

Form PTO-1695 (Rev. 05/04)
OMB No. 0651-0027 (exp. 6/30/2008)

U.S. Department of COMMERCE
United States Patent and Trademark Office

RECORDATION FORM COVER SHEET

PATENTS ONLY

To the Director of the U.S. Patents and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies):

HUA CHUNG September 16, 2004
Nirmalya Maity September 21, 2004
Jick Yu September 21, 2004
Roderick Craig Mosley September 18, 2004
Mel Chang September 16, 2004

Additional name of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies)

Name: APPLIED MATERIALS, INC.

Internal Address: Patent Counsel

Street Address: 3050 Bowers Avenue

City: Santa Clara

State: CA

Country: USA Zip: 95054

Additional Name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

Execution Date(s) _____

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other

4. Application number(s) or patent number(s):

A. Patent Application No.(s)

12/627,977; Filed November 30, 2009

☐ This document is being filed together with a new application.

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning this document should be mailed:

Name: Patterson & Sheridan, L.L.P.

Internal Address: Applied Materials, Inc.

Street Address: 3040 Post Oak Boulevard, Suite 1500

City: Houston

State: TX Zip: 77056

Phone Number: 713-623-4844

Fax Number: 713-623-4846

Email Address: lpatterson@pattersonsheridan.com

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- ☐ Authorized to be charged by credit card
☒ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers _____
Expiration Date _____

b. Deposit Account Number
50-1074/006303.C5/MDP/COPPER/PJT

Authorized User Name Robert W. Mulcahy

9. Signature: 
Signature

December 16, 2009
Date

Robert W. Mulcahy; Reg No. 25,436

Name of Person Signing

Total number of pages, sheet, attachments,
and documents including cover

5

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1480, Alexandria, V.A. 22313-1480

COPY

Atty. Dkt. No. 6303 P3 CPI/COPPER

ASSIGNMENT FOR APPLICATION FOR PATENT**WHEREAS:**Names and Addresses
of Inventors:

1)	Hua Chung 4645 Piper Drive San Jose, California 95129	2)	Nirmalya Maity 1480 Holly Avenue Los Altos, California 94024
3)	Jick Yu 1424 Graywood Drive San Jose, California 95129	4)	Roderick Craig Mosely 4337 Diavila Avenue Pleasanton, California 94588
5)	Mei Chang 12881 Corte de Arguello Saratoga, CA 95070	6)	

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

" INTEGRATION OF ALD TANTALUM NITRIDE FOR COPPER METALLIZATION "for which application for Letters Patent in the United States was filed on on **06/10/2004**, under Serial No. **10/865,042**, 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.

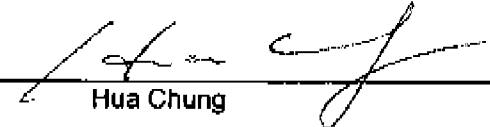
2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt 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

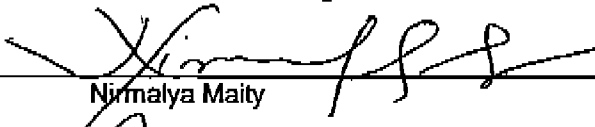
Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for 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.

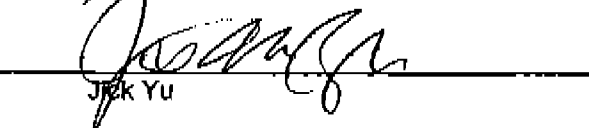
3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.

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) 9/16/04 Date 
Hua Chung

2) 9/21/04 Date 
Nirmalya Maity

3) 9/21/04 Date 
Jack Yu

4) _____ Date _____
Roderick Craig Mosely

5) 9/16/04 Date 
Mei Chang

COPY

Atty. Dkt. No. 6303 P3 CPL/COPPER

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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)	_____	Date	_____	Hua Chung
2)	_____	Date	_____	Nirmalya Maity
3)	_____	Date	_____	Jick Yu
4)	9/18/04	Date	_____	Roderick Craig Mosely
5)	_____	Date	_____	Mei Chang