

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4138082

|                                                                                                                                                                                                 |                                                     |
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| <b>SUBMISSION TYPE:</b>                                                                                                                                                                         | NEW ASSIGNMENT                                      |
| <b>NATURE OF CONVEYANCE:</b>                                                                                                                                                                    | ASSIGNMENT                                          |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                     |                                                     |
| <b>Name</b>                                                                                                                                                                                     | <b>Execution Date</b>                               |
| YUJI SAKAI                                                                                                                                                                                      | 10/28/2016                                          |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                     |                                                     |
| <b>Name:</b>                                                                                                                                                                                    | SONY CORPORATION                                    |
| <b>Street Address:</b>                                                                                                                                                                          | 1-7-1 KONAN, MINATO-KU                              |
| <b>City:</b>                                                                                                                                                                                    | TOKYO                                               |
| <b>State/Country:</b>                                                                                                                                                                           | JAPAN                                               |
| <b>Postal Code:</b>                                                                                                                                                                             | 108-0075                                            |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                |                                                     |
| <b>Property Type</b>                                                                                                                                                                            | <b>Number</b>                                       |
| <b>Application Number:</b>                                                                                                                                                                      | 29584037                                            |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                      |                                                     |
| <b>Fax Number:</b>                                                                                                                                                                              |                                                     |
| <i>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.</i> |                                                     |
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| <b>Correspondent Name:</b>                                                                                                                                                                      | MICHAEL BEST & FRIEDRICH LLP (DC)                   |
| <b>Address Line 1:</b>                                                                                                                                                                          | 100 E WISCONSIN AVENUE                              |
| <b>Address Line 2:</b>                                                                                                                                                                          | SUITE 3300                                          |
| <b>Address Line 4:</b>                                                                                                                                                                          | MILWAUKEE, WISCONSIN 53202                          |
| <b>ATTORNEY DOCKET NUMBER:</b>                                                                                                                                                                  | 880201-3102-US00                                    |
| <b>NAME OF SUBMITTER:</b>                                                                                                                                                                       | BRIAN K. DUTTON                                     |
| <b>SIGNATURE:</b>                                                                                                                                                                               | /brian k. dutton/                                   |
| <b>DATE SIGNED:</b>                                                                                                                                                                             | 11/10/2016                                          |
| This document serves as an Oath/Declaration (37 CFR 1.63).                                                                                                                                      |                                                     |
| <b>Total Attachments: 2</b>                                                                                                                                                                     |                                                     |
| source=19938888_880201-3102-US00_Declaration_and_Assignment#page1.tif                                                                                                                           |                                                     |
| source=19938888_880201-3102-US00_Declaration_and_Assignment#page2.tif                                                                                                                           |                                                     |

## DECLARATION AND ASSIGNMENT

### ANTENNA

As a below named inventor, I hereby declare that:

This declaration is directed to:

- ☒ 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.

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.

Yuji SAKAI  
Legal Name of Inventor

*Yuji Sakai*  
Signature of Inventor

Date *October 28, 2016*

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