

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5393851

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
LING-FU NIEH	02/12/2019
CHUN-WEI HSU	02/13/2019
PINLEI EDMUND CHU	02/12/2019
CHI-JEN LIU	02/13/2019
LIANG-GUANG CHEN	02/13/2019
YI-SHENG LIN	02/13/2019
RECEIVING PARTY DATA	
Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
Street Address:	8, LI-HSIN RD. 6
Internal Address:	HSINCHU SCIENCE PARK
City:	HSINCHU
State/Country:	TAIWAN
Postal Code:	300-78
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16114932
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/TSMC
Address Line 1:	17950 PRESTON ROAD, SUITE 1000
Address Line 4:	DALLAS, TEXAS 75252
ATTORNEY DOCKET NUMBER:	TSMP20162001US00
NAME OF SUBMITTER:	WENDY SAXBY
SIGNATURE:	/Wendy Saxby/
DATE SIGNED:	02/26/2019

Total Attachments: 7

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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

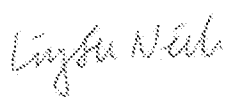
WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd. ("Assignee"), a corporation organized and existing under the laws of Taiwan, with its principal office at 8, Li-Hsin Rd. 6 Hsinchu Science Park, Hsinchu 300-78 Taiwan, is desirous of acquiring my entire right, title and interest in and to said 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	<u>Method for Reducing Metal Plug Corrosion and Device</u>			
SIGNATURE OF INVENTOR AND NAME				
	Ling-Fu Nieh	Chun-Wei Hsu	Pinlei Edmund Chu	Chi-Jen Liu
DATE	2019.02.12			
RESIDENCE	Taipei City, Taiwan	Hsinchu, Taiwan	Hsinchu, Taiwan	Taipei City, Taiwan

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TITLE OF INVENTION	<u>Method for Reducing Metal Plug Corrosion and Device</u>			
SIGNATURE OF INVENTOR AND NAME	Liang-Guang Chen	Yi-Sheng Lin		
DATE				
RESIDENCE	Hsinchu, Taiwan	Taichung City, Taiwan		

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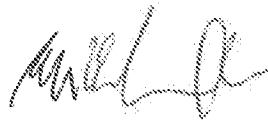
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SIGNATURE OF INVENTOR AND NAME	Ling-Fu Nieh	Chun-Wei Hsu	 Pinlei Edmund Chu	Chi-Jen Liu
DATE			02/12/2019	
RESIDENCE	Taipei City, Taiwan	Hsinchu, Taiwan	Hsinchu, Taiwan	Taipei City, Taiwan

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SIGNATURE OF INVENTOR AND NAME	Liang-Guang Chen	Yi-Sheng Lin		
DATE				
RESIDENCE	Hsinchu, Taiwan	Taichung City, Taiwan		

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DATE				
RESIDENCE	Hsinchu, Taiwan	Taichung City, Taiwan		

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ATTORNEY DOCKET NO.
TSMP20162001US00

ASSIGNMENT

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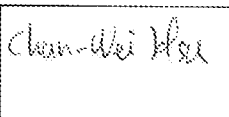
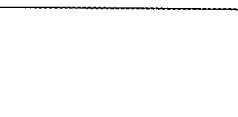
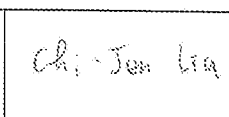
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	Ling-Fu Nieh	Chun-Wei Hsu	Pinlei Edmund Chu	Chi-Jen Liu
DATE		2019/2/13		2019/2/13
RESIDENCE	Taipei City, Taiwan	Hsinchu, Taiwan	Hsinchu, Taiwan	Taipei City, Taiwan

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SIGNATURE OF INVENTOR AND NAME	<i>Liang-Guang Chen</i> Liang-Guang Chen	<i>Yi-Sheng Lin</i> Yi-Sheng Lin	
DATE	<i>2019. 2. 13</i>	<i>2019. 2. 13</i>	
RESIDENCE	Hsinchu, Taiwan	Taichung City, Taiwan	