

FORM PTO-1595
(Rev. 6-93)

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To the Honorable Commissioner of Patent

...hed original document or copy thereof.

1. Name(s) of conveying party(ies):

- 1) CRAIG M. CARPENTER
- 2) ROSS S. DANDO
- 3) ALLEN P. MARDIAN
- 4)
- 5)
- 6)

5-24-02

2. Name and address of receiving party:

Name: MICRON TECHNOLOGY, INC.

Internal Address: _____

Street Address: 8000 SOUTH FEDERAL WAY

City BOISE State IDAHO

Zip: 83706-9632

Additional names & addresses attached? Yes No

JC976 U.S. PTO
10/155547
06/24/02

Additional names of conveying parties attached? Yes No

3. Nature of conveyance:

- Assignment Merger
- Security Agreement Change of Name
- Other _____

Execution Dates:

- 1) MAY 13, 2002 4) _____
- 2) MAY 13, 2002 5) _____
- 3) MAY 14, 2002 6) _____

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

10,155,547

If this document is being filed together with a new application,
the execution date of the application is May 24, 2002.

A. Patent Application No(s).

B. Patent No(s).

Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: PERKINS COIE LLP

Internal Address: PATENT-SEA

PAUL T. PARKER

Street Address: P.O. Box 1247

City: SEATTLE State: WA ZIP: 98111-1247

6. Total number of applications and patents involved 1

7. Total Fee (37 CFR 3.41): \$40.00

Enclosed

Authorized to be charged to deposit account

8. Deposit account number: _____

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9. Statement and signature.

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.

PAUL T. PARKER

Name of Person Signing

PAUL T. PARKER

Signature

MAY 24, 2002

Date

Total number of pages including cover sheet, attachments, and document: 4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
)
 Craig M. Carpenter) Docket No.: 108298652US
 Ross S. Dando) Disclosure Number: 01-0892
 Allen P. Mardian)
)
 Filed: Concurrently herewith)
)
 For: APPARATUS AND METHODS)
 FOR CONTROLLING GAS PULSING)
 IN PROCESSES FOR DEPOSITING)
 MATERIALS ONTO MICRO-DEVICE)
 WORKPIECES)
)

ASSIGNMENT:

 X Enclosed for recording
 Previously recorded
 Date: _____
 Reel: _____

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned do hereby:

SELL, ASSIGN AND TRANSFER to Micron Technology, Inc. (the "Assignee"), a corporation of Delaware, having a place of business at 8000 South Federal Way, Boise, Idaho 83706-9632, the entire right, title and interest for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for United States Letters Patent, which has been executed by the undersigned concurrently herewith and is entitled "**APPARATUS AND METHODS FOR CONTROLLING GAS PULSING IN PROCESSES FOR DEPOSITING MATERIALS ONTO MICRO-DEVICE WORKPIECES**"; such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or

treaty and claim priority based on such application in the United States of America;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

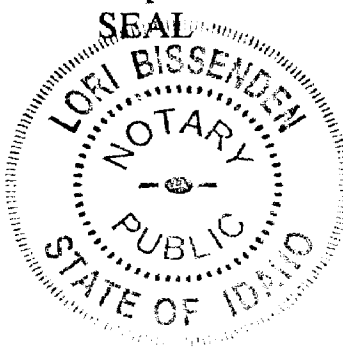
COVENANT that, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for securing, maintaining and enforcing proper patent protection for such improvements and for vesting title to such improvements in the Assignee;

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

Craig M. Carpenter Date: 13 MAY 2002
Craig M. Carpenter

STATE OF IDAHO)
) ss.
County of Ada)

BEFORE ME, this 13th day of May, 2002, personally appeared the above-named individual, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.



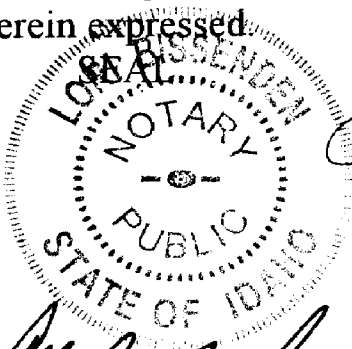
Lori Bissenden
Notary or Consular Officer
My Commission Expires 6/12/2004

Ross S. Dando
Ross S. Dando

Date: May 13th, 2002

STATE OF IDAHO)
) ss.
County of Ada)

BEFORE ME, this 13th day of May, 2002, personally appeared the above-named individual, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.



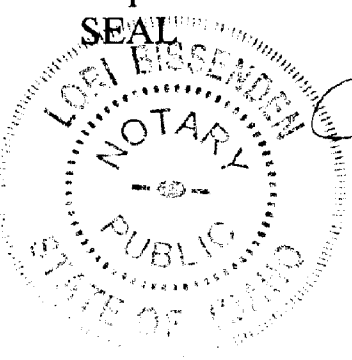
Lori Bissenden
Notary or Consular Officer
My Commission Expires 6/12/2004

Allen P. Mardian
Allen P. Mardian

Date: 5/14/02

STATE OF IDAHO)
) ss.
County of Ada)

BEFORE ME, this 14th day of May, 2002, personally appeared the above-named individual, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.



Lori Bissenden
Notary or Consular Officer
My Commission Expires 6/12/2004