

**IN THE UNITED STATES DISTRICT COURT FOR  
THE EASTERN DISTRICT OF TEXAS**

NORTHEASTERN UNIVERSITY and  
JARG CORPORATION

Plaintiffs,

v.

GOOGLE, INC.  
Defendant.

CASE NO. 07-CV-486

DEMAND FOR JURY TRIAL

**FIRST AMENDED COMPLAINT FOR DAMAGES AND INJUNCTIVE RELIEF  
FOR PATENT INFRINGEMENT**

Plaintiffs Northeastern University (“Northeastern”) and Jarg Corporation (“Jarg”) file this First Amended Complaint against Defendant Google, Inc. (“Google”).

**JURISDICTION AND VENUE**

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. §§ 100, *et seq.* This Court has subject matter jurisdiction over this action under 28 U.S.C §§ 1331, 1332 and 1338(a).
2. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b), (c) and 1400(b). Plaintiffs believe and, based thereon, allege that Google resides in this judicial district within the meaning of 28 U.S.C. § 1391(c), and further, that Google has committed, contributed to, and/or induced acts of patent infringement in this judicial district and provides goods or services and does business in this judicial district.

## **THE PARTIES**

### **A. Northeastern University**

3. Plaintiff Northeastern is a university organized and existing under the laws of the State of Massachusetts and has its principal executive offices at 716 Columbus Avenue, Boston, MA 02120.

4. Northeastern is a private research university founded in 1898. Northeastern is one of the nation's premier urban universities and a leader in cooperative education, community engagement, and interdisciplinary research. Northeastern's College of Computer and Information Science is the first college in the nation devoted to computer science and boasts strong research programs in programming languages, networks, databases, and information retrieval, among other areas. The university is home to more than 20,000 students and 600 faculty, with world class research programs in such diverse pursuits as drug discovery, high-rate nanoscale manufacturing, and complex scientific software.

### **B. Jarg Corporation**

5. Plaintiff Jarg is a corporation organized and existing under the laws of the State of Delaware and has its principal executive offices at 330 Bear Hill Rd, Waltham, MA, 02451.

6. Jarg specializes in high performance search technology and utilizes an ontology-based knowledge indexing engine to index information in its full contextual meaning. Jarg has an extensive patent portfolio relating to its search architecture, search engine, and other information productivity technology.

7. Dr. Kenneth P. Baclawski, an associate professor in the College of Computer and Information Science at Northeastern, is one of the founders of Jarg.

8. Dr. Baclawski invented the claimed systems and methods of U.S. Patent No. 5,694,593 ("the '593 patent"), entitled "Distributed Computer Database System and Method."

9. The '593 patent is assigned to Northeastern and Northeastern has exclusively licensed that patent to Jarg. Plaintiffs Northeastern and Jarg have the exclusive rights to enforce the '593 patent.

### **C. Google Inc.**

10. Google was originally incorporated in California in 1998. Google is currently a corporation organized and existing under the laws of the State of Delaware and has its principal executive offices at 1600 Amphitheatre Parkway, Mountain View, CA 94043.

11. Google offers search engine services through its website [www.google.com](http://www.google.com). Specifically, a user can submit a query to Google via the Internet, and Google will provide the user search results responsive to that query.

12. As part of its search engine services, Google accepts queries from users.

13. As part of its search engine services, Google uses one or more hashing algorithms.

14. As part of its search engine services, Google returns search results responsive to user queries.

15. As part of its search engine services, Google uses a system called PageRank to increase the relevancy of the search results it returns.

16. Google maintains and operates clusters of networked computers to provide search engine services to users.

17. Google obtains advertising revenue, at least in part, from fees charged through its AdSense program for advertisements placed next to the search results on its websites as well as the search results on Google Network member sites.

18. Google's advertising revenues made up at least 99% of Google's total revenue in 2004.

19. Google's advertising revenues made up at least 99% of Google's total revenue in 2005.

20. Google's advertising revenues made up at least 99% of Google's total revenue in 2006.
21. Google's advertising revenues made up at least 99% of Google's total revenue in the first six months of 2007.
22. The success of Google's advertising programs depends, at least in part, on the number of searches initiated at its websites and the websites of its Google Network members.
23. The number of searches initiated at Google websites and the websites of its Google Network members depends, at least in part, on how quickly searches are executed and results are returned to the user.
24. Google's ability to earn revenue substantially depends on the performance of its search engine services.

#### **FIRST CLAIM FOR RELIEF**

#### **INFRINGEMENT OF UNITED STATES PATENT NO. 5,694,593**

25. The '593 patent issued on December 2, 1997. A true and correct copy of the '593 patent is attached to Plaintiffs' original complaint as Exhibit A.
26. Google has directly and/or indirectly infringed one or more claims of the '593 patent, and Google is continuing such infringement by practicing or causing others to practice one or more of the inventions claimed in the '593 patent. For example, Google makes, uses, imports, sells and/or offers for sale search engine services and systems that infringe or that are used in ways that infringe one or more claims of the '593 patent in this district and elsewhere in the United States.
27. Plaintiffs have suffered damages as a result of Google's infringement and will continue to suffer damages as a result of Google's continued infringement.
28. Google has caused and will, until enjoined, continue to cause irreparable injury to Plaintiffs for which there is no adequate remedy at law.

29. On information and belief, Google did not obtain a written or oral opinion of counsel regarding its infringement or non-infringement of the '593 patent, the validity of the '593 patent, and/or the enforceability of the '593 patent prior to being served with this Complaint.

## **SECOND CLAIM FOR RELIEF**

### **GOOGLE'S WILLFUL INFRINGEMENT OF THE '593 PATENT**

30. Google's infringement of the inventions claimed in the '593 patent has been and continues to be willful.

31. Google has previously taken the position that it was not aware of the '593 patent prior to the filing of this lawsuit on November 6, 2007.

32. However, on May 15, 2003, Google received an email from Jarg's President, Michael Belanger, addressed to Google CEO, Eric Schmidt.

33. Mr. Belanger's email was titled "Useful Semantics Indexing Patents to know about" and states, *inter alia*, that Google "should find our patents of interest." The email asks Dr. Schmidt to let Mr. Belanger know "if our patented technology areas figure in your future plans and if we should both benefit from their use." That email included an attachment that identifies "patent #5,694,593" as part of Jarg's "intellectual property."

34. Google sent a responsive email to Mr. Belanger on the very same day, May 15, 2003, that states: "We read all of the email we receive and try to send personal responses to each message." The email continued, "[t]his note is just to let you know that we've received your letter, and you should hear from us soon." *See* JAR0294361. Google did not respond further.

35. In the second half of 2005, the then-CEO of Jarg, David Roache, made a presentation regarding Jarg to an investment group called the New York Angels. *See* Roache Dep. Tr., pp 275-282.

36. As part of that presentation, materials describing the '593 patent, including an abstract of that patent, were submitted to the New York Angels.

37. A Google employee, David Hirsch, was asked by the New York Angels to review Jarg's technology and its associated intellectual property as part of the New York Angel's due diligence on a potential investment in Jarg.

38. On information and belief, Mr. Hirsch and others at Google received the materials describing the '593 patent that were submitted to the New York Angels.

39. On information and belief, Google was made aware of the '593 patent's applicability to Google's accused search engine systems through Mr. Hirsch's and others at Google's review of those materials.

40. Also prior to the filing of this lawsuit, one or more Google employees involved in the development and maintenance of the accused search engine systems received an email from a third party named Bart Stuck forwarding certain Jarg marketing materials that, *inter alia*, identified the '593 patent.

41. As such, Google was aware of the '593 patent prior to the filing of this lawsuit.

42. Nevertheless, Google continued to develop, implement, use, and expand its use of the accused search engine services prior to the filing of this lawsuit.

43. Nor has Google made any attempt to stop its infringement of the '593 patent after the filing of this lawsuit, *e.g.*, by ending its use of the accused search engine services or taking efforts to modify those services to avoid continued infringement of the '593 patent.

44. Google's acts of infringement have been objectively reckless, *see In re Seagate Tech.*, 497 F.3d 1360, 1374-75 (Fed Cir. 2007)(en banc), making this case exceptional and entitling

Plaintiffs to enhanced damages and reasonable attorneys' fees pursuant to 35 U.S.C. §§ 284 and 285.

**PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs pray for judgment as follows:

- (a) that Google has infringed the '593 patent;
- (b) that an injunction be issued against further infringement of the '593 patent by Google and its officers, agents, servants, employees, attorneys and all persons in active concert or participation with them;
- (c) that Google account and pay actual damages, but no less than a reasonable royalty, to Plaintiffs to compensate them for Google's infringement of the '593 patent as provided by 35 U.S.C. § 284;
- (d) that this is an "exceptional case" and that, as a result, Plaintiffs are entitled to recover their attorney's fees under 35 U.S.C. § 285 and enhanced damages under 35 U.S.C. § 284;
- (d) that Google pay interest and costs to Plaintiffs as provided for by 35 U.S.C. § 284; and
- (e) that Plaintiffs be granted such other and further relief as the Court deems just and equitable.

**DEMAND FOR JURY TRIAL**

Pursuant to Federal Rule of Civil Procedure 38, Plaintiffs demands a jury trial on all issues triable of right by a jury.

Dated: June 16, 2010

Respectfully submitted,

/s/ Zeke DeRose, III

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**CERTIFICATE OF SERVICE**

The undersigned certifies that the foregoing document was filed electronically in compliance with Local Rule CV-5(a). As such, this document was served on all counsel who are deemed to have consented to electronic service. Local Rule CV-5(a)(3)(A). All other counsel of record not deemed to have consented to electronic service were served with a true and correct copy of the foregoing by email and/or fax, on this the 16<sup>th</sup> day of June, 2010.

/s/ Zeke DeRose, III

Zeke DeRose, III