# PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
Benyamin Buller	10/29/2005
William J. DeVore	10/18/2005
Juergen Frosien	10/18/2005
Xinrong Jiang	10/18/2005
Richard L. Lozes	10/18/2005
Henry Thomas Pearce-Percy	10/18/2005
Dieter Winkler	10/19/2005
Steven T. Coyle	10/17/2005
Helmut Banzhof	10/24/2005

### **RECEIVING PARTY DATA**

Name:	Applied Materials, Inc.
Street Address:	3050 Bowers Avenue
City:	Santa Clara
State/Country:	CALIFORNIA
Postal Code:	95054

### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11243363

### **CORRESPONDENCE DATA**

Fax Number: (415)538-8380

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

Phone: 415-538-1555
Email: jaoffice@janah.com

Correspondent Name: Janah & Associates, PC; Ashok K. Janah

Address Line 1: 650 Delancey Street, Suite 106
Address Line 4: San Francisco, CALIFORNIA 94107

PATENT

500159460 REEL: 018339 FRAME: 0614

40.00 112433

00 073 H

ATTORNEY DOCKET NUMBER:	009660 USA
NAME OF SUBMITTER:	Ashok K. Janah
Total Attachments: 12	
source=9660US _ExecAssign 092206#page	e1.tif
source=9660US _ExecAssign 092206#page	e2.tif
source=9660US _ExecAssign 092206#page3.tif	
source=9660US _ExecAssign 092206#page4.tif	
source=9660US _ExecAssign 092206#page5.tif	
source=9660US _ExecAssign 092206#page	e6.tif
source=9660US _ExecAssign 092206#page	e7.tif
source=9660US _ExecAssign 092206#page8.tif	
source=9660US _ExecAssign 092206#page9.tif	
source=9660US _ExecAssign 092206#page10.tif	
source=9660US _ExecAssign 092206#page11.tif	
source=9660US _ExecAssign 092206#page	e12.tif

#### WHEREAS:

#### Names and Addresses of Inventors:

- Benyamin Buller
   10379 Lansdale Ave.
   Cupertino, CA 95014
   U.S.A.;
- Juergen Frosien
   Kufsteinerstrasse 16A
   D-85521 Riemerling
   Germany:
- 5) Richard L. Lozes P.O. Box 5340 Pleasanton, CA 94566 U.S.A.:
- 7) Dieter Winkler Stademannstr. 6 D-81737 Munich Germany;
- 9) Helmut Banzhof Margeritenser. 12c 85596 Poing Germany

- 2) William J. DeVore 22828 Kings Court Hayward, CA 94541 U.S.A.;
- 4) Xinrong Jiang 3264 Greer Road Palo Alto, CA 94303 U.S.A.;
- 6) Henry Thomas Pearce-Percy 23415 Skyview Terrace Los Gatos, CA 95033 U.S.A.;
- 8) Steven T. Coyle 1049 Fair Oaks Ave Alameda, CA 94501 U.S.A.; and

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

## "ELECTRON BEAM COLUMN FOR WRITING SHAPED ELECTRON BEAMS"

- [ ] which is attached hereto
- [X] for which application for Letters Patent in the United States was filed on 10/03/2005, under Serial No. 11/243,363, 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.

S:\CTS500\Forms\assignment.doc

- 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)	29-oct-2005	
	Date	Benyamin Buller / // ///
2)	18 Oct 2005	William J. DeVire
	Date	William J. DeVore /
3)	Date	Juergen Frosien
<b>4</b> \		
4)	D-1-	
	Date	Xinrong Jiang
5)	18 October 2005	Michael & Loves

	Date	Richard L. Lozes
6)	18 Oct. 2005 Date	deur parcoleun
	Date	Henry Thomas Pearce-Percy
7)		
	Date	Dieter Winkler
8)		
	Date	Steven T. Coyler
9)		
,	Date	Helmut Banzhof

REEL: 018339 FRAME: 0618

#### WHEREAS:

#### Names and Addresses of Inventors:

- Benyamin Buller
   10379 Lansdale Ave.
   Cupertino, CA 95014
   U.S.A.;
- Juergen Frosien
   Kufsteinerstrasse 16A
   D-85521 Riemerling
   Germany;
- 5) Richard L. Lozes P.O. Box 5340 Pleasanton, CA 94566 U.S.A.;
- 7) Dieter Winkler Stademannstr. 6 D-81737 Munich Germany:
- Helmut Banzhof Margeritenser. 12c 85596 Poing Germany

- 2) William J. DeVore 22828 Kings Court Hayward, CA 94541 U.S.A.;
- 4) Xinrong Jiang 3264 Greer Road Palo Alto, CA 94303 U.S.A.;
- 6) Henry Thomas Pearce-Percy 23415 Skyview Terrace Los Gatos, CA 95033 U.S.A.;
- 8) Steven T. Coyle 1049 Fair Oaks Ave Alameda, CA 94501 U.S.A.; and

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

# "ELECTRON BEAM COLUMN FOR WRITING SHAPED ELECTRON BEAMS"

- [ ] which is attached hereto
- [X] for which application for Letters Patent in the United States was filed on 10/03/2005, under Serial No. 11/243,363, 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.

S:\CTS500\Forms\assignment.doc

- 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)	Date	Benyamin Buller
2)		
	Date	William J. DeVore
3)	Date	Juergen Frosien
4)	Date	Xinrong Jiang
5)	Date	Richard L. Lozes

6)	Date	Henry Thomas Pearce-Percy
7)	Date	Dieter Winkler
8)	10/17/05 Date	Steven/T) Coyleji
9)	Date	Helmut Banzhof

S:\CTS500\Forms\assignment.doc

#### WHEREAS:

### Names and Addresses of Inventors:

- 1) Benyamin Buller 10379 Lansdale Ave. Cupertino, CA 95014 U.S.A.;
- 3) Juergen Frosien Kufsteinerstrasse 16A D-85521 Riemerling Germany:
- 5) Richard L. Lozes P.O. Box 5340 Pleasanton, CA 94566 U.S.A.;
- 7) Dieter Winkler Stademannstr. 6 D-81737 Munich Germany:
- Helmut Banzhof Margeritenser. 12c 85596 Poing Germany

- 2) William J. DeVore 22828 Kings Court Hayward, CA 94541 U.S.A.;
- 4) Xinrong Jiang 3264 Greer Road Palo Alto, CA 94303 U.S.A.;
- Henry Thomas Pearce-Percy 6) 23415 Skyview Terrace Los Gatos, CA 95033 U.S.A.;
- Steven T. Coyle 1049 Fair Oaks Ave Alameda, CA 94501 U.S.A.; and

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

## "ELECTRON BEAM COLUMN FOR WRITING SHAPED ELECTRON BEAMS"

- which is attached hereto
- [X] for which application for Letters Patent in the United States was filed on 10/03/2005. under Serial No. 11/243,363, 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.

S:\CTS500\Forms\assignment.doc

PATENT

REEL: 018339 FRAME: 0622

- 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)		
	Date	Benyamin Buller
2)	Date	William J. DeVore
3)		·
	Date	Juergen Frosien
4)	10/18/2005	Vinory Jim
	Date	Xinrong Jiang ( U
5)		
	Date	Richard L. Lozes

6)	Date	Henry Thomas Pearce-Percy
7)	Date	Dieter Winkler
8)	Date	Steven T. Coyler
9)	Date	Helmut Banzhof

S:\CTS500\Forms\assignment.doc

#### WHEREAS:

## Names and Addresses of Inventors:

- Benyamin Buller
   10379 Lansdale Ave.
   Cupertino, CA 95014
   U.S.A.;
- Juergen Frosien
   Kufsteinerstrasse 16A
   D-85521 Riemerling
   Germany;
- 5) Richard L. Lozes P.O. Box 5340 Pleasanton, CA 94566 U.S.A.;
- 7) Dieter Winkler Stademannstr. 6 D-81737 Munich Germany;
- 9) Helmut Banzhof Margeritenser. 12c 85596 Poing Germany

- 2) William J. DeVore 22828 Kings Court Hayward, CA 94541 U.S.A.:
- 4) Xinrong Jiang 3264 Greer Road Palo Alto, CA 94303 U.S.A.;
- 6) Henry Thomas Pearce-Percy 23415 Skyview Terrace Los Gatos, CA 95033 U.S.A.;
- 8) Steven T. Coyle 1049 Fair Oaks Ave Alameda, CA 94501 U.S.A.; and

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

# "FI FCTRON BEAM COLUMN FOR WRITING SHAPED ELECTRON BEAMS"

- [ ] which is attached hereto
- [X] for which application for Letters Patent in the United States was filed on 10/03/2005, under Serial No. 11/243,363, 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.

S:\CTS500\Forms\assignment.doc

- 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)	Date	Benyamin Buller
2)	Date	William J. DeVore
3)	<u>19. 10. 2005</u> Date	Juergen Frosien
4)	Date	Xinrong Jiang
5)		

	Date	Richard L. Lozes
6)		
	Date	Henry Thomas Pearce-Percy
7)	19.10.05	Minhler
	Date	Dieter Winkler
8)		
,	Date	Steven Th. Coyler
9)	24.10.05	A X-+hol
	Date	Helmut Banzhof

S:\CTS500\Forms\assignment.doc