506012899 04/14/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6059611

SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT	
CONVEYING PARTY	/ DATA		
		Name	Execution Date
CARISSIMA MARIE HUDSON			05/13/2019
JAEWOO RYU			06/06/2019
RECEIVING PARTY	DATA		
Name:	GLOB	GLOBALWAFERS CO., LTD.	
Street Address:	NO. 8	NO. 8 INDUSTRIAL EAST ROAD 2	
Internal Address:	SCIEN	SCIENCE-BASED INDUSTRIAL PARK	
City:	HSINC	HSINCHU	
State/Country:	TAIWA	TAIWAN	
PROPERTY NUMBE	RS Total:	1	
	ne	Number]
Property Ty	pc		
Property Ty Application Number		16847760	
	:	16847760	
Application Number	:	(314)612-2307]
Application Number CORRESPONDENC Fax Number: Correspondence wi	E DATA	I	

FIIONE.	514-021-5070
Email:	USpatents@armstrongteasdale.com, clager@atllp.com
Correspondent Name:	PATENT DOCKET DEPARTMENT ARMSTRONG TEASD
Address Line 1:	7700 FORSYTH BOULEVARD
Address Line 2:	SUITE 1800
Address Line 4:	ST. LOUIS, MISSOURI 63105

ATTORNEY DOCKET NUMBER:	28744-5146 (181006.1)			
NAME OF SUBMITTER:	NICHOLAS A. KEPPEL			
SIGNATURE:	/Nicholas A. Keppel/			
DATE SIGNED:	04/14/2020			
Total Attachments: 4				
source=Executed Assignment form 181006 28744-4844#page1.tif				
source=Executed Assignment form 181006 28744-4844#page2.tif				
source=Executed Assignment form 181006 28744-4844#page3.tif				

source=Executed Assignment form 181006 28744-4844#page4.tif

<u>ASSIGNMENT</u>

WHEREAS, We Carissima Marie Hudson of St. Charles, Missouri, and JaeWoo Ryu of Chesterfield, Missouri, have invented an improvement in **METHODS FOR GROWING A SINGLE CRYSTAL SILICON INGOT USING CONTINUOUS CZOCHRALSKI METHOD** and have executed an application for a United States patent based thereon filed **April 18, 2019**, assigned Serial No. **62/835,735**;

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 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

Page 1 of 4

PATENT REEL: 052387 FRAME: 0197

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:

Auris M. Hudson Date: 5/13/19

STATE OF COUNTY OF

On this $\underline{13}$ day of \underline{Mag} , 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 - Notary Seal St Charles County - State of Missouri Commission Number 14917341 My Commission Expires Jul 20, 2022

Erika Damiani (Notary Public)

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

Signature:

Carissima Marie Hudson

Witnessed by: _____

Signature

Date:

Printed Name of Witness

Witnessed by: _____

Signature

Printed Name of Witness

PATENT REEL: 052387 FRAME: 0198

IN WITNESS WHEREOF, I have hereunto set my hand.

Signature: JaeWoo Ryu	Date: 6/6/2019
STATE OF Missourie) COUNTY OF H. Charles	

On this _____ day of ______, 2019 before me, a Notary Public, personally appeared JaeWoo 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.

StC	ERIKA DAMIANI Notary Public - Notary Seal harles County - State of Missouri commission Number 14917341 Commission Expires Jul 20, 2022

Anter Public)

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

Signature:

JaeWoo Ryu

Witnessed by: _____

Signature

Printed Name of Witness

Date: _____

Witnessed by:

Signature

Printed Name of Witness

Page 3 of 4

PATENT REEL: 052387 FRAME: 0199 For and on behalf of GlobalWafers Company, Ltd.

Paul Markowitz **Director of Intellectual Property**

STATE OF COUNTY OF

My 13, 2019

Date

On this $\underline{/2}$ day of \underline{May} , 2019 before me, a Notary Public, personally appeared <u>Paul Markowitz</u>, 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.

Page 4 of 4

(Notary Public)

ERIKA DAMIANI Notary Public - Notary Seal St Charles County - State of Missouri Commission Number 14917341 My Commission Expires Jul 20, 2022

> PATENT REEL: 052387 FRAME: 0200

RECORDED: 04/14/2020