To the Honorable Assistant Commissioner for Patents: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
   1. Kevin L. Beaman
   2. Ronald A. Wemier
   3. Lyle D. Breiner
   4. Er-Xuan Ping
   5. Cem Basceri
   6. David J. Kubista
   7. Lingyi A. Zheng

Add'l names of conveying parties attached? □ Yes □ No

2. Name/address of receiving party(ies):
   Micron Technology, Inc.
   8000 South Federal Way
   P.O. Box 6
   Boise, Idaho 83706-9632

Add'l names of receiving parties attached? □ Yes □ No

3. Nature of conveyance:
   ☑ Assignment
   □ Merger
   □ Change of Name
   □ Security Agreement
   □ Other
   □ Reassignment

Execution dates:
   1. June 12, 2003
   2. June 11, 2003
   4. June 24, 2003

4. Application number(s) and/or patent number(s):
   If this document is being filed with a new application, the date of signature by the first named inventor was: June 12, 2003

   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:
   Customer No. 25096
   Perkins Coie LLP
   P.O. Box 1247
   Seattle, Washington 98111-1247
   (206) 583-8888

6. Total No. of applications and patents involved: [one (1)]

7. Total fee (37 CFR §3.41): $40.00
   ☑ Enclosed
   □ Charge Deposit Account No. 50-0665

8. Deposit Account No. 50-0665
   (Attach duplicate copy of this page if paying by deposit account)

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.

   Edward S. Hotchkiss
   Name of Person Signing
   Signature
   21 August 2003
   Date

Total number of pages, including cover sheet, attachments and document: [ ]
ASSIGNMENT

THIS ASSIGNMENT is by Kevin L. Beaman, Ronald A. Weimer, Lyle D. Breiner, Er-Xuan Ping, Trung T. Doan, Cem Basceri, David J. Kubista, and Lingyi A. Zheng (the "Assignors"), residing at 4402 Redhawk Ave., Boise, Idaho 83716; 1696 E. Victory Rd., Boise, Idaho 83706; 3050 Val Vista Court, Meridian, Idaho 83642; 2239 E. Chateau Dr., Meridian, Idaho 83642; 1574 Shenandoah Drive, Boise, Idaho 83712; 314 E. Iowa Dr., Boise, Idaho 83706; 13389 Skyview St., Nampa, Idaho 83686; and 2535 E. Red Cedar Lane, #202, Boise, Idaho 83716, respectively. We Assignors have invented one or more certain inventions described in a United States Patent Application entitled METHODS AND APPARATUS FOR PROCESSING MICROFEATURE WORKPIECES; METHODS FOR CONDITIONING ALD REACTION CHAMBERS (the "Application") and ☑ executed concurrently herewith; or ☐ filed on ___________ as Application No. ___________ (the "Invention(s)"). We Assignors authorize the Assignee, identified below, or its representatives to insert the filing date and application number of the Application when known.

Micron Technology, Inc., a corporation of the State of Delaware having a place of business at 8000 South Federal Way, P.O. Box 6, Boise, Idaho 83706-9632 ("Assignee"), desires to acquire the entire right, title and interest in and to the Invention(s) and the Application, and in and to any patents (collectively, "Patents") that may be granted for the Invention(s) in the United States or in any foreign countries.

For valuable consideration, the receipt and sufficiency of which we acknowledge, Assignors hereby sell, assign, and transfer to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to: the Invention(s), the Application, and any Patents; any divisions, continuations, and continuations-in-part of the Application and any other application claiming priority rights from the Application; any reissues, reexaminations, or extensions of any and all Patents; the right to file foreign applications directly in the name of Assignee; and the right to claim priority rights deriving from the Application (collectively, the "Rights"). Assignors warrant that they are joint owners of the Rights, and that the Rights are unencumbered. Assignors also agree to not sign any writing or do any act conflicting with this assignment, and, without further compensation, sign all documents and do such additional acts as Assignee deems necessary or desirable to: perfect Assignee's enjoyment of the Rights; prepare and prosecute the Application or any other applications for Patents; conduct
proceedings regarding the Rights, including any litigation or interference proceedings; or perfect or defend title to the Rights. Assignors request the Commissioner of Patents to issue any Patent of the United States that may be issued on the Invention(s) to Assignee. This Assignment may be executed in counterparts.

Date: 6-12-03
Kevin L. Beaman

STATE OF

COUNTY OF

On June 12th, 2003 before me, Stacy Summers, personally appeared Kevin L. Beaman, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

(Seal)

Stacy Summers
Signature

[Seal of Notary Public]

* * * * * * *
Date: 11 June 2003

STATE OF Idaho

COUNTY OF Ada

On 11-12-03 before me, Stacy Summers, personally appeared Ronald A. Weimer, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

(Seal)

STACY SUMMERS
NOTARY PUBLIC
STATE OF IDAHO

Signature

Expires 06/12/03.

Date: 06/11/2003

STATE OF Idaho

COUNTY OF Ada

On 06-12-03 before me, Stacy Summers, personally appeared Lyle D. Breiner, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

(Seal)

STACY SUMMERS
NOTARY PUBLIC
STATE OF IDAHO

Signature

Expires 06/12/03.
Date: 06/24/2003

Er-Xuan Ping

STATE OF Idaho
COUNTY OF Ada

On 24th of June 2003 before me, Stacy Summers, personally appeared Er-Xuan Ping, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Stacy Summers

(Seal)

Signature

Date: ____________________________

Trung T. Doan

STATE OF __________________________
COUNTY OF __________________________

On __________________________ before me, __________________________, personally appeared Trung T. Doan, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

(Seal)

Signature

* * * * * * *
Date: 6-11-03
Cem Basceri

STATE OF Idaho
COUNTY OF Ada

On 06-11-03 before me, Stacy Summers, personally appeared Cem Basceri, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

(Signature)

Date: 6/11/03

WITNESS my hand and official seal.

(Signature)

David J. Kubista

STATE OF Idaho
COUNTY OF Ada

On 06-11-03 before me, Stacy Summers, personally appeared David J. Kubista, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.
Date: 06/11/2003

Lingyi A. Zheng

STATE OF IDAHO

COUNTY OF Ada

On 06-11-03 before me, Stacy Summers, personally appeared Lingyi A. Zheng, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Stacy Summers

Signature

Expiration 09/28/10.
ASSIGNMENT

THIS ASSIGNMENT is by Kevin L. Beaman, Ronald A. Weimer, Lyle D. Breiner, Er-Xuan Ping, Trung T. Doan, Cem Basceri, David J. Kubista, and Lingyi A. Zheng (the "Assignors"), residing at 4402 Redhawk Ave., Boise, Idaho 83716; 1696 E. Victory Rd., Boise, Idaho 83706; 3050 Val Vista Court, Meridian, Idaho 83642; 2239 E. Chateau Dr., Meridian, Idaho 83642; 1574 Shenandoah Drive, Boise, Idaho 83712; 314 E. Iowa Dr., Boise, Idaho 83706; 13389 Skyview St., Nampa, Idaho 83686; and 2535 E. Red Cedar Lane, #202, Boise, Idaho 83716, respectively. We Assignors have invented one or more certain inventions described in a United States Patent Application entitled METHODS AND APPARATUS FOR PROCESSING MICROFEATURE WORKPIECES; METHODS FOR CONDITIONING ALD REACTION CHAMBERS (the "Application") and ☑ executed concurrently herewith; or ☐ filed on __________ as Application No. __________ (the "Invention(s)"). We Assignors authorize the Assignee, identified below, or its representatives to insert the filing date and application number of the Application when known.

Micron Technology, Inc., a corporation of the State of Delaware having a place of business at 8000 South Federal Way, P.O. Box 6, Boise, Idaho 83706-9632 ("Assignee"), desires to acquire the entire right, title and interest in and to the Invention(s) and the Application, and in and to any patents (collectively, "Patents") that may be granted for the Invention(s) in the United States or in any foreign countries.

For valuable consideration, the receipt and sufficiency of which we acknowledge, Assignors hereby sell, assign, and transfer to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to: the Invention(s), the Application, and any Patents; any divisions, continuations, and continuations-in-part of the Application and any other application claiming priority rights from the Application; any reissues, reexaminations, or extensions of any and all Patents; the right to file foreign applications directly in the name of Assignee; and the right to claim priority rights deriving from the Application (collectively, the "Rights"). Assignors warrant that they are joint owners of the Rights, and that the Rights are unencumbered. Assignors also agree to not sign any writing or do any act conflicting with this assignment, and, without further compensation, sign all documents and do such additional acts as Assignee deems necessary or desirable to: perfect Assignee's enjoyment of the Rights; prepare and prosecute the Application or any other applications for Patents; conduct
proceedings regarding the Rights, including any litigation or interference proceedings; or
perfect or defend title to the Rights. Assignors request the Commissioner of Patents to issue
any Patent of the United States that may be issued on the Invention(s) to Assignee. This
Assignment may be executed in counterparts.

Date: 6-12-03
Kevin L. Beaman

STATE OF _____________
COUNTY OF _____________

On June 12th, 2003 before me, Stacy Summers, personally appeared Kevin L. Beaman, personally known to me (or proved to me on the basis of
satisfactory evidence) to be the person whose name is subscribed to the within instrument and
acknowledged to me that he/she executed the same in his/her authorized capacity, and that
by his/her signature on the instrument the person, or the entity upon behalf of which the
person acted, executed the instrument.

WITNESS my hand and official seal.

(Seal)

Stacy Summers
Signature
Expires 9/30/03

* * * * *
DATE: June 11, 2003

STATE OF Idaho

COUNTY OF Ada

On 11-12-03 before me, Stacy Summers, personally appeared Ronald A. Weimer, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

(Seal)

WITNESS my hand and official seal.

Signature

Exp: 06/12/06

Date: 06/11/2003

STATE OF Idaho

COUNTY OF Ada

On 06-12-03 before me, Stacy Summers, personally appeared Lyle D. Breiner, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

(Seal)

WITNESS my hand and official seal.

Signature

Exp: 06/12/06
Date: 06/24/2003

STATE OF Idaho

COUNTY OF Ada

On 24th day of June 2003 before me, Stacy Summers, personally appeared Er-Xuan Ping, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature

Date: __________________________

Trung T. Doan

STATE OF __________________________

COUNTY OF __________________________

On __________________________ before me, __________________________, personally appeared Trung T. Doan, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature
Date: 6-11-03

Cem Basceri

STATE OF Idaho
COUNTY OF Ada

On 06-11-03 before me, Stacy Summers, personally appeared Cem Basceri, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Stacy Summers
Signature

Expiration 09/28/06

Date: 06/31/03

David J. Kubista

STATE OF Idaho
COUNTY OF Ada

On 06-11-03 before me, Stacy Summers, personally appeared David J. Kubista, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Stacy Summers
Signature

Expiration 09/28/06
Date: 06/11/2003

** STATE OF Idaho **

** COUNTY OF Ada **

On 11-11-03 before me, Stacy Summers personally appeared Lingyi A. Zheng, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature


[Seal]

STACY SUMMERS

NOTARY PUBLIC

STATE OF IDAHO

PATENT
REEL: 014430 FRAME: 0501