

FORM PTO-1595 (Rev. 6-93)] 1901 B) 1911 B2011 B2012 B2011 B2011 A2011 1910 1910 1910 1910	U.S. Department of Commerce Patent And Trademark Office	
CMB No. 0651-0011 (exp. 4/94)	100908191	THE THOUGHT VIII	
To the Honorable Commissioner of Patents and Trad	lemarks: Please record the attached original document or copy the	ereof.	
Name of conveying party(ies):	2. Name and address of receiving	party(ies):	
Date Date	Name: Applied Materials, In	nc, 25 9	
RAYMOND HUNG 11/05/19 JOSEPH P. CAULFIELD 11/05/19		Box 450-A	
HONGCHING SHAN 11/05/19 RUIPING WANG 11/05/19	98	20	
RUIPING WANG 11/05/19 GERALD Z. YIN 11/05/19	98		
	Street Address:		
Additional name(s) of conveying party(ies) attached?	YesX_No		
3. Nature of conveyance:	City: Santa Clara	State:CAZip:95052	
X Assignment Merg			
Security Agreement Chan	Additional name(s) & address(es) a ge of Name	ttached? Yes X No	
Other			
Other	····		
Execution Date:			
4. Application number(s) or registration number(s):			
If this document is being filed together with a new	application, the execution date of the application is: N	ovember 16, 1998 (Date of Filing)	
A. Patent Application No.(s)			
••			
B. Patent No.(s)			
Additional numbers attached? Ye	es X No		
Name and address of party to whom corresponder document should be mailed:	ace concerning 6. Total number of applications and	d patents involved:	
Name: Patent Counsel	7. Total fee (37 C.F.R. 3.41)		
Internal Address: APPLIED MATERIALS, I	NC. Enclosed	Enclosed	
Internal Address. ATTEMES HITTERINGS, I			
	X Authorized to be charged to	deposit account	
	01-1651		
Street Address: P.O. Box 450-A			
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City Costs Claus	Zin: 05052		
City: Santa Clara State: CA	Zip: <u>95052</u>		
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9. Statement and signature.	~ 100	-	
To the best of my knowledge and belief, the forego	oing information is true and folfect and any attacked copy is E ri	ue copy of the original document.	
ROBERT W. MULCAHY Reg No. 25,436	1 Many 5	11 116 198	
Name of Person Signing	Signature Total number of pages including covers	Date	
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	euments to be recorded with required cover sheet information accommissioner of Patents & Trademarks, Box Assignments Washington D.C. 20231		
J:\FORMS\272 (AUGUST 20, 1993)	/199	FC:581	
	11/24/1998	2047515	
		PATENT	
	REEL: 9	9598 FRAME: 0751	

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Raymond Hung 1282 Burkette Drive San Jose, California 95129	2)	Joseph P. Caulfield 910 Rockefeller Drive, Apt. 9A Sunnyvale, California 94087
3)	Hongching Shan 3630 Tumble Way San Jose, California 95132	4)	Ruiping Wang 622 Sammie Avenue Fremont, California 94539
5)	Gerald Z. Yin 10132 Bilich Place 19500 Pruneridge hve. # Cupertino, California 95014 Cupertino CA.	9 tos 5014	

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

"Oxide Etch Process Using Hexafluorobutadiene and Related Unsaturated Hydrofluorocarbons"

for which application for Letters Patent in the United States was 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

PATENT REEL: 9598 FRAME: 0752 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.

Raymond Hung

Joseph P. Caulfield

Hongching Shan

4) 11-5 , 1998

Ruiping Wang

5) 11-5, 1998

RECORDED: 11/16/1998

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