

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4924247

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
NUPUR BHARGAVA	03/28/2018
JOHN TOLLE	03/27/2018
JOE MARGETIS	04/06/2018
MATTHEW GOODMAN	04/17/2018
ROBERT VYNE	04/06/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ASM IP Holding B.V.
<b>Street Address:</b>	Versterkerstraat 8, 1322 AP
<b>City:</b>	Almere
<b>State/Country:</b>	NETHERLANDS
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15957565
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(602)382-6070
<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>	6023826000
<b>Email:</b>	ipdocket@swlaw.com
<b>Correspondent Name:</b>	SNELL & WILMER L.L.P.
<b>Address Line 1:</b>	400 EAST VAN BUREN STREET, SUITE 1900
<b>Address Line 2:</b>	ONE ARIZONA CENTER
<b>Address Line 4:</b>	PHOENIX, ARIZONA 85004-2202
<b>ATTORNEY DOCKET NUMBER:</b>	53358.08300
<b>NAME OF SUBMITTER:</b>	CYNTHIA L. PILLOTE
<b>SIGNATURE:</b>	/Cynthia L. Pillote/
<b>DATE SIGNED:</b>	04/19/2018
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 3</b>	

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN**  
**APPLICATION USING AN APPLICATION DATA SHEET**

First Named Inventor: Nupur Bhargava

Docket No.: 53358.08300

Serial No.:

Filing Date:

Title: METHODS FOR FORMING SILICON-CONTAINING EPITAXIAL LAYERS  
AND RELATED SEMICONDUCTOR DEVICE STRUCTURES

Pursuant to 35 U.S.C. 115(e), Applicant herewith submits for recordation a combined declaration and assignment.

Declaration

As the below named inventor, I hereby declare that:

The captioned 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 (5) years, or both.

I acknowledge that a person may not execute an oath or declaration for an application unless that person has reviewed and understands the contents of the application, including the claims, and is aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

Assignment

**AND WHEREAS**, ASM IP Holding B.V., a corporation having its principal place of business at Versterkerstraat 8, 1322 AP Almere, The Netherlands, is desirous of acquiring the entire right, title, and interest in and to the Application and the invention as described in the Application, and is a non-Inventor Applicant;

**AND WHEREAS**, a "formal application," as referred to herein, shall mean any provisional, non-provisional, design, continuation, continuation in part, divisional, reissue, reexamination, foreign, PCT or other patent application or like document,

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR by these presents do sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title, and interest in and to the Applications, the invention as described in the Application, and all formal applications which may be filed based in whole or in part on one or more of the aforesaid applications, in the United States and all foreign countries, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter American Convention Relating to Patents, Designs and

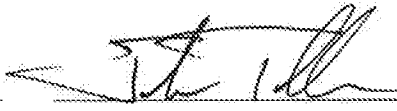
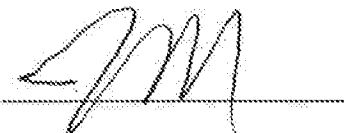
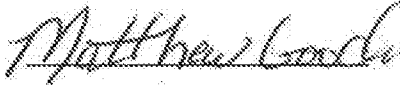

Industrial Models, and any other international agreements to which the United States adheres, and hereby authorizes and requests the Commissioner of Patents to issue said Letters Patent to ASSIGNEE, for the sole use and benefit of ASSIGNEE, its successors, assigns and legal representatives,

**AND HEREBY AGREE** to transfer, upon request of ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, a like interest in and to any improvements and formal applications based thereon, growing out of or relating to the invention; and, without further remuneration, to provide all reasonable assistance and execute any papers requested by ASSIGNEE, its successors, assigns and legal representatives, to preserve and/or acquire ASSIGNEE'S full protection and title in and to the invention hereby transferred and any improvements therein,

**AGREEING, FURTHERMORE**, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE for the filing and granting of formal applications based on the invention or improvements therein, and the perfecting of title thereto in ASSIGNEE.

**IN ADDITION**, I authorize any attorney associated with Snell & Wilmer L.L.P. to insert on this document the serial number, filing date, and any further identification that may be necessary or desirable by the U.S. Patent and Trademark Office.

**EXECUTED** as of the date(s) written below by ASSIGNOR:

INVENTOR'S NAME	ADDRESS	SIGNATURE	DATE
Nupur Bhargava	<u>Phoenix, Arizona, USA</u>	_____	_____
John Tolle	<u>Gilbert, Arizona, USA</u>		<u>3/27/18</u>
Joe Margetis	<u>Gilbert, Arizona, USA</u>		<u>4/06/18</u>
Matthew Goodman	<u>Phoenix, Arizona, USA</u>		<u>4/17/2018</u>
Robert Vyne	<u>Chandler, Arizona, USA</u>		<u>5/08/18</u>

SNELL & WILMER L.L.P., 400 East Van Buren, Phoenix, Arizona 85004-2202, (p) (602) 382-6000, (f) (602) 382-6070

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INVENTOR'S NAME	ADDRESS	SIGNATURE	DATE
Nupur Bhargava	<u>Phoenix, Arizona, USA</u>	<u>Nupur Bhargava</u>	<u>03-28-2018</u>
John Tolle	<u>Gilbert, Arizona, USA</u>	_____	_____
Joe Margetis	<u>Gilbert, Arizona, USA</u>	_____	_____
Matthew Goodman	<u>Phoenix, Arizona, USA</u>	<u>Matthew Goodman</u>	<u>4/17/2018</u>
Robert Vyne	<u>Chandler, Arizona, USA</u>	_____	_____

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