

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

BLACKBIRD TECH LLC d/b/a
BLACKBIRD TECHNOLOGIES,

Plaintiff,

v.

UBER TECHNOLOGIES, INC.,

Defendant.

Case No. _____

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Blackbird Tech LLC d/b/a Blackbird Technologies (“Blackbird Technologies”) hereby alleges against Defendant Uber Technologies, Inc. (“Uber” or “Defendant”), on personal knowledge as to its own activities and on information and belief as to all other matters, as follows:

THE PARTIES

1. Plaintiff Blackbird Technologies is a Delaware limited liability company with its principal place of business located at 200 Baker Ave., Suite 203, Concord, MA 01742.
2. Uber is a corporation organized and existing under the laws of Delaware, with its principal place of business located at 1455 Market Street, Suite 400, San Francisco, CA 94103

JURISDICTION AND VENUE

3. This is an action for patent infringement arising under the patent laws of the United States of America, Title 35, United States Code §§ 100, *et seq.*
4. This Court has subject matter jurisdiction over this action per 28 U.S.C. § 1331 (federal question jurisdiction) and 28 U.S.C. § 1338(a) (patent jurisdiction).

5. This Court has personal jurisdiction over Defendant because Defendant is subject to general and specific jurisdiction in the state of Delaware. Defendant is subject to personal jurisdiction because Defendant is a Delaware corporation and because Defendant has transacted business within Delaware and committed acts of patent infringement in Delaware. Defendant has made certain minimum contacts with Delaware such that the maintenance of this suit does not offend traditional notions of fair play and substantial justice. Defendant regularly conducts business in Delaware, including by operating, supporting, and offering for download and installation a smartphone app that allows users in Delaware (Uber riders and drivers) to request and/or fulfill on demand transportation services in Delaware. *See, e.g.*, <https://www.uber.com/cities/wilmington-de/>.¹ Defendant has marketed, offered, and provided the infringing instrumentality in Delaware to citizens of Delaware through various interactive means, including but not limited to its website (uber.com) and the Apple and Google app stores. The exercise of personal jurisdiction comports with Defendant's right to due process because, as described above, Defendant has purposefully availed itself of the privilege of Delaware corporate laws and of conducting activities within Delaware such that it should reasonably anticipate being haled into court here. As alleged herein, the acts by Defendant in this district have caused injury to Blackbird Technologies.

6. Venue is proper in the District of Delaware pursuant to 28 U.S.C. § 1391(b) and (c) and § 1400(b) at least because Defendant resides in the District of Delaware, transacted business within this district, and committed acts in this district that infringe U.S. Patent No. 6,754,580.

¹ All websites cited in this Complaint, including any video content, were accessed on or around March 19, 2019.

THE PATENT-IN-SUIT

7. U.S. Patent No. 6,754,580 (the “’580 patent”) entitled, “System for Guiding Vehicles,” was duly and legally issued by the U.S. Patent and Trademark Office on June 22, 2004. Blackbird Technologies is the owner by assignment of all right, title, and interest in and to the ’580 patent, including all right to recover for any and all infringement thereof. The ’580 patent is valid and enforceable. A true and correct copy of the ’580 patent is attached as Exhibit A.

8. The claims of the ’580 patent are directed to an unconventional vehicle monitoring and guidance system that allows for adaptive real-time vehicle management and route navigation. Prior to the claimed invention, vehicle guidance systems were limited in that they determined the “optimal route for the vehicles based solely on the current traffic flow.” Ex. A, ’580 patent at 1:31-40. These systems did not “disclose guiding that takes place in order to optimize the entire traffic operation in the system.” *Id.* at 2:26-28.

9. The claimed invention improves the functioning of these conventional systems by allowing for dynamic route guidance based on information from vehicles operating in the vehicle management system. The claimed invention achieves “optimal guidance” by utilizing a control center that receives vehicle-specific information (*e.g.*, position, speed, location, vehicle type, destination) from vehicles having a unique identifier and are actively logged-into the system. This way, the control center can manage the flow of vehicles in the system and provide real-time route guidance to each vehicle using information “greater than that indicated by earlier inventions.” *Id.* at 2:64-65.

10. The claimed invention improves the accuracy and overall functioning of vehicle management and associated vehicle route guidance computer systems by introducing an

unconventional technological solution (e.g., a dynamic monitoring and route guidance architecture using specific real-time data from vehicles or operators that are actively logged on to the system). The improved functioning of these systems further allows for real-time displays of vehicle route guidance.

COUNT I – INFRINGEMENT OF THE '580 PATENT

11. Blackbird Technologies reasserts and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

12. On information and belief, Uber hosts, develops, programs, operates, supports, and/or provides network services to enable on demand transportation for both riders and drivers (“Uber Services”). *See, e.g.,* <https://developer.uber.com/docs/api-overview> (providing an overview of the Uber API); <https://developer.uber.com/docs/drivers> (providing an overview of the Driver API).

13. Uber develops, programs, supports, and makes available for download and installation mobile apps for Uber riders (“Uber Rider App”) and Uber drivers (“Uber Driver App”) (collectively, the “Uber Apps”). The Uber Apps can be installed on computing devices (rider or driver devices) running several different operating systems, including but not limited to certain versions of iOS and Android.

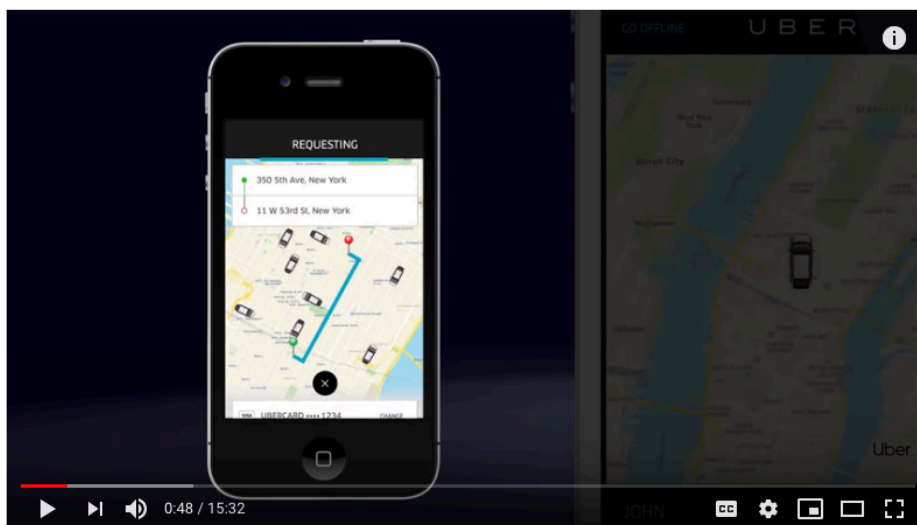
14. As part of the Uber Services, Uber makes available a specialized vehicle navigation system to its drivers through the Uber Driver App. *See, e.g.,* <https://www.uber.com/newsroom/a-new-navigation-experience-for-drivers/> (describing Uber’s navigation system).

15. Uber infringes one or more claims of the '580 patent, including at least claim 1, through the Uber Services integrated with at least the Uber Driver App (together, “the Uber

Driver System”), as discussed in the following paragraphs of this Complaint. Such paragraphs describe the Uber Driver App for iOS. Upon information and belief, the Uber Driver App for Android operates in a substantially similar manner.

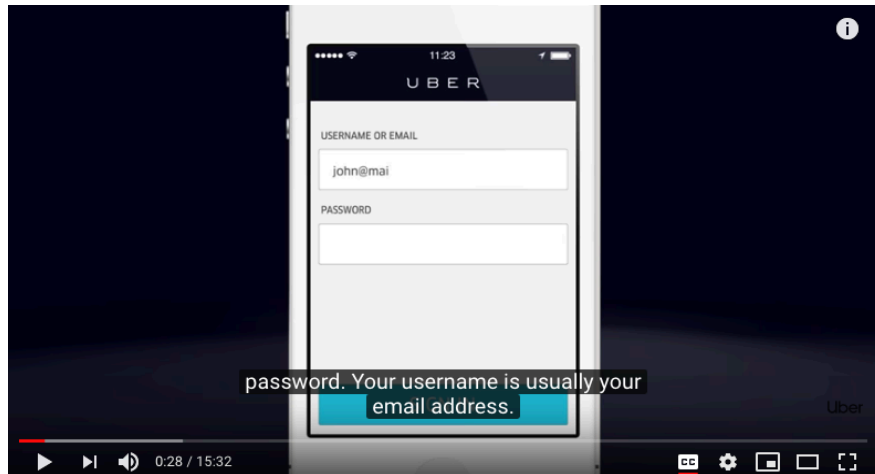
16. The Uber Driver System is a system “for controlling vehicle movements, in areas containing a road network, and a plurality of vehicles that exhibit means for identification, means for road information and means for transmission of information between the vehicle and a traffic information center,” as recited in claim 1.

17. For example, the Uber Services manage vehicle movements on the road for Uber drivers that are actively logged-in through the Uber Driver App:

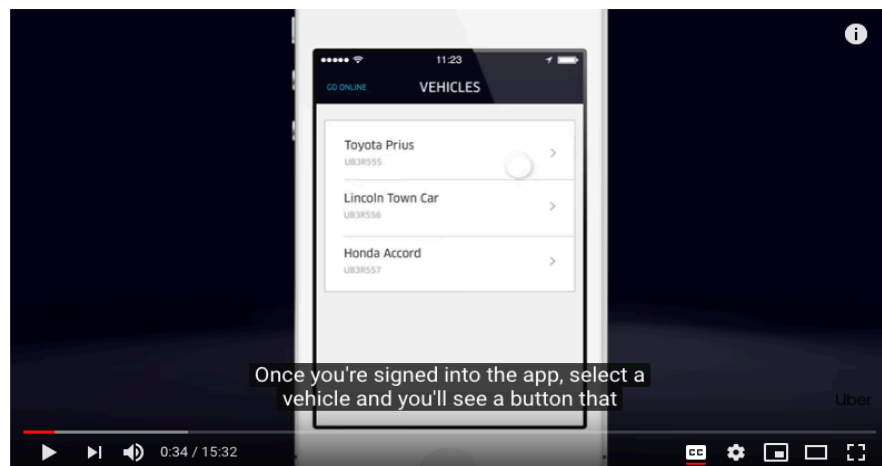


See, e.g., Uber, *How the Driver App Works*, YouTube (Aug. 6, 2015), <https://www.youtube.com/watch?v=10eiFrRqWII>, at 0:48 (“Uber Driver Video”).

18. Each Uber driver using the Uber Driver App must log-in to access the Uber Services and begin receiving trip requests. Uber drivers can log-in using a unique username and password:

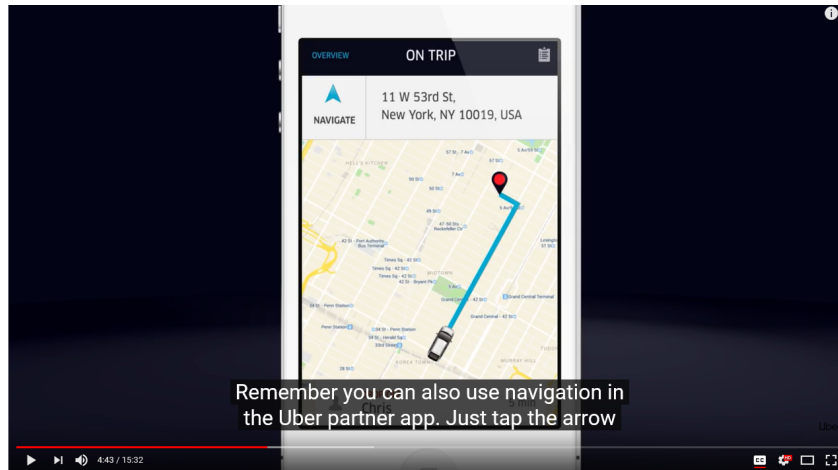


See, e.g., id. at 0:28. Each Uber driver must also select a specific vehicle, which has unique identifiers such as make, model and license number, to associate with that driver/log-in:



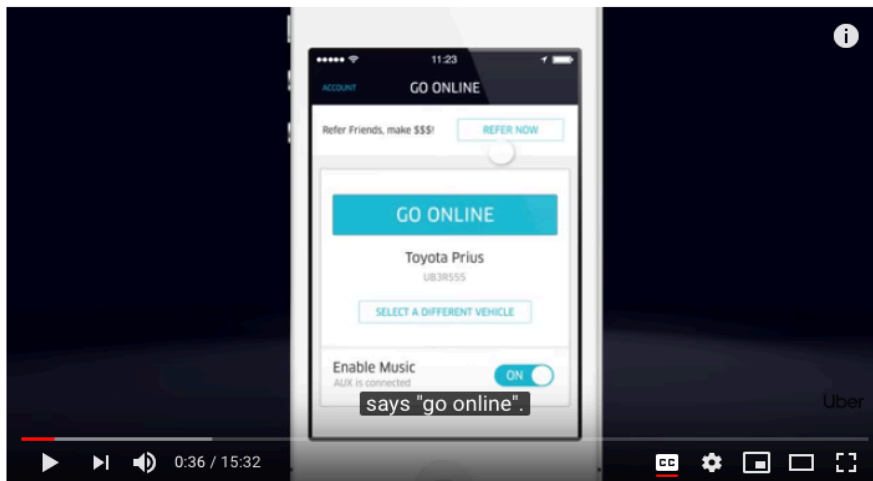
See, e.g., id. at 0:34.

19. The Uber Driver System provides road information, including road maps, navigation, and guidance, for Uber drivers through the Uber Driver App:

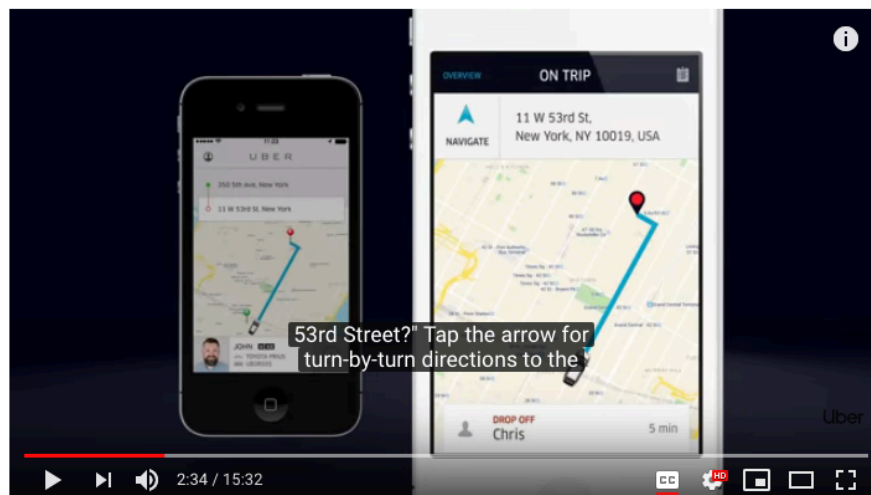
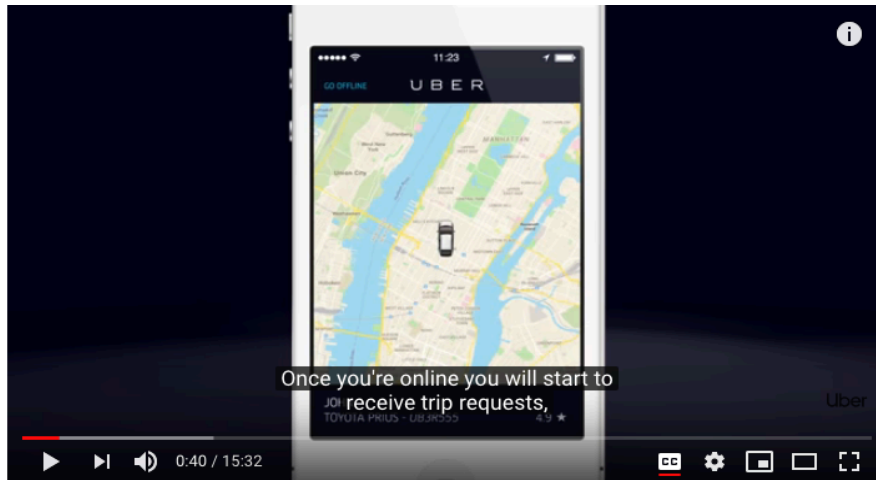


See, e.g., *id.* at 4:43; <https://www.uber.com/newsroom/a-new-navigation-experience-for-drivers/> (describing Uber’s navigation system).

20. The Uber Driver System allows for the transmission of information between the Uber Driver App and the Uber Services. Upon opening the Uber Driver App, and based on the specific identification information from the Uber driver (e.g., vehicle information), an Uber driver can select to go “online”:



See, e.g., Uber Driver Video at 0:36. Once online, through the Uber Driver App, an Uber driver interacts with the Uber Services to receive and accept trip requests, and to subsequently navigate to rider pick-up locations and rider destinations:

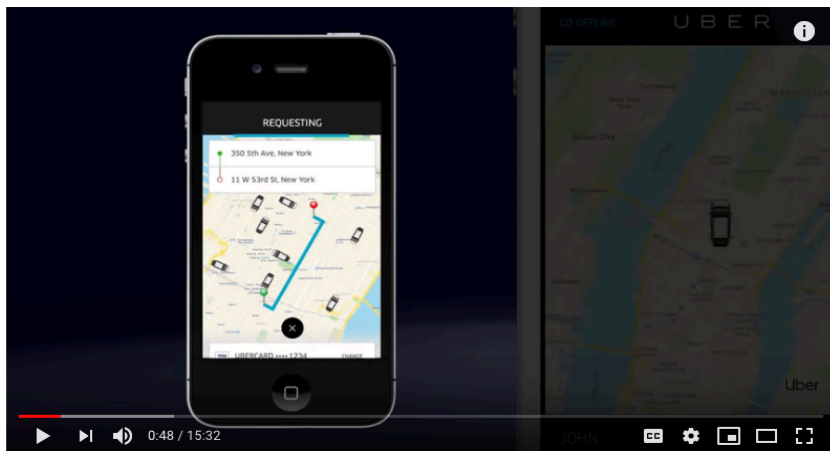


See, e.g., *id.* at 0:40 and 2:34.

21. The Uber Driver System allows for information between the Uber Driver App and the Uber Services to be transmitted over various communication protocols, including cellular or WiFi communication protocols. See, e.g., <https://help.uber.com/partners/article/how-much-data-does-the-driver-app-use?nodeId=e18872dd-2258-4d11-a9c3-87dc907caa66> (describing cellular data used during operation); *Uber Privacy Policy*, <https://privacy.uber.com/policy/> (describing location information determined through data such as GPS, IP address, and WiFi).

22. The Uber Driver System utilizes a road network that “is so arranged as to be entered into the system as a data network,” as recited in claim 1.

23. For example, the Uber Driver App displays the road network as a digital road map:



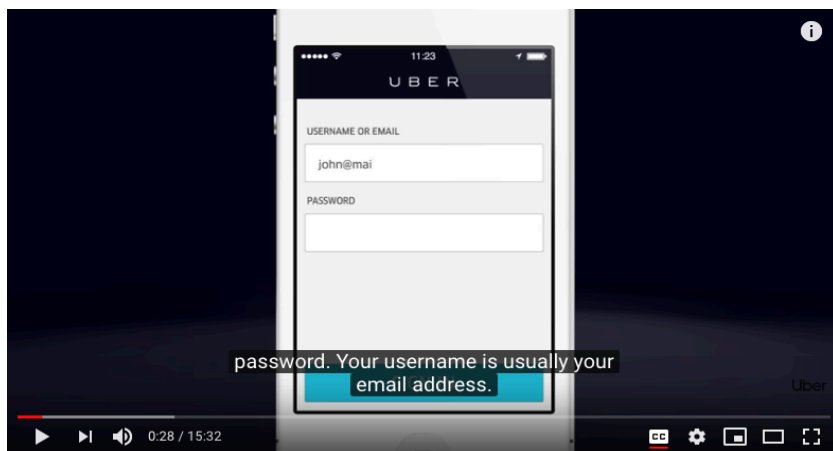
See, e.g., Uber Driver Video at 0:48. Uber describes the operation of its system as a string of data events:

We refer to the data underlying each trip as a session, which begins when a user opens the Uber app. That action triggers a string of data events, from when the rider actually requests a ride to the point where the trip has been completed. As each session occurs within a finite period of time, we can more easily organize the relevant data to be used for future analysis to further enhance our services. Among other functions, categorizing Uber's trip data into sessions makes it easier to understand and uncover issues or introduce new features.

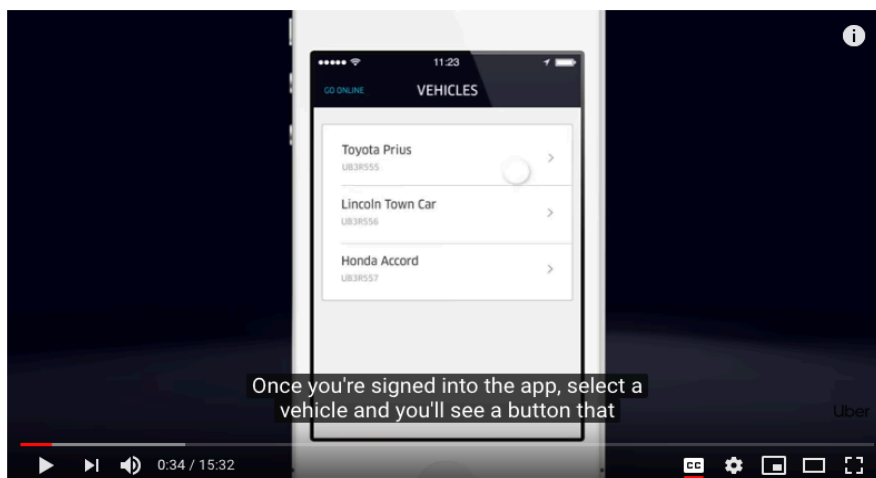
(<https://eng.uber.com/sessionizing-data/>).

24. Through the Uber Driver App, “each vehicle that is intended to make use of the road network is logged in for travelling on the road network . . . each vehicle is identified with an identity at the time of logging in, in conjunction with which the identify is either dynamic or static,” as recited in claim 1.

25. For example, each Uber driver using the Uber Driver App must log-in to access the Uber Services and begin receiving trip requests. Uber drivers log-in using a unique username and password:



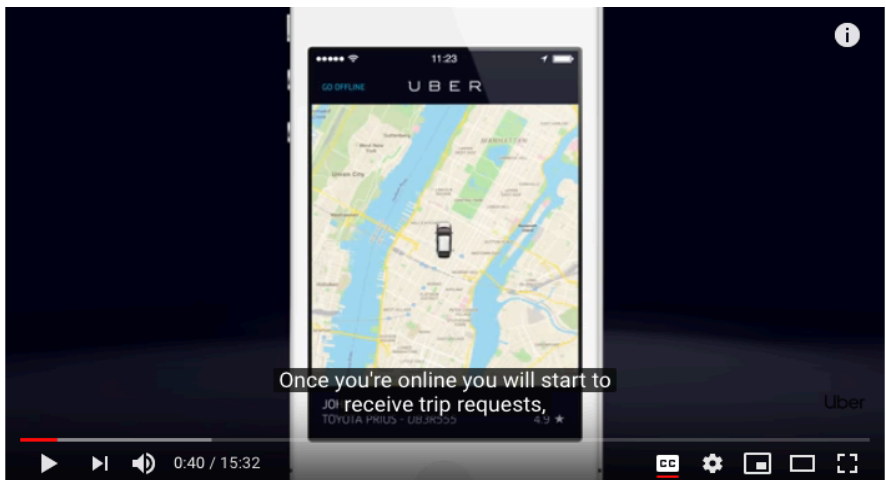
See, e.g., *id.* at 0:28. Through the Uber Driver App, each Uber driver must also select a specific vehicle, which has unique identifiers such as make, model and license number, to associate with that driver/log-in:



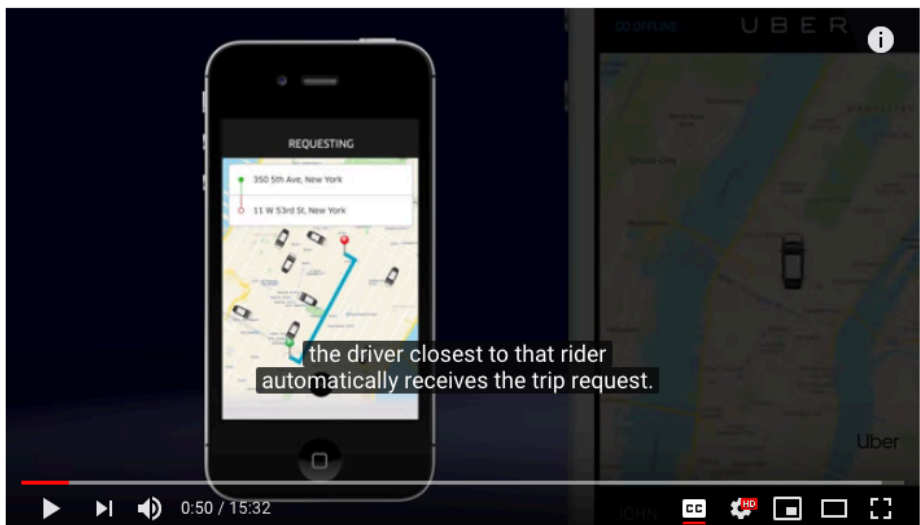
See, e.g., *id.* at 0:34.

26. Through the Uber Driver App, “information relating to the intended destination is sent in from each vehicle to the traffic information center in conjunction with logging in or later in the course of a journey when there is a new desired destination,” as recited in claim 1.

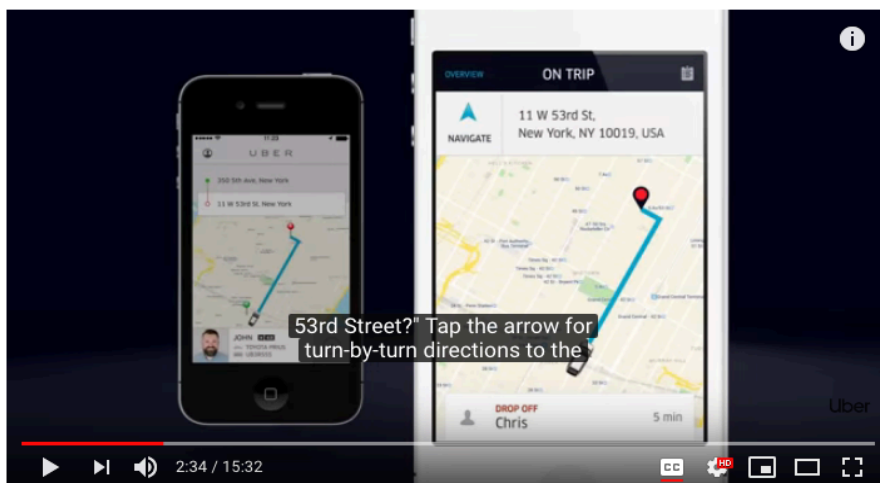
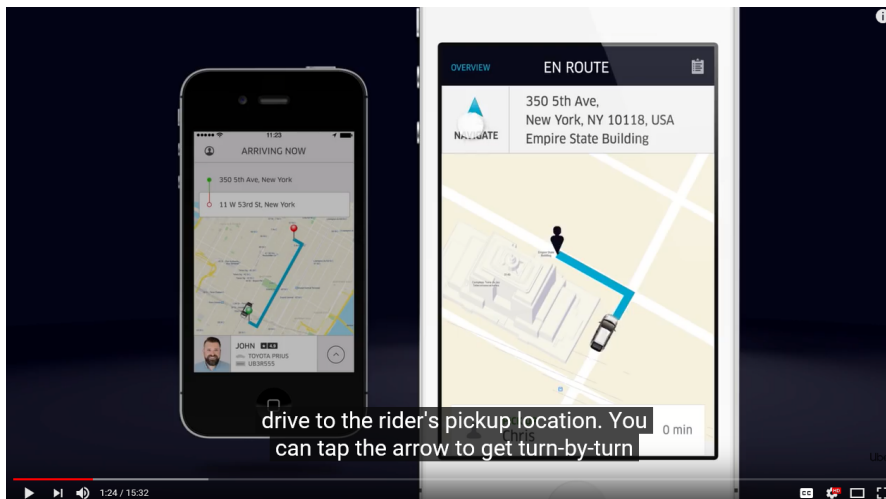
27. For example, an Uber driver that is logged into the Uber Driver System receives and accepts trip requests through the Uber Driver App:



See, e.g., *id.* at 0:40. A rider requesting an Uber driver must select a desired vehicle/ride type (e.g., UberX, UberXL, Uber Black, Uber Black SUV, UberPOOL, UberWAV). See, e.g., *Ways to Ride*, <https://www.uber.com/us/en/ride/>; <https://help.uber.com/riders/article/selecting-a-vehicle-option?nodeId=a03f9296-7905-4abb-92d5-4dab19cc2bd3> (describing the selection of different vehicle options). Trip requests are received based on an Uber driver's vehicle information (e.g., location, proximity to request, vehicle type):



See, e.g., Uber Driver Video at 0:50. When an Uber driver accepts a ride or picks up a rider, the Uber Driver App sends information relating to the pick-up or destination address and then receives “En Route” or “On Trip” navigation information from the Uber Services:



See, e.g., Uber Driver Video at 1:24 (“En Route” navigation) and 2:34 (“On Trip” navigation).

28. Through the Uber Driver App, “information about position and speed of . . . each vehicle is reported at regular intervals to the . . . traffic information center,” as recited in claim 1.

29. For example, the Uber Driver System provides estimated times of arrival and real-time route guidance:

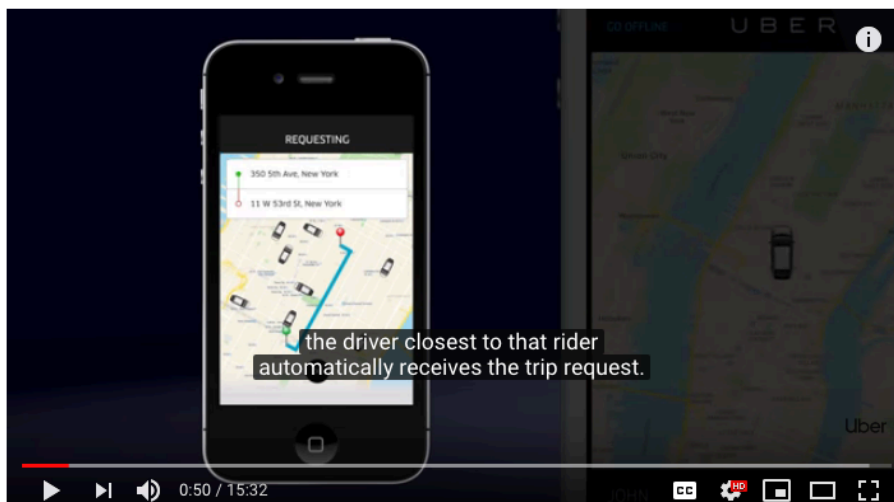
From providing accurate ETAs to navigating the fastest path to your destination, maps are at the heart of the Uber experience. Today, we're excited to introduce a redesigned navigation experience built around drivers' needs. We've completely revamped navigation on iOS and are introducing in-app navigation on Android for the first time. Now, with one-tap, turn-by-turn directions start right away, saving time and eliminating the need to juggle multiple apps.

...

As we started rebuilding our navigation, we focused on features to help drivers feel prepared throughout their trip. These included navigation basics such as lane guidance, compound maneuvers, and real-time traffic. We also introduced night-time themed maps to help give drivers' eyes a break from harsh light during the evenings.

See, e.g., <https://www.uber.com/newsroom/a-new-navigation-experience-for-drivers/> (emphasis in original).

30. The Uber Driver System tracks the position and speed of a vehicle at regular intervals. For example, when an Uber driver is logged-in and online, an Uber driver's location is reported to Uber Services at regular intervals to determine which driver is closest to the desired rider:



See, e.g., Uber Driver Video at 0:50. In addition, Uber explains that it tracks location information and uses information from Uber drivers' devices, including Uber drivers' speed:

- **Location Information**

Depending on the Uber services that you use, and your app settings or device permissions, we may collect your precise or approximate location information as determined through data such as GPS, IP address and WiFi.

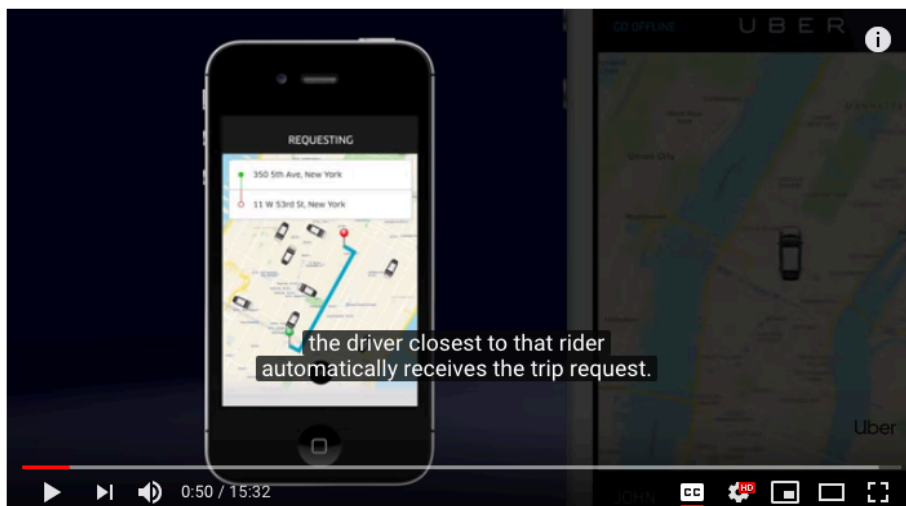
...

- Using information from drivers' devices to identify unsafe driving behavior such as speeding or harsh braking and acceleration, and to raise awareness among drivers regarding such behaviors.

(<https://privacy.uber.com/policy/>).

31. The Uber Driver System allows for “overall control of the traffic . . . on the basis of the information reported to the traffic information center,” as recited in claim 1.

32. For example, as described in Paragraphs 17-30, the Uber Driver System monitors the locations and provides routes for Uber drivers logged into the Uber Driver System through the Uber Driver App. The Uber Driver System controls the flow of Uber drivers based on their proximity to a ride request and identified vehicle information:



See, e.g., Uber Driver Video at 0:50; see also, e.g., <https://www.uber.com/us/en/ride/> (describing vehicle options); <https://help.uber.com/riders/article/selecting-a-vehicle-option?nodeId=>

[a03f9296-7905-4ab b-92d5-4dab19cc2bd3](#) (same). The Uber Driver System uses information from the Uber Driver App and current road conditions to provide real-time route guidance:

From providing accurate ETAs to navigating the fastest path to your destination, maps are at the heart of the Uber experience. Today, we're excited to introduce a redesigned navigation experience built around drivers' needs. We've completely revamped navigation on iOS and are introducing in-app navigation on Android for the first time. Now, with one-tap, turn-by-turn directions start right away, saving time and eliminating the need to juggle multiple apps.

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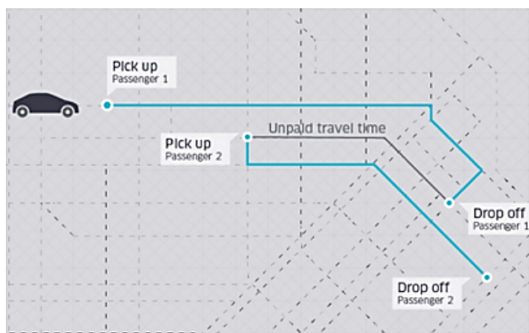
As we started rebuilding our navigation, we focused on features to help drivers feel prepared throughout their trip. These included navigation basics such as lane guidance, compound maneuvers, and real-time traffic. We also introduced night-time themed maps to help give drivers' eyes a break from harsh light during the evenings.

See, e.g. <https://www.uber.com/newsroom/a-new-navigation-experience-for-drivers/> (emphasis in original).

33. The Uber Driver System also allows Uber drivers to participate in UberPOOL, which is described as a “more efficient” travel system that dynamically updates navigation based on the proximity of the Uber driver to a series of in-route ride requests. For Uber drivers using UberPOOL, the Uber Driver System dynamically monitors and controls the flow of Uber drivers, based on their location and log-in information, to streamline navigation:

More efficient travel and more time earning

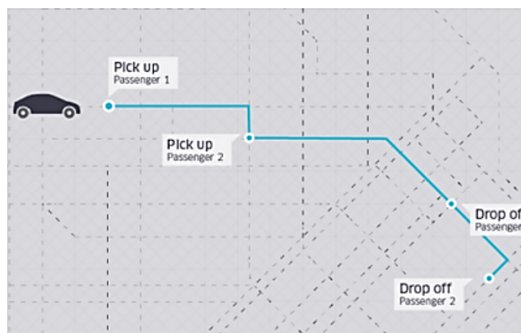
Why uberPOOL?



Example uberX trip

On an uberX trip, there is down time when you are not earning money between passenger pickups.

You take your passenger to their destination and end the trip. Your next fare doesn't start until another request comes through and you've picked up the new passenger.



Example uberPOOL trip

On an uberPOOL trip, you're earning on the way to each passenger pickup.

You collect a fare from the first pickup through the final drop-off, eliminating the unpaid period spent waiting for your next request and traveling to that pickup location.

See, e.g., <https://www.uber.com/drive/atlanta/resources/uberpool/> (describing UberPool). As described by Uber, when using UberPOOL, “[n]avigation will be updated automatically,” and that “[t]he order of pickup and drop-offs is based on the route and where everyone is heading.” <https://www.uber.com/drive/services/shared-rides/>. As further described by Uber, the purpose of UberPOOL is to eliminate the problem of having “two cars driving side by side traveling towards a similar destination,” and that UberPOOL solves that problem by “pairing those passengers together and help ease congestion by taking cars off the road.” Uber, *How Uber Pool and Shared Rides Work*, YouTube (Nov. 30, 2018), <https://www.youtube.com/watch?v=b4BCsxy9qw> at 0:25-0:38.

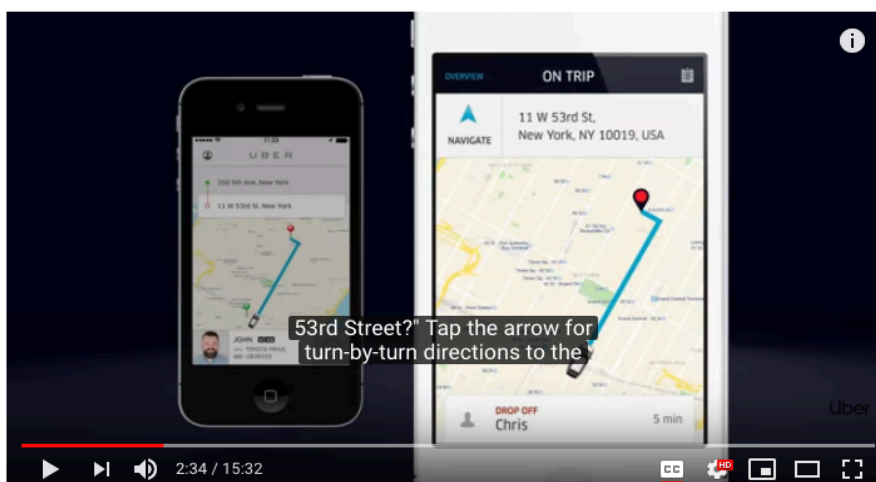
34. The Uber Driver System allows for “information about a proposed route for each vehicle [to be] transmitted from the traffic information center to . . . each vehicle,” as recited in claim 1.

35. For example, as explained in Paragraph 27, when an Uber driver accepts a ride or picks up a rider, the Uber Driver App sends information relating to the pick-up location or rider

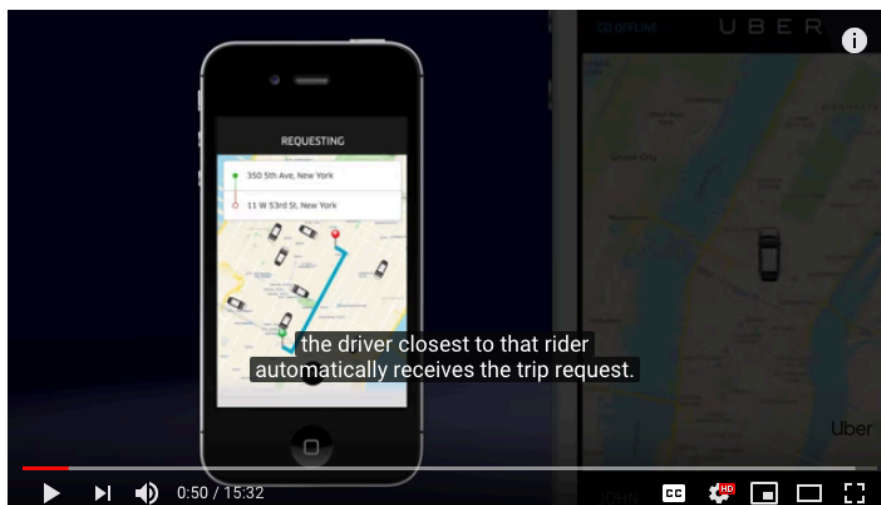
destination and receives “En Route” or “On Trip” navigation information from the Uber Services.

36. The Uber Driver System “exhibits an exact image of the actual traffic situation and guides the traffic dynamically, for control of the traffic situation centrally,” as recited in claim 1.

37. For example, the Uber Driver System allows for the Uber Driver App to display an exact image of the actual mapped route:



See, e.g., Uber Driver Video at 2:34. By tracking information provided by the Uber Driver App, the Uber Services can monitor and control the flow of Uber drivers who are logged-on to the Uber Driver App:



See, e.g., *id.* at 0:50; see also, e.g., <https://www.uber.com/newsroom/a-new-navigation-experience-for-drivers/> (describing Uber’s navigation features as including “real-time traffic”).

In addition, as explained in Paragraphs 32 and 33, the Uber Services can control and guide Uber drivers dynamically based on information such as, for example, real-time traffic conditions, destination, the location, position and speed of Uber drivers, Uber driver identification, vehicle identification, and ride type (e.g., UberPOOL).

Direct Infringement of Claim 1 of the '580 Patent

38. Defendant, pursuant to 35 U.S.C. § 271(a), has directly infringed and continues to directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '580 patent, including at least claim 1 by using and making, in this judicial district and/or elsewhere in the United States, the Uber Driver System. For example, Uber controls the Uber Driver System as a whole by running, operating, and/or supporting its Uber Services or otherwise making its Uber Services available to drivers through the Uber Driver App, and obtains benefits from such use at least by collecting Uber transportation payments. Uber makes the Uber Driver System by hosting and/or launching its Uber Services or otherwise making its Uber Services available to existing Uber drivers through the Uber Driver App, which is

configured to transmit information related to Uber's on-demand transportation services between the Uber Services and the Uber Driver App.

Inducement of Claim 1 of the '580 Patent

39. At least on or after the filing of this Complaint, Defendant, pursuant to 35 U.S.C. § 271(b), knowingly and intentionally actively induces the infringement of one or more claims of the '580 patent, including at least claim 1 by instructing and otherwise encouraging infringement and by making the Uber Driver App available to Uber drivers to download and install onto their devices in order to use the Uber Driver System. For example, Uber requires drivers installing and/or using the Uber Driver App to consent to Uber's collection of location-based services, which includes the use of the "precise or approximate location." <https://privacy.uber.com/policy/>. Uber also provides many instructional videos and other promotional materials demonstrating how the Uber Driver App can communicate with the Uber Driver System to facilitate transportation services in a way that infringes the '580 patent. *See, e.g.*, Uber Driver Video.

40. An Uber driver, pursuant to 35 U.S.C. § 271(a), directly infringes, literally and/or under the doctrine of equivalents, one or more claims of the '580 patent, including at least claim 1, by using the Uber Driver System. For example, an Uber driver utilizes the Uber Driver System as a whole by using the Uber Driver App to fulfill ride requests and otherwise communicate with the Uber Services, and obtains benefits from such use at least by virtue of customer payment for the Uber ride.

Willful Infringement of the '580 Patent

41. Uber's infringement has been willful or otherwise egregious. Upon information and belief, Uber is a member of Unified Patents Inc. ("Unified Patents"). *See, e.g.*, <https://www.unifiedpatents.com/> (listing Uber in scrollbar). Unified Patents is described as a

“membership organization that seeks to . . . deter . . . patent assertions in defined technology sectors (Zones) through” activities such as “administrative patent review (PTAB).”

<https://www.unifiedpatents.com/faq>. According to Unified Patents, members pay annual fees to subscribe to Unified Patents’ services. *Id.*

42. On January 23, 2017, Unified Patents filed a Petition for Inter Partes Review of U.S. Patent No. 6,754,580 with the United States Patent and Trademark Office. Unified Patents states only that its “members receive no *prior* notice that Unified is preparing or filing any post-grant patent challenge.” *Id.* (emphasis added). Accordingly, upon information and belief, Uber became aware of the ’580 patent at least as early January 23, 2017, the date Unified Patents filed its petition.

43. On June 15, 2017, the Patent Trial and Appeal Board (“PTAB”) issued a decision denying institution, finding that Unified Patents failed to show “there is a reasonable likelihood” that the challenged claims of the ’580 patent are invalid. On information and belief, Uber had knowledge that Unified Patents’ petition was denied. Despite its knowledge of the ’580 patent and the PTAB’s denial of institution, Uber continued to make and use the Uber Driver System in a manner that infringed the ’580 patent. Uber knew or should have known that its actions constituted an unjustifiably high risk of infringement of the ’580 Patent.

DAMAGES

44. Blackbird Technologies has sustained damages as a direct and proximate result of Uber’s infringement of the ’580 patent.

45. As a consequence of Uber’s past infringement of the ’580 patent, Blackbird Technologies is entitled to the recovery of past damages in the form of, at a minimum, a reasonable royalty.

46. As a consequence of Uber's continued and future infringement of the '580 patent, Blackbird Technologies is entitled to royalties for Uber's infringement of the '580 patent on a going-forward basis.

47. As a consequence of Uber's willful or otherwise egregious infringement of the '580 patent, Blackbird Technologies is entitled to treble damages pursuant to 35 U.S.C. § 284.

PRAYER FOR RELIEF

WHEREFORE, Blackbird Technologies respectfully requests that this Court enter judgment against Defendant, as follows:

A. Adjudging that Defendant has infringed the '580 patent, in violation of 35 U.S.C. § 271(a);

B. An award of damages to be paid by Defendant adequate to compensate Blackbird Technologies for Defendant's past infringement and any continuing or future infringement up until the date such judgment is entered, and in no event less than a reasonable royalty, including interest, costs, and disbursements pursuant to 35 U.S.C. § 284 and, if necessary to adequately compensate Blackbird Technologies for Defendant's infringement, an accounting of all infringing sales including, but not limited to, those sales not presented at trial;

C. Awarding Blackbird Technologies all damages, including treble damages, based on any infringement found to be willful or otherwise egregious, pursuant to 35 U.S.C. § 284;

D. Ordering Defendant to continue to pay royalties to Blackbird Technologies for infringement of the '580 patent on a going-forward basis;

E. Awarding that this case be exceptional under 35 U.S.C. § 285 and awarding costs, expenses, and attorneys' fees to Blackbird Technologies;

F. Awarding Blackbird Technologies pre-judgment and post-judgment interest at the maximum rate permitted by law on its damages; and

G. Granting Blackbird Technologies such further relief as this Court deems just and proper under the circumstances.

DEMAND FOR JURY TRIAL

Blackbird Technologies demands a trial by jury on all claims and issues so triable.

Dated: March 22, 2019

STAMOULIS & WEINBLATT LLC

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