

PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT3897848

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
QINGJUN ZHOU	04/06/2016
JUNGMIN KO	04/06/2016
TOM CHOI	04/07/2016
SEAN KANG	04/11/2016
JEREMIAH PENDER	04/08/2016
SRINIVAS D. NEMANI	04/11/2016
YING ZHANG	04/07/2016
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:	15080117
CORRESPONDENCE DATA	
Fax Number:	(713)623-4846
<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:	713-623-4844
Email:	CRouly@pattersonsheridan.com, PSDocketing@pattersonsheridan.com
Correspondent Name:	PATTERSON & SHERIDAN, LLP
Address Line 1:	24 GREENWAY PLAZA, SUITE 1600
Address Line 4:	HOUSTON, TEXAS 77046
ATTORNEY DOCKET NUMBER:	APPM/022857US02
NAME OF SUBMITTER:	KEITH M. TACKETT
SIGNATURE:	/Keith M. Tackett/
DATE SIGNED:	06/01/2016

Total Attachments: 4

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ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Qingjun ZHOU 6350 Vegas Drive San Jose, 95120	2)	Jungmin KO 2410 Woodland Avenue San Jacinto, California 95128
3)	Tom CHOI 1191 Cranberry Ave. Sunnyvale, California 94087	4)	Sean KANG 5132 Holborn Way San Ramon, California 94582
5)	Jeremiah PENDER 1565 Fuchsia Drive San Jose, California 95125	6)	Srinivas D. NEMANI 504 Fern Ridge Court Sunnyvale, California 94087
7)	Ying ZHANG 4501 Carlyle Court, Apt. 1310 Santa Clara, California 95054		

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

CYCLIC SPACER ETCHING PROCESS WITH IMPROVED PROFILE CONTROL

for which application for Letters Patent in the United States was filed on March 24, 2016, under Serial No. 15/080,117, 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.



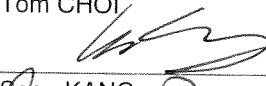
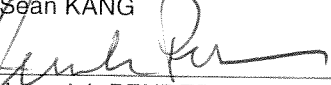
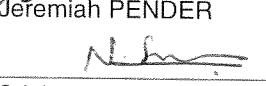
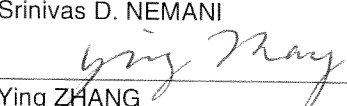
2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt 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>4/6/2016</u> (DATE)	 Qingjun ZHOU
2)	_____ (DATE)	_____ Jungmin KO
3)	<u>4/7/2016</u> (DATE)	 Tom CHOI
4)	<u>4/11/2016</u> (DATE)	 Sean KANG
5)	<u>4/8/2016</u> (DATE)	 Jeremiah PENDER
6)	<u>4/11/2016</u> (DATE)	 Srinivas D. NEMANI
7)	<u>04/07/2016</u> (DATE)	 Ying ZHANG

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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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