502501874 09/19/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Timothy B. Cowles	09/09/2013
Steven M. Bodily	09/09/2013

RECEIVING PARTY DATA

Name:	Micron Technology, Inc.	
Street Address:	8000 S Federal Way	
City:	Boise	
State/Country:	IDAHO	
Postal Code:	83716-9632	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14031432

CORRESPONDENCE DATA

Fax Number: 6126599344

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 612-659-9340
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Address Line 1: 1221 NICOLLET AVENUE, SUITE 500
Address Line 4: MINNEAPOLIS, MINNESOTA 55403

ATTORNEY DOCKET NUMBER:	1002.1500001[13-028700US]
NAME OF SUBMITTER:	Jacob T. Kern
Signature:	/Jacob T. Kem/
Date:	09/19/2013

Total Attachments: 3 source=00264699#page1.tif source=00264699#page2.tif source=00264699#page3.tif

> PATENT REEL: 031240 FRAME: 0959

OP \$40.00 14031432

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:		Docket No. 1002.1500001
	Timothy B. Cowles, et al.	Disclosure No. 2013-0287.00/US
Filed:	Concurrently Herewith	
For:	DATA SHIFTING	
		ASSIGNMENT
	Enclosed for recording Previously, recorded	
Date:	· ·	
Reel:		

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 "DATA SHIFTING"; 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;

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ASSIGNMENT

Attorney Docket No.: 1002.1380001 [2011-0423.00/US]

Serial No.: Not Yet Assigned Filing Date: Herewith

WARRANT AND CONVENANT 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 day of
2013 Amoll B Couls Date: 9/9/13
Timothy B. Cowled
STATE OF IDAHO
COUNTY OF ADA ss.
BEFORE ME, this day of September, 2013 personally appeared the above-name 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 ow
free will for the purpose therein expressed. Notary of Consulty Officer
Notary or Consular Officer My Commission Expires PUBL ARY ARY ARY ARY MY Commission Expires
A L Victorial Park

Rev. 01/12

ASSIGNMENT

Attorney Docket No.: 1002.1380001 [2011-0423.00/US] Serial No.: Not Yet Assigned

Filing Date: Herewith

Steven M. Bodily Date: 9/9/2013

STATE OF TMAHO

COUNTY OF ADA

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.

[SEAL]

Notary or Consular Officer

Notary or Commission Expires 12 20 18

My Commission Expires _

Rev. 01/12