IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

AIDO MOBILITY LLC,	
Plaintiff,	Civil Action No. 1:19-cv-00601-RGA
V.	PATENT CASE
DOW JONES & COMPANY, INC.,	JURY TRIAL DEMANDED
Defendant.	

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Aido Mobility LLC ("Aido" or "Plaintiff") files this First Amended Complaint against Dow Jones & Company, Inc. ("Dow Jones" or "Defendant") for infringement of U.S. Patent No. 7,058,395 ("the '395 patent"), U.S. Patent No. 7,212,811 ("the '811 patent"), and U.S. Patent No. 7,292,844 ("the '844 patent") (collectively "the patents-in-suit" or "asserted patents").

THE PARTIES

1. Plaintiff is a Texas limited liability company with its principal place of business at 1400 Preston Road, Suite 400, Plano, Texas 75093.

2. Defendant is a Delaware corporation with its principal place of business at 1211 Avenue of the Americas, New York, New York 10036. Defendant does business in the State of Delaware and in this judicial district. Defendant can be served with process through its registered agent Corporate Creations Network, Inc., 3411 Silverside Road, Tatnall Building, Suite 104, Wilmington, Delaware 19810.

JURISDICTION AND VENUE

This action arises under the patent laws of the United States, namely 35 U.S.C.
§§ 271, 281, and 284, among others.

4. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331, 1338(a), and 1367.

5. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1400(b).

Defendant is a Delaware corporation.

6. Defendant is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Delaware Long Arm Statute, due at least to their substantial business in this State and judicial district, including: (a) regularly doing or soliciting business, engaging in other persistent conduct, and/or deriving substantial revenue from goods sold, and services provided, to Delaware residents; and (b) Defendant is a Delaware corporation.

THE PATENTS-IN-SUIT

7. The asserted claims relate generally to novel methods for push notifications that contain certain information and/or are sent in response to certain specific conditions (*e.g.*, user interest indicators, location identifiers, etc.).

The '395 patent lawfully issued on June 6, 2006, and stems from Application No. 11/262,731, filed on November 1, 2005. The '395 patent is entitled "Geographical Web Browser, Methods, Apparatus and Systems." A copy of the '395 patent is attached hereto as Exhibit 1.

9. The '811 patent lawfully issued on May 1, 2007, and stems from Application No.
11/099,486, filed on April 6, 2005. The '811 patent is entitled "Geographical Web Browser,
Methods, Apparatus and Systems." A copy of the '811 patent is attached hereto as Exhibit 2.

10. The '844 patent lawfully issued on November 6, 2007, and stems from Application No. 11/603,022, filed on November 22, 2006. The '844 patent is entitled "Geographical Web Browser, Methods, Apparatus and Systems." A copy of the '844 patent is attached hereto as Exhibit 3.

 The names inventors on the patents-in-suit are Eric Morgan Dowling, Duncan Leo MacFarlane, and Mark Nicholas Anastasi.

12. The patents-in-suit all claim priority to U.S. Patent Application No. 09/195,171, filed on November 17, 1998, which issued as U.S. Patent No. 6,522,875 ("the '875 patent").

13. The technologies claimed by the patents-in-suit consist of ordered combinations of features and functions that were not, alone or in combination, considered well-understood by, and routine, generic, and conventional to, skilled artisans in the industry at the time of invention.

14. Each asserted claim in the patents-in-suit is presumed valid.

15. Each asserted claim in the patents-in-suit is directed to patent eligible subject matter under 35 U.S.C. § 101.

16. The patent specifications of the patents-in-suit disclose shortcomings in the prior art and then explain, in detail, the technical ways that the patents resolve or overcome those shortcomings. *See, e.g.,* Exhibit 1, '395 patent, 1:20-5:42; Exhibit 2, '811 patent, 1:20-5:36; Exhibit 3, '844 patent, 1:22-5:34. *See also* Declaration of Eric M. Dowling, at ¶¶ 12-16 (attached as Exhibit 12, hereinafter "Dowling Decl.").

17. The disclosures of the patents-in-suit broadly relate to mobile data networks. Exhibit 12, Dowling Decl., at \P 12, *citing* '395 patent (Exhibit 1), at 1:20-25. More particularly, the disclosures relate to advances in network application programs which allow a user to navigate a set of network web pages based on the setting of one or more control parameters. *Id.*

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The disclosures further teach the benefits of achieving these advances utilizing persistent connection techniques primarily applied at or below the application layer of the OSI model. *Id.*, *citing* '395 patent (Exhibit 1), at 2:7-31, 13:47-67, 16:8-19, 22:28-59. In providing such advances, the patents-in-suit represented a substantial advance in the art of telecommunications, providing methods that allow for persistent data sessions of mobile devices, despite the mobile device failing to maintain a consistent direct connection (*e.g.*, by a user travelling through disparate broadcast domains), and enhanced data sharing across and within networks. *Id.* Through the patents-in-suit, several advanced techniques for dynamic data exchange across a network, and in some cases, with persistent data session management, are achieved. *Id.*

18. Prior to the patents-in-suit, no technology existed to provide local broadcast information to automatically control a network application such as a web browser by selectively filtering broadcast information using a packet filter. Exhibit 12, Dowling Decl., at ¶ 13, *citing* '395 patent (Exhibit 1), at 2:54-67. The available approaches required a user to select an icon or navigate a browser application via conventional means to access information specific to a local area. *Id.* Also, systems did not exist that could allow for information processed by a GPS receiver to control the flow of information on a network connection with a server. *Id.* This is evidenced by the fact that systems envisioned by telecommunication firms at the time relied on the knowledge of the user's operating wireless cell. *Id., citing* '395 patent (Exhibit 1), at 3:23-30. As such, there were no conventional techniques for utilizing detailed, personalized user information (*e.g.*, past and present GPS location data and/or user preferences) for broadcasting content. *Id.*

In addition, prior to the patents-in-suit, the disclosures of U.S. Patent Appl. Ser.
No. 09/167,698 to Eric M. Dowling and Mark N. Anastasi had not been disclosed to the public

or otherwise incorporated into any commercially-available technology. Exhibit 12, Dowling Decl., at \P 14. As such, there were no conventional techniques for utilizing virtual sessions to allow a mobile unit to maintain a virtual session with a central server. *Id*.

- 20. The patents-in-suit met the needs evinced above by providing, for example:
 - a. systems and methods capable of providing a user with a means to receive information from a first connection to a network based on a user's position;
 - b. techniques for applications to control a flow of information based on a locally received broadcast;
 - c. techniques for applications to control the flow of information based on processed GPS data;
 - d. a mobile unit and associated methods capable of receiving one or more transmissions via a second connection and then generating a request packet on a first connection to navigate an application program; and
 - e. a network server and associated methods that operate to receive request packets that are generated based on information received from these transmissions.

Exhibit 12, Dowling Decl., at ¶ 15.

21. The inventions recited in the claims of the patents-in-suit bring together numerous unconventional elements and steps previously unknown in the field of telecommunications, GPS, networking, and computing technology. Exhibit 12, Dowling Decl., at ¶ 16. Each asserted claim recites an unconventional combination that was previously unheard of and that improves computerized telecommunications and processes, for example by overcoming several problems

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with prior technology and allowing for dynamic, personalized data exchange across a network with persistent data session management as described above. *Id*.

22. The claims of the patents-in-suit bring together numerous unconventional concepts and features and set forth a solution that is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks. Exhibit 12, Dowling Decl., at \P 18. Computerized inventions such as these constitute patentable subject matter. *Id*.

23. As one example, the use of "pushed information," a "push message," an "application-program identifying field," and/or "wherein the communication push message acts as a notification to allow the user to selectively download the further content only if the user is interested in receiving the further content," as claimed by the '395 patent was far from conventional. Exhibit 12, Dowling Decl., at ¶ 19. In 1998, these features and components were unconventional even when taken alone and were even more unconventional in combination. *Id.* These features and components are not "abstract" in any sense of the word – they are technical in nature, and cannot be characterized as being well-known, routine, and conventional in at least November of 1998. *Id.*

24. Furthermore, claim 4 of the '395 patent recites the following elements that were unconventional at the time of filing of the application (November of 1998):

- a. the particular mobile unit is configured to wirelessly receive pushed information, read an application-program identifying field contained within the pushed information to identify a particular application program resident on the particular mobile unit;
- b. [the particular mobile unit is configured] to present to the user via the graphical user interface a selectable indication, such that when the selectable indication is selected by a user selection, further content related to the particular application program will be downloaded to the particular mobile unit;

- c. the particular mobile unit is in communication with at least a particular wireless packet access station of the plurality of wireless packet access stations when the particular mobile unit is located in a coverage area of the particular wireless packet access station;
- d. causing a communication push message to be wirelessly transmitted to the particular mobile unit;
- e. wherein the communication push message includes the application-program identifying field that identifies the particular application program and contains information related to the further content available for downloading in response to the user selection;
- f. receiving a client-request packet wirelessly coupled from the particular mobile unit in response to the user selection, the client-request packet indicating a request to download the further content;
- g. sending the further content to the mobile unit in response to the client-request packet;
- h. wherein the communication push message acts as a notification to allow the user to selectively download the further content only if the user is interested in receiving the further content.

Exhibit 12, Dowling Decl., at ¶ 20. Similar elements are found in claim 22 of the '395 patent,

claim 5 of the '811 patent, and claim 1 of the '844 patent. Therefore, this applies equally to

those claims. Id.

25. In claim 8 of the '811 patent, the unconventional elements include but are not

limited to:

- a. identifying a downloadable information content that comports with [a] user preference;
- b. causing an application layer communication to be wirelessly transmitted to the mobile unit via an Internet and via a wireless packet access station, wherein the application layer communication contains an indication of the content;
- c. wherein the application layer communication carries information to be presented to the user to allow the user to selectively download the content only if the user is interested in receiving the content
- d. wherein the application layer communication is coupled at least partially via a virtual communication session implemented at one or more layers below the application layer;
- e. wherein the virtual communication session is configured to be transitioned from an initial active state to an inactive state, and later to be transitioned from the inactive state back to the active state, and when the virtual communication session is in the active state, the application layer communication can be coupled to the mobile unit via the virtual communication session;

f. wherein the mobile communication system is configured to support a mode of operation in which the user preference is received while the virtual communication session is in the active state, and the application layer communication is wirelessly transmitted after the virtual communication session has transitioned to the inactive state and back again to the active state.

Exhibit 12, Dowling Decl., at ¶ 21.

26. Thus, each of the claims of the patents-in-suit bring together numerous unconventional elements and steps previously unknown in the field of telecommunications, by utilizing various aspects of GPS, networking, and computing technology. Exhibit 12, Dowling Decl., at \P 22. The inventions of the patents-in-suit improve those technologies and contain numerous technical and computerized limitations as set forth above. *Id.* Again, by utilizing the specific claimed techniques, parties could now broadcast content over a specific type of network utilizing detailed, personalized user information. *Id.* This allows users to achieve the benefits laid out in the specifications of the patents-in-suit and that are readily apparent to anyone who has received a personally-tailored push notification. *Id.* In addition, the use of virtual sessions also enables more efficient and flexible communication because a persistent connection is not required. *Id.* Prior to the inventions of the patent-in-suit, this was unheard of and unconventional. *Id.*

27. There was no push notification service or technology in existence prior to the inventions of the patents-in-suit that utilized specific user data and/or preferences. Exhibit 12, Dowling Decl., at \P 23. If one would have attempted to utilize the existing technology to achieve a push notification service based on user data and/or preferences, such attempts would have failed, because utilizing non-specific cell data in lieu of a user's position would have been unworkable. *Id.* The patents-in-suit resolved these issues by integrating advanced techniques for obtaining and utilizing user preferences as described in the unconventional elements listed

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above. *Id*. The use of virtual sessions further refined these techniques, as they enhance session persistence in a technical and novel way. *Id*.

28. With respect to push notifications and/or messages, at least one author has stated that the first push service was developed by Blackberry in "the first years of this millennium." *See* Exhibit 4, The History of Push Notifications, *available at* https://pushcrew.com/blog/history-of-push-notifications/. In describing the Blackberry push service, this author went on to state:

Push kept users updated with their email the moment it was received on the phone. The notifications appeared as a small tab of information on the mobile screen. This was revolutionary, and was one of the little features that ensured RIM's Blackberry was the chosen business device for years.

Id.

29. Apple did not launch its push notification service until June 2009. *See* Exhibit 5, Urban Airship, *Push Notifications Explained*, p. 1, *available at* https://www.urbanairship.com/push-notifications-explained; *see also* Exhibit 6, Melanson, Donald, *iPhone push notification service for devs announced*, Engadget (June 8, 2008), *available at* https://www.engadget.com/2008/06/09/iphone-push-notification-service-for-devs-announced/ (noting that Apple's push notification service was first announced in June 2008).

30. Google did not launch its push notification service until May 2010. See Exhibit 5, Urban Airship, Push Notifications Explained, p. 1; see also Exhibit 7, Wei Huang, Android Cloud To Device Messaging, Android Developers Blog (May 27, 2010), available at https://android-developers.googleblog.com/2010/05/android-cloud-to-device-messaging.html (noting that Google launched its first push notification service in May 2010).

31. On March 15, 2018, at least one author stated that: "Location-based push notifications are a relatively new phenomenon; users are still protective of their location data. *See* Exhibit 8, Bhagwandin, Stefan, *Master the Dos & Don'ts of Location-Based Push*

Notifications, p. 3 (Mar. 15, 2018), *available at* https://www.leanplum.com/blog/location-based-push-notifications/.

32. The evidence cited above establishes that, at the time of the inventions of the patents-in-suit, many of the features and components were unconventional even when taken alone. Exhibit 12, Dowling Decl., at \P 24. Viewed as an ordered combination, they cannot be whittled down to a contrived, overly-simplistic alleged "abstract idea." *Id.* The asserted claims of the patents-in-suit recite inventions that constitute technical improvements of telecommunications, by utilizing various aspects of GPS, networking, and computing technology that were completely unconventional at the time of invention, and helped resolve technical problems – for instance, the lack of personalized data exchange (*e.g.*, GPS data or predefined preferences) across a network and inconsistent data session management. *Id.*

33. In addition, the patents-in-suit have over 550 forward citations, which is further indicative of the value and importance of the inventions claimed in the patents-in-suit.

<u>COUNT I</u>

(Infringement of U.S. Patent No. 7,058,395)

34. Plaintiff incorporates paragraphs 1 through 33 herein by reference.

35. This cause of action arises under the patent laws of the United States and, in particular, 35 U.S.C. §§ 271, *et seq*.

36. Plaintiff is the assignee of the '395 patent, with ownership of all substantial rights, including the right to exclude others and to enforce, sue, and recover damages for past, present, and future infringements.

37. The '395 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

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38. Defendant has infringed one or more claims of the '395 patent in this judicial district and elsewhere in Delaware and the United States.

39. In particular, Defendant has infringed at least claims 4 and 22 of the '395 patent by, among other things, practicing the claimed method steps via operating, maintaining, and/or providing services to support the functionalities of the Wall Street Journal App (the "Accused Practices"). To the extent one or more steps are not performed by Defendant, then, on information and belief, such steps are performed by a third-party pursuant to a contractual obligation to Defendant and/or the direction and control of Defendant.

40. Attached hereto as Exhibit 9, and incorporated herein by reference, is a claim chart detailing how the Accused Practices infringe the '395 patent.

41. Defendant is liable for these infringements of the '395 patent pursuant to 35U.S.C. § 271.

42. Plaintiff has been damaged as a result of Defendant's infringing conduct described in this Count. Defendant is, thus, liable to Plaintiff in an amount that adequately compensates Plaintiff for Defendant's infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT II

(Infringement of U.S. Patent No. 7,212,811)

43. Plaintiff incorporates paragraphs 1 through 42 herein by reference.

44. This cause of action arises under the patent laws of the United States and, in particular, 35 U.S.C. §§ 271, *et seq*.

45. Plaintiff is the assignee of the '811 patent, with ownership of all substantial rights, including the right to exclude others and to enforce, sue, and recover damages for past, present, and future infringements.

46. The '811 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

47. Defendant has infringed one or more claims of the '811 patent in this judicial district and elsewhere in Delaware and the United States.

48. In particular, Defendant has infringed at least claims 5 and 8 of the '811 patent by, among other things, engaging in the Accused Practices. To the extent one or more steps are not performed by Defendant, then, on information and belief, such steps are performed by a third-party pursuant to a contractual obligation to Defendant and/or the direction and control of Defendant

49. Attached hereto as Exhibit 10, and incorporated herein by reference, is a claim chart detailing how the Accused Practices infringe the '811 patent.

50. Defendant is liable for these infringements of the '811 patent pursuant to 35U.S.C. § 271.

51. Plaintiff has been damaged as a result of Defendant's infringing conduct described in this Count. Defendant is, thus, liable to Plaintiff in an amount that adequately compensates Plaintiff for Defendant's infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

<u>COUNT III</u>

(Infringement of U.S. Patent No. 7,292,844)

52. Plaintiff incorporates paragraphs 1 through 51 herein by reference.

53. This cause of action arises under the patent laws of the United States and, in particular, 35 U.S.C. §§ 271, *et seq*.

54. Plaintiff is the assignee of the '844 patent, with ownership of all substantial rights, including the right to exclude others and to enforce, sue, and recover damages for past, present, and future infringements.

55. The '844 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

56. Defendant has infringed one or more claims of the '844 patent in this judicial district and elsewhere in Delaware and the United States.

57. In particular, Defendant has infringed at least claim 1 of the '844 patent by, among other things, engaging in the Accused Practices. To the extent one or more steps are not performed by Defendant, then, on information and belief, such steps are performed by a thirdparty pursuant to a contractual obligation to Defendant and/or the direction and control of Defendant.

58. Attached hereto as Exhibit 11, and incorporated herein by reference, is a claim chart detailing how the Accused Practices infringe the '844 patent.

59. Defendant is liable for these infringements of the '844 patent pursuant to 35U.S.C. § 271.

60. Plaintiff has been damaged as a result of Defendant's infringing conduct described in this Count. Defendant is, thus, liable to Plaintiff in an amount that adequately compensates Plaintiff for Defendant's infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

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JURY DEMAND

Plaintiff requests a trial by jury pursuant to Rule 38 of the Federal Rules of Civil Procedure.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff requests that the Court find in its favor and against Defendant,

and that the Court grant Plaintiff the following relief:

- a. Judgment that one or more claims of the '395 patent, the '811 patent, and the '844 patent have been infringed, either literally and/or under the doctrine of equivalents, by Defendant;
- b. Judgment that Defendant account for and pay to Plaintiff all damages to, and costs incurred by, Plaintiff because of Defendant's infringing activities and other conduct complained of herein, including an accounting for any sales or damages not presented at trial;
- c. That Plaintiff be granted pre-judgment and post-judgment interest on the damages caused by Defendant's infringing activities and other conduct complained of herein; and
- d. That Plaintiff be granted such other and further relief as the Court may deem just and proper under the circumstances.

Dated: July 3, 2019

DEVLIN LAW FIRM LLC

/s/ Timothy Devlin

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