504081219 11/03/2016

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
WEI-LI HUANG	10/21/2016
JHENG-JIE WONG	10/23/2016
HSIANG-SHENG SU	10/06/2016
TSUNG-LUNG HUANG	10/31/2016
KUO-CHIO LIU	10/05/2016
HSIN-CHIEH HUANG	10/21/2016
DE-DUI MARVIN LIAO	10/31/2016
CHIN-YU KU	10/31/2016
CHEN-SHIEN CHEN	10/31/2016

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:	15342838

CORRESPONDENCE DATA

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NAME OF SUBMITTER:	ANTHONY KING
SIGNATURE:	/Anthony King/

PATENT 504081219 REEL: 040217 FRAME: 0137

 DATE SIGNED:
 11/03/2016

 Total Attachments: 3

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PATENT REEL: 040217 FRAME: 0138

ASSIGNMENT

Your Ref.: P20160140US01

WHEREAS, I(we), <u>HUANG</u>, <u>WEI-LI</u>, <u>WONG</u>, <u>JHENG-JIE</u>, <u>SU</u>, <u>HSIANG-SHENG</u>, <u>HUANG</u>, <u>TSUNG-LUNG</u>, <u>LIU</u>, <u>KUO-CHIO</u>, <u>HUANG</u>, <u>HSIN-CHIEH</u>, <u>LIAO</u>, <u>DE-DUI MARVIN</u>, <u>KU</u>, <u>CHIN-YU</u> and <u>CHEN</u>, <u>CHEN-SHIEN</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 FABRICATING METHOD THEREOF

(hereinafter referred to as the INVENTION) for which an application for United States Letters Patent /Utility Patent is executed on even date herewith unless at least one of the following is checked:

☐ United States Design Patent was
☐ executed on:
☐ filed on:
☐ established by PCT International Patent Application No.:
☐ established by PCT International Patent Application No.:
☐ 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.

US ONLY

Your Ref.; P20160140US01

Assignor Name	Address
HUANG, WEI-LI	NO.139-9, QINGJIN LN., PINGTUNG CITY,
	PINGTUNG COUNTY 900, TAIWAN (R.O.C.)
Signature of Assignor	Date of Signature
(X) HUANG WEI-LI	(X) >016, (0, X)
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)
Assignor Name WONG, JHENG-JIE	Address
WONG, JHENG-JIE	NO.5-83, JIABA, SHANHUA DIST., TAINAN
	CITY 741, TAIWAN (R.O.C.)

Assignor Name WONG, JHENG-JIE	NO.5-83, JIABA, SHANHUA DIST., TAINAN CITY 741, TAIWAN (R.O.C.)
Signature of Assignor (X) Wong, Thena 15	Date of Signature (X) 10/3/2016
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)

Assignor Name SU, HSIANG-SHENG	Address NO.96, ALY. 22, LN. 752, SEC. 3, BEI'AN RD., ANNAN DIST., TAINAN CITY 709, TAIWAN (R.O.C.)
Signature of Assignor (X) S.W. HSZANG-SHENG	Date of Signature (X) (O / Ob / >oU
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)

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Signature of Assignor (X) HUANG TSUNG -LUNG	Date of Signature (X) >0(6, (0, 3)
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)

Assignor Name LIU, KUO-CHIO	Address 13F., NO.169, BADE RD., EAST DIST., HSINCHU CITY 300, TAIWAN (R.O.C.)
Signature of Assignor (X) Li U Kup Chi R	Date of Signature (X) 2016
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)
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Signature of Assignor (X) HGM-Cliven Hung	Date of Signature (X) Sold. Co. 2
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)
	<u>, </u>
Assignor Name LIAO, DE-DUI MARVIN	Address NO. 25, CHI-PENG RD, HSIN-CHU, TAIWAN (R.O.C)
Signature of Assignor (X)	Date of Signature (X) 10/31/2016
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)
Assignor Name KU, CHIN-YU	3F1, NO.46, LYUSHUEI RD., HSINCHU CITY 300, TAIWAN (R.O.C.)
Signature of Assignor (X)	Date of Signature (X) >016, 10.3
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)
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Signature of Assignor (X) Chap Chap Shap	Date of Signature (X) 10.31, 1016
Name of Witness (optional)	Name of Witness (optional)
Signature of Witness (optional)	Signature of Witness (Optional)

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