

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5933508

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
HAN WANG	05/30/2017
QI XIE	05/15/2017
DELPHINE LONGRIE	05/15/2017
JAN WILLEM MAES	05/15/2017
DAVID DE ROEST	05/15/2017
JULIAN HSIEH	05/22/2017
CHIYU ZHU	06/01/2017
TIMO ASIKAINEN	06/01/2017
KRZYSZTOF KACHEL	05/15/2017
HARALD PROFIJT	05/15/2017
<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:	16773064
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(949)760-9502
<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>	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.121P1C2

PATENT

<b>NAME OF SUBMITTER:</b>	ANDREW N. MERICKEL
<b>SIGNATURE:</b>	/Andrew N. Merickel/
<b>DATE SIGNED:</b>	01/28/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).

**Total Attachments: 11**

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

*Application Data Sheet filed previously or concurrently*

Docket No.: ASMMC.121P1

Page 1 of 11

Title: SELECTIVE DEPOSITION OF ALUMINUM AND NITROGEN CONTAINING MATERIAL

Inventors: Han Wang, Qi Xie, Delphine Longrie, Jan Willem Maes, David de Roest, Julian Hsieh, Chiyu Zhu, Timo Asikainen, Krzysztof Kachel, and Harald Profijt

***Declaration***

This Declaration is directed to the application identified above that:

Was filed **February 14, 2017** as U.S. or International Application No. **15/432,263** 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, 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))**

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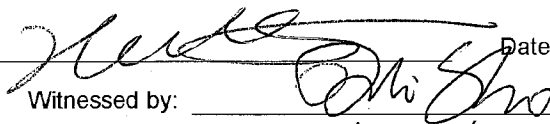
ASSIGNOR hereby acknowledges the ASSIGNEE as the Applicant for all aforementioned Patent Properties, and authorizes and requests the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications 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, authorize the filing of and 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: Han Wang

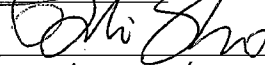
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Date: \_\_\_\_\_

5-30-2017

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



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

Dabi Shao

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

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Legal Name of inventor: Qi Xie

Signature: Qi Xie Date: May 15, 2017

Witnessed by: ~~DIETER PIERREUX~~

Witness Name (printed): DIETER PIERREUX

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

*Application Data Sheet filed previously or concurrently*

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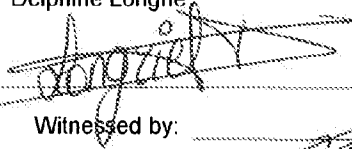
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Title: SELECTIVE DEPOSITION OF ALUMINUM AND NITROGEN CONTAINING MATERIAL

Inventors: Han Wang, Qi Xie, Delphine Longrie, Jan Willem Maes, David de Roest, Julian Hsieh, Chiyu Zhu, Timo Asikainen, Krzysztof Kachel, and Harald Profijt

Legal Name of inventor: Delphine Longrie

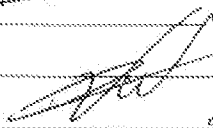
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Date: \_\_\_\_\_

15/05/2017

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



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

Steves Van Aerde

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

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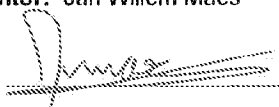
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Legal Name of inventor: Jan Willem Maes

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



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

MAY 15, 2011

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



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

DICTER PICREUX

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

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Legal Name of inventor: David de Roest

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

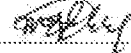


Date: \_\_\_\_\_

15/05/2017

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

M. STOKHOF



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

STOKHOF



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

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Legal Name of inventor: Julian Hsieh

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

*Julian Hsieh*

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

*5/22/2017*

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

*Kiyohiro Matsushita*

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

*Kiyohiro Matsushita*

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

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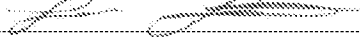
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Legal Name of inventor: Chiyu Zhu

Signature:  Date: 01 - Jun - 2017

Witnessed by: 

Witness Name (printed): HANNU HUOTARI

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

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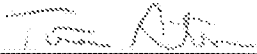
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Legal Name of inventor: Timo Asikainen


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



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

1.6.2017

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



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

HAN WANG

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

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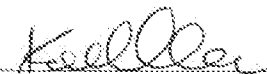
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Legal Name of inventor: Krzysztof Kachel

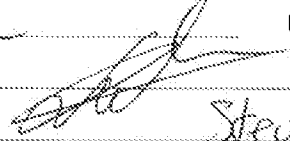
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Date:

15.05.2017

Witnessed by:



Witness Name (printed):

Steven Van Aerde

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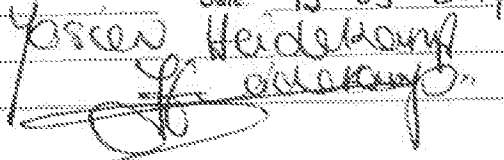
Legal Name of inventor: Harald Profijt

Signature:



Date: 15-05-2017

Witnessed by:



Witness Name (printed):

25364947