## 01-29-2002



J:\FORMS\272 (AUGUST 20, 1993)

## 005630 USA/ETCH/METAL

10141110	ORDATION FORM COVE	R SHEET  U.S. Department of Commerce  Potent And Trademark Office
(Rev. 6-93) OMB No. 0651-0011 (exp. 4/94)	PATENTS	ONLY Construction Considered Patent And Trademark Office
To the Honorable Commissioner of Patents and Traden	narks: Please record the atta	sched original document or copy thereof.
Name of conveying party(ies):	Date	Name and address of receiving party(ies):     Name:APPLIED MATERIALS, INC
Yong Deuk KO Se Jin OH Chan Ouk JUNG Jeng H HWANG  Additional name(s) of conveying party(ies) attached?	10-23-01 10-23-01 10-23-01 10-16-01 Yes <u>X</u> No	Internal Address: PATENT COUNSEL, M/S 2061  Street Address: P.O. Box 450-A  City: Santa Clara State: CA Zip: 95052  Additional name(s) & address(es) attached? Yes X No
<ul> <li>4. Application number(s) or registration number(s):</li> <li>If this document is being filed together with a new apple.</li> <li>A. Patent Application No.(s)</li> <li>B. Patent No.(s)</li> <li>Additional numbers attached? Yes X 1</li> </ul>		of the application
Name and address of party to whom correspondence document should be mailed:      Name:APPLIED MATERIALS, INC Internal Address:PATENT COUNSEL, M/S 200 Street Address:P.O. Box 450-A  City: Santa ClaraState:CAZip: 950	<u>61</u>	6. Total number of applications and patents involved:
City. <u>Duna Cita</u>		
9. Statement and signature.  To the best of my knowledge and belief, the forego  Joseph Bach Registration No. 37, 771  Name of Person Signing	ing information is true and	This space  I correct and any attached copy is a true copy of the original document.  DATE  DATE  This space including cover sheet, attachments and document:  5
	documents to be recorded v	with required cover sheet information to:  & Trademarks, Box Assignments ton, D.C. 20231

PATENT REEL: 012501 FRAME: 0173

## ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Yong Deuk Ko	2)	Se Jin Oh
3)	Chan Ouk Jung	4)	Jeng H. Hwang

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

METHOD OF REDUCING PARTICULATES IN A PLASMA ETCH CHAMBER DURING A METAL ETCH PROCESS

for which an application for Letters Patent in the United States was filed on July 27, 2001, under SERIAL 09/918,671 U.S. Express Mail No. ET160304660US;

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 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 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:

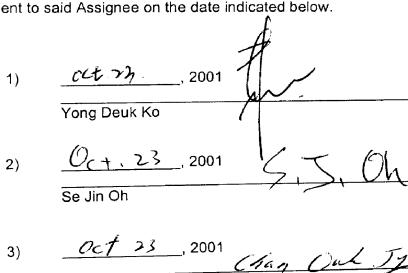
1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention 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: 012501 FRAME: 0174

Attorney Docket No.: AM-5630

- 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 date indicated below.



4)	, 2001	
	Jeng H. Hwang	

Chan Ouk Jung

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WHEREAS:

Names and Addresses of Inventors:

1) Yong Deuk Ko	2)	Se Jin Oh
3) Chan Ouk Jung	4)	Jeng H. Hwang

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PATENT REEL: 012501 FRAME: 0176

Attorney Docket No.: AM-5630

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- 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 date indicated below.

1)	, 2001
	Yong Deuk Ko
2)	, 2001 Se Jin Oh
3)	, 2001 Chan Ouk Jung
4)	Jeng H. Hwang

RECORDED: 01/11/2002