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14 Attorneys for Plaintiff  
15 WORD TO INFO, INC.

17 IN THE UNITED STATES DISTRICT COURT  
18 NORTHERN DISTRICT OF CALIFORNIA

20 WORD TO INFO, INC.,  
21 Plaintiff,  
22  
23 v.  
24 GOOGLE INC.,  
25 Defendant.

Case No. 3:15-cv-03486-WHO  
**FIRST AMENDED COMPLAINT  
FOR PATENT INFRINGEMENT  
DEMAND FOR JURY TRIAL**

1 **COMPLAINT FOR PATENT INFRINGEMENT**

2 Plaintiff Word to Info, Inc. (“Word to Info”), by way of its Complaint against  
3 Google, Inc. (“Google” or “Defendant”), alleges the following:

4 **NATURE OF THE ACTION**

5 1. This is an action for patent infringement arising under the Patent Laws  
6 of the United States, Title 35 of the United States Code.

7 **THE PARTIES**

8 2. Plaintiff Word to Info is a corporation organized under the laws of the  
9 State of Texas with a place of business at 1106 Edgewood Dr., Richardson, TX  
10 75081.

11 3. Upon information and belief, Defendant Google Inc. is a corporation  
12 organized under the laws of the State of Delaware, with its principal place of  
13 business at 1600 Amphitheatre Parkway, Mountain View, California 94043.

14 **JURISDICTION AND VENUE**

15 4. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and  
16 1338.

17 5. This Court has personal jurisdiction over Google at least because  
18 Google has ongoing and systematic contacts with this District and the United  
19 States. In addition, Google has acknowledged that it is subject to the jurisdiction of  
20 this Court in the brief Google filed in support of its Motion to Transfer Venue (D.I.  
21 35).

22 6. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(c) and  
23 1400(b).

24 **STATEMENT OF FACTS**

25 7. This is an action for patent infringement of one or more claims of  
26 United States U.S. Patent No. 5,715,468 entitled “Memory System for Storing and  
27 Retrieving Experience and Knowledge with Natural Language” (the ’468 Patent);  
28 U.S. Patent No. 6,138,087 entitled “Memory System for Storing and Retrieving

1 Experience and Knowledge with Natural Language Utilizing State Representation  
2 Data, Word Sense Numbers, Function Codes and/or Directed Graphs” (the ’087  
3 Patent); U.S. Patent No. 6,609,091 entitled “Memory System for Storing and  
4 Retrieving Experience and Knowledge with Natural Language Utilizing State  
5 Representation Data, Word Sense Numbers, Function Codes and/or Directed  
6 Graphs” (the ’091 Patent); U.S. Patent No. 7,349,840 entitled “Memory System for  
7 Storing and Retrieving Experience and Knowledge with Natural Language Utilizing  
8 State Representation Data, Word Sense Numbers, Function Codes, Directed Graphs  
9 and/or Context Memory” (the ’840 Patent); U.S. Patent No. 7,873,509 entitled  
10 “Memory System for Storing and Retrieving Experience and Knowledge with  
11 Natural Language Utilizing State Representation Data, Word Sense Numbers,  
12 Function Codes, Directed Graphs, Context Memory, and/or Purpose Relations” (the  
13 ’509 Patent); U.S. Patent No. 8,326,603 entitled “Memory System for Storing and  
14 Retrieving Experience and Knowledge with Natural Language Queries” (the ’603  
15 Patent); U.S. Patent No. 8,688,436 entitled “Memory System for Storing and  
16 Retrieving Experience and Knowledge by Utilizing Natural Language Responses”  
17 (the ’436 Patent) (collectively, the “Patents-in-Suit”).

18 8. Word to Info is the assignee and owner of the right, title and interest in  
19 and to, including the right to assert all causes of action arising under said patents  
20 and the right to any remedies for infringement of them. The Patents-in-Suit were  
21 previously owned by their sole inventor, Robert L. Budzinski, who is the owner of  
22 Word to Info. At least one of the Patents-in-Suit has been cited during prosecution  
23 of approximately 158 issued United States Patents relating to natural language  
24 processing.

25 9. On February 3, 1998, the ’468 Patent, was duly and legally issued by  
26 the United States Patent and Trademark Office. A true and correct copy of the ’468  
27 Patent is attached as Exhibit A to this Complaint.

28 10. On October 24, 2000, the ’087 Patent was duly and legally issued by

1 the United States Patent and Trademark Office. A true and correct copy of the '087  
2 Patent is attached as Exhibit B to this Complaint.

3 11. On August 19, 2003, the '091 Patent was duly and legally issued by  
4 the United States Patent and Trademark Office. A true and correct copy of the '091  
5 Patent is attached as Exhibit C to this Complaint.

6 12. On March 25, 2008, the '840 Patent was duly and legally issued by the  
7 United States Patent and Trademark Office. A true and correct copy of the '840  
8 Patent is attached as Exhibit D to this Complaint.

9 13. On January 18, 2011, the '509 Patent was duly and legally issued by  
10 the United States Patent and Trademark Office. A true and correct copy of the '509  
11 Patent is attached as Exhibit E to this Complaint.

12 14. On December 4, 2012, the '603 Patent was duly and legally issued by  
13 the United States Patent and Trademark Office. A true and correct copy of the '603  
14 Patent is attached as Exhibit F to this Complaint.

15 15. On April 1, 2014, the '436 Patent was duly and legally issued by the  
16 United States Patent and Trademark Office. A true and correct copy of the '436  
17 Patent is attached as Exhibit G to this Complaint.

18 16. In connection with its products or services, Google infringes one or  
19 more claims of each of the Patents-in-Suit.

20 17. On December 30, 2013, U.S. Application No. 14/143,161 was filed on  
21 behalf of Google listing Simon Tong, Uri Lerner, Amit Singhal, Paul Haahr, and  
22 Steven Baker as the inventors and Google, Inc. as the Original Assignee.

23 18. On October 10, 2014, the examiner for U.S. Application No.  
24 14/143,161 mailed a Notice of Allowability which stated: "The following is the  
25 Examiner's statement of reasons for allowance: In an effort of searching prior art  
26 for rejecting the instant application, two references were considered close to the  
27 teaching of the instant application and obtained after a lengthy searching on EAST  
28 database. The two references are: [1] . . . [2] Budzinski, Robert L.: "MEMORY

1 SYSTEM FOR STORING AND RETRIEVING EXPERIENCE AND  
2 KNOWLEDGE WITH NATURAL LANGUAGE UTILIZING STATE  
3 REPRESENTATION DATA, WORD SENSE NUMBERS, FUNCTION CODES,  
4 DIRECTED GRAPHS AND/OR CONTEXT MEMORY”, U.S. Patent Application  
5 Publication 2004/0107088 A1, filed August 8, 2003 and published June 3, 2004.” A  
6 true and correct copy of the Notice of Allowability for the 14/143,161 application is  
7 attached as Exhibit H to this Complaint.

8 19. U.S. Patent Application Publication 2004/0107088 A1, which was  
9 cited in the Notice of Allowability of the 14/143,161 application included the  
10 priority claim: “Continuation of application No. 08/315,691, filed on Sep. 30,  
11 1994, now Pat. No. 5,715,468.” A true and correct copy of U.S. Patent Application  
12 Publication 2004/0107088 A1 is attached as Exhibit I to this Complaint.

13 20. U.S. Patent Application Publication 2004/0107088 A1 issued as the  
14 ’840 Patent on March 25, 2008, before the Notice of Allowability for the  
15 14/143,161 application was mailed.

16 21. At least one of the inventors on the 14/143,161 application, Amit  
17 Singhal, was involved with the launch, development and/or maintenance of the  
18 Knowledge Graph feature of Google’s internet search engine product. *See*  
19 [https://googleblog.blogspot.com/2012/05/introducing-knowledge-graph-things-](https://googleblog.blogspot.com/2012/05/introducing-knowledge-graph-things-not.html)  
20 [not.html](https://googleblog.blogspot.com/2012/05/introducing-knowledge-graph-things-not.html) (Last visited November 5, 2015).

21 22. On February 23, 2015, U.S. Patent Application No. 14/628,692 was  
22 filed on behalf of Google claiming the benefit of the 14/143,161 application.

23 23. On information and belief, the 14/628,692 application is a continuation  
24 of the 14/143,161 application.

25 **FIRST CLAIM FOR RELIEF**

26 **INFRINGEMENT OF U.S. PATENT NO. 5,715,468**

27 24. Plaintiff repeats and re-alleges the allegations of paragraphs 1 through  
28 23 as though fully set forth herein.

1           25. Defendant Google has been directly infringing and continues to  
2 directly infringe one or more claims of the '468 Patent in the United States through  
3 at least its operation of the Knowledge Graph feature of its internet search engine  
4 product and/or its Google Now product throughout the United States in violation of  
5 35 U.S.C. § 271 (a).

6           26. Google infringes the '468 Patent by, at least, providing a system that  
7 electronically encodes data representative of natural language, includes a database  
8 containing a plurality of a syntax usage data entries, associated word sense numbers  
9 having associated state representation data, and/or function codes, lexically  
10 processing the electronically encoded data and accessing the dictionary data base,  
11 providing a grammar specification, and uses the syntax usage data from the  
12 database with reference to the grammar specification to produce output  
13 representative of a grammatical parse of the natural language, wherein the output  
14 data includes syntax usage.

15           27. Google also infringes the '468 Patent by, at least, providing a system  
16 that processes experience and knowledge that uses an experience and knowledge  
17 data base which is comprised of directed graphs comprised of nodes with associated  
18 clause implying word sense numbers organized into paths of said nodes such that  
19 said nodes have access conditions which determine the zero or more next said  
20 nodes on the zero or more said paths that are accessible, and finding zero or more  
21 paths between the nodes with reference to the experience and knowledge data base  
22 such that access conditions of the nodes on the found paths are met.

23           28. Google also infringes the '468 Patent by, at least, providing a system  
24 that generates natural language by providing one or more word sense numbers,  
25 providing a dictionary data base wherein the dictionary data base contains a  
26 plurality of entries which are comprised of syntax usage data, associated word sense  
27 numbers having associated state representation data and/or function codes,  
28 accessing the natural language word which is associated with said dictionary data

1 base with the word sense number, providing a grammar specification, utilizing the  
2 syntax usage data and natural language words which are from the dictionary data  
3 base entries and which are associated with the word sense numbers with reference  
4 to the grammar specification to generate outgoing natural language.

5 29. Because of Google's infringement of the '468 Patent, Plaintiff has  
6 suffered damages and will continue to suffer damages in the future. Plaintiff is  
7 entitled to an award of such damages, but in no event less than a reasonable royalty,  
8 the precise amount to be determined at trial.

9 30. On information and belief, Google was made aware of the '468 Patent  
10 and its infringement thereof at least as early as its receipt of the Notice of  
11 Allowability of U.S. Patent Application 14/143,161, which was mailed on October  
12 10, 2014.

13 31. In the alternative, on information and belief, Google was made aware  
14 of the '468 Patent and its infringement thereof at least as early as the filing of U.S.  
15 Patent Application No. 14/628,692 on February 23, 2015, which claims priority to  
16 U.S. Patent Application 14/143,161.

17 32. On information and belief, therefore, Google's continued infringement  
18 of the '468 Patent is willful and deliberate, entitling Plaintiff to enhanced damages  
19 under 35 U.S.C. § 284 and attorneys' fees and non-taxable costs under 35 U.S.C. §  
20 285.

## 21 **SECOND CLAIM FOR RELIEF**

### 22 **INFRINGEMENT OF U.S. PATENT NO. 6,138,087**

23 33. Plaintiff repeats and re-alleges the allegations of paragraphs 1 through  
24 32 as though fully set forth herein.

25 34. Defendant Google has been directly infringing one or more claims of  
26 the '087 Patent in the United States through at least its operation of the Knowledge  
27 Graph feature of its internet search engine product and/or its Google Now product  
28 throughout the United States in violation of 35 U.S.C. § 271 (a).





1 with reference to said grammar specification to produce output data representative  
2 of a grammatical parse of said natural language, said output data including selected  
3 syntax usage.

4 40. Because of Google's infringement of the '091 Patent, Plaintiff has  
5 suffered damages and will continue to suffer damages in the future. Plaintiff is  
6 entitled to an award of such damages, but in no event less than a reasonable royalty,  
7 the precise amount to be determined at trial.

#### 8 **FOURTH CLAIM FOR RELIEF**

#### 9 **INFRINGEMENT OF U.S. PATENT NO. 7,349,840**

10 41. Plaintiff repeats and re-alleges the allegations of paragraphs 1 through  
11 40 as though fully set forth herein.

12 42. Defendant Google has been directly infringing and continues to  
13 directly infringe one or more claims of the '840 Patent in the United States through  
14 at least its operation of the Knowledge Graph feature of its internet search engine  
15 product and/or its Google Now product throughout the United States in violation of  
16 35 U.S.C. § 271 (a).

17 43. Google infringes the '840 patent by, at least, providing a system that  
18 lexically processes electronically encoded data, accesses a dictionary database that  
19 contains a plurality of entries which are comprised of one or more of syntax usage  
20 data, associated word sense numbers having associated state representation data,  
21 and/or functions codes, includes a grammar specification and a context data base  
22 wherein said context data base contains a plurality of entries which are comprised  
23 of one or more of word sense numbers having associated state representation data,  
24 and/or function codes, and utilizing one or more of said syntax usage data, said  
25 word sense numbers, and/or said function codes which are from entries of said  
26 dictionary data base and which are associated with words of said natural language  
27 with reference to said grammar specification and with reference to said context data  
28 base to select word sense numbers and/or function codes associated with said

1 natural language words.

2 44. Because of Google's infringement of the '840 Patent, Plaintiff has  
3 suffered damages and will continue to suffer damages in the future. Plaintiff is  
4 entitled to an award of such damages, but in no event less than a reasonable royalty,  
5 the precise amount to be determined at trial.

6 45. On information and belief, Google was made aware of the '840 Patent  
7 and its infringement thereof at least as early as its receipt of the Notice of  
8 Allowability of U.S. Patent Application 14/143,161, which was mailed on October  
9 10, 2014.

10 46. In the alternative, on information and belief, Google was made aware  
11 of the '840 Patent and its infringement thereof at least as early as the filing of U.S.  
12 Patent Application No. 14/628,692 on February 23, 2015, which claims priority to  
13 U.S. Patent Application 14/143,161.

14 47. On information and belief, therefore, Google's continued infringement  
15 of the '840 Patent is willful and deliberate, entitling Plaintiff to enhanced damages  
16 under 35 U.S.C. § 284 and attorneys' fees and non-taxable costs under 35 U.S.C. §  
17 285.

18 **FIFTH CLAIM FOR RELIEF**

19 **INFRINGEMENT OF U.S. PATENT NO. 7,873,509**

20 48. Plaintiff repeats and re-alleges the allegations of paragraphs 1 through  
21 47 as though fully set forth herein.

22 49. Defendant Google has been directly infringing one or more claims of  
23 the '509 Patent in the United States through at least its operation of the Knowledge  
24 Graph feature of its internet search engine product and/or its Google Now product  
25 throughout the United States in violation of 35 U.S.C. § 271 (a).

26 50. Google infringes the '509 patent by, at least, providing a system that  
27 includes an experience and knowledge data base which is comprised of directed  
28 graphs comprised of nodes with associated clause implying word sense numbers

1 organized into paths of said nodes such that said nodes have access conditions  
2 which determine zero or more next said nodes on zero or more said paths that are  
3 accessible, utilizes a natural language processor to provide natural language with  
4 associated clause implying word sense numbers, purpose relation path identification  
5 processes to find zero or more said paths from said nodes associated with said  
6 clause implying word sense numbers associated with said natural language with  
7 reference to said experience and knowledge database such that said access  
8 conditions of said nodes on said found paths are met, and provides criteria for  
9 selecting said found experience and knowledge paths, and utilizing said criteria to  
10 select one or more of said found paths.

11 51. Because of Google's infringement of the '509 Patent, Plaintiff has  
12 suffered damages. Plaintiff is entitled to an award of such damages, but in no event  
13 less than a reasonable royalty, the precise amount to be determined at trial.

14 **SIXTH CLAIM FOR RELIEF**

15 **INFRINGEMENT OF U.S. PATENT NO. 8,326,603**

16 52. Plaintiff repeats and re-alleges the allegations of paragraphs 1 through  
17 51 as though fully set forth herein.

18 53. Defendant Google has been directly infringing one or more claims of  
19 the '603 Patent in the United States through at least its operation of the Knowledge  
20 Graph feature of its internet search engine product and/or its Google Now product  
21 throughout the United States in violation of 35 U.S.C. § 271 (a).

22 54. Google infringes the '603 patent by, at least, providing a system that  
23 utilizes a natural language processor to provide natural language with associated  
24 clause implying word sense numbers in memory associated with an apparatus,  
25 includes an experience and knowledge data base which is comprised of directed  
26 graphs comprised of nodes with associated clause implying word sense numbers  
27 organized into paths of said nodes such that said nodes have access conditions  
28 which determine zero or more next said nodes on zero or more said paths that are

1 accessible, utilizes a purpose relation path identification processor to identify zero  
2 or more said paths from said nodes associated with said clause implying word sense  
3 numbers associated with said natural language with reference to said experience  
4 and knowledge database such that said access conditions of said nodes on said  
5 found paths are met.

6 55. Because of Google's infringement of the '603 Patent, Plaintiff has  
7 suffered damages. Plaintiff is entitled to an award of such damages, but in no event  
8 less than a reasonable royalty, the precise amount to be determined at trial.

9 **SEVENTH CLAIM FOR RELIEF**

10 **INFRINGEMENT OF U.S. PATENT NO. 8,688,436**

11 56. Plaintiff repeats and re-alleges the allegations of paragraphs 1 through  
12 55 as though fully set forth herein.

13 57. Defendant Google has been directly infringing one or more claims of  
14 the '436 Patent in the United States through at least its operation of the Knowledge  
15 Graph feature of its internet search engine product and/or its Google Now product  
16 throughout the United States in violation of 35 U.S.C. § 271 (a).

17 58. Google infringes the '436 patent by, at least, providing a system in  
18 which natural language is processed by an apparatus to provide electronically  
19 encoded data which is representative of said natural language, providing a  
20 dictionary data base in memory associated with said apparatus wherein said  
21 dictionary data base contains a plurality of entries which are comprised of one or  
22 more of syntax usage data, associated word sense numbers with associated state  
23 representation data and/or function codes, lexically processing said electronically  
24 encoded data to access said dictionary data base, providing a natural language  
25 plausibility and expectedness processor, utilizing said natural language plausibility  
26 and expectedness processor to initiate accessing entries of said dictionary data base  
27 which are associated with words of said natural language.

28 59. Because of Google's infringement of the '436 Patent, Plaintiff has

1 suffered damages. Plaintiff is entitled to an award of such damages, but in no event  
2 less than a reasonable royalty, the precise amount to be determined at trial.

3 **JURY DEMAND**

4 Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff  
5 demands a trial by jury on all issues triable as such.

6 **PRAYER FOR RELIEF**

7 WHEREFORE, Plaintiff Word to Info, Inc. respectfully demands entry of  
8 judgment against Google as follows:

9 A. finding that Google has infringed one or more claims of the Patents-in-  
10 Suit;

11 B. finding Google's infringement of at least one of the Patents-in-Suit to  
12 be willful;

13 C. awarding Plaintiff damages to be paid by Google adequate to  
14 compensate Plaintiff for Google's past infringement of the Patents-in-Suit and any  
15 continuing or future infringement of the Patents-in-Suit through the date such  
16 judgment is entered, together with pre-judgment and post-judgment interest, costs,  
17 expenses and an accounting of all infringing acts including, but not limited to, those  
18 acts not presented at trial as justified under 35 U.S.C. § 284;

19 D. a declaration that this case is exceptional under 35 U.S.C. § 285, and  
20 an award of Plaintiff's reasonable attorneys' fees;

21 E. ordering an accounting of all infringing acts including, but not limited  
22 to, those acts not presented at trial and an award of damages to Plaintiff for any  
23 such acts; and

24 F. awarding such other and further relief at law or in equity as the Court  
25 deems just and proper.

1 Dated: November 9, 2015

2 Respectfully submitted,

3 /s/ Steven R. Daniels

4 Steven R. Daniels, Bar No. 235398  
5 Cassandra Klingman (appearing *pro hac*  
6 *vice*)

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26 Attorneys for Plaintiff  
27 Word to Info, Inc.  
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**CERTIFICATE OF SERVICE**

I hereby certify that on November 9, 2015, I electronically filed the above document with the Clerk of Court using CM/ECF which will send electronic notification of such filing to all registered counsel.

/s/ Steven R. Daniels  
Steven R. Daniels