

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5537641

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KISHORE K. MUCHHERLA	04/07/2017
ASHUTOSH MALSHE	04/07/2017
PRESTON A. THOMSON	04/07/2017
MICHAEL G. MILLER	04/05/2017
SAMPATH K. RATNAM	04/04/2017
PETER FEELEY	04/05/2017
RENATO C. PADILLA	03/28/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MICRON TECHNOLOGY, INC.
<b>Street Address:</b>	8000 SOUTH FEDERAL WAY
<b>City:</b>	BOISE
<b>State/Country:</b>	IDAHO
<b>Postal Code:</b>	83716-9632
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16420505
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(612)659-9344
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	612-659-9340
<b>Email:</b>	coon@bipl.net
<b>Correspondent Name:</b>	BROOKS, CAMERON & HUEBSCH, PLLC
<b>Address Line 1:</b>	1201 MARQUETTE AVENUE SOUTH
<b>Address Line 2:</b>	SUITE 400
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55403
<b>ATTORNEY DOCKET NUMBER:</b>	1005.0620003[16-018001US]
<b>NAME OF SUBMITTER:</b>	JACOB T. KERN
<b>SIGNATURE:</b>	/Jacob T. Kern/
<b>DATE SIGNED:</b>	05/23/2019

PATENT

**Total Attachments: 10**

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In re Application of:**

**Docket No. 1005.0620001**

**Kishore K. Muchherla, et al.**

**Disclosure No. 2016-0180.00/US**

**Filed: Concurrently herewith**

**For : MEMORY MANAGEMENT**

**ASSIGNMENT**

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned does 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 83716-9632, 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 "MEMORY MANAGEMENT"; 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 and an 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 right and property herein conveyed has been or will be made to others by the undersigned, and that 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 improvement 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.

Kishore K. Muchherla Date: 04/07/2017  
Kishore K. Muchherla

STATE OF CALIFORNIA

COUNTY OF Santa Clara

On April 7, 2017 before me, Suzanne A. McHugh  
(insert name and title of the officer)

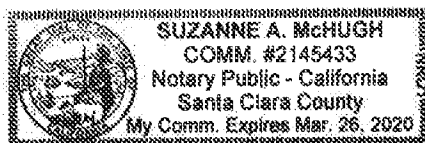
personally appeared, Kishore K. Muchherla  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

[SEAL]

Suzanne A. McHugh  
Notary or Consular Officer  
My Commission Expires March 26, 2020



ASSIGNMENT

Attorney Docket No.: 1005.0620001 [2016-0180.00/US]

Serial No.: Not Yet Assigned

Filing Date: Concurrently Herewith

Page 3 of 3

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

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

Ashutosh Malshe  
Ashutosh Malshe

Date: 04/07/2017

STATE OF CALIFORNIA

COUNTY OF Santa Clara

On April 7, 2017 before me, Suzanne A. McHugh  
(insert name and title of the officer)

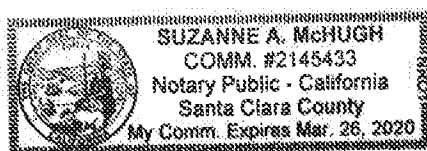
personally appeared, Ashutosh Malshe  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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WITNESS my hand and official seal

[SEAL]

Suzanne A. McHugh  
Notary or Consular Officer  
My Commission Expires March 26, 2020



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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Kishore K. Muchherla, et al.**

**Docket No. 1005.0620001**

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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 83716-9632, 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 "MEMORY MANAGEMENT"; 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 right and property herein conveyed has been or will be made to others by the undersigned, and that 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 improvement 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.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 7<sup>th</sup> day of April, 2017.

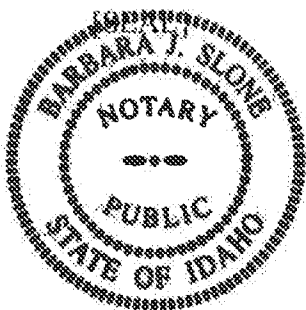
PTH

Preston A. Thomson

Date: 4/7/2017

STATE OF IDAHO )  
 ) ss.  
COUNTY OF Ada )

BEFORE ME, this 7<sup>th</sup> day of April, 2017 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/she executed the same of his/her own free will for the purpose therein expressed.



Barbara J. Slove  
Notary or Consular Officer  
My Commission Expires 08/25/2020

WARRANT AND COVENANT that no assignment, grant mortgage, license, or other agreement affecting the right and property herein conveyed has been or will be made to others by the undersigned, and that 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 improvement 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.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 5<sup>th</sup> day of April, 2017.

Michael G. Miller Date: 4/5/2017  
Michael G. Miller

STATE OF Idaho )  
 ) ss.  
COUNTY OF Ada )

BEFORE ME, this 5<sup>th</sup> day of April, 2017 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/she executed the same of his/her own free will for the purpose therein expressed.



Diane Feldman  
Notary or Consular Officer  
My Commission Expires 05/02/19



WARRANT AND COVENANT that no assignment, grant mortgage, license, or other agreement affecting the right and property herein conveyed has been or will be made to others by the undersigned, and that 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 improvement in the Assignee;

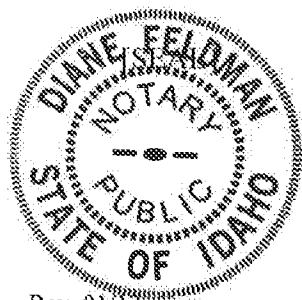
TO BE BINDING on the heirs, assigns, representatives, and successors of the undersigned and extend to the successors, assigns, and nominees of the Assignee.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 4<sup>th</sup> day of April, 2017.

R Sampath Ratnam Date: 04/04/2017  
Sampath K. Ratnam

STATE OF Idaho )  
COUNTY OF Ada ) ss.

BEFORE ME, this 4<sup>th</sup> day of April, 2017 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/she executed the same of his/her own free will for the purpose therein expressed.



Diane Feldman  
Notary or Consular Officer  
My Commission Expires 05/02/19

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 5<sup>th</sup> day of April, 2017.

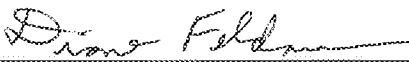
  
\_\_\_\_\_  
Peter Feeley

Date: April 5, 2017

STATE OF Idaho )  
COUNTY OF Ada ) ss.

BEFORE ME, this 5<sup>th</sup> day of April, 2017 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/she executed the same of his/her own free will for the purpose therein expressed.



  
\_\_\_\_\_  
Notary or Consular Officer  
My Commission Expires 05/02/19

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Docket No. 1005.0620001

Kishore K. Muchherla, et al.

Disclosure No. 2016-0180.00/US

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

Renato C. Padilla  
Renato C. Padilla

Date: 3/22/17

STATE OF CALIFORNIA

COUNTY OF Sacramento

A Notary Public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

On 22 March 2017 before me, D. Shira, Notary Public  
(insert name and title of the officer)

personally appeared, Renato Cruz Padilla, Sr.  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

[SEAL]

D. Shira  
Notary or Consular Officer  
My Commission Expires Jan 26, 2019

