.RM PTO-1595 (Rev. 6-93)	U.S. Department of Commerce Patent And Trademark Office
To the Honorable Commissioner of Patents and Trademarks: Please n	172952
1. Name of conveying party(ies): Stan D. Tsai Shijian Li Feng Q. Liu Lizhong Sun Liang-Yuh Chen Additional name(s) of conveying party(ies) attached?YesX_ No 3. Nature of conveyance: X Assignment Merger Security Agreement Change of Name Other Execution Date: SEE ABOVE	2. Name and address of receiving party(ies): Name: Applied Materials, Inc. Internal Address: P.O. Box 450-A Street Address:
If this document is being filed together with a new application, the example of the second of the se	xecution date of the application is: \(\frac{7-1/-02}{\}\) (Date of Filing)
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Patent Counsel Internal Address: APPLIED MATERIAL INC. /2002 TDIAZI 00000047 501074 10193810 Street Address: P.O. Box 450-A City: Santa Clara State: CA Zip: 95052	6. Total number of applications and patents involved:
	is true and correct and any attached copy is a true copy of the original Signature Date
	Total number of pages including cover sheet, attachments and document: 3

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	STAN D. TSAI 5444 Decker Terrace Fremont, California 94555	2)	SHIJIAN LI 1202 Donington Drive San Jose, California 95129
3)	FENG Q. LIU 202 Calvert Drive #254 Cupertino, California 95014	4)	Lizhong Sun 952 Windsor Hills Circle San Jose, California 95123
5)	LIANG-YUH CHEN 1400 Melbourne Street Foster City, California 94404		

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

DUAL REDUCED AGENTS FOR BARRIER REMOVAL IN CHEMICAL MECHANICAL POLISHING

enclosed herewith or for which application for Letters Patent in the United States was filed on $\,$

under Serial No., 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

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PATENT REEL: 013124 FRAME: 0186 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.

- Said Assignors hereby covenant and agree to cooperate with said Assignee 2. 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. 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)	Jul 9, 2002	Sh
2)	7/9, 2002	STAND, TSAI
3)	<u> 1/8</u> , 2002	FENG Q. LIU
4)	<u>67/64</u> , 2002	LIZHONG SUN
5)	<u>07/10</u> , 2002	LIANG-YUH CHEN

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