Form PTO-1595 (Rev. 01-09) OMB No. 0651-0027 (exp. 02/28/2009)	U.S. DEPARTMENT OF COMMERC United States Patent and Trademar <u>k Offic</u>		
RECORDATION FOR	RM COVER SHEET		
PATENTS ONLY			
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.			
Name of conveying party(ies):	2. Name and address of receiving party(iea)		
Kavita Shah (11/01/2007)	Name: APPLIED MATERIALS, INC.		
Haichun Yang (11/08/2007) and Schubert S. Chu (11/01/2007)	Internal Address:		
Additional name(s) of conveying party(les) attached? Yes X No	Street Address:		
3. Nature of conveyance/Execution Date(s):	- Office Address.		
Execution Date(s): in parentheses after inventor name	3050 Bowers Avenue		
x Assignment Merger Change of Name			
[片 · 나 ː ·			
Security Agreement Joint Research Agreement	City: Santa Clara		
Government Interest Assignment	State: CA		
Executive Order 9424, Confirmatory License	Country: Zip: 95054		
Other	Additional name(s) & address(es) Yes X No attached?		
A. Patent Application No.(s) 12/699,271	B. Patent No.(s)		
Additional numbers attached	Yes X No		
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:		
Name: B. Todd Patterson			
PATTERSON & SHERIDAN, LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00		
Internal Address: Atty. Dkt.: APPM/11772USC1 Street Address: 3040 Post Oak Blvd, Suite 1500	Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)		
City: Houston	8. Payment Information		
State: TX Zip:			
Phone Number: (713) 623-4844			
Fax Number: (713) 623-4846	Deposit Account Number 50-1074		
Email Address: tpatterson@pattersonsheridan.com	Authorized User Name Flobert W. Mulcahy		
9. Signature: Signature	May 14, 2010		
Robert W. Mulcahy - 25,436	Total number of pages including cover		
Name of Person Signing	sheet, attachments, and documents:		

PATENT REEL: 024391 FRAME: 0679

Atty. Dkt. No. APPM/011772.02/CPI/ALD/AG

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:



1)

	750 N SHORELINE BLVD, #10H
	KAVITASHAH MOUNTAIN VIEW
	979 Belmont Terrace, #5 CA
ı	Sunnyvale, CA 94986 34043
_	

2) HAICHUN YANG 702 Harvard Avenue, Apt. 2 Santa Clara, CA 95051

3) SCHUBERT S. CHU 38 Sequoia Way San Francisco, CA 94127

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

TANTALUM CARBIDE NITRIDE MATERIALS BY VAPOR DEPOSITION PROCESSES

enclosed herewith or for which application for Letters Patent in the United States was filed on September 25, 2007, under conventional Serial No. 11/860,952, 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 provisional and conventional Application filed and each and every Patent granted on any application which is a provisional and conventional, division, substitution, or continuation of said Application; and (d) in

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PATENT REEL: 024391 FRAME: 0680

RECORDED: 05/14/2010

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 conventional, 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	15t NOV 2007	_(DATE) _	All
			KAVITA SHAH
2)	11/8/07	_ (DATE)	Yangledh
	111	,	HAICHUN YANG , /
3)	11/1/07	(DATE)	film of /
•		_ ,	SCHUBERT'S CHIL