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WORD TO INFO, INC.,
Plaintiff,
v.
FACEBOOK, INC.
Defendants.

Case Nos. 3:15-cv-03485-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 Facebook, Inc. (“Facebook” 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. On information and belief, Facebook, Inc. is a corporation organized
12 under the laws of the State of Delaware with its principal place of business at 1
13 Hacker Way, Bldg 10, Menlo Park, California 94025. On information and belief,
14 Facebook, Inc., itself or through its subsidiaries and agents, has conducted and does
15 conduct business in this judicial district.

16 **JURISDICTION AND VENUE**

17 4. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and
18 1338.

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

24 6. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(c) and
25 1400(b).

26 **STATEMENT OF FACTS**

27 7. This is an action for patent infringement of one or more claims of
28

1 United States U.S. Patent No. 5,715,468 entitled “Memory system for storing and
2 retrieving experience and knowledge with natural language” (the ’468 Patent); U.S.
3 Patent No. 6,138,087 entitled “Memory system for storing and retrieving
4 experience and knowledge with natural language utilizing state representation data,
5 word sense numbers, function codes and/or directed graphs” (the ’087 Patent); U.S.
6 Patent No. 6,609,091 entitled “Memory system for storing and retrieving
7 experience and knowledge with natural language utilizing state representation data,
8 word sense numbers, function codes and/or directed graphs” (the ’091 Patent); U.S.
9 Patent No. 7,349,840 entitled “Memory system for storing and retrieving
10 experience and knowledge with natural language utilizing state representation data,
11 word sense numbers, function codes, directed graphs and/or context memory” (the
12 ’840 Patent); U.S. Patent No. 7,873,509 entitled “Memory system for storing and
13 retrieving experience and knowledge with natural language utilizing state
14 representation data, word sense numbers, function codes, directed graphs, context
15 memory, and/or purpose relations” (the ’509 Patent); U.S. Patent No. 8,326,603
16 entitled “Memory system for storing and retrieving experience and knowledge with
17 natural language queries” (the ’603 Patent); U.S. Patent No. 8,688,436 entitled
18 “Memory system for storing and retrieving experience and knowledge by utilizing
19 natural language responses” (the ’436 Patent) (collectively, the “Patents-in-Suit”).

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

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

1 19. Facebook infringes the '468 Patent by, at least, providing a system that
2 electronically encodes data representative of natural language, includes a database
3 containing a plurality of a syntax usage data entries, associated word sense numbers
4 having associated state representation data, and/or function codes, lexically
5 processing the electronically encoded data and accessing the dictionary data base,
6 providing a grammar specification, and using the syntax usage data from the
7 database with reference to the grammar specification to produce output
8 representative of a grammatical parse of the natural language, wherein the output
9 data includes syntax usage.

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

18 21. Facebook also infringes the '468 Patent by, at least, providing a system
19 that generates natural language by providing one or more word sense numbers,
20 providing a dictionary data base wherein the dictionary data base contains a
21 plurality of entries which are comprised of syntax usage data, associated word sense
22 numbers having associated state representation data and/or function codes,
23 accessing the natural language word which is associated with said dictionary data
24 base with the word sense number, providing a grammar specification, utilizing the
25 syntax usage data and natural language words which are from the dictionary data
26 base entries and which are associated with the word sense numbers with reference
27 to the grammar specification to generate outgoing natural language.

28 22. Because of Facebook's infringement of the '468 Patent, Plaintiff has

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

4 **SECOND CLAIM FOR RELIEF**

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

6 23. Plaintiff repeats and re-alleges the allegations of paragraphs 1 through
7 24 as though fully set forth herein.

8 24. Defendant Facebook has been directly infringing one or more claims
9 of the '087 Patent in the United States through at least its operation of the Graph
10 Search feature of its Facebook product throughout the United States in violation of
11 35 U.S.C. § 271 (a).

12 25. Facebook infringes the '087 patent by, at least, providing a system that
13 uses an experience and knowledge data base which is comprised of directed graphs
14 comprised of nodes with associated clause implying word sense numbers organized
15 into paths of said nodes, and processing said associated clause implying word sense
16 numbers of said experience and knowledge database.

17 26. Because of Facebook's infringement of the '087 Patent, Plaintiff has
18 suffered damages. Plaintiff is entitled to an award of such damages, but in no event
19 less than a reasonable royalty, the precise amount to be determined at trial.

20 **THIRD CLAIM FOR RELIEF**

21 **INFRINGEMENT OF U.S. PATENT NO. 6,609,091**

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

24 28. Defendant Facebook has been directly infringing and continues to
25 directly infringe one or more claims of the '091 Patent in the United States through
26 at least its operation of the Graph Search feature of its Facebook product throughout
27 the United States in violation of 35 U.S.C. § 271 (a).

28 29. Facebook infringes the '091 patent by, at least, providing a system that

1 electronically encodes data which is representative of said natural language,
2 includes a dictionary data base wherein said dictionary data base contains a
3 plurality of entries which are comprised of one or more of syntax usage data,
4 associated word sense numbers having associated state representation data and/or
5 function codes, lexically processes said electronically encoded data to access said
6 dictionary data base, includes a grammar specification and a data base of
7 requirements such that said requirements must be met by said associated state
8 representation data of said word sense numbers for said word sense numbers to be
9 selected, and utilizes said syntax usage data which are from entries of said
10 dictionary data base and which are associated with words of said natural language
11 with reference to said grammar specification to produce output data representative
12 of a grammatical parse of said natural language, said output data including selected
13 syntax usage.

14 30. Because of Facebook's infringement of the '091 Patent, Plaintiff has
15 suffered damages and will continue to suffer damages in the future. Plaintiff is
16 entitled to an award of such damages, but in no event less than a reasonable royalty,
17 the precise amount to be determined at trial.

18 **FOURTH CLAIM FOR RELIEF**

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

20 31. Plaintiff repeats and re-alleges the allegations of paragraphs 1 through
21 34 as though fully set forth herein.

22 32. Defendant Facebook has been directly infringing and continues to
23 directly infringe one or more claims of the '840 Patent in the United States through
24 at least its operation of the Graph Search feature of its Facebook product throughout
25 the United States in violation of 35 U.S.C. § 271 (a).

26 33. Facebook infringes the '840 patent by, at least, providing a system that
27 lexically processes electronically encoded data, accesses a dictionary database that
28 contains a plurality of entries which are comprised of one or more of syntax usage

1 data, associated word sense numbers having associated state representation data,
2 and/or functions codes, includes a grammar specification and a context data base
3 wherein said context data base contains a plurality of entries which are comprised
4 of one or more of word sense numbers having associated state representation data,
5 and/or function codes, and utilizing one or more of said syntax usage data, said
6 word sense numbers, and/or said function codes which are from entries of said
7 dictionary data base and which are associated with words of said natural language
8 with reference to said grammar specification and with reference to said context data
9 base to select word sense numbers and/or function codes associated with said
10 natural language words.

11 34. Because of Facebook's infringement of the '840 Patent, Plaintiff has
12 suffered damages and will continue to suffer damages in the future. Plaintiff is
13 entitled to an award of such damages, but in no event less than a reasonable royalty,
14 the precise amount to be determined at trial.

15 **FIFTH CLAIM FOR RELIEF**

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

17 35. Plaintiff repeats and re-alleges the allegations of paragraphs 1 through
18 40 as though fully set forth herein.

19 36. Defendant Facebook has been directly infringing one or more claims
20 of the '509 Patent in the United States through at least its operation of the Graph
21 Search feature of its Facebook product throughout the United States in violation of
22 35 U.S.C. § 271 (a).

23 37. Facebook infringes the '509 patent by, at least, providing a system that
24 includes an experience and knowledge data base which is comprised of directed
25 graphs comprised of nodes with associated clause implying word sense numbers
26 organized into paths of said nodes such that said nodes have access conditions
27 which determine zero or more next said nodes on zero or more said paths that are
28 accessible, utilizes a natural language processor to provide natural language with

1 associated clause implying word sense numbers, purpose relation path identification
2 processes to find zero or more said paths from said nodes associated with said
3 clause implying word sense numbers associated with said natural language with
4 reference to said experience and knowledge database such that said access
5 conditions of said nodes on said found paths are met, and provides criteria for
6 selecting said found experience and knowledge paths, and utilizing said criteria to
7 select one or more of said found paths.

8 38. Because of Facebook's infringement of the '509 Patent, Plaintiff has
9 suffered damages. Plaintiff is entitled to an award of such damages, but in no event
10 less than a reasonable royalty, the precise amount to be determined at trial.

11 **SIXTH CLAIM FOR RELIEF**

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

13 39. Plaintiff repeats and re-alleges the allegations of paragraphs 1 through
14 44 as though fully set forth herein.

15 40. Defendant Facebook has been directly infringing one or more claims
16 of the '603 Patent in the United States through at least its operation of the Graph
17 Search feature of its Facebook product throughout the United States in violation of
18 35 U.S.C. § 271 (a).

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

1 and knowledge database such that said access conditions of said nodes on said
2 found paths are met.

3 42. Because of Facebook's infringement of the '603 Patent, Plaintiff has
4 suffered damages. Plaintiff is entitled to an award of such damages, but in no event
5 less than a reasonable royalty, the precise amount to be determined at trial.

6 **SEVENTH CLAIM FOR RELIEF**

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

8 43. Plaintiff repeats and re-alleges the allegations of paragraphs 1 through
9 48 as though fully set forth herein.

10 44. Defendant Facebook has been directly infringing one or more claims
11 of the '436 Patent in the United States through at least its operation of the Graph
12 Search feature of its Facebook product throughout the United States in violation of
13 35 U.S.C. § 271 (a).

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

25 46. Because of Facebook's infringement of the '436 Patent, Plaintiff has
26 suffered damages. Plaintiff is entitled to an award of such damages, but in no event
27 less than a reasonable royalty, the precise amount to be determined at trial.
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JURY DEMAND

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

PRAYER FOR RELIEF

3
4 WHEREFORE, Plaintiff Word to Info, Inc. respectfully demands entry of
5 judgment against Facebook as follows:

6 A. finding that Facebook has infringed one or more claims of the Patents-
7 in-Suit;

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

14 C. a declaration that this case is exceptional under 35 U.S.C. § 285, and
15 an award of Plaintiff’s reasonable attorneys’ fees;

16 D. ordering an accounting of all infringing acts including, but not limited
17 to, those acts not presented at trial and an award of damages to Plaintiff for any
18 such acts; and

19 E. awarding such other and further relief at law or in equity as the Court
20 deems just and proper.
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1 Dated: November 23, 2015

2 Respectfully submitted,

3 /s/ Steven R. Daniels

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25 *Attorneys for Plaintiff*

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CERTIFICATE OF SERVICE

I hereby certify that on November 23, 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