505732226 10/21/2019

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
TETSUO ENDOH	08/22/2019
YASUHIRO OHTOMO	08/30/2019

## **RECEIVING PARTY DATA**

Name:	TOHOKU UNIVERSITY	
Street Address:	2-1-1, KATAHIRA, AOBA-KU	
City:	SENDAI-SHI, MIYAGI	
State/Country:	JAPAN	
Postal Code:	980-8577	

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16485289

# **CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER:	111327.00037
NAME OF SUBMITTER:	MIYUKI SHIMIZU
SIGNATURE:	/Miyuki Shimizu/
DATE SIGNED:	10/21/2019

## **Total Attachments: 4**

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> PATENT REEL: 050776 FRAME: 0353

505732226

### ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNOR(S) of the sum of One Dollar (\$1.00) and for other good and valuable consideration, the receipt of which is hereby acknowledged, by this document

Name	Address
Tetsuo ENDOH	c/o TOHOKU UNIVERSITY, 2-1-1, Katabira, Aoba-ku, Sendai-shi, Miyagi 980-8577, JAPAN
Yasuhiro OHTOMO	c/o TOHOKU UNIVERSITY, 2-1-1, Katabira, Aoba-ku, Sendai-shi, Miyagi 980-8577, JAPAN
assigns and transfers to:	
ASSIGNEE: Name	Address

the entire right, title and interest in and to the invention entitled:

JAPAN

## MEMORY DEVICE

2-1-1, Katahira, Aoba-ku, Sendai-shi, Miyagi 980-8577

and which is found in:

TOHOKU UNIVERSITY

	the U.S. patent application filed with this assignment document
	U.S. patent application no., filed
X	International patent application no. PCT/JP2018/004869, filed February 13, 2013
	U.S. patent no., issued

and, in and to

- all patent applications filed and letters patent obtained for the invention, whether
  foreign and domestic, and all continuations, continuation-in-part divisions, renewals,
  reissues, re-examinations, or substitutes of any such patent or patent application; and
  any patents and patent applications to which any such patent or patent application
  claims priority;
- all rights to any legal equivalent thereof in a foreign country such as patents of addition, utility models, patents of importation, revalidation patents and inventor certificates;
- the right to apply for patents and inventor certificates relating to the invention, and
  the right to claim priority to all applications throughout the world in respect of the
  invention; and

 the right to sue and recover any and all damages and profits, and any and all other remedies, for past, present, or future infringements of patents directed to the invention.

ASSIGNOR(S) authorizes ASSIGNEE or its legal representative to insert in this instrument the filing date, serial number, and any other information that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office or any other domestic or foreign government entity for the recordation of this document.

ASSIGNOR(S) warrants and agrees that:

- no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;
- upon request, ASSIGNOR(S) will promptly provide ASSIGNEE with all pertinent facts and documents relating to the invention as may be known and accessible to ASSIGNOR(S);
- ASSIGNOR(S) will, at ASSIGNEE'S expense, testify as to the same in any interference, litigation or proceeding related to the invention; and
- ASSIGNOR(S) will promptly execute and deliver to ASSIGNEE, its assigns or its
  legal representatives, without further or additional consideration, any and all papers,
  instruments or affidavits required, render all necessary assistance, and do such
  additional acts as ASSIGNEE or its successors or assigns may deem necessary or
  desirable, to apply for, obtain, maintain, issue and enforce any resulting patents or
  patent applications.

ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks and any foreign counterpart to issue any and all letters patent for the invention to ASSIGNEE, for ASSIGNEE'S sole use and benefit, and for the use and benefit of ASSIGNEE'S successors and assigns, to the full end of the term for which such patent may be granted.

ASSIGNOR(S) agree that this document shall bind and inure to the benefit of the heirs, assigns and legal representatives of both ASSIGNOR(S) and ASSIGNEE.

Date: 109001, 22, 2019	Signature:	etrus Endel no ENDOH	
Date:	Signature:Yası	shiro OHTOMO	•

### ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNOR(S) of the sum of One Dollar (\$1.00) and for other good and valuable consideration, the receipt of which is hereby acknowledged, by this document

ASSIGNOR(S):

claims priority;

Name	Address	
Tetsuo ENDOH	c/o TOHOKU UNIVERSITY, 2-1-1, Katahira, Aoba-ku, Sendai-shi, Miyagi 980-8577, JAPAN	
Yasuhiro OHTOMO	c/o TOHOKU UNIVERSITY, 2-1-1, Katahira, Aoba-ku, Sendai-shi, Miyagi 980-8577, JAPAN	
assigns and transfers to:		
ASSIGNEE:		
Name	Address	
TOHOKU UNIVERSITY	2-1-1, Katahira, Aoba-ku, Sendai-shi, Miyagi 980-8577 JAPAN	
the entire right, title and interest in and to the invention entitled:		
	MEMORY DEVICE	
and which is found in:		
the U.S. patent applicat	ion filed with this assignment document	
U.S. patent application no. , filed		
x International patent application no. PCT/JP2018/004869, filed February 13, 2018		
U.S. patent no., issued		
and, in and to		
foreign and domestic, a reissues, re-examination	filed and letters patent obtained for the invention, whether and all continuations, continuation-in-part divisions, renewals, ns, or substitutes of any such patent or patent application; and applications to which any such patent or patent application	

- all rights to any legal equivalent thereof in a foreign country such as patents of addition, utility models, patents of importation, revalidation patents and inventor certificates;
- the right to apply for patents and inventor certificates relating to the invention, and the right to claim priority to all applications throughout the world in respect of the invention; and

 the right to sue and recover any and all damages and profits, and any and all other remedies, for past, present, or future infringements of patents directed to the invention.

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- ASSIGNOR(S) will, at ASSIGNEE'S expense, testify as to the same in any interference, litigation or proceeding related to the invention; and
- ASSIGNOR(S) will promptly execute and deliver to ASSIGNEE, its assigns or its
  legal representatives, without further or additional consideration, any and all papers,
  instruments or affidavits required, render all necessary assistance, and do such
  additional acts as ASSIGNEE or its successors or assigns may deem necessary or
  desirable, to apply for, obtain, maintain, issue and enforce any resulting patents or
  patent applications.

ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks and any foreign counterpart to issue any and all letters patent for the invention to ASSIGNEE, for ASSIGNEE'S sole use and benefit, and for the use and benefit of ASSIGNEE'S successors and assigns, to the full end of the term for which such patent may be granted.

ASSIGNOR(S) agree that this document shall bind and inure to the benefit of the heirs, assigns and legal representatives of both ASSIGNOR(S) and ASSIGNEE.

Date:	Signature:
Date: <u>Aug. 30, 2019</u>	Signature: 大友康範 Yasuhiro OHTOMO