

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
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EPAS ID: PAT8329830

<b>SUBMISSION TYPE:</b>	RESUBMISSION
<b>NATURE OF CONVEYANCE:</b>	PATENT ASSIGNMENT AGREEMENT
<b>RESUBMIT DOCUMENT ID:</b>	508267249

**CONVEYING PARTY DATA**

Name	Execution Date
BLACKMORE SENSORS & ANALYTICS, LLC	12/01/2023

**RECEIVING PARTY DATA**

<b>Name:</b>	AURORA OPERATIONS, INC.
<b>Street Address:</b>	1654 SMALLMAN STREET
<b>City:</b>	PITTSBURGH
<b>State/Country:</b>	PENNSYLVANIA
<b>Postal Code:</b>	15222

**PROPERTY NUMBERS Total: 38**

Property Type	Number
Application Number:	16888071
Application Number:	17066077
Application Number:	17506397
Application Number:	17568360
Application Number:	17586523
Application Number:	17592265
Application Number:	17592286
Application Number:	17723340
Application Number:	17956389
Application Number:	17959406
Application Number:	18085376
Application Number:	18099842
Application Number:	18320821
Application Number:	18469002
Application Number:	18481678
Application Number:	18492998
Application Number:	18499734
Application Number:	18507612
Application Number:	18508922

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Property Type	Number
Application Number:	62183921
Application Number:	62427573
Application Number:	62428109
Application Number:	62428117
Application Number:	62428122
Application Number:	62661327
Application Number:	62711893
Application Number:	62717200
Application Number:	62727294
Application Number:	62739915
Application Number:	62760437
Application Number:	62783749
Application Number:	62788368
Application Number:	62788415
Application Number:	62788304
Application Number:	62837050
Application Number:	62864877
Application Number:	62874351
Application Number:	62874835

**CORRESPONDENCE DATA**

**Fax Number:** (202)672-5399

*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.*

**Phone:** 2026725300

**Email:** ipdocketing@foley.com, moneill@foley.com, SHall@foley.com

**Correspondent Name:** FOLEY & LARDNER LLP

**Address Line 1:** 3000 K STREET, N.W.

**Address Line 2:** SUITE 600

**Address Line 4:** WASHINGTON, D.C. 20007

**ATTORNEY DOCKET NUMBER:** 120261-0111

**NAME OF SUBMITTER:** MIJY O'NEILL

**SIGNATURE:** /Mijy O'Neill/

**DATE SIGNED:** 12/14/2023

**Total Attachments: 36**

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## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT8314442

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	CHANGE OF NAME

**CONVEYING PARTY DATA**

Name	Execution Date
BLACKMORE SENSORS & ANALYTICS, LLC	12/01/2023

**RECEIVING PARTY DATA**

<b>Name:</b>	AURORA OPERATIONS, INC.
<b>Street Address:</b>	1654 SMALLMAN STREET
<b>City:</b>	PITTSBURGH
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Application Number:	62183921

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
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<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
BLACKMORE SENSORS & ANALYTICS, LLC	12/01/2023
<b>RECEIVING PARTY DATA</b>	
<b>Company Name:</b>	AURORA OPERATIONS, INC.
<b>Street Address:</b>	1654 SMALLMAN STREET
<b>City:</b>	PITTSBURGH
<b>State/Country:</b>	PENNSYLVANIA
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<b>Application Number:</b>	62837050
<b>Application Number:</b>	62864877
<b>Application Number:</b>	62874351
<b>Application Number:</b>	62874835

**CORRESPONDENCE DATA**

**Fax Number:** (202)672-5399  
**Phone:** 2026725300  
**Email:** ipdocketing@foley.com, moneill@foley.com

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**Correspondent Name:** FOLEY & LARDNER LLP  
**Address Line 1:** 3000 K STREET, N.W.  
**Address Line 2:** SUITE 600  
**Address Line 4:** WASHINGTON, D.C. 20007

<b>ATTORNEY DOCKET NUMBER:</b>	120261-0111
<b>NAME OF SUBMITTER:</b>	MIJY O'NEILL
<b>Signature:</b>	/Mijy O'Neill/
<b>Date:</b>	12/06/2023

**Total Attachments: 31**

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**RECEIPT INFORMATION**

**EPAS ID:** PAT8314442  
**Receipt Date:** 12/06/2023

## PATENT ASSIGNMENT AGREEMENT

THIS PATENT ASSIGNMENT AGREEMENT ("Agreement") is made and entered into as of December 1, 2023 (the "Effective Date"), by and between Blackmore Sensors & Analytics, LLC, a Delaware limited liability company having a place of business at 1654 Smallman Street, Pittsburgh, PA 15222 ("Assignor") and Aurora Operations, Inc., a Delaware corporation having a place of business at 1654 Smallman Street, Pittsburgh, PA 15222 ("Assignee").

**WHEREAS**, Assignor agrees to transfer the Assigned Patents (defined below) to Assignee; and

**NOW, THEREFORE**, in consideration of the premises and the mutual representations, warranties, covenants and agreements set forth in this Agreement and other good and valuable consideration, the receipt of which is acknowledged by the parties, the parties agree as follows:

- (1) Definitions. As used in this Agreement, the following terms have the respective meanings set forth below.
  - (a) "Effective Date" has the meaning set forth in the preamble to this Agreement.
  - (b) "Patents" means (i) any and all patents, patent applications, and invention disclosures; (ii) all inventions and improvements described and claimed therein; (iii) all reissues, divisions, continuations, renewals, extensions, and continuations-in-part thereof; (iv) all income, royalties, damages, claims, and payments now or hereafter due or payable under and with respect thereto, including, without limitation, damages and payments for past and future infringements thereof; (v) all rights to sue for past, present, and future infringements thereof; and (vi) all rights corresponding to any of the foregoing throughout the world, including the right to claim priority to (i) and (iii).
- (2) Assignment. Assignor does hereby irrevocably and unconditionally assign, transfer, convey and deliver to the Assignee all of Assignor's right, title and interest in, to and under its Patents, including those set forth in Exhibit A attached hereto ("Assigned Patents"), together with the goodwill associated therewith.
- (3) Assumption. Assignee hereby accepts the assignment, transfer, conveyance and delivery of the right, title and interest in, to and under the Assigned Patents, sold, transferred, assigned, conveyed and delivered by Assignor pursuant to Section 2.
- (4) Further Assurances. Assignor agrees to execute and deliver, at the request of Assignee, all papers, instruments and agreements, and to perform any other reasonable acts Assignee may require, in order to vest all of Assignor's right, title and interest in and to the Assigned Patents in Assignee, including, without limitation, all documents necessary to record in the name of Assignee the assignment of the Assigned Patents with the United States Patent and Trademark Office and, with respect to any foreign rights included in the Assigned Patents, with any other applicable foreign or international office or registrar.



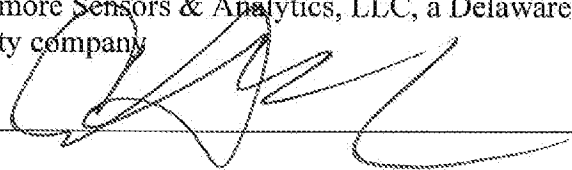
- (5) Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and thereof, and supersedes all prior agreements and understandings, both written and oral, between the parties with respect to the subject matter hereof and thereof.
- (6) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns.
- (7) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of law thereof (or of any other jurisdiction).
- (8) Counterparts. This Agreement may be executed in two or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts (any one of which may be by any digital imaging device (e.g., .pdf format)) have been signed by each of the parties and delivered to the other party, it being understood that all parties need not sign the same counterpart.
- (9) Severability. If any term, provision, covenant, or restriction of this Agreement is held by a court of competent jurisdiction or other governmental body to be invalid, void, or unenforceable, the remainder of the terms, provisions, covenants, and restrictions of this Agreement will remain in full force and effect and will in no way be affected, impaired, or invalidated so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner materially adverse to either party. Upon such a determination, the parties will negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in an acceptable manner in order that the transactions contemplated hereby be consummated as originally contemplated to the fullest extent possible.
- (10) Amendment, Waiver, and Termination. This Agreement cannot be amended, waived, or terminated except by a writing signed by the parties hereto and that identifies itself as an amendment to this Agreement.
- (11) Headings; Effectiveness. The section headings and captions contained herein are for convenience of reference only and will not control or affect the meaning or construction of any provision hereof. A signed copy of this Agreement delivered by e-mail, or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, Assignor and Assignee have caused this Agreement to be signed and executed by the undersigned officers before a Notary Public on this 1st day of December, 2023:

**ASSIGNOR**

Blackmore Sensors & Analytics, LLC, a Delaware limited liability company

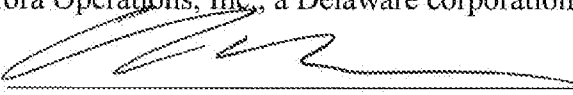
By: 

Name: Catherine Tornabene

Title: Deputy General Counsel, Intellectual Property

**ASSIGNEE**

Aurora Operations, Inc., a Delaware corporation

By: 

Name: Chris Urmson

Title: Chief Executive Officer

Subscribed and sworn before me this 1st day of December, 2023.

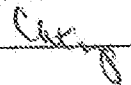
By: SEE BELOW

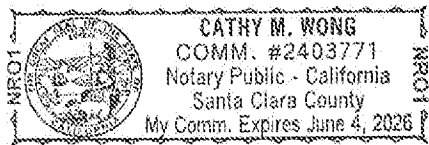
Name: CATHY M. WONG

Notary Public

A notary public or other officer completing this certificate certifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
County of SANTA CLARA  
Subscribed and sworn to (or affirmed) before me  
on this 01<sup>st</sup> day of December, 2023  
by CATHERINE TORNABENE CHRIS URMSON  
proved to me on the basis of satisfactory evidence  
to be the person (s) who appeared before me.

Signature: 



**EXHIBIT A**

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
AU	2019417832	12/31/2019	LIDAR SYSTEM INCLUDING MULTIFACETED DEFLECTOR	2019417832	Blackmore Sensors & Analytics, LLC
AU	2019418766	12/23/2019	LIDAR APPARATUS WITH ROTATABLE POLYGON DEFLECTOR HAVING REFRACTIVE FACETS	2019418766	Blackmore Sensors & Analytics, LLC
AU	2019418812	12/31/2019	Method And System For Refractive Beam-Steering	2019418812	Blackmore Sensors & Analytics, LLC
AU	2021257940	12/31/2019	LIDAR SYSTEM INCLUDING MULTIFACETED DEFLECTOR	2021257940	Blackmore Sensors & Analytics, LLC
AU	2021229207	12/23/2019	LIDAR APPARATUS WITH ROTATABLE POLYGON DEFLECTOR HAVING REFRACTIVE FACETS	2021229207	Blackmore Sensors & Analytics, LLC
AU	2020261259	2/10/2020	PROVIDING SPATIAL DISPLACEMENT OF TRANSMIT AND RECEIVE MODES IN LIDAR SYSTEM	2020261259	Blackmore Sensors & Analytics, LLC
AU	2022200101	2/10/2020	PROVIDING SPATIAL DISPLACEMENT OF TRANSMIT AND RECEIVE MODES IN LIDAR SYSTEM	2022200101	Blackmore Sensors & Analytics, LLC
AU	2021271815	5/14/2021	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
CA	3109480	7/25/2019	METHOD AND SYSTEM FOR SCANNING OF COHERENT LIDAR WITH FAN OF COLLIMATED BEAMS		Blackmore Sensors & Analytics, LLC
CA	3111509	8/14/2019	Method And System For Pitch-Catch Scanning Of Coherent Lidar	3111509	Blackmore Sensors & Analytics, LLC
CA	3113404	10/1/2019	Method And System For Optimizing Scanning Of Coherent Lidar	3113404	Blackmore Sensors & Analytics, LLC
CA	3114616	11/12/2019	METHOD AND SYSTEM FOR LASER PHASE TRACKING FOR INTERNAL REFLECTION SUBTRACTION IN PHASE-ENCODED LIDAR	3114616	Blackmore Sensors & Analytics, LLC
CA	3125553	12/23/2019	LIDAR APPARATUS WITH ROTATABLE POLYGON DEFLECTOR HAVING REFRACTIVE FACETS		Blackmore Sensors & Analytics, LLC
CA	3125683	12/31/2019	Method And System For Refractive Beam-Steering		Blackmore Sensors & Analytics, LLC
CA	3125686	12/31/2019	LIDAR SYSTEM INCLUDING MULTIFACETED DEFLECTOR		Blackmore Sensors & Analytics, LLC
CA	3137540	2/10/2020	PROVIDING SPATIAL DISPLACEMENT OF TRANSMIT AND RECEIVE MODES IN LIDAR SYSTEM	3137540	Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
CA	3146414	7/14/2020	Method And System For Sidelobe Suppression In Phase Encoded Doppler Lidar		Blackmore Sensors & Analytics, LLC
CA	3147597	7/13/2020	METHOD AND SYSTEM FOR ENHANCED VELOCITY RESOLUTION AND SIGNAL TO NOISE RATIO IN OPTICAL PHASE-ENCODED RANGE DETECTION		Blackmore Sensors & Analytics, LLC
CA	3173997	11/12/2019	METHOD AND SYSTEM FOR LASER PHASE TRACKING FOR INTERNAL REFLECTION SUBTRACTION IN PHASE-ENCODED LIDAR		Blackmore Sensors & Analytics, LLC
CA	3178768	5/14/2021	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
CN	202080030370.3	2/10/2020	Space shift for providing transmit and receive modes in an LIDAR system	CN113711081 / ZL202080030370.3	Blackmore Sensors & Analytics, LLC
CN	202211656059.7	2/10/2020	PROVIDING SPATIAL DISPLACEMENT OF TRANSMIT AND RECEIVE MODES IN LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
CN	201980087974.9	12/31/2019	LIDAR system comprising a multi-facet deflector	CN113316726 / ZL201980087974.9	Blackmore Sensors & Analytics, LLC
CN	202210187074.5	12/31/2019	LIDAR SYSTEM INCLUDING MULTIFACETED DEFLECTOR		Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
CN	201980087957.5	12/23/2019	LIDAR device with rotatable polygonal deflector having refractive facet		Blackmore Sensors & Analytics, LLC
CN	202180034633.2	5/14/2021	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
CN	201980087984.2	12/31/2019	Method and system for refractive beam steering		Blackmore Sensors & Analytics, LLC
CN	202080051843.8	7/13/2020	METHOD AND SYSTEM FOR ENHANCED VELOCITY RESOLUTION AND SIGNAL TO NOISE RATIO IN OPTICAL PHASE-ENCODED RANGE DETECTION	CN114286952 / ZL202080051843.8	Blackmore Sensors & Analytics, LLC
CN	202311278493.0	7/13/2020	METHOD AND SYSTEM FOR ENHANCED VELOCITY RESOLUTION AND SIGNAL TO NOISE RATIO IN OPTICAL PHASE-ENCODED RANGE DETECTION		Blackmore Sensors & Analytics, LLC
CN	201980071414.4	11/12/2019	Method and system for laser phase tracking for internal reflection reduction in phase coding LIDAR		Blackmore Sensors & Analytics, LLC
CN	201980063047.3	10/1/2019	Method And System For Optimizing Scanning Of Coherent Lidar		Blackmore Sensors & Analytics, LLC
CN	201980065586.0	8/14/2019	Method and system for coherent scanning of coherent LIDAR		Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
CN	201980053115.8	7/25/2019	Method and system for scanning coherent LIDAR using collimated beam sector	CN112601999 / ZL201980053115.8	Blackmore Sensors & Analytics, LLC
CN	202211382580.6	7/25/2019	Method and system for scanning coherent LIDAR using collimated beam sector		Blackmore Sensors & Analytics, LLC
CN	201980033898.3	4/22/2019	Method and system for controlling autonomous vehicle using coherent distance Doppler optical sensor	CN112154347 / ZL201980033898.3	Blackmore Sensors & Analytics, LLC
CN	202210388750.5	4/22/2019	Method and system for controlling autonomous vehicle by using coherent distance Doppler optical sensor		Blackmore Sensors & Analytics, LLC
CN	201880009947.5	2/2/2018	LIDAR system for adjusting Doppler effect	CN110268683 / ZL201880009947.5	Blackmore Sensors & Analytics, LLC
CN	202211292352.X	2/2/2018	LIDAR system for adjusting Doppler effect		Blackmore Sensors & Analytics, LLC
CN	201880044454.5	7/27/2018	METHOD AND SYSTEM FOR USING SQUARE WAVE DIGITAL CHIRP SIGNAL FOR OPTICAL CHIRPED RANGE DETECTION		Blackmore Sensors & Analytics, LLC
CN	201780081215.2	11/21/2017	Method and system for Doppler detection and Doppler correction for optical chirp distance detection	CN110114632/ ZL201780081215.2	Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
CN	202111234165.1	11/21/2017	Method and system for Doppler detection and correction of optical chirp distance detection		Blackmore Sensors & Analytics, LLC
CN	201780081804.0	11/21/2017	METHOD AND SYSTEM FOR AUTOMATIC REAL-TIME ADAPTIVE SCANNING WITH OPTICAL RANGING SYSTEMS	CNN110140064 / ZL201780081804.0	Blackmore Sensors & Analytics, LLC
CN	202310820368.1	11/21/2017	METHOD AND SYSTEM FOR AUTOMATIC REAL-TIME ADAPTIVE SCANNING WITH OPTICAL RANGING SYSTEMS		Blackmore Sensors & Analytics, LLC
CN	201780081807.4	11/21/2017	METHOD AND SYSTEM FOR ADAPTIVE SCANNING WITH OPTICAL RANGING SYSTEMS	CN110140063 / ZL201780081807.4	Blackmore Sensors & Analytics, LLC
CN	201780081968	11/21/2017	Method and system for classifying objects with a set of point cloud data	CN110168311 / ZL201780081968.3	Blackmore Sensors & Analytics, LLC
CN	202111404151.X	11/21/2017	METHOD AND SYSTEM FOR CLASSIFICATION OF AN OBJECT IN A POINT CLOUD DATA SET		Blackmore Sensors & Analytics, LLC
EP	17876731.5	11/21/2017	Method And System For Classification Of An Object In A Point Cloud Data Set	EP3548840	Blackmore Sensors & Analytics, LLC



Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
DE	17876731.5	11/21/2017	Method And System For Classification Of An Object In A Point Cloud Data Set	EP3548840 / 602017075320.3	Blackmore Sensors & Analytics, LLC
EP	23201649.3	11/21/2017	Method And System For Classification Of An Object In A Point Cloud Data Set		Blackmore Sensors & Analytics, LLC
EP	17888807.9	11/21/2017	Method And System For Adaptive Scanning With Optical Ranging Systems		Blackmore Sensors & Analytics, LLC
EP	17876081.5	11/21/2017	Method And System For Automatic Real-Time Adaptive Scanning With Optical Ranging Systems		Blackmore Sensors & Analytics, LLC
EP	17898933.1	11/21/2017	Method And System For Doppler Detection And Doppler Correction Of Optical Chirped Range Detection		Blackmore Sensors & Analytics, LLC
EP	18839276.5	7/27/2018	Method And System For Using Square Wave Digital Chirp Signal For Optical Chirped Range Detection		Blackmore Sensors & Analytics, LLC
EP	18748729.3	2/2/2018	METHOD AND SYSTEM FOR DOPPLER DETECTION AND DOPPLER CORRECTION OF OPTICAL PHASE-ENCODED RANGE DETECTION		Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
EP	19791789.1	4/22/2019	METHOD AND SYSTEM FOR CONTROLLING AUTONOMOUS VEHICLE USING COHERENT RANGE DOPPLER OPTICAL SENSORS	EP3785043	Blackmore Sensors & Analytics, LLC
DE	19791789.1	4/22/2019	METHOD AND SYSTEM FOR CONTROLLING AUTONOMOUS VEHICLE USING COHERENT RANGE DOPPLER OPTICAL SENSORS	EP3785043 / 602019035212.3	Blackmore Sensors & Analytics, LLC
EP	23189916.2	4/22/2019	METHOD AND SYSTEM FOR CONTROLLING AUTONOMOUS VEHICLE USING COHERENT RANGE DOPPLER OPTICAL SENSORS		Blackmore Sensors & Analytics, LLC
EP	18831205.2	7/10/2018	Method And System For Time Separated Quadrature Detection Of Doppler Effects In Optical Range Measurements		Blackmore Sensors & Analytics, LLC
EP	19847430.6	7/25/2019	METHOD AND SYSTEM FOR SCANNING OF COHERENT LIDAR WITH FAN OF COLLIMATED BEAMS		Blackmore Sensors & Analytics, LLC
EP	19856858.6	8/14/2019	Method And System For Pitch-Catch Scanning Of Coherent Lidar		Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
EP	19794778.1	10/1/2019	Method And System For Optimizing Scanning Of Coherent Lidar	EP3861366	Blackmore Sensors & Analytics, LLC
DE	19794778.1	10/1/2019	Method And System For Optimizing Scanning Of Coherent Lidar	EP3861366 / 602019020117.6	Blackmore Sensors & Analytics, LLC
SE	19794778.1	10/1/2019	Method And System For Optimizing Scanning Of Coherent Lidar	EP3861366	Blackmore Sensors & Analytics, LLC
EP	19836212.1	11/12/2019	METHOD AND SYSTEM FOR LASER PHASE TRACKING FOR INTERNAL REFLECTION SUBTRACTION IN PHASE-ENCODED LIDAR		Blackmore Sensors & Analytics, LLC
EP	20750961.3	7/13/2020	METHOD AND SYSTEM FOR ENHANCED VELOCITY RESOLUTION AND SIGNAL TO NOISE RATIO IN OPTICAL PHASE-ENCODED RANGE DETECTION		Blackmore Sensors & Analytics, LLC
EP	20855843.7	7/14/2020	SYSTEM FOR SIDELobe SUPPRESSION IN PHASE ENCODED DOPPLER LIDAR		Blackmore Sensors & Analytics, LLC
EP	19845942.2	12/31/2019	Method And System For Refractive Beam-Steering		Blackmore Sensors & Analytics, LLC
EP	19839775.4	12/23/2019	LIDAR APPARATUS WITH ROTATABLE POLYGON DEFLECTOR HAVING REFRACTIVE FACETS		Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
EP	21730417.9	5/14/2021	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
EP	19845809.3	12/31/2019	LIDAR SYSTEM INCLUDING MULTIFACETED DEFLECTOR		Blackmore Sensors & Analytics, LLC
EP	20710382.1	2/10/2020	PROVIDING SPATIAL DISPLACEMENT OF TRANSMIT AND RECEIVE MODES IN LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
IL	298218	5/14/2021	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
JP	2021-517840	10/1/2019	Method And System For Optimizing Scanning Of Coherent Lidar	7060908	Blackmore Sensors & Analytics, LLC
JP	2021-512417	8/14/2019	Method and system for the pitch-catch scanning of coherent LIDAR	7097508	Blackmore Sensors & Analytics, LLC
JP	2021-525204	11/12/2019	METHOD AND SYSTEM FOR LASER PHASE TRACKING FOR INTERNAL REFLECTION SUBTRACTION IN PHASE-ENCODED LIDAR	7208388	Blackmore Sensors & Analytics, LLC
JP	2021-538998	12/23/2019	The LIDAR apparatus provided with the rotation type polygon deflecting device which has a refraction facet	7121862	Blackmore Sensors & Analytics, LLC
JP	2021-538999	12/31/2019	Refraction beam steering method and system	7122477	Blackmore Sensors & Analytics, LLC

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JP	2021-118743	7/19/2021	METHOD AND SYSTEM FOR DOPPLER DETECTION AND DOPPLER CORRECTION FOR OPTICAL PHASE CODING DISTANCE DETECTION	7277517	Blackmore Sensors & Analytics, LLC
JP	2021-126516	8/2/2021	METHOD AND SYSTEM FOR CLASSIFICATION OF OBJECT IN POINT CLOUD DATA SET	7252285	Blackmore Sensors & Analytics, LLC
JP	2021-147661	7/27/2018	Methods and systems for using square wave digital chirp signals for optical chirp range detection	7317910	Blackmore Sensors & Analytics, LLC
JP	2022-000212	4/22/2019	Method And System For Controlled Autonomous Vehicle Using Coherent Range Doppler Optical Sensors	7295980	Blackmore Sensors & Analytics, LLC
JP	2022-065623	10/1/2019	Method And System For Optimizing Scanning Of Coherent Lidar		Blackmore Sensors & Analytics, LLC
JP	2022-102598	8/14/2019	Method And System For Pitch-Catch Scanning Of Coherent Lidar		Blackmore Sensors & Analytics, LLC
JP	2022-569030	5/14/2021	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
JP	2023-077302	2/10/2020	PROVIDING SPATIAL DISPLACEMENT OF TRANSMIT AND RECEIVE MODES IN LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC

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JP	2023-095571	4/22/2019	Method And System For Controlled Autonomous Vehicle Using Coherent Range Doppler Optical Sensors		Blackmore Sensors & Analytics, LLC
JP	2023-192458	11/12/2019	METHOD AND SYSTEM FOR LASER PHASE TRACKING FOR INTERNAL REFLECTION SUBTRACTION IN PHASE-ENCODED LIDAR		Blackmore Sensors & Analytics, LLC
KR	10-2019-7018575	11/21/2017	Method and system for classification of objects in point cloud data sets	10-2272801	Blackmore Sensors & Analytics, LLC
KR	10-2019-7019062	11/21/2017	Adaptive scanning method and system using optical distance measurement system	10-2252219	Blackmore Sensors & Analytics, LLC
KR	10-2019-7019076	11/21/2017	Method and apparatus for Doppler detection and Doppler correction of optical chirp distance detection	10-2254468	Blackmore Sensors & Analytics, LLC
KR	10-2019-7019078	11/21/2017	Automatic real-time adaptive scanning method and system using optical distance measurement system	10-2254466	Blackmore Sensors & Analytics, LLC
KR	10-2019-7022921	2/2/2018	LIDAR system to adjust the Doppler effect	10-2214061	Blackmore Sensors & Analytics, LLC
KR	10-2019-7038797	7/27/2018	Method and system for using square wave digital chirped signal for optically chirped distance detection	10-2340050	Blackmore Sensors & Analytics, LLC

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KR	10-2020-7033550	4/22/2019	Autonomous Vehicle Control Method and System Using Coherent Distance Doppler Optical Sensor	10-2272212	Blackmore Sensors & Analytics, LLC
KR	10-2021-7003210	2/2/2018	LIDAR SYSTEM TO ADJUST DOPPLER EFFECTS	10-2278768	Blackmore Sensors & Analytics, LLC
KR	10-2021-7006972	7/25/2019	Method and system for scanning of a coherent LIDAR using a fan of collimated beams	10-2532001	Blackmore Sensors & Analytics, LLC
KR	10-2021-7009073	10/1/2019	Methods and systems for optimizing scanning of coherent LIDARs	10-2362322	Blackmore Sensors & Analytics, LLC
KR	10-2021-7009705	8/14/2019	Method and system for pitch-catch scanning in Coherent LIDAR	10-2363751	Blackmore Sensors & Analytics, LLC
KR	10-2021-7010786	11/12/2019	Laser phase tracking method and system for internal reflection subtraction in phase encoding LIDAR	10-2352325	Blackmore Sensors & Analytics, LLC
KR	10-2021-7014545	11/21/2017	METHOD AND SYSTEM FOR DOPPLER DETECTION AND DOPPLER CORRECTION OF OPTICAL CHIRPED RANGE DETECTION	10-2399757	Blackmore Sensors & Analytics, LLC
KR	10-2021-7014560	11/21/2017	METHOD AND SYSTEM FOR AUTOMATIC REAL-TIME ADAPTIVE SCANNING WITH OPTICAL RANGING SYSTEMS	10-2380943	Blackmore Sensors & Analytics, LLC

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KR	10-2021-7019744	4/22/2019	METHOD AND SYSTEM FOR CONTROLLING AUTONOMOUS VEHICLE USING COHERENT RANGE DOPPLER OPTICAL SENSORS	10-2405872	Blackmore Sensors & Analytics, LLC
KR	10-2021-7020076	11/21/2017	METHOD AND SYSTEM FOR CLASSIFICATION OF AN OBJECT IN A POINT CLOUD DATA SET	10-2380216	Blackmore Sensors & Analytics, LLC
KR	10-2021-7021869	2/2/2018	LIDAR SYSTEM TO ADJUST DOPPLER EFFECTS	10-2379447	Blackmore Sensors & Analytics, LLC
KR	10-2021-7040580	7/27/2018	METHOD AND SYSTEM FOR USING SQUARE WAVE DIGITAL CHIRP SIGNAL FOR OPTICAL CHIRPED RANGE DETECTION	10-2454659	Blackmore Sensors & Analytics, LLC
KR	10-2021-7043304	11/12/2019	METHOD AND SYSTEM FOR LASER PHASE TRACKING FOR INTERNAL REFLECTION SUBTRACTION IN PHASE ENCODED LIDAR	10-2391143	Blackmore Sensors & Analytics, LLC
KR	10-2022-7004494	8/14/2019	Method And System For Pitch-Catch Scanning Of Coherent Lidar	10-2441163	Blackmore Sensors & Analytics, LLC
KR	10-2022-7009625	11/21/2017	METHOD AND SYSTEM FOR CLASSIFICATION OF AN OBJECT IN A POINT CLOUD DATA SET	10-2443626	Blackmore Sensors & Analytics, LLC



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KR	10-2022-7011058	12/31/2019	Method And System For Refractive Beam-Steering	10-2481212	Blackmore Sensors & Analytics, LLC
KR	10-2022-7015489	11/21/2017	METHOD AND SYSTEM FOR DOPPLER DETECTION AND DOPPLER CORRECTION OF OPTICAL CHIRPED RANGE DETECTION	10-2477195	Blackmore Sensors & Analytics, LLC
KR	10-2022-7017972	4/22/2019	METHOD AND SYSTEM FOR CONTROLLING AUTONOMOUS VEHICLE USING COHERENT RANGE DOPPLER OPTICAL SENSORS	10-2457967	Blackmore Sensors & Analytics, LLC
KR	10-2022-7039131	5/14/2021	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
KR	10-2022-7044143	12/31/2019	Method And System For Refractive Beam-Steering	10-2539954	Blackmore Sensors & Analytics, LLC
KR	10-2023-7001335	2/10/2020	Providing spatial displacement of transmit and receive modes in lidar system		Blackmore Sensors & Analytics, LLC
KR	10-2023-7015265	7/25/2019	METHOD AND SYSTEM FOR SCANNING OF COHERENT LIDAR WITH FAN OF COLLIMATED BEAMS	10-2603968	Blackmore Sensors & Analytics, LLC
KR	10-2023-7017839	12/31/2019	Method And System For Refractive Beam-Steering		Blackmore Sensors & Analytics, LLC

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KR	10-2023-7029630	12/23/2019	LIDAR LIDAR APPARATUS WITH ROTATABLE POLYGON DEFLECTOR HAVING REFRACTIVE FACETS		Blackmore Sensors & Analytics, LLC
KR	10-2023-7034217	12/31/2019	LIDAR SYSTEM INCLUDING MULTIFACETED DEFLECTOR		Blackmore Sensors & Analytics, LLC
KR	10-2023-7038028	10/1/2019	Method And System For Optimizing Scanning Of Coherent Lidar		Blackmore Sensors & Analytics, LLC
KR	10-2023-7039270	7/25/2019	METHOD AND SYSTEM FOR SCANNING OF COHERENT LIDAR WITH FAN OF COLLIMATED BEAMS		Blackmore Sensors & Analytics, LLC
KR	KR-10-2021-7023519	12/23/2019	LIDAR device with rotating polygonal deflector with refractive facets	10-2577234	Blackmore Sensors & Analytics, LLC
KR	KR-10-2021-7023947	12/31/2019	LiDAR system with multi-facet deflector	10-2590187	Blackmore Sensors & Analytics, LLC
KR	KR-10-2021-7024113	12/31/2019	Refraction beam steering method and system	10-2384684	Blackmore Sensors & Analytics, LLC
KR	KR 10-2021-7037562	2/10/2020	Provision of spatial displacement of transmit and receive modes within a LIDAR system	10-2490244	Blackmore Sensors & Analytics, LLC
KR	KR-10-2022-7004298	10/1/2019	Method And System For Optimizing Scanning Of Coherent Lidar	10-2602366	Blackmore Sensors & Analytics, LLC
US	11/767,501	6/23/2007	Coherent Detection Scheme For Fm Chirped Laser Radar	7,742,152	Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
US	15/192,119	6/24/2016	Method and system for three dimensional digital holographic aperture synthesis	10,036,812	Blackmore Sensors & Analytics, LLC
US	15/423,978	2/3/2017	Method and system for doppler detection and doppler correction of optical phase-encoded range detection	10,422,880	Blackmore Sensors & Analytics, LLC
US	15/645,311	7/10/2017	Method And System For Time Separated Quadrature Detection Of Doppler Effects In Optical Range Measurements	10,401,495	Blackmore Sensors & Analytics, LLC
US	15/661,377	7/27/2017	Method And System For Using Square Wave Digital Chirp Signal For Optical Chirped Range Detection	10,534,084	Blackmore Sensors & Analytics, LLC
US	16/026,085	7/3/2018	Method And System For Three Dimensional Digital Holographic Aperture Synthesis	10,527,729	Blackmore Sensors & Analytics, LLC
US	16/464,063	11/21/2017	Method And System For Classification Of An Object In A Point Cloud Data Set	11,537,808	Blackmore Sensors & Analytics, LLC
US	16/464,108	11/21/2017	Method And System For Adaptive Scanning With Optical Ranging Systems	11,624,828	Blackmore Sensors & Analytics, LLC
US	16/464,648	11/21/2017	Method And System For Automatic Real-Time Adaptive Scanning With Optical Ranging Systems	11,249,192	Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
US	16/464,657	11/21/2017	Method And System For Doppler Detection And Doppler Correction Of Optical Chirped Range Detection	11,802,965	Blackmore Sensors & Analytics, LLC
US	16/515,538	7/18/2019	LIDAR SYSTEM TO DETECT DOPPLER EFFECTS	11,041,954	Blackmore Sensors & Analytics, LLC
US	16/535,127	8/8/2019	LIDAR SYSTEM TO ADJUST DOPPLER EFFECTS	11,585,925	Blackmore Sensors & Analytics, LLC
US	16/590,316	10/1/2019	Method And System For Optimizing Scanning Of Coherent Lidar	10,838,045	Blackmore Sensors & Analytics, LLC
US	16/681,663	11/12/2019	Method and system for laser phase tracking for internal reflection subtraction in phase-encoded LIDAR	10,768,282	Blackmore Sensors & Analytics, LLC
US	16/714,707	12/14/2019	Method And System For Three Dimensional Digital Holographic Aperture Synthesis	Abandoned	Blackmore Sensors & Analytics, LLC
US	16/719,010	12/18/2019	Method And System For Using Square Wave Digital Chirp Signal For Optical Chirped Range Detection	10,670,720	Blackmore Sensors & Analytics, LLC
US	16/725,349	12/23/2019	LIDAR system for autonomous vehicle	10,866,312	Blackmore Sensors & Analytics, LLC
US	16/725,375	12/23/2019	LIDAR SYSTEM FOR AUTONOMOUS VEHICLE	11,181,641	Blackmore Sensors & Analytics, LLC
US	16/725,399	12/23/2019	LIDAR SYSTEM FOR AUTONOMOUS VEHICLE	10,914,841	Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
US	16/725,419	12/23/2019	Systems and methods for refractive beam-steering	10,712,431	Blackmore Sensors & Analytics, LLC
US	16/730,120	12/30/2019	LIDAR System including Multifaceted Deflector	10,754,012	Blackmore Sensors & Analytics, LLC
US	16/732,167	12/31/2019	Method And System For Enhanced Velocity Resolution And Signal To Noise Ratio In Optical Phase-Encoded Range Detection	10,838,061	Blackmore Sensors & Analytics, LLC
US	16/732,181	12/31/2019	Method And System For Refractive Beam-Steering	10,809,381	Blackmore Sensors & Analytics, LLC
US	16/736,383	1/7/2020	LIDAR SYSTEM	10,921,452	Blackmore Sensors & Analytics, LLC
US	16/783,550	2/6/2020	PROVIDING SPATIAL DISPLACEMENT OF TRANSMIT AND RECEIVE MODES IN LIDAR SYSTEM	11,079,546	Blackmore Sensors & Analytics, LLC
US	16/860,470	4/28/2020	Method And System For Using Square Wave Digital Chirp Signal For Optical Chirped Range Detection	11,579,292	Blackmore Sensors & Analytics, LLC
US	16/875,114	5/15/2020	LIDAR SYSTEM	11,822,010	Blackmore Sensors & Analytics, LLC
US	16/888,003	5/29/2020	Lidar System including Multifaceted Deflector	11,237,253	Blackmore Sensors & Analytics, LLC
US	16/888,071	5/29/2020	SYSTEMS AND METHODS FOR REFRACTIVE BEAM-STEERING		Blackmore Sensors & Analytics, LLC

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US	16/906,835	6/19/2020	Method And System For Vehicle Odometry Using Coherent Range Doppler Optical Sensors	11,181,640	Blackmore Sensors & Analytics, LLC
US	16/928,823	7/14/2020	Method And System For Sidelobe Suppression In Phase Encoded Doppler Lidar	11,002,837	Blackmore Sensors & Analytics, LLC
US	17/000,744	8/24/2020	Method and System For Laser Phase Tracking for Internal Reflection Subtraction in Phase-Encoded Lidar	11,656,343	Blackmore Sensors & Analytics, LLC
US	17/066,077	10/8/2020	Method And System For Optimizing Scanning Of Coherent Lidar	FOA mailed 10/4/23	Blackmore Sensors & Analytics, LLC
US	17/069,000	10/13/2020	Method And System For Refractive Beam-Steering	11,835,630	Blackmore Sensors & Analytics, LLC
US	17/098,859	11/16/2020	Method And System For Enhanced Velocity Resolution And Signal To Noise Ratio In Optical Phase-Encoded Range Detection	11,709,267	Blackmore Sensors & Analytics, LLC
US	17/099,982	11/17/2020	LIDAR system for autonomous vehicle	11,714,173	Blackmore Sensors & Analytics, LLC
US	17/147,550	1/13/2021	Lidar System	11,561,304	Blackmore Sensors & Analytics, LLC
US	17/167,857	2/4/2021	LIDAR SYSTEM FOR AUTONOMOUS VEHICLE	11,500,106	Blackmore Sensors & Analytics, LLC
US	17/171,744	2/9/2021	AUTONOMOUS VEHICLE LIDAR SYSTEM USING A WAVEGUIDE ARRAY	11,249,194	Blackmore Sensors & Analytics, LLC
US	17/182,455	2/23/2021	LIDAR SYSTEM	11,260,881	Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
US	17/228,335	4/12/2021	Method And System For Sidelobe Suppression In Phase Encoded Doppler Lidar	11,327,161	Blackmore Sensors & Analytics, LLC
US	17/331,362	5/26/2021	METHOD AND SYSTEM FOR TIME SEPARATED QUADRATURE DETECTION OF DOPPLER EFFECTS IN OPTICAL RANGE MEASUREMENTS	11,366,228	Blackmore Sensors & Analytics, LLC
US	17/362,588	6/29/2021	PROVIDING SPATIAL DISPLACEMENT OF TRANSMIT AND RECEIVE MODES IN LIDAR SYSTEM	11,409,043	Blackmore Sensors & Analytics, LLC
US	17/506,397	10/20/2021	Method And System For Vehicle Odometry Using Coherent Range Doppler Optical Sensors	before 1st OA	Blackmore Sensors & Analytics, LLC
US	17/558,021	12/21/2021	Lidar System including Multifaceted Deflector	11,835,657	Blackmore Sensors & Analytics, LLC
US	17/568,360	1/4/2022	AUTONOMOUS VEHICLE LIDAR SYSTEM USING A WAVEGUIDE ARRAY		Blackmore Sensors & Analytics, LLC
US	17/586,523	1/27/2022	Method And System For Automatic Real-Time Adaptive Scanning With Optical Ranging Systems		Blackmore Sensors & Analytics, LLC
US	17/592,265	2/3/2022	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
US	17/592,286	2/3/2022	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC

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US	17/723,340	4/18/2022	Method And System For Sidelobe Suppression In Phase Encoded Doppler Lidar		Blackmore Sensors & Analytics, LLC
US	17/956,389	9/29/2022	LIDAR SYSTEM FOR AUTONOMOUS VEHICLE		Blackmore Sensors & Analytics, LLC
US	17/959,406	10/4/2022	Method And System For Classification Of An Object In A Point Cloud Data Set		Blackmore Sensors & Analytics, LLC
US	18/085,376	12/20/2022	Lidar System		Blackmore Sensors & Analytics, LLC
US	18/099,842	1/20/2023	LIDAR SYSTEM TO ADJUST DOPPLER EFFECTS		Blackmore Sensors & Analytics, LLC
US	18/320,821	5/19/2023	Method And System For Enhanced Velocity Resolution And Signal To Noise Ratio In Optical Phase-Encoded Range Detection		Blackmore Sensors & Analytics, LLC
US	18/469,002	9/18/2023	Method And System For Doppler Detection And Doppler Correction Of Optical Chirped Range Detection		Blackmore Sensors & Analytics, LLC
US	18/481,678	10/5/2023	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
US	18/492,998	10/24/2023	Lidar System including Multifaceted Deflector		Blackmore Sensors & Analytics, LLC
US	18/499,734	11/1/2023	Method And System For Refractive Beam-Steering		Blackmore Sensors & Analytics, LLC
US	18/507,612	11/13/2023	Lidar System		Blackmore Sensors & Analytics, LLC



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US	18/508,922	11/14/2023	Method And System For Automatic Real-Time Adaptive Scanning With Optical Ranging Systems		Blackmore Sensors & Analytics, LLC
US	60/805,677	6/23/2006	Simplified Coherent Detection Scheme For Fm Chirped Laser Radar		Blackmore Sensors & Analytics, LLC
US	62/183,921	6/24/2015	Three Dimensional Digital Holographic Aperture Synthesis		Blackmore Sensors & Analytics, LLC
US	62/427,573	11/29/2016	Method And System For Classification Of An Object In A Point Cloud Data Set		Blackmore Sensors & Analytics, LLC
US	62/428,109	11/30/2016	Method And System For Doppler Detection And Doppler Correction Of Optical Chirped Range Detection		Blackmore Sensors & Analytics, LLC
US	62/428,117	11/30/2016	Method And System For Automatic Real-Time Adaptive Scanning With Optical Ranging Systems		Blackmore Sensors & Analytics, LLC
US	62/428,122	11/30/2016	Method And System For Adaptive Scanning With Optical Ranging Systems		Blackmore Sensors & Analytics, LLC
US	62/661,327	4/23/2018	Method and system for controlling autonomous vehicle using coherent range doppler optical sensors		Blackmore Sensors & Analytics, LLC
US	62/711,893	7/30/2018	Method And System For Optimizing Scanning Of Coherent Lidar In Autonomous Vehicles		Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
US	62/717,200	8/10/2018	Method And System For Optimizing Scanning Of Coherent Lidar		Blackmore Sensors & Analytics, LLC
US	62/727,294	9/5/2018	Method And System For Optimizing Scanning Of Coherent Lidar		Blackmore Sensors & Analytics, LLC
US	62/739,915	10/2/2018	Method And System For Optimizing Scanning Of Coherent Lidar		Blackmore Sensors & Analytics, LLC
US	62/760,437	11/13/2018	Method And System For Laser Phase Tracking For Internal Reflection Subtraction In Phase Encoded Lidar		Blackmore Sensors & Analytics, LLC
US	62/783,749	12/21/2018	Method And System For Doppler Detection With Single-Sideband Pilot Tone For Phase-Encoded Lidar		Blackmore Sensors & Analytics, LLC
US	62/788,368	1/4/2019	Method And System For Refractive Beam-Steering		Blackmore Sensors & Analytics, LLC
US	62/788,415	1/4/2019	Polygonal Grating For Scanning Of Coherent Lidar		Blackmore Sensors & Analytics, LLC
US	62/788,304	1/4/2019	Method And System For Refractive Beam-Steering		Blackmore Sensors & Analytics, LLC
US	62/837,050	4/22/2019	Method And System For Providing Spatial Displacement Of Transmit And Receive Modes In Coherent Lidar		Blackmore Sensors & Analytics, LLC
US	62/864,877	6/21/2019	Method And System For Vehicle Odometry Using Coherent Range Doppler Optical Sensors		Blackmore Sensors & Analytics, LLC

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US	62/874,351	7/15/2019	Method And System For Sidelobe Suppression In Phase Encoded Doppler Lidar		Blackmore Sensors & Analytics, LLC
US	62/874,835	7/16/2019	Method And System For Enhanced Velocity Resolution And Signal To Noise Ratio In Optical Phase-Encoded Range Detection		Blackmore Sensors & Analytics, LLC
WO	PCT/US2020/041991	7/14/2020	Method And System For Sidelobe Suppression In Phase Encoded Doppler Lidar		Blackmore Sensors & Analytics, LLC
WO	PCT/US2017/062703	11/21/2017	Method And System For Doppler Detection And Doppler Correction Of Optical Chirped Range Detection		Blackmore Sensors & Analytics, LLC
WO	PCT/US2017/062708	11/21/2017	Method And System For Automatic Real-Time Adaptive Scanning With Optical Ranging Systems		Blackmore Sensors & Analytics, LLC
WO	PCT/US2017/062714	11/21/2017	Method And System For Adaptive Scanning With Optical Ranging Systems		Blackmore Sensors & Analytics, LLC
WO	PCT/US2017/062721	11/21/2017	Method And System For Classification Of An Object In A Point Cloud Data Set		Blackmore Sensors & Analytics, LLC
WO	PCT/US2018/016632	2/2/2018	Method And System For Doppler Detection And Doppler Correction Of Optical Phase-Encoded Range Detection		Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
WO	PCT/US2018/041388	7/10/2018	Method And System For Time Separated Quadrature Detection Of Doppler Effects In Optical Range Measurements		Blackmore Sensors & Analytics, LLC
WO	PCT/US2018/044007	7/27/2018	Method And System For Using Square Wave Digital Chirp Signal For Optical Chirped Range Detection		Blackmore Sensors & Analytics, LLC
WO	PCT/US2019/028532	4/22/2019	METHOD AND SYSTEM FOR CONTROLLING AUTONOMOUS VEHICLE USING COHERENT RANGE DOPPLER OPTICAL SENSORS		Blackmore Sensors & Analytics, LLC
WO	PCT/US2019/043482	7/25/2019	Method And System For Optimizing Scanning Of Coherent Lidar In Autonomous Vehicles		Blackmore Sensors & Analytics, LLC
WO	PCT/US2019/043488	7/25/2019	METHOD AND SYSTEM FOR SCANNING OF COHERENT LIDAR WITH FAN OF COLLIMATED BEAMS		Blackmore Sensors & Analytics, LLC
WO	PCT/US2019/046537	8/14/2019	Method And System For Pitch-Catch Scanning Of Coherent Lidar		Blackmore Sensors & Analytics, LLC
WO	PCT/US2019/054146	10/1/2019	Method And System For Optimizing Scanning Of Coherent Lidar		Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
WO	PCT/US2019/061022	11/12/2019	METHOD AND SYSTEM FOR LASER PHASE TRACKING FOR INTERNAL REFLECTION SUBTRACTION IN PHASE-ENCODED LIDAR		Blackmore Sensors & Analytics, LLC
WO	PCT/US2019/068351	12/23/2019	LIDAR APPARATUS WITH ROTATABLE POLYGON DEFLECTOR HAVING REFRACTIVE FACETS		Blackmore Sensors & Analytics, LLC
WO	PCT/US2019/069144	12/31/2019	Method And System For Refractive Beam-Steering		Blackmore Sensors & Analytics, LLC
WO	PCT/US2019/069151	12/31/2019	LIDAR SYSTEM INCLUDING MULTIFACETED DEFLECTOR		Blackmore Sensors & Analytics, LLC
WO	PCT/US2020/017495	2/10/2020	PROVIDING SPATIAL DISPLACEMENT OF TRANSMIT AND RECEIVE MODES IN LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
WO	PCT/US2020/041809	7/13/2020	METHOD AND SYSTEM FOR ENHANCED VELOCITY RESOLUTION AND SIGNAL TO NOISE RATIO IN OPTICAL PHASE-ENCODED RANGE DETECTION		Blackmore Sensors & Analytics, LLC
WO	PCT/US2021/032515	5/14/2021	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC
WO	PCT/US2022/017321	2/22/2022	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC

Country	Application Number	Filing Date	Title	Patent Number	Current owner/assignor
WO	PCT/US2023/011341	1/23/2023	LIDAR SYSTEM		Blackmore Sensors & Analytics, LLC