Substitute Form PTO-1595 Attorney Docket No.: 05542-459006 Client's Ref. No.: 5353D2/CMP

RECORDATION FORM COVER SHEET PATENTS ONLY

Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
Name of conveying party(ies):	Name and address of receiving party(les):
Wallace T.Y. Tang	Applied Materials, Inc.
Additional name(s) attached? ☐ Yes 图 No	3050 Bowers Avenue Santa Clara, California 95054
3. Nature of conveyance:	United States of America
 ☑ Assignment ☑ Merger ☑ Security Agreement ☑ Change of Name ☑ Other: 	
Execution Date: July 31, 2000	Additional names/addresses attached? ☐ Yes ☑ No
4. Application number(s) or patent number(s):	
If this document is being filed with a new application, the execution date of the application is:	
A. Patent Application No(s).:	B: Patent No(s).:
11/043,486	
Additional numbers attached? ☐ Yes 図 No	
Name/address of party to whom correspondence concerning document should be mailed;	6. Total number of applications/patents involved: 1
TIM H. PHAM	7. Total fee (37 CFR §3.41): \$40
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CERTIFICATE OF TRANSMISSION BY FACSIMILE

I hereby certify that this correspondence is being transmitted by facsimile to the Patent and Trademark Office on the date indicated below.

January **€**, 2006 Date of Transmission

Signature

Christine Picozzi
Typed Race of Echol Signing Certificate

REEL: 017171 FRAME: 0160

PATENT ASSIGNMENT

WHEREAS, WALLACE T. Y. TANG, having a residence at P.O. Box 4408, 5 Deerwood Trail, Warren, NJ 07059 (hereinafter referred to as "Assignor") owns right, title, and interest in and to U.S. Patent Application Number 09/134,147, filed on Aug. 14, 1998, entitled IN-SITU REAL-TIME MONITORING TECHNIQUE AND APPARATUS FOR ENDPOINT DETECTION OF THIN FILMS DURING CHEMICAL/MECHANICAL POLISHING PLANARIZATION (hereinafter referred to as "Patent Application"); and

WHEREAS, APPLIED MATERIALS, INC., having offices at P.O. Box 450A, Santa Clara, CA 95052 (hereinafter referred to as "Assignee"), desires to acquire Assignor's entire right, title, and interest in and to said Patent Application, and in and to the inventions disclosed in said Patent Application, and to the Future Patents (as hereinafter defined).

Now, Therefore, for and in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor does hereby sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, Assignor's full right, title, and interest in and to said Patent Application, and to all future patents which may be granted therefor throughout the world, and all division, reissues, substitutions, continuations, continuations-in-part and extensions thereof (collectively, "Future Patents"), together with all claims, causes of action and damages for past infringement, if any, of said Patent Application and Future Patents; and Assignor hereby authorizes and requests the United States Patent and Trademark Office and other patent offices throughout the world to issue all Future Patents resulting therefrom insofar as Assignor's interest is concerned, to the said Assignee of Assignor's entire right, title, and interest.

Assignor also hereby sells and assignees to Assignee, its successors, assigns and legal representatives Assignor's full right, title, and interest to inventions disclosed in said Patent Application and Future Patents throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said inventions in Assignee's own name throughout the world including all rights of priority, all rights to publish cautionary notices reserving ownership of said inventions and all rights to register said inventions in appropriate registries; and Assignor further agrees to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith reasonably necessary to perfect such right, title, and interest in Assignee, its successors, assigns and legal representatives.

Assignor hereby further agrees that Assignor will communicate to said Assignee, or to its successors, assigns and legal representatives, any facts known to Assignor respecting any improvements, and, at the expense of said Assignee, will testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, make all lawful oaths, and exert reasonable efforts to vest title in said Assignee and to aid said Assignee, its successors, assigns and legal representatives in obtaining and enforcing proper protection for said Patent Application and Future Patents in such countries as Assignee may elect.

IN WITNESS WHEREOF, Assignor has caused this instrument to be executed effective July 31, 2000,

Name: Wallace T. Y. Tang

PATENT REEL: 017171 FRAME: 0161