

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5175592

|                                                                                                                                                                                                 |                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| <b>SUBMISSION TYPE:</b>                                                                                                                                                                         | NEW ASSIGNMENT                            |
| <b>NATURE OF CONVEYANCE:</b>                                                                                                                                                                    | ASSIGNMENT                                |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                     |                                           |
| <b>Name</b>                                                                                                                                                                                     | <b>Execution Date</b>                     |
| SAAD A. KHAIRALLAH                                                                                                                                                                              | 05/11/2018                                |
| GABE GUSS                                                                                                                                                                                       | 06/19/2018                                |
| WAYNE E. KING                                                                                                                                                                                   | 03/23/2018                                |
| MANYALIBO JOSEPH MATTHEWS                                                                                                                                                                       | 04/05/2018                                |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                     |                                           |
| <b>Name:</b>                                                                                                                                                                                    | LAWRENCE LIVERMORE NATIONAL SECURITY, LLC |
| <b>Street Address:</b>                                                                                                                                                                          | 2300 FIRST STREET                         |
| <b>Internal Address:</b>                                                                                                                                                                        | SUITE 204                                 |
| <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>                             |
| <b>Application Number:</b>                                                                                                                                                                      | 16152763                                  |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                      |                                           |
| <b>Fax Number:</b>                                                                                                                                                                              | (925)423-8259                             |
| <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>                                                                                                                                                                                   | 925-422-7272                              |
| <b>Email:</b>                                                                                                                                                                                   | disney2@llnl.gov                          |
| <b>Correspondent Name:</b>                                                                                                                                                                      | LAWRENCE LIVERMORE NATIONAL LABORATORY    |
| <b>Address Line 1:</b>                                                                                                                                                                          | 7000 EAST AVENUE                          |
| <b>Address Line 2:</b>                                                                                                                                                                          | PO BOX 808, L-703                         |
| <b>Address Line 4:</b>                                                                                                                                                                          | LIVERMORE, CALIFORNIA 94551-0808          |
| <b>ATTORNEY DOCKET NUMBER:</b>                                                                                                                                                                  | IL-13259                                  |
| <b>NAME OF SUBMITTER:</b>                                                                                                                                                                       | MARK H. LOUGH                             |
| <b>SIGNATURE:</b>                                                                                                                                                                               | /MARK H. LOUGH/                           |
| <b>DATE SIGNED:</b>                                                                                                                                                                             | 10/05/2018                                |
| <b>Total Attachments: 8</b>                                                                                                                                                                     |                                           |

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source=IL-13259 Assignment-KHAIRALLAH#page2.tif  
source=IL-13259 Assignment-GUSS#page1.tif  
source=IL-13259 Assignment-GUSS#page2.tif  
source=IL-13259 Assignment-KING#page1.tif  
source=IL-13259 Assignment-KING#page2.tif  
source=IL-13259 Assignment-IBO#page1.tif  
source=IL-13259 Assignment-IBO#page2.tif

## ASSIGNMENT

LLNL Case No.: IL-13259

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

- |                              |                                     |
|------------------------------|-------------------------------------|
| 1. <u>Saad A. Khairallah</u> | 2. <u>Gabe Guss</u>                 |
| 3. <u>Wayne E. King</u>      | 4. <u>Manyalibo Joseph Matthews</u> |

hereby sells, assigns and transfers to ASSIGNEE, Lawrence Livermore National Security, LLC, a Delaware Corporation, having its administrative offices located at 2300 First Street, Suite 204, Livermore, CA 94550 and the successors, assigns and legal representative of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in the invention entitled:

### ADDITIVE MANUFACTURING POWER MAP TO MITIGATE OVERHANG STRUCTURE

and which is found in

- U.S. provisional application no. 62/647,358, filed on 03/23/2018
- U.S. patent application serial no. 16/152,763, filed on 10/05/2018
- Int'l 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 invention by the above application 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

5/11/2018  
Date

Signature of Inventor(s)

  
\_\_\_\_\_  
Saad A. Khairallah

executed this

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Date

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\_\_\_\_\_  
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\_\_\_\_\_  
Saad A. Khairallah

executed this

Signature of Inventor(s)

6-19-18

\_\_\_\_\_  
Date

Gabe Guss

\_\_\_\_\_  
Gabe Guss

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### ADDITIVE MANUFACTURING POWER MAP TO MITIGATE DEFECTS

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- |                                      |                   |            |                   |
|--------------------------------------|-------------------|------------|-------------------|
| ■ U.S. provisional application no.   | <u>62/647,358</u> | , filed on | <u>03/23/2018</u> |
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| ■ Int'l application serial no.       | _____             | , filed on | _____             |

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7/23/18

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Wayne E. King

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Signature of Inventor(s)

Manyalibo Joseph Matthews

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