502571631 11/15/2013

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2617495

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUNG-HSU WU	11/11/2013
CHIEN-HUA HUANG	11/11/2013
CHUNG-JU LEE	11/13/2013
TIEN-I BAO	11/13/2013
SHAU-LIN SHUE	11/12/2013

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 R.O.C.	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14081752

CORRESPONDENCE DATA

Fax Number: (972)732-9218 Phone: 972-732-1001

Email: docketing@slater-matsil.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: SLATER & MATSIL, L.L.P. Address Line 1: 17950 PRESTON ROAD

Address Line 2: **SUITE 1000**

Address Line 4: DALLAS, TEXAS 75252

ATTORNEY DOCKET NUMBER: TSM13-1195

PATENT

502571631

REEL: 031615 FRAME: 0484

NAME OF SUBMITTER:	KASEY EDWARDS
Signature:	/Kasey Edwards/
Date:	11/15/2013
Total Attachments: 2 source=TSM13-1195_Assignment#page1.tif source=TSM13-1195_Assignment#page2.tif	

PATENT REEL: 031615 FRAME: 0485

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 , with its principal office at No. 8, Li-Hsin Rd. 6 Science-Based Industrial Park, 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	Semiconductor Device having Voids and Method of Forming Same			
SIGNATURE OF INVENTOR AND NAME	Yung-Hsu Wu	dis-Hutlay	Chung-Tu Lae	Zin-I Bai
	Yung-Hsu Wu	Chien-Hua Huang	Chung-Ju Lee	Tien-I Bao
DATE	11/1 , 20 /3	111, 2013	1/13,2013	11/13.2013
RESIDENCE	Taipei City, Taiwan	Toufen Township, Taiwan	Hsin-Chu, Taiwan	Dayuan Township, Taiwan

ATTORNEY DOCKET NO. TSM13-1195

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 , with its principal office at No. 8, Li-Hsin Rd. 6 Science-Based Industrial Park, 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	Semiconductor Device having Voids and Method of Forming Same	
SIGNATURE OF INVENTOR _ AND NAME	Shau-Lin Shue	
DATE	>013-11.12	
RESIDENCE	Hsin-Chu, Taiwan	

Page 2 of 2

Assignment

PATENT REEL: 031615 FRAME: 0487

RECORDED: 11/15/2013