OMB No. 0651-0011 (exp. 4/94)	U.S. Department
To the Honorable Commissioner of Patents and Trademarks. Please i	ecord the attached original document or copy thereof.
1. Name of conveying party(ies): Date BENJAMIN A. BONNER ANAND N. IYER DEEPAK N. KUMAR THOMAS H. OSTERHELD WEI-YUNG HSU YONG-SIK R. KIM CHRISTOPHER W. SMITH HUANBO ZHANG Additional name(s) of conveying party(ies) attached? X Yes No Notice of conveyance: X Assignment Merger	2. Name and address of receiving party(ies): Name: Applied Materials, Inc, Internal Address: P.O. Box 450-A Street Address: O City: Santa Clara State: CA Zip: 9506
Security Agreement Change of Name Other Execution Date: See Above and the Attached	10/194560
	recution date of the application is:(Date o
	recution date of the application is:
If this document is being filed together with a new application, the ex A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? Yes _X_ No 5. Name and address of party to whom correspondence concerning document should be mailed:	(Date of the application is:
If this document is being filed together with a new application, the ex A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? Yes _X_ No 5. Name and address of party to whom correspondence concerning	6. Total number of applications and patents involved:1 7. Total fee (37 C.F.R. 3.41)
If this document is being filed together with a new application, the ex A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? Yes _X_ No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Patent Counsel Internal Address: APPLIED MATERIALS, INC.	6. Total number of applications and patents involved: 1 7. Total fee (37 C.F.R. 3.41)
If this document is being filed together with a new application, the ex A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? Yes _X_ No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Patent Counsel Internal Address: APPLIED MATERIALS, INC. 2002_TDIR710000228_50107410194560 581 40.00_CH Street Address: P.O. Box 450-A City:Santa Clara State:CA Zip:95052	6. Total number of applications and patents involved:1 7. Total fee (37 C.F.R. 3.41)
If this document is being filed together with a new application, the ex A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? Yes _X_ No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Patent Counsel Internal Address: APPLIED MATERIALS, INC. 2002 TBIRZ1	6. Total number of applications and patents involved:1 7. Total fee (37 C.F.R. 3.41)

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

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

Atty. Docket No.: AMAT/5900/CMP/CMP/RKK

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses

of Inventors:

1)	BENJAMIN A. BONNER 755 West Valley Drive #3 Campbell, California 95008	2)	ANAND N. IYER 3480 Granda Avenue Apt. 285 Santa Clara, California 95051
3)	DEEPAK N. KUMAR 1267 Vincente Drive #135 Sunnyvale, California 94080	4)	THOMAS H. OSTERHELD 1195 Barbara Avenue Mountain View, California 94040
5)	WEI-YUNG HSU 4501 Carlyle Court #1104 Santa Clara, California 95054	6)	YONG-SIK R. KIM 1655 Pomeroy Avenue #12 Santa Clara, California 95051
7)	CHRISTOPHER W. SMITH 25400 Becky Lane Los Altos Hills, California 94022	8)	HUANBO ZHANG 21052 Red Fir Court Cupertino, California 95014

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

METHODS AND COMPOSITIONS FOR CHEMICAL MECHANICAL POLISHING SHALLOW TRENCH ISOLATION SUBSTRATES

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 of 3

PATENT REEL: 013109 FRAME: 0258

- 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) July 9 , 2002

BENJAMIN A. BONNER

2) 1024 9 , 2002

ANAND N IVER

3)	July 9, 2002	DEEPAK N. KUMAR
4)	July 10, 2002	THOMAS H. OSTERHELD
6)	July 11, 2002	Mei-Yung Hsuf
	שי צעט , 2002 , 2002	YONG-SIK R. KIM
8)	July 12, 2002	
E)	Tula 10 2002	CHRISTOPHER W. SMITH

HUANBO ZHANG

RECORDED: 07/12/2002