

Attorney Docket No. A8316/T52800

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(Rev. 6-				е
	e of conveying party(ies):	tents. Please record the att	ached original documents or copy thereof 2. Name and address of receiving party(ies)	
I. INAIII	e of conveying party(les).		2. Name and address of receiving party(les)	_
	Jeong Soo Byun Zheng Yuan	Execution Date 5/26/04 5/24/04	Name: Applied Materials, Inc.	829. 829.
	Shankar Venkataraman	5/24/04 5/24/04	Internal Address: Legal Affairs Department	10/857
	M. Ziaul Karim Thanh N. Pham	5/28/04	Street Address: P.O. Box 450A	8/0
	Ellie Y. Yieh	<u>5/24/04</u>	City: Santa Clara State: CA ZIP: 95052	
Addition	al name(s) of conveying parties	attached? ☐Yes ☒ No.	Additional names and addresses attached? ☐Yes ☒ No	
3. Natu	re of conveyance:	(1-1-04		
	Assignment	rger		
	Security Agreement	ange of Name		
	Other:			
Execution	on Date: <u>SEE ABOVE</u>	the state of the s		
4. Appli	ication Number(s) or Patent Nur	mbers.	de .	
5 Nam		ditional numbers attached? [
	e and address of party to whom ing document should be mailed:		6. Total number of applications and patents involved:1_	
201100111			7 T-1-16 (07.0FD 0.44)	
			7. Total fee (37 CFR 3.41):\$40.00	
	Patent Counsel			
	Patent Counsel APPLIED MATERIALS, INC.		☐ Enclosed ☐ Charge Fees to Deposit Account	74.00
	Patent Counsel		☐ Enclosed ☐ Charge Fees to Deposit Account☐ Charge any additional fees associated with this paper or during the pendency of this application, or credit any	
	Patent Counsel APPLIED MATERIALS, INC. Legal Affairs Department P.O. Box 450A, M/S 2061		☐ Enclosed ☐ Charge Fees to Deposit Account ☐ Charge any additional fees associated with this paper or	
	Patent Counsel APPLIED MATERIALS, INC. Legal Affairs Department P.O. Box 450A, M/S 2061		☐ Enclosed ☐ Charge Fees to Deposit Account☐ Charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to deposit account. 8. Deposit account number: 50-1074	
Name:	Patent Counsel APPLIED MATERIALS, INC. Legal Affairs Department P.O. Box 450A, M/S 2061		☐ Enclosed ☐ Charge Fees to Deposit Account☐ Charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to deposit account.	1 1100.00
Name:	Patent Counsel APPLIED MATERIALS, INC. Legal Affairs Department P.O. Box 450A, M/S 2061 Santa Clara, California 95052	DO NOT USE	☐ Enclosed ☐ Charge Fees to Deposit Account☐ Charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to deposit account. 8. Deposit account number: 50-1074	
Name:	Patent Counsel APPLIED MATERIALS, INC. Legal Affairs Department P.O. Box 450A, M/S 2061 Santa Clara, California 95052 ement and signature. To the best of my knowledge a	DO NOT USE	☐ Enclosed ☐ Charge Fees to Deposit Account☐ Charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to deposit account. 8. Deposit account number: 50-1074 THIS SPACE	
Name: 9. State	Patent Counsel APPLIED MATERIALS, INC. Legal Affairs Department P.O. Box 450A, M/S 2061 Santa Clara, California 95052 ement and signature. To the best of my knowledge adocument.	DO NOT USE	Enclosed Charge Fees to Deposit Account Charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to deposit account. B. Deposit account number: 50-1074 THIS SPACE THIS SPACE	
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Name: 9. State original of	Patent Counsel APPLIED MATERIALS, INC. Legal Affairs Department P.O. Box 450A, M/S 2061 Santa Clara, California 95052 ement and signature. To the best of my knowledge a document. Robert W. Mulcahy Name of Person Signing Atty Reg. No. 25,436	nd belief, the foregoing is transfer. Sign	Enclosed Charge Fees to Deposit Account Charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to deposit account. B. Deposit account number: 50-1074 THIS SPACE THIS SPACE THIS SPACE June 1, 2004 Date Control of the deposit account of the depo	
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9. State original of	Patent Counsel APPLIED MATERIALS, INC. Legal Affairs Department P.O. Box 450A, M/S 2061 Santa Clara, California 95052 ement and signature. To the best of my knowledge adocument. Robert W. Mulcahy Name of Person Signing Atty Reg. No. 25,436 Inge Correspondence Address to 0.0651-0011 (exp. 4/94)	Total number of pages to that of Part 5? Do not detaction on the page of the U.S. Pate Director of the U.S. Pate	Enclosed	

PATENT REEL: 015432 FRAME: 0182

Attorney Docket No.: A8316/T52800 AMAT No.: 008316 USA/DSM/HDP/CVD/JW

TTC No.: 016301-052800US

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Jeong Soo Byun 20975 Valley Green Drive, #257 Cupertino, CA 95014 United States	2)	Zheng Yuan 42024 Benbow Drive Fremont, CA 94539 United States
3)	Shankar Venkataraman 3444 Notre Dame Drive Santa Clara, CA 95051 United States	4)	M. Ziaul Karim 2820 McAnn Court San Jose, CA 95121 United States
5)	Thanh N. Pham 3794 Meadowlands Lane San Jose, CA 95135 United States	6)	Ellie Y. Yieh 5888 Pistola Way San Jose, CA 95138 United States

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

GAP FILLING WITH A COMPOSITE LAYER

for which application for Letters Patent in the United States was filed on , under Application No. Unassigned, 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.

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- 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)	5/26/04	_, 2004	J. G. PAJAU (Jeong Soo Byun
2)	5/24/04	_, 2004	Zheng Yuan
3)	5/21/04	_, 2004	Shankar Venkataraman
4)		_, 2004	M. Ziaul Marine
5)	5/28/04	_, 2004	M. Ziaul Karim Thanh N. Pham
6)	924104	_, 2004	5

Ellie Y. Yieh

60203992 v1

Attorney Docket No.: A8316/T52800 AMAT No.: 008316 USA/DSM/HDP/CVD/JW

TTC No.: 016301-052800US

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Names and Addresses of Inventors:

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3)	Shankar Venkataraman 3444 Notre Dame Drive Santa Clara, CA 95051 United States	4)	M. Ziaul Karim 2820 McAnn Court San Jose, CA 95121 United States
5)	Thanh N. Pham 3794 Meadowlands Lane San Jose, CA 95135 United States	6)	Ellie Y. Yieh 5888 Pistola Way San Jose, CA 95138 United States

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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.
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1)		_, 2004	Jeong Soo Byun
2)		_, 2004	Zheng Yuan
3)		_, 2004	Shankar Venkataraman
4)	May 24, 2004	_, 2004	M. Ziadi Karim
5)		_, 2004	Thanh N. Pham
6)		_, 2004	Ellie Y. Yieh

60203992 v1