

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT6847913

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CARISSIMA MARIE HUDSON	10/15/2019
JAE-WOO RYU	11/13/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	GLOBALWAFERS CO., LTD.
<b>Street Address:</b>	NO. 8. INDUSTRIAL EAST ROAD
<b>Internal Address:</b>	SCIENCE-BASED INDUSTRIAL PARK
<b>City:</b>	HSINCHU
<b>State/Country:</b>	TAIWAN
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17393568
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(314)612-2307
<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>	314-621-5070
<b>Email:</b>	USpatents@atllp.com, clager@atllp.com
<b>Correspondent Name:</b>	PATENT DOCKET DEPARTMENT ARMSTRONG TEASDALE LLP
<b>Address Line 1:</b>	7700 FORSYTH BOULEVARD
<b>Address Line 2:</b>	SUITE 1800
<b>Address Line 4:</b>	ST. LUOIS, MISSOURI 63105
<b>ATTORNEY DOCKET NUMBER:</b>	28744-5435 (181016.5)
<b>NAME OF SUBMITTER:</b>	NICHOLAS A. KEPPEL
<b>SIGNATURE:</b>	/Nicholas A. Keppel/
<b>DATE SIGNED:</b>	08/04/2021
<b>Total Attachments: 4</b>	
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source=ExecutedAssignment-42068150#page4.tif	

ASSIGNMENT

**WHEREAS, We Carissima Marie Hudson of St. Charles, Missouri and Jae-Woo Ryu of Chesterfield, Missouri, have invented an improvement in METHODS FOR GROWING A NITROGEN DOPED SINGLE CRYSTAL SILICON INGOT USING CONTINUOUS CZOCHRALSKI METHOD and have executed an application for a United States patent based thereon filed September 13, 2019 assigned Serial No. 16/569,949;**

**AND, WHEREAS, GlobalWafers Co., Ltd., a company organized and existing under the laws of Taiwan and having its registered address at No. 8. Industrial East Road 2, Science-Based Industrial Park, Hsinchu, Taiwan R.O.C. (hereinafter referred to as "ASSIGNEE") is desirous of acquiring certain rights thereunder;**

**NOW, THEREFORE, for one dollar and other good and valuable consideration, receipt of all of which is hereby acknowledged, we have agreed to and do hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said invention, said United States application, any other United States applications (including provisional, non-provisional, divisional, continuing, or reissue applications) based in whole or in part on said United States application or in whole or in part on said invention, any foreign applications based in whole or in part on any of the aforesaid United States applications or in whole or in part on said invention, and any and all patents (including extensions thereof) of any country which have been or may be granted on any of the aforesaid applications or on said invention or any part thereof;**

**TO BE HELD AND ENJOYED** by said ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us had no sale and assignment of said interest been made;

**AND We** hereby authorize and request the Commissioner of Patents of the United States of America to issue any and all United States patents which may be granted upon said United States applications or any of them, or upon said invention or any part thereof, to said ASSIGNEE;

**AND We** hereby jointly and severally agree for ourselves and for our respective heirs, executors and administrators, to execute without further consideration any further lawful documents and any further assurances, and any provisional, non-provisional, divisional, continuing, reissue, or other applications for patents of any country, that may be deemed necessary by said ASSIGNEE fully to secure to said ASSIGNEE its interest as aforesaid in and to said invention or any part thereof, and in and to said several patents or any of them;

**AND We** hereby jointly and severally covenant for ourselves and our respective legal representatives that we have granted no right or license to make, use or sell said invention, to anyone except said ASSIGNEE, that prior to the execution of this deed our right, title and interest in said

invention had not been otherwise encumbered, and that we have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, I have hereunto set my hand.

Signature: Carissima M. Hudson  
Carissima Marie Hudson

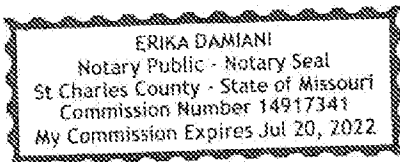
Date: Oct 15, 2019

STATE OF Missouri  
COUNTY OF St. Charles

On this 15 day of October, 2019 before me, a Notary Public, personally appeared **Carissima Marie Hudson**, to me known to be the person described in and who executed the foregoing assignment and acknowledged that he executed same as his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.

Erika Damiani  
(Notary Public)



**SECTION BELOW IS FOR USE ONLY IF NOT SIGNING IN FRONT OF A NOTARY**

Signature: \_\_\_\_\_  
Carissima Marie Hudson

Date: \_\_\_\_\_

Witnessed by: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name of Witness

Witnessed by: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name of Witness

IN WITNESS WHEREOF, I have hereunto set my hand.

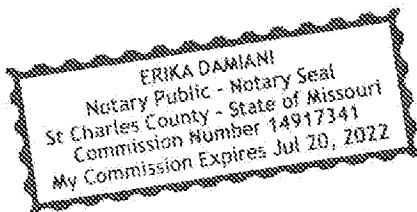
Signature: [Handwritten Signature]  
Jae-Woo Ryu

Date: 11/13/2019

STATE OF Missouri  
COUNTY OF St. Charles

On this 13 day of November, 2019 before me, a Notary Public, personally appeared **Jae-Woo Ryu**, to me known to be the person described in and who executed the foregoing assignment and acknowledged that he executed same as his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.



[Handwritten Signature]  
(Notary Public)

**SECTION BELOW IS FOR USE ONLY IF NOT SIGNING IN FRONT OF A NOTARY**

Signature: \_\_\_\_\_  
Jae-Woo Ryu

Date: \_\_\_\_\_

Witnessed by: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name of Witness

Witnessed by: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name of Witness

For and on behalf of GlobalWafers Company, Ltd.

*Paul Markowitz*  
Paul Markowitz  
Director of Intellectual Property

*October 15, 2019*  
Date

STATE OF *Missouri*  
COUNTY OF *St Charles*

On this *15* day of *October*, 2019 before me, a Notary Public, personally appeared **Paul Markowitz**, to me known to be the person described in and who executed the foregoing assignment and acknowledged that he executed same as his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.

*Erika Damiani*  
(Notary Public)

