

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>Kun Xu</td><td>12/02/2008</td></tr><tr><td>Feng Q. Liu</td><td>12/05/2008</td></tr><tr><td>Yuchun Wang</td><td>12/03/2008</td></tr><tr><td>Abraham Ravid</td><td>12/01/2008</td></tr><tr><td>Wen-Chiang Tu</td><td>12/09/2008</td></tr></tbody></table>	Name	Execution Date	Kun Xu	12/02/2008	Feng Q. Liu	12/05/2008	Yuchun Wang	12/03/2008	Abraham Ravid	12/01/2008	Wen-Chiang Tu	12/09/2008	
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RECEIVING PARTY DATA													
Name:	Applied Materials, Inc.												
Street Address:	P.O. Box 450A												
City:	Santa Clara												
State/Country:	CALIFORNIA												
Postal Code:	95052												
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>12267526</td></tr></tbody></table>	Property Type	Number	Application Number:	12267526									
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CORRESPONDENCE DATA													
Fax Number:	(408)986-3090												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
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Email:	yolande_glass@contractor.amat.com												
Correspondent Name:	Applied Materials												
Address Line 1:	P.O. Box 450A												
Address Line 4:	Santa Clara, CALIFORNIA 95052												
ATTORNEY DOCKET NUMBER:	013595/CMP/MDG												
NAME OF SUBMITTER:	Yolande M. Glass												

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PATENT
REEL: 021972 FRAME: 0555

Total Attachments: 4

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PATENT

REEL: 021972 FRAME: 0556

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

Kun Xu 42628 Shoreham Part Ct. Fremont, CA 94538	Abraham Ravid 19756 Wheaton Drive Cupertino, CA 95014
Feng Q Liu 4729 Lago Vista Cir. San Jose, CA 95129	Wen-Chiang Tu 777 West Middlefield Road Mountain View, California 94043
Yuchun Wang 606 Giannini Drive Santa Clara, CA 95051	

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

Metrology for GST Film Thickness and Phase

for which application for Letters Patent in the United States was filed on 11/7/2008, under Serial No. 12/267,526, 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 the Application), and the invention disclosed therein (hereinafter referred to as the 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 the 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.

Date: 12/2/2008


KUN XU

Date: 12/05/2008


FENG Q LIU

Date: 12/03/2008


YUCHUN WANG

Date: _____

ABRAHAM RAVID

Date: 12/09/2008


WEN-CHIANG TU

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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.

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

Date:

_____ KUN XU

Date:

_____ FENG Q LIU

Date:

_____ YUCHUN WANG

Date:

_____ 12/1/2008 °

_____ *Abraham David*
ABRAHAM RAVID

Date:

_____ WEN-CHIANG TU

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