

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7162593

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KOOSHA NASSIRI NAZIF	11/05/2018
RAISUL ISLAM	11/05/2018
JIN-HONG PARK	11/05/2018
KRISHNA C. SARASWAT	11/05/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY
<b>Street Address:</b>	OFFICE OF THE GENERAL COUNSEL, BLDG 170, 3RD FL, MAIN QUAD, PO BOX 20386
<b>City:</b>	STANFORD
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94305-2038
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>PCT Number:</b>	US2019059849
<b>CORRESPONDENCE DATA</b>	
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<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>	
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<b>ATTORNEY DOCKET NUMBER:</b>	S18-187/PCT
<b>NAME OF SUBMITTER:</b>	RON JACOBS
<b>SIGNATURE:</b>	/Ron Jacobs/
<b>DATE SIGNED:</b>	02/07/2022
<b>Total Attachments: 4</b>	

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**PATENT**

**REEL: 058911 FRAME: 0214**

## ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **November 5, 2018**, by and between **Raisul Islam**, an individual residing in **San Jose, CA, USA**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **Office of the General Counsel, P.O. Box 20386, Stanford, CA 94305-2038, US** (the "Assignee").

1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US provisional patent application **62/755784** filed **11/5/2018** entitled **Integration of Transition Metal Dichalcogenides (TMDs) and Si Tandem Solar Cells Using All-inorganic Metal Oxide Heterojunction Contacts Aiming at >30% Efficiency at Low Cost** (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.

2) Assignor hereby agrees that no assignment, sale, agreement or encumbrance has been or will be made or entered into by Assignor which would conflict with this Assignment. Assignor represents and warrants to Assignee that at the time of the execution and delivery of this Assignment, Assignor solely owns (or jointly owns, if the invention(s) were jointly made) the entire right, title and interest in and to said invention(s).

3) Assignor agrees that Assignee may apply for foreign patents relating to said invention(s) and irrevocably authorizes Assignee and grants Assignee the right to do so.

4) Assignor agrees, on request and without further consideration, but at the expense of Assignee, to sign all lawful papers, make all rightful oaths, and give any required testimony in any legal proceedings relating to said invention(s), and to generally aid Assignee, or its successors or assigns to obtain and enforce patent protection for said invention(s) in any and all countries.

5) Assignor authorizes and requests any official whose duty it is to issue patents to issue any patent on said invention(s) to Assignee, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.

6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of **November 5, 2018**.

Signature: \_\_\_\_\_

Assignor: **Raisul Islam**



Lumen Ref.: S18-187/PROV  
PID: 25050 IID: 5165

## ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **November 5, 2018**, by and between **Koosha Nassiri Nazif**, an individual residing in **Stanford, CA, USA**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **Office of the General Counsel, P.O. Box 20386, Stanford, CA 94305-2038, US** (the "Assignee").

1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US provisional patent application **62/755784** filed **11/5/2018** entitled **Integration of Transition Metal Dichalcogenides (TMDs) and Si Tandem Solar Cells Using All-inorganic Metal Oxide Heterojunction Contacts Aiming at >30% Efficiency at Low Cost** (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.

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Assignor has executed this Assignment as of the Effective Date of **November 5, 2018**.

Signature: \_\_\_\_\_

Assignor: **Koosha Nassiri Nazif**

Lumen Ref.: S18-187/PROV  
PID: 25050 IID: 6631

## ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **November 5, 2018**, by and between **Jin-Hong Park**, an individual residing in **Hwasung-si, South Korea**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **Office of the General Counsel, P.O. Box 20386, Stanford, CA 94305-2038, US** (the "Assignee").

1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US provisional patent application **62/755784** filed **11/5/2018** entitled **Integration of Transition Metal Dichalcogenides (TMDs) and Si Tandem Solar Cells Using All-Inorganic Metal Oxide Heterojunction Contacts Aiming at >30% Efficiency at Low Cost** (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.

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6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of **November 5, 2018**.

Signature: Jin-Hong Park  
Assignor: **Jin-Hong Park**

Lumen Ref.: S18-187/PROV  
PID: 25050 IID: 6630

## ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **November 5, 2018**, by and between **Krishna C. Saraswat**, an individual residing in **Saratoga, CA, USA**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **Office of the General Counsel, P.O. Box 20386, Stanford, CA 94305-2038, US** (the "Assignee").

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6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of **November 5, 2018**.

Signature:   
Assignor: **Krishna C. Saraswat**

Lumen Ref.: S18-187/PROV  
PID: 25050 IID: 4840