UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

L2 MOBILE TECHNOLOGIES LLC,	Civil Action No:
Plaintiff, v.	JURY TRIAL DEMANDED
FORD MOTOR COMPANY,	
Defendant.	

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff L2 Mobile Technologies LLC ("L2MT") complains against Defendant Ford Motor Company ("Defendant" or "Ford") as follows:

NATURE OF ACTION

1. This is an action for patent infringement of United States Patent Nos. 8,179,913; 7,266,105; RE47,200; 8,054,777; and 8,064,460 (collectively, the "Patents in Suit") under the Patent Laws of the United States, 35 U.S.C. § 1, *et seq*.

THE PARTIES

- 2. Plaintiff L2MT is a corporation organized and existing under the laws of the State of Texas with its principal place of business at 8105 Rasor Blvd., Suite 210, Plano, TX 75024. L2MT is in the business of licensing patented technology. L2MT is the assignee of the Patents in Suit.
- 3. Defendant Ford is a corporation duly existing and organized under the laws of the State of Delaware with its principal place of business at One American Road, Dearborn, Michigan 48126. Ford's registered agent for service of process in the State of Delaware is The Corporation Trust Company, having an address Corporation Trust Center, 1209 Orange Street, Wilmington,

Delaware 19801. Ford directly and/or through one or more of its subsidiaries, agents, affiliates, and/or intermediaries conducts business in and is doing business in this District and elsewhere in the United States, including, without limitation, making, using, offering to sell, selling, and/or importing connected vehicles containing integrated wireless communications devices that embody the patented technology, and enabling end-user purchasers to use such connected vehicles in this District. The wireless communications devices in Ford's connected vehicles comply with the GSM wireless communications standard. This standard is also referred to as the "3G" wireless communications standard.

JURISDICTION

- 4. The claims in this action arise under the patent laws of the United States. Accordingly, this Court has subject matter jurisdiction over the patent claims pursuant to 28 U.S.C. §§ 1331 and 1338(a).
- 5. Ford is subject to this Court's specific and general personal jurisdiction pursuant to due process and the Delaware Long Arm Statute, due at least to its substantial business conducted in this forum, directly and/or through intermediaries, including having (i) solicited business in the State of Delaware, transacted business within the State of Delaware and attempted to derive financial benefit from residents of the State of Delaware, including benefits directly related to the instant patent infringement causes of action set forth herein; (ii) placed its vehicles into the stream of commerce throughout the United States and transacted business in Delaware and in this District; and (iii) either alone or in conjunction with others, committed acts of infringement within this District and induced others to commit acts of infringement within this District. On information and belief, Ford, directly and/or through subsidiaries, agents, affiliates, and/or intermediaries, has advertised (including through websites), offered to sell, sold and/or distributed infringing vehicles, and/or has induced the sale and use of infringing products in Delaware. Ford has, directly or

through its distribution network, purposefully and voluntarily placed such vehicles in the stream of commerce knowing and expecting them to be purchased and used by consumers in Delaware and in this District.

- 6. Further, on information and belief, Ford is subject to the Court's general jurisdiction, including from regularly doing or soliciting business, engaging in other persistent courses of conduct, and/or deriving substantial revenue from goods and services provided to individuals in Delaware and in this District. Therefore, the exercise of jurisdiction over Ford is appropriate under the applicable jurisdictional statutes and would not offend traditional notions of fair play and substantial justice.
- 7. On information and belief, Ford does one or more of the following with vehicles that use the 3G wireless communication standards and that embody the patented technology: (a) manufacture (directly or through third party manufacturers) and/or assemble these vehicles that are and have been used, offered for sale, sold, and purchased in this District; (b) use these vehicles in this District; (c) import these vehicles into the United States for sale to purchaser end-users, including purchaser end-users in this District; and (d) sell or offer these vehicles for sale (directly or through authorized dealerships) in the United States, including to purchaser end-users in this District.

VENUE

- 8. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400.
- 9. Ford is subject to personal jurisdiction in this District, resides in this District, is registered to do business in Delaware, has regularly conducted business in this District, and has committed acts of infringement within this District. Without limitation, on information and belief, within this District Ford, directly and/or through subsidiaries, agents, affiliates, and/or

intermediaries, has advertised (including through websites), offered to sell, sold and/or distributed infringing vehicles, and/or has induced the sale and use of infringing vehicles.

THE PATENTS IN SUIT

- 10. On September 4, 2007, U.S. Patent No. 7,266,105 ("the '105 patent"), entitled "METHOD FOR DETERMINING TRIGGERING OF A PDCP SEQUENCE NUMBER SYNCHRONIZATION PROCEDURE," a copy of which is attached hereto as Exhibit 1, was duly and legally issued. The '105 patent issued from U.S. Patent Application Serial Number 10/249,177 filed March 20, 2003, which claims priority to United States Provisional Patent Application No. 60/319,240 filed May 10, 2002. The '105 patent discloses and relates to wireless communication protocols. The inventors assigned all right, title, and interest in and to the '105 patent to ASUSTEK Computer, Inc. (hereinafter "ASUSTEK"). ASUSTEK assigned its entire right, title, and interest in and to the '105 patent to Innovative Sonic Ltd. ("ISL"). ISL assigned its entire right, title, and interest in and to the '105 patent to L2MT. L2MT is the current and sole owner of all rights, title and interest in and to seek and obtain injunctive or any other relief for infringement of the '105 patent.
- 11. On May 15, 2012, U.S. Patent No. 8,179,913 ("the '913 patent"), entitled "METHOD AND APPARATUS OF HANDLING VARIABLE OF RLC RESET PROCEDURE DURING RECEIVER-SIDE-ONLY RE-ESTABLISHMENT IN WIRELESS COMMUNICATIONS SYSTEM," a copy of which is attached hereto as Exhibit 2, was duly and legally issued. The '913 patent issued from U.S. Patent Application Serial Number 11/797,300 filed May 2, 2007 and discloses and relates to wireless communication protocols. The inventors assigned all rights, title, and interest in and to the '913 patent to ISL. ISL assigned its entire right, title, and interest in and to the '913 to L2MT. L2MT is the current and sole owner of all rights,

title and interest in and to the '913 patent, including the right to sue for and collect past, present and future damages and to seek and obtain injunctive or any other relief for infringement of the '913 patent.

- 12. On January 8, 2019, U.S. Patent No. RE47,200 ("the '200 patent"), entitled "PREVENTING SHORTENED LIFETIMES OF SECURITY KEYS IN A WIRELESS COMMUNICATIONS SECURITY SYSTEM," a copy of which is attached hereto as Exhibit 3, was duly and legally issued. The '200 patent issued from U.S. Patent Application Serial Number 14/283,801 filed May 21, 2014 and discloses and relates to wireless communication protocols. The inventors assigned all right, title, and interest in and to the '200 patent to ASUSTEK. ASUSTEK assigned its entire right, title, and interest in and to the '200 patent to ISL. ISL assigned its entire right, title, and interest in and to the '200 patent to sue for and collect past, present and future damages and to seek and obtain injunctive or any other relief for infringement of the '200 patent.
- 13. On November 8, 2011, U.S. Patent No. 8,054,777 ("the '777 patent"), entitled "METHOD AND APPARATUS FOR HANDLING CONTROL PDUS DURING RE-ESTABLISHING RECEIVING SIDES IN A WIRELESS COMMUNICATIONS SYSTEM," a copy of which is attached hereto as Exhibit 4, was duly and legally issued. The '777 patent issued from U.S. Patent Application Serial Number 11/524,486 filed September 21, 2006 and discloses and relates to wireless communication protocols. The inventors assigned all right, title, and interest in and to the '777 patent to ASUSTeK. ASUSTeK assigned its entire right, title, and interest in and to the '777 patent to ISL. ISL assigned its entire right, title, and interest in and to the '777 patent,

including the right to sue for and collect past, present and future damages and to seek and obtain injunctive or any other relief for infringement of the '777 patent.

- 14. On November 22, 2011, U.S. Patent No. 8,064,460 ("the '460 patent"), entitled "METHOD AND APPARATUS OF DELIVERING PROTOCOL DATA UNITS FOR A USER EQUIPMENT IN A WIRELESS COMMUNICATIONS SYSTEM," a copy of which is attached hereto as Exhibit 5, was duly and legally issued. The '460 patent issued from U.S. Patent Application Serial Number 12/116,207 filed May 7, 2008 and discloses and relates to wireless communication protocols. The inventors assigned all right, title, and interest in and to the '460 patent to ISL. ISL assigned its entire right, title, and interest in and to the '460 to L2MT. L2MT is the current and sole owner of all rights, title and interest in and to the '460 patent, including the right to sue for and collect past, present and future damages and to seek and obtain injunctive or any other relief for infringement of the '460 patent.
- 15. The Patents in Suit are standard-essential patents. ASUSTeK is or has been a member of the European Telecommunications Standards Institute ("ETSI"). ASUSTek was a key contributor of proposals to the 3G wireless standard. On information and belief, ASUSTek and/or ISL declared before ETSI the Patents in Suit as essential to the 3G wireless communication standard.
- 16. The proliferation of connected vehicles, such as vehicles made, used, sold, offered for sale, and imported by Ford, and their popularity, is based on the development of the 3G wireless communication standard. Without 3G technology and L2MT's inventions incorporated therein, connected vehicles and other mobile devices would not be able to provide the constant on-the-go access to data, hotspot access, and vehicle control features such as remote start, remote lock/unlock, and remote access to vehicle information, that we are accustomed to today.

ATTEMPTS TO LICENSE FORD

17. L2MT is a member of the Avanci LLC patent pool. On information and belief, Avanci LLC made Ford a FRAND offer to patents that are essential to the 3G wireless communications standard. On information and belief, Ford declined to take a license to the Avanci LLC patent pool.

FORD'S INFRINGING PRODUCTS AND METHODS

- 18. Ford makes, uses, sells, offers for sale and/or imports into the United States connected vehicles and devices that comply with the 3G wireless communications standards. On information and belief, all of the Ford vehicles that comply with the 4G wireless communications standard also comply with the 3G wireless communications standard. Each of the Patents in Suit are essential to the 3G wireless communications standard. Ford's vehicles that comply with the 3G wireless communications standard cannot operate without implementing the designs and methods claimed in the Patents in Suit.
- 19. By way of example, on information and belief, Ford's vehicles that comply with the 3G wireless communications standard (the "Ford Standard-Compliant Vehicles") are believed to include, but are not limited to, the following vehicles¹:

Ford Vehicle Model	Model Year(s)
Ford C-max Energi	2018
Ford Econoline	2018-2019
Ford Ecosport	2018-2021
Ford Edge	2015-2020
Ford Escape	2017-2021
Ford Expedition	2018-2022
Ford Explorer	2018-2021

¹ https://www.ford.com/technology/sync/ (last visited September 22, 2021); https://di-uploads-pod7.dealerinspire.com/capitallincoln1/uploads/2017/04/BROCHURE-Lincoln-Way-App.pdf (last visited September 22, 2021);

https://www.lincoln.com/cmslibs/content/dam/brand_lincoln/en_us/brand/resources/general/pdf/19_Lincoln_MKZ_SpecLite.pdf (last visited September 22, 2021).

Ford Vehicle Model	Model Year(s)
Ford Explorer Police Intercept	2018-2019
Ford F-150	2018-2021
Ford F-250 Sd	2018-2020
Ford F-350 Sd	2018-2020
Ford F-450 Sd	2018-2020
Ford F-550 Sd	2018-2020
Ford Fiesta	2018-2019
Ford Flex	2018-2019
Ford Focus	2018
Ford Focus Electric	2018-2019
Ford Fusion	2017-2020
Ford Fusion Energi	2017-2020
Ford Fusion Hybrid	2018-2020
Ford Mustang	2018-2021
Ford Ranger	2019-2021
Ford Taurus	2018-2019
Ford Transit	2018-2020
Ford Bronco Sport	2021
Ford Maverick	2022
Ford Transit Connect	2021
Ford Super Duty	2021
Ford Bronco	2021
Ford Mustang Mach-E	2021
Lincoln MKC	2015-2019
Lincoln MKZ	2018-2020
Lincoln MKZ Hybrid	2018-2020
Lincoln MKX	2016-2018
Lincoln Continental	2017-2020
Lincoln Navigator	2018-2021
Lincoln Nautilus	2019-2021
Lincoln Aviator	2020-2022
Lincoln Corsair	2020-2021
Lincoln MKT	2019

- 20. Despite not having a license to the L2MT Essential Patents, including the Patents in Suit, the Ford Standard-Compliant Vehicles have used the methods and designs claimed therein.
- 21. On information and belief, each of the Ford Standard-Compliant Vehicles include a telematics control unit (TCU). The TCU includes, is integrated with, or operates in conjunction

with a cellular modem, RF transceivers, antennas, RF power amplifiers, user graphical interfaces, and other software and hardware. All these components combine together to enable the Ford Standard-Compliant vehicles, and the users of those vehicles, to conduct mobile communications and/or transmit data over cellular networks by practicing the 3G wireless communications standard.

- 22. For example, on information and belief, one or more of the Ford Standard-Compliant Vehicles are equipped with a TCU that includes a Qualcomm MDM9215 IC SOC LTE modem. On information and belief, the Qualcomm MDM9215 IC SOC LTE modem is 3G-complaint and transmits and receives data using the 3G wireless communications standard.²
- 23. On information and belief, the Ford Standard-Compliant Vehicles include a factory-installed integrated in-vehicle communications and entertainment system referred to as Ford SYNC® that is integrated with the TCU. Ford's support webpage demonstrates that vehicles equipped with Ford SYNC® include a touchscreen that indicates when the vehicle is connected to a cellular network.³ Ford's website further states that software updates to the Ford SYNC® system are automatically delivered to the vehicle wirelessly (or over-the-air).⁴ On information and belief, these wireless software updates are made over the 3G wireless communications network using the 3G wireless communications standard.
- 24. On information and belief, the Ford Standard-Compliant Vehicles are operable with Ford's FordPass mobile application. The FordPass application works in conjunction with the Ford

² https://www.qualcomm.com/news/releases/2012/09/14/qualcomm-second-generation-lte-chipsets-enable-high-speed-wireless (last visited September 22, 2021).

³ https://www.ford.com/support/how-tos/sync/getting-started-with-sync/how-do-i-change-sync-connectivity-settings/ (last visited September 21, 2021).

⁴ https://www.ford.com/technology/sync/#sync-homepage-image-f8358c5fd9cfd9bf145a3db5ffe7e06a-ai (last visited September 21, 2021).

SYNC® system to provide users the ability to remotely control their vehicles, for example, to remotely start their vehicle, locate their vehicle, and lock or unlock their vehicle. Ford's support webpage page further describes that before a user can start using these features, the vehicle must have an active FordPass Connect embedded modem that is registered with the FordPass mobile application.⁵ On information and belief, the remote functionality of the FordPass mobile application is provided by the wireless modem included in the vehicle TCUs in each of the Ford Standard-Compliant Vehicles.

FIRST CAUSE OF ACTION

(Infringement of the '913 Patent)

- 25. L2MT hereby repeats and re-alleges the allegations contained in paragraphs 1 to 24 above, as if fully set forth herein.
- 26. It is necessary to practice one or more claims of the '913 patent to comply with the requirements of the 3G mobile communications standard, including without limitation 3GPP TS 25.322 v6.12.0 and subsequent versions. The Ford Standard-Compliant Vehicles are covered by one or more claims of the '913 patent and therefore infringe the '913 patent. A claim chart attached as Exhibit 6 identifies specifically how each element of each asserted claim of the '913 patent must be practiced by devices, such as the Ford Standard-Compliant Vehicles, that comply with the 3G wireless communications standard.
- 27. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has in the past and continues to directly infringe the '913 patent pursuant to 35 U.S.C. § 271(a) by using without authority the Ford Standard-Compliant Vehicles in a

⁵ https://www.ford.com/support/category/fordpass/fordpass-sync-connect/ (last visited September 21, 2021).

manner that infringes the methods of claims 1 and 2 of the '913 patent. On information and belief, such use includes use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles during development and testing of the Ford Standard-Compliant Vehicles. Such use during development and testing of the Ford Standard-Compliant Vehicles cannot be performed without infringing the methods recited in claims 1 and 2 of the '913 patent because it is necessary to practice the claimed methods to comply with the requirements of certain standards applicable to 3G wireless communications.

- On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 1 of the '913 patent literally and/or pursuant to the doctrine of equivalents wherein the Ford Standard-Compliant Vehicles practice the method of handling a variable of a Radio Link Control reset procedure during receiver-side-only reestablishment in a wireless communications system comprising the steps of re-establishing only a receiver side of a Radio Link Control (RLC) entity, and resetting a reset state variable, used for counting the number of times a RESET protocol data unit (PDU) is scheduled to be transmitted, during the re-establishing of only the receiver side of the RLC entity.
- 29. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 2 of the '913 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles practice the limitations of claim 1, and further, wherein the wireless communications system operates in Acknowledged Mode.
- 30. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has in the past and continues to indirectly infringe the '913 patent, including at least claims 1 and 2 of the '913 patent, pursuant to 35 U.S.C. § 271(b) by actively inducing acts of direct infringement performed by others, such as end-users of the Ford Standard-

Compliant Vehicles. Ford has actual notice and knowledge of the '913 patent at least as of the date it was served with this complaint. Discovery will confirm the exact date Ford became aware of the '913 patent.

31. Ford indirectly infringes by inducing third parties to infringe the methods recited in claims 1 and 2 of the '913 patent by using the 3G wireless capabilities of the Ford Standard-Compliant Vehicles in their normal and customary way in the United States and in this District. For example, Ford actively induces third parties, including without limitation end-users of the Ford Standard-Compliant Vehicles, to infringe the '913 patent by, among other things, (i) designing, manufacturing, offering for sale, and selling the Ford Standard-Compliant Vehicles to end-users or to others who offer for sale or sell the same to end-users with the knowledge and intent that endusers will use the 3G capabilities of such vehicles in accordance with the 3G standard, (ii) enabling end-users of Ford Standard-Compliant Vehicles to use the vehicles in accordance with at least the 3G communications standard; (iii) providing instructions to end-users for using the Ford Standard-Compliant Vehicles in their customary way, including instructions on using the cellular connectivity features of the vehicles; (iv) providing cellular connectivity, remote diagnosis, and important firmware updates for the Ford Standard-Compliant Vehicles over cellular networks; (v) enabling users to monitor and control their Ford Standard-Compliant Vehicle over cellular networks using the FordPass mobile application; (vi) sending notifications for events and enabling end-users to receive notifications over cellular networks; (vii) advertising compliance of the Ford Standard-Compliant Vehicles with at least the 3G standard; and (viii) providing to third parties the hardware components (e.g., antenna(s), filter(s), switch(es), transceiver(s), and/or baseband processor(s) contained in Ford Standard-Compliant Vehicles) and software components (e.g., operating systems running on Ford Standard-Compliant Vehicles and other software and/or firmware used to operate components of the Ford Standard-Compliant Vehicles) that may be required for or associated with infringement of at least claims 1 and 2 of the '913 patent.

- 32. Ford encourages end-users to infringe the methods recited in claims 1 and 2 of the '913 patent with knowledge and the specific intent to cause the acts of direct infringement performed by these third parties. On information and belief, despite having knowledge of the '913 patent at least as early as the filing of this complaint, Ford has and will continue to engage in activities constituting inducement of such direct infringement, notwithstanding its knowledge, or willful blindness thereto, that the activities it induces result in infringement of the '913 patent. Ford is aware that the Ford Standard-Compliant Vehicles are manufactured to comply with the 3G wireless communications standard, and that the subsequent use of the 3G capabilities of such vehicles in the United States would result in direct infringement of at least claims 1 and 2 of the '913 patent. On information and belief, the 3G wireless capabilities of the Ford Standard-Compliant Vehicles cannot be operated in their normal and customary way without complying with the 3G wireless communications standard. Therefore, Ford is aware that at least the end-users of its Ford Standard-Compliant Vehicles will infringe the '913 patent by using the 3G capabilities of those vehicles in their ordinary and customary way in accordance with the 3G wireless communication standard.
- 33. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has been and is now directly infringing at least claims 3 and 4 of the '913 patent pursuant to 35 U.S.C. § 271(a) by making, using, offering to sell, and/or selling in the United States, and/or importing into the United States, without authority, the Ford Standard-Compliant Vehicles that infringe the communications device recited in claims 3 and 4 of the '913 patent.

- 34. On information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 3 of the '913 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise a control circuit for realizing functions of the claimed communications device, a processor installed in the control circuit for executing a program code to operate control circuit, and a memory coupled to the processor for storing the program code, wherein the program code comprises re-establishing only a receiver side of a Radio Link Control (RLC) entity, and resetting a reset state variable, used for counting the number of times a RESET protocol data unit (PDU) is scheduled to be transmitted, during the re-establishing of only the receiver side of the RLC entity.
- 35. Upon information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 4 of the '913 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise the limitations of claim [3], and further, wherein the wireless communications system operates in Acknowledged Mode.
- 36. Ford's direct and indirect infringement of the '913 patent has injured L2MT, and L2MT is entitled to recover damages adequate to compensate for such infringement pursuant to 35 U.S.C. § 284. Unless Ford ceases its infringing activities, it will continue to injure L2MT by infringing the '913 patent.

SECOND CAUSE OF ACTION

(Infringement of the '105 Patent)

- 37. L2MT hereby repeats and re-alleges the allegations contained in paragraphs 1 to 24, as if fully set forth herein.
- 38. It is necessary to practice one or more claims of the '105 patent to comply with the requirements of the 3G mobile communications standard, including without limitation 3GPP TS 25.301 v6.6.0, TS 25.322 v6.12.0, TS 25.331 v6.17.0, and TS 25.323 v6.11.0 and subsequent

versions. The Ford Standard-Compliant Vehicles are covered by one or more claims of the '105 patent and therefore infringe the '105 patent. A claim chart attached as Exhibit 7 identifies specifically how each element of each asserted claim of the '105 patent must be practiced by devices, such as the Ford Standard-Compliant Vehicles, that comply with the 3G wireless communications standard.

- 39. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has in the past and continues to directly infringe the '105 patent pursuant to 35 U.S.C. § 271(a) by using without authority the Ford Standard-Compliant Vehicles in a manner that infringes the methods of claims 1, 2, and 4 of the '105 patent. On information and belief, such use includes the use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles during the development and testing of the Ford Standard-Compliant Vehicles. Such use during development and testing of the Ford Standard-Compliant Vehicles cannot be performed without infringing the methods recited in claims 1, 2, and 4 of the '105 patent because it is necessary to practice the claimed methods to comply with the requirements of certain standards applicable to 3G wireless communications.
- 40. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes for example, claim 1 of the '105 patent literally and/or pursuant to the doctrine of equivalents wherein the Ford Standard-Compliant Vehicles such products practice the method for determining triggering of a packet data convergence protocol (PDCP) sequence number synchronization procedure in a wireless device, the wireless device utilizing a multilayered protocol that includes: a radio resource control (RRC) layer for establishing and configuring radio links according to a plurality of RRC procedures; a PDCP layer for transfer of user data between users of PDCP services to generate corresponding PDCP protocol data units

(PDUs); and a radio link control (RLC) layer for segmenting the PDCP PDUs for a medium access control (MAC) layer; the method comprising: identifying execution of an RRC procedure; when the RRC procedure triggers a serving radio network subsystem (SRNS) relocation procedure, then triggering the PDCP sequence number synchronization procedure only if a next expected UL/DL Receive PDCP sequence number invalidity event is detected during the SRNS relocation procedure; and when the RRC procedure does not trigger the SRNS relocation procedure, then triggering the PDCP sequence number synchronization procedure only if an RLC entity of a PDCP entity is re-established in response to the RRC procedure, or if a PDCP header compression protocol of the PDCP entity is changed in response to the RRC procedure.

- 41. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Complaint Vehicles infringes, for example, claim 2 of the '105 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles practice the limitations of claim 1, and further, wherein the RRC procedure further causes the RLC entity of the PDCP entity to be re-established.
- 42. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Complaint Vehicles infringes, for example, claim 4 of the '105 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles practice the limitations of claim 1, and further, wherein the RRC procedure is selected from a set consisting of Transport Channel Reconfiguration, Radio Bearer Setup, Radio Bearer Release, Cell Update, RRC Radio Bearer Reconfiguration, URA Update, and UTRAN Mobility Information procedures.
- 43. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has in the past and continues to indirectly infringe the '105 patent, including at least claim 1, 2, and 4 of the '105 patent, pursuant to 35 U.S.C. § 271(b) by actively inducing acts of direct infringement performed by others, such as end-users of the Ford Standard-

Compliant Vehicles. Ford has had actual notice and knowledge of the '105 patent at least as of the date it was served with this complaint. Discovery will confirm the exact date Ford became aware of the '105 patent.

44. Ford indirectly infringes by inducing third parties to infringe the methods recited in claims 1, 2, and 4 of the '105 patent by using the 3G wireless capabilities of the Ford Standard-Compliant Vehicles in their normal and customary way in the United States and in this District. For example, Ford actively induces third parties, including without limitation end-users of the Ford Standard-Compliant Vehicles, to infringe the '105 patent by, among other things, (i) designing, manufacturing, offering for sale, and selling the Ford Standard-Compliant Vehicles to end-users or to others who offer for sale or sell the same to end-users with the knowledge and intent that endusers will use the 3G capabilities of such vehicles in accordance with the 3G standard, (ii) enabling end-users of Ford Standard-Compliant Vehicles to use the vehicles in accordance with at least the 3G communications standard; (iii) providing instructions to end-users for using the Ford Standard-Compliant Vehicles in their customary way, including instructions on using the cellular connectivity features of the vehicles; (iv) providing cellular connectivity, remote diagnosis, and important firmware updates for the Ford Standard-Compliant Vehicles over cellular networks; (v) enabling users to monitor and control their Ford Standard-Compliant Vehicle over cellular networks using the FordPass mobile application; (vi) sending notifications for events and enabling end-users to receive notifications over cellular networks; (vii) advertising compliance of the Ford Standard-Compliant Vehicles with at least the 3G standard; and (viii) providing to third parties the hardware components (e.g., antenna(s), filter(s), switch(es), transceiver(s), and/or baseband processor(s) contained in Ford Standard-Compliant Vehicles) and software components (e.g., operating systems running on Ford Standard-Compliant Vehicles and other software and/or firmware used to operate components of the Ford Standard-Compliant Vehicles) that may be required for or associated with infringement of at least claims 1, 2, and 4 of the '105 patent.

- 45. Ford encourages end-users to infringe the methods recited in claims 1, 2, and 4 of the '105 patent with knowledge and the specific intent to cause the acts of direct infringement performed by these third parties. On information and belief, despite having knowledge of the '105 patent at least as early as the filing of this complaint, Ford has and will continue to engage in activities constituting inducement of such direct infringement, notwithstanding its knowledge, or willful blindness thereto, that the activities it induces result in infringement of the '105 patent. Ford is aware that the Ford Standard-Compliant Vehicles are manufactured to comply with the 3G wireless communications standard, and that the subsequent use of the 3G capabilities of such vehicles in the United States would result in direct infringement of at least claims 1, 2, and 4 of the '105 patent. On information and belief, the 3G wireless capabilities of the Ford Standard-Compliant Vehicles cannot be operated in their normal and customary way without complying with the 3G wireless communications standard. Therefore, Ford is aware that at least the end-users of its Ford Standard-Compliant Vehicles will infringe the '105 patent by using the 3G capabilities of those vehicles in their ordinary and customary way in accordance with the 3G wireless communication standard.
- 46. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has been and is now directly infringing at least claims 7–10 of the '105 patent pursuant to 35 U.S.C. § 271(a) by making, using, offering to sell, and/or selling in the United States, and/or importing into the United States, without authority, the Ford Standard-Compliant Vehicles that infringe the communications device recited in claims 7–10 of the '105 patent.

- 47. On information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 7 of the '105 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles include a wireless device comprising a radio resource control (RRC) layer for establishing and configuring radio links according to a plurality of RRC procedures; a PDCP layer for transfer of user data between users of PDCP services to generate corresponding PDCP protocol data units (PDUs); a radio link control (RLC) layer for segmenting the PDCP PDUs for a medium access control (MAC) layer; and a packet data convergence protocol (PDCP) re-synchronization module for performing the steps of identifying execution of a radio resource control (RRC) procedure by the wireless device; when the RRC procedure a triggers serving radio network subsystem (SRNS) relocation procedure, then triggering a PDCP sequence number synchronization procedure only if a next expected UL/DL Receive PDCP sequence number invalidity event is detected during the SRNS relocation procedure; and when the RRC procedure does not trigger the SRNS relocation procedure, then triggering the PDCP sequence number synchronization procedure only if a radio link control (RLC) entity of a PDCP entity supported by the wireless device is reestablished in response to the RRC procedure, or if a PDCP header compression protocol utilized by the PDCP entity is changed in response to the RRC procedure.
- 48. Upon information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 8 of the '105 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise the limitations of claim 7, and further, wherein the RRC procedure further causes the RLC entity of the PDCP entity to be re-established.
- 49. Upon information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 9 of the '105 patent literally and/or pursuant to the doctrine of equivalents wherein

such vehicles comprise the limitations of claim 7, and further, wherein the RRC procedure further causes the PDCP header compression protocol of the PDCP entity to be changed.

- 50. Upon information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 10 of the '105 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise the limitations of claim 7, and further, wherein the RRC procedure is selected from a set consisting of Transport Channel Reconfiguration, Radio Bearer Setup, Radio Bearer Release, Cell Update, RRC Radio Bearer Reconfiguration, URA Update, and UTRAN Mobility Information procedures.
- 51. Ford's direct and indirect infringement of the '105 patent has injured L2MT, and L2MT is entitled to recover damages adequate to compensate for such infringement pursuant to 35 U.S.C. § 284. Unless Ford ceases its infringing activities, it will continue to injure L2MT by infringing the '105 patent.

THIRD CAUSE OF ACTION

(Infringement of the '200 Patent)

- 52. L2MT hereby repeats and re-alleges the allegations contained in paragraphs 1 to 24, as if fully set forth herein.
- 53. It is necessary to practice one or more claims of the '200 patent to comply with the requirements of the 3G mobile communications standard, including without limitation 3GPP TS 25.331 v6.26.0 and subsequent versions. The Ford Standard-Compliant Vehicles are covered by one or more claims of the '200 patent and therefore infringe the '200 patent. A claim chart attached as Exhibit 8 identifies specifically how each element of each asserted claim of the '200 patent must be practiced by devices, such as the Ford Standard-Compliant Vehicles, that comply with the 3G wireless communications standard.

- 54. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has in the past and continues to directly infringe the '200 patent pursuant to 35 U.S.C. § 271(a) by using without authority the Ford Standard-Compliant Vehicles in a manner that infringes the methods of claims 10–14 of the '200 patent. On information and belief, such use includes the use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles during the development and testing of the Ford Standard-Compliant Vehicles. Such use during development and testing of the Ford Standard-Compliant Vehicles cannot be performed without infringing the methods recited in claims 10–14 of the '200 patent because it is necessary to practice the claimed methods to comply with the requirements of certain standards applicable to 3G wireless communications.
- Compliant Vehicles infringes, for example, claim 10 of the '200 patent literally and/or pursuant to the doctrine of equivalents wherein the Ford Standard-Compliant Vehicles practice the method for calculating an initial security count value for a new channel, the method comprising: establishing a plurality of established channels in a wireless communication device, wherein each established channel in the wireless communication device has a corresponding security count value and utilizes a first security key; performing a security mode reconfiguration to change utilization of each of the established channels in the wireless communication device from the first security key to a second security key according to an activation time for each of the established channels, wherein upon utilization of the second security key by one of the established channels, the corresponding security count value for the one of the established channels is changed, wherein the second security key is a new security key that replaces the first security key and is different from the first security key; initiating establishment of a new channel in the wireless communication

device; assigning the second security key to the new channel; utilizing a first set to obtain a first value, wherein the first set is consisting of corresponding security count values of the established channels in the wireless communication device that utilize the second key, and wherein the first value is at least as great as the x most significant bits (MSBx) of a value in the first set and at least one of the established channels utilizing the first security key; and setting the MSBx of the initial security count value for the new channel equal to the first value, wherein if the first set is empty, then the first value is set to a first predetermined value.

- 56. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 11 of the '200 patent literally and/or pursuant to the doctrine of equivalents wherein such products practice the limitations of claim 10, and further, wherein the first predetermined value is zero.
- 57. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 12 of the '200 patent literally and/or pursuant to the doctrine of equivalents wherein such products practice the limitations of claim 10, and further, wherein the first value is at least as great as the MSBx of the greatest value in the first set.
- 58. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 13 of the '200 patent literally and/or pursuant to the doctrine of equivalents wherein such products practice the limitations of claim 10, and further, wherein the first value is greater than the MSBx of the greatest value in the first set.
- 59. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 14 of the '200 patent literally and/or pursuant to the doctrine of equivalents wherein such products practice the limitations of claim 10, and further, wherein the first set includes the corresponding security count values of each established channel

in the wireless communication device utilizing the second security key when initiating the establishment of the new channel in the wireless communication device.

- 60. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has in the past and continues to indirectly infringe the '200 patent, including at least claims 10–14 of the '200 patent, pursuant to 35 U.S.C. § 271(b) by actively inducing acts of direct infringement performed by others, such as end-users of the Ford Standard-Compliant Vehicles. Ford has actual notice and knowledge of the '200 patent at least as of the date it was served with this complaint. Discovery will confirm the exact date Ford became aware of the '200 patent.
- 61. Ford indirectly infringes by inducing third parties to infringe the methods recited in claims 10–14 of the '200 patent by using the 3G wireless capabilities of the Ford Standard-Compliant Vehicles in their normal and customary way in the United States and in this District. For example, Ford actively induces third parties, including without limitation end-users of the Ford Standard-Compliant Vehicles, to infringe the '200 patent by, among other things, (i) designing, manufacturing, offering for sale, and selling the Ford Standard-Compliant Vehicles to end-users or to others who offer for sale or sell the same to end-users with the knowledge and intent that end-users will use the 3G capabilities of such vehicles in accordance with the 3G standard, (ii) enabling end-users of Ford Standard-Compliant Vehicles to use the vehicles in accordance with at least the 3G communications standard; (iii) providing instructions to end-users for using the Ford Standard-Compliant Vehicles in their customary way, including instructions on using the cellular connectivity features of the vehicles; (iv) providing cellular connectivity, remote diagnosis, and important firmware updates for the Ford Standard-Compliant Vehicles over cellular networks; (v) enabling users to monitor and control their Ford Standard-Compliant Vehicle over cellular

networks using the FordPass mobile application; (vi) sending notifications for events and enabling end-users to receive notifications over cellular networks; (vii) advertising compliance of the Ford Standard-Compliant Vehicles with at least the 3G standard; and (viii) providing to third parties the hardware components (e.g., antenna(s), filter(s), switch(es), transceiver(s), and/or baseband processor(s) contained in Ford Standard-Compliant Vehicles) and software components (e.g., operating systems running on Ford Standard-Compliant Vehicles and other software and/or firmware used to operate components of the Ford Standard-Compliant Vehicles) that may be required for or associated with infringement of at least claims 10–14 of the '200 patent.

62. Ford encourages end-users to infringe the methods recited in claims 10–14 of the '200 patent with knowledge and the specific intent to cause the acts of direct infringement performed by these third parties. On information and belief, despite having knowledge of the '200 patent at least as early as the filing of this complaint, Ford has and will continue to engage in activities constituting inducement of such direct infringement, notwithstanding its knowledge, or willful blindness thereto, that the activities it induces result in infringement of the '200 patent. Ford is aware that the Ford Standard-Compliant Vehicles are manufactured to comply with the 3G wireless communications standard, and that the subsequent use of the 3G capabilities of such vehicles in the United States would result in direct infringement of at least claims 10–14 of the '200 patent. On information and belief, the 3G wireless capabilities of the Ford Standard-Compliant Vehicles cannot be operated in their normal and customary way without complying with the 3G wireless communications standard. Therefore, Ford is aware that at least the end-users of its Ford Standard-Compliant Vehicles will infringe the '200 patent by using the 3G capabilities of those vehicles in their ordinary and customary way in accordance with the 3G wireless communication standard.

63. Ford's direct and indirect infringement of the '200 patent has injured L2MT, and L2MT is entitled to recover damages adequate to compensate for such infringement pursuant to 35 U.S.C. § 284. Unless Ford ceases its infringing activities, it will continue to injure L2MT by infringing the '200 patent.

FOURTH CAUSE OF ACTION

(Infringement of the '777 Patent)

- 64. L2MT hereby repeats and re-alleges the allegations contained in paragraphs 1 to 24, as if fully set forth herein.
- 65. It is necessary to practice one or more claims of the '777 patent to comply with the requirements of the 3G mobile communications standard, including without limitation 3GPP TS 25.322 v6.12.0 and subsequent versions. The Ford Standard-Compliant Vehicles are covered by one or more claims of the '777 patent and therefore infringe the '777 patent. A claim chart attached as Exhibit 9 identifies specifically how each element of each asserted claim of the '777 patent must be practiced by devices, such as the Ford Standard-Compliant Vehicles, that comply with the 3G wireless communications standard.
- 66. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has in the past and continues to directly infringe the '777 patent pursuant to 35 U.S.C. § 271(a) by using without authority the Ford Standard-Compliant Vehicles in a manner that infringes the methods of claims 1, 6, 8, and 9 of the '777 patent. On information and belief, such use includes the use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles during the development and testing of the Ford Standard-Compliant Vehicles. Such use during development and testing of the Ford Standard-Compliant Vehicles cannot be performed without infringing the methods recited in claims 1, 6, 8, and 9 of the '777 patent because it is

necessary to practice the claimed methods to comply with the requirements of certain standards applicable to 3G wireless communications.

- On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 1 of the '777 patent literally and/or pursuant to the doctrine of equivalents wherein such products practice the method of handling control Protocol Data Units (PDU's) in a wireless communications system having a communications device having a Radio Link Control (RLC) entity having a transmitting side and a receiving side when reestablishing the receiving side comprising: only reestablishing the receiving side in the RLC entity of the communications device; discarding a first control PDU corresponding to the receiving side; and retaining and not discarding a second control PDU corresponding to the transmitting side wherein the first control PDU corresponding to the receiving Window (MRW) Acknowledgment (ACK) Status PDU.
- 68. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 6 of the '777 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles practice the limitations of claim 1, and further, wherein the second control PDU corresponding to the transmitting side is a Move Receiving Window (MRW) Status PDU.
- 69. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 8 of the '777 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles practice the limitations of claim 1, and further, wherein the wireless communications system operates in Acknowledged Mode.
- 70. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 9 of the '777 patent literally and/or pursuant to

the doctrine of equivalents wherein the communications device is a mobile phone, a wireless mobile communications device, or a networking device.

- 71. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has in the past and continues to indirectly infringe the '777 patent, including at least claims 1, 6, 8, and 9 of the '777 patent, pursuant to 35 U.S.C. § 271(b) by actively inducing acts of direct infringement performed by others, such as end-users of the Ford Standard-Compliant Vehicles. Ford has actual notice and knowledge of the '777 patent at least as of the date it was served with this complaint. Discovery will confirm the exact date Ford became aware of the '777 patent.
- 72. Ford indirectly infringes by inducing third parties to infringe the methods recited in claims 1, 6, 8, and 9 of the '777 patent by using the 3G wireless capabilities of the Ford Standard-Compliant Vehicles in their normal and customary way in the United States and in this District. For example, Ford actively induces third parties, including without limitation end-users of the Ford Standard-Compliant Vehicles, to infringe the '777 patent by, among other things, (i) designing, manufacturing, offering for sale, and selling the Ford Standard-Compliant Vehicles to end-users or to others who offer for sale or sell the same to end-users with the knowledge and intent that end-users will use the 3G capabilities of such vehicles in accordance with the 3G standard, (ii) enabling end-users of Ford Standard-Compliant Vehicles to use the vehicles in accordance with at least the 3G communications standard; (iii) providing instructions to end-users for using the Ford Standard-Compliant Vehicles in their customary way, including instructions on using the cellular connectivity features of the vehicles; (iv) providing cellular connectivity, remote diagnosis, and important firmware updates for the Ford Standard-Compliant Vehicles over cellular networks; (v) enabling users to monitor and control their Ford Standard-Compliant Vehicle over cellular

networks using the FordPass mobile application; (vi) sending notifications for events and enabling end-users to receive notifications over cellular networks; (vii) advertising compliance of the Ford Standard-Compliant Vehicles with at least the 3G standard; and (viii) providing to third parties the hardware components (e.g., antenna(s), filter(s), switch(es), transceiver(s), and/or baseband processor(s) contained in Ford Standard-Compliant Vehicles) and software components (e.g., operating systems running on Ford Standard-Compliant Vehicles and other software and/or firmware used to operate components of the Ford Standard-Compliant Vehicles) that may be required for or associated with the infringement of at least claims 1, 6, 8, and 9 of the '7777 patent.

73. Ford encourages end-users to infringe the methods recited in claims 1, 6, 8, and 9 of the '777 patent with knowledge and the specific intent to cause the acts of direct infringement performed by these third parties. On information and belief, despite having knowledge of the '777 patent at least as early as the filing of this complaint, Ford has and will continue to engage in activities constituting inducement of such direct infringement, notwithstanding its knowledge, or willful blindness thereto, that the activities it induces result in infringement of the '777 patent. Ford is aware that the Ford Standard-Compliant Vehicles are manufactured to comply with the 3G wireless communications standard, and that the subsequent use of the 3G capabilities of such vehicles in the United States would result in direct infringement of at least claims 1, 6, 8, and 9 of the '777 patent. On information and belief, the 3G wireless capabilities of the Ford Standard-Compliant Vehicles cannot be operated in their normal and customary way without complying with the 3G wireless communications standard. Therefore, Ford is aware that at least the end-users of its Ford Standard-Compliant Vehicles will infringe the '777 patent by using the 3G capabilities of those vehicles in their ordinary and customary way in accordance with the 3G wireless communication standard.

- 74. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has been and is now directly infringing at least claims 2, 13, 15, and 16 of the '777 patent pursuant to 35 U.S.C. § 271(a) by making, using, offering to sell, and/or selling in the United States, and/or importing into the United States, without authority, the Ford Standard-Compliant Vehicles that infringe the communications device recited in claims 2, 13, 15, and 16 of the '777 patent.
- 75. On information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 2 of the '777 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise a communications device utilized in a wireless communications system, and Radio Link Control (RLC) entity of the communications device having a transmitting side and a receiving side, utilized for accurately reestablishing the receiving side, the wireless communications device comprising: a control circuit for realizing functions of the wireless communications device; a central processing unit for executing a program code to operate the control circuit; and a memory for storing the program code; wherein the program code comprises: only reestablishing the receiving side in the RLC entity of the communications device; discarding a first control PDU corresponding to the receiving side; and retaining and not discarding a second control PDU corresponding to the transmitting side wherein the first control PDU corresponding to the receiving Window (MRW) Acknowledgment (ACK) Status PDU.
- 76. Upon information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 13 of the '777 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise the limitations of claim 2, and further, wherein the second control PDU corresponding to the transmitting side is a Move Receiving Window (MRW) Status PDU.

- 77. Upon information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 15 of the '777 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise the limitations of claim 2, and further, wherein the wireless communications system operates in Acknowledged Mode.
- 78. Upon information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 16 of the '777 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise the limitations of claim 2, and further, wherein the communications device is a mobile phone, a wireless mobile communications device, or a networking device.
- 79. Ford's direct and indirect infringement of the '777 patent has injured L2MT, and L2MT is entitled to recover damages adequate to compensate for such infringement pursuant to 35 U.S.C. § 284. Unless Ford ceases its infringing activities, it will continue to injure L2MT by infringing the '777 patent.

FIFTH CAUSE OF ACTION

(Infringement of the '460 Patent)

- 80. L2MT hereby repeats and re-alleges the allegations contained in paragraphs 1 to 24, as if fully set forth herein.
- 81. It is necessary to practice one or more claims of the '460 patent to comply with the requirements of the 3G mobile communications standard, including without limitation 3GPP TS 25.321 v7.19.0 and subsequent versions. The Ford Standard-Compliant Vehicles are covered by one or more claims of the '460 patent and therefore infringe the '460 patent. A claim chart attached as Exhibit 10 identifies specifically how each element of each asserted claim of the '460 patent must be practiced by devices, such as the Ford Standard-Compliant Vehicles, that comply with the 3G wireless communications standard.

- 82. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has in the past and continues to directly infringe the '460 patent pursuant to 35 U.S.C. § 271(a) by using without authority the Ford Standard-Compliant Vehicles in a manner that infringes the methods of claims 1–5 of the '460 patent. On information and belief, such use includes the use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles during the development and testing of the Ford Standard-Compliant Vehicles. Such use during development and testing of the Ford Standard-Compliant Vehicles cannot be performed without infringing the methods recited in claims 1–5 of the '460 patent because it is necessary to practice the claimed methods to comply with the requirements of certain standards applicable to 3G wireless communications.
- On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 1 of the '460 patent literally and/or pursuant to the doctrine of equivalents wherein the Ford Standard-Compliant Vehicles practice the method for delivering protocol data units, named PDUs thereinafter, in a user equipment of a wireless communications system, the method comprising: receiving a reordering PDU having set of MAC-ehs serving data units, named MAC-ehs SDUs; delivering the reordering PDU to an upper layer when a first MAC-ehs SDU of the set of MAC-ehs SDUs and a last MAC-ehs SDU of the set of MAC-chs SDUs are not segmented according to a segmentation indication field corresponding to the reordering PDU; and discarding any previously stored MAC-ehs SDU segment.
- 84. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 2 of the '460 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles practice the limitations of claim 1, and further, wherein the reordering PDU is carried in a MAC-ehs PDU.

- 85. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 3 of the '460 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles practice the limitations of claim 2, and further, wherein the segmentation indication field is a header field of the MAC-ehs PDU corresponding to the reordering PDU.
- 86. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 4 of the '460 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles practice the limitations of claim 1, and further, wherein the MAC-ehs SDUs comprise MAC-d PDUs or MAC-c PDUs.
- 87. On information and belief, use of the 3G wireless capabilities of the Ford Standard-Compliant Vehicles infringes, for example, claim 5 of the '460 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles practice the limitations of claim 1, and further, wherein the wireless communications system is an Evolved High Speed Packet Access system.
- 88. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has in the past and continues to indirectly infringe the '460 patent, including at least claims 1–5 of the '460 patent, pursuant to 35 U.S.C. § 271(b) by actively inducing acts of direct infringement performed by others, such as end-users of the Ford Standard-Compliant Vehicles. Ford has actual notice and knowledge of the '460 patent at least as of the date it was served with this complaint. Discovery will confirm the exact date Ford became aware of the '460 patent.
- 89. Ford indirectly infringes by inducing third parties to infringe the methods recited in claims 1–5 of the '460 patent by using the 3G wireless capabilities of the Ford Standard-Compliant Vehicles in their normal and customary way in the United States and in this District.

For example, Ford actively induces third parties, including without limitation end-users of the Ford Standard-Compliant Vehicles, to infringe the '460 patent by, among other things, (i) designing, manufacturing, offering for sale, and selling the Ford Standard-Compliant Vehicles to end-users or to others who offer for sale or sell the same to end-users with the knowledge and intent that endusers will use the 3G capabilities of such vehicles in accordance with the 3G standard, (ii) enabling end-users of Ford Standard-Compliant Vehicles to use the vehicles in accordance with at least the 3G communications standard; (iii) providing instructions to end-users for using the Ford Standard-Compliant Vehicles in their customary way, including instructions on using the cellular connectivity features of the vehicles; (iv) providing cellular connectivity, remote diagnosis, and important firmware updates for the Ford Standard-Compliant Vehicles over cellular networks; (v) enabling users to monitor and control their Ford Standard-Compliant Vehicle over cellular networks using the FordPass mobile application; (vi) sending notifications for events and enabling end-users to receive notifications over cellular networks; (vii) advertising compliance of the Ford Standard-Compliant Vehicles with at least the 3G standard; and (viii) providing to third parties the hardware components (e.g., antenna(s), filter(s), switch(es), transceiver(s), and/or baseband processor(s) contained in Ford Standard-Compliant Vehicles) and software components (e.g., operating systems running on Ford Standard-Compliant Vehicles and other software and/or firmware used to operate components of the Ford Standard-Compliant Vehicles) that may be required for or associated with infringement of at least claims 1–5 of the '460 patent.

90. Ford encourages end-users to infringe the methods recited in claims 1–5 of the '460 patent with knowledge and the specific intent to cause the acts of direct infringement performed by these third parties. On information and belief, despite having knowledge of the '460 patent at least as early as the filing of this complaint, Ford has and will continue to engage in activities

constituting inducement of such direct infringement, notwithstanding its knowledge, or willful blindness thereto, that the activities it induces result in infringement of the '460 patent. Ford is aware that the Ford Standard-Compliant Vehicles are manufactured to comply with the 3G wireless communications standard, and that the subsequent use of the 3G capabilities of such vehicles in the United States would result in direct infringement of at least claims 1–5 of the '460 patent. On information and belief, the 3G wireless capabilities of the Ford Standard-Compliant Vehicles cannot be operated in their normal and customary way without complying with the 3G wireless communications standard. Therefore, Ford is aware that at least the end-users of its Ford Standard-Compliant Vehicles will infringe the '460 patent by using the 3G capabilities of those vehicles in their ordinary and customary way in accordance with the 3G wireless communication standard.

- 91. Ford, directly and/or through its subsidiaries, affiliates, agents, intermediaries, and/or business partners, has been and is now directly infringing at least claims 6–10 of the '460 patent pursuant to 35 U.S.C. § 271(a) by making, using, offering to sell, and/or selling in the United States, and/or importing into the United States, without authority, the Ford Standard-Compliant Vehicles that infringe the communications device recited in claims 6–10 of the '460 patent.
- 92. On information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 6 of the '460 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise a communications device used in a wireless communications system for delivering PDUs comprising: a control circuit for realizing functions of the communications device; a central processing unit coupled to the control circuit for executing a program code to operate the control circuit; and a memory coupled to the central processing unit or storing the program code; wherein the program code comprises: receiving a reordering PDU having set of

MAC-ehs serving data units, named MAC-ehs SDUs; delivering the reordering PDU to an upper layer when a first MAC-chs SDU of the set of MAC-ehs SDUs and a last MAC-ehs SDU of the set of MAC-ehs SDUs are not segmented according to a segmentation indication field corresponding to the reordering PDU; and discarding any previously stored MAC-ehs SDU segment.

- 93. Upon information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 7 of the '460 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise the limitations of claim 6, and further, wherein the reordering PDU is carried in a MAC-ehs PDU.
- 94. Upon information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 8 of the '460 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise the limitations of claim 7, and further, wherein the segmentation indication field is a header field of the MAC-ehs PDU corresponding to the reordering PDU.
- 95. Upon information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 9 of the '460 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise the limitations of claim 6, and further, wherein the MAC-ehs SDUs comprise MAC-d PDUs or MAC-c PDUs.
- 96. Upon information and belief, the Ford Standard-Compliant Vehicles infringe, for example, claim 10 of the '460 patent literally and/or pursuant to the doctrine of equivalents wherein such vehicles comprise the limitations of claim 6, and further, wherein the wireless communications system is an Evolved High Speed Packet Access system.
- 97. Ford's direct and indirect infringement of the '460 patent has injured L2MT, and L2MT is entitled to recover damages adequate to compensate for such infringement pursuant to

35 U.S.C. § 284. Unless Ford ceases its infringing activities, it will continue to injure L2MT by infringing the '460 patent.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs prays for:

- 1. Judgment that the Patents in Suit are each valid and enforceable;
- 2. Judgment that the Patents in Suit are infringed by Ford;
- 3. Judgment that Ford's acts of patent infringement relating to the patents are willful;
- 4. An award of damages arising out of Ford's acts of patent infringement, together with pre-judgment and post-judgment interest;
- 5. Judgment that the damages so adjudged be trebled in accordance with 35 U.S.C. § 284;
- 6. An award of L2MT's attorneys' fees, costs and expenses incurred in this action in accordance with 35 U.S.C. § 285; and
 - 7. Such other and further relief as the Court may deem just and proper.

JURY DEMAND

Plaintiff demands trial by jury of all issues triable of right by a jury.

RESERVATION OF RIGHTS

L2MT's investigation is ongoing, and certain material information remains in the sole possession of Ford or third parties, which will be obtained via discovery herein. L2MT expressly reserves the right to amend or supplement the causes of action set forth herein in accordance with Rule 15 of the Federal Rules of Civil Procedure.

Date: October 1, 2021

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