

Form PTO-1595 (Rev. 09/04)
OMB No. 0651-0027 (exp. 6/30/2005)U.S. Department of COMMERCE
United States Patent and Trademark Office**RECORDATION FORM COVER SHEET
PATENTS ONLY**

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

1. Name of conveying party(ies):LING CHEN
VINCENT KU
DIEN-YEH WU
HUA CHUNGJanuary 27, 2003
January 24, 2003
January 28, 2003
January 24, 2003Additional name of conveying party(ies) attached? ☒ Yes ☐ No**2. Name and address of receiving party(ies)**Name: APPLIED MATERIALS, INC.Internal Address: Patent CounselStreet Address: P.O. Box 450-ACity: Santa ClaraState: CACountry: USA Zip: 95052Additional Name(s) & address(es) attached? ☐ Yes ☒ No**3. Nature of conveyance:**

Execution Date(s) _____

- ☒ Assignment ☐ Merger
- ☐ Security Agreement ☐ Change of Name
- ☐ Government Interest Assignment
- ☐ Executive Order 9424, Confirmatory License
- ☐ Other

4. Application number(s) or patent number(s):

A. Patent Application No.(s)

11/925,667; Filed October 26, 2007☐ This document is being filed together with a new application.

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No**5. Name and address of party to whom correspondence concerning this document should be mailed:**Name: Patterson & Sheridan, L.L.P.Internal Address: Applied Materials IncStreet Address: 3040 Post Oak Boulevard, Suite 1500City: HoustonState: TX Zip: 77056Phone Number : 713-623-4844Fax Number: 713-623-4846Email Address: tpatterson@pattersonsheridan.com**6. Total number of applications and patents involved: 1****7. Total fee (37 CFR 1.21(h) & 3.41)****\$ 40.00**

- ☐ Authorized to be charged by credit card
- ☒ Authorized to be charged to deposit account
- ☐ Enclosed
- ☐ None required (government interest not affecting title)

8. Payment Informationa. Credit Card Last 4 Numbers
Expiration Date _____b. Deposit Account Number
50-1074/005192.C6/CPI/COPPER/AGAuthorized User Name Robert W. Mulcahy**9. Signature :**

Signature

November 16, 2007

Date

Robert W. Mulcahy Reg No. 25,436

Name of Person Signing

Total number of pages, sheet, attachments,
and documents including cover**23**Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1460, Alexandria, V.A. 22313-1460**PATENT****REEL: 020132 FRAME: 0754**

RECORDATION FORM COVER SHEET

Page 2

ALAN OUYE
NORMAN NAKASHIMA
MEI CHANG

January 27, 2003
January 24, 2003
February 25, 2003



Atty. Docket No.: APPM/5192-07/ISM/CORE MCVD/BG

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses
of Inventors:

1)	LING CHEN 784 DARTSHIRE WAY SUNNYVALE, CA 94087	2)	VINCENT KU 1830 DALTREY WAY SAN JOSE, CA 95132
3)	DIEN-YEH WU 1326 LONGFELLOW WAY SAN JOSE, CA 95129	4)	HUA CHUNG 4645 PIPER DRIVE SAN JOSE, CA 95129
5)	ALAN OUYE 716 NORTH IDAHO STREET SAN MATEO, CA 94401	6)	NORMAN NAKASHIMA 841 LINCOLN AVENUE SUNNYVALE, CA 94086
7)	MEI CHANG 12881 CORTE DE ARGUELLO SARATOGA, CA 95070		

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

GAS DELIVERY APPARATUS FOR ATOMIC LAYER DEPOSITION

for which application for Letters Patent in the United States was filed on October 25, 2002 under Serial No. 10/281,079, 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.

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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.

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1) Jan 27, 2003


LING CHEN

2) _____, 2003

VINCENT KU

3) _____, 2003

DIEN-YEH WU

4) _____, 2003

HUA CHUNG

5) _____, 2003

ALAN OUYE

6) _____, 2003

NORMAN NAKASHIMA

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1) _____, 2003

LING CHEN

2) 1-24, 2003

VINCENT KU

3) _____, 2003

DIEN-YEH WU

4) _____, 2003

HUA CHUNG

5) _____, 2003

ALAN OUYE

6) _____, 2003

NORMAN NAKASHIMA

7) _____, 2003

MEI CHANG

Atty. Docket No.: APPM/5192-07/ISM/CORE MCVD/BG

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1) _____, 2003

LING CHEN

2) _____, 2003

VINCENT KU

3) 01/28/ _____, 2003


DIEN-YEH WU

4) _____, 2003

HUA CHUNG

5) _____, 2003

ALAN OUYE

6) _____, 2003

NORMAN NAKASHIMA

7) _____, 2003

MEI CHANG

Atty. Docket No.: APPM/5192-07/ISM/CORE MCVD/BG

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1) _____, 2003

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VINCENT KU

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DIEN-YEH WU

4) 1/14/03, 2003



HUA CHUNG

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NORMAN NAKASHIMA

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MEI CHANG

Atty. Docket No.: APPM/5192-07/ISM/CORE MCVD/BG

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HUA CHUNG

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6) 1/24, 2003

Norm Nakashima
NORMAN NAKASHIMA

7) _____, 2003

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Atty. Docket No.: APPM/5192-07/ISM/CORE MCVD/BG

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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) _____, 2003

LING CHEN

2) _____, 2003

VINCENT KU

3) _____, 2003

DIEN-YEH WU

4) _____, 2003

HUA CHUNG

5) _____, 2003

ALAN OUYE

6) _____, 2003

NORMAN NAKASHIMA

7) 2/25, 2003

MEI CHANG



3040 Post Oak Blvd, Suite 1500
Houston, TX 77056-6582
TEL 713.623.4844
FAX 713.623.4846

FACSIMILE COVER SHEET

DATE: November 16, 2007
FILE NO: APPM/005192.C6/CPI/COPPER/AG
TO: Mail Stop Assignment Recordation Services
FAX NO: 571-273-0140
COMPANY: USPTO
FROM: John-Paul F. Cherry
PAGE(S) with cover: 26
ORIGINAL TO FOLLOW? ☐ YES ☒ NO

RECORDATION COVER SHEET AND ASSIGNMENT

TITLE: GAS DELIVERY APPARATUS FOR ATOMIC LAYER DEPOSITION
U.S. SERIAL NO.: 11/925,667
FILING DATE: October 26, 2007
INVENTOR: LING CHEN, et al.
EXAMINER: Unknown
GROUP ART UNIT: Unknown
CONFIRMATION NO.: 3393

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PATENT 3393_1

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RECORDATION FORM COVER SHEET

PATENTS ONLY

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

1. Name of conveying party(ies):

LING CHEN January 27, 2003
VINCENT KU January 24, 2003
DIEN-YEH WU January 28, 2003
HUA CHUNG January 24, 2003

Additional name of conveying party(ies) attached? ☒ Yes ☐ No

3. Nature of conveyance:

Execution Date(s) _____

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other

2. Name and address of receiving party(ies)

Name: APPLIED MATERIALS, INC.

Internal Address: Patent Counsel

Street Address: P.O. Box 450-A

City: Santa Clara

State: CA

Country: USA Zip: 95052

Additional Name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

☐ This document is being filed together with a new application.

A. Patent Application No.(s)

B. Patent No.(s)

11/925,667; Filed October 26, 2007

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Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning this document should be mailed:

Name: Patterson & Sheridan, L.L.P.

Internal Address: Applied Materials Inc

Street Address: 3040 Post Oak Boulevard, Suite 1500

City: Houston

State: TX Zip: 77056

Phone Number : 713-623-4844

Fax Number: 713-623-4846

Email Address: tpatterson@pattersonsheridan.com

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- ☐ Authorized to be charged by credit card
☒ Authorized to be charged to deposit account
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☐ None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers
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b. Deposit Account Number
50-1074/005192.C6/CPI/COPPER/AG

Authorized User Name Robert W. Mulcahy

9. Signature :

Signature

November 16, 2007

Date

Robert W. Mulcahy Reg No. 25,436

Name of Person Signing

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ALAN OUYE
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January 27, 2003
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