

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT3671231

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
XIANGJIN XIE	12/09/2015
FENG Q. LIU	12/09/2015
DAPING YAO	12/09/2015
ALEXANDER JANSEN	12/09/2015
JOUNG JOO LEE	12/15/2015
ADOLPH MILLER ALLEN	12/09/2015
XIANMIN TANG	12/14/2015
MEI CHANG	12/14/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Applied Materials, Inc.
<b>Street Address:</b>	3050 Bowers Avenue
<b>City:</b>	Santa Clara
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95054
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14958459
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(732)935-7122
<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>	
<b>Phone:</b>	732-935-7100
<b>Email:</b>	lzaveta@mtiplaw.com
<b>Correspondent Name:</b>	MOSER TABOADA/ALAN TABOADA
<b>Address Line 1:</b>	1030 BROAD STREET
<b>Address Line 2:</b>	SUITE 203
<b>Address Line 4:</b>	SHREWSBURY, NEW JERSEY 07702
<b>ATTORNEY DOCKET NUMBER:</b>	23398/MDP/COPPER
<b>NAME OF SUBMITTER:</b>	ALAN TABOADA
<b>SIGNATURE:</b>	/Alan Taboada/

PATENT

<b>DATE SIGNED:</b>	12/24/2015
<b>Total Attachments: 2</b> source=APPM23398#page1.tif source=APPM23398#page2.tif	

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Name and Address  
of Inventor:

- |   |   |
|---|---|
| 1) <b>XIANGJIN XIE</b><br>729 Wichitaw Dr.<br>Fremont, CA 94539                   | 5) <b>JOUNG JOO LEE</b><br>1101 Silver Hill Drive<br>San Jose, CA 95120     |
| 2) <b>FENG Q. LIU</b><br>4729 Lago Vista Cir.<br>San Jose, CA 95129               | 6) <b>ADOLPH MILLER ALLEN</b><br>4958 Stoneridge Court<br>Oakland, CA 94605 |
| 3) <b>DAPING YAO</b><br>16186 NW Ryegrass Street<br>Portland, OR 97229            | 7) <b>XIANMIN TANG</b><br>7044 Anjon Creek Circle<br>San Jose, CA 95120     |
| 4) <b>ALEXANDER JANSEN</b><br>1271 Lakeside Dr., Apt. 3122<br>Sunnyvale, CA 94085 | 8) <b>MEI CHANG</b><br>12881 Corte De Arguello<br>Saratoga, CA 95070        |

(hereinafter referred to as Assignor), has invented a certain invention entitled:

**METHODS FOR PRE-CLEANING CONDUCTIVE INTERCONNECT STRUCTURES**

for which we have filed an application for a Patent of the United States on December 3, 2015, having Serial No. 14/958,459, which claims priority to United States Provisional Patent filed on October 2, 2015, having Serial No. 62/236,470; 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 Assignor, 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 Assignor to have been received in full from said Assignee:

1. Said Assignor hereby sells, assigns, transfers and conveys 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.

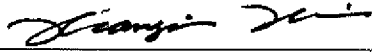

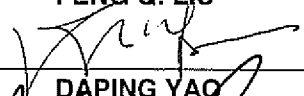
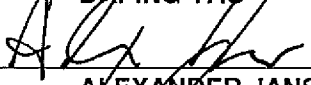
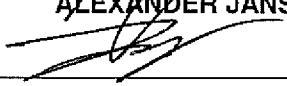
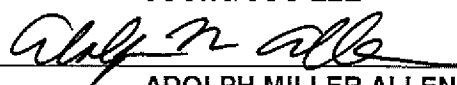


2. Said Assignor hereby covenants and agrees to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in 516374\_1

any and all countries and groups of countries. Such cooperation by said Assignor 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 Assignor 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 Assignor, his respective heirs, legal representatives and assigns.

4. Said Assignor hereby warrants and represents that he has not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

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

1)	<u>12/9/2015</u> (Date)		_____ XIANGJIN XIE
2)	<u>12/9/2015</u> (Date)		_____ FENG Q. LIU
3)	<u>12/9/2015</u> (Date)		_____ DAPING YAO
4)	<u>12/9/2015</u> (Date)		_____ ALEXANDER JANSEN
5)	<u>12/15/2015</u> (Date)		_____ JOUNG JOO LEE
6)	<u>12/9/2015</u> (Date)		_____ ADOLPH MILLER ALLEN
7)	<u>12/14/2015</u> (Date)		_____ XIANMIN TANG
8)	<u>12/14/2015</u> (Date)		_____ MEI CHANG