505733393 10/21/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

EPAS ID: PAT5780206

CONVEYING PARTY DATA

Name	Execution Date
YIXUAN YU	02/05/2018
JOSHUA D. KUNTZ	02/06/2018
CHRISTINE A. ORME	02/05/2018
ANDREW J. PASCALL	02/06/2018

RECEIVING PARTY DATA

Name:	LAWRENCE LIVERMORE NATIONAL SECURITY
Street Address:	2300 FIRST STREET, SUITE 204
City:	LIVERMORE
State/Country:	CALIFORNIA
Postal Code:	94550

PROPERTY NUMBERS Total: 1

Property Type	Number
PCT Number:	US2018017686

CORRESPONDENCE DATA

Fax Number: (323)266-0373

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: 3239342300

Email: LA Mail@la.ladas.com **Correspondent Name:** LADAS & PARRY LLP

Address Line 1: 4525 WILSHIRE BOULEVARD, SUITE 240

Address Line 4: LOS ANGELES, CALIFORNIA 90010

ATTORNEY DOCKET NUMBER:	631302-9
NAME OF SUBMITTER:	MAVIS S. GALLENSON
SIGNATURE:	/Mavis S. Gallenson 32,464/
DATE SIGNED:	10/18/2019

Total Attachments: 7

source=IL-13151PCT Assignment-YU#page1.tif source=IL-13151PCT Assignment-KUNTZ#page1.tif source=IL-13151PCT_Assignment-KUNTZ#page2.tif

source=IL-13151PCT_Assignment-ORME#page1.tif source=IL-13151PCT_Assignment-ORME#page2.tif source=IL-13151PCT_Assignment-PASCALL#page1.tif source=IL-13151PCT_Assignment-PASCALL#page2.tif

<u>ASSIGNMENT</u>

1. Yixuan Yu	2. <u>j</u>	oshua D. Kuntz
3. Christine A. Orme	4	ndrew J. Pascall
having its administrative offices loca and legal representative of the ASSIG	ied at 2300 First Street, NEE all of its right, title	Livermore National Security, LLC, a Delaware Corporation Suite 204, Livermore, CA 94550 and the successors, assigns and interest for the United States and its territorial possessions which are disclosed in the invention entitled:
	IELD DRIVEN AS: NOCRYSTAL SUP	SEMBLY OF ORDERED ERLATTICES
and which is found in		
U.S. provisional application no	·	filed on
■ U.S. patent application serial n),	nied on
Int'l application serial no. PC and any legal equivalent thereof in a be obtained for said invention by the substitute thereof, and any reissue, re-	T/US2018/017686 oreign country, including above application or a examination or extension	
and any legal equivalent thereof in a second and any legal equivalent thereof in a second and any legal equivalent thereof in a second and any reissue, reconventions for the Protection of Indu-ASSIGNOR(S) hereby covenants that into which would conflict with this assemble with the second and will testify as to the execute and deliver to ASSIGNEE or for, obtain, maintain, issue or enforce which may be necessary or desirable to the execution of this assignment to it officially known.	foreign country, including above application or examination or extension istrial Property; no assignment, sale, agaignment; ASSIGNEE will, upon and said Letters Patent same in any interference its legal representative are said application, said in o carry out the purposes insert into this assignment.	the right to claim priority and, in and to, all Letters Patent to any continuation, division, continuation-in-part, extension or

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ł, "	Yixuan Yu	2.	Joshua D. Kuntz
3	Christine A. Orme	. 4.	Andrew J. Pascall
havii and l	ng its administrative offices located at 2300 Firs legal representative of the ASSIGNEE all of its ri in all foreign countries in and to, any and all impr	st Stre ight, t rovem	nce Livermore National Security, LLC, a Delaware Corporation et, Suite 204, Livermore, CA 94550 and the successors, assignitle and interest for the United States and its territorial possession ents which are disclosed in the invention entitled:
			ASSEMBLY OF ORDERED UPERLATTICES
and '	which is found in	***************************************	
	U.S. provisional application no.		, filed on
**	U.S. patent application serial no.		, filed on
be o	btained for said invention by the above application or thereof, and any reissue, reexamination or	, inclu ation r exter	ding the right to claim priority and, in and to, all Letters Patent to or any continuation, division, continuation-in-part, extension o
and and a be o subsited to the convergence of the c	any legal equivalent thereof in a foreign country, btained for said invention by the above application to the thereof, and any reissue, reexamination or ventions for the Protection of Industrial Property; [GNOR(S)] hereby covenants that no assignment which would conflict with this assignment; [GNOR(S)] further covenants that ASSIGNEE we ments relating to said invention and said Lette IGNOR and will testify as to the same in any in the and deliver to ASSIGNEE or its legal represorbtain, maintain, issue or enforce said application may be necessary or desirable to carry out the	, inclustion rexterior exterior exterior exterior exterior exterior exterior exterior, sa purpo	ding the right to claim priority and, in and to, all Letters Patent to or any continuation, division, continuation-in-part, extension of said Letters Patent and all rights under all Internations agreement or encumbrance has been or will be made or enterested and legal equivalents as may be known and accessible thence, litigation, or proceeding relating thereto and will promptly ve any and all papers, instruments or affidavits required to applied invention and said Letters Patent and said equivalents thereoses thereof. An attorney of record is authorized and requested by
and in the organization of	any legal equivalent thereof in a foreign country, btained for said invention by the above application of the respective thereof, and any reissue, reexamination or rentions for the Protection of Industrial Property; (GNOR(S)) hereby covenants that no assignment which would conflict with this assignment; (GNOR(S)) further covenants that ASSIGNEE we ments relating to said invention and said Lette (IGNOR and will testify as to the same in any in the ute and deliver to ASSIGNEE or its legal repressible and deliver to ASSIGNEE to carry out the execution of this assignment to insert into this a fally known.	, inclustion rexter ; i, sale, vill, upers Paulerfer sentation, sa purpo assign	ding the right to claim priority and, in and to, all Letters Patent to or any continuation, division, continuation-in-part, extension of asion of said Letters Patent and all rights under all International agreement or encumbrance has been or will be made or entered on its request, be provided promptly with all pertinent facts and tent and legal equivalents as may be known and accessible to ence, litigation, or proceeding relating thereto and will promptly we any and all papers, instruments or affidavits required to apply it invention and said Letters Patent and said equivalents thereof ses thereof. An attorney of record is authorized and requested by ment the filing date and serial number of said application when attents and Trademarks to issue said Letters Patent of the Uniter
and and subside of subside of the observation of th	any legal equivalent thereof in a foreign country, btained for said invention by the above application of the respective thereof, and any reissue, reexamination or rentions for the Protection of Industrial Property; IGNOR(S) hereby covenants that no assignment which would conflict with this assignment; IGNOR(S) further covenants that ASSIGNEE we ments relating to said invention and said Lette IGNOR and will testify as to the same in any in the and deliver to ASSIGNEE or its legal represorbtain, maintain, issue or enforce said application in the execution of this assignment to insert into this a sailly known.	, inclustion rexter ; i, sale, vill, upers Paulerfer sentation, sa purpo assign	ding the right to claim priority and, in and to, all Letters Patent to or any continuation, division, continuation-in-part, extension of asion of said Letters Patent and all rights under all International agreement or encumbrance has been or will be made or entered that are request, be provided promptly with all pertinent facts and stent and legal equivalents as may be known and accessible to ence, litigation, or proceeding relating thereto and will promptly we any and all papers, instruments or affidavits required to apply it invention and said Letters Patent and said equivalents thereo ses thereof. An attorney of record is authorized and requested by ment the filing date and serial number of said application when attents and Trademarks to issue said Letters Patent of the United

ELINE CASE INC. TE-13131FC1	
executed this 2/4/20/25 Date	Signaturi do f Inventores (
executed this	Signature of Inventor(s)
Date	Christine A. Orme
executed this	Signature of Inventor(s)
Date	Andrew J. Pascall

ASSIGNMENT

For good and valuable consideration, the receipt of	which is	s hereby acknowledged ASSIGNOR(s)
1. Yixuan Yu		Joshua D. Kuntz
3. Christine A. Orme		Andrew J. Pascali
having its administrative offices located at 2300 F	Lawren irst Stre right, ti	ice Livermore National Security, LLC, a Delaware Corporation, let, Suite 204, Livermore, CA 94550 and the successors, assigns the and interest for the United States and its territorial possessions
		ASSEMBLY OF ORDERED UPERLATTICES
and which is found in		
U.S. provisional application no.	5	, filed on
W U.S. patent application serial no.		, filed on
Int'l application serial no. PCT/US2018/01		
be obtained for said invention by the above appli- substitute thereof, and any reissue, reexamination of Conventions for the Protection of Industrial Propert ASSIGNOR(S) hereby covenants that no assignment	ication of or exten y;	Sing the right to claim priority and, in and to, all Letters Patent to or any continuation, division, continuation-in-part, extension or usion of said Letters Patent and all rights under all International agreement or encumbrance has been or will be made or entered
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AND the <u>ASSIGNOR(S)</u> requests the Commission States and any reissue or extension thereof to the AS		tients and Trademarks to issue said Letters Patent of the United E, Lawrence Livermore National Security, LLC.
executed this	Ş	Signature of Inventor(s)
Date		Yixuan Yu

LLNL Case No.: <u>IL-13151PCT</u>	
executed this	Signature of Inventor(s)
Date	Joshua D. Kuntz
executed this 2/5/2018 Date	Signature of Inventor(s) Christine A. Orme
executed this	Signature of Inventor(s)

Andrew J. Pascall

Date

ASSIGNMENT

For good and valuable consideration, the receipt of	which is	hereby acknowledged ASSIGNOR(s)
1. Yixuaxi Yu		Joshua D. Kuntz
3. Christine A. Orme		Andrew J. Pascall
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		SSEMBLY OF ORDERED UPERLATTICES
and which is found in		
U.S. provisional application no.	9	, filed on
W U.S. patent application serial no.		, filed on
Int'l application serial no. PCT/US2018/01	7686	, filed on 02/09/2018
be obtained for said invention by the above appli substitute thereof, and any reissue, reexamination of Conventions for the Protection of Industrial Property	cation c or exten 7;	ling the right to claim priority and, in and to, all Letters Patent to or any continuation, division, continuation-in-part, extension or sion of said Letters Patent and all rights under all International agreement or encumbrance has been or will be made or entered
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AND the <u>ASSIGNOR(S)</u> requests the Commissions States and any reissue or extension thereof to the AS		tents and Trademarks to issue said Letters Patent of the United E, Lawrence Livermore National Security, LLC.
executed this	S	Signature of Inventor(s)
	~	Yixuan Yu

LLNL Case No.: IL-13151PC1			
executed this	Signature of Inventor(s)		
Date	Joshua D. Kuntz	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	*********
	*		
executed this	Signature of Inventor(s)		
Date	Christine A. Orme	ANALIANUA TERRETARIA SERVICIA	*************
executed this	Signature, of Inventor(s)) *	*
Date	(Andrew), Pascall		griss.

PATENT REEL: 050782 FRAME: 0623

RECORDED: 10/21/2019