| FORM PTO-1595 RECO  | /ER SHEET        | 7463 FEP/GCM<br>U.S. DEPARTMENT OF COMMERCE<br>Patent and Trademark Office |                             |  |  |  |  |
|---|------------------|--|-----------------------------|--|--|--|--|
| To the Honorable Commissioner of Patents and Tr   | ademarks: Pleasc | record the attached original do  | cuments or copy thereof     |  |  |  |  |
| 1. Name of conveying party(ies):  |                  | 2. Name and address of receiving party(ies):                               |                             |  |  |  |  |
| EXECUTION DATE  |                  | Name: <u>Applied Materials, Inc.</u>                                       |                             |  |  |  |  |
| Christopher S. OLSEN  |                  | Internal Address: <u>Legal Affairs Department</u>                          |                             |  |  |  |  |
| Additional name(s) of conveying part(ies) attached? $\Gamma$ Yes $\underline{x}$ No   |                  |  |                             |  |  |  |  |
| 3. Nature of conveyance:  |                  |  |                             |  |  |  |  |
| $\underline{x}$ Assignment $\Gamma$ Merger  |                  | Street Address: <u>P.O. Box 4</u>  | 50- <u>A</u>                |  |  |  |  |
| Γ Security Agreement Γ Change of N  | Name             |  |                             |  |  |  |  |
| Other   |                  | City: Santa ClaraState CA 2ip 95052  |                             |  |  |  |  |
| Execution Date: <u>SEE ABOVE</u>  |                  | Additional Name(s) & address(es) attached? Γ Yes <u>x</u> No               |                             |  |  |  |  |
| 4. Application number(s) or patent Number(s):   |                  |  |                             |  |  |  |  |
| If this document is being filed together with a new application, the execution date of the application is:  |                  |  |                             |  |  |  |  |
| A. Patent Application No.(s)  |                  | B. Patent No.(S)   |                             |  |  |  |  |
| Serial No. 10/461,143 - Filing Date: 6/12,  | /2003            |  |                             |  |  |  |  |
| Additional Numbers attached? Γ Yes <u>x</u> No  |                  |  |                             |  |  |  |  |
|   |                  |  |                             |  |  |  |  |
|   |                  |  |                             |  |  |  |  |
|   |                  |  |                             |  |  |  |  |
| <ol> <li>Name and address of party to whom correspondence concerning document should be mailed:</li> <li>Name: <u>PATENT COUNSEL</u></li> <li>Internal Address: <u>Applied Materials, Inc.</u></li> </ol> |                  | 6. Total number of application   |                             |  |  |  |  |
|   |                  | 7. Total fee (37 CFR 3.41)   | \$ <u>40,00</u>             |  |  |  |  |
|   |                  | f Enclosed   |                             |  |  |  |  |
| Legal Affairs_Dept.   |                  | x Authorized to be charge  | d to deposit account        |  |  |  |  |
| Street Address: P.O. Box 450-A  |                  | 8. Deposit account number: 50-1074   |                             |  |  |  |  |
| Street ALLITESS   |                  | (Attach duplicate copy of this account)                                    | s page if paying by deposit |  |  |  |  |
| City: <u>Sante Clara</u> State: <u>CA</u> ZIP: <u>95052</u>   |                  |  |                             |  |  |  |  |
| DO NOT USE THIS SPACE   |                  |  |                             |  |  |  |  |
| 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and any attached copy is a true copy of the original document.                                      |                  |  |                             |  |  |  |  |
| Robert W. Mulcahy, Reg. No. 25,436  Name of Person Signing  Signature  Date   |                  |  |                             |  |  |  |  |
| Name of Person Signing Signature Signature  10. Total number of pages comprising cover sheet, attachments, and decument: 3  |                  |  |                             |  |  |  |  |
| OMB No. 0651-0011 (exp. 4/94)   |                  |  |                             |  |  |  |  |
| OMB No. 0651-0011 (exp. 4/94)   |                  |  |                             |  |  |  |  |

Mail documents to be recorded with the required cover sheet information to: Commissioner of Patents & Trademarks , Box Assignments Washington, D.C. 20231

FORMS\ASN-COV.LTR

1/94

## Case # 007463 USA/TSG/GCM/LE

## ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventor:

| 1) | Christopher S. Olsen      | · -    |  |      |  |
|----|---------------------------|--------|--|------|--|
|    | 4024 Ralston Common       |        |  |      |  |
|    | Fremont, California 94538 | U.S.A. |  | <br> |  |

(hereinafter referred to as Assignor), has invented a certain invention entitled:

## METHOD FOR IMPROVING NITROGEN PROFILE IN PLASMA NITRIDED GATE DIELECTRIC LAYERS

for which application for Letters Patent in the United States was filed on June 12, 2003

under Serial No. 10//461,143 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 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 Assignor, 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 Assignor to have been received in full from said Assignee:

- Said Assignor hereby sells, assigns, transfers and conveys 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.
- Said Assignor hereby covenants and agrees 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 Assignor 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

Assignor in providing such cooperation shall be paid for by said Assignee.

- 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 Assignor, his respective heirs, legal representatives and assigns.
- Said Assignor hereby warrants and represents that he has not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignor has executed and delivered this instrument to said Assignee on the dates indicated below.

Aug 13 , 2003 Christopher S. Olsen 1)