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17 **UNITED STATES DISTRICT COURT**
18 **NORTHERN DISTRICT OF CALIFORNIA**

19 ENOVSYS LLC,

20 Plaintiff,

21 v.

22 UBER TECHNOLOGIES, INC.,

23 Defendant.

Case No.: 5:23-4549

**ORIGINAL COMPLAINT
FOR PATENT INFRINGEMENT**

DEMAND FOR JURY TRIAL

1 Plaintiff Enovsys LLC (“Enovsys” or ‘Plaintiff’), by and through its
2 undersigned counsel, alleges the following for its Complaint against Uber
3 Technologies, Inc. (“Uber” or “Defendant”):

4 **NATURE OF THE ACTION**

5 1. This is an action for infringement of one or more claims of United States
6 Patent Nos. 6,441,752; 6,756,918; and 7,199,726 brought under the patent laws of the
7 United States, Title 35, United States Code against Uber in connection with its location-
8 based services.

9 **THE PARTIES**

10 2. Plaintiff Enovsys LLC is a California limited liability company having a
11 place of business at 269 South Beverly Drive, Suite 951, Beverly Hills, CA 90212.

12 3. Upon information and belief, Defendant Uber Technologies, Inc. is a
13 corporation incorporated under the laws of the State of Delaware.

14 4. Uber is headquartered and has a principal place of business at 1455 Market
15 Street, Suite 400, San Francisco, California 94103 and may be served through its agent
16 for service of process, National Registered Agents, Inc., at 330 North Brand Boulevard,
17 Suite 700, Glendale, California, 91203.

18 **JURISDICTION AND VENUE**

19 5. This patent infringement action arises under the patent laws of the United
20 States, including 35 U.S.C. §§ 271 et seq., 281, and 284-85, amongst others.

21 6. This Court has subject matter jurisdiction over this action pursuant to 28
22 U.S.C. §§ 1331 and 1338(a).

23 7. This Court has personal jurisdiction over Defendant. Uber is subject to
24 this Court’s specific and general jurisdiction because it has and continues to conduct
25 and solicit substantial business in the United States, the State of California and this
26 District. Uber, directly or through its intermediaries, provides, offers for sale, sells and
27 advertises its services in the United States, the State of California, and within this
28 District. Uber has committed the acts of patent infringement that are the subject of this
Original Complaint in the United States, the State of California and this District.

1 8. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391 and
2 1400(b). Upon information and belief, Defendant has transacted business in this
3 District and has committed, by itself or in concert with others, acts of patent
4 infringement in this District. In addition, Defendant maintains one or more regular and
5 established places of business in this District, and upon information and belief, its
6 corporate headquarters are located in this District.

7 **FACTUAL BACKGROUND**

8 **ENOVSYS AND ITS INTELLECTUAL PROPERTY**

9 9. Enovsys has engaged in consultancy and development in location-based
10 services in wireless technology and owns intellectual property related to such
11 technology. Enovsys’s location-based wireless technology has been licensed by Sprint
12 and was the subject of settlement agreements with telecommunication providers
13 Verizon and T-Mobile. *See Enovsys LLC v. Verizon Communications, Inc. et al.*, No.
14 2:21-cv-00315-JRG, Dkt. 106 (E.D. Tex. Aug. 29, 2022) and *Enovsys LLC v. T-Mobile*
15 *USA, Inc.*, No. 2:21-cv-00368-JRG, Dkt. 100 (E.D. Tex. Nov. 11, 2022).

16 10. Enovsys is the assignee, and the sole and exclusive owner of all right, title
17 and interest, in United States Patent Serial No. 6,441,752 (hereinafter “the ’752
18 patent”), entitled “Method and Apparatus for Locating Mobile Units Tracking Another
19 or Within a Prescribed Geographic Boundary.”

20 11. The ’752 patent was duly and legally issued by the United States Patent
21 and Trademark Office (PTO) on August 27th, 2002. The named inventor of the ’752
22 patent is Mundi Fomukong. A true and correct copy of the ’752 patent is attached as
23 Exhibit A.

24 12. Enovsys is the assignee, and the sole and exclusive owner of all right, title
25 and interest, in United States Patent Serial No. 6,756,918 (hereinafter “the ’918
26 patent”), entitled “Method and Apparatus for Locating Mobile Units Tracking Another
27 or Within a Prescribed Geographic Boundary.”
28

1 13. The '918 patent was duly and legally issued by the USPTO on June 29th,
2 2004. The named inventor of the '918 patent is Mundi Fomukong. A true and correct
3 copy of the '918 patent is attached as Exhibit B.

4 14. Enovsys is the assignee, and the sole and exclusive owner of all right, title
5 and interest, in United States Patent Serial No. 7,199,726 (hereinafter “the '726
6 patent”), entitled “Method and Apparatus for Locating Mobile Units Tracking Another
7 or Within a Prescribed Geographic Boundary.”

8 15. The '726 patent was duly and legally issued by the USPTO on April 03,
9 2007. The named inventor of the '726 patent is Mundi Fomukong. A true and correct
10 copy of the '726 patent is attached as Exhibit C.

11 16. The '752 patent, the '918 patent and '726 patent are referred to
12 collectively as the “Asserted Location-Based Service Patents” or “Patents-In-Suit.”

13 17. The Asserted Location-Based Service Patents are valid and enforceable.

14 18. Enovsys alleges that Uber has infringed and continues to infringe one or
15 more claims of the patents-in-suit by engaging in acts that constitute infringement
16 under 35 U.S.C. § 271 et seq., including but not limited to making, using, offering for
17 sale, and/or selling within the United States certain products and services which
18 embody, or in combination embody, one or more claims of the patents-in-suit.

19 19. On information and belief, these products and services include, for
20 example, ride services provided via the Uber Mobile Network, including servers at the
21 Uber Platform wirelessly connected to Uber’s Driver Applications and Uber Customer
22 mobile device applications on iOS, Android, and Microsoft operating systems
23 (respectively, “Driver App” and “Customer App”), as well as the various Uber ride
24 service, ride-sharing, car-pooling, and delivery services provided therethrough
25 (collectively, the “Accused Products and Services”). The Accused Products and
26 Services permit a customer to request a service through the Customer App from Uber
27 drivers located in the same geographic area and allow the rider to track the location of
28 nearby Uber drivers, including the driver accepting the service request.

1 includes the Uber Platform and both Driver Apps and Customer Apps installed on
2 devices able to maintain communication with and report their location to the Uber
3 Platform.

4 27. Upon information and belief, when a rider in a specific geographic area
5 opens the Uber Customer App on their smartphone, location microservices within the
6 Customer App are activated. These services gather the customer's location data using
7 the onboard GPS unit of the smartphone and leverage network signals like cellular,
8 Bluetooth, or Wi-Fi. The collected data, including customer metadata, is then
9 transmitted to the Uber Platform utilizing notification services between the Customer
10 (and Driver) Apps and the Uber Platform.

11 28. Upon information and belief, the Uber Platform receives the notification
12 from the Customer App and updates the customer's database schema in a rider profile
13 table, including essential details such as the User's ID and current location.

14 29. Upon information and belief, when a driver in a specific geographic area
15 activates the online mode in the Driver App on their smartphone, the Driver App
16 obtains GPS and other location-based data and periodically securely transmits (*e.g.*,
17 every 4 seconds) the driver's real-time location data along with driver metadata such
18 as Driver ID, vehicle type, and trip status to the Uber Platform.

19 30. Upon information and belief, as a result of receiving these messages via
20 the Uber Mobile Network, the Uber Platform receives the notification from the Driver
21 App and updates the driver's database schema in a driver profile table, encompassing
22 essential details such as Driver ID, vehicle type, current vehicle location, trip status and
23 more.

24 31. Upon information and belief, the Customer App and Driver App location
25 coordinates are converted into a unique key that indicates a particular geographic
26 region (*e.g.*, a Google S2 geospatial cell) that the customer or driver is located within,
27 and the customer or driver's real-time location information is maintained in servers on
28 Uber's platform designated for that specific geographic location.

1 32. When active, the Customer App's user interface displays the rider's
2 current location and presents available service options such as UberX, Uber Share, and
3 Uber Comfort cars currently on the road. Riders can enter their pickup and destination
4 locations and choose from the available service options. The Customer App user
5 interface displays the calculated route from the current location to the destination, the
6 estimated price for various available ride options, and the estimated time of arrival
7 ("ETA") for the Uber ride to the pickup location, making it convenient for the rider to
8 plan their journey.

9 33. Upon information and belief, when a rider plans a ride, the Uber Platform
10 utilizes the rider's location coordinates to create a unique key that identifies the
11 geographic region (*e.g.*, a Google S2 geospatial cell) and assesses the real-time demand
12 for rides and the availability of drivers in that geographic region. When demand for
13 Uber services is exceptionally high in the geographic region and there is a limited
14 availability of drivers, the Uber Platform sends a notification to the rider alerting the
15 rider of a surge in pricing for rides in that specific area before confirming the ride.

16 34. Upon information and belief, the Driver Apps in nearby geographic
17 regions (*e.g.*, Google S2 geospatial cells) also receive notifications from the Uber
18 Platform with information that indicates the geographic regions in which surge pricing
19 is in effect and directions and/or transit time to such surge price areas, which are
20 displayed by the user interface of the Driver Apps.

21 35. When a rider has selected a ride option such as UberX, Uber Share, or
22 Uber Comfort and confirms they wish to proceed with the ride, the Customer App sends
23 a message containing the request details to the Uber Platform, including customer and
24 ride details.

25 36. Upon information and belief, when a component of the Uber Platform
26 receives the service request, the details are routed to a match component which
27 interfaces with other components to immediately begin searching for available drivers
28 for the chosen option. As this search takes place, the Customer App displays a circle
indicating the geographical region based upon the rider location coordinates within

1 which the Uber Platform is searching for nearby drivers eligible to accept the service
2 request.

3 37. Upon information and belief, the Uber platform efficiently utilizes
4 geospatial indexing mechanisms, leveraging the Google S2 library, to process location
5 coordinates received from the Driver and Customer Apps and convert these coordinates
6 into distinct geospatial S2 cells. This process involves computing a GeoHash based on
7 the longitude and latitude, resulting in a unique key as S2 geospatial cell's ID (*i.e.*,
8 indicating its geographic region.)

9 38. Upon information and belief, each S2 geospatial cell is assigned one or
10 more Uber Platform database servers, which store essential data metrics related to both
11 the driver profile table and the rider profile table for drivers and riders within that cell.
12 This strategic geospatial indexing allows Uber to organize and manage location-based
13 data efficiently. By computing the rider's S2 geospatial ID, Uber can also determine
14 the nearby S2 geospatial IDs in a dispatch area of a given radius to match drivers and
15 riders.

16 39. Upon information and belief, a match system at the Uber Platform
17 strategically selects the dispatch area or region by associating a collection of nearby S2
18 geospatial IDs and looks up the data metrics associated with the active Driver Apps
19 currently in it to determine which active Driver Apps are currently in a status making
20 them eligible candidates to receive invitation notices to accept the requested service.

21 40. Upon information and belief, the Uber Platform employs intelligent
22 algorithms that use a batching approach to select candidate drivers who are eligible to
23 accept the trip that ensures that the candidate drivers are selected with an overall
24 minimum average estimated time of arrival to the rider's pickup location.

25 41. The Uber Platform sends notifications informing selected candidate
26 drivers within the dispatch area of the ride request, the fee Uber will pay the driver, the
27 distance and time to the rider's pickup location, and the estimated ride duration and
28 distance. When a driver accepts the request, the Driver App sends a notice via the Uber

1 Mobile Network to the Uber Platform indicating a successful driver match is made with
2 the rider.

3 42. Upon information and belief, upon receiving such a notice, the Uber
4 Platform updates the state of the ride to indicate that the pickup phase has begun, at
5 which time the Uber Platform receives and monitors regular location updates from the
6 accepting driver's Driver App and the requesting rider's Customer App to monitor that
7 the driver and rider remain in proximity while the driver is *en route* to the rider, for
8 example that both have remained proximate to the pickup route that joins them.

9 43. After the driver has accepted the service request, the Uber Platform
10 promptly sends to the Customer App a notification that displays a message confirming
11 the successful match and informing the rider that the vehicle is *en route*.

12 44. The Uber Platform sends to the Customer App a notice containing
13 essential details about the driver, such as the driver's name, photo, vehicle type, and
14 estimated time of arrival (ETA) to the pickup location, and location. The Rider's App
15 displays the driver's location, allowing the rider to track the driver's location.

16 45. The Uber platform also sends a notice to the Driver App with the rider
17 details and the route to the pickup location of the rider. Moreover, if the rider's live
18 location is enabled, the Uber Platform also sends the live location coordinates to the
19 Driver App for Display to the driver and use by the Driver App for example to update
20 the route to the pickup location as needed. The Uber Platform receives in any event the
21 rider's live location for use at the Uber Platform.

22 46. As the driver approaches the pickup location, the Uber Platform sends to
23 the Customer App a notification to inform them of the driver's imminent arrival which
24 is displayed by the user interface of the Customer App.

25 47. As the driver reaches very near to the pickup location, the Driver App
26 receives and displays a notification from the Uber Platform that the rider has been
27 notified of the impending pickup. When the rider has been picked up, in response to an
28 input from the driver, the Driver App notifies the Uber Platform that rider pickup has
been completed and the trip has begun.

1 48. The Uber Platform sends a notification to the Customer App, indicating
2 that the trip is now in progress. This notification serves as a confirmation that the
3 journey has commenced and provides the rider with real-time updates on the status and
4 progression of their trip; in particular, the Customer App displays an icon indicating
5 the real-time location of the car on its route to the destination.

6 49. Upon information and belief, the Uber Platform also continuously
7 monitors the trip using the GPS pings from the Driver App and the Customer App from
8 the pickup location to the destination location to ensure that the two remain
9 substantially co-located for the trip's duration.

10 50. Upon information and belief, the Uber Platform's tracking of the driver
11 and rider location to confirm that they maintain relative proximity (and remain on the
12 intended route) is made for safety and billing purposes to verify that the rider was
13 present on the ride from start to finish.

14 51. Upon information and belief, if the Uber Platform detects from the GPS
15 pings that the Driver App and the Customer App are not co-located during the trip, *e.g.*,
16 that the rider has left the car for more than a period of time during an unscheduled stop,
17 Uber representatives receive a notification from the Uber Platform and will contact the
18 driver and/or rider to determine whether there is a safety issue.

19 52. Upon information and belief, when the destination is reached, the Driver
20 App sends a notice to the Uber Platform indicating the end of the trip. The Uber
21 Platform updates the status of the ride, rider, and driver and generates a notification to
22 both the rider and the driver providing the total fee/fare and other information. The
23 Uber Platform also sends the trip data to a server component for storage, including the
24 verification that the Driver App and Customer App's reported coordinates tracked each
25 other and remained in relative proximity from the start to end of the ride.

26 **COUNT I: INFRINGEMENT OF U.S. PATENT NO. 6,441,752**

27 53. Enovsys repeats, realleges, and incorporates by reference the foregoing
28 paragraphs of the Original Complaint as if fully set forth herein.

1 54. The claims of the '752 patent are generally directed to beneficial methods
2 and systems for providing the location of portable mobile devices in a geographic
3 region of a wireless network to a wireless consumer requesting the location of portable
4 mobile devices that are maintaining close proximity to the wireless consumer in the
5 geographic region.

6 55. The claims of the '752 patent are generally directed to various techniques
7 based upon whether portable mobile remote units have maintained close proximity to
8 a wireless consumer in a geographic region of a wireless network.

9 56. Upon information and belief, Uber has directly infringed one or more
10 claims of the '752 patent under 35 U.S.C. § 271(a) by, among other things, making,
11 using, offering to sell, and/or selling in the United States products and services used
12 by, or under the direction or control of, Uber in practicing one or more claims of the
13 '752 patent, including, by way of example and without limitation, the Accused
14 Products and Services.

15 57. The Accused Products and Services infringe at least claims, 1, 3, 4, 6, 7
16 and 12 of the '752 patent.

17 58. Claim 1 recites: “[a] method for providing the location of a portable
18 mobile remote unit in a geographic region of a wireless network to a wireless consumer
19 requesting the location of portable mobile remote units that are maintaining close
20 proximity to the wireless consumer in the geographic region.” Upon information and
21 belief, and to the extent that the preamble is limiting, the Accused Products and
22 Services practice the recited method.

23 59. For example, the Uber Platform provides to a Customer App the location
24 of one or more online Driver Apps within the same S2 geospatial cell as the rider when
25 the Customer App is active, such as when the rider has opened the Customer App and
is planning a ride or has made a ride request.

26 60. Claim 1 requires: “i) obtaining the location of the wireless consumer at
27 intervals over a period of time.” Upon information and belief, the Accused Products
28 and Services practice this claimed step of the recited method.

1 61. For example, the Uber Platform periodically obtains from the Customer
2 App its GPS location coordinates when the Customer App is active, such as when the
3 rider has opened the Customer App and is planning a ride or has made a ride request.

4 62. Claim 1 requires: “ii) requesting at each interval, at the network, that all
5 mobile remote units within close proximity of the wireless consumer disclose their
6 location to the network.” Upon information and belief, the Accused Products and
7 Services practice this claimed step of the recited method.

8 63. For example, the Uber Platform requests all online Driver Apps to
9 periodically update the Uber Platform of their current GPS coordinates, including the
10 Driver Apps located within the S2 geospatial cell of the active Customer App. As a
11 further example, all online Driver Apps and Customer App transmit their respective
12 GPS coordinates (along with identifying data) to the Uber Platform every few seconds.

13 64. Claim 1 requires: “iii) maintaining a list of mobile remote units that
14 provided their location at each interval after the request of (ii).” Upon information and
15 belief, the Accused Products and Services practice this claimed step of the recited
16 method.

17 65. For example, when the Customer App has sent a notice with the start and
18 end locations of a planned ride, the match and location systems of the Uber Platform
19 identifies a list of the online Driver Apps within the S2 geospatial cell of the active
20 Customer App that have reported their location since the time the Customer App made
21 the service request and are eligible to accept the service request.

22 66. Claim 1 requires: “iv) from the list of (iii), forwarding the location of at
23 least a mobile remote unit to the mobile consumer upon determination that the remote
24 unit maintained close proximity to the mobile consumer over the period of time of (i).”
25 Upon information and belief, the Accused Products and Services practice this claimed
26 step of the recited method.

27 67. For example, the Uber Platform forwards to the active Customer App,
28 from the identified list, the currently reported location it has received for the Driver
App that accepted the service request.

1 68. Claim 3 recites: “[a] technique employed by the method according to
2 claim 1 to determine if a remote unit is within a specified geographic boundary or close
3 proximity to a wireless consumer.” Upon information and belief, and to the extent that
4 the preamble is limiting, the Accused Products and Services practice the recited
5 method.

6 69. For example, the match and/or location system/service in the Uber
7 Platform determine which Driver Apps are located in any given S2 geospatial cell
8 included in the Uber Mobile Network as a covered area that is in the vicinity of or in
9 the same S2 geospatial cell as active Customer Apps that are planning or requesting a
10 service. Also, the trip monitoring system/service at the Uber Platform monitors whether
11 a ride-requesting Customer App and a ride-providing Driver App are substantially co-
12 located during a ride.

13 70. Claim 3 requires: “obtaining from the network geographic information
14 describing the geographic boundary.” Upon information and belief, the Accused
15 Products and Services practice the recited method. For example, the Uber Platform
16 calculates which S2 geospatial(s) are experiencing surge pricing wherein drivers can
17 get paid higher fares, determines which Driver Apps are currently located in S2
18 geospatial(s) nearby to such S2 geospatial(s), and sends notices to such Driver Apps of
19 the surge priced S2 geospatial(s).

20 71. Claim 3 requires: “estimating at the remote unit if the current location of
21 the remote unit is within the geographic boundary obtained at the network.” Upon
22 information and belief, the Accused Products and Services practice this claimed step
23 of the recited method.

24 72. For example, when the Driver Aps receives a surge price message, it
25 displays nearby surge priced S2 geospatial cell(s) with the estimated time and/or
26 distance to drive over to them. Also, Uber’s system tracks geolocation changes, at the
27 mobile device level, as it employs a data-rich platform to handle events, including
28 geocoordinate changes, that are reported to a gateway service and sent to the system to
be consumed by downstream services.

1 73. Claim 4 recites: “[a] method according to claim 1 utilized to further limit
2 the provision of remote unit location to the network.” Upon information and belief, and
3 to the extent the preamble is limiting, the Accused Products and Services limit the
4 provision of remote unit location to the network.

5 74. For example, when a Driver App attempts to go online it sends a
6 synchronous message to the Uber Platform with its GPS coordinates and other data and
7 indicating that it wishes to establish a continuously asynchronous connection with the
8 Uber Platform to communicate, including to receive service requests. Upon
9 information and belief, the Uber Platform will determine whether the Driver App is
10 located in an S2 geospatial cell that is covered by the Uber Mobile Network before
11 establishing that connection and allowing it to periodically update the Uber Platform
12 with its state and location.

13 75. Also, when S2 servers at the Uber Platform are queried by the match
14 system for eligible Driver Apps located in those S2 geospatial cells, they will return
15 the locations of Driver Apps not in the correct condition (state) to be eligible to receive
16 a ride request or are not in a territory where they are eligible to receive a service request,
17 such as being located outside of the territorial boundary of the state of their designated
18 home city.

19 76. Two example conditions are if the Driver App has sent a message to the
20 Uber Platform indicating that they do not wish to receive requests in a given
21 geographical area or to accept service requests that take them on a route opposite of
22 their home.

23 77. Claim 4 requires: “obtaining at the network, exclusion region information
24 within which the remote unit should not provide its location the network.” Upon
25 information and belief, the Accused Products and Services obtain at the network
26 exclusion region information within which the remote unit should not provide its
27 location the network.

28 78. For example, the Uber match system and/or S2 system receive
information indicating regions which, though they are covered areas of the network,

1 are nonetheless areas wherein the Driver Apps are not eligible to match a service
2 request. Likewise, if the Driver App sends GPS coordinates and other information to
3 the Uber Platform indicating to the map system that the Driver App is located in a
4 pickup lot for an airport, the match system considers the Driver App to be located in
5 an exclusion region wherein it is disqualified from participating in the normal ETA
6 based match service (but rather only will be receiving such an invitation based upon its
7 number in a queue). Likewise, as previously discussed, a Driver App has other
8 exclusion regions wherein it is ineligible for the match service, such as S2 geospatial
9 cells representing all coverage areas outside of the state of their designated city.

10 79. Claim 4 requires: “determining that the remote unit is not in the exclusion
11 region before providing the location of the remote unit to the network.” Upon
12 information and belief, the Accused Products and Services practice this claimed step
13 of the recited method.

14 80. For example, the S2 servers determine whether a Driver App is not located
15 in an exclusion region prior to sending that Driver App’s location to the match system,
16 such as when the Driver App is located in an S2 geospatial outside of the state of their
17 designated home city, in an airport pickup lot, or in a region specifically communicated
18 by the Driver App to the Uber Platform where it should not receive ride requests.

19 81. To illustrate, if a Customer App makes a service request from the
20 customer’s house located one mile away from an airport’s pickup lot, the locations of
21 Uber Driver Apps in that parking lot will not be provided by the S2 servers to the match
22 system.

23 82. Conversely, if a Driver App is located near an airport pickup parking lot
24 but is not located in the airport designated parking lot, the location of that Driver App
25 will not be sent by the S2 servers to the match service if the request is coming from the
26 airport, because those requests may only be assigned to the drivers in the queue in the
27 pickup lot.

28 83. Similarly, if a Driver App is reporting GPS coordinates outside of the state
of their designated city, that Driver App’s location will not be provided by the S2

1 servers as a candidate for the match service, even if the service request is coming from
2 a Customer App only 50 (fifty) feet from the Driver App and the pickup ETA would
3 have been near instantaneous.

4 84. Claim 6 recites: “[a] method for providing the location of portable remote
5 units that exist within a prescribed geographic boundary to a wireless consumer
6 requesting that information.” Upon information and belief, and to the extent that the
7 preamble is limiting, the Accused Products and Services practice the recited method.

8 85. For example, the Uber Platform provides the locations of nearby Driver
9 Apps to a Customer App for the Customer App’s user interface to display to the
10 customer.

11 86. Claim 6 requires: “i) receiving at the network a wider than normal
12 prescribed geographic boundary to query for mobile remote units from the wireless
13 consumer.” Upon information and belief, the Accused Products and Services practice
14 this claimed step of the recited method.

15 87. For example, when the Uber Platform receives a service request from a
16 Customer App, such as a ride request, it parses the identifier of the Customer App and
17 its current GPS coordinates. The request is routed to a component of the Uber Platform
18 whose function it is to match the request to proximate Driver Apps who are eligible to
19 be notified of the request until one has accepted the request.

20 88. In performing the match, the match system/service creates a circle of a
21 given radius from the GPS coordinates of the request and identifies the various S2
22 geospatial cells comprising the area of the circle. The geographic boundary of the circle
23 created and received by the match system is, of course, wider than the GPS coordinates
24 of the Customer App. The Uber Platform’s match service queries the S2 servers
25 responsible for maintaining the current location and status of the Driver Apps current
26 reporting locations within each of those S2 geospatial cells in order to obtain therefrom
27 a list of eligible Driver Apps. If, however, the S2 servers provide a list with too few
28

1 Driver Apps (or none), the match service will increase the radius to make a much wider
2 boundary to send the query to a broader number of S2 servers.

3 89. Claim 6 requires: “ii) splitting the geographic boundary of (i) into sub
4 geographic regions to constitute the prescribed geographic boundary.” Upon
5 information and belief, the Accused Products and Services practice this claimed step
6 of the recited method.

7 90. For example, the match system/service of the Uber Platform splits the area
8 of the larger area circle into its constituent S2 geospatial cells.

9 91. Claim 6 requires: “iii) requesting in the sub geographic region(s), the
10 location of remote units that are present in each sub region.” Upon information and
11 belief, the Accused Products and Services practice this claimed step of the recited
12 method.

13 92. For example, the match service of the Uber Platform then makes a broader
14 request to the S2 system by querying the assigned S2 server components for each of
15 the constituent S2 geospatial cells comprising the area of the larger circle.

16 93. Claim 6 requires: “iv) verifying after each request of (iii) in a sub region
17 whether at least a portable remote unit disclosed a global location in the region.” Upon
18 information and belief, the Accused Products and Services practice this claimed step
19 of the recited method.

20 94. For example, each of the queried S2 servers of the location system that
21 receive the broader request from the match system/service component determine
22 whether one or more Driver Apps have disclosed a location within their respective S2
23 geospatial cell(s) before concluding the query.

24 95. Claim 6 requires: “v) maintaining a list of all remote units that disclosed
25 their location after each request from the verification of step (iv).” Upon information
26 and belief, the Accused Products and Services practice this claimed step of the recited
27 method.

28

1 96. For example, upon receipt of the request from the match component of the
2 Uber Platform, each of the queried S2 servers create a list for return to the match
3 component of eligible Driver Apps that have reported to the Uber Platform a location
4 with their respective S2 geospatial cell(s).

5 97. Claim 6 requires: “vi) providing to the network and from the list of (v) the
6 location of at least a remote unit that revealed its location in the sub region.” Upon
7 information and belief, and to the extent that the preamble is limiting, the Accused
8 Products and Services practice the recited method.

9 98. For example, the match component provides to a notification service of
10 the Uber Platform at least one eligible Driver App that can be sent an invitation to
11 accept the service request so that the notification can be sent to the Driver App for its
12 user interface to display to the driver to accept or decline.

13 99. Claim 7 recites: “[a] technique according to claim 6, utilized to terminate
14 a request for the location information of remote units in the prescribed geographic
15 boundary.” Upon information and belief, and to the extent the preamble is limiting, the
16 Accused Products and Services practice the recited technique.

17 100. For example, the match service will terminate its query to the S2 servers
18 for the locations of Driver Apps upon the identification by the S2 servers of a sufficient
19 number (which may be just one) of Driver Apps eligible to be sent an invitation to
20 accept or reject the service request.

21 101. Claim 7 requires: “checking to establish that a request for remote unit
22 location information was undertaken in all re-defined or sub regions of the prescribed
23 boundary or a portable remote unit in a defined or sub region responded with location
24 information.” Upon information and belief, the Accused Products and Services practice
25 the recited method. For example, the Uber Platform verifies that each queried S2 server
26 searched its respective database(s) for the currently reported locations of eligible Driver
27 Apps.

28

1 102. Claim 12 recites: “a communication system.” Upon information and
2 belief, and to the extent the preamble is limiting, the Accused Products and Services
3 comprise a communication system.

4 103. For example, the Uber Mobile Network wirelessly connects the Uber
5 Platform with Customer and Drivers Apps so that the Uber Platform can transmit to
6 and receive data from the Customer and Driver Apps.

7 104. Claim 12 requires: “a network of communication units.” Upon
8 information and belief, the Accused Products and Services comprise and utilize a
9 network of communication units.

10 105. For example, the Uber Platform comprises communication units that send
11 data to and receive data from each Driver App and Customer App. The Driver and
12 Customer Apps enable the smartphones (or other communication devices) upon which
13 they operate to send data to and receive data from the Uber Platform via a cell phone
14 service, the internet or another communication channel and also are communication
15 units. As a further example, each of the Driver Apps and Customer Apps are
16 programmed to enable wireless communication with the Uber Platform via the portable
17 remote devices (*e.g.*, smartphones). Each of these are “communication units.” As a
18 further example, the Customer Apps and Driver Apps are communication units that are
19 adapted to communicate their GPS coordinates, messages and other data to the Uber
20 Platform and to receive GPS coordinates, messages and other data from the Uber
21 Platform and are utilized to provide the Accused Products and Service.

22 106. Claim 12 requires: “at least a first communication unit and at least a
23 second communication unit able to provide their location information to the network.”
24 Upon information and belief, the Accused Products and Services meet this limitation.
25 For example, each active Driver App and Customer App is able to report its GPS
26 coordinates (and other location information) to the Uber Platform.

27 107. Claim 12 requires: “the system able to determine and report that the at
28 least second communication unit maintained close proximity to the at least first

1 communication unit over a period of time.” Upon information and belief, the Accused
2 Products and Services meet this limitation because there are a number of services
3 running on the Uber Platform that determine and report whether one or more Driver
4 Apps have maintained close proximity to one or more Customer Apps over a period of
5 time.

6 108. For example, a ride tracking component (system/service) of the Uber
7 Platform compares the GPS coordinates of each service-providing Driver App with the
8 GPS coordinates of the corresponding service-requesting Customer App from at least
9 the time of the start to the time of the end of the ride to determine that the two have
10 remained substantially co-located during the time period. Amongst other reasons for
11 such tracking, the Uber Platform determines if there is unscheduled time period for
12 which the Customer App and Driver App have not maintained relative proximity. If so,
13 that tracking component/service reports the deviation to a notification
14 component/service that notifies an Uber representative so they can investigate that the
15 driver and rider are safe. Moreover, by tracking the relative proximity, the Uber
16 Platform confirms that the rider in fact took the paid-for ride in case of a later billing
17 challenge. If the tracking server component/service determines from the GPS
18 coordinate comparison that the two components have maintained their relative
19 proximity until the ride ended at its intended destination, it reports to another server
20 component that the ride was successfully completed.

21 109. Also, the Uber Platform includes a pricing component/system/service that
22 determines for each S2 geospatial cell the number of active Customer Apps within
23 requesting services and the number of online Driver Apps within that S2 geospatial cell
24 available to provide services and reports the results to a surge pricing component that
25 determines whether surge pricing should be applied within that S2 geospatial. The
26 surge pricing component sends such determinations to another Uber Platform
27 component/service which, in turn, sends notifications to online Drivers Apps in nearby
28

1 S2 geospatial cells to encourage the nearby drivers to enter the surge priced S2
2 geospatial.

3 110. Furthermore, the Uber Platform includes a match component that
4 determines a plurality of eligible Driver Apps that are in close proximity to a given
5 plurality of Customer Apps requesting ride services to determine which ones of such
6 Driver Apps should be invited to accept the ride services so as to minimize the overall
7 wait time for that plurality of customers. The match component sends a message to a
8 notification service that notifies the selected Driver Apps that they have been invited
9 to accept the service request.

10 111. Upon information and belief, to the extent that it is not directly infringing
11 any of the above identified claim of the '752 patent, Uber has actively induced and is
12 actively inducing others (such as Uber drivers and Uber riders) to infringe these claims
13 under 35 U.S.C. 271(b) by using the Accused Products and Services.

14 112. Upon information and belief, to the extent that it is not directly infringing
15 any of the above identified claim of the '752 patent, Uber has contributed to and is
16 contributing to the infringement by others (such as Uber drivers and Uber riders) of
17 these claims under 35 U.S.C. 271(c) through the use of the Accused Products and
18 Services.

19 113. Upon information and belief, since becoming aware of the '752 patent,
20 Uber has provided the Uber Driver App, Customer App and Platform for use by others
21 (such as Uber drivers and Uber riders) and encouraged, aided, or otherwise caused
22 others to use the Accused Products and Services in the United States in a way that
23 infringes at least the above identified claims of the '752 patent.

24 114. Upon information and belief, the Uber Driver App and Customer App are
25 not staple articles of commerce having no substantial non-infringing uses but rather are
26 specifically intended for use in accessing and using the Accused Products and Services
27 in a way that infringes at least the above-identified claims of the '752 patent.
28

1 115. Upon information and belief, Uber directly infringes one or more claims
2 of the '752 patent literally, or induces or contributes to direct infringement that is literal.
3 Alternatively, to the extent that Uber's direct infringement or induced or contributory
4 infringement for any claim is not found to be literal, such claims are infringed under
5 the doctrine of equivalents.

6 **COUNT II: INFRINGEMENT OF U.S. PATENT NO. 7,199,726**

7
8 116. Enovsys repeats, realleges, and incorporates by reference the foregoing
9 paragraphs of the Original Complaint as if fully set forth herein.

10 117. The claims of the '726 patent are generally directed to beneficial methods
11 and systems employing various techniques for tracking the proximity of one or more
12 portable mobile devices located in a geographic region of a wireless network over a
13 period of time and selectively notifying portable mobile devices in particular
14 geographic regions.

15 118. Upon information and belief, Uber has directly infringed one or more
16 claims of the '726 patent under 35 U.S.C. § 271(a) by, among other things, making,
17 using, offering to sell, and/or selling in the United States products and services used
18 by, or under the direction or control of, Uber in practicing one or more claims of the
19 '726 patent, including, by way of example and without limitation, the Accused
20 Products and Services.

21 119. The Accused Products and Services infringe at least Claims, 1, 4, 6, 8, 12
22 and 13 of the '726 patent.

23 120. Claim 1 recites: “[a] communication system.” Upon information and
24 belief, and to the extent that the preamble is limiting, the Accused Products and
25 Services comprise a communication system.

26 121. For example, the Uber Mobile Network wirelessly connects the Uber
27 Platform with Customer Apps and Driver Apps so that the Uber Platform can transmit
28 to and receive data from the Customer Apps and Driver Apps.

1 122. Claim 1 requires: “(i) a portable mobile remote unit.” Upon information
2 and belief, the Accused Products and Services include portable mobile remote units.

3 123. For example, each of the Driver Apps and Customer Apps are installed on
4 smartphones or mobile devices and comprise portable remote units.

5 124. Claim 1 requires: “(ii) a network of communication units.” Upon
6 information and belief, the Accused Products and Services include a network of
7 communication units.

8 125. For example, the Uber Platform comprises communication units that send
9 data to and receive data from each Driver App and Customer App. The Driver and
10 Customer Apps enable the smartphones (or other communication devices) upon which
11 they operate to send data to and receive data from the Uber Platform via a cell phone
12 service, the internet or another communication channel and also are communication
13 units. As a further example, each of the Driver Apps and Customer Apps are
14 programmed to enable wireless communication with the Uber Platform via the portable
15 remote devices (*e.g.*, smartphones). Each of these are “communication units.” As a
16 further example, the Customer Apps and Driver Apps are communication units that are
17 adapted to communicate their GPS coordinates, messages and other data to the Uber
18 Platform and to receive GPS coordinates, messages and other data from the Uber
19 Platform and utilized to provide the Accused Products and Service.

20 126. Claim 1 requires: “(iii) the portable mobile remote unit able to
21 communicate with at least a transmitter within the network to establish its geographic
22 location within the system.” Upon information and belief, the Accused Products and
23 Services include a portable mobile remote unit able to communicate with at least a
24 transmitter within the network to establish its geographic location within the system.

25 127. For example, the Driver Apps are adapted to communicate their GPS
26 coordinates and other location information to the Uber Platform which then establishes
27 its S2 geospatial and street location. (The Uber Platform is a transmitter within the
28 network because it transmits data to both Customer Apps and Driver Apps.)

1 128. Moreover, the Driver and Customer Apps communicate with cell phone
2 towers and GPS satellites to establish their geographic location within the system, such
3 as GPS coordinates and other location information that the Uber Platform uses to map
4 to street locations.

5 129. Claim 1 requires: “(iv) means to request for the location information of
6 portable mobile remote units that are in a geographic boundary that is prescribed within
7 the coverage area of said network.” Upon information and belief, the Accused Products
8 and Services include means to request for the location information of portable mobile
9 remote units that are in a geographic boundary that is prescribed within the coverage
10 area of said network.

11 130. For example, the Uber Platform periodically obtains from the Customer
12 App its GPS location coordinates and the Uber Platform requests all online Driver Apps
13 to periodically update the Uber Platform of their current GPS coordinates within the
14 S2 geospatial cell of the active Customer App that is a covered S2 geospatial cell within
15 the Uber Mobile Network.

16 131. Claim 1 requires: “(v) means to provide the location information of the
17 portable mobile remote unit to the network upon determination that the portable mobile
18 remote unit is within said prescribed geographic boundary requested by the network.”
19 Upon information and belief, the Accused Products and Services include means to
20 provide the location information of the portable mobile remote unit to the network upon
21 determination that the portable mobile remote unit is within said prescribed geographic
22 boundary requested by the network.

23 132. For example, when the Uber Platform receives a service request from a
24 Customer App, such as a ride request, it parses the identifier of the Customer App and
25 its current GPS coordinates. The request is routed to a match component of the Uber
26 Platform whose function it is to match the request to proximate Driver Apps who are
27 eligible to be notified of the request until one has accepted the request.

28 133. In performing the match, the match system/service creates a circle of a
given radius from the GPS coordinates of the request and identifies the various S2

1 geospatial cells comprising the area of the circle. The Uber Platform's match service
2 queries the S2 servers responsible for maintaining the current location and status of the
3 Driver Apps current reporting locations within each of those S2 geospatial cells in order
4 to obtain therefrom a list of eligible Driver Apps.

5 134. Likewise, upon information and belief, when a Driver App first logs in to
6 the Uber Platform, the Uber Platform determines from the Driver App's reported GPS
7 coordinates whether it is located in an S2 geospatial cell that is covered area of the
8 Uber Mobile Network before allowing it to open a channel to periodically update the
9 Uber Platform of its location. Likewise for a Customer App logging in to the Uber
10 Platform.

11 135. The Uber Platform also requests all online Driver Apps and active
12 Customer Apps to periodically update the Uber Platform of their current GPS
13 coordinates within every S2 geospatial cells covered by the Uber Mobile Network. By
14 design, these Apps update the Uber Platform every few seconds with at least their
15 current GPS position for the Uber Platform to use and to convert to an S2 geospatial
16 cell or a street location.

17 136. Claim 1 requires: "(vi) means to determine and report to the system that,
18 another portable mobile remote unit has maintained relative proximity to the portable
19 mobile remote over a period of time while in motion." Upon information and belief,
20 the Accused Products and Services include means to determine and report to the system
21 that, another portable mobile remote unit has maintained relative proximity to the
22 portable mobile remote over a period of time while in motion.

23 137. For example, a ride tracking component (system/service) of the Uber
24 Platform compares the GPS coordinates of each service-providing Driver App with the
25 GPS coordinates of the corresponding service-requesting Customer App from at least
26 the time of the start to the time of the end of the ride to determine that the two have
27 remained substantially co-located during the time period. Amongst other reasons for
28 such tracking, the Uber Platform determines if there is unscheduled time period for
which the Customer App and Driver App have not maintained relative proximity. If so,

1 that tracking component/service reports the deviation to a notification
2 component/service that notifies an Uber representative so they can investigate that the
3 driver and rider are safe. Moreover, by tracking the relative proximity, the Uber
4 Platform confirms that the rider in fact took the paid-for ride in case of a later billing
5 challenge. If the tracking server component/service determines from the GPS
6 coordinate comparison that the two components have maintained their relative
7 proximity until the ride ended at its intended destination, it reports the verification and
8 tracking data of the successfully completed ride to at least a storage component in case
9 later needed for law enforcement, billing, data analytic or other purposes.

10 138. As a further example, the Uber Platform includes a surge pricing server
11 component that determines which online Driver Apps and Customer Apps, both of
12 which are in motion, are maintaining their location in any given S2 geospatial cell to
13 determine whether surge pricing is needed in that S2 geospatial cell.

14 139. The Uber Platform also includes a match server component that
15 determines which online Driver Apps (which are in motion) are in the same S2
16 geospatial cell as an active Customer App that is requesting a ride service in order to
17 determine which Driver App in close proximity (*e.g.*, having a low ETA to the location
18 of the Customer App) should be invited to accept the service.

19 140. The Uber Platform also includes a ride verification component that
20 determines that the service-providing Driver App remains substantially co-located with
21 the service-requesting Customer App (which is also in motion) during a ride for both
22 safety reasons and billing verification.

23 141. Claim 4 recites: “[a] communication system for providing the location
24 information of portable mobile remote units, in a geographic region to a wireless
25 consumer requesting that information.” Upon information and belief, and to the extent
26 that the preamble is limiting, the Accused Products and Services comprise and utilize
27 a communication system for providing the location information of portable mobile
28 remote units in a geographic region to a wireless consumer requesting that information.

1 142. For example, the locations of online Driver Apps within a certain
2 geographical radius of an active Customer App are provided by the Uber Platform to
3 that Customer App for display to the customer planning a ride (*i.e.*, a Customer App
4 that has provided the Uber Platform with a pickup and destination address for a planned
5 or requested ride.

6 143. Claim 4 requires: “i) a pool of portable mobile remote units that are able
7 to communicate with a network transmitter to establish their location within the
8 system.” Upon information and belief, the Accused Products and Services comprise
9 and utilize a pool of portable mobile remote units that are able to communicate with a
10 network transmitter to establish their location within the system.

11 144. For example, the Driver Apps (as well as the Customer Apps) are adapted
12 to communicate their GPS coordinates and other location information to the Uber
13 Platform which then establishes the App’s S2 geospatial and street location. The Uber
14 Platform is a transmitter within the network because it transmits data to both Customer
15 Apps and Driver Apps.

16 145. Moreover, both the Driver Apps and Customer Apps communicate with
17 cell phone towers, Wi-Fi routers, and GPS satellites to establish their geographic
18 location within the system, such as GPS coordinates and other location information
19 that the Uber Platform uses to map to street locations.

20 146. Claim 4 requires: “ii) means for the wireless consumer to specify and
21 forward to a network, geographic boundary information describing a region within the
22 coverage area of said network where the location information of portable mobile
23 remote units are required by the wireless consumer.” Upon information and belief, the
24 Accused Products and Services comprise and utilize means for the wireless consumer
25 to specify and forward to a network geographic boundary information describing a
26 region within the coverage area of said network where the location information of
portable mobile remote units are required by the wireless consumer.

27 147. For example, when the Customer App is opened and the customer plans a
28 ride, the Customer App obtains from the smartphone its GPS coordinates and other

1 location information and sends this information in a message to the Uber Platform. The
2 GPS coordinates specify to the Uber Platform which S2 geospatial the Customer App
3 is currently located in and that it is requesting to receive the location of Driver Apps
4 within a given radius thereof. The Uber Platform sends back the locations of nearby
5 Driver Apps, which are displayed by the user interface of the Customer App at least
6 when the ride is in the planning stage.

7 148. Again, when the Customer App sends a service request message to the
8 Uber Platform, the request contains its GPS coordinates that specifies for the Uber
9 Platform the radius of geographic region the Uber Platform should search for the
10 location of eligible candidate Driver Apps to receive invitations to accept the service
11 request.

12 149. Claim 4 requires: “iii) means to request that all portable remote units
13 within said region (ii) establish their location at the network.” Upon information and
14 belief, the Accused Products and Services comprise and utilize means to request that
15 all portable remote units within said region (ii) establish their location at the network.

16 150. For example, in the Uber Mobile Network, the online Driver Apps and
17 active Customer Apps are programmed to periodically gather from their respective
18 smartphones (or other portable communication devices) their GPS coordinates and any
19 additional location information and to transmit those coordinates and other location
20 information to the Uber Platform. The Uber Platform includes components/services
21 that receive and process the GPS coordinates and other location information to
22 establish the S2 geospatial and street location used by various components/services at
the Uber Platform.

23 151. In particular, a match component/service of the Uber Platform specifies a
24 radius from the current location of the Customer App of a circular geographical search
25 area and queries the S2 servers responsible for identifying the eligible Driver Apps
26 located within the S2 geospatial cells comprising that area.

27 152. Claim 4 requires: “iv) means to identify said request (iii) and verify at a
28 portable mobile remote unit whether the portable remote unit exist within said region.”

1 Upon information and belief, the Accused Products and Services comprise and utilize
2 means to identify said request (iii) and verify at a portable mobile remote unit whether
3 the portable remote unit exists within said region.

4 153. For example, the S2 servers identify when a request is made from the
5 match system and return a list of eligible candidate servers to the match system. The
6 match system processes the list to identify which candidates should receive invitations
7 to accept the service based upon ETA and sends those to a notification
8 component/system. The notification system sends the invitations to the Drivers Apps
9 specifying the amount of payment, pickup location, destination location ETA to pickup
10 location and estimated ride duration. The Driver App, while in motion, updates and
11 displays its location, in relation to the pickup region, confirming that it is within the
12 region. Also, Uber's system tracks geolocation changes, at the mobile device level, as
13 it employs a data-rich platform to handle events, including geolocation coordinate
14 changes, that are reported to a gateway service and sent to the system to be consumed
15 by downstream services.

16 154. Claim 4 requires: “v) means to provide to the wireless consumer the
17 location information of a portable mobile remote unit that exist in the geographic
18 boundary defined by the wireless consumer after the verification of (iv).” Upon
19 information and belief, the Accused Products and Services comprise and utilize means
20 to provide to the wireless consumer the location information of a portable mobile
21 remote unit that exist in the geographic boundary defined by the wireless consumer
22 after the verification of (iv).

23 155. For example, the Uber Platform sends back to the Customer App the
24 locations of nearby Driver Apps located within the search radius of the Customer App's
25 GPS coordinates, which are displayed by the user interface of the Customer App before
26 the planned ride is ordered.

27 156. Claim 6 recites: “[a] method for determining that a first portable mobile
28 remote communication unit is tracking a second portable mobile remote
communication unit while in motion.” Upon information and belief, and to the extent

1 that the preamble is limiting, the Accused Products and Services practice the recited
2 method.

3 157. For example, both an online Driver App and an active Customer App are
4 portable remote communication units that are in motion during the ride pickup and
5 during the ride. During the ride pickup phase and during the ride, the Uber Platform
6 verifies that the Customer App is tracking the Driver App that accepted the ride request
7 by sending the Driver App's street location information to the Customer App. The Uber
8 Platform determines during the ride that the Driver App and Customer App are tracking
9 each other by calculating that the GPS coordinates of the two reflect that they are
10 substantially co-located.

11 158. Claim 6 requires: "iv) [*sic*, (i)] obtaining the geographic location of the
12 first and second portable communication units at intervals over a period of time." Upon
13 information and belief, the Accused Products and Services practice this claimed step
14 of the recited method. For example, the Uber Platform periodically obtains from the
15 Customer App its GPS location coordinates when the Customer App is active, such as
16 when the rider has opened the Customer App and is planning a ride or has made a ride
17 request. As a further example, all active Driver and Customer App components
18 transmit their respective GPS coordinates (along with identifying data) to the Uber
19 Platform every few seconds.

20 159. Claim 6 requires: "v) [*sic*, (ii)] computing from said geographic location
21 (i) whether the first and second portable communication units are maintaining relative
22 proximity during said period of time." Upon information and belief, the Accused
23 Products and Services practice this claimed step of the recited method.

24 160. For example, a ride verification component/service of the Uber Platform
25 compares these received GPS coordinates from ride pickup to ride drop-off to
26 determine that the ride-providing Driver App and the ride-requesting Customer App
27 have maintained their relative proximity. Amongst other reasons for such tracking,
28 Uber determines if there is a time period for which the Customer App and Driver App
have not maintained relative proximity. If so, the tracking component/service sends a

1 notice to an Uber representative who may then make inquiries to both driver and rider
2 to ensure that the parties are safe. Another reason is to verify that the rider remained
3 on the ride from pickup location to destination location for billing and historical/data
4 analytic purposes. Also, the Uber Platform includes a surge pricing server component
5 that determines which online Driver Apps and Customer Apps, both of which are in
6 motion, are maintaining their location in any given S2 geospatial cell to determine
7 whether surge pricing is needed in that S2 geospatial cell. Further, the Uber Platform
8 also includes a match server component that determines which online Driver Apps
9 (which are in motion) are in the same S2 geospatial cell as an active Customer App that
10 is requesting a ride service in order to determine which Driver App in close proximity
11 (e.g., having a low ETA to the location of the Customer App) should be invited to
12 accept the service.

13 161. Also, the Uber Platform includes a pricing component/system/service that
14 determines for each S2 geospatial cell the number of active Customer Apps within
15 requesting services and the number of online Driver Apps within that S2 geospatial cell
16 available to provide services and reports the results to a surge pricing component that
17 determines whether surge pricing should be applied within that S2 geospatial. The
18 surge pricing component sends such determinations to another Uber Platform
19 component/service which, in turn, sends notifications to online Drivers Apps in nearby
20 S2 geospatial cells to encourage the nearby drivers to enter the surge priced S2
21 geospatial.

22 162. Furthermore, the Uber Platform includes a match component that
23 determines a plurality of eligible Driver Apps that are in close proximity to a given
24 plurality of Customer Apps requesting ride services to determine which ones of such
25 Driver Apps should be invited to accept the ride services so as to minimize the overall
26 wait time for that plurality of customers. The match component sends a message to a
27 notification service that notifies the selected Driver Apps that they have been invited
28 to accept the service request.

1 163. Claim 6 requires: “vi) [*sic*, (iii)] if the result of said computation (ii)
2 indicates that relative proximity is maintained between the first and second portable
3 communication units over said period of time, advising the system that the first portable
4 mobile remote unit is tracking the second.” Upon information and belief, the Accused
5 Products and Services practice this claimed step of the recited method.

6 164. For example, a ride tracking component (system/service) of the Uber
7 Platform compares the GPS coordinates of each service-providing Driver App with the
8 GPS coordinates of the corresponding service-requesting Customer App from at least
9 the time of the start to the time of the end of the ride to determine that the two have
10 remained substantially co-located during the time period. Amongst other reasons for
11 such tracking, the Uber Platform determines if there is unscheduled time period for
12 which the Customer App and Driver App have not maintained relative proximity. If so,
13 that tracking component/service reports the deviation to a notification
14 component/service that notifies an Uber representative so they can investigate that the
15 driver and rider are safe. Moreover, by tracking the relative proximity, the Uber
16 Platform confirms that the rider in fact took the paid-for ride in case of a later billing
17 challenge. If the tracking server component/service determines from the GPS
18 coordinate comparison that the two components have maintained their relative
19 proximity until the ride ended at its intended destination, it reports the verification and
20 tracking data of the successfully completed ride to at least a storage component in case
21 later needed for law enforcement, billing, data analytic or other purposes.

22 165. Also, upon information and belief, the Uber Platform verifies that a ride-
23 requesting Customer App and ride-providing Driver App are tracking each other during
24 at least a pickup. Also, as previously disclosed, the surge pricing component/service
25 obtains information from the system indicating which Driver App is reporting its
26 location within proximity of a geographic boundary or S2 geospatial cell associated
27 with a customer to determine whether a pricing surge is needed.
28

1 166. Claim 8 recites: “[a] communication system.” Upon information and
2 belief, and to the extent that preamble is limiting, the Accused Products and Services
3 comprise and utilize a communication system.

4 167. For example, the Uber Mobile Network is a communication system that
5 connects the Uber Platform with Customer and Drivers Apps so that the Uber Platform
6 can transmit to and receive data from the Customer and Driver Apps.

7 168. Claim 8 requires: “i) a network of communication resources.” Upon
8 information and belief, the Accused Products and Services include a network of
9 communication resources.

10 169. For example, the Customer and Driver Apps are communication units that
11 are adapted to communicate their GPS coordinates, messages and other data to the Uber
12 Platform and to receive GPS coordinates, messages and other data from the Uber
13 Platform. Moreover, the Uber Mobile Network includes communication units such as
14 wireless cell towers, servers, mobile remote units and GPS satellites utilized to provide
15 the Accused Products and Services.

16 170. Claim 8 requires: “ii) a pool of portable mobile remote units that are able
17 to communicate with the network to establish their geographic location within the
18 system.” Upon information and belief, the Accused Products and Services comprise
19 and utilize a pool of portable mobile remote units that are able to communicate with
20 the network to establish their geographic location within the system.

21 171. The Driver and Customer Apps communicate with cell phone towers and
22 GPS satellites to establish their GPS coordinates and other location information and
23 communicate such information to the Uber Platform which then uses this information
24 to establish the Driver App’s S2 geospatial cell and street location.

25 172. Claim 8 requires: “ii) [*sic*, iii)] means for a wireless consumer to specify
26 and forward to the network, geographic boundary information describing a region
27 within a coverage area of said network where a notification should be sent to one or
28 more of said portable mobile remote units within said region.” Upon information and

1 belief, the Accused Products and Services comprise and utilize means for a wireless
2 consumer to specify and forward to the network, geographic boundary information
3 describing a region within a coverage area of said network where a notification should
4 be sent to one or more of said portable mobile remote units within said region.

5 173. For example, when planning or requesting a service, the Customer App
6 sends to the Uber Platform its GPS coordinates and other location information in an
7 appropriate notice indicating that the information is provided in a ride planning or ride
8 service request. This information constitutes geographical boundary information
9 because it specifies a geographical area where the Uber Platform should search for
10 eligible Drivers Apps who should be sent notifications of the service request inviting
11 them to accept the service request. When the Uber Platform receives the GPS
12 coordinates and other location information in such a notice, it indicates to the Uber
13 Platform a region within the coverage area of the Uber Mobile Network that must be
14 searched for eligible Driver Apps that should be sent notifications of the requested
15 service.

16 174. Claim 8 requires: “iii) [*sic*, iv)] means to forward said notification to
17 portable mobile remote units within said region.” Upon information and belief, the
18 Accused Products and Services comprise and utilize means to forward said notification
19 to portable mobile remote units within said region. For example, when the Uber
20 Platform identifies Driver Apps that should be sent notifications of the requested
21 service, it sends those service notices to certain Driver Apps with low ETAs to the
22 Customer App requesting the service.

23 175. Claim 8 requires; “iv) [*sic*, v)] means to identify said notification (iii) at
24 the portable mobile remote unit and means to verify whether the portable remote unit
25 exists within said region (iii).” Upon information and belief, the Accused Products and
26 Services comprise and utilize means to identify said notification (iii) at the portable
27 mobile remote unit and means to verify whether the portable remote unit exists within
28 said region (iii).

1 176. For example, the Driver App includes a component/service that identifies
2 (*e.g.*, by message type) it received a service notice message for display via the user
3 interface. The Driver App also verifies that it located (and therefore exists) in the region
4 of the request by calculating and/or displaying the ETA to the pickup location. The
5 Uber Platform also includes a match component/service that verifies during the match
6 process that the portable remote unit exists in the region. Also, Uber’s system tracks
7 geolocation changes, at the mobile device level (at least Driver App), as it employs a
8 data-rich platform to handle events, including geolocation coordinate changes, that are
9 reported to a gateway service and sent to the system to be consumed by downstream
10 services.

11 177. Claim 12 recites: [a] a method for notifying portable mobile remote units
12 within a geographic region in a wireless communication system.” Upon information
13 and belief, and to the extent the preamble is limiting, the Accused Products and
14 Services practice a method for notifying portable mobile remote units within a
15 geographic region in a wireless communication system. For example, the Uber
16 Platform sends notification messages to Driver Apps and Customer Apps.

17 178. Claim 12 requires: “i) communicating with one or more portable mobile
18 remote unit in a network to establish their geographic location within the system.”
19 Upon information and belief, the Accused Products and Services practice
20 communicating with one or more portable mobile remote unit in a network to establish
21 their geographic location within the system.

22 179. For example, the Uber Platform opens a communication channel with
23 online Driver Apps and active Customer Apps that periodically transmit their GPS
24 coordinates and other location information to the Uber Platform. The Uber Platform
25 processes the received GPS coordinates and other location information to establish the
26 respective S2 geospatial cell and street location of these Driver and Customer Apps.

27 180. Moreover, the Driver and Customer Apps communicate with cell phone
28 towers and GPS satellites to establish their geographic location within the system, such

1 as GPS coordinates and other location information that the Uber Platform uses to map
2 to street locations.

3 181. Claim 12 requires: “ii) specifying and forwarding to the network,
4 geographic boundary information describing a region within a coverage area of said
5 network where a notification should be sent to one or more of said portable mobile
6 remote units within said region.” Upon information and belief, the Accused Products
7 and Services practice specifying and forwarding to the network, geographic boundary
8 information describing a region within a coverage area of said network where a
9 notification should be sent to one or more of said portable mobile remote units within
10 said region.

11 182. For example, when planning or requesting a service, the Customer App
12 sends to the Uber Platform its GPS coordinates and other location information in an
13 appropriate notice indicating that the information is provided in a ride planning or ride
14 service request. This information constitutes geographical boundary information
15 because it specifies a geographical area where the Uber Platform should search for
16 eligible Drivers Apps who should be sent notifications of the service request inviting
17 them to accept the service request. When the Uber Platform receives the GPS
18 coordinates and other location information in such a notice, it indicates to the Uber
19 Platform a region within the coverage area of the Uber Mobile Network that must be
20 searched for eligible Driver Apps that should be sent notifications of the requested
21 service.

22 183. Claim 12 requires: “iii) forwarding said notification to portable mobile
23 remote units within said region.” Upon information and belief, the Accused Products
24 and Services practice the step of forwarding the notification to portable mobile remote
25 units within said region.

26 184. For example, when the Uber Platform identifies Driver Apps that should
27 be sent notifications of the requested service, it sends those service notices to certain
28 Driver Apps with low ETAs to the Customer App requesting the service.

1 185. Claim 12 requires: “iv) identifying said notification (iii) at the portable
2 mobile remote unit and verifying whether the portable remote unit exists within said
3 region (iii).” Upon information and belief, the Accused Products and Services practice
4 the steps of identifying said notification (iii) at the portable mobile remote unit and
5 verifying whether the portable remote unit exists within said region (iii).

6 186. For example, the Driver App includes a component/service that identifies
7 (*e.g.*, by message type) it received a service notice message for display via the user
8 interface. The Driver App also verifies that it is located (and therefore exists) in the
9 region of the request by calculating and/or displaying the ETA to the pickup location.
10 The Uber Platform also includes a match component/service that verifies during the
11 match process that the portable remote unit exists in the region. Also, Uber’s system
12 tracks geolocation changes, at the mobile device level (at least Driver App), as it
13 employs a data-rich platform to handle events, including geolocation coordinate
14 changes, that are reported to a gateway service and sent to the system to be consumed
15 by downstream services.

16 187. Also, during the time of the matching of Driver Apps and Customer App,
17 the S2 servers at the Uber Platform verify that the Driver Apps that are to be receiving
18 service request notification messages are in the region of the requested service before
19 sending the service notification messages.

20 188. Claim 13 adds to claim 12 the additional step of “responding to said
21 notification if said portable mobile remote unit (iv) exist within the geographic
22 boundary defined by said region.” Upon information and belief, the Accused Products
23 and Services practice the step of responding to said notification if said portable mobile
24 remote unit (iv) exist within the geographic boundary defined by said region.

25 189. A Driver App accepting a service request sends a message to the Uber
26 Platform notifying at least one component/server at the Uber Platform that the service
27 request has been accepted. Furthermore, the Driver App sends another notification
28 when the ride has begun. These notifications are only sent if the Driver App is located
in the region of the request. Also, Uber’s system is known to track geolocation changes,

1 at the mobile device level (at least Driver App), as it employs a data-rich platform to
2 handle events, including geolocation coordinate changes, that are reported to a gateway
3 service and sent to the system to be consumed by downstream services.

4 190. Upon information and belief, to the extent that it is not directly infringing
5 any of the above identified claim of the '726 patent, Uber has actively induced and is
6 actively inducing others (such as Uber drivers and Uber riders) to infringe these claims
7 under 35 U.S.C. 271(b) through the use of the Accused Products and Services.

8 191. Upon information and belief, to the extent that it is not directly infringing
9 any of the above identified claim of the '726 patent, Uber has contributed to and is
10 contributing to the infringement by others (such as Uber drivers and Uber riders) of
11 these claims under 35 U.S.C. 271(c) through the use of the Accused Products and
12 Services.

13 192. Upon information and belief, since becoming aware of the '726 patent,
14 Uber has provided the Uber Driver App, Customer App and Platform for use by others
15 (such as Uber drivers and Uber riders) and encouraged, aided, or otherwise caused
16 others to use the Accused Products and Services in the United States in a way that
17 infringes at least above identified claims of the '726 patent.

18 193. Upon information and belief, the Uber Driver App and Customer App are
19 not staple articles of commerce having no substantial non-infringing uses but rather are
20 specifically intended for use in accessing and using the Accused Products and Services
21 in a way that infringes at least the above identified claims of the '726 patent.

22 194. Upon information and belief, Uber directly infringes one or more claims
23 of the '726 patent literally, or induces or contributes to direct infringement that is literal.
24 Alternatively, to the extent that Uber's direct infringement or induced or contributory
25 infringement for any claim is not found to be literal, such claims are infringed under
26 the doctrine of equivalents.

27 **COUNT III: INFRINGEMENT OF U.S. PATENT NO. 6,756,918**

28

1 195. Enovsys repeats, realleges, and incorporates by reference the foregoing
2 paragraphs of the Original Complaint as if fully set forth herein.

3 196. The claims of the '918 patent are generally directed to beneficial methods
4 and systems for providing the location of portable mobile devices in a geographic
5 region of a wireless network that are maintaining close proximity to a wireless
6 consumer.

7 197. Upon information and belief, Uber has directly infringed one or more
8 claims of the '918 patent under 35 U.S.C. § 271(a) by, among other things, making,
9 using, offering to sell, and/or selling in the United States products and services used
10 by, or under the direction or control of, Uber in practicing one or more claims of the
11 '918 patent, including, by way of example and without limitation, the Accused
12 Products and Services.

13 198. The Accused Products and Services infringe at least claims, 1, 2, 15, 22
14 and 24 of the '918 patent.

15 199. Claim 1 recites: "a communication system." Upon information and belief,
16 and to the extent that the preamble is limiting, the Accused Products and Services
17 comprise and utilize a communication system.

18 200. For example, the Uber Mobile Network is a communication system that
19 connects the Uber Platform with Customer and Drivers Apps so that the Uber Platform
20 can transmit to and receive data from the Customer and Driver Apps.

21 201. Claim 1 requires: "a portable mobile remote unit." Upon information and
22 belief, the Accused Products and Services comprise and utilize a portable remote unit.

23 202. For example, each of the Driver Apps and Customer Apps are installed on
24 smartphones or mobile devices and comprise portable remote units.

25 203. Claim 1 requires: "a network of communication units." Upon information
26 and belief, the Accused Products and Services comprise and utilize a network of
27 communication units.

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1 204. For example, the Uber Platform comprises communication units that send
2 data to and receive data from each Driver App and Customer App. The Driver and
3 Customer Apps enable the smartphones (or other communication devices) upon which
4 they operate to send data to and receive data from the Uber Platform via a cell phone
5 service, the internet or another communication channel and also are communication
6 units. As a further example, each of the Driver Apps and Customer Apps are
7 programmed to enable wireless communication with the Uber Platform via the portable
8 remote devices (*e.g.*, smartphones). Each of these are “communication units.” As a
9 further example, the Customer Apps and Driver Apps are communication units that are
10 adapted to communicate their GPS coordinates, messages and other data to the Uber
11 Platform and to receive GPS coordinates, messages and other data from the Uber
12 Platform and utilized to provide the Accused Products and Service.

13 205. Claim 1 requires: “means to obtain the location of the portable mobile
14 remote unit.” Upon information and belief, the Accused Products and Services
15 comprise and utilize means to obtain the location of the portable mobile remote unit.

16 206. For example, the Driver Apps are adapted to communicate their GPS
17 coordinates and other location information to the Uber Platform which then establishes
18 its S2 geospatial and street location. (The Uber Platform is a transmitter within the
19 network because it transmits data to both Customer Apps and Driver Apps.)

20 207. Moreover, the Driver and Customer Apps communicate with cell phone
21 towers and GPS satellites to establish their geographic location within the system, such
22 as GPS coordinates and other location information that the Uber Platform uses to map
23 to street locations.

24 208. Claim 1 requires: “means to obtain geographic boundary information in
25 order to disclose a global location at the network.” Upon information and belief, the
26 Accused Products and Services comprise and utilize means to obtain geographic
27 boundary information in order to disclose a global location at the network.

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1 209. For example, the Uber Platform includes one or more location
2 components/services that receive a set of GPS coordinates and identify a corresponding
3 geographic area (*e.g.*, S2 geospatial cell) and one or more match components/services
4 that identify the S2 geospatial cells within a specified radius of any given set of GPS
5 coordinates. Also, the Uber Driver and Customer Apps routinely obtain and provide
6 their location to Uber’s network.

7 210. Claim 1 requires: “means to provide the location of the portable mobile
8 remote unit to the network upon determination that the portable mobile remote unit is
9 within the geographic boundary obtained at the network.” Upon information and belief,
10 the Accused Products and Services comprise and utilize means to provide the location
11 of the portable mobile remote unit to the network upon determination that the portable
12 mobile remote unit is within the geographic boundary obtained at the network.

13 211. For example, when the Uber Platform receives a service request from a
14 Customer App, such as a ride request, it parses the identifier of the Customer App and
15 its current GPS coordinates. The request is routed to a match component of the Uber
16 Platform whose function it is to match the request to proximate Driver Apps who are
17 eligible to be notified of the request until one has accepted the request.

18 212. In performing the match, the match system/service creates a circle of a
19 given radius from the GPS coordinates of the request and identifies the various S2
20 geospatial cells comprising the area of the circle. The Uber Platform’s match service
21 queries the S2 servers responsible for maintaining the current location and status of the
22 Driver Apps current reporting locations within each of those S2 geospatial cells in order
23 to obtain therefrom a list of eligible Driver Apps.

24 213. Likewise, upon information and belief, when a Driver App first logs in to
25 the Uber Platform, the Uber Platform determines from the Driver App’s reported GPS
26 coordinates whether it is located in an S2 geospatial cell that is a covered area of the
27 Uber Mobile Network before allowing it to open a channel to periodically update the
28 Uber Platform of its location. Likewise for a Customer App logging in to the Uber
Platform.

1 214. The Uber Platform also requests all online Driver Apps and active
2 Customer Apps to periodically update the Uber Platform of their current GPS
3 coordinates within every S2 geospatial cells covered by the Uber Mobile Network. By
4 design, these Apps update the Uber Platform every few seconds with at least their
5 current GPS position for the Uber Platform to use and to convert to an S2 geospatial
6 cell or a street location.

7 215. Claim 1 requires: “means to determine and report to the system upon
8 request that, another mobile remote unit of the network has tracked the portable mobile
9 remote over a period of time.” Upon information and belief, the Accused Products and
10 Services comprise and utilize means to determine and report to the system upon request
11 that another mobile remote unit of the network has tracked the portable mobile remote
12 over a period of time.

13 216. For example, the Uber Platform includes trip component/services that
14 determine and report that the Driver App providing a ride and Customer App requesting
15 the ride tracked each other during the ride by establishing that the Customer App and
16 Driver App were substantially co-located from the start to the end of the ride. Also,
17 within any given S2 geospatial cell, the Uber Platform includes a surge pricing server
18 component that determines and reports which online Driver Apps and Customer Apps,
19 both of which are in motion within the S2 geospatial cell, are maintaining their co-
20 location within the cell’s boundary to determine whether surge pricing is needed.

21 217. Also, the Uber Platform includes a pricing component/system/service
22 that determines for each S2 geospatial cell the number of active Customer Apps within
23 requesting services and the number of online Driver Apps within that S2 geospatial cell
24 available to provide services and reports the results to a surge pricing component that
25 determines whether surge pricing should be applied within that S2 geospatial. The
26 surge pricing component sends such determinations to another Uber Platform
27 component/service which, in turn, sends notifications to online Drivers Apps in nearby
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1 S2 geospatial cells to encourage the nearby drivers to enter the surge priced S2
2 geospatial.

3 218. Furthermore, the Uber Platform includes a match component that
4 determines and reports a plurality of eligible Driver Apps that are in close proximity to
5 a given plurality of Customer Apps requesting ride services. That way, it can access
6 which Driver Apps should be invited to accept the ride services so as to minimize the
7 overall wait time for that plurality of customers. The match component sends a message
8 to a notification service that notifies the selected Driver Apps that they have been
9 invited to accept the service request.

10 219. Claim 2 requires “[t]he portable remote [unit] according to claim 1, having
11 means to further determine if location disclosure for the remote unit is prohibited at a
12 specific boundary before sending its location to the network.” Upon information and
13 belief, the Accused Products and Services comprise and utilize portable remote units
14 having means to further determine if location disclosure for the remote unit is
15 prohibited at specific boundary before sending its location to the network.

16 220. For example, upon information and belief, each Customer App and Driver
17 App is programmed to receive a message from the Uber Platform confirming that it is
18 located at a GPS coordinate within an S2 cell comprising a covered region of the Uber
19 Mobile Network before establishing a connection with the Uber Platform to continue
20 to periodically transmit to the Uber Platform its GPS coordinates.

21 221. Claim 15 recites: “[a] method for determining that a first portable remote
22 unit of a wireless consumer associated with a network is being tracked by at least a
23 second portable remote unit that is in motion with the first portable remote unit over a
24 tracking period.” Upon information and belief, and to the extent that the preamble is
25 limiting, the Accused Products and Services practice a method for determining that a
26 first portable remote unit of a wireless consumer associated with a network is being
27 tracked by at least a second portable remote unit that is in motion with the first portable
28 remote unit over a tracking period.

1 222. For example, during a ride, the Uber Platform determines that the GPS
2 coordinates of a service-providing Driver App are being tracked by the GPS
3 coordinates of the service-requesting Customer App from at least the time of the pickup
4 at the pickup location to the time of the drop off at the destination location.

5 223. Furthermore, the Uber Platform confirms that the GPS coordinates of the
6 service-providing Driver App are sent to the service-requesting Customer App, and
7 vice versa, from the time the Driver App sent a message to the Uber Platform accepting
8 the service request to the time of the pickup at the pickup location.

9 224. Furthermore, the Uber Platform confirms that the GPS coordinates of the
10 service-providing Driver App are sent to the service-requesting Customer App for the
11 entire duration of the ride from the time the Driver App sent a message to the Uber
12 Platform accepting the service request to the time of the drop off at the drop off
13 location.

14 225. Claim 15 requires: “i) obtaining the location information of the first
15 portable mobile remote unit, said location information provided at intervals during said
16 tracking period.” Upon information and belief, the Accused Products and Services
17 practice obtaining the location information of the first portable mobile remote unit, said
18 location information provided at intervals during said tracking period.

19 226. For example, the Uber Platform periodically obtains the location of the
20 Driver Apps that are in covered service areas of the Uber Mobile Network and
21 connected with the Uber Platform (*i.e.*, online), including from the time a Driver App
22 reports to the Uber Platform that it has accepted a ride service invitation from the Uber
23 Platform to the time the ride has ended.

24 227. Claim 15 requires: “ii) obtaining the location information of the at least
25 second portable communication unit that is within a specified geographic boundary of
26 the first portable remote unit, said location information provided at intervals during
27 said tracking period.” Upon information and belief, the Accused Products and Services
28 practice obtaining the location information of the at least second portable

1 communication unit that is within a specified geographic boundary of the first portable
2 remote unit, said location information provided at intervals during said tracking period.

3 228. For example, the Uber Platform also periodically obtains the location of
4 Customer Apps that are planning or have requested a trip, including from the time that
5 a Driver App has accepted their service request to the time of the drop off at the
6 destination location of the service request. Moreover, the Uber Platform only sends
7 service invitations to Drivers Apps that are located within a specific geographic
8 boundary (*e.g.*, a circle of a given radius of the GPS coordinates) of a service-
9 requesting Customer App.

10 229. Claim 15 requires: “iii) using the location obtained according to step (i)
11 and (ii) to verify whether the first portable remote unit and second portable remote unit
12 have maintained relative proximity during the tracking period.” Upon information and
13 belief, the Accused Products and Services practice using the location obtained
14 according to step (i) and (ii) to verify whether the first portable remote unit and second
15 portable remote unit have maintained relative proximity during the tracking period.

16 230. For example, the Uber Platform includes a ride verification component
17 that compares the GPS coordinates periodically received from the service-providing
18 Driver App with the GPS coordinates periodically received from the service-requesting
19 Customer App during a ride from at least the time of pick up at the pickup location to
20 the time of drop off at the destination location to verify that the two have remained in
21 relative proximity for the duration.

22 231. Claim 15 requires: “iv) forwarding the result of the verification to a
23 network requestor at the end of the tracking period.” Upon information and belief, the
24 Accused Products and Services practice forwarding the result of the verification to a
25 network requestor at the end of the tracking period.

26 232. Claim 22 recites: “a communication system.” Upon information and
27 belief, and to the extent the preamble is limiting, the Accused Products and Services
28 comprise and utilize the Uber Mobile Network, a communication system in which
Driver Apps and Customer Apps communicate with the Uber Platform.

1 233. Claim 22 requires: “(i) a network of communication units.” Upon
2 information and belief, the Accused Products and Services comprise and utilize a
3 network of communication units.

4 234. For example, each of the Driver Apps and Customer Apps are
5 programmed to enable wireless communication with the Uber Platform via the portable
6 remote devices (*e.g.*, smartphones) onto which they are installed. Each of these are
7 “communication units.”

8 235. Claim 22 requires: “(ii) at least a first communication unit and at least a
9 second communication unit able to provide location information to the network for a
10 time while in motion.” Upon information and belief, the Accused Products and
11 Services comprise and utilize at least a first communication unit and at least a second
12 communication unit able to provide location information to the network for a time
13 while in motion.

14 236. For example, both the ride-providing Driver App and ride-requesting
15 Customer App periodically report their GPS coordinates to the Uber Platform during a
16 ride from the time the ride was accepted to the time of drop-off.

17 237. Claim 22 requires: “(iii) means to request whether the at least second
18 communication unit is tracking the at least first communication unit.” Upon
19 information and belief, the Accused Products and Services comprise and utilize means
20 to request whether the at least second communication unit is tracking the at least first
21 communication unit.

22 238. For example, the Uber Platform includes a trip component/service that
23 monitors the reported GPS coordinates of both the ride-providing Driver App and ride-
24 requesting Customer App during a ride. The Uber Platform also includes at least one
25 safety or billing component/service that requests the trip component to report whether
26 or not the two GPS components are tracking each other during the ride. Also, within
27 any given S2 geospatial cell, the Uber Platform includes a surge pricing server
28 component that needs to know which online Driver Apps and Customer Apps, both of
which are in motion within an S2 geospatial cell, are maintaining their co-location

1 within the cell's boundary to determine whether surge pricing is needed in that S2
2 geospatial cell. Furthermore, the Uber Platform includes a match component that needs
3 to know which plurality of eligible Driver Apps are in close proximity to a given
4 plurality of Customer Apps requesting ride services. That way, it can determine which
5 Driver Apps should be invited to accept the ride services so as to minimize the overall
6 wait time for that plurality of customers.

7 239. Claim 22 requires: "(iv) means to determine from said location provided
8 (ii) that the at least first and second communication unit maintained proximity while in
9 motion during said time." Upon information and belief, the Accused Products and
10 Services comprise and utilize means to determine from said location provided (ii) that
11 the at least first and second communication unit maintained proximity while in motion
12 during said time.

13 240. For example, the trip component/service is able to compare the reported
14 GPS coordinates of the Driver App and Customer App during a ride to verify that the
15 Driver App and Customer App are substantially co-located during the ride. Also, within
16 any given S2 geospatial cell, the Uber Platform includes a surge pricing server
17 component that determines and reports which online Driver Apps and Customer Apps,
18 both of which are in motion within the cell, are maintaining their co-location within the
19 cell's boundary to determine whether surge pricing is needed in that S2 geospatial cell.
20 Furthermore, the Uber Platform includes a match component that determines and
21 reports a plurality of eligible Driver Apps that are in close proximity to a given plurality
22 of Customer Apps requesting ride services. That way, it can access which Driver Apps
23 should be invited to accept the ride services so as to minimize the overall wait time for
24 that plurality of customers. The match component sends a message to a notification
25 service that notifies the selected Driver Apps that they have been invited to accept the
26 service request.

27 241. Also, the Uber Platform includes a pricing component/system/service that
28 determines for each S2 geospatial cell the number of active Customer Apps within
requesting services and the number of online Driver Apps within that S2 geospatial cell

1 available to provide services and reports the results to a surge pricing component that
2 determines whether surge pricing should be applied within that S2 geospatial. The
3 surge pricing component sends such determinations to another Uber Platform
4 component/service which, in turn, sends notifications to online Drivers Apps in nearby
5 S2 geospatial cells to encourage the nearby drivers to enter the surge priced S2
6 geospatial.

7 242. Furthermore, the Uber Platform includes a match component that
8 determines a plurality of eligible Driver Apps that are in close proximity to a given
9 plurality of Customer Apps requesting ride services to determine which ones of such
10 Driver Apps should be invited to accept the ride services so as to minimize the overall
11 wait time for that plurality of customers. The match component sends a message to a
12 notification service that notifies the selected Driver Apps that they have been invited
13 to accept the service request.

14 243. “Claim 22 requires: “(vi) [*sic*, v)] means to provide result of the
15 determination (iv) to the requestor of (iii).” Upon information and belief, the Accused
16 Products and Services comprise and utilize means to provide result of the determination
17 (iv) to the requestor of (iii).

18 244. For example, the trip component/service can provide the results of the
19 verification to the safety or billing component/service. Also, the surge pricing
20 component and match component provide their results to the Uber Platform, so
21 appropriate notices/alerts can be sent to the Driver and Customer Apps.

22 245. “Claim 24 requires: “[t]he system of claim 22 having means to maintain
23 an inventory of all second communication units that are providing their location within
24 proximity to the first communication unit during said time and having further means to
25 determine and report a second communication unit in said inventory that has
26 maintained proximity to the first communication unit during said time.” Upon
27 information and belief, the Accused Products and Services comprise and utilize means
28 to maintain an inventory of all second communication units that are providing their

1 location within proximity to the first communication unit during said time and having
2 further means to determine and report a second communication unit in said inventory
3 that has maintained proximity to the first communication unit during said time.

4 246. For example, the Uber Platform includes a location component/service
5 that maintains on various servers the current locations of each online Driver App in any
6 given geographic area (*e.g.*, S2 geospatial cell or sub-cell) covered by the system and
7 determines and reports to a match service one or more Driver Apps that have
8 maintained proximity to a Customer App requesting a ride service. Also, as previously
9 disclosed, the trip component/service and the surge pricing component/service obtain
10 information from the system indicating which Driver App is reporting their location
11 within proximity of a geographic boundary or S2 cell of the Customer App.

12 247. Upon information and belief, to the extent that it is not directly infringing
13 any of the above identified claim of the '918 patent, Uber has actively induced and is
14 actively inducing others (such as Uber drivers and Uber riders) to infringe these claims
15 under 35 U.S.C. 271(b) through the use of the Accused Products and Services.

16 248. Upon information and belief, to the extent that it is not directly infringing
17 any of the above identified claim of the '918 patent, Uber has contributed to and is
18 contributing to the infringement by others (such as Uber drivers and Uber riders) of
19 these claims under 35 U.S.C. 271(c) by using the Accused Products and Services.

20 249. Upon information and belief, since becoming aware of the '918 patent,
21 Uber has provided the Uber Driver App, Customer App and Platform for use by others
22 (such as Uber drivers and Uber riders) and encouraged, aided, or otherwise caused
23 others to use the Accused Products and Services in the United States in a way that
24 infringes at least above identified claims of the '918 patent.

25 250. Upon information and belief, the Uber Driver App and Customer App are
26 not staple articles of commerce having no substantial non-infringing uses but rather are
27 specifically intended for use in accessing and using the Accused Products and Services
28 in a way that infringes at least the above identified claims of the '918 patent.

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