PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT2847994

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUMIT AGARWAL	04/11/2014
ANN CHIEN	04/11/2014
CHIU-PIEN KUO	04/11/2014
MARK HOINKIS	04/11/2014

RECEIVING PARTY DATA

Name:	APPLIED MATERIALS, INC.
Street Address:	3050 BOWERS AVENUE
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14243677

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.

Email:	KTaboada@pattersonsheridan.com
Correspondent Name:	KEITH TABOADA
Address Line 1:	595 SHREWSBURY AVENUE
Address Line 4:	SHREWSBURY, NEW JERSEY 07702

ATTORNEY DOCKET NUMBER:	APPN/21681
NAME OF SUBMITTER:	KEITH TABOADA
SIGNATURE:	/Keith Taboada/
DATE SIGNED:	05/08/2014

Total Attachments: 6

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Atty Dkt No.: 021681/USA/ETCH/COP0100179
1016.066037 (PATENT)

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

3382 →
CAPOTERRA WAY
DUBLIN, CA
94568

1)	Sumit AGARWAL S.A. ~~3120 Rubino Drive, Apt. 210~~ ~~San Jose, California 95125~~	2)	Ann CHIEN 1342 Stony Brook LN Pleasanton, California 94566
3)	Chiu-Pien KUO 3F., No.296-5, Dong Sec.1 Guangming 6th Rd. Zhubei City 302 TAIWAN ROC	4)	Mark HOINKIS 1271 Lakeside Drive, # 3132 Sunnyvale, California 94085
5)	Bradley J. HOWARD 1400 Oak Vista Way Pleasanton, California 94566		

(hereinafter referred to as Assignors), have invented a certain invention entitled:

METHODS FOR ETCHING A METAL LAYER TO FORM AN INTERCONNECTION STRUCTURE FOR SEMICONDUCTOR APPLICATIONS

for which application for Letters Patent in the United States was filed on **April 2, 2014**, under Serial No. **14/243,677**, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed

necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.

4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1) 4/11/2014 (DATE) Sumit
Sumit AGARWAL

2) ____________ (DATE) ____________
Ann CHIEN

3) ____________ (DATE) ____________
Chiu-Pien KUO

4) ____________ (DATE) ____________
Mark HOINKIS

5) ____________ (DATE) ____________
Bradley HOWARD

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

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necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

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Sumit AGARWAL

2) 4/11/2014 (DATE) Ann Chien
Ann CHIEN

3) 4/11 2014 (DATE) Chiu-Pien Kuo
Chiu-Pien KUO

4) ____________ (DATE) ____________
Mark HOINKIS

5) 4/11/2014 (DATE) Bradley J Howard
Bradley HOWARD

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2) ____________ (DATE) ______________________
Ann CHIEN

3) ____________ (DATE) ______________________
Chiu-Pien KUO

4) 11 APRIL 2014 (DATE) Mark Hoinkis
Mark HOINKIS

5) ____________ (DATE) ______________________
Bradley HOWARD