rorm r 1 U-1595 (Rev. 01-09) OMB No. 0651-0027 (exp. 02/28/2009)	U.S. DEPARTMENT OF COMMERCI United States Patent and Trademark Office	
RECORDATION FOR		
PATENTS ONLY		
To the Director of the U.S. Patent and Trademark Office: Please	a record the attached decomments or the new address(es) helpw	
	Name and address of receiving party(les)	
1. Name of conveying party(les): Huiwen Xu (03/20/2007)		
Mei-Yee Shek (03/16/2007)	Name: APPLIED MATERIALS, INC.	
Li-Qun Xia (03/20/2007)		
Amir Al-Bayati (03/19/2007)	Internal Address:	
Additional name(s) of conveying party(ies) attached? X Yes No	Street Address:	
3. Nature of conveyance/Execution Date(s):		
Execution Date(s): in parentheses after inventor name	3050 Bowers Avenue	
x Assignment Merger Change of Name		
Security Agreement Joint Research Agreement	City: Santa Clara	
Government Interest Assignment	State: California	
Executive Order 9424, Confirmatory License	Country: USA Zip: 95054	
Other	Additional name(s) & address(es) Yes X No attached?	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	This document is being filed together with a new application.	
A. Patent Application No.(s)	B. Patent No.(s)	
12/975,833		
Additional numbers attached?	Yes X No	
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.: 010686.C02/DSM/BCVD/JW		
Street Address: 3040 Post Oak Blvd, Suite 1500	X Authorized to be charged to deposit account	
	Enclosed	
	None required (government interest not affecting title)	
City: Houston	8. Payment information	
State: TX Zip: 77056		
Phone Number: (713) 623-4844		
Fax Number: (713) 623-4846	Deposit Account Number 50-1074	
Email Address: tpatterson@pattersonsheridan.com	Authorized User Name Robert W. Mulcahy	
9. Signature:		
(Kolet W Malestel	December 22, 2010	
Signatur	Date	
Robert W. Mulcahy - 25,436	Total number of pages including cover 6	
Name of Person Signing	sheet, attachments, and documents:	

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted by facsimile to the Patent and		
Trademark Office, facsimile no. (571) 273-0140, on the date shown below.		
Dated: 12/27/10	Signature: (Keith M. Tackett)	

REEL: 025605 FRAME: 0864

	RECORDATION (s	FORM COVER SHEET (PTO-1599 supplemental sheet)	5)
Additional Conve	eying Party(ies)/Exec	ution Date(s) (1. Continued):	
Derek Witty Hichem M'Saad	(03/30/2007) (04/05/2007)		
Additional Assign	nees (2. Continued):		
Assignee Name: Internal Address: Street Address:			
City:	State:	Country:	Zip:
Assignee Name: Internal Address: Street Address;			
City:	State:	Country:	Zlp:
Assignee Name: Internal Address: Street Address:			
City:	State:	Country:	Zip:
Additional Applica	tions and/or Patents	(4. Continued):	
Additional Patent Applicatio 4A. Continued:	on Numbers	Additional Patent Numbers 4B. Continued:	
	Additional numbers at	tached? Yes No	

2 .

Docket No.: 010686.C02/DSM/BCVD/JW

Atty. Dkt. No. APPM/010686.P1/DSM/LOW K/JP

## ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	HUIWEN XU 1461 Mallard Way Sunnyvale, CA 94087	2)	MEI-YEE SHEK 991 N. CAUTO RULA AVE 2531 Alvin Street Mountain View CA 94043 PAGE ACTO CA 94303
3)	LI-QUN XIA 868 Leith Avenue Santa Clara, CA 95054	4)	AMIR AL-BAYATI 3302 Chemin De Riviere San Jose, CA 95148
5)	DEREK WITTY 5587 Starfire Circle Fremont, CA 94538	6)	HICHEM M'SAAD 3500 Granada Avenue #364 Santa Clara, CA 95051

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

## METHOD TO MINIMIZE THE WET ETCH UNDERCUTS AND PROVIDE PORE SEALING OF EXTREME LOW K (K<2.5) DIELECTRICS

enclosed herewith or for which application for Letters Patent in the United States was filed on HEREWITH, under Serial No. UNASSIGNED, 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,

**PATENT** 

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including each and every Application filed and each and every Patent granted on any application which is a conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

- Said Assignors hereby covenant and agree to cooperate with said 2. 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 including without limitation opposition proceedings, 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 V	WITNESS WHEREOF, the s nent to said Assignee on the	said Assignors have executed and delivered
แทร เทรแนก	Tent to said Assigned on the	dates fridioates bolon:
1)	3/20/0/ (DATE)	fh pu
		HUIWEN XU
2)	3/16/0) (DATE)	
,		MEI-YEE SHEK
	3/20/07	
3)	(DATE)	
		LI-QUN XIA
4)	3-19-07 (DATE)	A-Dlust-
•		AMIR ALYBAYATI
5)	3/30/07 (DATE)	Jeh Wills
-,		DEREK WITTY
•		
6)	(DATE)	
·		HICHEM M'SAAD

Atty. Dkt. No. APPM/010686.P1/DSM/LOW K/JP

## ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	HUIWEN XU 1461 Mallard Way Sunnyvale, CA 94087	2)	MEI-YEE SHEK 2531 Alvin Street Mountain View CA 94043
3)	LI-QUN XIA 868 Leith Avenue Santa Clara, CA 95054	4)	AMIR AL-BAYATI 3302 Chemin De Riviere San Jose, CA 95148
5)	DEREK WITTY 5587 Starfire Circle Fremont, CA 94538	6)	HICHEM M'SAAD 3500 Granada Avenue #364 Santa Clara, CA 95051

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

## METHOD TO MINIMIZE THE WET ETCH UNDERCUTS AND PROVIDE PORE SEALING OF EXTREME LOW K (K<2.5) DIELECTRICS

enclosed herewith or for which application for Letters Patent in the United States was filed on HEREWITH, under Serial No. UNASSIGNED, 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,

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including each and every Application filed and each and every Patent granted on any application which is a conventional, division, substitution, or continuation of said Application; and (d) in 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)	(DA TE)	HUIWEN XU
2)	(DA TE)	MEI-YEE SHEK
3)	(DA TE)	LI-QUN XIA
4)	(DATE)	AMIR AL-BAYATI
5)	(DA TE)	DEREK WITTY
6)	4/15/2007 (DATE)	HICHEM M'SAAD

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