

08-29-2000

ket No.: 4572

FORM PT: (Modified)  
(Rev. 6-93)  
OMB No. Of .sp.4/94)  
Copyright 1 LegalStar  
P08/REV02

REC



U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

101445693

Tab settings

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
**Ling Chen**  
**Christophe Marcadal**  
*MKD 8.9.00*  
Additional names(s) of conveying party(ies)  Yes  No

2. Name and address of receiving party(ies):  
Name: **Applied Materials, Inc.**  
Internal Address: \_\_\_\_\_  
Street Address: **3050 Bowers Avenue**  
City: **Santa Clara** State: **CA** ZIP: **95054**  
Additional name(s) & address(es) attached?  Yes  No

10886 U.S. PTO  
09/635738  
08/09/00

3. Nature of conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_  
Execution Date: **8-8-2000**

4. Application number(s) or registration numbers(s):  
If this document is being filed together with a new application, the execution date of the application is: **8-9-2000**  
A. Patent Application No.(s)  
**09/635738**  
Additional numbers attached?  Yes  No

B. Patent No.(s)

5. Name and address of party to whom correspondence concerning document should be mailed:  
Name: **Applied Materials, Inc.**  
Internal Address: \_\_\_\_\_  
Street Address: **3050 Bowers Avenue**  
**P.O. Box 450A**  
City: **Santa Clara** State: **CA** ZIP: **95052**

6. Total number of applications and patents involved: **1**  
7. Total fee (37 CFR 3.41):.....\$ **40.00**  
 Enclosed - Any excess or insufficiency should be credited or debited to deposit account  
 Authorized to be charged to deposit account  
8. Deposit account number:  
**50-1074**

DO NOT USE THIS SPACE

9. Statement and signature.  
*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*  
**Robert W. Mulcahy**  
Name of Person Signing Signature **8/9/00** Date  
Total number of pages including cover sheet, attachments, and document: **3**

## ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses  
of Inventors:

- 1) Ling Chen  
784 Dartshire Way  
Sunnyvale, CA 94087
- 2) Christophe Marcadal  
3655 Pruneridge Avenue, Apt. 124  
Santa Clara, CA 95051
- 3)

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

**BARRIER LAYER STRUCTURE FOR COPPER METALLIZATION AND METHOD OF FORMING THE STRUCTURE**

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.

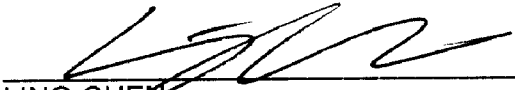

2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall

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>8/8</u>	, 2000	 _____ LING CHEN
2)	<u>8/8</u>	, 2000	 _____ CHRISTOPHE MARCADAL
3)	_____	, 2000	_____