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| PATENT ASSIGNMENT COVER SHEET |
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EPAS ID: PAT6708272

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| KOOSHA NASSIRI NAZIF | 04/26/2021 |
| RAISUL ISLAM | 04/26/2021 |
| JIN-HONG PARK | 05/10/2021 |
| KRISHNA C. SARASWAT | 04/26/2021 |
| RECEIVING PARTY DATA | |
| Name: | THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY |
| Street Address: | OFFICE OF THE GENERAL COUNSEL, BLDG 170, 3RD FL, MAIN QUAD PO BOX 20386 |
| City: | STANFORD |
| State/Country: | CALIFORNIA |
| Postal Code: | 94305-2038 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 17288689 |
| CORRESPONDENCE DATA | |
| Fax Number: | (650)424-0141 |
| <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> | |
| Phone: | 650-331-8411 |
| Email: | ron@lumenpatent.com |
| Correspondent Name: | RON JACOBS |
| Address Line 1: | 438 CAMBRIDGE AVE. |
| Address Line 2: | SUITE 225 |
| Address Line 4: | PALO ALTO, CALIFORNIA 94306 |
| ATTORNEY DOCKET NUMBER: | S18-187/PCT/US |
| NAME OF SUBMITTER: | RON JACOBS |
| SIGNATURE: | /Ron Jacobs/ |
| DATE SIGNED: | 05/13/2021 |
| This document serves as an Oath/Declaration (37 CFR 1.63). | |

Total Attachments: 6

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ASSIGNMENT AND DECLARATION

Docket No.: **S18-187**
PID: 29452 US **17/288689**

WHEREAS, **Koosha Nassiri Nazif** of **Stanford, CA, USA**, **Raisul Islam** of **San Jose, CA, USA**, **Jin-Hong Park** of **Hwasung-si, South Korea**, **Krishna C. Saraswat** of **Saratoga, CA, USA**, is/are the inventor(s) of an invention entitled **Tandem solar cells having a top or bottom metal chalcogenide cell** that is the subject matter of a US application for Letters Patent which is identifiable in the United States Patent and Trademark Office by application no. **17/288689** filed on **4/26/2021** and/or executed on even date herewith;

WHEREAS, **The Board of Trustees of the Leland Stanford Junior University**, a trust with corporate powers under the laws of the State of California and the United States of America, and having offices at Building 170, Third Floor, Main Quad, P.O. Box 20386, Stanford, CA 94035-2038 USA, ("Assignee") is desirous of acquiring the entire right, title, and interest in and to the invention, the applications, and any and all Letters Patent or similar foreign or domestic legal protection;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I transfer to Assignee, its successors and assigns, my entire right, title, and interest in and to the invention, the above-identified applications, the right to claim priority, all provisional applications from which any of the above-identified applications claim priority, corresponding domestic and foreign applications, any continuation, division, renewal, or substitute for the applications, all Letters Patent, any reissue, re-examination, or similar legal protection issuing related to the Letters Patent, and all rights and benefits under any applicable treaty or convention; and I authorize the Director of the United States Patent and Trademark Office or foreign equivalent to issue the Letters Patent or similar legal protection to the Assignee.

I authorize the Assignee, its successors and assigns, to insert in this instrument the filing date(s) and application numbers when ascertained. I further authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries, and appoint Assignee the common representative in the above identified international application and any international application for the invention.

I represent to the Assignee, its successors, and assigns, that I have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I, my executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute and deliver to Assignee or its legal representatives such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries, including without limitation providing testimony in any related interference, litigation, or proceeding.

The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Signature: 
Inventor: **Krishna C. Saraswat**

Date: April 26, 2021

ASSIGNMENT AND DECLARATION

Docket No.: S18-187
PID: 29452 US 17/288689

WHEREAS, Koosha Nassiri Nazif of Stanford, CA, USA, Raisul Islam of San Jose, CA, USA, Jin-Hong Park of Hwasung-si, South Korea, Krishna C. Saraswat of Saratoga, CA, USA, is/are the inventor(s) of an invention entitled Tandem solar cells having a top or bottom metal chalcogenide cell that is the subject matter of a US application for Letters Patent which is identifiable in the United States Patent and Trademark Office by application no. 17/288689 filed on 4/26/2021 and/or executed on even date herewith;

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NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I transfer to Assignee, its successors and assigns, my entire right, title, and interest in and to the invention, the above-identified applications, the right to claim priority, all provisional applications from which any of the above-identified applications claim priority, corresponding domestic and foreign applications, any continuation, division, renewal, or substitute for the applications, all Letters Patent, any reissue, re-examination, or similar legal protection issuing related to the Letters Patent, and all rights and benefits under any applicable treaty or convention; and I authorize the Director of the United States Patent and Trademark Office or foreign equivalent to issue the Letters Patent or similar legal protection to the Assignee.

I authorize the Assignee, its successors and assigns, to insert in this instrument the filing date(s) and application numbers when ascertained. I further authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries, and appoint Assignee the common representative in the above identified international application and any international application for the invention.

I represent to the Assignee, its successors, and assigns, that I have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I, my executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute and deliver to Assignee or its legal representatives such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries, including without limitation providing testimony in any related interference, litigation, or proceeding.

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Signature:  Date: 04/26/2021
Inventor: Raisul Islam

ASSIGNMENT AND DECLARATION

Docket No.: **S18-187**
PID: 29452 US **17/288689**

WHEREAS, **Koosha Nassiri Nazif** of **Stanford, CA, USA**, **Raisul Islam** of **San Jose, CA, USA**, **Jin-Hong Park** of **Hwasung-si, South Korea**, **Krishna C. Saraswat** of **Saratoga, CA, USA**, is/are the inventor(s) of an invention entitled **Tandem solar cells having a top or bottom metal chalcogenide cell** that is the subject matter of a US application for Letters Patent which is identifiable in the United States Patent and Trademark Office by application no. **17/288689** filed on **4/26/2021** and/or executed on even date herewith;


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Signature:  Date: 04/26/2021
Inventor: **Koosha Nassiri Nazif**

PATENT
REEL: 056232 FRAME: 0331

ASSIGNMENT AND DECLARATION

Docket No.: **S18-187**
PID: 29452 US 17/288689

WHEREAS, **Koosha Nassiri Nazif of Stanford, CA, USA, Raisul Islam of San Jose, CA, USA, Jin-Hong Park of Hwasung-si, South Korea, Krishna C. Saraswat of Saratoga, CA, USA,** is/are the inventor(s) of an invention entitled **Tandem solar cells having a top or bottom metal chalcogenide cell** that is the subject matter of a US application for Letters Patent which is identifiable in the United States Patent and Trademark Office by application no. **17/288689** filed on **4/26/2021** and/or executed on even date herewith;

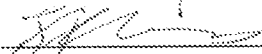
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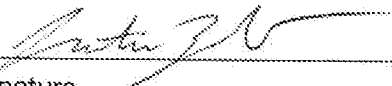
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Signature:  Date: 2021-05-11
Inventor: **Jin-Hong Park**

ASSIGNMENT AND DECLARATION

Docket No.: **S18-187**
PID: 29452 US 17/288689

SIGNED FOR AND ON BEHALF OF THE ASSIGNEE,
The Board of Trustees of The Leland Stanford Junior University



Signature

Date

Justin Zahrt
Name

Assistant Director, Intellectual Property
Position



STANFORD UNIVERSITY • OFFICE OF TECHNOLOGY LICENSING

3000 EL CAMINO REAL • BUILDING FIVE SUITE 300 • PALO ALTO CA 94306-2100
(650) 723-0651 • FAX (650) 725-7295

KARIN H. IMMERGLUCK
EXECUTIVE DIRECTOR
OFFICE OF TECHNOLOGY LICENSING

TO: Justin Zahrt

FROM: Karin Immergluck
Executive Director

DATE: March 9, 2020

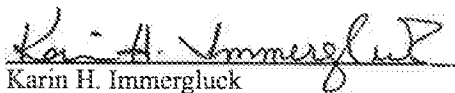
RE: DELEGATION OF SIGNATURE AUTHORITY: Assistant Director, Intellectual
Property, Office of Technology Licensing

Pursuant to the Delegation of Signature Authority from the Vice Provost and Dean of Research to me as Executive Director by memorandum dated June 4, 2018, I hereby further delegate Signature Authority for transactions specified below to the Assistant Director, Intellectual Property. The Assistant Director, Intellectual Property, has the authority to sign documents or approve transactions relating to the filing, prosecution, registration and maintenance of intellectual property assets of Stanford University, including patent applications, patents, copyright works, and trademarks. This authority includes the powers to sign and certify official intellectual property-related government and patent office documents, including power of attorney documents and intellectual property assignment documents on behalf of the University as the assignee.

Even though the authority may exist to sign documents, custom, sound business practice and judgement, as well as the involvement of any novel legal issues or potentially significant legal exposure, should result in bringing matters of significant policy, budget, or legal impact to the attention of the Executive Director, and in the case of legal impact, to the Office of General Counsel, for approval. The authority granted here is not a substitute for compliance with existing University policies.

This Signature Authority may not be further delegated without the approval and further delegation from the Executive Director.

All delegations of Signature Authority must be filed with the Vice Provost and Dean of Research and the Office of General Counsel.


Karin H. Immergluck
Executive Director
Office of Technology Licensing

* otl.stanford.edu *