# 504190352 01/23/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4237027

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
KI WON KIM	12/28/2016
HYEONG UK ROH	12/28/2016
JONG SUNG YUN	12/28/2016
WON PYO HONG	12/28/2016

## **RECEIVING PARTY DATA**

Name:	TOKAI CARBON KOREA CO., LTD
Street Address:	71, GAEJEONGSANEOPDANJI-RO
Internal Address:	MIYANG-MYEON, ANSEONG-SI
City:	GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	17602

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15394491

## **CORRESPONDENCE DATA**

Fax Number:

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.

**Phone:** 5208827623

Email:cgee@hayes-soloway.comCorrespondent Name:NORMAN P. SOLOWAYAddress Line 1:4640 E. SKYLINE DRIVEAddress Line 4:TUCSON, ARIZONA 85718

ATTORNEY DOCKET NUMBER:	MUHANN FPC-2016-0141
NAME OF SUBMITTER:	NORMAN P. SOLOWAY
SIGNATURE:	/norman p. soloway/
DATE SIGNED:	01/23/2017

**Total Attachments: 4** 

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PATENT REEL: 041045 FRAME: 0071

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PATENT REEL: 041045 FRAME: 0072

Docket No. MUHANN FPC-2016-0141

### ASSIGNMENT

I, Ki Won Kim of Gyeonggi-do, Republic of Korea, having invented certain inventions and improvements in METHOD AND APPARATUS FOR REPRODUCING COMPONENT OF SEMICONDUCTOR MANUFACTURING APPARATUS, AND REPRODUCED COMPONENT and having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 15/394,491 , filed December 29, 2016 ), for good and valuable consideration, the receipt of which is hereby acknowledged from TOKAI CARBON KOREA CO., LTD, a Korean corporation having its principal place of business at 71, Gaejeongsaneopdanji-ro, Miyang-myeon, Anseong-si, Gyeonggi-do, 17602, Republic of Korea, Republic of Korea (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

And for the same consideration I do agree that I will upon request execute any instrument which the Assignee may desire to carry this Assignment into effect and perfect the title transferred hereby or prosecute the above-mentioned application;

And I do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America to issue Letters Patent on the said application to the Assignee;

And I do hereby jointly and severally covenant for myself and for my legal representatives that I have granted no right or license to make, use, or sell said invention to anyone except the Assignee, that prior to the execution of this deed my right, title, and interest in and to said inventions or any of them or any part thereof has not been otherwise encumbered by me, and that I have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's signature	Date	2016	. 12.28.
Full name (typed or printed) Ki Won Kim			
Witness: Witness:			
<u>Benti</u> , <u>Kwen</u> Date: 12.28.20/6  Date:			

# **ASSIGNMENT**

I, Hyeong Uk Roh of Gyeonggi-do, Republic of Korea, having invented certain inventions and improvements in METHOD AND APPARATUS FOR REPRODUCING COMPONENT OF SEMICONDUCTOR MANUFACTURING APPARATUS, AND REPRODUCED COMPONENT and having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 15/394,491 \_\_\_\_\_, filed \_\_December 29, 2016 \_\_\_\_\_), for good and valuable consideration, the receipt of which is hereby acknowledged from TOKAI CARBON KOREA CO., LTD, a Korean corporation having its principal place of business at 71, Gaejeongsaneopdanji-ro, Miyang-myeon, Anseong-si, Gyeonggi-do, 17602, Republic of Korea, Republic of Korea (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

And for the same consideration I do agree that I will upon request execute any instrument which the Assignee may desire to carry this Assignment into effect and perfect the title transferred hereby or prosecute the above-mentioned application;

And I do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America to issue Letters Patent on the said application to the Assignee;

And I do hereby jointly and severally covenant for myself and for my legal representatives that I have granted no right or license to make, use, or sell said invention to anyone except the Assignee, that prior to the execution of this deed my right, title, and interest in and to said inventions or any of them or any part thereof has not been otherwise encumbered by me, and that I have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's:			_ Date _	2016,12.28
	(typed or printed) Hyeong Uk Roh	TVII		
Witness:	Bomi, Kwovi	Witness:		
Date:	74. 39. 3016+ 1111	Date:		

## ASSIGNMENT

I, Jong Sung Yun of Gyeonggi-do, Republic of Korea, having invented certain inventions and improvements in METHOD AND APPARATUS FOR REPRODUCING COMPONENT OF SEMICONDUCTOR MANUFACTURING APPARATUS, AND REPRODUCED COMPONENTand having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 15/394,491 , filed December 29, 2016 ), for good and valuable consideration, the receipt of which is hereby acknowledged from TOKAI CARBON KOREA CO., LTD, a Korean corporation having its principal place of business at 71, Gaejeongsaneopdanji-ro, Miyang-myeon, Anseong-si, Gyeonggi-do, 17602, Republic of Korea, Republic of Korea (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

And for the same consideration I do agree that I will upon request execute any instrument which the Assignee may desire to carry this Assignment into effect and perfect the title transferred hereby or prosecute the above-mentioned application;

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And I do hereby jointly and severally covenant for myself and for my legal representatives that I have granted no right or license to make, use, or sell said invention to anyone except the Assignee, that prior to the execution of this deed my right, title, and interest in and to said inventions or any of them or any part thereof has not been otherwise encumbered by me, and that I have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's Full name	signature(typed or printed)	My Jong Sung Yun		Date.	- 38	. DEC. 2016
Witness: _	Boms Kwon		Witness:			
Date:	12. 28. 2016		Date:			

### ASSIGNMENT

I, Won Pyo Hong of Gyeonggi-do, Republic of Korea, having invented certain inventions and improvements in METHOD AND APPARATUS FOR REPRODUCING COMPONENT OF SEMICONDUCTOR MANUFACTURING APPARATUS, AND REPRODUCED COMPONENTand having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 15/394,491 , filed December 29, 2016 ), for good and valuable consideration, the receipt of which is hereby acknowledged from TOKAI CARBON KOREA CO., LTD, a Korean corporation having its principal place of business at 71, Gaejeongsaneopdanji-ro, Miyang-myeon, Anseong-si, Gyeonggi-do, 17602, Republic of Korea, Republic of Korea (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

And for the same consideration I do agree that I will upon request execute any instrument which the Assignee may desire to carry this Assignment into effect and perfect the title transferred hereby or prosecute the above-mentioned application;

And I do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America to issue Letters Patent on the said application to the Assignee;

And I do hereby jointly and severally covenant for myself and for my legal representatives that I have granted no right or license to make, use, or sell said invention to anyone except the Assignee, that prior to the execution of this deed my right, title, and interest in and to said inventions or any of them or any part thereof has not been otherwise encumbered by me, and that I have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's signature	316	Date _	28. DEC. 2016
Full name (typed or printed)	Won Pyo Hong		
Witness: Bom?, Kwon	Witness:		
Date: (2 ב. פר. ב)	Date:		

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RECORDED: 01/23/2017