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# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
KABUSHIKI KAISHA TOSHIBA	07/25/2017

### **RECEIVING PARTY DATA**

Name:	TOSHIBA MEMORY CORPORATION	
Street Address:	1-1, SHIBAURA 1-CHOME, MINATO-KU	
City:	TOKYO	
State/Country:	JAPAN	

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15449001

#### **CORRESPONDENCE DATA**

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NAME OF SUBMITTER:	ANGELA M. NOLAN	
SIGNATURE:	/Angela M. Nolan/	
DATE SIGNED:	08/16/2017	

**Total Attachments: 2** 

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> **PATENT** REEL: 043306 FRAME: 0157 504505965

## <u>ASSIGNMENT</u>

WHEREAS, KABUSHIKI KAISHA TOSHIBA, a company established under the laws of Japan whose address is 1-1, Shibaura 1-chome, Minato-ku, Tokyo (hereinafter called "Assignor"), is the co-owner (one-half interest) by assignment recorded in the United States Patent and Trademark Office of the following United States Letters Patent(s) and/or patent application(s) (hereinafter called "Patent Properties"):

Application or Patent Number and Date of Filing or Issue

Named
Inventors

Reel and Frame

15/449,001 filed March 3, 2017

Mitsumasa KOYANAGI Tetsu TANAKA Takafumi FUKUSHIMA Kang-Wook LEE

The undersigned has reviewed all the documents in the chain of title identified above; and to the best of the undersigned's knowledge and belief, title is in the Assignor. The undersigned is empowered to sign this Assignment on behalf of the Assignor.

WHEREAS, TOSHIBA MEMORY CORPORATION, a company established under the laws of Japan whose address is 1-1, Shibaura 1-chome, Minato-ku, Tokyo (hereinafter called "Assignee"), is desirous of acquiring Assignor's right, title and interest for the United States, its territories, dependencies and possessions, in and to said Patent Properties (and/or patents that may be granted therefrom), including any and all provisional, non-provisional, divisional, continuation, international, design, confirmation, substitute and reissue application(s) or extensions of the same.

Now, To All Whom It May Concern: Be it known that for and in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor has sold, assigned, transferred and set over, and does hereby sell, assign, transfer and set over, unto Assignee, its successors, assigns and legal representatives, its entire right, title and interest for the United States, its territories, dependencies and possessions, in and to said Patent Properties (and/or patents that may be granted therefrom), including any and all provisional, non-provisional, divisional, continuation, design, confirmation, substitute and reissue application(s) or extensions thereof; the same to be held and enjoyed by Assignee, its successors, assigns and legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor had this assignment and sale not been made, together with all claims for damages by reason of past infringement of said Patent Properties with the right to sue for and collect the same for its own use and for the use of its successors, assigns and legal representatives.

Assignor agrees that this assignment is binding on Assignor and its successors, assigns and legal representatives.

Assignor agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning said Patent Properties (and/or patents that may be granted therefrom), or any confirmation, division, continuation, reexamination or reissue thereof, and to cooperate with Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.

Assignor covenants that it has full right to convey the interest herein assigned and that it has not executed and will not execute any agreement in conflict herewith.

Assignor agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

Assignor agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to Assignee.

Assignor grants the firm of OLIFF PLC of Alexandria, Virginia the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

This Assignment is ef	fective as of the 🏄 📗	day of <i>Jolge</i> , 2017.
Α		Ohoha Shiranora
Witness		Signature
		Officer of Assignor
<u> </u>		Íkuko SHIMOGAWARA
Witness		Typewritten Name of Officer
		General Manager, Intellectual Property Division
		Title of Officer