

Form PTO-1595 (Rev. 01-09)
OMB No. 0651-0027 (exp. 02/28/2009)

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RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies): Sivakumar Dhandapani (05/06/2011), Jun Qian (05/06/2011), Christopher D. Cocca (05/02/2011), Jason G. Fung (05/06/2011), Additional name(s) of conveying party(ies) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. Name and address of receiving party(ies) Name: <u>APPLIED MATERIALS, INC.</u> Internal Address: _____ Street Address: _____ 3050 Bowers Avenue City: <u>Santa Clara</u> State: <u>California</u> Country: <u>United States of America</u> Zip: <u>95054</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance/Execution Date(s): Execution Date(s): <u>in parentheses after inventor name</u> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____	4. Application or patent number(s): <input type="checkbox"/> This document is being filed together with a new application. A. Patent Application No.(s) <u>13/087,180 filed</u> <u>04/14/2011</u> B. Patent No.(s) Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>B. Todd Patterson</u> <u>PATTERSON & SHERIDAN, LLP</u> Internal Address: Atty. Dkt.: APPM/14963US Street Address: <u>3040 Post Oak Blvd, Suite 1500</u> City: <u>Houston</u> State: <u>TX</u> Zip: <u>77056</u> Phone Number: <u>(713) 623-4844</u> Fax Number: <u>(713) 623-4846</u> Email Address: <u>tpatterson@pattersonsheridan.com</u>	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ <u>40.00</u> <input checked="" type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title)
8. Payment Information Deposit Account Number <u>50-1074</u> Authorized User Name <u>Robert W. Mulcahy</u>	
9. Signature. <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;"> _____ Signature <u>Robert W. Mulcahy -25,436</u> Name of Person Signing </div> <div style="text-align: right;"> <u>June 7, 2011</u> Date <div style="display: flex; align-items: center;"> Total number of pages including cover sheet, attachments, and documents: 5 </div> </div> </div>	

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted by facsimile to the Patent and Trademark Office, facsimile no. (571) 273-0140, on the date shown below.

Dated: June 7, 2011

Signature: (Keith M. Tackett)

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RECORDATION FORM COVER SHEET (PTO-1595) (supplemental sheet)	
Additional Conveying Party(ies)/Execution Date(s) (1. Continued): Shou-Sung Chang (05/06/2011), Charles C. Garretson (05/23/2011), Gregory E. Menk (05/06/2011), and Stan D. TSAI (05/06/2011)	
Additional Assignees (2. Continued):	
Assignee Name: _____	
Internal Address: _____	
Street Address: _____	
City: _____ State: _____ Country: _____ Zip: _____	
Assignee Name: _____	
Internal Address: _____	
Street Address: _____	
City: _____ State: _____ Country: _____ Zip: _____	
Assignee Name: _____	
Internal Address: _____	
Street Address: _____	
City: _____ State: _____ Country: _____ Zip: _____	
Additional Applications and/or Patents (4. Continued):	
Additional Patent Application Numbers 4A. Continued:	Additional Patent Numbers 4B. Continued:
Additional numbers attached? <input type="checkbox"/> Yes <input type="checkbox"/> No	

Atty Dkt No.: 014963/CMP/CMP/BOHN C

ASSIGNMENT FOR APPLICATION FOR PATENT**WHEREAS:****Names and Addresses of Inventors:**

- | | |
|--|---|
| 1) SIVAKUMAR DHANDAPANI
1255 Crestpoint Drive
San Jose, California 95131 | 2) JUN QIAN
575 Dublin Way
Sunnyvale, California 94087 |
| 3) CHRISTOPHER D. COCCA
38286 Acacia Street
Fremont, California 94536 | 4) JASON G. FUNG
355 North Wolfe Road, Apt. 332
Sunnyvale, California 94085 |
| 5) SHOU-SUNG CHANG
504 Shoal Circle
Redwood City, California 94065 | 6) CHARLES C. GARRETSON
147 N. Murphy Avenue
Sunnyvale, California 94086 |
| 7) GREGORY E. MENK
1833 Greenwood Road
Pleasanton, California 94566 | 8) STAN D. TSAI
3312 Alpine Drive
Fremont, California 94555 |

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

CLOSED-LOOP CONTROL FOR IMPROVED POLISHING PAD PROFILES

for which application for Letters Patent in the United States was filed on April 14, 2011, under Serial No. 13/087,180, 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 conventional, 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


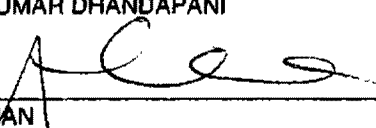
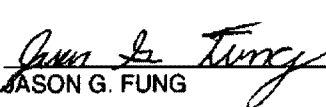

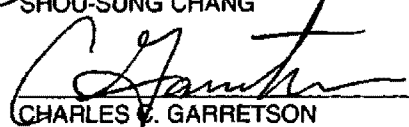
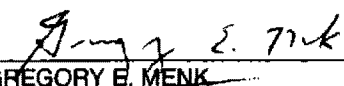
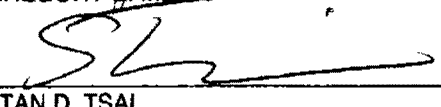
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herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance 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 therefore 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)	<u>5/6/11</u> (DATE)	 SIVAKUMAR DHANDAPANI
2)	<u>5/6/11</u> (DATE)	 JUN QIAN
3)	_____ (DATE)	_____ CHRISTOPHER D. COCCA
4)	<u>5-6-2011</u> (DATE)	 JASON G. FUNG
5)	<u>5-6-2011</u> (DATE)	 SHOU-SUNG CHANG
6)	<u>5/23/11</u> (DATE)	 CHARLES E. GARRETSON
7)	<u>5/6/11</u> (DATE)	 GREGORY E. MENK
8)	<u>5/6/11</u> (DATE)	 STAN D. TSAI

Atty Dkt No.: 014963/CMP/CMP/BOHN C

herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, conventional, 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 therefore 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.

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IN WITNESS WHEREOF, the said Assignors have executed and delivered this Instrument to said Assignee on the dates indicated below.

1)	_____ (DATE)	_____
		SIVAKUMAR DHANDAPANI
2)	_____ (DATE)	_____
		JUN QIAN
3)	<u>5/2/2011</u> (DATE)	<u>GC</u>
		CHRISTOPHER D. COCCA
4)	_____ (DATE)	_____
		JASON G. FUNG
5)	_____ (DATE)	_____
		SHOU-SUNG CHANG
6)	_____ (DATE)	_____
		CHARLES C. GARRETSON
7)	_____ (DATE)	_____
		GREGORY E. MENK
8)	_____ (DATE)	_____
		STAN D. TSAI