

PATENT ASSIGNMENT

Electronic Version v1.1
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SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Biao Liu</td> <td>12/11/2012</td> </tr> <tr> <td>Chikuang Wang</td> <td>12/12/2012</td> </tr> <tr> <td>Yuri Uritsky</td> <td>12/12/2012</td> </tr> </tbody> </table>		Name	Execution Date	Biao Liu	12/11/2012	Chikuang Wang	12/12/2012	Yuri Uritsky	12/12/2012
Name	Execution Date								
Biao Liu	12/11/2012								
Chikuang Wang	12/12/2012								
Yuri Uritsky	12/12/2012								
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									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13714368</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13714368				
Property Type	Number								
Application Number:	13714368								
CORRESPONDENCE DATA									
Fax Number:	4087380881								
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
Phone:	408-738-0592								
Email:	efiling@ishimarulaw.com								
Correspondent Name:	Mikio Ishimaru								
Address Line 1:	ISHIMARU & ASSOCIATES LLP								
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ATTORNEY DOCKET NUMBER:	602-001								
NAME OF SUBMITTER:	Mikio Ishimaru								
This document serves as an Oath/Declaration (37 CFR 1.63).									

CH \$40.00 13714368

Total Attachments: 5

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ASSIGNMENT STATEMENT

Oath/Declaration Statement Included

WHEREAS, the undersigned (hereinafter termed Assignor(s)) has/have invented certain new and useful improvements in

MEASUREMENT SYSTEM WITH THICKNESS CALCULATION AND METHOD OF OPERATION THEREOF

for which a United States patent application has been executed on or before the date of this assignment.

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 termed Assignee), is desirous of acquiring the entire right, title and interest in and to said application and said invention and improvements thereon, and in and to Letters Patents thereon when granted in the United States and foreign countries.

NOW, THEREFORE, for good and valuable consideration received by said Assignor(s) from said Assignee(s), the receipt of which is hereby acknowledged by said Assignor(s):

1. Said Assignor(s) hereby state that I/we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.
2. Said Assignor(s) does not know/do not know and does not believe/do not believe the same was ever known or used in the United States of America before this invention thereof or more than one year prior to this application, and that the same was not in public use or on sale in the United States of America more than one year prior to this application. I acknowledge the duty to disclose information which is known to me to be material to patentability in accordance with title 37, Code of Federal Regulations, section 1.56.
3. Said Assignor(s) does hereby sell, assign, transfer and convey unto said Assignee(s), the entire right, title and interest in and to said application and said invention and in and to any and all improvements on said invention and in and to any and all improvements on said invention heretofore or hereafter made or acquired by said Assignor(s); and in and to any and all Letters Patent on said invention and/or said improvements that may be granted in the United States or any foreign country, including each and every Letters Patent granted on any application which is a division, continuation, substitution, renewal, or continuation-in-part of any said application, and in and to each and every reissue or extension of said Letters Patent.
4. Said Assignor(s) hereby covenants and agrees to cooperate with said Assignee(s) where said Assignee(s) may enjoy to the fullest extent the right, title and interest herein conveyed. Such cooperation shall include (a) prompt execution of all papers (prepared at the expense of Assignee(s)) which are deemed necessary or desirable by Assignee(s) to perfect in it the right, title and interest herein conveyed, (b) prompt execution of all petitions, oaths, specifications or other papers (prepared at the expense of Assignee(s)) which are deemed necessary or desirable by Assignee(s) for prosecuting said application, for filing and prosecuting divisional, continuation, substitution, renewal, continuation-in-part, or additional applications in the United States and/or foreign countries covering said invention and/or said improvements, for filing and prosecuting applications for reissuance of letters patent included herein, or for interference proceedings involving said invention and/or said improvements and (c) prompt assistance and cooperation in the prosecution of interference proceedings involving said invention and/or said improvements and in the adjudication of said Letters Patent, particularly by the disclosure of facts and the production of evidence relating to said invention and/or said improvements, provided the expenses which may be incurred by said Assignor(s) in lending such assistance and cooperation shall be paid by the Assignee(s).

5. The terms, covenants and conditions of this assignment shall inure to the benefit of said Assignee(s), its successors, assigns and/or other legal representatives and shall be binding upon said Assignor(s), his/her heirs, legal representatives and assigns.

6. Said Assignor(s) hereby warrants and represents that he/she has not entered into any assignment, contract or understanding in conflict herewith.

Authorization to Permit Access To Application by Participating Office

If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified patent application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified patent application is filed to have access to the above-identified patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the above-identified patent application with respect to: 1) the above-identified patent application –as-filed; 2) any foreign application to which the above-identified patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application; and 3) any U.S. application-as-filed form which benefit is sought in the above-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Offices.

7. Said Assignor(s) hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT international application which designated at least one country other than the United States listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s):

Number	Country	Day/Month/Year filed	Priority Claimed	
			Yes	No

8. Said Assignor(s) hereby claim the benefit under 35 USC 119(e) of any United States provisional application(s) listed below:

Prior Provisional Application(s):

Serial No.	Filing Date

9. Said Assignor(s) hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or Section 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred

between the filing date of the prior application and the national or PCT international filing date of this application:

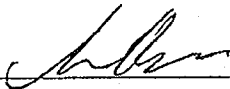
Prior U.S. Application(s):

Serial No.	Filing Date

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The above-identified application was made or authorized to be made by the Assignor(s), who believe(s) that I am/we are the original inventor(s) or an original joint inventor(s) of a claimed invention in the application.

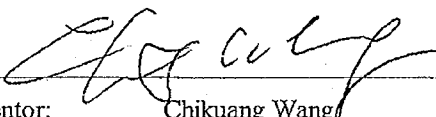
Said Assignor(s) hereby acknowledge that any willful false statement made in this Assignment is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both..

Inventor's signature:  Date: 12/11/2012

Full name of sole or first inventor: Biao Liu
 Citizenship: China
 Residence Address: 5015 Elmwood Dr.
San Jose, CA 95130
 P.O. Address: Same as Residence

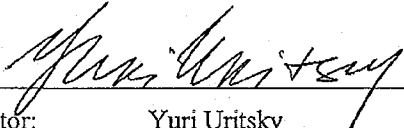
The above-identified application was made or authorized to be made by the Assignor(s), who believe(s) that I am/we are the original inventor(s) or an original joint inventor(s) of a claimed invention in the application.

Said Assignor(s) hereby acknowledge that any willful false statement made in this Assignment is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both..

Inventor's signature:  Date: 12/12/2012
Full name of joint inventor: Chikuang Wang
Citizenship: United States of America
Residence Address: 1186 Washoe Drive
San Jose, CA 95120
Post Office Address: Same as Residence

The above-identified application was made or authorized to be made by the Assignor(s), who believe(s) that I am/we are the original inventor(s) or an original joint inventor(s) of a claimed invention in the application.

Said Assignor(s) hereby acknowledge that any willful false statement made in this Assignment is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both..

Inventor's signature:  Date: 12-12-12
Full name of joint inventor: Yuri Uritsky
Citizenship: United States of America
Residence Address: 8564 Mahogany Place
Newark, CA 94560
Post Office Address: Same as Residence