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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Michael R. Rice	06/13/2005
Claes H. Bjorkman	05/25/2005
Jun Zhao	06/14/2005
Kenneth S. Collins	05/25/2005
Thomas Miu	05/26/2005

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11095943

CORRESPONDENCE DATA

Fax Number: (408)986-3090

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

Phone: 408-235-6536

Email: jo_ann_cottrell@amat.com
Correspondent Name: Applied Materials, Inc.

Address Line 1: P.O. Box 450-A
Address Line 2: Legal Affairs Dept.

Address Line 4: Santa Clara, CALIFORNIA 95052

NAME OF SUBMITTER: Jo Ann Cottrell

PATENT REEL: 016181 FRAME: 0486

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\$40.00

CH \$40

Total Attachments: 4

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PATENT REEL: 016181 FRAME: 0487

Case No: 9073/SYNX/JW

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

- 1) Michael Robert Rice 1025 Via Di Salerno Pleasanton, CA, 94566
- Claes H. Bjorkman
 Los Altos Square
 Los Altos Hills , CA, 95422
- 3) Jun Zhao 11764 Ridge Creek Court Cupertino, CA, 95014
- 4) Kenneth S. Collins 7214 Glenview Drive San Jose, CA, 95120
- 5) Thomas Miu 37814 Jasmine Court Fremont, CA 94536

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

METHODS AND APPARATUS FOR TRANSFERRING CONDUCTIVE PIECES DURING SEMICONDUCTOR DEVICE FABRICATION

for which application for Letters Patent in the United States was filed March 31, 2005, under Serial No. 11/095,943, 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 the Application), and the invention disclosed therein (hereinafter referred to as the Invention), and in and to all embodiments of the Invention, heretofore concelved, 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 the 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.

PATENT REEL: 016181 FRAME: 0488

- 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 has 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) _	6-13	_, 2005	Michael Robert Rin Michael Robert Rice
2) _	5-25	, 2005	Claes H. Bjørkman
3) _		, 2005	,
4) _	5-25	, 2005	Jun Zhao KAS SUL
5) _	5-26	, 2005	Kenneth S. Collins Thomas Miu

Case No: 9073/SYNX/JW

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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,

PATENT REEL: 016181 FRAME: 0490 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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- 4. Said Assignors hereby warrant and represent that they have has 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)	, 2005	Michael Robert Rice
2)Claes H. Bjorkman	, 2005	
3) Monofun Jun Zhao	,2005, June 14th	
4)	, 2005	Kenneth S. Collins
5)	, 2005 /	Thomas Miu