response will begin with Google's receipt of a search request and detail each step from the receipt of the search request to the point where the results are sent for display on the user's computer for at least (i) users that log in to a Google account (*e.g.*, iGoogle or Gmail); (ii) users that do not log in but use a personal computer with an IP address known to Google or a Windows account (with a Windows Identification); (iii) users that do not log in, and do not use a personal computer, but search the internet within a particular search session. A complete

response must also identify all hardware, software, source code, search engines, algorithms, servers, databases, and/or other software/firmware, or hardware used or involved in each step in such a way to clearly associate each of the steps with the technology used to carry out that step.

**INTERROGATORY NO. 3:**

Describe in detail the steps involved to display advertisements that may appear in the search results of a Google user beginning at the point when the user submits a search request, the results of which cause an advertisement to be considered for display, and concluding at the point where the advertisement is sent to the user's computer for display for at least (i) users that log in to a Google account (*e.g.*, iGoogle or Gmail); (ii) users that do not log in but use a personal computer with an IP address known to Google or a Windows account (with a Windows Identification); (iii) users that do not log in, and do not use a personal computer, but search the internet within a particular search session. A complete response must also identify all hardware, software, source code, search engines, algorithms, servers, databases, and/or other software/firmware, or hardware used or involved in each step in such a way to clearly associate each of the steps with the technology used to carry out that step.

**INTERROGATORY NO. 4:**

Describe in detail the steps involved to display an advertisement that may appear on any webpage of a Google user, including pages on the [www.google.com](http://www.google.com) domain and all webpages displayed while a user is logged into their Google account. A complete response must also identify all hardware, software, source code, search engines, algorithms, servers, databases, and/or other software/firmware, or hardware used or involved in each step in such a way to clearly associate each of the steps with the technology used to carry out that step.



**INTERROGATORY NO. 5:**

To the extent not disclosed in Interrogatory Response Nos. 2-4, describe the operation of all software, hardware, search engines, and/or databases that store users' personal information or profiles (including the structure, organization, and database schemas or files in which the information is stored) in order to return to the user personalized search results upon a search request for at least (i) users that log in to a Google account (*e.g.*, iGoogle or Gmail); (ii) users that do not log in but use a personal computer with an IP address known to Google or Windows account; (iii) users that do not log in, and do not use a personal computer, but search the internet within a particular search session.

**INTERROGATORY NO. 6:**

Describe in detail the method by which Google collects information about individual users' internet activities in order to create personalized search results for particular users. A complete response must identify all hardware, software, source code, search engines, algorithms, servers, databases, and/or other software/firmware, or hardware used or involved in each step in such a way to clearly associate each of the steps with the technology used to carry out that step.

**INTERROGATORY NO. 7:**

Describe in detail the algorithm(s) used to determine which documents or search results to display on the computer screen of a particular user upon receiving a search request for (i) users that log in to a Google account (*e.g.*, iGoogle or Gmail); (ii) users that do not log in to a Google account but use a personal computer with an IP address known to Google or Windows account; (iii) users that do not log in, and do not use a personal computer, but search the internet within a particular search session.

**INTERROGATORY NO. 8:**

State the date and describe the circumstances when Google first became aware of the '040 and '031 patents and fully describe all actions taken by Google as a result of becoming aware of '040 and '031 patents.

**INTERROGATORY NO. 9:**

Beginning on December 27, 2005, identify on a year-by-year and quarter-by-quarter basis (i) the revenues derived from personalized search, including any revenues derived from advertisements related to personalized searches and contracts with third parties to provide such advertisements; and (ii) any costs directly related to personalized searches.

**INTERROGATORY NO. 10:**

Describe in detail Google's contention relating to the damages that P.U.M. is entitled if Google is found to infringe, and identify the documents relating thereto and persons with knowledge thereof.

**INTERROGATORY NO. 11:**

Identify the (4) Google employees most knowledgeable regarding the research, development, design, function, and operation of Google's personalized search technology. Note, each of the areas may be considered separately and/or combined with one or more areas in the event that there are not 4 individuals that have the most knowledge regarding all of the areas listed.

**INTERROGATORY NO. 12:**

State the basis, including the identification of all evidence, for Google's contention that it does not infringe and has not infringed any claim of the patents-in-suit as alleged in paragraphs 8-9 of Google's Answer. In answering this interrogatory, specify which claims Google alleges do not infringe; state in detail, on a limitation-by-limitation basis, how Google's personalized

search technology does not meet the limitations of the claims; and provide a claim chart comparing each limitation of each claim to Google's personalized search technology.

**INTERROGATORY NO. 13:**

State the basis, including the identification of all evidence, for Google's contention that one or more claims of the patents-in-suit, as alleged in the Third Defense in Google's Answer, are invalid. In answering this interrogatory, identify the claims alleged to be invalid, the statutory basis of invalidity (*i.e.*, 35 U.S.C. §§ 101, 102, 103, 112, or 251), and all facts relating to or supporting Google's claim of invalidity.

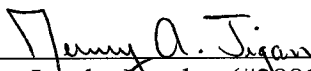
**INTERROGATORY NO. 14:**

Describe in detail the level of ordinary skill in the art that Google contends is applicable to the patents-in-suit.

**INTERROGATORY NO. 15:**

State the basis, including the identification of all evidence, for Google's contention that P.U.M. lacks the standing necessary to assert the claims of the patents-in-suit, as alleged in the Fifth Defense in Google's Answer.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

  
\_\_\_\_\_  
Karen Jacobs Loudon (#2881)  
Jeremy A. Tigan (#5239)  
1201 N. Market Street  
P.O. Box 1347  
Wilmington, DE 19899-1347  
(302) 658-9200  
klouden@mnat.com  
jtigan@mnat.com  
*Attorneys for Personalized User Model, L.L.P.*

OF COUNSEL:

Marc S. Friedman  
SONNENSCHN NATH  
& ROSENTHAL LLP  
1221 Avenue of the Americas  
New York, NY 10020-1089  
(212) 768-6700

Jennifer D. Bennett  
SONNENSCHN NATH  
& ROSENTHAL LLP  
1530 Page Mill Road, Ste. 200  
Palo Alto, CA 94304-1125  
(650) 798-0300

January 19, 2010  
3342656

**CERTIFICATE OF SERVICE**

I hereby certify that on January 19, 2010, I caused the foregoing to be electronically filed with the Clerk of the Court using CM/ECF which will send electronic notification of such filing to all registered participants.

Additionally, I hereby certify that true and correct copies of the foregoing were caused to be served on January 19, 2010 upon the following individuals in the manner indicated:

**BY E-MAIL & HAND DELIVERY**

Richard L. Horwitz  
David E. Moore  
POTTER ANDERSON & CORROON LLP  
1313 N. Market St., 6<sup>th</sup> Floor  
Wilmington, DE 19801  
**rhorwitz@potternanderson.com**  
**dmoore@potteranderson.com**

**BY E-MAIL**

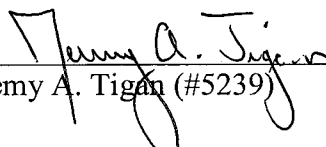
Brian C. Cannon  
QUINN EMANUEL URQUHART OLIVER  
& HEDGES, LLP  
**briancannon@quinnemanuel.com**

Charles K. Verhoeven  
QUINN EMANUEL URQUHART OLIVER  
& HEDGES, LLP  
**charlesverhoeven@quinnemanuel.com**

David A. Perlson  
QUINN EMANUEL URQUHART OLIVER  
& HEDGES, LLP  
**davidperlson@quinnemanuel.com**

Antonio R. Sistos  
QUINN EMANUEL URQUHART OLIVER  
& HEDGES, LLP  
**antoniosistos@quinnemanuel.com**

Eugene Novik  
QUINN EMANUEL URQUHART OLIVER  
& HEDGES, LLP  
**eugenenovikov@quinnemanuel.com**

  
\_\_\_\_\_  
Jeremy A. Tigan (#5239)

# EXHIBIT 2

**Bennett, Jennifer D.**

---

**From:** Eugene Novikov [eugenenovikov@quinnemanuel.com]  
**Sent:** Thursday, August 26, 2010 11:18 AM  
**To:** Bennett, Jennifer D.; Nelson, Mark C.; Friedman, Marc S.  
**Cc:** dmoore@potteranderson.com; rhorwitz@Potteranderson.com; Google-PUM  
**Subject:** PUM v. Google - supplemental interrogatory responses

Counsel

In light of the fact that the number of asserted claims is the subject of a dispute before the Court – and Plaintiff's stated intention to significantly reduce the number of asserted claims – Google is not able to provide supplemental interrogatory responses on invalidity tomorrow. As discussed when the agreement was reached, our willingness and ability to provide supplemental prior art responses at this stage depended on the nature of Plaintiff's infringement interrogatory responses, including the number of claims asserted. Charting all 68 claims that Plaintiff has "asserted" at this stage for several references, many or most of which will not be asserted at trial, is pointless and unreasonable. Indeed, Plaintiff itself has not even provided infringement allegations for many of the supposedly asserted claims and claim elements. We will provide supplemental interrogatory responses on invalidity and prior art within a reasonable amount of time after the dispute regarding asserted claims is resolved, and Plaintiff provides complete and coherent contentions regarding the claims it actually plans to assert at trial. As always, please let us know if you have any questions or if you would like to discuss the matter further.

Gene

# EXHIBIT 3



**Jennifer Bennett**  
(650) 798-0325  
jbennett@sonnenschein.com

1530 Page Mill Road  
Suite 200  
Palo Alto, CA 94304-1125  
650.798.0300  
650.798.0310 fax  
www.sonnenschein.com

April 29, 2010

VIA E-MAIL

Eugene Novikov  
50 California Street  
San Francisco, CA 94111-4788  
(415) 986-5700  
eugenenovikov@quinnemanuel.com

Re: *Personalized User Model, LLP v. Google, Inc.*, C.A. No. 09-00525-JJF

Dear Eugene:

This letter is in response to your April 22, 2010 letter regarding P.U.M.'s infringement contentions. P.U.M. will comply with the Court's Scheduling Order. However, Google has produced only 1,500 pages of documents to date and has yet to produce any source code. Unless Google immediately supplements its production with additional documents and source code responsive to P.U.M.'s document requests, it will be impossible for P.U.M. to provide final infringement contentions by June 18, 2010. Additionally, with respect to P.U.M. supplementing its responses to Google's interrogatories to identify specific Bates numbers for documents, because Google also cites to Fed. R. Civ. P. 33(d) in response to six of its responses to P.U.M.'s interrogatories (Nos. 2-6, and 9), the parties should mutually agree upon a time to exchange this information.

Sincerely,

s/ Jennifer Bennett

Jennifer Bennett

# EXHIBIT 4

**Bennett, Jennifer D.**

---

**From:** Bennett, Jennifer D.  
**Sent:** Saturday, June 05, 2010 1:56 PM  
**To:** 'Eugene Novikov'  
**Cc:** Google-PUM; Friedman, Marc S.; rhorwitz@potteranderson.com; dmoore@potteranderson.com; Shin, Jimmy M.; Nelson, Mark C.; klouden@mnat.com; jtigan@mnat.com  
**Subject:** RE: PUM v. Google - stipulation to amend scheduling order

Gene-

We have reviewed the stipulation to amend that you have prepared and it looks good. Did you want to finalize for filing or would you like us to? We would like to have this filed on Monday.

Thanks,

Jennifer D. Bennett   
 Sonnenschein Nath & Rosenthal LLP  
 jrbennett@sonnenschein.com  
 www.sonnenschein.com



-----  
 CONFIDENTIALITY NOTE:

This e-mail and any attachments are confidential and may be protected by legal privilege. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of this e-mail or any attachment is prohibited. If you have received this e-mail in error, please notify us immediately by returning it to the sender and delete this copy from your system. Thank you for your cooperation.

IRS CIRCULAR 230 NOTICE:

To comply with requirements imposed by the IRS, we inform you that any U.S. federal tax advice contained herein (including any attachments), unless specifically stated otherwise, is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding penalties under the Internal Revenue Code or (ii) promoting, marketing or recommending any transaction or matter addressed herein to another party.

-----

---

**From:** Eugene Novikov [mailto:eugenenovikov@quinnemanuel.com]  
**Sent:** Friday, June 04, 2010 4:20 PM  
**To:** Bennett, Jennifer D.  
**Cc:** Google-PUM; Friedman, Marc S.; 'rhorwitz@potteranderson.com'; 'dmoore@potteranderson.com'; Shin, Jimmy M.; Nelson, Mark C.; 'klouden@mnat.com'; 'jtigan@mnat.com'  
**Subject:** PUM v. Google - stipulation to amend scheduling order

Jennifer –

Attached please find a draft stipulation to change the dates in the scheduling order.

Additionally, below is our understanding of the agreement on the remainder of the dates.

**May 25, 2010** – Google produces source code.

**July 1, 2010** – PUM provides list of asserted claims.

**July 16, 2010** – PUM provides supplemental interrogatory responses regarding infringement contentions. Defendant provides Plaintiff with prior art interrogatory responses based on Plaintiff's previously served infringement contentions.

**August 27, 2010** – Google provides supplemental prior art interrogatory responses based on Plaintiff's list of asserted claims and supplemental infringement contentions. If Google finds that it cannot meet this deadline

9/1/2010

due to the number of asserted claims on PUM's list, the parties will meet and confer regarding an alternative timeline.

**August 27, 2010** – Parties exchange claim construction positions (was July 16).

**September 17, 2010** – Due date for opening claim construction brief (was August 13).

**October 22, 2010** – Due date for responsive claim construction brief (was September 17).

**December 2010** – *Markman* hearing (no change).

Gene

**EXHIBIT 5**  
**FULLY REDACTED**

**EXHIBIT 6**  
**FULLY REDACTED**

# EXHIBIT 7

**Bennett, Jennifer D.**

---

**From:** Bennett, Jennifer D.  
**Sent:** Tuesday, August 31, 2010 2:04 PM  
**To:** 'Eugene Novikov'  
**Cc:** Google-PUM; Friedman, Marc S.; Nelson, Mark C.; Shin, Jimmy M.; Moore, David E.; Horwitz, Richard L.; jtigan@mnat.com; klouden@mnat.com  
**Subject:** RE: PUM v. Google: invalidity charts

Gene-

During the call yesterday PUM offered to provide a subset of claims to Google if Google would agree to then chart the subset and to defer on moving on the number of asserted claims until after we received such invalidity supplementation and the additional promised documents and code. Google refused that compromise.

Thanks,

Jennifer D. Bennett  
Silicon Valley  
Direct: 70325  
jbennett@sonnenschein.com

---

**From:** Eugene Novikov [mailto:eugenenovikov@quinnemanuel.com]  
**Sent:** Tuesday, August 31, 2010 1:54 PM  
**To:** Bennett, Jennifer D.  
**Cc:** Google-PUM; Friedman, Marc S.; Nelson, Mark C.; Shin, Jimmy M.; Moore, David E.; Horwitz, Richard L.; jtigan@mnat.com; klouden@mnat.com  
**Subject:** PUM v. Google: invalidity charts

Jennifer:

On our call Monday, in order to resolve the parties' dispute, Google offered to chart some subset of the 68 asserted claims given that Plaintiff does not contest it will not assert at trial all, or even close to all, of these claims. Plaintiff refused to identify such a subset and instead indicated it believed Google should chart each of the 68 claims for each prior art reference. As Plaintiff has refused to identify any such subset, Google will provide supplemental invalidity charts for the asserted independent claims that have not yet been charted, and for the following dependent claims:

'040 patent: 2, 3, 4

'031 patent: 2, 3

'276 patent: 2, 3, 4

Google will provide these charts on or before September 8. If there is some reasonable number of additional (or different) claims that Plaintiff believes it will assert, and that it would be productive for Google to chart, please let us know by the end of today.

Gene