

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:

NEW ASSIGNMENT

NATURE OF CONVEYANCE:

ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Barry L. Chin	07/23/2001
Alfred W. Mak	07/25/2001
Lawrence Chung-Lai Lei	07/24/2001
Ming Xi	07/24/2001
Hua Chung	07/25/2001
Ken Kaung Lai	07/23/2001
Jeong Soo Byun	07/24/2001

RECEIVING PARTY DATA

Name:	Applied Materials, Inc.
Street Address:	P.O. Box 450-A
City:	Santa Clara
State/Country:	CALIFORNIA
Postal Code:	95052

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11423535

CORRESPONDENCE DATA

Fax Number: (732)530-9808
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.
Phone: (732) 530-9404
Email: adevesty@pattersonsheridan.com
Correspondent Name: Keith Taboada, Esq.
Address Line 1: 595 Shrewsbury Avenue
Address Line 4: Shrewsbury, NEW JERSEY 07702

ATTORNEY DOCKET NUMBER:

5017C01/ISM/CORE MCVD

OP \$40.00 11423535

500113925

PATENT
REEL: 017763 FRAME: 0353

NAME OF SUBMITTER:

Keith Taboada, Esq.

Total Attachments: 14

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ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses
of Inventors:

- | | |
|--|---|
| 1) Barry L. Chin
13174 Cumberland Drive
Saratoga, CA 95070 | 5) Hua Chung
4645 Piper Drive
San Jose, CA 95129 |
| 2) Alfred W. Mak
32722 Fellows Court
Union City, CA 94587 | 6) Ken Kaung Lai
1354 Terra Alta Drive
Milpitas, CA 95035 |
| 3) Lawrence Chung-Lai Lei
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20975 Valley Green Drive #257
Cupertino, CA 95014 |
| 4) Ming Xi
151 Churchill Avenue
Palo Alto, California 94306 | |

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

ATOMIC LAYER DEPOSITION APPARATUS

for which application for Letters Patent in the United States was 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 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)	<u>July 23</u> , 2001	<u>Barry L. Chin</u> BARRY L. CHIN
2)	_____, 2001	_____ ALFRED W. MAK
3)	_____, 2001	_____ LAWRENCE CHUNG-LAI LEI
4)	_____, 2001	_____ MING XI
5)	_____, 2001	_____ HUA CHUNG
6)	_____, 2001	_____ KEN KAUNG LAI
7)	_____, 2001	_____ JEONG SOO BYUN

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BARRY L. CHIN

2) 7/25, 2001



ALFRED W. MAK

3) _____, 2001

LAWRENCE CHUNG-LAI LEI

4) _____, 2001

MING XI

5) _____, 2001

HUA CHUNG

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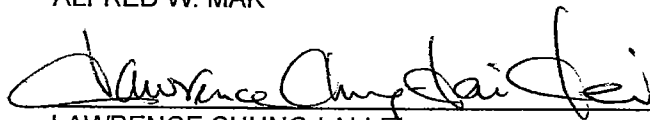
1) _____, 2001

BARRY L. CHIN

2) _____, 2001

ALFRED W. MAK

3) July 24, 2001



LAWRENCE CHUNG-LAI LEI

4) _____, 2001

MING XI

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HUA CHUNG

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JEONG SOO BYUN

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LAWRENCE CHUNG-LAI LEI

4) July 24th, 2001



MING XI

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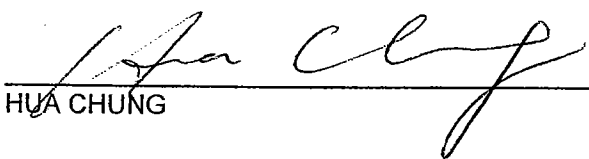
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MING XI

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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)	_____, 2001	_____ BARRY L. CHIN
2)	_____, 2001	_____ ALFRED W. MAK
3)	_____, 2001	_____ LAWRENCE CHUNG-LAI LEI
4)	_____, 2001	_____ MING XI
5)	_____, 2001	_____ HUA CHUNG
6)	_____, 2001	_____ KEN KAUNG LAI
7)	<u>7/24</u> , 2001	<u>J. S. Byun</u> JEONG SOO BYUN