507257503 04/28/2022

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7304424

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|--|
| NATURE OF CONVEYANCE: | EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| UCHICAGO ARGONNE, LLC | 11/10/2015 |

RECEIVING PARTY DATA

| Name: | UNITED STATES DEPARTMENT OF ENERGY | |
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PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13481110 |

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| DATE SIGNED: | 04/28/2022 |

Total Attachments: 1

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PATENT 507257503 REEL: 059761 FRAME: 0579

CONFIRMATORY LICENSE

Title of Invention: GRAPHENE LAYER FORMATION AT LOW SUBSTRATE TEMPERATURE ON A METAL AND CARBON BASED SUBSTRATE

Inventors: Anirudha V. Sumant, Alexander Balandin

Patent Application Serial No.: 13/481,110 Filing Date: May 25, 2012

Patent Number: Issue Date:

Contractor: UChicago Argonne, LLC

DOE Contract No.: DE-AC02-06CH11357 (add P # or CRADA # is appropriate)

DOE Case No.: S-127,889 ANL Case No.: ANL-IN-11-055

The Contractor has reported the above-identified invention as a subject invention to DOE and has elected to retain title thereto.

Accordingly, this document is confirmatory of the nonexclusive, nontransferable, irrevocable, paid-up, worldwide license in this subject invention, patent application and any resulting patent, including any continuation, divisional, reissue, or supplemental application thereof, to practice or to have practiced for or on behalf of the United States throughout the world; and of all other rights acquired by the Government by the patent rights clause in the above-identified contract.

It is understood and agreed that this license does not preclude the Government from asserting rights under the provisions of said contract or of any other agreement between the Government and the Contractor, or from asserting any other rights of the Government with respect to the above-identified subject invention.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

Signed this 10TH DAY OF NOVEMBER, 2015

Contractor Name: UChicago Argonne, LLC

By:_______

Chief Patent Counsel

Argonne National Laboratory UChicago Argonne, LLC

Mas D. Millians

PATENT REEL: 059761 FRAME: 0580

RECORDED: 04/28/2022