

## PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT																
NATURE OF CONVEYANCE:	ASSIGNMENT																
CONVEYING PARTY DATA																	
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Madhavi R. Chandrachood</td><td>01/17/2007</td></tr><tr><td>Michael N. Grimbergen</td><td>01/17/2007</td></tr><tr><td>Khiem K. Nguyen</td><td>01/16/2007</td></tr><tr><td>Richard Lewington</td><td>01/15/2007</td></tr><tr><td>Ibrahim M. Ibrahim</td><td>01/18/2007</td></tr><tr><td>Sheeba J. Panayil</td><td>02/01/2007</td></tr><tr><td>Ajay Kumar</td><td>01/12/2007</td></tr></tbody></table>		Name	Execution Date	Madhavi R. Chandrachood	01/17/2007	Michael N. Grimbergen	01/17/2007	Khiem K. Nguyen	01/16/2007	Richard Lewington	01/15/2007	Ibrahim M. Ibrahim	01/18/2007	Sheeba J. Panayil	02/01/2007	Ajay Kumar	01/12/2007
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<table border="1"><tr><td>Name:</td><td>Applied Materials, Inc.</td></tr><tr><td>Street Address:</td><td>3050 Bowers Avenue</td></tr><tr><td>City:</td><td>Santa Clara</td></tr><tr><td>State/Country:</td><td>CALIFORNIA</td></tr><tr><td>Postal Code:</td><td>95054</td></tr></table>		Name:	Applied Materials, Inc.	Street Address:	3050 Bowers Avenue	City:	Santa Clara	State/Country:	CALIFORNIA	Postal Code:	95054						
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CORRESPONDENCE DATA																	
Fax Number: (408)986-3090 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>																	
Email: sheri_robinson@amat.com																	
Correspondent Name: Applied Materials, Inc.																	
Address Line 1: P.O. Box 450A																	
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Address Line 4: Santa Clara, CALIFORNIA 95052																	
ATTORNEY DOCKET NUMBER:	11457 USA 02																

CH \$40.00 11589598

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PATENT  
REEL: 019023 FRAME: 0870

NAME OF SUBMITTER:

Sheri Griffin

Total Attachments: 4

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**ASSIGNMENT FOR APPLICATION FOR PATENT**

WHEREAS:

Names and Addresses  
of Inventors:

1)	MADHAVI R. CHANDRACHOOD 392 WAVERLY STREET SUNNYVALE, CA 94086	2)	MICHAEL N. GRIMBERGEN 767 MARTINIQUE DRIVE REDWOOD CITY, CA 94065
3)	KHIEM K. NGUYEN 2724 KEPPLER COURT SAN JOSE, CA 95148	4)	RICHARD LEWINGTON 602 EVANGELINE WAY HAYWARD, CA 94544
5)	IBRAHIM M. IBRAHIM 2265 LENOX PLACE SANTA CLARA, CA 95054	6)	SHEEBA J. PANAYIL 2226 SCHOTT COURT SANTA CLARA, CA 95054
7)	AJAY KUMAR 10457 MANZANITA COURT CUPERTINO, CA 95014		

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

***"MASK ETCH PLASMA REACTOR HAVING AN ARRAY OF OPTICAL SENSORS VIEWING THE WORKPIECE BACKSIDE AND A TUNABLE ELEMENT CONTROLLED IN RESPONSE TO THE OPTICAL SENSORS"***

for which application for Letters Patent in the United States was filed on **October 30, 2006**, under Application Serial No.: **11/589,598**; 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, 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) Jan 17, 2007 Madhavi R. Chandrachood  
Madhavi R. Chandrachood
- 2) 1/17/07, 2007 Michael N. Grimbergen  
Michael N. Grimbergen
- 3) Jan 16, 2007 Khiem K. Nguyen  
Khiem K. Nguyen
- 4) Jan 15, 2007 Richard Lewington  
Richard Lewington
- 5) 1/18/07, 2007 Ibrahim M. Ibrahim  
Ibrahim M. Ibrahim
- 6) \_\_\_\_\_, 2007 \_\_\_\_\_  
Sheeba J. Panayil
- 7) Jan 12, 2007 Ajay Kumar  
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- 5) \_\_\_\_\_, 2007 \_\_\_\_\_  
Ibrahim M. Ibrahim
- 6) 2/1, 2007 Sheeba Panayil  
Sheeba J. Panayil
- 7) \_\_\_\_\_, 2007 \_\_\_\_\_  
Ajay Kumar