

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5849159

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
EIICHI NAKANO	04/03/2018
MARK E. TUTTLE	04/19/2018
<b>RECEIVING PARTY DATA</b>	
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<b>Street Address:</b>	8000 S. FEDERAL WAY
<b>Internal Address:</b>	P.O. BOX 6
<b>City:</b>	BOISE
<b>State/Country:</b>	IDAHO
<b>Postal Code:</b>	83707-0006
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16702811
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	010829-9258.US02
<b>NAME OF SUBMITTER:</b>	SAM BEARD
<b>SIGNATURE:</b>	/Sam Beard/
<b>DATE SIGNED:</b>	12/04/2019
<b>Total Attachments: 3</b>	
source=2019-12-04 Assignment as Filed (010829-9258.US02)#page1.tif	
source=2019-12-04 Assignment as Filed (010829-9258.US02)#page2.tif	
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## ASSIGNMENT BY INVENTORS

This Assignment is by the following individuals (the "Assignors"):

- Eiichi Nakano, having a mailing address of 4463 S. Epsilon Ave., Boise, ID 83716; and
- Mark E. Tuttle, having a mailing address of 4173 W. Highland Fall Ct., Meridian, ID 83646.

The Assignors invented one or more certain inventions (the "Invention(s)") described in an application for Letters Patent of the United States titled SEMICONDUCTOR DEVICES HAVING ELECTRICALLY AND OPTICALLY CONDUCTIVE VIAS, AND ASSOCIATED SYSTEMS AND METHODS, naming the Assignors as inventors, and filed on December 22, 2017 as U.S. Application No. 15/852,339 (the "Application"). The Assignors authorize the Assignee, identified below, or its representatives to insert the application number and filing date of the Application when known.

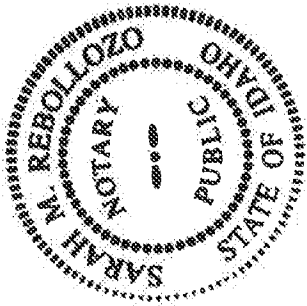
Micron Technology, Inc., a corporation of Delaware having its principal place of business at 8000 S. Federal Way, P.O. Box 6, Boise, Idaho 83707-0006 ("Assignee"), desires to acquire the entire right, title and interest in and to the Invention(s) and the Application, and in and to any patents (collectively, "Patents") that may be granted for the Invention(s) in the United States or in any foreign countries.

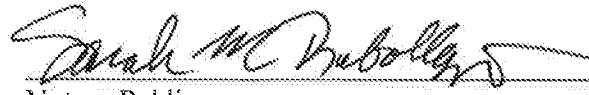
For valuable consideration, the receipt and sufficiency of which Assignors acknowledge, Assignors hereby sell, assign, and transfer to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to: the Invention(s), the Application, and any Patents; any divisions, 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 Assignors own 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; 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: 4-19-2018

  
Mark E. Tuttle

On this 19<sup>th</sup> day of April, 2018, before me personally came **Mark E. Tuttle**, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

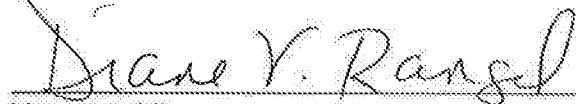


  
Notary Public

Date: Apr 3rd '18

  
Eiichi Nakano

On this 3rd day of April, 2018, before me  
personally came **Eiichi Nakano**, to me known to be the individual described in and who executed the  
foregoing instrument, and acknowledged execution of the same.

  
Notary Public

