PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

on v1.1 EPAS ID: PAT5026377

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HIROAKI YOKOTA	06/19/2018
SHIGEYA KUWAO	06/19/2018
MIHO YAMADA	06/20/2018
KIRIO MASUI	06/20/2018

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:	29641185

CORRESPONDENCE DATA

Fax Number:

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: 202-747-9560

Email: dcipdocket@michaelbest.com, mtanaka@michaelbest.com

Correspondent Name: MICHAEL BEST & FRIEDRICH LLP (DC)

Address Line 1: 100 E WISC. AVE., SUITE 3300
Address Line 4: MILWAUKEE, WISCONSIN 53202

ATTORNEY DOCKET NUMBER: 880201-3149-US01	
NAME OF SUBMITTER: BRIAN K. DUTTON	
SIGNATURE: /Brian K. Dutton/	
DATE SIGNED:	06/27/2018
This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 6

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PATENT REEL: 046214 FRAME: 0445

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PATENT REEL: 046214 FRAME: 0446

DECLARATION AND ASSIGNMENT

TELEVISION RECEIVER

As a below named inventor, I hereby declare that:

This declaration is directed to:		
☐ the attached application, or		
☑ United States application or PCT 29/641,185 filed on March 20, 20	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.

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.

I have reviewed and understand the contents of the above-identified application, including the claims.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37. Code of Federal Regulations § 1.56.

WHEREAS, the below named inventor(s) have invented certain new and useful improvements described in the above-identified application,

AND WHEREAS, Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo 108-0075, Japan, a corporation of Japan (hereinafter referenced as ASSIGNEE), is desirous of acquiring all interest in, to and under the invention, the above-identified 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, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as a sole or joint inventor as indicated below, have assigned, sold and transferred, and do hereby assign, sell and transfer unto the ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in the invention and the above-identified 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 the invention, and in and to any 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 the 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 the 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.

This assignment executed on the date(s) indicated below.

Hiroaki YOKOTA Legal Name of Inventor

Josephi Johota Signature of Inventor

Date Jane 19, 2018

 \boxtimes Additional inventors are named on the supplemental sheet(s) attached hereto.

SUPPLEMENTAL SHEET(S) FOR DECLARATION AND ASSIGNMENT

Shigeya KUWAO	
Legal Name of Joint Inventor (if applicable)	
Thigeya Kuwao	
Signature of Inventor	Date June 19, 20/8
Miho YAMADA	
Legal Name of Joint Inventor (if applicable)	
Signature of Inventor	Date
g	****
Kirio MASUI	
Legal Name of Joint Inventor (if applicable)	
<u>Nirio Trasui</u>	W. K.
Signature of Inventor	Date June 20, 20/8

DECLARATION AND ASSIGNMENT

TELEVISION RECEIVER

As a below named inventor, I hereby declare that:

.1	his declaration is directed to:
C	I the attached application, or
Ø	United States application or PCT international application number
	29/641,185 filed on March 20, 2018.
T	he 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.

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.

I have reviewed and understand the contents of the above-identified application, including the claims.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56.

WHEREAS, the below named inventor(s) have invented certain new and useful improvements described in the above-identified application,

AND WHEREAS, Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo 108-0075, Japan, a corporation of Japan (hereinafter referenced as ASSIGNEE), is desirous of acquiring all interest in, to and under the invention, the above-identified 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, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as a sole or joint inventor as indicated below, have assigned, sold and transferred, and do hereby assign, sell and transfer unto the ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in the invention and the above-identified 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 the invention, and in and to any 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 the 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 the 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.

This assignment executed on the date(s) indicated below.

Hiroaki YOKOTA Legal Name of Inventor	
Signature of Inventor	Date
Additional inventors are named on t ■ Additional inventors	the supplemental sheet(s) attached hereto.

SUPPLEMENTAL SHEET(S) FOR DECLARATION AND ASSIGNMENT

Shigeya KUWAO Legal Name of Joint Inventor (if applicable)	
Signature of Inventor	Date
Miho YAMADA Legal Name of Joint Inventor (if applicable) Mho Josefa Signature of Inventor	Date Leve, 20, 20/8
Kirio MASUI Legal Name of Joint Inventor (if applicable)	
Signature of Inventor	Date