

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4018853

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
MENG-FU SHIH	12/23/2015
CHUN-YEN LO	12/23/2015
CHENG-LIN HUANG	12/23/2015
WEN-MING CHEN	12/29/2015
CHIEN-MING HUANG	01/21/2016
YUAN-FU LIU	01/04/2016
YUNG-CHIUAN CHENG	01/06/2016
WEI-CHIH HUANG	01/06/2016
CHEN-HSUN LIU	01/06/2016
CHIEN-PIN CHAN	01/06/2016
YU-NU HSU	01/22/2016
TE-HSUN PANG	01/08/2016
CHIN-YU KU	01/06/2016
RECEIVING PARTY DATA	
Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
Street Address:	NO. 8, LI-HSIN RD. 6
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:	14942226
CORRESPONDENCE DATA	
Fax Number:	(972)732-9218
<i>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.</i>	
Phone:	972-732-1001
Email:	docketing@slatermatsil.com

Correspondent Name:	SLATER MATSIL, LLP
Address Line 1:	17950 PRESTON ROAD
Address Line 2:	SUITE 1000
Address Line 4:	DALLAS, TEXAS 75252

ATTORNEY DOCKET NUMBER:	TSM15-0393
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NAME OF SUBMITTER:	JERRY LETHIN
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SIGNATURE:	/Jerry Lethin/
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DATE SIGNED:	08/23/2016
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	This document serves as an Oath/Declaration (37 CFR 1.63).
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Total Attachments: 4

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ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made; and

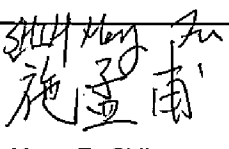
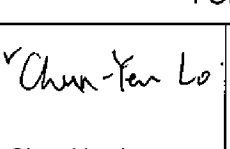
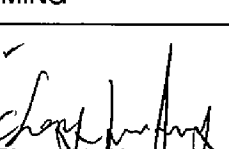
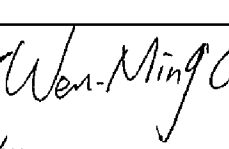
WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd. ("Assignee"), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at No. 8, Li-Hsin Rd. 6 Science-Based Industrial Park, Hsin-Chu 300-77 Taiwan, R.O.C., is desirous of acquiring my entire right, title and interest in and to said invention, and to said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to said Assignee, its successors and assigns, my entire right, title and interest in and to said invention and in and to said application and all patents which may be granted therefor, and all future non-provisional applications including divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner for Patents to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to said Assignee, as assignee of my entire right, title and interest. I declare that I have not executed and will not execute any agreement in conflict herewith.

I also hereby sell and assign to Assignee, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including, but not limited to, the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said Assignee, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention or the file history thereof, and at the expense of said Assignee, its legal representatives, successors, or assigns, will testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said Assignee, its legal representatives, successors, and assigns, to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	CONDUCTIVE EXTERNAL CONNECTOR STRUCTURE AND METHOD OF FORMING			
SIGNATURE OF INVENTOR AND NAME	 Meng-Fu Shih	 Chun-Yen Lo	 Cheng-Lin Huang	 Wen-Ming Chen
DATE	✓ 2015/12/23	✓ 2015/12/23	✓ 2015/12/23	✓ 2015/12/29
RESIDENCE	Hsin-Chu, Taiwan	Hsin-Chu, Taiwan	Hsin-Chu, Taiwan	Zhunan Township, Taiwan

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made; and

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd. ("Assignee"), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at No. 8, Li-Hsin Rd. 6 Science-Based Industrial Park, Hsin-Chu 300-77 Taiwan, R.O.C., is desirous of acquiring my entire right, title and interest in and to said invention, and to said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

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TITLE OF INVENTION	CONDUCTIVE EXTERNAL CONNECTOR STRUCTURE AND METHOD OF FORMING			
SIGNATURE OF INVENTOR AND NAME	✓ Chien-Ming Huang Chien-Ming Huang	✓ Yuan-Fu Liu Yuan-Fu Liu	✓ Yung-Chiuan Cheng Yung-Chiuan Cheng	✓ Wei-Chih Huang Wei-Chih Huang
DATE	✓ 2016.01.21	✓ 2016/1/4	✓ 2016.1.6	✓ 2016/1/6
RESIDENCE	Hsin-Chu, Taiwan	Kaohsiung City, Taiwan	Kaohsiung City, Taiwan	Taipei City, Taiwan

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made; and

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IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	CONDUCTIVE EXTERNAL CONNECTOR STRUCTURE AND METHOD OF FORMING			
SIGNATURE OF INVENTOR AND NAME	✓ <i>Chen-Hsun Liu</i> Chen-Hsun Liu	✓ <i>Chien-Pin Chan</i> Chien-Pin Chan	✓ <i>Yu-Nu Hsu</i> Yu-Nu Hsu	✓ Chi-Hung Lin
DATE	✓ 2016.1.6	✓ 2016.1.6	✓ 2016.1.22	✓
RESIDENCE	Tainan City, Taiwan	Pingzhen City, Taiwan	Tainan City, Taiwan	Kaohsiung City, Taiwan

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made; and


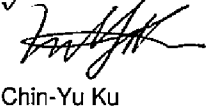
WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd. ("Assignee"), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at No. 8, Li-Hsin Rd. 6 Science-Based Industrial Park, Hsin-Chu 300-77 Taiwan, R.O.C., is desirous of acquiring my entire right, title and interest in and to said invention, and to said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

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IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	CONDUCTIVE EXTERNAL CONNECTOR STRUCTURE AND METHOD OF FORMING			
SIGNATURE OF INVENTOR AND NAME	✓  Te-Hsun Pang	✓  Chin-Yu Ku		
DATE	✓ 2016/01/08	✓ Jan 6, 2016		
RESIDENCE	Tainan City, Taiwan	Hsin-Chu, Taiwan		