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

1. Name of conveying party(ies):
   Arthur M. HOWALD and John P. HOLLAND

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

2. Name and address of receiving party(ies):
   Name: Lam Research Corporation
   Internal Address:
   Street Address: 4630 Cushing Parkway
   City: Fremont State/Country: CA ZIP: 94538-6516
   Additional name(s) & address(es) attached? _ Yes _ No

3. Nature of conveyance:
   X Assignment __ Merger
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   _ Other
   Execution Date: September 30, 1998

4. Application number(s) or patent number(s):
   If the 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):
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5. Name and address of party to whom correspondence concerning document should be mailed:
   Name: LOWE HAUPTMAN GOPSTEIN GILMAN & BERNER
   Internal Address:
   Street Address: 1700 Diagonal Road, Suite 310
   City: Alexandria State: VA ZIP: 22314

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) _________________ $40.00
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   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.

   Allan M. Lowe, Registration No. 19,641
   Name and Registration No. of Person Signing
   Signature _________________
   Date July 22, 1999
   Total number of pages comprising cover sheet: 1

CMB No. 0851-0011 (exp. 4/94)
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereto:

1. Name of conveying party(ies):
   Arthur M. HOWALD and John P. HOLLAND

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: September 30, 1998

4. Application number(s) or patent number(s):

If the document is being filed together with a new application, the execution date of the application is: September 30, 1998

A. Patent Application No(s).
B. Patent No(s).

   Additional numbers attached? _ Yes x No

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      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.

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      Name and Registration No. of Person Signing

      Signature
      April 7, 1999

      Total number of pages comprising cover sheet: 1

CMB No. 0851-0011 (exp. 4/94)

04/15/1999 DHUYEN 00000303 ARTHUR M HOWALD

01 FC:581 40.00 OP
ASSIGNMENT

WHEREAS WE, ARTHUR M. HOWALD and JOHN P. HOLLAND of PLEASANTON CALIFORNIA and SANTA CLARA, CALIFORNIA, respectively, have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled ELECTROSTATIC DECHUCKING METHOD AND APPARATUS FOR DIELECTRIC WORKPIECES IN VACUUM PROCESSORS,

executed by us on the date of execution of this document, as shown below, and filed concurrently herewith;

AND WHEREAS, LAM RESEARCH CORPORATION, a corporation of the State of DELAWARE and having an address of 4650 Cushing Parkway, Fremont, CA 94538-6516 is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, We do hereby sell, assign, transfer and set over unto LAM RESEARCH CORPORATION, its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, We hereby agree with the said assignee that We will not execute any writing or do any act whatsoever conflicting with these presents, and that We will, at any time upon request, without further or additional consideration but at the expense of said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and assignee;

AND We request the Commissioner of Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to said LAM RESEARCH CORPORATION, its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

30-September-1998
Date

ARTHUR M. HOWALD

30 September 1998
Date

JOHN P. HOLLAND