507846613 04/10/2023

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7893749

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ALBERTO DANIEL LACAZE	09/02/2021
KARL NICHOLAS MURPHY	09/02/2021

RECEIVING PARTY DATA

Name:	ROBOTIC RESEARCH, LLC		
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City:	CLARKSBURG		
State/Country:	MARYLAND		
Postal Code:	20871		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	18132539

CORRESPONDENCE DATA

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Address Line 4: RIDGEFIELD, CONNECTICUT 06877

ATTORNEY DOCKET NUMBER:	RR03-073-03-01
NAME OF SUBMITTER:	LIMOR N. BREDMEHL
SIGNATURE:	/Limor N. Bredmehl/
DATE SIGNED:	04/10/2023

Total Attachments: 6

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PATENT REEL: 063279 FRAME: 0364

PATENT ASSIGNMENT

NOW THEREFORE, in consideration of promises, covenants, agreements, and other good and valuable consideration set forth herein or otherwise agreed to between the parties, receipt whereof being hereby acknowledged, each of Alberto Daniel Lacaze of Potomac, Maryland and Karl Nicholas Murphy of Cocoa Beach, Florida, (each an "Assignor") does hereby assign, transfer, and convey unto Robotic Research, LLC, having offices at 22601 Gateway Center Drive, Clarksburg, MD 20871, U.S.A. ("Assignee"), or its designees, all right, title, and interest that exist today and may exist in the future in and to any and all of the following (collectively "the Patent Rights"):

- (a) the provisional patent applications, patent applications, and patents listed in attached Schedule A ("the Patents");
- (b) all patents and patent applications to which any of the Patents directly or indirectly claims priority;
- (c) all reissues, reexaminations, extensions, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, divisions, registrations of any item in any of the foregoing categories (a) and (b);
- (d) all foreign patents, patent applications, and counterparts relating to any item in any of the foregoing categories (a) through (c), including, without limitation, certificates of invention, utility models, industrial design protection, design patent protection;
- (e) all items in any of the foregoing in categories (a) through (d), whether or not expressly listed in Schedule A, and whether or not claims in any of the foregoing have been rejected, withdrawn, cancelled, or the like;
- (f) all rights to apply in any or all countries of the world for patents, certificates of invention, utility models, industrial design protections, design patent protections, or other governmental grants or issuances of any type related to any item in any of the foregoing categories (a) through (e), including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement, or understanding;
- (g) all causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of, any of the Patents and/or any item in any of the foregoing categories (a) through (f), including, without limitation, all causes of action and other enforcement rights for:
 - (i) damages, past, present, or future;
 - (ii) injunctive relief;
 - (iii) any other remedies of any kind for past, current, and future infringement; and
 - (iv) all rights to collect royalties and other payments under or on account of any of the Patents and/or any item in any of the foregoing categories (a) through (f);

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AND for the same consideration, each Assignor hereby represents and warrants to Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles, and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignor is the sole and lawful owner of the entire right, title, and interest in and to the said inventions and application for the above-mentioned Patents;

AND for the same consideration, each Assignor hereby covenants and agrees to and with Assignee, its successors, legal representatives, and assigns, that Assignor will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of any Patents and Patent applications for said inventions, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application, or any proceeding in connection with any Patents or Patent applications for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation, or continuation-in-part, or any reissue, reexamination, or extension of any Patent, to be obtained thereon, is lawful and desirable;

AND each Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models, or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of Assignee, as the assignee to the entire interest therein;

AND the terms and conditions of this Assignment of Patent Rights will inure to the benefit of Assignee, its successors, assigns, and other legal representatives and will be binding upon each Assignor, its successors, assigns, and other legal representatives;

AND this Assignment may be executed in multiple counterparts, each of which shall constitute an original and all of which, when taken together, shall constitute the single Agreement;

AND if any part of this Assignment shall be held unenforceable for any reason, the remainder of the Assignment shall continue in full force and effect. If any provision of this Assignment is deemed unenforceable by any court of competent jurisdiction, and if limiting such provision would make the provision valid, then such provision shall be deemed to be construed as so limited.

[Signature Page Follows]

Agreed to and Accepted:	
By Assignors:	
	9/2/2021
Alberto Daniel Lacaze	Date
71711 ₂	1/2/202/
Karl Nicholas Murphy	Date
On behalf-of Assignce, Robotic Research, LLC:	9/2/2021
Alberto-Daniel Lacaze, President	Date

$\underline{\textbf{SCHEDULE}\; \textbf{A}}$

Application No. (Patent No.)	Country	Filing Date	Title of Patent	First Named Inventor
			Method and system for robotic algae	Alberto Daniel Lacaze
12/341990	US	12/22/2008	harvest	
40/505504		0/00/00/40	Method And System For Robotic	Alberto Daniel Lacaze
13/535594	US	6/28/2012	Algae Harvest	Allegate Design Longer
12/071100	US	4/06/0040	Field Deployable Rapid Prototypable UXVs	Alberto Daniel Lacaze
13/871129	08	4/26/2013	Method for Shipbuilding Using 3D	Alberto Daniel Lacaze
15/269885	US	9/19/2016	Printers	Alberto Darliei Lacaze
10/200000	00	0/10/2010	Method for Using Cryptography to	Alberto Daniel Lacaze
			Protect Deployable Rapid On-Site	
			Manufacturing 3D Printing Systems and Enable a Single Time Printing	
15/903163	US	2/23/2018	Protocol	
16/193338	00	2/20/2010	Field Deployable Rapid Prototypable	Alberto Daniel Lacaze
(10906668)	US	11/16/2018	UXVs	
			Coordinated Traffic Feature and Map	Alberto Daniel Lacaze
16/377581	US	4/8/2019	Generation for Convoy Operations	
			Driver Aid and Autonomous Tractor	Alberto Daniel Lacaze
			Trailer Parking and Loading Dock	
16/445302	US	6/19/2019	Alignment System	All (D)
101115751	110	0/40/0040	Autonomous Truck Unloading for	Alberto Daniel Lacaze
16/445751 16/520456	US	6/19/2019 7/24/2019	Mining and Construction Applications Autonomous Waste Collection Truck	Alberto Daniel Lacaze
10/320430	00	112412019	Drone Based Inspection System At	Alberto Daniel Lacaze
16/535455	US	8/8/2019	Railroad Crossings	Alberto Daniel Lacaze
101000100		5, 5, 25, 10	Path Follower with Limited Steering	Alberto Daniel Lacaze
16/536509	US	8/9/2019	Rate Controller	
16/542807	US	8/16/2019	Compact Transformable Robot	Alberto Daniel Lacaze
16/559889	US	9/4/2019	Autonomous Police or Security Vehicle	Alberto Daniel Lacaze
16/563157	US	9/6/2019	Autonomous Street Sweeper Vehicle	Alberto Daniel Lacaze
			Meeting Coordinator Minimizing Joint	Alberto Daniel Lacaze
16/574443	US	9/27/2019	Driving Time	5
40/505055	110	0/07/0040		Alberto Daniel Lacaze
16/585355	US	9/27/2019	Driving Time	Alberta Daniel Laceza
16/585392	US	9/27/2019	Meeting Coordinator Minimizing Joint Driving Time	Alberto Daniel Lacaze
16/585576	US	9/27/2019	Autonomous Winter Service Vehicle	Alberto Daniel Lacaze
1.07.00007.0		O. Z. I ZO I O	Autonomous Road Surface Marking	Alberto Daniel Lacaze
16/593036	US	10/4/2019	Vehicle	Ballot EddaEd
16/597893	US	10/10/2019	Autonomous Ambulance	Alberto Daniel Lacaze
			Autonomous Trucks with Specialized	Alberto Daniel Lacaze
			Behaviors for Mining and Construction	
16/601775	US	10/15/2019	Applications	

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			Autonomous Truck Loading for Mining	Alberto Daniel Lacaze
16/676544	US	11/7/2019	and Construction Applications	
			Autonomous Truck Unloading for	Alberto Daniel Lacaze
16/676666	US	11/7/2019	Mining and Construction Applications	
			Driver Aid and Autonomous Tractor-	Alberto Daniel Lacaze
			Trailer Parking and Loading Dock	
16/678244	US	11/8/2019	Alignment System	
			Learning Mechanism for Autonomous	Alberto Daniel Lacaze
16/679376	US	11/11/2019	Trucks for Mining and Construction	
10/0/93/0	00	11/11/2019	Applications Self-Discovery Mechanism, Scripting	Alberto Daniel Lacaze
			Language, and Optimization for Mining	Alberto Darliei Lacaze
16/679512	US	11/11/2019	and Construction Applications	
10/0/0012		1111112010	Autonomous Dust Mitigation in Mining	Alberto Daniel Lacaze
16/679824	US	11/11/2019	and Construction Applications	, aborto Barnot Lacazo
16/740622	US	1/13/2020	Autonomous Fire Vehicle	Alberto Daniel Lacaze
			Effect of Multiple Rules of the Road At	Alberto Daniel Lacaze
			Different Elevation Profiles on Speed	
16/791126	US	2/14/2020	Constraints and Fuel Consumption	
16/797248	US	2/21/2020	Acoustically Adjustable Lenses	Alberto Daniel Lacaze
			Field Deployable Rapid Prototypable	Alberto Daniel Lacaze
61/642035	US	5/3/2012	UXVs	
			System and Method for Deployable	Alberto Daniel Lacaze
			Rapid On-Site Manufacturing Using	
61/840081	US	6/27/2013	3D Printing in Combination with Vacuum Metallization	
01/040001	00	0/2//2013	System and Method for 3D Printing	Alberto Daniel Lacaze
61/903343	US	11/12/2013	Models with Additional Features	Alberto Darliei Lacaze
0 1/0000 10		1111212010	System and Method for Enabling the	Alberto Daniel Lacaze
61/903348	US	11/12/2013	Partial Printing of a Device	, aborto Barror Lacazo
			System and Method for Printing	Alberto Daniel Lacaze
61/903357	US	11/12/2013	Tunable Antennas	
			Method for Using Cryptography to	Alberto Daniel Lacaze
			Protect Deployable Rapid On-Site	
			Manufacturing 3D Printing Systems	
0.4/0.0000		4.44.0200.40	and Enable a Single Time Printing	
61/903363	US	11/12/2013	Protocol	Alle ante Daniel I access
61/903370	US	11/12/2013	3D Printer Station	Alberto Daniel Lacaze
61/984536	US	4/25/2014	Structural Analysis for Additive Manufacturing	Alberto Daniel Lacaze
62/024944	US	7/15/2014	Omni-directional Stereo System	Alberto Daniel Lacaze
02/024044	00	111012014	Point-and-Click Control of Unmanned,	Alberto Daniel Lacaze
			Autonomous Vehicle Using Omni-	, aborto Dariioi Lacaze
62/129471	US	3/6/2015	Directional Visors	
		2, 2, 20, 3	Senising On UAVS For Mapping And	Alberto Daniel Lacaze
62/175231	US	6/13/2015	Obstacle Avoidance	
			System and Method for Protecting	Alberto Daniel Lacaze
62/209994	US	8/26/2015	Software from Buffer Overruns	
			Method for Shipbuilding Using 3D	Alberto Daniel Lacaze
62/257572	US	11/19/2015	Printers	

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	1		T	T
62/326711	US	4/23/2016	Handheld 3D Printer	Alberto Daniel Lacaze
62/367601	US	7/27/2016	Covert Timing Synchronization	Alberto Daniel Lacaze
			Vehicle Capable of Multiple Varieties	Alberto Daniel Lacaze
62/413474	US	10/27/2016	of Locomotion	
			System and Method for Enabling	Alberto Daniel Lacaze
62/475567	US	3/23/2017	Fused Deposition Metal 3D Printing	
62/490425	US	4/26/2017	Energy Harvester While in Tow	Alberto Daniel Lacaze
			Learning Mechanism For Autonomous	Alberto Daniel Lacaze
			Trucks For Mining And Construction	
62/759956	US	11/12/2018	Applications	
			Driver Air And Autonomous Tractor	Alberto Daniel Lacaze
			Trailer Parking And Loading Dock	
62/768473	US	11/16/2018	Alignment System	
63/106714	US	10/28/2020	Rear Trailer Hosteler	Alberto Daniel Lacaze
63/108949	US	11/3/2020	Remote Operator Safety Station	Alberto Daniel Lacaze
			Power Distribution using Autonomous	Alberto Daniel Lacaze
63/109081	US	11/3/2020	Electric Vehicles	
			Systems And Methods For Passive 3D	Alberto Daniel Lacaze
63/218364	US	7/4/2021	Mapping	
			Systems And Methods For Distributed	Alberto Daniel Lacaze
63/220244	US	7/9/2021	Geographical Search	