504745170 01/24/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4791898

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHUO-MAO CHEN	12/22/2017
FENG-CHENG HSU	12/28/2017
SHIN-PUU JENG	12/22/2017

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LTD.	
Street Address:	NO.8, LI-HSIN RD. 6, HSINCHU SCIENCE PARK	
City:	HSINCHU	
State/Country:	TAIWAN	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15851174

CORRESPONDENCE DATA

Fax Number:

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: 949 387 2885
Email: inbox@wpatca.com

Correspondent Name: WPAT, PC INTELLECTUAL PROPERTY ATTORNEYS

Address Line 1: 2301 DUPONT DR. SUITE 510
Address Line 4: IRVINE, CALIFORNIA 92612

ATTORNEY DOCKET NUMBER:	18506-1107
NAME OF SUBMITTER:	ANTHONY KING
SIGNATURE:	/Anthony King/
DATE SIGNED:	01/24/2018

Total Attachments: 2

source=US6441-Assignment#page1.tif source=US6441-Assignment#page2.tif

PATENT 504745170 REEL: 044719 FRAME: 0781

3

US ONLY

ASSIGNMENT

WHEREAS, I(we), <u>CHEN, SHUO-MAO</u>, <u>HSU, FENG-CHENG</u> and <u>JENG, SHIN-PUU</u> whose post office address(es) appear(s) below, hereinafter referred to as ASSIGNOR, have invented certain new and useful invention entitled

SEMICONDUCTOR STRUCTURE AND MANUFACTURING METHOD THEREOF

(hereinafter referred to as the INVENTION) for which an application for Ui	iited States Letters Patent /Utility Patent
is executed on even date herewith unless at least one of the following is c	necked:
☐ United States Design Patent was	
□ executed on:	
☐ filed on: 21 December 2017 Serial No.: 15/3☐ established by PCT International Patent Application No.:	351,174 filed: designating the
United States of America	, <u>, , , , , , , , , , , , , , , , , , </u>
☐ issued on as U.S. Patent No.:	

WHEREAS, TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LTD. whose post office address is NO.8, LI-HSIN RD. 6, HSINCHU SCIENCE PARK, HSINCHU, TAIWAN, R.O.C. hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to the same in the United States and its territorial possessions;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I (we), ASSIGNOR, by these presents do sell, assign and transfer unto said ASSIGNEE, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application for the full term or terms for which the same may be granted, including all priority rights under any International Convention.

ASSIGNOR further covenants that no assignments, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment;

ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) in the United States for said INVENTION, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said INVENTION, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE'S expense, to identify and communicate to ASSIGNEE at ASSIGNEE'S request documents and information concerning the INVENTION that are within ASSIGNOR'S possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance, litigation and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under this instrument shall extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.

ALSO, ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all Letters Patent referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE'S sole use and behoof; and for the use and behoof of ASSIGNEE'S legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.

Assignor Name CHEN, SHUO-MAO	Address 4F., NO.21-3, CHANGSHENG ST., XINZHUANG DIST., NEW TAIPEI CITY 24247, TAIWAN (R.O.C.)
Signature of Assignor Chen, Shue Man -	Date of Signature (X) /2, >>, 20/7
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)

Assignor Name HSU, FENG-CHENG	Address 3F., NO. 26-2, DAGUAN RD., SANXIA, NEW TAIPEI CITY 237-41, TAIWAN (R.O.C.)
Signature of Assignor (X) ING Wang Use	Date of Signature (X) 2017, 12, 28
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)

Assignor Name JENG, SHIN-PUU	Address NO. 107, SHUE-SHEN RD., PO-SHAN VILLAGE, HSINCHU, TAIWAN (R.O.C.)
Signature of Assignor (X)	Date of Signature (X) 12/22/2017
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)