

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4389862

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHRISTOPHER KAWAMURA	04/28/2016
HOWARD KIRSCH	05/10/2016
<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>	15151065
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(303)473-2720
<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>	303-473-2700
<b>Email:</b>	jjmulhern@hollandhart.com
<b>Correspondent Name:</b>	MICHAEL L. DRAPKIN
<b>Address Line 1:</b>	HOLLAND & HART LLP
<b>Address Line 2:</b>	P.O. BOX 11583
<b>Address Line 4:</b>	SALT LAKE CITY, UTAH 84147
<b>ATTORNEY DOCKET NUMBER:</b>	P012 (88231.0013)
<b>NAME OF SUBMITTER:</b>	MICHAEL L. DRAPKIN
<b>SIGNATURE:</b>	/Michael L. Drapkin/
<b>DATE SIGNED:</b>	04/28/2017
<b>Total Attachments: 4</b>	
source=P012 Micron - 2015-0259.00US Assignment#page1.tif	
source=P012 Micron - 2015-0259.00US Assignment#page2.tif	
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## ASSIGNMENT

WHEREAS, WE,

1. Christopher Kawamura, a citizen of the United States of America, having a mailing address located at 8000 South Federal Way, Boise, Idaho 83716-9632, and a resident of Boise, Idaho,
2. Howard Kirsch, a citizen of the United States of America, having a mailing address located at 479 W. Bogus View Drive, Eagle, Idaho 83616 and a resident of Eagle, Idaho,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **BOOSTING A DIGIT LINE VOLTAGE FOR A WRITE OPERATION** (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, **MICRON TECHNOLOGY, INC.** (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 8000 South Federal Way, Boise, Idaho 83716-9632, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent

applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 23<sup>rd</sup> day of April, 2016.

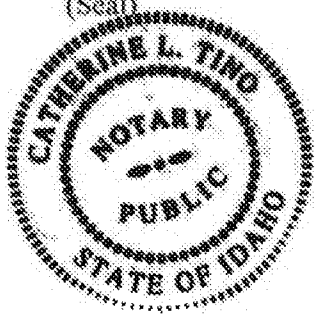
Chris Kaw  
Christopher Kawamura

State of Idaho  
County of Ada

On April 25<sup>th</sup> before me, Catherine L. Tino appeared Christopher Kawamura 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 on behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.  
Notary or Consular Officer Catherine L. Tino  
(Seal)

EXP 12/20/18



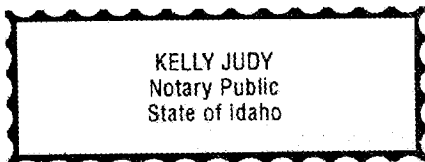
IN TESTIMONY WHEREOF, I have hereunto set my hand this 10 day of May, 2016

Howard Kirsch  
Howard Kirsch

State of Idaho  
County of Ada

On 10, May 2016 before me, Kelly Judy - Notary appeared Howard Kirsch, 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 on behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.  
Notary or Consular Officer Kelly Judy  
(Seal)



My Commission Expires 9-17-19