# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3826879

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

### **CONVEYING PARTY DATA**

Name	Execution Date
ZIHUI LI	04/04/2016
CHING-MEI HSU	04/01/2016
HANSHEN ZHANG	04/04/2016
JINGCHUN ZHANG	04/04/2016

## **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:	15056756		

## **CORRESPONDENCE DATA**

**Fax Number:** (303)571-4321

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.

**Phone:** 415-576-0200

**Email:** sserrano@kilpatricktownsend.com

Correspondent Name: KILPATRICK TOWNSEND & STOCKTON LLP / AMA

Address Line 1: TWO EMBARCADERO CENTER

Address Line 2: EIGHTH FLOOR

Address Line 4: SAN FRANCISCO, CALIFORNIA 94111-3834

ATTORNEY DOCKET NUMBER:	080042-022726USA-0971903	
NAME OF SUBMITTER:	SHANNON SERRANO	
SIGNATURE:	/Shannon Serrano/	
DATE SIGNED:	04/12/2016	

## **Total Attachments: 4**

source=080042-022726USA-0971903\_Assignment#page1.tif source=080042-022726USA-0971903\_Assignment#page2.tif

PATENT 503780233 REEL: 038258 FRAME: 0949

source=080042-022726USA-0971903\_Assignment#page3.tif source=080042-022726USA-0971903\_Assignment#page4.tif

PATENT REEL: 038258 FRAME: 0950

### ASSIGNMENT FOR APPLICATION FOR PATENT

#### WHEREAS:

Names and Addresses of Inventors:

1)	Zihui Li 1506 Vista Club Circle #101 Santa Clara, CA 95054	2)	Ching-Mei Hsu 25 Olimsted Road, #105 696 Towle way, Apr. 8 Stanford, CA-94305 Pala Alto, CA. 903-6
3)	Hanshen Zhang 21979 McClellan Road Cupertino, CA 95014	4)	Jingchun Zhang 10325 Menhart Lane Cupertino, CA 95014

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

# SILICON SELECTIVE REMOVAL

for which application for Letters Patent in the United States was filed on February 29, 2016, under Application No. 15/056,756, 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 Ciara, 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 division, every Application of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

- 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, 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 therefor 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) , 2016	
Zihui Li	1
2) 04/0/ 2016 Ching-Mei/Hsu	
3) 2016	
Hanshen Zhang	
4), 2016	

#### ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Zihui Li 1506 Vista Club Circle #101 Santa Clara, CA 95054	2)	Ching-Mei Hsu 25 Olmsted Road, #105 Stanford, CA 94305
3)	Hanshen Zhang 21979 McClellan Road Cupertino, CA 95014	4)	Jingchun Zhang 10325 Menhart Lane Cupertino, CA 95014

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

#### SILICON SELECTIVE REMOVAL

for which application for Letters Patent in the United States was filed on February 29, 2016, under Application No. 15/056,756, 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 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, 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 therefor 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)	4/4	, 2016	ii Li
2)		, 2016	ng-Mei Hsu
3) _	474	, 2016	
4) .	×4	, 2016	shen Zhang chun Zhang