

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Naoto Tsuji</td> <td>03/04/2013</td> </tr> <tr> <td>Atsuki Fukazawa</td> <td>03/04/2013</td> </tr> <tr> <td>Noboru Takamura</td> <td>03/05/2013</td> </tr> <tr> <td>Suvi Haukka</td> <td>03/08/2013</td> </tr> <tr> <td>Antti Juhani Niskanen</td> <td>03/11/2013</td> </tr> <tr> <td>Hyung Sang Park</td> <td>03/06/2013</td> </tr> </tbody> </table>		Name	Execution Date	Naoto Tsuji	03/04/2013	Atsuki Fukazawa	03/04/2013	Noboru Takamura	03/05/2013	Suvi Haukka	03/08/2013	Antti Juhani Niskanen	03/11/2013	Hyung Sang Park	03/06/2013
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<table border="1"> <tr> <td>Name:</td> <td>ASM IP Holding B.V.</td> </tr> <tr> <td>Street Address:</td> <td>Versterkerstraat 8</td> </tr> <tr> <td>City:</td> <td>Almere</td> </tr> <tr> <td>State/Country:</td> <td>NETHERLANDS</td> </tr> <tr> <td>Postal Code:</td> <td>1322 AP</td> </tr> </table>		Name:	ASM IP Holding B.V.	Street Address:	Versterkerstraat 8	City:	Almere	State/Country:	NETHERLANDS	Postal Code:	1322 AP				
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CORRESPONDENCE DATA															
Fax Number:	6023826070														
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>															
Phone:	602-382-6337														
Email:	snieto@swlaw.com														
Correspondent Name:	Snell & Wilmer L.L.P. / Damon L. Boyd														
Address Line 1:	400 EAST VAN BUREN														
Address Line 2:	ONE ARIZONA CENTER														
Address Line 4:	PHOENIX, ARIZONA 85004-2202														
ATTORNEY DOCKET NUMBER:	56436.3500														

CH \$40.00 13799708

NAME OF SUBMITTER:

Damon L. Boyd

Total Attachments: 5

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ASSIGNMENT

UTILITY PATENT

WHEREAS, the undersigned inventor(s) (hereinafter singly and collectively, "ASSIGNOR") of the address(es) indicated below, have invented a(n) **Method for Forming Si-Containing Film Using Two Precursors by ALD** for which application for Letters Patent of the United States is being applied for herewith (hereinafter "Application");

AND WHEREAS, ASM IP Holding B.V. (hereinafter "ASSIGNEE"), 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 include the Application including any provisional, non-provisional, design, continuation, continuation in part, divisional, reissue, reexamination, foreign, PCT or other patent application or like document thereof,

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:

Application No.:

Filed:

INVENTOR'S NAME	ADDRESS	SIGNATURE	DATE
<u>Naoto Tsuji</u>	<u>Suginami-ku, Tokyo</u> <u>Japan</u>	<u>N. Tsuji</u>	<u>March 4, 2013</u>

WITNESS NAME	SIGNATURE	DATE
<u>Junya Morimoto</u>	<u>J. M</u>	<u>Mar 4, 2013</u>

<u>Atsuki Fukazawa</u>	<u>Tama-shi, Tokyo</u> <u>Japan</u>	<u>Atsuki Fukazawa</u>	<u>4th March 2013</u>
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WITNESS NAME	SIGNATURE	DATE
<u>Junya Morimoto</u>	<u>J. M</u>	<u>Mar. 4, 2013</u>

<u>Noboru Takamura</u>	<u>Kawasaki-shi, Kanagawa</u> <u>Japan</u>	<u>Noboru Takamura</u>	<u>5th March 2013</u>
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WITNESS NAME	SIGNATURE	DATE
<u>Junya Morimoto</u>	<u>J. M</u>	<u>Mar. 5, 2013</u>

<u>Suvi Haukka</u>	<u>Helsinki, Finland</u>	_____	_____
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Application No.: _____
Filed: _____

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<u>Naoto Tsuji</u>	<u>Suginami-ku, Tokyo</u> <u>Japan</u>	_____	_____

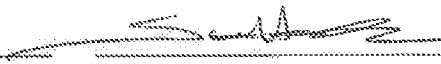
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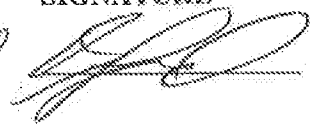
<u>Atsuki Fukazawa</u>	<u>Tama-shi, Tokyo</u> <u>Japan</u>	_____	_____
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<u>Noboru Takamura</u>	<u>Kawasaki-shi, Kanagawa</u> <u>Japan</u>	_____	_____
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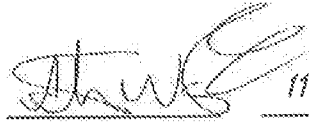
<u>Suvi Haukka</u>	 <u>Helsinki, Finland</u>	<u>March 8,</u>	<u>2013</u>
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WITNESS NAME	SIGNATURE	DATE
<u>Ryan Libergard</u>		<u>3/8/13</u>

Application No.: _____
Filed: _____

Antti Juhani Niskanen

Helsinki, Finland



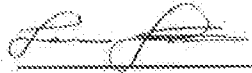
11-Mar-2013

WITNESS NAME

SIGNATURE

DATE

HANJU HUOTAKI



11-Mar-2013

Hyung Sang Park

Seoul, Korea

WITNESS NAME

SIGNATURE

DATE

SNELL & WILMER, L.L.P.
Damon L. Boyd, Esq.
One Arizona Center
400 East Van Buren
Phoenix, Arizona 85004-2202
Tel.: (602) 382-6337
Fax: (602) 382-6070

Application No.: _____
Filed: _____

Antti Juhani Niskanen _____
Helsinki, Finland _____

WITNESS NAME SIGNATURE DATE

Hyung Sang Park _____ Hyundai E&A 2 Bldg, Seoul _____ 2013. Mar. 06
Seoul, Korea _____

WITNESS NAME SIGNATURE DATE

Soohyun Kim _____ [Signature] _____ Mar. 06, 2013

SNELL & WILMER, LLP.
Damon L. Boyd, Esq.
One Arizona Center
400 East Van Buren
Phoenix, Arizona 85004-2202
Tel.: (602) 382-6337
Fax: (602) 382-6070