Exhibit 1

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

DEFENDANT GOOGLE INC.'S THIRD SUPPLEMENTAL OBJECTIONS AND RESPONSES TO PLAINTIFF I/P ENGINE, INC.'S FIRST SET OF INTERROGATORIES (INTERROGATORY NO. 8)

Pursuant to Federal Rules of Civil Procedure 26 and 33, Defendant Google Inc. ("Google") hereby further objects and responds in writing to I/P Engine, Inc.'s ("I/P Engine") First Set of Interrogatories as served on November 7, 2011.

GENERAL OBJECTIONS

Google hereby incorporates by reference and re-states each General Objection from Google's First and Second Supplemental Objections and Responses to I/P Engine's First Set of Interrogatories.

STATEMENT ON SUPPLEMENTATION

Google's investigation in this action is ongoing, and Google reserves the right to rely on and introduce information in addition to any information provided herein at the trial of this matter or in other related proceedings. Google has yet to receive complete discovery responses from I/P Engine. In addition, I/P Engine has yet to identify in a coherent way how it contends Google infringes the asserted claims of the Patents-in-Suit. Google anticipates that facts it learns

later in the litigation may be responsive to one or more of the interrogatories and Google reserves is right to supplement these interrogatories at appropriate points throughout this litigation without prejudice and/or to otherwise make available to I/P Engine such information. Google also reserves the right to change, modify or enlarge the following responses based on additional information, further analysis, and/or in light of events in the litigation such as rulings by the Court. Google reserves the right to rely on or otherwise use any such amended response for future discovery, trial or otherwise.

SPECIFIC OBJECTIONS AND RESPONSES

Google expressly incorporates the above objections as though set forth fully in response to each of the following individual interrogatories, and, to the extent that they are not raised in the particular response, Google does not waive those objections.

INTERROGATORY NO. 8

Identify and describe each basis for Google's contention that the claims of the '420 and '664 Patents are invalid including, but not limited to, all facts, dates, documents, communications and/or events, including prior art, which Google contends are pertinent thereto, and identify the persons having the most knowledge of such facts, dates, documents, communications and/or events.

RESPONSE TO INTERROGATORY NO. 8:

Google incorporates here in response to this interrogatory its General Objections above by this reference. Google objects to this interrogatory on the grounds that: (i) it is overbroad and unduly burdensome; (ii) it is vague and ambiguous with respect to the phrase "all facts, dates, documents, communications and/or events;" (iii) it seeks information that is irrelevant,

immaterial or not reasonably calculated to lead to the discovery of admissible evidence. Google further objects to this interrogatory on the ground that it seeks proprietary, trade secret or other confidential or competitively sensitive business information; and (iv) it is compound and/or is comprised of subparts constituting more than one interrogatory in that it seeks information about '420 and '664 Patents. Google will only produce such relevant, non-privileged information subject to adequate protections for Google's confidential, trade secret and/or proprietary business or technical information via a protective order entered by the Court in this action.

Subject to the foregoing general and specific objections, Google responds that in accordance with Federal Rule of Civil Procedure 33(d), all or part of the non-objectionable discovery sought may be obtained from documents that will be produced. Google will rely on documents produced in this action and will identify those documents to the extent reasonable after the time they are produced. Google will supplement its response to Interrogatory No. 8 to reference relevant documents to the extent reasonable.

Google further responds that the following references, either alone or in conjunction with the knowledge of one of skill in the art, render one or more of the asserted claims invalid:

- "Content-Based, Collaborative Recommendation" by Balabanovic et al.
- "Feature-based and Clique-based User Models for Movie Selection: A Comparative Study" by Alspector et al.
- "Using Collaborative Filtering to Weave an Information Tapestry" by Goldberg et al.
- "Architecting Personalized Delivery of Multimedia Information" by Loeb
- U.S. Patent No. 5,794,237 to Gore
- U.S. Patent No. 5,835,087 to Herz
- U.S. Patent No. 5,855,015 to Shoham
- U.S. Patent No. 6,202,058 to Rose

- U.S. Patent No. 5,724,567 to Rose et al.
- U.S. Patent No. 6,006,218 to Breese et al.
- U.S. Patent No. 6,421,675 to Ryan et al.
- U.S. Patent No. 5,963,940 to Liddy et al.

Google further asserts that the asserted claims of the '420 and '664 patent, as apparently interpreted by Plaintiff, are invalid for lack of enablement and written description. In particular, neither patent describes or enables using collaborative filtering or any other form of feedback on a demand search. Rather, the patents only describe and enable using collaborative filtering with persistent or "wire" search results.

Google reserves its right to supplement, revise or render more specific its responses to Interrogatory No. 8, including during expert discovery.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 8:

Subject to the foregoing general and specific objections, Google identifies the following documents previously produced by Google as showing that the asserted claims from the '420 and '664 patents are invalid: G-IPE-0217615 - G-IPE-0217641, G-IPE-0217642 - G-IPE-0217648, G-IPE-0217649 - G-IPE-0217672, G-IPE-0217673 - G-IPE-0217683, G-IPE-0217684 - G-IPE-0217693, G-IPE-0217694 - G-IPE-0217708, G-IPE-0217709 - G-IPE-0217756, G-IPE-0217757 - G-IPE-0217770, G-IPE-0217771 - G-IPE-0217780, G-IPE-0217781 - G-IPE-0217796, G-IPE-0217797 - G-IPE-0217813, G-IPE-0217814 - G-IPE-0217870, G-IPE-0217871 - G-IPE-0217956, G-IPE-0217957 - G-IPE-0217999, and G-IPE-0218000 - G-IPE-0218013.

Google served its Preliminary Invalidity Contentions on January 24, 2012. Google hereby incorporates those Contentions by reference and submits that its response to this

Interrogatory also may be derived from those disclosures. Google reserves the right to amend and/or supplement its invalidity contentions if and when further information becomes available.

Google reserves its right to supplement, revise or render more specific its responses to Interrogatory No. 8, including during expert discovery.

SECOND SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 8

Google incorporates its General Objections, Specific Objections to Interrogatory No. 8, and prior responses to Interrogatory No. 8 as if fully set forth herein.

Subject to the foregoing General and Specific Objections, Google further states that the following additional prior art references, either alone or in conjunction with the knowledge of one of skill in the art, render one or more of the asserted claims invalid:

- U.S. Patent No. 6,185,558 to Bowman et al. ("Bowman")
- U.S. Patent No. 6,006,222 to Culliss ("Culliss")
- U.S. Patent No. 6,421,675 to Ryan et al. ("Ryan")

Claim charts illustrating how Bowman, Culliss, and Ryan invalidate the asserted claims are attached hereto as Exhibits A-7, A-8, and A-9.[1]

Plaintiff alleged that various references from Defendants' Preliminary Invalidity Contentions do not filter informons "for relevance to the query" or receive information "found to be relevant to the query by other users," on the theory that these references filter and rank for relevance to the user instead of relevance to the query. *See, e.g.*, I/P Engine's Response to Google's Interrogatory No. 13 at 6 (stating that the Rose reference "ranks items based on how

[1] Google further attaches to this interrogatory response, as Exhibits A-1 through A-6, amended versions of the claim charts that were first presented as Exhibits to Defendants' Preliminary Invalidity Contentions.

well their content matches a profile of interests stored for each user, not a query received from an individual user"); 14 ("Nor does Balabanovic disclose 'receiving information found to be relevant to the query by other users.' Balabanovic's feedback is an indication of how well a user liked an item.")

Defendants further provide invalidity charts for Bowman, Culliss, and Ryan, which filter information "for relevance to the query" and "receiv[e] information found to be relevant to the query by other users." *See* Exhibits A-7, A-8, A-9. For example, Bowman accepts a search query from a user and generates a body of search results that match the query. (*See* Bowman at Abstract; 5:31-32; claim 28). Bowman then gives each search result a ranking score based on how often prior users *who had entered the same query* had selected that particular result. (*See id.* at Abstract; 2:30-35; 5:32-35; claim 28). Items that were selected more often get higher ranking scores, and the items with the highest ranking scores are presented to the user. (*Id.* at 9:60-64). (As detailed in the attached charts, Bowman, Culliss, and Ryan also use content-based filtering with their feedback-based filtering.)

Notably, while I/P Engine sought to distinguish the prior art references on the alleged ground that they do not filter information "for relevance to the query" or "receiv[e] information found to be relevant to the query by other users," it has essentially ignored these limitations in its Infringement Contentions. For example, I/P Engine's Infringement Contentions state that Google AdWords meets the '664 claim element of "receiving information found to be relevant to the query by other users" because AdWords allegedly records an advertisement's historical click-through rate and allegedly uses this click-through rate as a component of the advertisement's Quality Score. (*See* I/P Engine, Inc.'s Second Preliminary Infringement Contentions against Google at 24-25). Even if these assertions are true—and they are not—I/P Engine does not even

try to explain how historical click-through rate constitutes "information found to be relevant *to the query* by other users." Rather, I/P Engine's Infringement Contentions assert that an advertisement's historical click-through rate is the overall rate that the ad was clicked on by all AdWords users, not just users who had entered the same query. Thus, I/P Engine's own Infringement Contentions fail to even allege how AdWords meets the limitation that I/P Engine asserts was missing from Defendants' prior invalidity charts, *i.e.* a measure of how relevant users found an advertisement to be for any given query.

* * *

Google also notes that the Court's *Markman* Order of June 15, 2012 (Dkt. 171) held that "scanning a network" means "looking for or examining items in a network" and "a scanning system" means "a system used to search for information." (*See id.* at 23). Under this construction, the process of "scanning" is not limited to spidering or crawling, as Defendants had originally proposed, expanding the relevant art for this element further. Similarly, the *Markman* Order also construed "collaborative feedback data" and "[feedback system for] receiving information found to be relevant to the query by other users" so as not to require that the feedback or received information comes from users with similar interests or needs, again expanding the art relevant to this limitation. (*See id.*) Google's investigation continues as to relevant prior art under the Court's constructions and Google reserves its rights to supplement its response based on additional prior art discovered under that investigation.

Further, the Court has construed "demand search" as "a single search engine query performed upon a user request," and has construed "query" as a "request for search results." (Markman Order at 8, 23). The Court construed "scanning a network" as "looking for or examining items in a network." (*Id.* at 23). Thus, the element of "scanning a network to make a

demand search for informons" requires looking for or examining items to make a request for search results, which makes no sense. The '420 specification also does not describe how to look for or examine items to make a request for search results, nor does it enable one of skill in the art to carry out this step. Accordingly, claims 10, 25, and their dependents are invalid for indefiniteness, lack of written description, and lack of enablement.

Google understands that I/P Engine will supplement its Infringement Contentions by July 2, 2012, and Google reserves its rights to supplement this response based on I/P Engine's forthcoming supplemental Infringement Contentions.

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CERTIFICATE OF SERVICE

On July 2, 2012, I caused to be served the foregoing ***Defendant Google Inc.'s Third Supplemental Objections and Responses to Plaintiff I/P Engine, Inc.'s First Set of Interrogatories*** by email, on Plaintiff's counsel of record.

/s/Joshua L. Sohn
Joshua L. Sohn