504560460 09/22/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4607171

| | | NEW ASSIGNMENT | NEW ASSIGNMENT | | | |
|---|---|---|----------------|--|--|--|
| NATURE OF CONVEYANCE: | | ASSIGNMENT | ASSIGNMENT | | | |
| CONVEYING PART | Υ DATA | | | | | |
| | | Name | Execution Date | | | |
| KIMBERLY A SABLO | NC | | 09/19/2017 | | | |
| JOHN W LITTLE | | | 09/19/2017 | | | |
| RECEIVING PARTY | DATA | | | | | |
| Name: | | THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF THE ARMY | | | | |
| Street Address: | 101 AF | RMY PENTAGON | | | | |
| City: | WASH | INGTON | | | | |
| State/Country: | D.C. | | | | | |
| Postal Code: | 20310 | | | | | |
| PROPERTY NUMBE Property Ty | | Number | | | | |
| Application Numbe | r: | 15710947 | | | | |
| | ΕΠΑΤΑ | | | | | |
| | ill be sent to | (301)394-3972 o the e-mail address first; if that is uns d: if that is unsuccessful, it will be sen | | | | |
| Fax Number: <i>Correspondence w</i> | ill be sent to | | | | | |
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| Fax Number: <i>Correspondence wi</i> <i>using a fax number</i> Phone: Email: Correspondent Nan | ill be sent to ;, if provided | <i>o the e-mail address first; if that is uns</i> <i>d; if that is unsuccessful, it will be sen</i> 301-394-1769 nadine.I.Ioman.civ@mail.mil ALAN I. KALB | | | | |
| Fax Number: <i>Correspondence wi using a fax number</i> Phone: Email: Correspondent Nan Address Line 1: | ill be sent to ;, if provided | <i>the e-mail address first; if that is uns</i> <i>t; if that is unsuccessful, it will be sen</i> 301-394-1769 nadine.I.Ioman.civ@mail.mil ALAN I. KALB 2800 POWDER MILL ROAD | | | | |
| Fax Number: <i>Correspondence wi using a fax number</i> Phone: Email: Correspondent Nan Address Line 1: Address Line 4: | ill be sent to ; if provided ne: | <i>b the e-mail address first; if that is uns</i> <i>d; if that is unsuccessful, it will be sen</i> 301-394-1769 nadine.I.Ioman.civ@mail.mil ALAN I. KALB 2800 POWDER MILL ROAD ADELPHI, MARYLAND 20783 | | | | |
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ASSIGNMENT AND AGREEMENT

Title of Invention: HIGH EFFICIENCY PHOTOVOLTAIC CELLS WITH SUPPRESSED RADIATIVE EMISSION DUE TO CHEMICAL NONEQUILIBRIUM OF PHOTOELECTRONS

Inventor(s): Kimberly A. Sablon, Andrei V. Sergeyev, John W. Little

Date Declaration Executed: 09/19/2017

*Application Serial No.: 15/710,947 *Filing Date: 9/21/17 Docket No.: ARL 16-45

(*I (We) herby authorize the application serial number and filing date of said application be added when known.)

I, the undersigned inventor, in consideration of the rights of the Government of the United States acquired by virtue of circumstances under which the above-identified invention was made, hereby:

1. Assign to the Government of the United States, as represented by the Secretary of the Army, my entire right, title, and interest throughout the United States, its Territories, Possessions, and Puerto Rico, in and to the above-entitled invention and application for patent and all Letters Patent issuing thereon, and any continuation or division of said application and any reissue or extension of said Letters Patent.

2. Agree to assign to the Government upon its request, title and interest in the invention in those foreign countries in which the Government, within eight months of the filing of the United States application for patent, determines to cause an application to be filed; provided that if the Government determines not to cause an application to be filed in any particular foreign country or fails to make such a determination, within the said eight months, all right, title and interest in the invention in such foreign country shall remain in me, subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent in which may issue on the invention in such foreign country, including the power to issue sublicenses for use in behalf of the Government and/or furtherance of the foreign policies of the Government.

3. Agree to provide any further information within my knowledge and to execute any further documents necessary to the prosecution of patent applications on the invention, the prosecution and settlement of interferences and recording of title to patent applications and patents issuing thereon.

| Signature of Inventor: | - <u>- Hel</u> ford the Carines | | | |
|--|--|------------------------------|---------------------|--|
| a d e face de la composition de la comp | (First name) | (Middle Initial) | (Last Name) | |
| Duty Address: Army R | esearch Laboratory, Adelphi, (Locality) | Montgomery (County) | Maryland (State) | |
| Date: <u>01/11/17</u> | Typed name of | Inventor: Kimberly A. Sablon | | |
| | ********(nota | rizing preferred)******** | | |
| State of: Marylan | (d) SS. | | | |
| County of: Montgom | ery) [place where a | cknowledgement is taken] | | |

On the above date <u>Kimberly A. Sablon</u> known to me to be the individual described in and who executed the foregoing instrument duly appeared before me and acknowledged to me that the same as his own free act and deed. In witness whereof I hereunto set my hand and official seal.

| Nadine L. Loman |
|--|
| (Printed or typeswritten name of notary public) |
| A Ladam TR Flancum |
| (Printed or typewritten name of notary public) |

(SEAL)

My Commission expires on <u>February 27, 2019</u> Page 1 of 2

> PATENT REEL: 043663 FRAME: 0429

| Signature of Inventor: | n. Sate | |
|---|--|---------------------|
| (First name) | (Middle Initial) | (Last Name) |
| Duty Address: Army Research Laboratory, Adelphi, (Locality) | Montgomery (County) | Maryland (State) |
| Date: 09/19/2017 Typed name of I | nventor: John W. Little | |
| *********(notar | izing preferred)******** | |
| State of: <u>Maryland</u>) SS. County of: <u>Montgomery</u>) [place where ac | knowledgement is taken] | |
| An an an Anna Anna Anna An An | a an an an Ann an An Air an Air an Air an Air an Air | |

On the above date <u>John W. Little</u> known to me to be the individual described in and who executed the foregoing instrument duly appeared before me and acknowledged to me that the same as his own free act and deed. In witness whereof I hereunto set my hand and official seal.

| Nadine L. Loman | |
|--|--|
| (Printed or typeyariten name of notary public) | |
| - Same WI Or Osciel IS PHONODA | |
| (Signature of notary public) | |

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My Commission expires on February 27, 2019

(SEAL)

Page 2 of 2