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

1. Name of conveying party:
   a) Andrew J. Perry
   b) Vijayakumar C. Venugopal

2. Name and address of receiving party:
   a) Name: Lam Research Corporation
   c) Address: 4650 Cushing Parkway, Fremont, CA 94538

3. Nature of Conveyance
   [ ] Assignment
   [ ] Security Agreement
   [ ] Merger
   [ ] Change of Name
   [ ] License Agreement

   Execution Date: January 15, 2003

4. Application Number: 10/286,409

   The title of the application is:
   Method for Controlling a Recess Etch Process

5. Please send all correspondence concerning this document to:
   Customer Number 27787
   Michael S. Brandt
   Lam Research Corporation
   4650 Cushing Parkway, CA-1
   Fremont, CA 94538
   Tel. No. (510) 572-1667
   Fax No. (510) 572-2876

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): $40.00
   [ ] Please charge Deposit Account No. 50-1842 (Order No. P1013).
   [ ] The Commissioner is authorized to charge any fees beyond the amount enclosed which
   may be required, or to credit any overpayment, to Deposit Account No. 50-1842 (Order No.
   P1013).

8. 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.

   Date: January 21, 2003
   Michael S. Brandt, Registration No. 39,119

   Docket No. P1013

PATENT
REEL: 013696 FRAME: 0733
ASSIGNMENT OF PATENT APPLICATION

Whereas I the undersigned inventor have invented certain new and useful improvements as set forth in the patent application entitled:

Method for Controlling a Recess Etch Process

(Atty. Docket No: P1013) for which I have executed an application for a United States Letters Patent.

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I the undersigned inventor hereby:

1) Sell, assign and transfer to Lam Research Corporation, a Delaware corporation having a place of business at 4650 Cushing Parkway, Fremont, CA 94538, (hereinafter referred to as “ASSIGNEE”), the entire right title and interest in any and all improvements and inventions disclosed in, application based upon, and Patent (including foreign patents) granted upon the information which is disclosed in the above referenced application.

2) Authorize and request the Commissioner of Patents to issue any and all Letters Patents resulting from said application or any division, continuation, substitute or reissue thereof to the ASSIGNEE.

3) Agree to execute all papers and documents and, entirely at the ASSIGNEE’S expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative and applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.

4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon the inventor, as well as the inventor’s heirs, legal representatives and assigns.

5) Warrant and represent that I have not entered, and will not enter into any assignment, contract, or understanding that conflicts with this agreement.

Signed on the date indicated beside my signature.

1. Signature: [Signature]  Date: [Date]
   Typed Name: Andrew J. Perry

2. Signature: [Signature]  Date: [Date]
   Typed Name: Vijayakumar Venugopal

Docket No. P1013

RECORDED: 01/27/2003

PATENT
REEL: 013696 FRAME: 0734