

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3147980

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ARABINDA DAS, PH.D.	10/27/2014
TECHINSIGHTS INC.	10/27/2014
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:	14555423
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@slater-matsil.com
Correspondent Name:	SLATER & MATSIL, L.L.P.
Address Line 1:	17950 PRESTON ROAD, SUITE 1000
Address Line 4:	DALLAS, TEXAS 75252
ATTORNEY DOCKET NUMBER:	TSM11-1396CP1
NAME OF SUBMITTER:	CINDY STOUTEN
SIGNATURE:	/Cindy Stouten/
DATE SIGNED:	12/15/2014
Total Attachments: 12	
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ASSIGNMENT

WHEREAS, I, **Arabinda Das, Ph.D.** ("Inventor"), having a residence of **Ottawa, Ontario, Canada**, and having jointly invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made;

WHEREAS, **TechInsights Inc.** (formerly **Semiconductor Insights Inc.**) ("Consultant-Employer"), a corporation organized and existing under the laws of Ontario, Canada, with its principal office at **3000 Solandt Road, Ottawa, Ontario, Canada K2K 2X2**, employs Inventor, previously entered into an Employee Agreement as to Proprietary Rights with Inventor, executed on September 19, 2008 (attached as Attachment A), and previously entered into an Analyst Agreement with Inventor, executed September 4, 2014 (attached as Attachment B); 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.**, previously entered into a consulting agreement and an Amendment to Consulting Agreement with Consultant-Employer, executed September 4, 2014 (attached as Attachment C), and is desirous of acquiring Inventor's and/or Consultant-Employer's 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, Inventor hereby sells and assigns to said Assignee, its successors and assigns, Inventor's 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 Inventor hereby authorizes and requests the Commissioner for Patents to issue all patents for said invention, or patent resulting therefrom, insofar as Inventor's interest is concerned, to said Assignee, as assignee of Inventor's entire right, title and interest. Inventor also hereby sells and assigns to Assignee, its successors and assigns, Inventor's 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 agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

Inventor hereby further agrees that Inventor will communicate to said Assignee, or to its successors, assigns, and legal representatives, any facts known to Inventor 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.

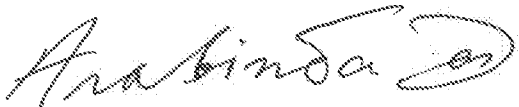
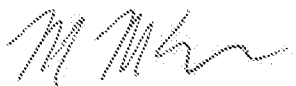
FURTHER, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, Consultant-Employer hereby assigns and releases to said Assignee, its successors and assigns, any right, title, interest, and claim in and to said invention and in and to said application and all patents which may be granted therefor, and all future non-provisional applications including divisions, reissues, substitutions, continuations, and extensions thereof. Consultant-Employer also hereby assigns and releases to Assignee, its successors and assigns, any right, title, interest, and claim to 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 agrees to execute

any and all assignments and any other papers in connection therewith necessary to perfect such patent rights.

Consultant-Employer and Inventor hereby execute this Assignment to effectuate the terms of the Amendment to Consulting Agreement, executed September 4, 2014 (attached as Attachment C) and the Analyst Agreement, executed September 4, 2014 (attached as Attachment B). To the extent that any terms or clauses of any previous agreement entered into between Consultant-Employer and Inventor, including, but not limited to, the Employee Agreement as to Proprietary Rights, executed on September 19, 2008 (attached as Attachment A), are inconsistent with any term or clause provided in this Assignment, such terms or clauses are superseded by this Assignment. Consultant-Employer and Inventor individually declare that Consultant-Employer and Inventor, respectively, will not execute any agreement in conflict with this Assignment.

IN WITNESS WHEREOF, Inventor hereunto sets Inventor's hand and seal this day and year, and Consultant-Employer causes its duly authorized officer to execute this Assignment this day and year;

TITLE OF INVENTION	FinFET-Based ESD Devices and Methods for Forming the Same
ATTORNEY DOCKET NUMBER	TSM11-1396CP1

BY INVENTOR:	BY CONSULTANT-EMPLOYER:
	
Arabinda Das, Ph.D.	Mike McLean, Senior Vice President of IP Services, TechInsights Inc.
DATE: Oct 27, 2014	DATE: Oct 27, 2014

Attachment A
to Assignment

TSM11-1396CP1

SCHEDULE A

SEMICONDUCTOR INSIGHTS INC.

EMPLOYEE AGREEMENT AS TO PROPRIETARY RIGHTS

IN CONSIDERATION OF EMPLOYMENT WITH SEMICONDUCTOR INSIGHTS INC. (THE "COMPANY"), THE UNDERSIGNED (THE "EMPLOYEE") ACKNOWLEDGES AND AGREES THAT:


1. Employment with the Company will give the Employee access to proprietary and confidential information belonging to the Company, its customers, its suppliers and others (which proprietary and confidential information is collectively referred to in this Agreement as "Confidential Information"). Confidential information includes, but is not limited to, customer lists, marketing plans, proposals, contracts, technical and/or financial information, designs, techniques, databases, software, trade secrets, proprietary information and know-how. All Confidential Information remains the confidential and proprietary information of the Company.
2. The Employee may in the course of employment with the Company develop, alone or with others, tangible and intangible property including, without limitation, software, hardware, know-how, marketing plans, designs, techniques, documentation and other material, regardless of the form or media on which such is stored, some or all of which property may be protected by patents, copyrights, trade secrets, trade marks or industrial designs (which tangible and intangible property is collectively referred to in this Agreement as "Developed Property").
3. The Employee, both during and after employment with the Company, shall keep all confidential information and Developed Property confidential and shall not use any Developed Property or Confidential Information except in the course of carrying out authorized activities on behalf of the Company or except as expressly authorized by the Company in writing.
4. During the Employee's engagement with the Company and at any time thereafter the Employee shall not disclose any information concerning the Company or its affiliated corporations which could adversely effect the Company's image or reputation.
5. The Employee shall not use, employ or disclose to the Company for use in any work for the Company, any confidential, secret or private information of any third person, which the Employee is under a duty not to disclose, employ or use. The Employee represents that the Employee has disclosed to the Company, in writing, the existence of any such duty, as well as any agreement with any third party which requires the Employee to refrain from competing with the business of such third party. The Employee shall not use, employ or incorporate into any work for the Company any third party material, including without limitation any copyrighted works or works or processes protected by any other intellectual property rights, without the prior written consent of the third party and the Company.
6. If the Employee's engagement with the Company terminates for any reason, unless the Company waives this requirement, the Employee will, within one (1) week of termination of the Employee's engagement with the Company, review with the person designated


for this purpose by the Company, the nature and type of confidential information to which the Employee has had access and will sign an acknowledgment describing the nature and type of confidential information which the Employee is duty bound not to use or disclose.

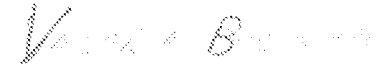
7. All Developed Property which the Employee may develop in the course of employment with the Company, whether alone or jointly with others, and all industrial and intellectual property rights therein shall be in the exclusive property of the Company and the Employee shall have no rights in any such Developed Property. At the request and expense of the Company, the Employee agrees to do all acts necessary and sign all documentation necessary in order to assign all rights in the Developed Property to the Company and to enable the Company to register patents, copyrights, trade marks or industrial designs and such other protection as the Company deems advisable anywhere in the world.
8. If, during the course of the contract with the Company, the Employee develops any work that is protected by copyright, the Employee hereby waives unconditionally any "moral rights" the Employee may have in such work, to the full extent permitted by law.
9. The Employee agrees that all Developed Property may be maintained, changed, modified and/or adapted by the Company without further consent.
10. The Company shall have exclusive rights to file applications and obtain and maintain protection and registrations for the Developed Property and the Employee and the Employee's employees will co-operate with the Company to provide all necessary assistance as may be reasonably required by the Company for these purposes including executing and delivering from time to time any documents and instruments and doing all other acts and things that may be reasonably required to carry out or better evidence or perfect the full intent and meaning of this Agreement.
11. During the Employee's engagement and at any reasonable time thereafter the Employee shall fully disclose to the Company all intellectual property rights howsoever created by the Employee or the Employee's employees in part or in whole which may in any way relate to the Developed Property or any of the Company's technology.
12. During the Term and for twelve (12) months thereafter, the Employee shall not, without the prior written consent of the Company:
 - (a) provide services to any client or customer of the Company;
 - (b) directly or indirectly solicit or attempt to solicit business from any client or customer of the Company (including any potential client of the Company) which was contracted, solicited or served by the Employee or about which the Employee received information during the employment with the Company;
 - (c) directly or indirectly recruit, solicit or otherwise induce or attempt to induce any employee of the Company to terminate his or her employment or relationship with the Company or otherwise act contrary to the interests of the Company;


- (d) directly or indirectly take advantage of or attempt to take advantage of any maturing opportunity of the Company that the Employee became aware of or that originated with the Company during the employment with the Company, or
- (e) directly or indirectly cause or attempt to cause suppliers not to do business with the Company.
13. The Employee acknowledges that the restrictions contained in this Schedule are necessary for the protection and goodwill of the Company and are reasonable for that purpose. The Employee therefore agrees that any breach of the terms of this Schedule is likely to cause the Company substantial and irrevocable damage and irreparable harm. In the event of any such breach the Employee agrees that the Company, in addition to such other remedies which may be available, shall be entitled to specific performance and other injunctive relief including interim or interlocutory relief, if demanded.
14. The Employee agrees that the provisions of this Agreement shall survive the termination of his or her employment with the Company howsoever arising.
15. The Employee agrees that the employee will, if requested from time to time by the Company, execute such further agreements as to confidentiality and proprietary rights as the Company or any of its customers or suppliers may require.
16. If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid, illegal or unenforceable, such provision shall be severed from this Agreement and all other provisions of this Agreement shall remain in full force and effect.

IN WITNESS WHEREOF THE EMPLOYEE has executed this Agreement as to Proprietary Rights this 10th day of October, 2008.


Witness Signature


Employee Signature


Witness Name


Employee Name

Attachment B
to Assignment

TSM11-1396CP1

EXHIBIT A

ANALYST AGREEMENT

WHEREAS Semiconductor Insights Inc. (operating as TechInsights) ("Consultant") has entered into that certain agreement with Taiwan Semiconductor Manufacturing Company, Ltd. ("TSMC") dated January 16, 2014 and amended by the Amendment to Consulting Agreement dated April 2nd, 2014 (collectively, the "Consulting Agreement"); and

WHEREAS under the Consulting Agreement, Consultant and all employees, contractors, consultants, and agents of Consultant who perform services under the Consulting Agreement must assign to TSMC all intellectual property and rights arising under the Consulting Agreement; and

WHEREAS Consultant desire to engage Arabinda Das ("Analyst") to provide services under the Consulting Agreement and Analyst desires to provide services under the Consulting Agreement;

THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Analyst agree as follows:

1. Analyst hereby assigns and agrees to assign to TSMC any rights which Analyst has or may acquire in all inventions, discoveries, patents, trade secrets, know-how, copyrights, and any other intellectual property created or developed by Analyst, either alone or jointly with others, under the Consulting Agreement (henceforth "Resulting IP"). Analyst further agrees, as to all such Resulting IP to assist TSMC in every reasonable way (but at TSMC's expense) to obtain and from time to time enforce any and all rights and protections relating to Resulting IP in any and all countries. Analyst will execute all documents for use in applying for, obtaining, and enforcing such Resulting IP and other rights and protections as TSMC may desire, together with any assignments thereof to TSMC or persons designated in writing by TSMC. Analyst's obligations to assist TSMC in obtaining and enforcing Resulting IP in any and all countries shall continue beyond the termination or expiration of the Consulting Agreement and this Analyst Agreement.
2. In the event TSMC is unable, after reasonable effort, to secure Analyst's signature on any document needed to apply for, obtain, memorialize ownership of, or enforce any patent, copyright, or other right or protection relating to Resulting IP, Analyst hereby irrevocably designates and appoints TSMC and its duly authorized officers and agents as its agent and attorney-in-fact, to act for and on its behalf and stead to execute and file any such document and to do all other lawfully permitted acts to further the prosecution, issuance of, and enforcement of patents, copyrights, or similar protections thereon with the same legal force and effect as if executed by Analyst.
3. Analyst recognizes and agrees that TSMC is an express third party beneficiary of this Agreement and that TSMC has the right and standing to enforce the terms of this Agreement.
4. Consultant hereby agrees to indemnify Analyst in respect of any damages or loss to Analyst resulting from this Analyst Agreement, except in so far as such damages or loss are a result of Analyst's willful misconduct, gross negligence, breach of confidentiality, or refusal to meet the obligations arising from this Analyst Agreement if such refusal is unreasonable or without reasonable cause.

AGREED AND EXECUTED this 4 day of Sept 2014


(Signature)

ARABINDA DAS
(Printed Name)

Attachment C
to Assignment

TSM11-1396CP1

AMENDMENT TO CONSULTING AGREEMENT

WHEREAS Taiwan Semiconductor Manufacturing Company, Ltd. ("TSMC") and Semiconductor Insights Inc. (operating as TechInsights) ("Consultant") entered into that certain agreement entitled Master Service Agreement-2014 dated April 2nd, 2014 (the "Consulting Agreement"); and

WHEREAS TSMC and Consultant desire to amend certain terms of the Consulting Agreement as provided herein; and

WHEREAS TSMC and Consultant mutually agree to continued performance under the Agreement, as amended herein;

THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and desiring to be bound by such, TSMC and Consultant agree to amend and restate the Agreement as follows:

To the extent any provision of this Amendment to Consulting Agreement conflicts with or is inconsistent with any provision of the Consulting Agreement, the provisions of this Amendment to Consulting Agreement shall take precedence.

The Consulting Agreement is hereby amended to include the following sections X.1 through X.4, inclusive, and the attached exhibits as if such sections and exhibits had been included in the original agreement – meaning the following sections and agreements are intended to have full force and effect as of the Effective Date of the Consulting Agreement.

X.1 TSMC shall be the owner of all inventions, discoveries, patents, trade secrets, know-how, copyrights, and any other intellectual property created or developed by Consultant, including Consultant's Employees, either by one or more of them or jointly with TSMC, under the Consulting Agreement (henceforth "Resulting IP"). Employees, as used herein shall include and all employees, contractors, consultants, and agents of Consultant who perform work under the Consulting Agreement.

X.2 Consultant, on behalf of itself and its Employees, hereby assigns and agrees to assign to TSMC any rights which Consultant and/or its Employees may have or may acquire in Resulting IP. Consultant further agrees, as to all such Resulting IP to assist TSMC in every reasonable way (but at TSMC's expense) to obtain and from time to time enforce any and all rights and protections relating to Resulting IP in any and all countries. Consultant will execute all documents for use in applying for, obtaining, and enforcing such Resulting IP and other rights and protections as TSMC may desire, together with any assignments thereof to TSMC or persons designated in writing by TSMC. Consultant's obligations to assist TSMC in obtaining and enforcing Resulting IP in any and all countries shall continue beyond the termination or expiration of the Consulting Agreement.

X.3 In the event TSMC is unable, after reasonable effort, to secure Consultant's signature on any document needed to apply for, obtain, memorialize ownership of, or enforce any patent, copyright, or other right or protection relating to Resulting IP, Consultant hereby irrevocably designates and appoints TSMC and its duly authorized officers and agents as its agent and attorney-in-fact, to act for and on its behalf and stand to execute and file any such document and to do all other lawfully permitted acts to further the prosecution, issuance of, and enforcement of patents, copyrights, or similar protections thereon with the same legal force and effect as if executed by Consultant.

X.4 Consultant further agrees and warrants that all Employees that perform work under the Consulting Agreement shall sign, on their own behalf, an Analyst Agreement substantially in the form of Exhibit A, attached hereto. Consultant shall have no liability under this section, however, if Consultant is unable, after making commercially reasonable efforts, to obtain a signed Analyst Agreement (a) from a former Employee, or (b) from a current Employee, provided that any current Employee who refuses or is otherwise unable to sign an Analyst Agreement shall not provide any further services under the Consulting Agreement. Consultant shall promptly provide to TSMC a copy of all signed Analyst Agreements upon receipt of same.

IN WITNESS WHEREOF, the Parties have caused their duly authorized officers to execute this Agreement as of the dates set forth below.

Taiwan Semiconductor Manufacturing
Company, Ltd.

CONSULTANT Semiconductor Insights Inc.

By:



By:



Name:

Lie-Yea Cheng

Name:

Mike McLean

Title:

Patent Program Manager

Title:

SUP IP Services

Date:

September 4, 2014

Date:

Sept. 4, 2014

