504511946 08/21/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4558651

	:	NEW ASSIGNMENT	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PART	ΓΥ DATA			
		Name	Execution Date	
MASAHARU NAGA	TA		07/26/2017	
YASUHIRO MATSU	JI		07/31/2017	
KIYOSHI YOSHIKA	WA		07/31/2017	
RECEIVING PART	Υ DATA			
Name:	SONY	SONY CORPORATION		
Street Address:	1-7-1 k	1-7-1 KONAN, MINATO-KU		
City:	ΤΟΚΥ	ТОКҮО		
State/Country:	JAPAN	JAPAN		
Postal Code:	108-00	075		
Property T	7 1° °			
Application Number		15552389		
Application Number	er:	15552389		
Application Number	er:			
Application Number CORRESPONDEN Fax Number: Correspondence w	er: CE DATA vill be sent to	15552389 (703)935-8473 o the e-mail address first; if that is unsucces d; if that is unsuccessful, it will be sent via b	ssful, it will be sent US Mail.	
Application Number CORRESPONDENCE Fax Number: Correspondence w using a fax number Phone:	er: CE DATA vill be sent to	(703)935-8473 o the e-mail address first; if that is unsucces d; if that is unsuccessful, it will be sent via b 571-313-7556	ssful, it will be sent JS Mail.	
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Application Number CORRESPONDENCE Fax Number: <i>Correspondence w</i> <i>using a fax numbe</i> Phone: Email: Correspondent Na Address Line 1:	er: CE DATA vill be sent to r, if provideo	(703)935-8473 o the e-mail address first; if that is unsucces d; if that is unsuccessful, it will be sent via b 571-313-7556 mail@paratus-law.com PARATUS LAW GROUP, PLLC 1765 GREENSBORO STATION PLACE	ssful, it will be sent US Mail.	
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Application Number CORRESPONDENCE Fax Number: Correspondence w using a fax number Phone: Email: Correspondent Na Address Line 1: Address Line 2:	er: CE DATA vill be sent to or, if provided me:	(703)935-8473 o the e-mail address first; if that is unsucces d; if that is unsuccessful, it will be sent via b 571-313-7556 mail@paratus-law.com PARATUS LAW GROUP, PLLC 1765 GREENSBORO STATION PLACE SUITE 320 TYSONS CORNER, VIRGINIA 22102	ssful, it will be sent US Mail.	
Application Number CORRESPONDENCE Fax Number: Correspondence w using a fax number Phone: Email: Correspondent Na Address Line 1: Address Line 2: Address Line 4:	er: CE DATA vill be sent to or, if provided me: T NUMBER:	(703)935-8473 o the e-mail address first; if that is unsucces d; if that is unsuccessful, it will be sent via b 571-313-7556 mail@paratus-law.com PARATUS LAW GROUP, PLLC 1765 GREENSBORO STATION PLACE SUITE 320 TYSONS CORNER, VIRGINIA 22102	ssful, it will be sent US Mail.	
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Application Number CORRESPONDENC Fax Number: Correspondence w using a fax number Phone: Email: Correspondent Na Address Line 1: Address Line 1: Address Line 2: Address Line 4:	er: CE DATA vill be sent to or, if provided me: T NUMBER:	(703)935-8473 o the e-mail address first; if that is unsucces d; if that is unsuccessful, it will be sent via to 571-313-7556 mail@paratus-law.com PARATUS LAW GROUP, PLLC 1765 GREENSBORO STATION PLACE SUITE 320 TYSONS CORNER, VIRGINIA 22102 1946-0846 LENNY R. JIANG	ssful, it will be sent US Mail.	

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PATENT REEL: 043345 FRAME: 0599

Attorney Docket No.: Sony Ref. No.: SP363169US00

with offices at

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE INFORMATION PROCESSING DEVICE, INFORMATION PROCESSING METHOD, Title of AND PROGRAM

As the below named inventor, I hereby declare that:

This declaration is directed to:

โลงอกกิจร

L____ The attached application, or

United States application or PCT international application number PCT/JP2016/001976 filed on 2016/04/11

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, SONY CORPORATION

1-7-1 KONAN, 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 logal protection 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 1 further agree that ASSIGNEE will, upon its request, be provided promptly with all portinent 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

_____ Dave: Jaly 2.6, 201 MASAHARU NAGATA Inventor: signature Masahara nagata

Attorney Docket No.: Sony Ref. No.: SP363169()500

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 Investion	INFORMATION PROCESSING DEVICE, INFORMATION PROCESSING METHOD, AND PROGRAM			
As the below	As the below named inventor, I hereby declare that.			
This declarati is directed to:	The strength of the strength o			
	United States application or PCT international application number PCT/JP2016/001976 filed on 2016/04/11			
The above-id	sutified application was made or authorized to be made by me.			
WHEREAS,	an the original inventor or an original joint inventor of a claimed invention in the application. SONY CORPORATION , with offices at			
<u>1-7-1 KO</u>	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 in which may be granted therefor in the United States and in any and all foreign countries; EFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency.			
in and to any any and all pr Convention P adheres, and t United States Patent to said	datives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to iority rights and/or convention rights under the International Convention for the Protection of Industrial Property. Inter-American claims to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America o any other benefits accurating or to accrue to me with respect to the filing 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 assignce of the whole right, title and interest thereto;			
designee, as remuneration,	agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of ites and countries foreign thereto;			
application fo	agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for r foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;			
application, s	agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said sid invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will e same in any interference or litigation related thereto;			
And I hereby this assignme:	covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with of 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 NAM	IE OF INVENTOR			
Investor	VASUIAIRO MATSUI Date: July 21, 2017			
Signature:	Signature: <u>Yasuhiro Matxur</u>			

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PATENT REEL: 043345 FRAME: 0601

Attorney Docket No.: Sony Ref. No.: SP363169US00

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

As the below named inventor, I hereby declare that: This declaration The situched application, or is directed to: Image: Directed to: Image: Directed to: Directed to:	Title of Invention	INFORMATION PROCESSING DEVICE, INFORMATION PROCESSING METHOD, AND PROGRAM			
The attached application, or United States application or PCT international application number PCT/JP2016/(0)1976 filed on 2016/04/11 The above-identified application was made or authorized to be made by me. I believe that Lam the original inventor or an original joint inventor of a claimed invention in the application. WHEREAS, SONY CORPORATION , with offices at 1-7-1 KONAN, 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 legal protection 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 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 asid United States Letters Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;	As the below named inventor, I hereby declare that:				
filed on 2016/04/11 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. SONY CORPORATION	385				
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. with offices at WHEREAS SONY CORPORATION		Contraction of the second s			
WHEREAS, SONY CORPORATION	The above-identified application was made or authorized to be made by me.				
acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection 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 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;					
legal protection 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 communitors thereof, and in and to any and all Letters Patent of the United States, and commines 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-America an 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 accraing 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;	*************				
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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 reinnneration, 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 1 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 1 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					
toventor: KIYOSHIYOSHIKAWA Date: July 31, 2017	Inventor:	KIYOSHI YOSHIKAWA $D_{\text{ote:}} = \frac{37.829}{9} \cdot \frac{37.72077}{2000}$			
Signature: <u>Hissorhi Joshikaun</u>	Signature:	Hiyoshi Yoshikawa			

PATENT REEL: 043345 FRAME: 0602

RECORDED: 08/21/2017