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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ORESTE MADIA	08/25/2020
ANDREA ILLIBERI	08/31/2020
MICHAEL EUGENE GIVENS	08/25/2020
TATIANA IVANOVA	09/01/2020
CHARLES DEZELAH	10/07/2020
VARUN SHARMA	09/02/2020

RECEIVING PARTY DATA

Name:	ASM IP HOLDING B.V.	
Street Address:	VERSTERKERSTRAAT 8	
City:	ALMERE	
State/Country:	NETHERLANDS	
Postal Code:	1322 AP	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17072525

CORRESPONDENCE DATA

Fax Number: (602)470-2434

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: 6024705707

Email: michelle.sympson@asm.com

Correspondent Name: PATRICK LEE

Address Line 1: 3440 E. UNIVERSITY DRIVE Address Line 4: PHOENIX, ARIZONA 85034

ATTORNEY DOCKET NUMBER:	PAT-MC-0624-US-NP	
NAME OF SUBMITTER:	MICHELLE SYMPSON	
SIGNATURE:	/Michelle Sympson/	
DATE SIGNED:	11/14/2020	

Total Attachments: 7

PATENT REEL: 054368 FRAME: 0146

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PATENT REEL: 054368 FRAME: 0147 Application Serial No.: 17/072,525 Docket No.: PAT-MC-0624-US-NP

Filing Date: October 16, 2020

Title: ATOMIC LAYER DEPOSITION OF INDIUM GALLIUM ZINC OXIDE

ASSIGNMENT

WHEREAS, ORESTE MADIA, a citizen of Italy and a resident of Leuven, Belgium; ANDREA ILLIBERI, a citizen of Italy and a resident of Leuven, Belgium; MICHAEL EUGENE GIVENS, a citizen of the United States of America and a resident of Oud-Heverlee, Belgium; TATIANA IVANOVA, a citizen of Finland and a resident of Espoo, Finland; CHARLES DEZELAH, a citizen of the United States of America and a resident of Helsinki, Finland; VARUN SHARMA, a citizen of India and a resident of Helsinki, Finland

(collectively, "WE" or "ASSIGNOR") have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to ATOMIC LAYER DEPOSITION OF INDIUM GALLIUM ZINC OXIDE (collectively, the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefore; and

WHEREAS, ASM IP HOLDING B.V. (hereinafter "ASSIGNEE"), a corporation having a place of business at Versterkerstraat 8, Almere, 1322 AP, Netherlands, desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all patent applications therefore, and all patents that have granted or may be granted hereafter thereon, including, but not limited to, those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed and transferred, and by these presents do hereby sell, assign, convey and transfer, unto ASSIGNEE, its successors, its legal representatives and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefore that may have been filed or may be filed hereafter for said INVENTIONS (including but not limited Application No(s). 17/072,525, filed on October 16, 2020, as Docket No. PAT-MC-0624-US-NP (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known)) and all rights of priority under International Conventions, Treaties, and Agreements, all utility applications, national phase applications, utility model applications, divisional applications, renewal applications, continuation applications, validation applications and design applications thereof, and all issued patents which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon;

AND WE DO HEREBY authorize and request any Official of any country or countries whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to

Application Serial No.: Filing Date:	Docket No.: PAT-MC-0624-US-NP
Title: ATOMIC LAYER DEPOSITI	ON OF INDIUM GALLIUM ZINC OXIDE
ASSIGNEE, its successors, its legal of this instrument;	representatives, and its assigns, in accordance with the terms
legal representatives, and its assign relating to any violation(s) of any o prior to the date of assignment to sa limited to the right to sue for, seek,	t, transfer, and convey to said ASSIGNEE, its successors, its sall claims for damages and all remedies arising out of or of the rights assigned hereby that have or may have accrued aid ASSIGNEE, or may accrue hereafter, including, but not obtain, collect, recover and retain damages and any ongoing may be entitled, or form any settlement or agreement related issuance;
its successors, its legal representation in the successors in the successors in the successors in the successors in the successor in the	gree that WE will communicate promptly to said ASSIGNEE, ves, and its assigns, any facts known to us respecting said any legal proceeding, sign all lawful papers, execute all all rightful declarations and/or oaths, and provide all lawful accessors, its legal representatives, and its assigns, to obtain d INVENTIONS in all countries.
EXECUTED as of the date(s) below	by ASSIGNOR:
ORESTE MADIA	
(1/1/2 ////0-	25/08/2020
Signature	Date
ANDREA ILLIBERI	
Signature	Date
MICHAEL EUGENE GIVENS	
Signature	Date
TATIANA IVANOVA	
Signature	Date

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Application Serial No.:	Docket No.: PAT-MC-0624-US-NP
Filing Date: Title: ATOMIC LAYER DEPOSITION OF INI	DIUM GALLIUM ZINC OXIDE
ASSIGNEE, its successors, its legal representation of this instrument;	ives, and its assigns, in accordance with the terms
legal representatives, and its assigns all claims relating to any violation(s) of any of the rights prior to the date of assignment to said ASSIGN limited to the right to sue for, seek, obtain, coll-	nd convey to said ASSIGNEE, its successors, its for damages and all remedies arising out of or assigned hereby that have or may have accrued NEE, or may accrue hereafter, including, but not ect, recover and retain damages and any ongoing littled, or form any settlement or agreement related
its successors, its legal representatives, and its INVENTIONS, and will testify in any legal applications and certificates, make all rightful	E will communicate promptly to said ASSIGNEE, assigns, any facts known to us respecting said proceeding, sign all lawful papers, execute all declarations and/or oaths, and provide all lawful its legal representatives, and its assigns, to obtain ONS in all countries.
EXECUTED as of the date(s) below by ASSIG	NOR:
ORESTE MADIA	
Signature	Date
ANDREA ILLIBERI	
Krdra Fleber	31/08/2020
Signature	Date
MICHAEL EUGENE GIVENS	
Signature	Date
TATIANA IVANOVA	
Signature	Date

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Application Serial No.: Filing Date:	Docket No.: PAT-MC-0624-US-NP
Title: ATOMIC LAYER DEPOSITION OF INDI-	UM GALLIUM ZINC OXIDE
ASSIGNEE, its successors, its legal representative of this instrument;	es, and its assigns, in accordance with the terms
AND WE DO HEREBY sell, assign, transfer, and legal representatives, and its assigns all claims for relating to any violation(s) of any of the rights as prior to the date of assignment to said ASSIGNE limited to the right to sue for, seek, obtain, collector prospective royalties to which WE may be entitle to any of said patents before or after issuance;	or damages and all remedies arising out of or ssigned hereby that have or may have accrued EE, or may accrue hereafter, including, but not t, recover and retain damages and any ongoing
AND WE HEREBY covenant and agree that WE vits successors, its legal representatives, and its a INVENTIONS, and will testify in any legal prapplications and certificates, make all rightful de assistance to said ASSIGNEE, its successors, its and enforce patent protection for said INVENTION	ssigns, any facts known to us respecting said roceeding, sign all lawful papers, execute all clarations and/or oaths, and provide all lawful legal representatives, and its assigns, to obtain
EXECUTED as of the date(s) below by ASSIGNO	OR:
ORESTE MADIA	
Signature	Date
ANDREA ILLIBERI	
Signature	Date
MICHAEL EUGENE GIVENS	
4/1/	25-August-2020
Signature	Date
TATIANA IVANOVA	

Date

Signature

Application Serial No.:	Docket No.: PAT-MC-0624-US-NP
Filing Date: Title: ATOMIC LAYER DEPOSITION OF I	NDIUM GALLIUM ZINC OXIDE
ASSIGNEE, its successors, its legal represent of this instrument;	tatives, and its assigns, in accordance with the terms
legal representatives, and its assigns all clair relating to any violation(s) of any of the right prior to the date of assignment to said ASSI limited to the right to sue for, seek, obtain, c	r, and convey to said ASSIGNEE, its successors, its ms for damages and all remedies arising out of or hts assigned hereby that have or may have accrued GNEE, or may accrue hereafter, including, but not ollect, recover and retain damages and any ongoing entitled, or form any settlement or agreement related;
its successors, its legal representatives, and INVENTIONS, and will testify in any leg applications and certificates, make all rightforms.	
ORESTE MADIA	
Signature	Date
ANDREA ILLIBERI	
Signature	Date
MICHAEL EUGENE GIVENS	
Signature	Date
TATIANA IVANOVA	
Thy	1.09, 2020
Signature V	Date

Application Serial No.:	Docket No.: PAT-MC-0624-US-NP
Filing Date: Title: ATOMIC LAYER DEPOSITION OF	INDIUM GALLIUM ZINC OXIDE
CHARLES DEZELAH	
	ocialan 7, 2020
Signature	Date
VARUN SHARMA	
Signature	 Date

Application Serial No : Filing Date:	Docket No.: PAT-MC-0624-US-NP
Title: ATOMIC LAYER DEPOSITION C	OF INDIUM GALLIUM ZINC OXIDE
CHARLES DEZELAH	
Signature	Date
VARUN SHARMA Varunslamme	02 03 2020
Signature	The same

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