10-04-1999

VER SHEET

U.S. Department of Commerce
Patent and Trademark Office

To the Honorable Commissioner:

1. Name of conveying party(ies):
   VIKRAM PAVATE
   MURALI NARASIMHAN
   Date: 9-22-99

   Additional name(s) of conveying party(ies) attached? ___ Yes X No

3. Nature of conveyance:
   X Assignment
   ___ Merger
   ___ Security Agreement
   ___ Change of Name
   ___ Other:
   Execution Date: 9/24/99

4. Application number(s) or registration number(s):
   09/406,325

   If this document is being filed together with a new application, the execution date of the application is: 9/27/99 (Date of Filing)
   A. Patent Application No(s)
   B. Patent No(s)

   Additional numbers attached? ___ Yes X No

5. Name and address of party to whom correspondence concerning document should be mailed:
   Name: Patent Counsel
   Internal Address: APPLIED MATERIALS, INC.
   Street Address: P.O. Box 450-A
   City: Santa Clara State: CA Zip: 95052

6. Total number of applications and patents involved: 1

7. Total fee (37 C.F.R. 3.41) $ 40.00
   Enclosed
   X Authorized to be charged to deposit account
   01-1651/AMAT/2882/MD/PVD/DV

8. Deposit account number:
   01-1651/AMAT/2882/MD/PVD/DV

   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. Maletsky
   Name of Person Signing
   10/04/1999

   Signature
   Date

   Total number of pages including cover sheet, attachments and document: 3

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

E:\Appm\2882\PTO\2882.Assign.Cvr.doc

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

PATENT
REEL: 010275 FRAME: 0730
ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

<table>
<thead>
<tr>
<th>1)</th>
<th>VIKRAM PAVATE</th>
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<td>San Jose, California 95126</td>
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<td>2)</td>
<td>MURALI NARASIMHAN</td>
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<td>2111 Shiangzone Court</td>
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<td></td>
<td>San Jose, California 95121</td>
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(hereinafter referred to as Assignors), have invented a certain invention entitled:

METHOD AND APPARATUS OF FORMING A SPUTTERED DOPED SEED LAYER

for which application for Letters Patent in the United States was filed on __/__/99, 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) 9/24/99, 1999 ________________________________
   VIKRAM PAVATE

2) 9/24/99, 1999 ________________________________
   MURALI NARASIMHAN