11-30-2004

FORM PTO-1595 (Perv. 8-93) OMB No. 0851-0011 (exp. 4/84) 102891254				
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original document or copy thereof.				
Name of conveying party(ies):	Date	2. Name and address of receiving party(ies):	J. s. P 3925	
JEONG SOO BYUN ALFRED MAK	June 30, 2000 July 7, 2000	Name: APPLIED MATERIA Internal Address: Patent Counsel	7,000 10,000 10,000	
Additional name(s) of conveying party(ies) attached?YesX No				
Nature of conveyance: X Assignment	11 - 19 - 04 _Merger	Street Address: P.O. Box 450-A		
Security Agreement	Change of Name	City: Santa Clara State: CA Additional name(s) & address(es) attached?		
Execution Date: SEE A	BOVE			
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is:(Date of Filing) A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached?Yes X_No				
Name and address of party to whom document should be mailed: Name: <u>APPLIED MATERI</u> Internal Address: <u>Patent Cour</u>	ALS, INC.	Total number of applications and patents involve Total fee (37 C.F.R. 3.41) Enclosed X Authorized to be charged to deposit account	\$40.00	
Street Address: P,O. Box 45 City: Santa Clara State	0-A : <u>CA</u> Zip: <u>95052</u>	8. Deposit account number: 50-1074/4417.C2/CPVTICL/BG		
DO NOT USE THIS SPACE				
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Robert W. Mulcahy; Reg No.: 25,436 Name of Person Signing Total number of pages including cover sheet, attachments and document: 3				

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

11/30/2004 ECDOPER 00000078 501074 10993925 01 FC:8021 40.00 DA Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450 111904

Case No. 4417

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

- Jeong Soo Byun
 20975 Valley Green Drive #257
 Cupertino, CA 95014
- 2) Alfred Mak 32722 Fellows Court Union City, CA 94587

3)

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

FORMATION OF BORIDE BARRIER LAYERS USING CHEMISORPTION TECHNIQUES

for which we have filed an application for a Patent of the United States on 6/27/200_____, Serial No. 09/604, 943_____; 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 production of pertinent facts and documents, giving testimony,

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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}	6/20/2000	J.S BMU
-		JEONG SOO BYUN /
2)	7/7/00 2000	John alle
• •		ALFRED MAK

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