504801976 03/02/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
GUO-CHIANG CHI	12/19/2014	
CHIA-DER CHANG	12/19/2014	
CHIH-HUNG LU	12/19/2014	
WEI-CHIN CHEN	12/22/2014	

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.
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Internal Address:	SCIENCE-BASED INDUSTRIAL PARK
City:	HSIN-CHU
State/Country:	TAIWAN
Postal Code:	300-77

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15910357

CORRESPONDENCE DATA

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Total Attachments 2		
DATE SIGNED:	03/02/2018	
SIGNATURE:	/Janie Martinez-Holm/	
NAME OF SUBMITTER:	JANIE MARTINEZ-HOLM	
ATTORNEY DOCKET NUMBER:	20140910/24061.3434US03	

Total Attachments: 2

PATENT REEL: 045090 FRAME: 0512

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PATENT REEL: 045090 FRAME: 0513

WHEREAS, <u>Guo-Chiang CHI</u>, <u>Chia-Der CHANG</u>, <u>Chih-Hung LU</u>, <u>and Wei-Chin CHEN</u> 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:

ASSIGNMENT

Title: SENI	ICONDU	CTOR DEVIC	<u>je with an</u>	<u>INTERCO</u>	<u>DNNECT</u>	<u>STRUCU</u>	\mathbf{RE}_{-}	AND
METHOD I	OR FOR	RMING THE S.	AME					
Filed: Executed on:			Serial N	lo				
WHEREAS	Taisvan	Semiconductor	Manufaatunina	Co 144	-£ N- 0	T : TT_:	D	

WHEREAS, <u>Taiwan Semiconductor Manufacturing Co.</u>, <u>Ltd.</u>, of <u>No.8</u>, <u>Li-Hsin Road. 6</u>, <u>Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77</u>, <u>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.

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ASSIGNMENT

2014/12/19	Guo-Chiang Co	的美国强
Date	Name: Guo-Chiang CHI	(Last name: CHI)
2014/12/19	Chia Der Chame	<u> </u>
Date	Name: Chia-Der CHANG ((Last name: CHANG)
2014/12/19	chihlding Les	
Date /	Name: Chih-Hung LU	(Last name: LU)
2014/12/22	Wei-Chin OHEN	陳維青

(Last name: CHEN)

Name: Wei-Chin CHEN

tewangj 2014/12/19 16:54:34

Date