505870172 01/17/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5917000

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DOYOUNG JANG	01/06/2020
MIN-SOO KIM	01/06/2020

RECEIVING PARTY DATA

Name:	IMEC VZW
Street Address:	KAPELDREEF 75
City:	LEUVEN
State/Country:	BELGIUM
Postal Code:	3001

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16675588

CORRESPONDENCE DATA

Fax Number: (949)760-9502

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: 9497600404

Email: efiling@knobbe.com

Correspondent Name: KNOBBE, MARTENS, OLSON & BEAR, LLP

Address Line 1: 2040 MAIN STREET, 14TH FLOOR

Address Line 4: IRVINE, CALIFORNIA 92614

ATTORNEY DOCKET NUMBER:	IMEC1085.001AUS
NAME OF SUBMITTER:	JOHN M. CARSON
SIGNATURE:	/John M. Carson/
DATE SIGNED:	01/17/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 3

source=Signed Declaration Assignment - IMEC1085.001AUS#page1.tif source=Signed Declaration Assignment - IMEC1085.001AUS#page2.tif source=Signed Declaration Assignment - IMEC1085.001AUS#page3.tif

PATENT 505870172 REEL: 051545 FRAME: 0573

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

Application Data Sheet filed previously or concurrently

Docket No.: IMEC1085.001AUS Page 1 of 3

Title: METHOD OF FORMING A SEMICONDUCTOR DEVICE

Inventors: Doyoung Jang and Min-Soo Kim

Declaration

This Declaration is directed to U.S. or International Application No. 16/675588, filed November 6, 2019 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 of a claimed invention 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 related to METHOD OF FORMING A SEMICONDUCTOR DEVICE (collectively hereinafter referred to as the "Work") for which an application for Letters Patent in the United States (identified above) has been filed or prepared for filing with the United States Patent and Trademark Office (hereinafter the "Application"), and ASSIGNOR desires to assign or confirm assignment of the Work and the Application to the below identified Assignee.

AND WHEREAS, IMEC vzw, with its principal place of business at Kapeldreef 75, 3001 Leuven, Belgium (hereinafter the "ASSIGNEE"), desires to acquire or confirm ownership of 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.

ASSIGNOR hereby 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

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

Application Data Sheet filed previously or concurrently

Docket No.: IMEC1085.001AUS Page 2 of 3

Title: METHOD OF FORMING A SEMICONDUCTOR DEVICE

Inventors: Doyoung Jang and Min-Soo Kim

applications as aforesaid, to issue all related Letters Patent to the ASSIGNEE, its successors, legal representatives, and assigns.

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; 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 filling of, 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 filled therefrom, and any continuing application filled 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.

Signature: 1/2 - 1/2020
Witnessed by: Witness Name (printed): ON WWWROUK

PATENT REEL: 051545 FRAME: 0575

Title: METHOD OF FORMING A SEMICONDUCTOR DEVICE Inventors: Doyoung Jang and Min-Soo Kim	
Inventors: Doyoung Jang and Min-Soo Kim	
Legal Name of Inventor: Min-Soo Kim	
Signature: 1 CTM Date: 60	ian/202
Witnessed by:	
Witness Name (printed): の Y N Y w い か 作 C と	

31765147

RECORDED: 01/17/2020

PATENT REEL: 051545 FRAME: 0576