

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT6617743

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the EXECUTION DATE FOR INVENTOR KYOUNG EUN KWEON previously recorded on Reel 055152 Frame 0671. Assignor(s) hereby confirms the CORRECT EXECUTION DATE FOR INVENTOR KYOUNG EUN KWEON IS 01/28/2021 NOT 01/29/2021.
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JOEL BASILE VARLEY	02/03/2021
NOAH PATRICK ALLEN	02/03/2021
CLINT FRYE	02/02/2021
KYOUNG EUN KWEON	01/28/2021
VINCENZO LORDI	02/02/2021
LARS VOSS	02/03/2021
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	LAWRENCE LIVERMORE NATIONAL SECURITY, LLC
<b>Street Address:</b>	7000 EAST AVENUE
<b>City:</b>	LIVERMORE
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94550
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	17166962
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(408)971-4660
<i>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.</i>	
<b>Phone:</b>	4089712573
<b>Email:</b>	alma@zilkakotab.com
<b>Correspondent Name:</b>	ZILKA-KOTAB, PC
<b>Address Line 1:</b>	1155 N. 1ST ST.
<b>Address Line 2:</b>	SUITE 105
<b>Address Line 4:</b>	SAN JOSE, CALIFORNIA 95112
<b>ATTORNEY DOCKET NUMBER:</b>	IL-13324S1O1/LLNLP240
<b>NAME OF SUBMITTER:</b>	DOMINIC M. KOTAB

<b>SIGNATURE:</b>	/Dominic M. Kotab/
<b>DATE SIGNED:</b>	03/23/2021
<b>Total Attachments: 9</b> source=IL-13324S1O1_LLNL240_ExecutedAssignment_02-04-2021#page1.tif source=IL-13324S1O1_LLNL240_ExecutedAssignment_02-04-2021#page2.tif source=IL-13324S1O1_LLNL240_ExecutedAssignment_02-04-2021#page3.tif source=IL-13324S1O1_LLNL240_ExecutedAssignment_02-04-2021#page4.tif source=IL-13324S1O1_LLNL240_ExecutedAssignment_02-04-2021#page5.tif source=IL-13324S1O1_LLNL240_ExecutedAssignment_02-04-2021#page6.tif source=IL-13324S1O1_LLNL240_ExecutedAssignment_02-04-2021#page7.tif source=IL-13324S1O1_LLNL240_ExecutedAssignment_02-04-2021#page8.tif source=IL-13324S1O1_LLNL240_ExecutedAssignment_02-04-2021#page9.tif	

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT6534898

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JOEL BASILE VARLEY	02/03/2021
NOAH PATRICK ALLEN	02/03/2021
CLINT FRYE	02/02/2021
KYOUNG EUN KWEON	01/29/2021
VINCENZO LORDI	02/02/2021
LARS VOSS	02/03/2021
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	LAWRENCE LIVERMORE NATIONAL SECURITY, LLC
<b>Street Address:</b>	7000 EAST AVENUE
<b>City:</b>	LIVERMORE
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94550
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	17166962
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(408)971-4660
<i>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.</i>	
<b>Phone:</b>	(408) 971-2573
<b>Email:</b>	alma@zilkakotab.com
<b>Correspondent Name:</b>	ZILKA-KOTAB, PC
<b>Address Line 1:</b>	1155 N. 1ST ST.
<b>Address Line 2:</b>	SUITE 105
<b>Address Line 4:</b>	SAN JOSE, CALIFORNIA 95112
<b>ATTORNEY DOCKET NUMBER:</b>	IL-13324S1O1/LLNLP240
<b>NAME OF SUBMITTER:</b>	DOMINIC M. KOTAB
<b>SIGNATURE:</b>	/Dominic M. Kotab/
<b>DATE SIGNED:</b>	02/04/2021

## ASSIGNMENT

LLNL Record of Invention Case No. IL-13324S1O1 , entitled:

### FIELD ASSISTED INTERFACIAL DIFFUSION DOPING THROUGH HETEROSTRUCTURE DESIGN

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(s)

- |                              |                              |
|------------------------------|------------------------------|
| 1. <u>Joel Basile Varley</u> | 2. <u>Noah Patrick Allen</u> |
| 3. <u>Clint Frye</u>         | 4. <u>Kyoung Eun Kweon</u>   |
| 5. <u>Vincenzo Lordi</u>     | 6. <u>Lars Voss</u>          |

hereby sells, assigns, transfers, and conveys to ASSIGNEE, Lawrence Livermore National Security, LLC, a Delaware limited liability company, having a place of business at 7000 East Avenue, Livermore, CA 94550 and the successors, assigns and legal representative of the ASSIGNEE all of its right, title and interest throughout the world in and to any and all inventions and discoveries found in the above-listed LLNL Record of Invention Case No. and in:

- U.S. Provisional Application Serial No. \_\_\_\_\_ , filed on \_\_\_\_\_
- U.S. Patent Application Serial No. 17/166,962 , filed on 02/03/2021
- International Application Serial No. \_\_\_\_\_ , filed on \_\_\_\_\_

and any legal equivalent thereof in a foreign country, including the right to claim priority, and in and to all Letters Patent to be obtained for said inventions and discoveries by the above application(s) or any continuation, division, continuation-in-part, extension or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, Lawrence Livermore National Security, LLC.

executed this

2/3/2021

\_\_\_\_\_  
Date

Signature of ASSIGNOR(s)



\_\_\_\_\_  
Joel Basile Varley

executed this

\_\_\_\_\_  
Date

Signature of ASSIGNOR(s)

\_\_\_\_\_  
Noah Patrick Allen

## ASSIGNMENT

LLNL Record of Invention Case No. IL-13324S101, entitled:

### FIELD ASSISTED INTERFACIAL DIFFUSION DOPING THROUGH HETEROSTRUCTURE DESIGN

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(s)

- |                              |                              |
|------------------------------|------------------------------|
| 1. <u>Joel Basile Varley</u> | 2. <u>Noah Patrick Allen</u> |
| 3. <u>Clint Frye</u>         | 4. <u>Kyoung Eun Kweon</u>   |
| 5. <u>Vincenzo Lordi</u>     | 6. <u>Lars Voss</u>          |

hereby sells, assigns, transfers, and conveys to ASSIGNEE, Lawrence Livermore National Security, LLC, a Delaware limited liability company, having a place of business at 7000 East Avenue, Livermore, CA 94550 and the successors, assigns and legal representative of the ASSIGNEE all of its right, title and interest throughout the world in and to any and all inventions and discoveries found in the above-listed LLNL Record of Invention Case No. and in:

- U.S. Provisional Application Serial No. \_\_\_\_\_, filed on \_\_\_\_\_
- U.S. Patent Application Serial No. 17/166,962, filed on 02/03/2021
- International Application Serial No. \_\_\_\_\_, filed on \_\_\_\_\_

and any legal equivalent thereof in a foreign country, including the right to claim priority, and in and to all Letters Patent to be obtained for said inventions and discoveries by the above application(s) or any continuation, division, continuation-in-part, extension or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, Lawrence Livermore National Security, LLC.

executed this

Signature of ASSIGNOR(s)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Joel Basile Varley

executed this

Signature of ASSIGNOR(s)

2/3/2021  
Date

  
Noah Patrick Allen

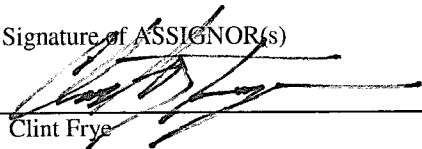
LLNL Case No.: IL-13324S1O1

executed this

2/2/21

Date

Signature of ASSIGNOR(s)

  
Clint Frye

executed this

\_\_\_\_\_  
Date

Signature of ASSIGNOR(s)

\_\_\_\_\_  
Kyoung Eun Kweon

executed this

\_\_\_\_\_  
Date

Signature of ASSIGNOR(s)

\_\_\_\_\_  
Vincenzo Lordi

executed this

\_\_\_\_\_  
Date

Signature of ASSIGNOR(s)

\_\_\_\_\_  
Lars Voss

LLNL Case No.: IL-133245101

executed this

\_\_\_\_\_  
Date

Signature of ASSIGNOR(s)

\_\_\_\_\_  
Clint Frye

executed this

1.29.2021

\_\_\_\_\_  
Date

Signature of ASSIGNOR(s)

  
\_\_\_\_\_  
Kyoung Eun Kweon

executed this

\_\_\_\_\_  
Date

Signature of ASSIGNOR(s)

\_\_\_\_\_  
Vincenzo Lordi

executed this

\_\_\_\_\_  
Date

Signature of ASSIGNOR(s)

\_\_\_\_\_  
Lars Voss

LLNL Case No.: IL-13324S1O1

executed this

\_\_\_\_\_  
Date

Signature of ASSIGNOR(s)

\_\_\_\_\_  
Clint Frye

executed this

\_\_\_\_\_  
Date

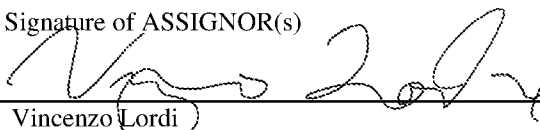
Signature of ASSIGNOR(s)

\_\_\_\_\_  
Kyoung Eun Kweon

executed this

2/2/2021  
Date

Signature of ASSIGNOR(s)

  
Vincenzo Lordi

executed this

\_\_\_\_\_  
Date

Signature of ASSIGNOR(s)

\_\_\_\_\_  
Lars Voss



LLNL Case No.: IL-133245101

executed this

Date \_\_\_\_\_

Signature of ASSIGNOR(s)

~~~~~  
Clint Frye

executed this

~~~~~  
Date \_\_\_\_\_

Signature of ASSIGNOR(s)

Kyoung Eun Kwon

executed this

~~~~~  
Date \_\_\_\_\_

Signature of ASSIGNOR(s)

Vincenzo Lordi

executed this

Date \_\_\_\_\_

Signature of ASSIGNOR(s)

Lars Voss