503634630 01/05/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3681260

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KAZUHIRO OHBA	12/04/2015
SHUICHIRO YASUDA	12/23/2015
TETSUYA MIZUGUCHI	12/04/2015
KATSUHISA ARATANI	12/04/2015
MASAYUKI SHIMUTA	12/04/2015
AKIRA KOUCHIYAMA	12/07/2015
MAYUMI OGASAWARA	12/07/2015

RECEIVING PARTY DATA

Name:	SONY CORPORATION
Street Address:	1-7-1 KONAN, MINATO-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	108-0075

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14950512

CORRESPONDENCE DATA

Fax Number: (312)876-7934

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: 3128767925

Email: patents.us@dentons.com

Correspondent Name: DENTONS US LLP **Address Line 1:** P.O. BOX 061080

Address Line 4: CHICAGO, ILLINOIS 60606-1080

ATTORNEY DOCKET NUMBER:	09792909-009324
NAME OF SUBMITTER:	SUSAN FARLEY
SIGNATURE:	/susan farley/
DATE SIGNED:	01/05/2016

PATENT REEL: 037410 FRAME: 0202

503634630

Total Attachments: 7

source=20160104_SP248735US03_6oaths#page1.tif

source=20160104_SP248735US03_6oaths#page2.tif

source=20160104_SP248735US03_6oaths#page3.tif

source=20160104_SP248735US03_6oaths#page4.tif

source=20160104_SP248735US03_6oaths#page5.tif

source=20160104_SP248735US03_6oaths#page6.tif

source=20160104_SP248735US03_OathYasuda#page1.tif

PATENT REEL: 037410 FRAME: 0203

Attorney Docket No.: 09792909-009324 Sony Bef. No.: SP248735US03

Title of Invention	MEMORY COMPONENT, MEMORY DEVICE, AND METHOD OF OPERATING MEMORY DEVICE	
As the below	named inventur, I hereby declare that:	
This declaration is directed to:	The attached application, or	
	United States application or PCT international application number 14/950512 filed on November 24, 2015	
The above-ide	entified application was made or authorized to be made by me.	
Thelieve that WHEREAS.	I am the original inventor or an original joint inventor of a claimed invention in the application. SONY CORPORATION with offices at	
1-7-1 KO	NAN, MINATO-KU, TOKYO, 108-0075, JAPAN (hereinalter referred to as ASSIGNEE), is desirous of	
acquiring all i	nterest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar on which may be granted therefor in the United States and in any and all foreign countries;	
NOW THEREFORE, 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. I by these presents do hereby assign, self and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filling of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;		
And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;		
And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;		
And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto:		
And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.		
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 (3) years, or both.		
LEGAL NAME OF INVENTOR		
Inventor:	Kazuhiro Ohba Date: Lellabor 4, 2015	
Signature:	Kezulino Ohla	

Attorney Backet Na.: 09792909-009324 Sony Ref. No.: SP248735US03

Title of Invention	MEMORY COMPONENT, MEMORY DEVICE, AND METHOD OF OPERATING MEMORY DEVICE	
As the below	named inventor, I hereby declare that:	
This declaration is directed to:	The association of	
Sphorodomore : J	United States application or PCT international application number 14/950512 filed on November 24, 2015	
	entified application was made or authorized to be made by me.	
	I am the original inventor or an original joint inventor of a claimed invention in the application. SONY CORPORATION , with offices at	
	NAN, MINATO-KU, TOKYO, 108-0075, JAPAN (hereinafter referred to as ASSIGNEE), is desirous of	
	interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar on which may be granted therefor in the United States and in any and all foreign countries;	
NOW THEREFORE, 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. I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other henefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;		
And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;		
And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;		
And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;		
And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.		
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:	Tetsuya Mizuguchi Date: December 4 2015	
Signature:	Terraya Mizuguchi	

Attorney Docket No.: 09792909-009324 Sony Ref. No.: SP248735US03

Title of Invention	MEMORY COMPONENT, MEMORY DEVICE, AND METHOD OF OPERATING MEMORY DEVICE	
As the below	named inventor; I hereby declare that:	
This declarate is directed to:	The organization of	
The above id	United States application or PCT international application number 14/950512 filed on November 24, 2015 entified application was made or authorized to be made by me.	
	I am the original inventor or an original joint inventor of a claimed invention in the application.	
WHEREAS,	SONY CORPORATION , with offices at	
***************************************	DNAN, MINATO-KU, TOKYO, 108-0075, JAPAN (hereinafter referred to as ASSIGNEE), is desirous of	
legal protecti	interest in, to and under said invention, said application disclusing the invention and in, to and under any Letters Patent or similar on which may be granted therefor in the United States and in any and all foreign countries;	
NOW THEREFORE, 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, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and to any and all priority rights and/or convention rights under the international Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents. Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said ASSIGNEE, as the assignce of the whole right, title and interest thereto;		
And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;		
And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;		
And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;		
And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.		
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:	Katsuhisa Aratani Date: Dec - 4 2015	
Signature:	Ketsuhan Jate	

Attorney Docket No.: 09792909-009324 Sony Ref. No.: SP248735US03

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	MEMORY COMPONENT, MEMORY DEVICE, AND METHOD OF OPERATING MEMORY DEVICE	
As the below	named inventor, I hereby declare that:	
This declarate is directed to:	1 8 Who district and fraction on	
	United States application or PCT international application number 14/950512 filed on November 24, 2015	
The above-id	entified application was made or authorized to be made by me.	
WHEREAS,	I am the original inventor or an original joint inventor of a claimed invention in the application. SONY CORPORATION with offices at UNAN, MINATO-KU, TOKYO, 108-0075, JAPAN (hereinafter referred to as ASSIGNEE), is desirous of	
acquiring all	interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar on which may be granted therefor in the United States and in any and all foreign countries;	
of which are legal represer in and to any any and all pr Convention F adheres, and United States	EFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency liereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and statives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and and all Leners Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to niority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American telating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America to any other benefits accruing or to accrue to me with respect to the filling of applications for patents or securing of patents in the and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters ASSIGNEE, as the assignee of the whole right, title and interest thereto;	
And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;		
And I further agree to properly execute and deliver and without further renumeration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Fatent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;		
And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;		
And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.		
I hereby acknown not more than	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of five (5) years, or both.	
	Me of inventor	
Inventor	Masayuki Shimuta Descenden 4, 2015	
Signature:	Masayuki Shimuta	

PATENT REEL: 037410 FRAME: 0207

Attorney Ducket No.: 09792909-009324 Sony Ref. No.: SP248735US03

Title of Invention	MEMORY COMPONENT, MEMORY DEVICE, AND METHOD OF OPERATING MEMORY DEVICE	
As the below	named inventor, I hereby declare that:	
This declaration is directed to:	Were agree which accent entitles of	
	United States application or PCT international application number 14/950512 filed on November 24, 2015	
The above-ide	cutified application was made or authorized to be made by me.	
WHEREAS,	I am the original inventor or an original joint inventor of a claimed invention in the application. SONY CORPORATION , with offices at	
~~~~~	NAN, MINATO-KU, TOKYO, 108-0075, JAPAN (hereinafter referred to as ASSIGNEE), is desirous of	
legal protection	interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar on which may be granted therefor in the United States and in any and all foreign countries;	
NOW THEREFORE, 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. I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;		
And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;		
And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;		
And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto:		
And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.		
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 (3) years, or both.		
LEGAL NAME OF INVENTOR		
~~~~	Akira Kouchiyama December 7, 2015	
Signature:	Akira Kochiyama	

Atturney Dacket No.: 09792909-009324 Sony Ref. No.: SP248735US03

Title of Invention	MEMORY COMPONENT, MEMORY DEVICE, AND METHOD OF OPERATING MEMORY DEVICE	
As the below	named inventor, I hereby declare that:	
This declarati	1 8 The standard and the standard	
	United States application or PCT international application number 14/950512 filed on November 24, 2015	
The shove-ide	entified application was made or authorized to be made by me.	
	I am the original inventor or an original joint inventor of a claimed invention in the application. SONY CORPORATION , with offices at	
1-7-1 KO	NAN, MINATO-KU, TOKYO, 108-0075, JAPAN (hereinafter referred to as ASSIGNEE), is desirous of	
	interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar on which may be granted therefor in the United States and in any and all fereign countries;	
NOW THEREFORE, 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. I by these presents do hereby assign, sell and transfer onto said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Leners Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;		
And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;		
And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filling subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;		
And I further agree that ASSIGNEE will, upon its request, he provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;		
And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.		
Thereby 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: Mayumi Ogasawara Date: December 7, 2015 Signature: Mayumi Ogasawara		
Signature:	Mayermi Ogasawara	

Attorney Docket No.: 09792909-009324 Sony Ref. No.: SP248735US03

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	MEMORY COMPONENT, MEMORY DEVICE, AND METHOD OF OPERATING MEMORY DEVICE	
As the below	named inventor, I hereby declare that:	
This declarates is directed to	Fig. The stracting application, or	
	United States application or PCT international application number 14/950512	
	filed on November 24, 2015	
The above-ic	ientified application was made or authorized to be made by me.	
I believe that	1 am the original inventor or an original joint inventor of a claimed invention in the application. with offices at	
WHEREAS,	KINY CORPORATION	
***************************************	ONAN, MINATO-KU, TOKYO, 108-0075, JAPAN (hereinafter referred to as ASSIGNEE), is desirous of interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar ion which may be granted therefor in the United States and in any and all foreign countries;	
NOW THEREPORE, 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, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and logal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and logal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to in any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents. Designs and Industrial Models, and any other international agreements to which the United States of America Convention Relating to Patents. Designs and Industrial Models, and any other international agreements to which the United States of America Convention Relating to Patents. Designs and Industrial Models, and any other international agreements to which the United States of America Convention Relating to Patents. Designs and Industrial Models, and any other international agreements to which the United States of America Convention Relating to Patents or securing of patents in the adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the adheres.		
designee, a remuneration the United	er agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further in, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of States and countries foreign thereto;	
application Patent which	And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall be earlier require and prepare at its own expense;	
And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;		
And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.		
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.		
}	AME OF INVENTOR	
Inventor:	Shyichiro Yasuda Date:	
Signature:	Liching yearing	

RECORDED: 01/05/2016

PATENT REEL: 037410 FRAME: 0210