. \$ 31.05 Atty Ref/Docket No.: 1303.182US1

Patent and Trademark Office

| To the Honorable Commissioner of Patents and Trademark 1033048   | 394 attached original documents or copy thereof.   |
|--|--|
| Name of conveying party(ies):  | 2. Name and address of receiving party(ies):   |
| Leonard Forbes, Kie Y. Ahn and Arup Bhattacharyya  | Name: Micron Technology, Inc.  |
| Additional name(s) of conveying party(ies) attached?   | Street Address: 8000 So. Federal Way   |
| [ ]Yes [X]No   | City: Boise State: ID Zip: 83716-9632  |
| 3. Nature of conveyance:   | Additional name(s) & address(es) attached? [ ]Yes [X]No  |
| [X] Assignment [ ] Merger [ ] Security Agreement [ ] Change of Name [ ] Other  Execution Date: August 22, 2006, August 21, 2006, | 2935 U.S. PTO  |
| August 21, 2006  | £  |
| 4. Application number(s) or patent number(s):  |  |
| If this document is being filed together with a new application, the August 21, 2006, August 21, 2006                            | he execution date of the application is: August 22, 2006,  |
| 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:  | 6. Total number of applications and patents involved: 1  |
| Name: <u>David R. Cochran</u>  | 7. Total fee (37 CFR 3.41):\$ <u>40.00</u>   |
| Address: SCHWEGMAN LUNDBERG WOESSNER & KLUTH, P.A.   | [ ]Enclosed [X]Authorized to be charged to deposit account   |
| P.O. Box 2938<br>1600 TCF Tower<br>121 South Eighth Street   | 8. Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743 |
| Minneapolis, Minnesota 55402   | 14545  |
| DO NOT USE TI  | HIS SPACE  |
| 9. Statement and signature.  | 743  |
| 9. Statement and signature.  To the best of my knowledge and belief, the foregoing information of the original document.         | on is true and correct and any attached copy is a true copy  |
| David R. Cochran/Reg. No. 46,632  Name of Person Signing   | Signature 31 August 20 Date  |
| Total n  | umber of pages including cover sheet: 13   |
| Mail documents to be recorded with required cover sheet information  | ution to:  |
| Commissioner of Patents and Trademarks Mail Stop Assignment Recordation Services P.O.Box 1450                                    | umber of pages including cover sheet: 13  ation to:  900/80/80 66 75                                 |

## **ASSIGNMENT**

WHEREAS, We, Leonard Forbes, residing at 7340 NW Mountain View Drive, Corvallis, OR 97330-9113, and Kie Y. Ahn, residing at 639 Quaker St., Chappaqua, NY 10514, and Arup Bhattacharyya, residing at 18 Glenwood Drive, Essex Junction, VT 05452, made certain new and useful inventions and improvements for which we executed an application for Letters Patent of the United States on even date herewith, which is entitled TANTALUM LANTHANIDE OXYNITRIDE FILMS;

AND WHEREAS, Micron Technology, Inc., a corporation organized and existing under and by virtue of the laws of the State of <u>Delaware</u>, and having an office and place of business at 8000 So. Federal Way, Boise, ID 83716-9632 (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

Docket No: 1303.182US1 Serial Number: Not Assigned Filing Date: even date herewith Page 2 of 4

AND, furthermore, we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this Zind day of day of Leonard Forbes

STATE OF OCCON

)ss

COUNTY OF Benton

On this 22 day of Aug us t, 2006 before me personally appeared Leonard Forbes, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

[SEAL]

OFFICIAL SEAL
MICHAEL D. DAVIS
NOTARY PUBLIC-OREGON
COMMISSION NO. 377988
MY COMMISSION EXPIRES MARCH 1, 2008
Notary Public

| Docket No: 1303.182US1 Serial Number: Not Assigned Filing Date: even date herewith Page 3 of 4 |               |   |
|--|---------------|---|
|  |               |   |
| IN TESTIMONY WHI   | EREOF, I ha   | ve hereunto set my hand this day of                     |
| , 2006.  |               |   |
|  |               |   |
|  |               |   |
|  | <del> </del>  | Kie Y. Ahn  |
| STATE OF   |               |   |
|  | )ss           |   |
| COUNTY OF  | )             |   |
| On this day of   |               | , 2006 before me personally appeared Kie Y. Ahn, to     |
|  |               | scribed in and who executed the foregoing instrument,   |
| and he/she duly acknowledged to m  | e that he/she | executed the same for the uses and purposes therein set |
| forth.   |               |   |
|  |               |   |
|  |               |   |
| [SEAL]   |               |   |
|  |               | Notary Public   |

| Docket No: 1303-182US1<br>Serial Number : Not Assigned<br>Filing Date : even date herewith<br>Page 4 of 4 |                 |  |
|---|-----------------|--|
|   |                 |  |
| IN TESTIMONY V  | WHEREOF. I h    | ave hereunto set my hand this day of                       |
| , 2006  |                 |  |
|   |                 |  |
|   | <del></del>     |  |
|   |                 | Arup Bhattacharyya   |
| STATE OF  | )               |  |
|   | )ss             |  |
| COUNTY OF   |                 |  |
| On this day o   | of              | , 2006 before me personally appeared Arup                  |
| Bhattacharyya, to me known an   | d known to me   | to be the person described in and who executed the         |
| foregoing instrument, and he/sh   | e duly acknowle | edged to me that he/she executed the same for the uses and |
| ourposes therein set forth.   |                 |  |
|   |                 |  |
| SEAL]   |                 |  |
|   |                 | Notary Public  |

## **ASSIGNMENT**

WHEREAS, We, Leonard Forbes, residing at 7340 NW Mountain View Drive, Corvallis, OR 97330-9113, and Kie Y. Ahn, residing at 639 Quaker St., Chappaqua, NY 10514, and Arup Bhattacharyya, residing at 18 Glenwood Drive, Essex Junction, VT 05452, made certain new and useful inventions and improvements for which we executed an application for Letters Patent of the United States on even date herewith, which is entitled TANTALUM LANTHANIDE OXYNITRIDE FILMS;

AND WHEREAS, Micron Technology, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 8000 So. Federal Way, Boise, ID 83716-9632 (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

| that no assignment,    | grant, mortgage, less been made to ot | nt and agree with said Assignee, its successors and assigns, icense or other agreement affecting the rights and property hers by us and that full right to convey the same as herein |
|------------------------|---------------------------------------|--|
| IN TEST                | MONY WHEREO                           | F, I have hereunto set my hand this day of   |
|                        |                                       | · —— ·   |
|                        |                                       |  |
|                        |                                       |  |
|                        | -                                     | Leonard Forbes   |
| STATE OF               |                                       |  |
|                        | )ss                                   | s  |
| COUNTY OF              |                                       |  |
| On this                | day of                                | , 2006 before me personally appeared <u>Leonard</u>  |
| Forbes, to me known a  | and known to me to                    | be the person described in and who executed the foregoing  |
| instrument, and he/she | duly acknowledged                     | to me that he/she executed the same for the uses and purposes  |
| therein set forth.     |                                       |  |
|                        |                                       |  |
| [SEAL]                 |                                       |  |

Notary Public

Docket No: 1303.182US1

Serial Number: Not Assigned Filing Date: even date herewith Page 2 of 4

| IN TI<br>August        | ESTIMONY WHEREOF, I have   | hereunto set my hand   | this <u>2/st</u> day of          |
|------------------------|--|------------------------|----------------------------------|
|                        |  | Kie y                  | ohn                              |
|                        |  | Kie Y.                 | Ahn                              |
| STATE OF $\mathcal{N}$ | ew York  |                        | · <del></del>                    |
| 7.4                    | )ss  |                        |                                  |
| COUNTY OF <u>W</u>     | )ss<br>lest (herfer )  |                        |                                  |
| On this                | Clst day of August   | , 2006 before me pe    | rsonally appeared Kie Y. Ahn, to |
| me known and kno       | own to me to be the person descr   | ribed in and who exec  | uted the foregoing instrument,   |
| and he/she duly ac     | knowledged to me that he/she ex  | xecuted the same for t | he uses and purposes therein set |
| forth.                 |  |                        |                                  |
| [SEAL]                 | ANGELLA R. HENRY Notary Public, State of New Yo No. 01HE6031500 Qualified in Westchester Cour Commission Expires Oct. 4, 20_ |                        | Miller                           |

**Notary Public** 

Docket No: 1303.182US1 Serial Number: Not Assigned Filing Date: even date herewith Page 3 of 4

|                      | , 2006.         | EREOF, I na | ave hereunto set my hand this day of                       |
|----------------------|-----------------|-------------|--|
|                      |                 |             | A rose Dhase share re                                      |
| CTATE OF             |                 |             | Arup Bhattacharyya   |
| STATE OF             |                 |             |  |
|                      |                 | )ss         |  |
| COUNTY OF            |                 |             |  |
| On this              | day of          |             | , 2006 before me personally appeared Arup                  |
| Bhattacharyya, to me | known and kn    | own to me f | to be the person described in and who executed the         |
| foregoing instrument | , and he/she du | ly acknowle | edged to me that he/she executed the same for the uses and |
| purposes therein set | forth.          |             |  |
| [SEAL]               |                 |             |  |
|                      |                 |             | Notary Public  |

Docket No: 1303.182US1

Serial Number: Not Assigned Filing Date: even date herewith Page 4 of 4

## ASSIGNMENT

WHEREAS, We, Leonard Forbes, residing at 7340 NW Mountain View Drive. Corvallis, OR 97330-9113, and Kie Y. Ahn, residing at 639 Quaker St., Chappaqua, NY 10514, and Arup Bhattacharyya, residing at 18 Glenwood Drive, Essex Junction, VT 05452, made certain new and useful inventions and improvements for which we executed an application for Letters Patent of the United States on even date herewith, which is entitled TANTALUM LANTHANIDE OXYNITRIDE FILMS:

AND WHEREAS, Micron Technology, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 8000 So. Federal Way, Boise, ID 83716-9632 (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

**PATENT** 

REEL: 018270 FRAME: 0194

AND, furthermore, we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us. IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of , 2006. Leonard Forbes STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_ On this day of \_\_\_\_\_, 2006 before me personally appeared Leonard Forbes, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth. [SEAL]

Notary Public

Docket No: 1303.182US1 Serial Number: Not Assigned Filing Date: even date herowith

Page 2 of 4

| IN TEST                     | TIMONY WHI<br>, 2006. | REOF, I have hereunto set my hand this day of                      |
|-----------------------------|-----------------------|--|
|                             |                       | Kie Y. Ahn   |
| STATE OF                    |                       |  |
| COLDENIA                    |                       | )ss  |
| COUNTY OF                   | <del></del>           |  |
| On this                     | day of                | , 2006 before me personally appeared Kie Y. Ahn.                   |
| me known and known          | n to me to be th      | e person described in and who executed the foregoing instrument,   |
| and he/she duly acknowledge | owledged to me        | that he/she executed the same for the uses and purposes therein se |
| forth.                      |                       |  |
| [SEAL]                      |                       |  |
|                             |                       | Notary Public  |

Docket No: 1303.182US1 Serial Number: Not Assigned Filing Date: even date herewith Page 3 of 4

| IN TESTIMONY WHEREOF, I have hereunto set my hand this 2/ day of August, 2006.                          |
|---|
| Amp Andedyn   |
| STATE OF VINON  |
| COUNTY OF CANTEN IN 1888  |
| On this A day of My ust, 2006 before me personally appeared Arup  |
| Bhattacharyya, to me known and known to me to be the person described in and who executed the           |
| foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and |
| purposes therein set forth.   |
| [SEAL] Maria Strafia  |

**Notary Public** 

Docket No: 1303.182US1

Serial Number: Not Assigned Filing Date: even date herewith Page 4 of 4

**RECORDED: 08/31/2006**