

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2637093

SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>WENSEN HUNG</td> <td>11/22/2013</td> </tr> <tr> <td>SZU-PO HUANG</td> <td>11/22/2013</td> </tr> <tr> <td>HSIANG-FAN LEE</td> <td>11/25/2013</td> </tr> <tr> <td>KIM HONG CHEN</td> <td>11/25/2013</td> </tr> <tr> <td>CHI-HSI WU</td> <td>11/25/2013</td> </tr> <tr> <td>SHIN-PUU JENG</td> <td>11/25/2013</td> </tr> </tbody> </table>		Name	Execution Date	WENSEN HUNG	11/22/2013	SZU-PO HUANG	11/22/2013	HSIANG-FAN LEE	11/25/2013	KIM HONG CHEN	11/25/2013	CHI-HSI WU	11/25/2013	SHIN-PUU JENG	11/25/2013
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SHIN-PUU JENG	11/25/2013														
RECEIVING PARTY DATA															
Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD. (TSMC)														
Street Address:	NO. 8, LI-HSIN RD. 6, SCIENCE-BASED INDUSTRIAL PARK														
City:	HSIN-CHU														
State/Country:	TAIWAN														
Postal Code:	300-77														
PROPERTY NUMBERS Total: 1															
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>14096952</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	14096952										
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Application Number:	14096952														
CORRESPONDENCE DATA															
Fax Number:	(972)732-9218														
Phone:	972-732-1001														
Email:	docketing@slater-matsil.com														
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>															
Correspondent Name:	SLATER & MATSIL, L.L.P.														
Address Line 1:	17950 PRESTON ROAD, SUITE 1000														
Address Line 4:	DALLAS, TEXAS 75252														
ATTORNEY DOCKET NUMBER:	TSM13-1185														
NAME OF SUBMITTER:	CINDY C. STOUTEN														

CH \$40.00 14096952

Signature:	/Cindy C. Stouten/
Date:	12/04/2013
Total Attachments: 2 source=tsm13-1185-assignment#page1.tif source=tsm13-1185-assignment#page2.tif	

ATTORNEY DOCKET NO.  
TSM13-1185

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

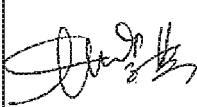
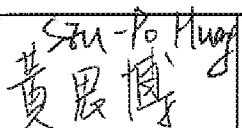

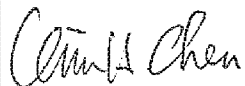
WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd. (TSMC), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, R.O.C., is desirous of acquiring my entire right, title and interest in and to the said invention, and to the 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	Advanced 3D IC Packaging with Efficient Hot Spot Thermal Management Features			
SIGNATURE OF INVENTOR AND NAME	 Wensen Hung	 Szu-Po Huang	 Hsiang-Fan Lee	 Kim Hong Chen
DATE	Nov 22, 2013	Nov 22, 2013	Nov. 25, 2013	Nov. 25, 2013
RESIDENCE	Zhubei City, Taiwan	Taichung City, Taiwan	Hsin-Chu, Taiwan	Fremont, California, US

ATTORNEY DOCKET NO.  
TSM13-1185

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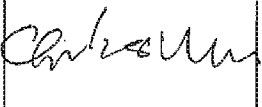
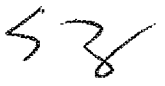
WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd. (TSMC), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, R.O.C., is desirous of acquiring my entire right, title and interest in and to the said invention, and to the 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	Advanced 3D IC Packaging with Efficient Hot Spot Thermal Management Features		
SIGNATURE OF INVENTOR AND NAME	 Chi-Hsi Wu	 Shin-Puu Jeng	
DATE	2013. 11. 25	11/25/2013	
RESIDENCE	Hsin-Chu, Taiwan	Hsin-Chu, Taiwan	