

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT6417990

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
UBER TECHNOLOGIES, INC.	11/19/2020
RECEIVING PARTY DATA	
Name:	UATC, LLC
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State/Country:	CALIFORNIA
Postal Code:	94103
PROPERTY NUMBERS Total: 11	
Property Type	Number
Application Number:	16173633
Application Number:	16437827
Application Number:	16536925
Application Number:	16366561
Application Number:	62835207
Application Number:	16536895
Application Number:	62824973
Application Number:	16460421
Application Number:	16366543
Application Number:	62840165
Application Number:	16727654
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NAME OF SUBMITTER:	KASIE GROVER
SIGNATURE:	/Kasie Grover/
DATE SIGNED:	11/24/2020
Total Attachments: 18 source=Patent Assignment (1).docx#page1.tif source=Patent Assignment (1).docx#page2.tif source=Patent Assignment (1).docx#page3.tif source=Patent Assignment (1).docx#page4.tif source=Patent Assignment (1).docx#page5.tif source=Patent Assignment (1).docx#page6.tif source=Patent Assignment (1).docx#page7.tif source=Patent Assignment (1).docx#page8.tif source=Patent Assignment (1).docx#page9.tif source=Patent Assignment (1).docx#page10.tif source=Patent Assignment (1).docx#page11.tif source=Patent Assignment (1).docx#page12.tif source=Patent Assignment (1).docx#page13.tif source=Patent Assignment (1).docx#page14.tif source=Patent Assignment (1).docx#page15.tif source=Patent Assignment (1).docx#page16.tif source=Patent Assignment (1).docx#page17.tif source=Patent Assignment (1).docx#page18.tif	

PATENT ASSIGNMENT

This Patent Assignment (this "*Assignment*"), dated and effective as of the latest date of the signatures (the "*Effective Date*"), is entered into by and between Uber Technologies, Inc., a Delaware corporation ("*Uber*"), and UATC, LLC, a Delaware limited liability company ("*UATC*"). Uber and UATC are sometimes referred to herein individually as a "*Party*" and collectively as the "*Parties.*"

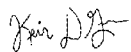
WHEREAS, prior to the Effective Date, Uber, certain of Uber's subsidiaries, and UATC entered into that certain Business Asset Contribution Agreement, dated as of June 30, 2019 (the "*Contribution Agreement*"), pursuant to which, among other things, Uber contributed, transferred and assigned to UATC all of Uber's right, title and interest in and to the patents and patent applications listed on the attached Exhibit A (the "*Transferred Patents*").

NOW THEREFORE, for good and valuable consideration, the receipt of which is acknowledged, Uber hereby assigns and transfers to UATC all right, title and interest in and to the Transferred Patents owned by the Uber including in and to any and all divisionals, continuations, continuations-in-part, substitutes, reexaminations, renewals, reissues and patents which have or which may be filed thereon or may be granted therefor, including any and all counterparts worldwide, including all right, title and interest in and to all income, royalties, damages and payments now or hereafter due or payable with respect to the Transferred Patents, and all causes of action (whether in law or equity) and the right to sue, counterclaim, and recover for the past, present and future infringement of the Transferred Patents.

Uber agrees that if requested by UATC, without charge to either of them but at the cost and expense of UATC, Uber will perform any reasonable action which may be necessary to secure and to vest in UATC the full and entire right, title and interest in, to and under the Transferred Patents, including promptly communicating and providing any and all known and accessible facts, data or any other pertinent information thereof and promptly executing and delivering any and all papers, documents, forms, declarations, oaths, affidavits and other legal instruments.

Uber authorizes and requests any official of any country or countries, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to UATC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

UBER TECHNOLOGIES, INC.

By: 
 Name: Keir Gumbs
 Title: Associate General Counsel and
Deputy Corporate Secretary
 November 19, 2020

UATC, LLC

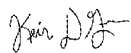
By: 
 Name: Keir Gumbs
 Title: Manager
 November 19, 2020

EXHIBIT A
Transferred Patents

TITLE	APPLICATION NUMBER	FILING DATE	PATENT NUMBER	ISSUE DATE	COUNTRY
OBJECT DETECTION BASED ON LIDAR INTENSITY	2019210587	7/31/2019	2019210587	8/6/2020	AU
OBJECT DETECTION BASED ON LIDAR INTENSITY	3,050,586	7/25/2019			CA
AUTONOMOUS VEHICLE COMPUTING SYSTEM, LIGHT DETECTION AND RANGING CALIBRATION SYSTEM AND METHOD THEREOF	201910701809.X	7/31/2019			CN
OBJECT DETECTION BASED ON LIDAR INTENSITY	19189423.7	7/31/2019			EP
AUTONOMOUS VEHICLE COMPUTING SYSTEM, LIGHT DETECTION AND RANGING CALIBRATION SYSTEM AND METHOD THEREOF	42020015496.1	9/7/2020			HK
OBJECT DETECTION BASED ON LIDAR INTENSITY	2019-135337	7/23/2019	6676814	3/16/2020	JP
OBJECT DETECTION BASED ON LIDAR INTENSITY	10201907051S	7/31/2019			GB
AUTONOMOUS VEHICLE WAYPOINT ROUTING	16/173,633	10/29/2018			US

EXHIBIT A
Transferred Patents

AUTONOMOUS VEHICLE LOCALIZATION USING A LIDAR INTENSITY MAP	16/437,827	6/11/2019			US
ROUTING GRAPH MANAGEMENT IN AUTONOMOUS VEHICLE ROUTING	16/696,227	11/26/2019			US
ROUTING GRAPH MANAGEMENT IN AUTONOMOUS VEHICLE ROUTING	PCT/US2019/063 286	11/26/2019			US
LOCAL MAP SERVER AND MULTIPLEXER	16/536,925	8/9/2019			US
LOG TRAJECTORY ESTIMATION FOR GLOBALLY CONSISTENT MAPS	16/366,561	3/27/2019			US
GROUND INTENSITY LIDAR LOCALIZER	62/835,207	4/17/2019			US
GROUND INTENSITY LIDAR LOCALIZER	16/536,895	8/9/2019			US
DEPART CONSTRAINTS IMPLEMENTATIO N IN AUTONOMOUS VEHICLE ROUTING	16/538,275	8/12/2019			US
DYNAMIC MATRIX FILTER FOR VEHICLE IMAGE SENSOR	62/824,973	3/27/2019			US
DYNAMIC MATRIX FILTER FOR VEHICLE IMAGE SENSOR	16/460,421	7/2/2019			US

EXHIBIT A
Transferred Patents

PROACTIVE GENERATION OF TUNING DATA FOR AUTONOMOUS VEHICLE DISPATCH	62/823,594	3/25/2019			US
PICK-UP/DROP- OFF ZONE AVAILABILITY ESTIMATION USING PROBABILISTIC MODEL	62/829,340	4/4/2019			US
PICK-UP/DROP- OFF ZONE AVAILABILITY ESTIMATION USING PROBABILISTIC MODEL	16/514,933	7/17/2019			US
PICK-UP/DROP- OFF ZONE HANDOFF BETWEEN AUTONOMOUS VEHICLES	62/829,343	4/4/2019			US
PICK-UP/DROP- OFF ZONE HANDOFF BETWEEN AUTONOMOUS VEHICLES	16/514,937	7/17/2019			US
PICK-UP/DROP- OFF ZONE HANDOFF	PCT/US2020/015 046	1/24/2020			US
AUTONOMOUS VEHICLE POSITIONING FOR TRIP OPTIMIZATION	16/538,236	8/12/2019			US
GEOREFERENCE D TRAJECTORY ESTIMATION SYSTEM	16/366,543	3/27/2019			US
ALL MOVER PRIORS	62/840,165	4/29/2019			US
ALL MOVER PRIORS	16/727,654	12/26/2019			US

EXHIBIT A
Transferred Patents

Dynamic Object Removal	62/892,778	8/28/2019			US
Radar Simulation	62/892,756	8/28/2019			US
Automated Accuracy Assessment in Tasking System	16/553,654	8/28/2019			US
Identifying Unknown Instances for Autonomous Driving	62/871,458	7/8/2019			US
SpAGNN: Spatially-Aware Graph Neural Networks for Relational Behavior Forecasting from Sensor Data	62/871,452	7/8/2019			US
End-to-end Contextual Perception and Prediction with Interaction Transformer	62/871,436	7/8/2019			US
Goal-Directed Occupancy Prediction for Lane-Following Actors	62/870,934	7/5/2019			US
Learning to Remember from a Multi-Task Teacher	62/852,116	5/23/2019			US
System and Methods for Autonomous Vehicle Testing	62/866,279	6/25/2019			US
LIDAR FAULT DETECTION SYSTEM	62/870,183	7/3/2019			US
Systems and Methods for Autonomous Vehicle Deployment and Control	62/882,642	8/5/2019			US
Large-Scale Visual Localization in the Age of Self-Driving Cars	62/822,846	3/23/2019			US
Differentiable Deep PatchMatch for Efficient Stereo Matching	62/822,845	3/23/2019			US

EXHIBIT A
Transferred Patents

LidarSIM: Realistic LiDAR Simulation by Leveraging the Real World	62/822,844	3/23/2019			US
Learning Joint 2D-3D Representations for Depth Completion	62/822,843	3/23/2019			US
Deep Stereo Image Compression	62/822,842	3/23/2019			US
Learning to Map by Discovering Lane Topology	62/822,841	3/23/2019			US
Network Automatic Pruning	62/822,840	3/23/2019			US
Deformable Filter Convolution for Point Cloud Reasoning	62/822,838	3/23/2019			US
PnPNet: Learning Temporal Instance Representations for Joint Perception and Motion Forecasting	62/822,837	3/23/2019			US
PolyTransform: Deep Polygon Transformer for Instance Segmentation	62/822,836	3/23/2019			US
Sensor Output Segmentation	62/870,998	7/5/2019			US
Systems and Methods for Autonomous Vehicles	62/821,354	3/20/2019			US
Methods and Systems for Motion Planning for an Autonomous Vehicle	62/864,843	6/21/2019			US
Third-Party Vehicle Operator Sign-In	62/844,051	5/6/2019			US
Full Uncertainty for Motion Planning in Autonomous Vehicles	62/887,760	8/16/2019			US

EXHIBIT A
Transferred Patents

Hardware in Loop Testing for Generation of Latency Profiles for Use in Simulation	62/888,034	8/16/2019			US
Vehicle Integration Platform (VIP) Security Integration	62/823,300	3/25/2019			US
Vehicle Integration Platform (VIP) Security Integration	16/557,084	8/30/2019			US
Association and Tracking for Autonomous Devices	62/886,001	8/13/2019			US
Methods and Systems for Managing Network Resources of an Autonomous Vehicle	62/833,401	4/12/2019			US
Methods and Systems for Managing Network Resources of a Vehicle	16/458,952	7/1/2019			US
Methods and Systems for Configuring Autonomous-Vehicle Communications	62/833,392	4/12/2019			US
Methods and Systems for Configuring Vehicle Communications	16/458,353	7/1/2019			US
Cloud Software Development Kit for Third-Party Autonomous Vehicles	16/526,079	7/30/2019			US
Offboard Vehicle Service Testing System	16/517,861	7/22/2019			US
Systems and Methods for Autonomous Vehicle Control with Interactive Object Annotation	62/863,566	6/19/2019			US

EXHIBIT A
Transferred Patents

Command Toolbox For Autonomous Vehicles	62/887,777	8/16/2019			US
Motion Prediction for Autonomous Devices	16/506,522	7/9/2019			US
Systems and Methods for Improved Monitoring of a Vehicle Integration Platform	62/839,127	4/26/2019			US
Systems and Methods for Improved Monitoring of a Vehicle Integration Platform	16/454,624	6/27/2019			US
Vehicle Integration Platform (VIP) Security	16/454,700	6/27/2019			US
End-To-End Interpretable Motion Planner for Autonomous Vehicles	16/541,739	8/15/2019			US
Multi-Task Multi-Sensor Fusion for Three-Dimensional Object Detection	62/858,489	6/7/2019			US
System And Method For Identifying Travel Way Features for Autonomous Vehicle Motion Control	62/869,251	7/1/2019			US
Deep Structured Scene Flow for Autonomous Devices	62/851,753	5/23/2019			US
Deep Structured Scene Flow for Autonomous Devices	16/531,720	8/5/2019			US
Feature Compression and Localization for Autonomous Devices	62/846,248	5/10/2019			US

EXHIBIT A
Transferred Patents

Image Based Localization System	62/829,672	4/5/2019			US
Systems and Methods for Generating Synthetic Light Detection and Ranging Data Via Machine Learning	62/834,596	4/16/2019			US
Systems and Methods for Detecting an Object Velocity	16/299,527	3/12/2019			US
LOCATION-BASED CHECKLIST INTERFACE FOR AUTONOMOUS VEHICLE USERS	PCT/US2019/045 662	8/8/2019			WO
Gridlock Solver for Motion Planning System of an Autonomous Vehicle	PCT/US2019/035 713	6/6/2019			WO
STEERABLE CAMERA FOR PERCEPTION AND VEHICLE CONTROL	PCT/US2019/047 102	8/19/2019			WO
DETECTING AND TRACKING LIDAR CROSS-TALK	16/520,812	7/24/2019	10837786	11/17/2020	US
SYSTEM AND METHOD FOR DETERMINING OBJECT INTENTION THROUGH VISUAL ATTRIBUTES	PCT/US2019/037 222	6/14/2019			WO
Multi-Task Machine-Learned Models for Object Intention Determination in Autonomous Driving	16/420,686	5/23/2019			US

EXHIBIT A
Transferred Patents

Methods and Systems for Configuring and Instructing Autonomous Vehicles	16/437,227	6/11/2019			US
Autonomous Vehicle Fleet Management for Improved Computational Resource Usage	16/446,021	6/19/2019			US
LIDAR SYSTEM DESIGN TO MITIGATE LIDAR CROSSTALK	PCT/US2019/043 410	7/25/2019			WO
LIDAR SYSTEM DESIGN TO MITIGATE LIDAR CROSS-TALK	16/520,799	7/24/2019			US
Systems and Methods for Pipelined Processing Of Sensor Data Using Hardware	PCT/US2019/035 582	6/5/2019			WO
Palette System for Cargo Transport	PCT/US2019/044 419	7/31/2019			WO
Integration Platform for Autonomous Vehicles	PCT/2019US/043 664	7/26/2019			WO
Providing Actionable Uncertainties in Autonomous Vehicles	PCT/US2019/039 529	6/27/2019			WO
AUTOMATED DELIVERY SYSTEMS FOR AUTONOMOUS VEHICLES	PCT/US2019/032 781	5/17/2019			WO
Autonomous Vehicle Control Using Service Pools Across Different Service Entities	PCT/US2019/026 918	4/11/2019			WO
Autonomous Vehicle Control Using Service Pools Across Different Service Entities	16/382,657	4/12/2019			US

EXHIBIT A
Transferred Patents

Autonomous Vehicle Control Using Service Pools Across Different Service Entities		4/11/2019			CA
Three-Dimensional Object Detection	16/353,463	3/14/2019			US
Three-Dimensional Object Detection	16/353,457	3/14/2019			US
Selective Activation of Autonomous Vehicles	16/414,144	5/16/2019			US
Autonomous Vehicle Idle State Task Selection for Improved Computational Resource Usage	PCT/US2019/043 000	7/23/2019			WO
Autonomous Vehicle Idle State Task Selection for Improved Computational Resource Usage	16/519,727	7/23/2019			US
Reducing Autonomous Vehicle Downtime and Idle Data Usage	PCT/US2019/030 430	5/2/2019			WO
Reducing Autonomous Vehicle Downtime and Idle Data Usage	16/401,629	5/2/2019			US
Reducing Autonomous Vehicle Downtime and Idle Data Usage	16/401,615	5/2/2019			US
Reducing Autonomous Vehicle Downtime and Idle Data Usage		5/2/2019			EP
Systems and Methods for Managing Space at a Location for Receiving Assets	PCT/US2019/029 320	4/26/2019			WO

EXHIBIT A
Transferred Patents

SYSTEMS AND METHODS FOR CONTROLLING AN ARRIVAL OF ONE OR MORE ASSETS AT A LOCATION	PCT/US2019/029317	4/26/2019			WO
SYSTEMS AND METHODS FOR CONTROLLING MOVEMENT OF ASSETS WITHIN A TRANSFER HUB	PCT/US2019/029367	4/26/2019			WO
Controlling an Autonomous Vehicle and the Service Selection of an Autonomous Vehicle	PCT/US2019/026916	4/11/2019			WO
Controlling an Autonomous Vehicle and the Service Selection of an Autonomous Vehicle	16/381,847	4/11/2019			US
Controlling an Autonomous Vehicle and the Service Selection of an Autonomous Vehicle	16/381,844	4/11/2019			US
Controlling an Autonomous Vehicle and the Service Selection of an Autonomous Vehicle	16/381,839	4/11/2019			US
Systems and Methods for Controlling Autonomous Vehicles that Provide a Vehicle Service to Users	16/504,034	7/5/2019			US
Lidar Sensor	29/692,678	5/28/2019	USD882430	4/28/2020	US

EXHIBIT A
Transferred Patents

Context-Specific Tolerance for Motion Control in Autonomous Vehicles	16/553,929	8/28/2019	US10571922	2/25/2020	US
Supervised Movement of Autonomous Vehicle	16/429,847	6/3/2019			US
LIDAR SENSOR ASSEMBLY INCLUDING DOVETAIL JOINT COUPLING FEATURES	PCT/US2019/032 456	5/15/2019			WO
System and Methods to Enable User Control of an Autonomous Vehicle	US16/544,294	4/19/2019			US
Autonomous Vehicle Collision Mitigation Systems and Methods	16/429,437	6/3/2019			US
Disabling Onboard Input Devices in an Autonomous Vehicle	16/504,042	7/5/2019			US
COORDINATING ON-DEMAND TRANSPORTATION WITH AUTONOMOUS VEHICLES	16/389,360	4/19/2019			US
Systems and Methods to Control Autonomous Vehicle Motion	16/445,187	6/19/2019			US
FPGA Device for Image Classification	16/377,346	4/8/2019			US
Vehicle Control System	11201907791W	8/23/2019			SG
Vehicle Control System	2019-546232	8/27/2019			JP
Vehicle Control System	18708529.5	8/23/2019			EP
Vehicle Security System	16/363,366	3/25/2019	US10659382	5/19/2020	US
Vehicle Management System	16/554,711	8/29/2019			US

EXHIBIT A
Transferred Patents

Vehicle Management System	11201905385R	6/13/2019			SG
Vehicle Management System	2019-531719	6/13/2019			JP
Vehicle Management System	17823305.2	7/12/2019			EP
Vehicle Management System	201780084481.0	7/24/2019			CN
Vehicle Management System	3047095	6/13/2019			CA
Vehicle Servicing System	11201905372S	6/13/2019			SG
Vehicle Servicing System	17825340.7	7/12/2019			EP
Vehicle Servicing System	201780083981.2	7/18/2019		7/30/2020	CN
Vehicle Servicing System	3047086	6/13/2019			CA
Charge Control System for Mobile Energy Storage Fleet	16/369,460	3/29/2019			US
Charge Control System for Mobile Energy Storage Fleet	16/369,454	3/29/2019			US
Charge Control System for Mobile Energy Storage Fleet	18709119.4	7/22/2019			EP
NEURAL NETWORK SYSTEM FOR AUTONOMOUS VEHICLE CONTROL	201780064218.5	4/17/2019			CN
SENSOR CLEANING SYSTEM FOR VEHICLES	2019-137876	7/26/2019		9/2/2020	JP
EXTERNAL SENSOR ASSEMBLY FOR VEHICLES	16/504,049	7/5/2019			US

EXHIBIT A
Transferred Patents

TRANSPORT FACILITATION SYSTEM FOR CONFIGURING A SERVICE VEHICLE FOR A USER	3040081	4/11/2019			CA
FACILITATING RIDER PICK-UP FOR A SELF-DRIVING VEHICLE	16/420,654	5/23/2019			US
DETECTING OBJECTS WITHIN A VEHICLE IN CONNECTION WITH A SERVICE	16/414,979	5/17/2019	US10662696	5/26/2020	US
SELECTING VEHICLE TYPE FOR PROVIDING TRANSPORT	16/509,168	7/11/2019			US
AUTONOMOUS VEHICLE OPERATED WITH GUIDE ASSISTANCE	20159753.1	5/13/2016			EP
AUTONOMOUS VEHICLE OPERATED WITH GUIDE ASSISTANCE	20159764.8	5/13/2016			EP
AUTONOMOUS VEHICLE OPERATED WITH GUIDE ASSISTANCE	16793657.4	5/13/2016	6020160359 81.2	5/6/2020	DE
AUTONOMOUS VEHICLE OPERATED WITH GUIDE ASSISTANCE	16793657.4	5/13/2016	3295268	5/6/2020	FR
AUTONOMOUS VEHICLE OPERATED WITH GUIDE ASSISTANCE	16793657.4	5/13/2016	3295268	5/6/2020	GB

EXHIBIT A
Transferred Patents

AUTONOMOUS VEHICLE OPERATED WITH GUIDE ASSISTANCE	16793657.4	5/13/2016	3295268	5/6/2020	NL
AUTONOMOUS VEHICLE OPERATED WITH GUIDE ASSISTANCE	10-2017-7035830	5/13/2016			KR
PROVIDING REMOTE ASSISTANCE TO AN AUTONOMOUS VEHICLE	16/430,943	6/4/2019			US
METHODS, SYSTEMS AND APPARATUS FOR MULTI-SENSORY STEREO VISION FOR ROBOTICS	201480022190.5	3/14/2014			CN
METHODS, SYSTEMS AND APPARATUS FOR MULTI-SENSORY STEREO VISION FOR ROBOTICS	14770009.0	3/14/2014			EP
METHODS, SYSTEMS AND APPARATUS FOR MULTI-SENSORY STEREO VISION FOR ROBOTICS	2016-502343	3/14/2014	6514681	4/19/2019	JP
METHODS, SYSTEMS AND APPARATUS FOR MULTI-SENSORY STEREO VISION FOR ROBOTICS	10-2015-7029111	3/14/2014			KR
SATELLITE SIGNAL CALIBRATION SYSTEM	16/532,789	8/6/2019			US
TRAVEL TIME ESTIMATION	15/610,068	5/31/2017	10810883		US

EXHIBIT A
Transferred Patents

TELEASSISTANCE DATA ENCODING FOR SELF-DRIVING VEHICLES	15/452,456	3/7/2017	10202126	2/12/2019	US
HYBRID TRIP PLANNING FOR AUTONOMOUS VEHICLES	17844132.5	8/14/2017			EP
HYBRID TRIP PLANNING FOR AUTONOMOUS VEHICLES	16/437,881	6/11/2019	10586458	3/10/2020	US
DESTINATION CHANGES IN AUTONOMOUS VEHICLES	2018266108	5/8/2018			AU
DESTINATION CHANGES IN AUTONOMOUS VEHICLES	3,063,089	5/8/2018			CA
DESTINATION CHANGES IN AUTONOMOUS VEHICLES	11201910272T	5/8/2018			SG
DESTINATION CHANGES IN AUTONOMOUS VEHICLES	16/545,300	8/20/2019			US
AUTONOMOUS VEHICLE ROUTING USING ANNOTATED MAPS	16/519,415	7/23/2019			US
ON-DEMAND TRANSPORT SYSTEM FACILITATING THIRD-PARTY AUTONOMOUS VEHICLES	16/389,794	4/19/2019			US
ON-DEMAND TRANSPORT SYSTEM FACILITATING THIRD-PARTY AUTONOMOUS VEHICLES	PCT/US2019/028396	4/19/2019			WO

EXHIBIT A
Transferred Patents

NAVIGATIONAL CONSTRAINTS FOR AUTONOMOUS VEHICLES	16/434,501	6/7/2019			US
COMPUTER SYSTEM FOR UTILIZING ULTRASONIC SIGNALS TO IMPLEMENT OPERATIONS FOR AUTONOMOUS VEHICLES	16/828,632	3/24/2020			US