Exhibit 1

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

NORTHEASTERN UNIVERSITY and JARG CORPORATION **Plaintiffs,** **v.** **GOOGLE INC.** **Defendant.**	Civil Action No. 2:07-CV-486-CE JURY TRIAL Oral Hearing Requested

DEFENDANT GOOGLE INC.'S PATENT RULE 4-2 PRELIMINARY CLAIM CONSTRUCTION AND IDENTIFICATION OF EXTRINSIC EVIDENCE

In accordance with the Court's June 8, 2009 Order Granting Joint Motion to Extend Time and Patent Rule 4-2, Defendant Google Inc. ("Defendant" or "Google") submits the following preliminary claim construction for certain claims of U.S. Patent No. 5,694,593 (the "patent-in-suit"). In addition, where relevant, Google provides a preliminary identification of extrinsic evidence that supports its proposed claim constructions.

Google reserves the right to supplement or amend its constructions if necessary, including in light of Plaintiffs' contentions. Furthermore, Google submits its preliminary constructions and extrinsic evidence (where relevant) without the benefit of complete discovery from Plaintiffs or third parties. Therefore, Google reserves the right to supplement or amend its contentions as further evidence is discovered during the course of discovery.

Pursuant to Patent Rule 4-2(c), Google is prepared to meet and confer with Plaintiffs at a mutually agreeable time and place for the purpose of narrowing the issues and finalizing preparation of a Joint Claim Construction and Prehearing Statement.

I. DEFENDANT'S PRELIMINARY CLAIM CONSTRUCTION

Below are Google's preliminary claim constructions for the asserted patents. For convenience, Google's preliminary claim constructions are presented in chart format. Claim terms and phrases identified include those identified in Google's May 22, 2009 Patent Rule 4-1 Disclosure of Proposed Claim Terms for Construction as specifically requiring construction, as well as those claim terms and phrases identified in Plaintiffs' May 22, 2009 Patent Rule 4-1 Disclosure of Proposed Claim Terms. In so doing, Google does not concede that any claim term or phrase appearing in Plaintiffs' Patent Rule 4-1 Disclosure, but not also included in Google's Patent Rule 4-1 Disclosures, requires construction by the Court. For brevity, most terms and phrases identified by Google are defined only once, where they first appear. Claim terms and phrases not expressly defined below should be accorded their plain meaning to persons of ordinary skill in the art. Citations to patents are exemplary and not necessarily exhaustive.

Below is Google's preliminary claim construction for U.S. Patent No. 5,694,593:

CLAIM TERM	CONSTRUCTION
[1] "fuzzy queries" (claim[1] 1)	imprecise or inexact requests for information from a database, the result of which does not necessarily contain each term in the query
[2] "non-relational, distributed database system" (claims 1, 8, 13)	a database, stored across multiple computers on a network, wherein data objects exist independently of their attribute values, and wherein data is not extracted

[1] Google has attempted to identify all the claim numbers that require construction. If Google has omitted any claim numbers, that omission is inadvertent. Like terms appearing in other claims should be given the same or a similar construction.

	using relational algebra
[3a] "a plurality of home nodes and a plurality of query nodes connected by a network" (claim 1) [3b] "a plurality of home nodes; and a plurality of query nodes; said plurality of home nodes and said plurality of query nodes connected by a network" (claims 8, 13)	a plurality of home nodes and query nodes connected by a network arranged with no central server and wherein, for any given query, any node may be defined as a home node or a query node
[4] "randomly selecting" (claim 1)	selecting by chance, independently of preceding selections, where each item in the set has equal probability of being chosen
[5] "query fragment(s)" (claims 1, 8, 13)	a part of a query consisting of a limited number of attributes and attribute values joined by relationships, specified in the same formal, artificial language and ontology which describes the attribute values of objects of the database
[6] "hashing" or "hashes" (claims 1, 8, 13)	performing a mathematical function on a key value to generate the address of the location of data associated with the key value
[7] "hashed query fragment" (claims 1, 8, 13)	a data value resulting from hashing a query fragment

[8] "a first portion and a second portion" (claims 1, 8, 13)	a first part separate and distinct from a second part
[9a] "transmitting, by said selected home node, each said hashed query fragment of said plurality of query fragments to a respective one of said plurality of query nodes indicated by said first portion of each said hashed query fragment" (claim 1) [9b] "transmits each said hashed query fragment to a respective one of said plurality of query nodes indicated by said first portion of said hashed query fragment" (claim 8) [9c] "transmitting a query message containing each said hashed query fragment to a respective one of said plurality of query nodes indicated by said first portion of said hashed query fragment" (claim 13)	the selected home node sends each hashed query fragment to exactly one node on the network, that node being identified by said first portion of the hashed query fragment
[10a] "using, by said query node, said second portion of said respective hashed query fragment to access data according to a local hash table located on said query	each query node receiving a hashed query fragment uses the second portion of the hashed query fragment as a key value to identify the address of data according to a

node" (claim 1) [10b] "each said query node uses said second portion of said hashed query fragment to access data according to a local hash table located on said query node" (claim 8) [10c] "said query node, upon receipt of said query message, using said second portion of said hashed query fragment to access data according to a local hash table located on said query node" (claim 13)	local hash table stored on that query node
[11] "local hash table" (claims 1, 8, 13)	a table resident on and unique to a particular query node in which the unique location of the information in the table is determined by hashing a key value
[12a] "returning, by each said query node" (claim 1) [12b] "each said query node … returns" (claim 8) [12c] "said query node … returning" (claim 13)	each query node that accesses data returns an object identifier to the home node
[13] "predetermined degree of relevance"	a predefined degree of similarity; only

(claims 3, 9)	results meeting or exceeding a predetermined level are returned to the user after the object identifier has been returned
[14] "object identifier" (claims 1, 3, 8, 13)	unique identifier of a data object stored in a database

II. EXTRINSIC EVIDENCE

Google preliminarily identifies the following extrinsic evidence that it contends supports its claim constructions. Google reserves the right to present any evidence in rebuttal to extrinsic evidence Plaintiffs may identify in support of their claim construction contentions and as discovery progresses:

- *Dictionary of Computing*. Research Triangle Park, NC: International Business Machines Corporation, 1991 (GN 292964-968)
- J.A. Simpson & E.S.C. Weiner, eds. *Oxford English Dictionary*, 2nd ed., vol. 13 (Clarendon Press: Oxford, UK) (1989) (GN 300402-406)
- Gunton, Tony, *A Dictionary of Information Technology and Computer Science* (2nd ed.) (Oxford, UK: NCC Blackwell Ltd.), 1993 (GN 292977-982, GN 300249-260)
- *Webster's New World Dictionary of Computer Terms* (4TH ed.) (Prentice Hall: New York, NY), 1992 (GN 292954-60, GN 300237-248)
- *Random House Webster's College Dictionary* (New York, NY: Random House Inc.), 1991 (GN 292947-953, GN 300197-206)
- Christopher Booth, ed. *The New IEEE Standard Dictionary of Electrical and Electronics Terms* (5th Ed.: Inst. of Electrical & Electronics Engineers, Inc.) (1993) (GN 300207-221)
- *IEEE Standard Computer Dictionary: A Compilation of IEEE Standard Computer Glossaries* (Inst. of Electrical & Electronics Engineers, Inc.) (1991) (GN 300222-236)
- Donald Knuth, The *Art of Computer Programming, Volume 3, Sorting and Searching*, Addison-Wesley, 1973 (GN 005628-809)
- Jim Gray, Andreas Reuter, *Transaction Processing: Concepts and Techniques*, Morgan Kaufman, 1993 (GN 300173-196)

- William B. Frakes, Ricardo Baeza-Yates, ed., *Information Retrieval / Data Structures & Algorithms*, Prentice Hall (1992) (GN 004430-60, GN 004714-83)
- Gerald Salton, *Automatic Text Processing: The Transformation, Analysis, and Retrieval of Information by Computer*, Addison-Wesley (1989) (GN 3331-97)
- Gerald Salton, Michael McGill, *Introduction to Modern Information Retrieval*, McGraw-Hill (1983) (GN 292518–545, GN 292822-841)
- Prosecution History for U.S. Patent No. 6,505,191 (July 3, 2002 Response to Office Action at 5) (GN 299941-300172)
- U.S. Patent No. 6,192,364 (GN 299812-831)
- U.S. Patent No. 6,424,973 (GN 299832-854)
- U.S. Patent No. 6,463,433 (GN 299855-877)
- U.S. Patent No. 6,470,333 (GN 299878-897)
- U.S. Patent No. 6,505,191 (GN 299917-940)
- U.S. Patent No. 6,535,881 (GN 299898-916)
- *Anchor Wall Systems, Inc. v. Concrete Products of New London, Inc.*, 2003 WL 1589532 at *3, No. Civ. 01-465 ADM/AJB (D. Minnesota, March 26, 2003) (GN 299783-789)
- *Merit Indust. v. JVL Corp.*, WL 2463377 Civ. No. 03-1618 (E.D.Pa. Aug. 27, 2007) (GN 299790-811)
- JAR 0000294-313
- JAR 0000828-845
- JAR 108483
- JAR 108497
- JAR 116994
- JAR 120394
- JAR 145968-970
- JAR 145995-997
- JAR 146051
- JAR 146084-092

- JAR 146229-267
- JAR 146353-354
- JAR 148895-899
- JAR 152503-517
- JAR 152552-560
- JAR 152668-672
- JAR 152860-865
- JAR 152869-874
- JAR 152878-883
- JAR 153050-055
- JAR 153059-064
- JAR 153263-277
- JAR 183954
- JAR 189888
- JAR 217065
- JAR 219469
- JAR 254746-769
- JAR 294498-502
- JAR 342217 - 29

Google reserves the right to rely upon the testimony of one or more experts who will explain the technology, the state of the art at the time the patent applications were filed, the meaning of claim terms as they would be understood by those of ordinary skill in the art at the time of the invention, the proper construction of various claim terms, and

the level of ordinary skill in the relevant art. Any such expert witnesses may also offer testimony if necessary to respond to Plaintiffs' contentions or for the Court's benefit.

Dated: July 31, 2009

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on July 31, 2009, a true and correct copy of GOOGLE INC.'S P.R. 4-2 PRELIMINARY CLAIM CONSTRUCTION AND IDENTIFICATION OF EXTRINSIC EVIDENCE was served on all counsel of record who are deemed to have consented to electronic service via the Court's CM/ECF system pursuant to Local Rule CV-5(a)(3).

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