

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2673817

SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
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CORRESPONDENCE DATA															
Fax Number:	(713)623-4846														
Phone:	7136234844														
Email:	jekin@pattersonsheridan.com, psdocketing@pattersonsheridan.com														
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>															
Correspondent Name:	PATTERSON & SHERIDAN, LLP														
Address Line 1:	3040 POST OAK BOULEVARD														
Address Line 2:	SUITE 1500														
Address Line 4:	HOUSTON, TEXAS 77056														
ATTORNEY DOCKET NUMBER:	APPM/21082US/ETCH/CHMBR														

NAME OF SUBMITTER:	KEITH TABOADA
Signature:	/Keith Taboada/
Date:	01/09/2014
<p>Total Attachments: 8</p> <p>source=021082_USL_ASG_2014-01-09#page1.tif</p> <p>source=021082_USL_ASG_2014-01-09#page2.tif</p> <p>source=021082_USL_ASG_2014-01-09#page3.tif</p> <p>source=021082_USL_ASG_2014-01-09#page4.tif</p> <p>source=021082_USL_ASG_2014-01-09#page5.tif</p> <p>source=021082_USL_ASG_2014-01-09#page6.tif</p> <p>source=021082_USL_ASG_2014-01-09#page7.tif</p> <p>source=021082_USL_ASG_2014-01-09#page8.tif</p>	

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PATENT

REEL: 031926 FRAME: 0278

ATTORNEY DOCKET NUMBER:	021082/ETCH/CHMBR/MDD
NAME OF SUBMITTER:	KEITH TABOADA
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RECEIPT INFORMATION EPAS ID: PAT2673583 Receipt Date: 01/09/2014	

PATENT**REEL: 031926 FRAME: 0279**



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KEITH TABOADA

Signature:

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ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Mang-Mang LING 1352 Millich Lane San Jose, California 95117	2)	Jungmin KO 2410 Woodland Avenue San Jose, CA, 95128
3)	Sean S. KANG 5132 Holborn Way San Ramon, California 94582	4)	Jeremiah T. PENDER 1565 Fuchsia Drive San Jose, California 95125
5)	Srinivas D. NEMANI 504 Fern Ridge Court Sunnyvale, California 94087	6)	Bradley HOWARD 1400 Oak Vista Way Pleasanton, California 94566

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

**METHODS FOR FORMING FEATURES IN A MATERIAL LAYER UTILIZING A COMBINATION OF
A MAIN ETCHING AND A CYCLICAL ETCHING PROCESS**

for which application for Letters Patent in the United States was filed on August 20, 2013,
under Serial No. 61/868,037, 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.

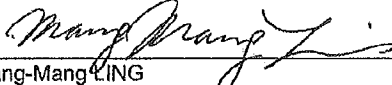
2. Said Assignors hereby covenant and agree to cooperate with said Assignee to
enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein
conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall
include prompt 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)	<u>Nov 5, 2013</u> (DATE)	<u></u> Mang-Mang LING
2)	_____ (DATE)	_____ Jungmin KO
3)	_____ (DATE)	_____ Sean S. KANG
4)	_____ (DATE)	_____ Jeremiah T. PENDER
5)	_____ (DATE)	_____ Srinivas D. NEMANI
6)	_____ (DATE)	_____ Bradley HOWARD

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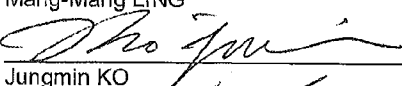

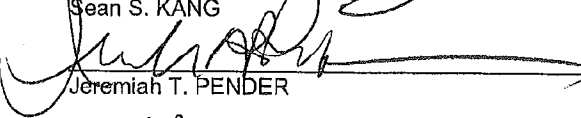

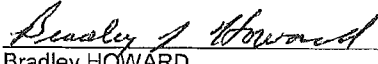
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