### 504898512 05/03/2018

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4945255

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
SHINJI IGARASHI	03/16/2018
NAOKI IDE	03/20/2018
KENTA KAWAMOTO	03/20/2018
TAKUYA FUJITA	03/20/2018
TAKASHI OGATA	03/20/2018

#### **RECEIVING PARTY DATA**

Name:	SONY CORPORATION
Street Address:	1-7-1 KONAN
Internal Address:	MINATO-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	1080075

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

Property Type	Number
Application Number:	15773389

### **CORRESPONDENCE DATA**

**Fax Number:** (312)803-4960

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.

Email: docketing@chiplawgroup.com

Correspondent Name: CHIP LAW GROUP Address Line 1: 155 N WACKER DR

Address Line 2: SUITE 4250

Address Line 4: CHICAGO, ILLINOIS 60606

NAME OF SUBMITTER: SIGNATURE:	PRAMOD CHINTALAPOODI /Pramod Chintalapoodi/
DATE SIGNED:	05/03/2018

Total Attachments: 5

PATENT REEL: 045708 FRAME: 0789

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## 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	BODY
	As the below	named inventor, I hereby declare that:
	This declaration is directed to:	The effective anniversion or
	The shows ide	United States application or PCT international application number PCT/JP2016/075478  filed on 2016/08/31  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
	1-7-1 KO	NAN, MINATO-KU, TOKYO, 108-0075, JAPAN (hereinafter referred to as ASSIGNEE), is desirous of
ı		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 represent in and to any any and all pr Convention R adheres, and to United States	EFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency hereby 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 Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to icrity 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;
	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 ates and countries foreign thereto;
	application fo	r agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for or 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	r agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said aid invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will be 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 nt and sale.
		nowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of a five (5) years, or both.
Γ	LEGAL NAN	ME OF INVENTOR
	Inventor:	SHINJI IGARASHI Date: March 16, 2018
	Signature:	Skinji Jaarashi

# 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	DRIVE ASSISTANCE DEVICE AND DRIVE ASSISTANCE METHOD, AND MOVING BODY
As the below	named inventor, I hereby declare that:
This declarati	The attached amplication or
	United States application or PCT international application number PCT/JP2016/075478 filed on 2016/08/31
The above-id	entified application was made or authorized to be made by me.
I believe that 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
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 hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and natives, 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 notive 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 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 assignee 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 ates and countries foreign thereto;
application fo	r agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for or 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	r agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said aid invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will be 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 ent and sale.
•	nowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of a five (5) years, or both.
LEGAL NA	ME OF INVENTOR
Inventor:	NAOKI IDE Date: March 20, 20/8
Signature:	Vanhi Ide

# 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	BODY
As the below	named inventor, I hereby declare that:
This declarated is directed to	The attached application or
	United States application or PCT international application number PCT/JP2016/075478 filed on 2016/08/31
l	lentified 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
	DNAN, 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;
of which are legal represe in and to any any and all r Convention adheres, and United State	EFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and natatives, 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 riority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Relating 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 filing of applications for patents or securing of patents in the stand countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters if ASSIGNEE, as the assignee of the whole right, title and interest thereto;
designee, as remuneration	r 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 a, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of tates and countries foreign thereto;
application f	er agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for 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,	er agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will the same in any interference or litigation related thereto;
And I hereby this assignm	covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with ent and sale.
	nowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of in five (5) years, or both.
LEGAL NA	ME OF INVENTOR
Inventor:	KENTA KAWAMOTO  Date: 20/8/3/20
Signature:	Kenta Kawamoto

# 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	BODY
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This declaration is directed to:	The attached application, or
	United States application or PCT international application number PCT/JP2016/075478  filed on 2016/08/31
The above-ide	ntified application was made or authorized to be made by me.
WHEREAS,	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
	nterest 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;
of which are h legal represent in and to any a any and all pri Convention Re adheres, and to United States a	FORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and atives, 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 ority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American elating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America only other benefits accruing 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 assignee of the whole right, title and interest thereto;
designee, as a 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 tes and countries foreign thereto;
application for	agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for 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, sa	agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said id 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 of this assignment	covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with at and sale.
• .	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.
LEGAL NAM	E OF INVENTOR
Inventor:	TAKUYA FUJITA Date: 2018 / 3 / 20
Signature:	Takuya Finista

### 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 BODY  DRIVE ASSISTANCE DEVICE AND DRIVE ASSISTANCE METHOD, AND MOVING
As the below named inventor, I hereby declare that:
This declaration is directed to:
United States application or PCT international application number PCT/JP2016/075478  filed on 2016/08/31
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 . 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 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 (5) years, or both.
LEGAL NAME OF INVENTOR
Inventor: TAKASHI OGATA Date: 2018/3/20
Signature: Jokashi Ogata

PATENT REEL: 045708 FRAME: 0795

**RECORDED: 05/03/2018**