PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4866090

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
MIN-FENG KAO	12/29/2015	
DUN-NIAN YAUNG	01/13/2016	
JEN-CHENG LIU	12/29/2015	
HSUN-YING HUANG	12/30/2015	

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.
Street Address:	NO. 8, LI-HSIN RD. 6
Internal Address:	HSIN-CHU SCIENCE PARK
City:	HSIN-CHU
State/Country:	TAIWAN
Postal Code:	300-77

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15921032

CORRESPONDENCE DATA

Fax Number: (216)502-0601

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: 216-502-0600

Email: docketing@eschweilerlaw.com ESCHWEILER & POTASHNIK, LLC **Correspondent Name:**

Address Line 1: **ROSETTA CENTER**

Address Line 2: 629 EUCLID AVE., SUITE 1000 Address Line 4: CLEVELAND, OHIO 44114

ATTORNEY DOCKET NUMBER:	TSMCP772USA
NAME OF SUBMITTER:	DAVID W. POTASHNIK
SIGNATURE:	/David W. Potashnik/
DATE SIGNED:	03/14/2018

Total Attachments: 2

PATENT REEL: 045206 FRAME: 0791 source=Assignment#page1.tif source=Assignment#page2.tif

> PATENT REEL: 045206 FRAME: 0792

ASSIGNMENT

WHEREAS, Min-Feng KAO, Dun-Nian YAUNG, Jen-Cheng LIU, and Hsun-Ying HUANG hereafter referred to as ASSIGNOR, has/have invented certain new and useful improvements as described and set forth in the below identified application for United States Letters Patent:

Title: SEMICO	NDUCTOR DEVI	<u>CE STRUCTURE WITH</u>	<u>I STACKED</u>	SEMICOND	UCTOR
DIES		***************************************			
Filed:		Serial No.	and the state of t		
Executed on:		***************************************			

WHEREAS, <u>Taiwan Semiconductor Manufacturing Co., Ltd.</u>, of <u>No. 8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu 300-78. Taiwan R.O.C.</u>, hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S interest in the said invention and application and in any U.S. Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has/have sold, assigned and transferred, and by these presents does/do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all his/her/their rights, title and interest in and to the said invention and application and all future improvements thereon, and in and to any Letters Patent which may hereafter be granted on the same in the United States, the said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignor had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees/agree that he/she/they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has/have signed his/her/their name(s) on the date(s) indicated.

P20150512US00/0503-B30151-US

PATENT REEL: 045206 FRAME: 0793

ASSIGNMENT

V 70 15 /12 /29 Date	Name: Min-Feng KAO (Last name: KAO)
ſ	2l-25 mg
1 2015/12/29	Name: Jen-Cheng LIU (Last name: LIU)
Date	Name: Jen-Cheng LIU (Last name: LIU)
√ 20(5/12/30 Date	V Han - Ymg HUANG Name: Hsun-Ying HUANG (Last name: HUANG)
Date	Name: HSIm-Ying HUANG (Last name: HUANG)