Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| STEVEN C. SHANNON | 05/15/2008 |
| KARTIK RAMASWAMY | 05/15/2008 |
| DANIEL J. HOFFMAN | 05/13/2008 |
| MATTHEW L. MILLER | 05/13/2008 |
| KENNETH S. COLLINS | 05/23/2008 |

RECEIVING PARTY DATA

| Name: | APPLIED MATERIALS, INC. |
|-------------------|-------------------------|
| Street Address: | P.O. BOX 450A |
| Internal Address: | LEGAL AFFAIRS DEPT. |
| City: | SANTA CLARA |
| State/Country: | CALIFORNIA |
| Postal Code: | 95052 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 12128963 |

CORRESPONDENCE DATA

Fax Number: (408)986-3090

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 408-563-2726

Email: robert_mulcahy@contractor.amat.com

Correspondent Name: Robert W. Mulcahy
Address Line 1: P.O. BOX 450A

Address Line 2: LEGAL AFFAIRS DEPT.

Address Line 4: SANTA CLARA, CALIFORNIA 95052

ATTORNEY DOCKET NUMBER: AM12703-02/ETCH/MDD

PATENT

500552113 REEL: 021015 FRAME: 0008

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| NAME OF SUBMITTER: | ROBERT W MULCAHY |
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| Total Attachments: 8 source=12703-02ASG052808#page1.tif source=12703-02ASG052808#page2.tif source=12703-02ASG052808#page3.tif source=12703-02ASG052808#page4.tif source=12703-02ASG052808#page5.tif source=12703-02ASG052808#page6.tif source=12703-02ASG052808#page7.tif source=12703-02ASG052808#page8.tif | |

PATENT REEL: 021015 FRAME: 0009

WHEREAS:

Names and Addresses

of Inventors:

| 1) | STEVEN C. SHANNON 3419 LEONARD STREET RALEIGH, NC 27607 | 2) | KARTIK RAMASWAMY 1646 TAWNYGATE WAY SAN JOSE, CA 95124 |
|----|---|----|--|
| 3) | DANIEL J. HOFFMAN 12343 ARROYO DE ARGUELLO SARATOGA, CA 95070 | 4) | MATTHEW L. MILLER 3114 SALISBURY COURT FREMONT, CA 94555 |
| 5) | KENNETH S. COLLINS 7214 GLENVIEW DRIVE SAN JOSE, CA 95120 | | |

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

"PLASMA REACTOR WITH PLASMA LOAD IMPEDANCE TUNING FOR ENGINEERED TRANSIENTS BY SYNCHRONIZED MODULATION OF A SOURCE POWER OR BIAS POWER RF GENERATOR"

for which application for Letters Patent in the United States was filed on : HEREWITH, Serial No.: UNKNOWN; 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

- 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 a | nd delivered this instrument to said |
|------------------------------------|------------------------------------|--------------------------------------|
| Assignee on the dates indicated be | low. | The state of the motion of the said |

| 1) | <u>15 mag</u> , 2008 | |
|----|----------------------|--------------------|
| 2) | , 2008 | Steven C. Shannon |
| 3) | 2008 | Kartik Ramaswamy |
| | | Daniel J. Hoffman |
| 4) | , 2008 | Matthew L. Miller |
| 5) | , 2008 | Kenneth S. Collins |

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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) | , 2008_ | · |
|----------|----------|--------------------|
| | | Steven C. Shannon |
| 2) | , 2008 | Kartik Ramaswamy |
| | | Natur Nathaswathy |
| 3) | <u> </u> | Daniel Strike |
| | | Daniel J. Hoffman |
| | | |
| 4) | , 2008 | |
| , | | Matthew L. Miller |
| 5) | , 2008 | |
| <i>J</i> | , 2008 | Kenneth S. Collins |
| | | remiento. Comis |

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| 5) | , 2008 Kenneth S. Collins |

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| | V Kartik Ramaswamy J |
| 3) | , 2008 |
| | Daniel J. Hoffman |
| 4) | 2008 |
| 7) | Matthew L. Miller |
| | 5-23 2000 K As 8 101 |
| 5) | |
| | Kenneth S. Collins |