505364446 03/08/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5411236

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the THE SERIAL NUMBER ERRONEOUSLY CITED AS 16291467 previously recorded on Reel 048493 Frame 0691. Assignor(s) hereby confirms the ASSIGNMENT.

CONVEYING PARTY DATA

Name	Execution Date
SHUNSUKE KASASHIMA	02/15/2019
JUN NISHIMURA	02/15/2019
TAKAMITSU OCHI	02/18/2019
HISASHI HARADA	02/15/2019
AYAHA HACHISUGA	02/15/2019
AYAKO KAWANISHI	02/15/2019

RECEIVING PARTY DATA

Name: TOSHIBA MEMORY CORPORATION	
Street Address:	1-1, SHIBAURA 1-CHOME, MINATO-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	105-0023

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16291497

CORRESPONDENCE DATA

Fax Number: (703)413-2220

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.

Phone: (703) 413-3000

Email: soppong@oblon.com

Correspondent Name: OBLON, ET AL.

Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	520901US
NAME OF SUBMITTER:	SHEILA OPPONG
SIGNATURE:	/Sheila Oppong/
DATE SIGNED:	03/08/2019

Total Attachments: 8

source=520901USCORRECTEDASSIGNMENT#page1.tif source=520901USCORRECTEDASSIGNMENT#page2.tif source=520901USCORRECTEDASSIGNMENT#page3.tif source=520901USCORRECTEDASSIGNMENT#page4.tif source=520901USCORRECTEDASSIGNMENT#page5.tif source=520901USCORRECTEDASSIGNMENT#page6.tif source=520901USCORRECTEDASSIGNMENT#page7.tif source=520901USCORRECTEDASSIGNMENT#page8.tif

Assignment Page 1 of 2

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHUNSUKE KASASHIMA	02/15/2019
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TAKAMITSU OCHI	02/18/2019
HISASHI HARADA	02/15/2019
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AYAKO KAWANISHI	02/15/2019

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State/Country:	JAPAN
Postal Code:	105-0023

PROPERTY NUMBERS Total: 1

Property T	уре	Number
Application Numb	er: 1	16291467

CORRESPONDENCE DATA

 Fax Number:
 (703)413-2220

 Phone:
 (703) 413-3000

 Email:
 adavis@oblon.com

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.

Correspondent Name: OBLON, ET AL. **Address Line 1:** 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

A	ATTORNEY DOCKET NUMBER:	520901US
1	NAME OF SUBMITTER:	ALLISON DAVIS

Assignment Page 2 of 2

Signature:	/ALLISON DAVIS/
Date:	03/04/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 6 source=520901US_ASN#page1.tif source=520901US_ASN#page3.tif source=520901US_ASN#page4.tif source=520901US_ASN#page5.tif source=520901US_ASN#page5.tif source=520901US_ASN#page6.tif	
RECEIPT INFORMATION	
EPAS ID: PAT5402 Receipt Date: 03/04/201	

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of Invention	SEMICONDUCTOR MEMORY DEVICE		
As the below name	d inventor, I hereby declare that:		
	The attached application, or		
	United States application or PCT international application number filed on		
	ed application was made or authorized to be made by me.		
I believe that I am	the original inventor or an original joint inventor of a claimed invention in the application.		
(hereinafter referre 105-0023, Japan , Letters Patent that a countries;	WHEREAS, TOSHIBA MEMORY CORPORATION (hereinafter referred to as "ASSIGNEE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, 105-0023, Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign		
NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.			
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.			
Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.			
I hereby acknoby fine or impriso	wledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 nment of not more than five (5) years, or both.		
LEGAL NAME C			
Inventor: Shuns	uke KASASHIMA Date: February 15, 2019		
Signature:	Shunsuke Kasashima		

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

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This declaration X The attached application, or			
	United States application or PCT international application number		
The above-identified application was made or authorized to be made by me.			
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.			
WHEREAS, TO (hereinafter referred 105-0023, Japan). Letters Patent that countries;	SHIBA MEMORY CORPORATION Id to as "ASSIGNEE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any may be granted therefore in the United States and its territorial possessions and in any and all foreign		
acknowledged, and ASSIGNEB, the fu all foreign countrie relevant Internation in and to any and all renewals thereof.	FORB, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby if for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said all and exclusive right to the said invention in the United States and its territorial possessions and in as (including the right to claim priority under the terms of the International Convention and other hal Treaties and Arrangements from the aforesaid application) and the entire right, title and interest all Letters Patent which may be granted therefor in the United States and its territorial possessions of foreign countries and in and to any and all divisions, reissues, continuations, substitutions and		
and all foreign cou of my entire right successors and ass as the same would	ze and request the Patent Office Officials in the United States and its territorial possessions and any intries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) igns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely have been held by me had this Assignment and sale not been made.		
Further, I agro- respecting said in continuation, subs- all of said Letters I to aid said ASSIG the United States a	that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me execute, and testify in any legal proceeding, sign all lawful papers, execute all divisional, titute, renewal and reissue applications, execute all necessary assignment papers to cause any and Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible NEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in and its territorial possessions and in any and all foreign countries.		
I hereby ackno by fine or impriso	wledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 nment of not more than five (5) years, or both.		
LEGAL NAME OF INVENTOR			
Inventor: <u>Jun N</u>	ISHIMURA Date:		
Signature:	Jun Nishimura		

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

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This declaration 🔀 The attached application, or		
•	United States application or PCT international application number filed on	
The above-identified application was made or authorized to be made by me.		
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.		
WHEREAS, TOSHIBA MEMORY CORPORATION (hereinafter referred to as "ASSIGNEE") having places of business at: 1-1. Shibaura 1-chome, Minato-ku. Tokyo, 105-0023, Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;		
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I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.		
LEGAL NAME OF INVENTOR		
Inventor: <u>Takan</u>	itsu OCHI Date: Feb. 18, 2019	
Signature: Takamitsu Ochi		

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.
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LEGAL NAME OF INVENTOR		
Inventor: Hisash	Date: 1019 2.15	
Signature:	fisashi Horada	

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LEGAL NAME OF INVENTOR			
Inventor: Ayaha	HACHISUGA Date: 2019, 2.15		
Signature:	jaha Hachisuga		

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P. ATTORNEYS AT LAW 1940 DUKE STREET

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RECORDED: 03/08/2019

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LEGAL NAME OF INVENTOR		
Inventor: Ayako KAWANISHI Date: February, 157h 2019		
Signature: Olyako Examishi		

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P. ATTORNEYS AT LAW

1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314