

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT5707989

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ANTTI J. NISKANEN	01/21/2015
SHANG CHEN	01/22/2015
VILJAMI PORE	01/21/2015
ATSUKI FUKAZAWA	01/22/2015
HIDEAKI FUKUDA	01/22/2015
SUVI P. HAUKKA	01/21/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ASM IP HOLDING B.V.
<b>Street Address:</b>	VERSTERKERSTRAAT 8
<b>City:</b>	ALMERE
<b>State/Country:</b>	NETHERLANDS
<b>Postal Code:</b>	1322 AP
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16540349
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(949)760-9502
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<b>Phone:</b>	949-760-0404
<b>Email:</b>	efiling@knobbe.com
<b>Correspondent Name:</b>	KNOBBE MARTENS OLSON & BEAR LLP
<b>Address Line 1:</b>	2040 MAIN STREET
<b>Address Line 2:</b>	14TH FLOOR
<b>Address Line 4:</b>	IRVINE, CALIFORNIA 92614
<b>ATTORNEY DOCKET NUMBER:</b>	ASMMC.104P2C3
<b>NAME OF SUBMITTER:</b>	ANDREW N. MERICKEL
<b>SIGNATURE:</b>	/Andrew N. Merickel/
<b>DATE SIGNED:</b>	09/09/2019
This document serves as an Oath/Declaration (37 CFR 1.63).	

PATENT

**Total Attachments: 7**

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**COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))**

*Application Data Sheet filed previously or concurrently*

Docket No.: ASMMC.104P2

Page 1 of 7

Title: Si PRECURSORS FOR DEPOSITION OF SiN AT LOW TEMPERATURES

Inventors: Antti J Niskanen, Shang Chen, Viljami Pore, Atsuki Fukazawa, Hideaki Fukuda, and Suvi P. Haukka

***Declaration***

This Declaration is directed to the application identified above that:

Was filed **January 29, 2014** as U.S. or International Application No. **14/167,904** and incorporating any amendments made thereto prior to the signature date of this Declaration.

As a named inventor, I declare that:

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

***Assignment from Inventors***

WHEREAS, **above-identified inventors** (individual(s) hereinafter "ASSIGNOR") invented certain new and useful improvements, technology, inventions, developments, ideas, ornamental designs, or discoveries, and hereby assign or are under an obligation to assign to the below identified Assignee the above-titled application (collectively hereinafter referred to as the "Work") for which an application for Letters Patent in the United States (identified above) has been prepared for filing with the United States Patent and Trademark Office (hereinafter the "Application").

AND WHEREAS, **ASM IP HOLDING B.V.**, with its principal place of business at Versterkerstraat 8, Almere, 1322 AP, THE NETHERLANDS (hereinafter the "ASSIGNEE"), desires to acquire the entire right, title, and interest in and to the Application and the Work.

NOW, THEREFORE, for good and valuable consideration of which receipt is hereby acknowledged, ASSIGNOR hereby acknowledges that ASSIGNOR has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in the Application and the Work, including all patent properties filed or issued upon the Application and the Work; where "Patent Properties" include, but are not limited to:

all provisional applications relating thereto;

all nonprovisional applications claiming priority to aforementioned provisional(s) and/or the present Application, including, all divisions, continuations, continuations-in-part, and reissues, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof; and

all rights of priority under International Conventions and any related Letters Patent which may hereafter be granted or filed in any country or countries foreign to the United States, all extensions, renewals and reissues thereof.

**COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))***Application Data Sheet filed previously or concurrently*

Docket No.: ASMMC.104P2

Page 2 of 7

Title: SI PRECURSORS FOR DEPOSITION OF SIN AT LOW TEMPERATURES


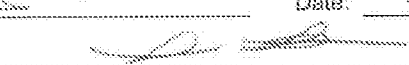
Inventors: Antti J Niskanen, Shang Chen, Viljami Pore, Atsuki Fukazawa, Hideaki Fukuda, and Suvi P. Haukka

ASSIGNOR hereby acknowledges the ASSIGNEE as the Applicant for all aforementioned patent properties, and authorizes and requests the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all related Letters Patent to the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND ASSIGNOR DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND ASSIGNOR DOES HEREBY covenant and agree that ASSIGNOR will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Work, and testify in any legal proceeding, assist in the preparation of any other Patent Property relating to the Application and the Work or any improvements made thereto, sign/execute all lawful papers, execute and make all rightful oaths and/or declarations in connection with the Application and the Work including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Work in all countries.

Legal Name of inventor: Antti J. Niskanen

Signature: Date: 21 Jan 2015Witnessed by: Witness Name (printed): HARRO HUOTARI**PATENT****REEL: 050313 FRAME: 0552**

**COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))**

*Application Data Sheet filed previously or concurrently*

Docket No.: ASMMC.104P2

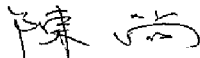
Page 3 of 7

Title: Si PRECURSORS FOR DEPOSITION OF SiN AT LOW TEMPERATURES

Inventors: Antti J Niskanen, Shang Chen, Viljami Pore, Atsuki Fukazawa, Hideaki Fukuda, and Suvi P. Haukka

Legal Name of inventor: Shang Chen

Signature: \_\_\_\_\_



Date: 2015/1/22

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



Witness Name (printed): \_\_\_\_\_

Junya Morimoto

**COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))**

*Application Data Sheet filed previously or concurrently*

Docket No.: ASMMC.104P2

Page 4 of 7

Title: SI PRECURSORS FOR DEPOSITION OF SiN AT LOW TEMPERATURES

Inventors: Antti J Niskanen, Shang Chen, Viljami Pore, Atsuki Fukazawa, Hideaki Fukuda, and Suvi P. Haukka

Legal Name of inventor: Viljami Pore

Signature: \_\_\_\_\_

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

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

Witness Name (printed): \_\_\_\_\_

**COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))**

*Application Data Sheet filed previously or concurrently*

Docket No.: ASMMC.104P2

Page 5 of 7

Title: Si PRECURSORS FOR DEPOSITION OF SiN AT LOW TEMPERATURES

Inventors: Antti J Niskanen, Shang Chen, Viljami Pore, Atsuki Fukazawa, Hideaki Fukuda, and Suvi P. Haukka

Legal Name of inventor: Atsuki Fukazawa

Signature:

深沢 篤樹

Date:

22 January 2015

Witnessed by:

Morimoto J

Witness Name (printed):

Junya Morimoto

**PATENT**

**REEL: 050313 FRAME: 0555**

**COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))**

*Application Data Sheet filed previously or concurrently*

Docket No.: ASMMC.104P2

Page 6 of 7

Title: Si PRECURSORS FOR DEPOSITION OF SiN AT LOW TEMPERATURES

Inventors: Antti J Niskanen, Shang Chen, Viljami Pore, Atsuki Fukazawa, Hideaki Fukuda, and Suvi P. Haukka

Legal Name of inventor: Hideaki Fukuda

Signature: H. Fukuda Date: Jan 22, 2015

Witnessed by: (Morimoto)

Witness Name (printed): Junya Morimoto



COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))

Application Data Sheet filed previously or concurrently

Docket No.: ASMMC.104P2

Page 7 of 7

Title: Si PRECURSORS FOR DEPOSITION OF SiN AT LOW TEMPERATURES

Inventors: Antti J Niskanen, Shang Chen, Viljami Pore, Atsuki Fukazawa, Hideaki Fukuda, and Suvi P. Haukka

Legal Name of inventor: Suvi P. Haukka

Signature: \_\_\_\_\_

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

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

Witness Name (printed): \_\_\_\_\_

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