### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5903377

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
DAVID W. PAGLIERONI	11/13/2019
N. REGINALD BEER	11/15/2019
DAVID CHAMBERS	11/15/2019

### **RECEIVING PARTY DATA**

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City:	LIVERMORE	
State/Country:	CALIFORNIA	
Postal Code:	94550	

### **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	16603977	

### CORRESPONDENCE DATA

Fax Number: (206)359-7198

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PERKINS COIE LLP **Correspondent Name:** Address Line 1: P.O. BOX 1247 Address Line 2: PATENT - SEA

Address Line 4: SEATTLE, WASHINGTON 98111-1247

ATTORNEY DOCKET NUMBER:	077518-8078.US00
NAME OF SUBMITTER:	TATJANA MIRKOVIC
SIGNATURE:	/Tatjana Mirkovic/
DATE SIGNED:	01/09/2020

### **Total Attachments: 4**

source=IL-13136 Assign & Dec Combined -David Paglieroni#page1.tif source=IL-13136 Assign & Dec Combined -David Paglieroni#page2.tif source=IL-13136B Assignment Signed -Dave Chambers#page1.tif

**PATENT REEL: 051470 FRAME: 0418** 505856440

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PATENT REEL: 051470 FRAME: 0419

LLNL Case No.: IL-13136 (PATENT)

# DECLARATION AND ASSIGNMENT BY INVENTOR UNDER 37 CFR § 1.63

Title of Invention: SWARM PATH PLANNER SYSTEM FOR AUTONOMOUS VEHICLES
I. <u>David W. Paglieroni</u> , hereby declare that this declaration is directed to the attached application identified as Attorney Docket No. 77518.8077.US00, United States application number 16/603,977 filed on 10/09/2019
2. I believe I am the original inventor or an original joint inventor of a claimed invention in the patent application identified in Section I ("Patent Application").
3. I made or authorized to make the Patent Application.
4. I have reviewed and understand the contents of the Patent Application including the claims.
5. I am aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR §1.56.
6. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC §1001 by fine or imprisonment of not more than five (5) years, or both.
7. ASSIGNMENT  For good and valuable consideration the receipt of which is hereby acknowledged, I hereby sell, assign, transfer, and convey to Lawrence Livermore National Security, LLC., a Delaware corporation having its administrative offices located at 2300 First Street, Suite 204, Livermore, CA 94550, and its successors, legal representatives and assigns (collectively, "Assignee"), the entire right, title and interest throughout the world in and to the following (collectively, "Rights"):
(a) all inventions and improvements claimed and/or disclosed in the Patent Application, in provisional application, filed, from which the Patent Application claims priority, and in any and all divisional, continuation, continuation-in-part, and substitute applications based on the Patent Application.
(b) the Patent Application, the provisional application, filed, from which the Patent Application claims priority, and any and all divisional, continuation, continuation-in-part, and substitute applications based on the Patent Application (collectively, "Related Applications").
(c) any and all patent(s) which may be granted in the United States, its territories, dependencies and possessions, for the inventions and improvements claimed and/or disclosed in the Related Applications, for the full term or terms for which the same may be granted.
(d) any and all patent(s) resulting from extension, renewal, reinstatement, reissue or reexamination, or any interference, opposition, or judicial proceeding, directed to any of the

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LLNL Case No.: IL-13136 (PATENT)

Related Applications or any patent described above, for the full term or terms for which the same may be granted.

- (e) any foreign equivalent or counterpart of any of the Related Applications or of any of the patent(s) described above, including without limitation, certificates of invention, utility models, and design registrations.
- (f) the right to claim priority based on the filing dates of the Related Applications or any of the patent(s) described above, under, but not limited to, the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes.
- (g) the right to seek relief and recover all damages, including, but not limited to, a reasonable royalty, by reason of infringement or any other violation of patent or patent application rights.

In addition, I hereby confirm the sale, assignment, transfer and conveyance to the Assignee of the entire right, title and interest throughout the world in the Rights, including the inventions and improvements, that occurred by operation of an employment agreement between me and the Assignee existing at the time said inventions and improvements were made. Should I have any remaining interest, I hereby sell, assign, transfer and convey any right, title and interest I may have in said inventions and improvements anywhere in the world to the Assignee.

I hereby represent and covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment.

I further covenant to provide reasonable assistance to the Assignee in handling various procedures, tasks and documentation in connection with this assignment, including, but not limited to, providing to the Assignee promptly upon the request of the Assignee all pertinent facts and documents relating to said invention and improvements, and said patents, said legal equivalents or other legal instrument as may be known and accessible to me and testifying as to the same in any interference, litigation, or proceeding relating thereto, and promptly executing and delivering to the Assignee or its legal representative any and all papers, documents, instruments or affidavits in connection with obtaining, maintaining, issuing or enforcing said application, said inventions and improvements, and said patents, said equivalents and other legal instrument which may be necessary or desirable to carry out the purposes thereof.

I hereby authorize and request 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, and any reissue or extension thereof, that may be granted upon any of the Rights in the name of the Assignee, as the assignee to the entire interest therein.

8. I am competent to execute the above declaration and assignment. I hereby have duly executed the declaration and assignment below with my name.

Signature of Inventor: David W. Paglieroni

11/13/20/9 Date:

## **ASSIGNMENT**

LLNL Record of Invention Case No. IL-13136 , entitled:

# OPTIMAL AUTONOMOUS CONTROL OF HIMANNED VEHICLE

SWARMS USING			
For good and valuable consideration, the receipt of	of which is hereby ackr	owledged, ASSI	GNOR(s)
1. N. Reginald Beer	2. David Chambers		
3. David W. Paglieronni			
hereby sells, assigns, transfers, and conveys to limited liability company, having a place of bus assigns and legal representative of the ASSIGNE all inventions and discoveries found in the above-	siness at 7000 East A E all of its right, title :	venue, Livermor and interest throu	e, CA 94550 and the successors ghout the world in and to any and
U.S. Provisional Application Serial No		, filed on	
U.S. Patent Application Serial No.	16/603977	, filed on _	10/ 09/2019
<ul> <li>International Application Serial No.</li> </ul>		, filed on _	
ASSIGNOR(S) further covenants that ASSIGNE documents relating to said invention and said L ASSIGNOR and will testify as to the same in any execute and deliver to ASSIGNEE or its legal rep for, obtain, maintain, issue or enforce said applic which may be necessary or desirable to carry out by the execution of this assignment to insert into officially known.	etters Patent and legal y interference, litigation presentative any and all action, said invention a the purposes thereof. this assignment the fili	I equivalents as n, or proceeding I papers, instrume nd said Letters P An attorney of r ng date and seria	may be known and accessible to relating thereto and will promptly ents or affidavits required to apply latent and said equivalents thereo- record is authorized and requested I number of said application when
AND the <u>ASSIGNOR(S)</u> requests the Commission States and any reissue or extension thereof to the a			
executed this	Signature of ASSIGNOR(s)		
Date	N. Reginald Beer		
executed this 11/15/19	Signature of ASSIGNOR(s)		
Date	David Char	nbers	
executed this	Signature of ASSIGNOR(s)		
Date	David W. Paglieroni		

PATENT **REEL: 051470 FRAME: 0422** 

## **ASSIGNMENT**

LLNL Record of Invention Case No. \_\_\_\_\_IL-13136\_\_\_\_\_\_, entitled:

OPTIMAL AUTONOM SWARMS I SING	DUS CONTROL C G STOCHASTIC I		
For good and valuable consideration, the receipt	of which is hereby ackr	iowledged, ASSI	GNOR(s)
1. N. Reginald Beer	2. David Chambers		
3. David W. Paglieronni			
hereby sells, assigns, transfers, and conveys to limited liability company, having a place of be assigns and legal representative of the ASSIGNI all inventions and discoveries found in the above	usiness at 7000 East A EE all of its right, title i	venue, Livermor and interest throu	e, CA 94550 and the successors, ghout the world in and to any and
U.S. Provisional Application Serial No.		, filed on	
• U.S. Patent Application Serial No.	16/603977	, filed on _	10/09/2019
International Application Serial No		, filed on	
ASSIGNOR(S) further covenants that ASSIGNI documents relating to said invention and said ASSIGNOR and will testify as to the same in at execute and deliver to ASSIGNEE or its legal refor, obtain, maintain, issue or enforce said appli which may be necessary or desirable to carry or by the execution of this assignment to insert into officially known.	Letters Patent and legany interference, litigation presentative any and alication, said invention and the purposes thereof.	I equivalents as n, or proceeding I papers, instrument and said Letters F An attorney of the	may be known and accessible to relating thereto and will promptly ents or affidavits required to apply atent and said equivalents thereof record is authorized and requested
AND the <u>ASSIGNOR(S)</u> requests the Commiss States and any reissue or extension thereof to the			
executed this	Signature of ASSIGNOR(s)		
1111=119	1. Right B		
Date	N. Reginale		
executed this	Signature of ASSIGNOR(s)		
Date	David Char	nbers	
executed this	Signature of ASSIGNOR(s)		
Date	David W. P.	aglieroni	

PATENT **REEL: 051470 FRAME: 0423** 

**RECORDED: 01/09/2020**