11/09/2017 504635892 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4682610

Name Execution Date YUJIN MORISAWA 06/20/2017 RECEIVING PARTY DATA 06/20/2017 RECEIVING PARTY DATA Name Vame: SONY MOBILE COMMUNICATIONS INC. Street Address: 4-12-3 HIGASHI-SHINAGAWA, SHINAGAWA-KU City: TOKYO State/Country: JAPAN Postal Code: 140-0002 PROPERTY NUMBERS Total: 1 Property Type Property Type Number Application Number: 29594445 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 using a fax number, if provided; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent using a fax number	SUBMISSION TYPE:	SUBMISSION TYPE:		NEW ASSIGNMENT				
Name Execution Date YUJIN MORISAWA 06/20/2017 RECEIVING PARTY DATA 06/20/2017 Receiving Party Data SONY MOBILE COMMUNICATIONS INC. Street Address: 4-12-3 HIGASHI-SHINAGAWA, SHINAGAWA-KU City: TOKYO State/Country: JAPAN Postal Code: 140-0002 PROPERTY NUMBERS Total: 1 Property Type Property Type Number Application Number: 29594445 CORRESPONDENCE DATA Fax Number: Correspondence will be sent to the e-mail address first; 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: MILWAKEE, WISCONSIN 53202	NATURE OF CONVEYANCE:		ļ.	ASSIGNMENT				
WUJIN MORISAWA 06/20/2017 RECEIVING PARTY DATA SONY MOBILE COMMUNICATIONS INC. Name: SONY MOBILE COMMUNICATIONS INC. Street Address: 4-12-3 HIGASHI-SHINAGAWA, SHINAGAWA-KU City: TOKYO State/Country: JAPAN Postal Code: 140-0002 PROPERTY NUMBERS Total: 1 Property Type Property Type Number Application Number: 29594445 CORRESPONDENCE DATA Fax Number: Correspondence will be sent to the e-mail address first; 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: MILWAKEE, WISCONSIN 53202	CONVEYING PARTY	DATA	•					
RECEIVING PARTY DATA Name: SONY MOBILE COMMUNICATIONS INC. Street Address: 4-12-3 HIGASHI-SHINAGAWA, SHINAGAWA-KU City: TOKYO State/Country: JAPAN Postal Code: 140-0002 PROPERTY NUMBERS Total: 1 Property Type Property Type Number Application Number: 29594445 CORRESPONDENCE DATA Fax Number: Correspondence will be sent to the e-mail address first; 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: MILWAKEE, WISCONSIN 53202			N	ame			Execution Dat	
Name: SONY MOBILE COMMUNICATIONS INC. Street Address: 4-12-3 HIGASHI-SHINAGAWA, SHINAGAWA-KU City: TOKYO State/Country: JAPAN Postal Code: 140-0002 PROPERTY NUMBERS Total: 1 Property Type Property Type Number Application Number: 29594445 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: MILWAKEE, WISCONSIN 53202	YUJIN MORISAWA						06/20/2017	
Street Address: 4-12-3 HIGASHI-SHINAGAWA, SHINAGAWA-KU City: TOKYO State/Country: JAPAN Postal Code: 140-0002 PROPERTY NUMBERS Total: 1 Property Type Property Type Number Application Number: 29594445 CORRESPONDENCE DATA Fax Number: Correspondence will be sent to the e-mail address first; 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: MILWAKEE, WISCONSIN 53202	RECEIVING PARTY D	ΑΤΑ						
City: TOKYO State/Country: JAPAN Postal Code: 140-0002 PROPERTY NUMBERS Total: 1 Property Type Property Type Number Application Number: 29594445 CORRESPONDENCE DATA Fax Number: Correspondence will be sent to the e-mail address first; 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: MILWAKEE, WISCONSIN 53202	Name:	SONY	MOBILI	E COMMUNICATIONS INC.				
State/Country: JAPAN Postal Code: 140-0002 PROPERTY NUMBERS Total: 1 Property Type Property Type Number Application Number: 29594445 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: MILWAKEE, WISCONSIN 53202	Street Address:	4-12-3	HIGAS	HI-SHINAGAWA, SHINAGA	WA-K	U		
Postal Code: 140-0002 PROPERTY NUMBERS Total: 1 Property Type Property Type Number Application Number: 29594445 CORRESPONDENCE DATA Fax Number: Correspondence will be sent to the e-mail address first; 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: MILWAKEE, WISCONSIN 53202	City:	ΤΟΚΥΟ	C					
PROPERTY NUMBERS Total: 1 Property Type Number Application Number: 29594445 CORRESPONDENCE DATA Fax Number: Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail. Correspondence will be sent to the e-mail address first; 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: MILWAKEE, WISCONSIN 53202	State/Country:	JAPAN	1					
Property Type Number Application Number: 29594445 CORRESPONDENCE DATA	Postal Code:	140-00	02					
Property Type Number Application Number: 29594445 CORRESPONDENCE DATA								
Application Number: 29594445 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: MILWAKEE, WISCONSIN 53202	PROPERTY NUMBER	IS Total: 1						
CORRESPONDENCE DATA Fax Number: Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail. Correspondence will be sent to the e-mail address first; 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: MILWAKEE, WISCONSIN 53202	Dueneutry True	_		Numerow				
Fax Number:Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent varing a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.Phone:202-747-9560Email:dcipdocket@michaelbest.com, mtanaka@michaelbest.comCorrespondent Name:MICHAEL BEST & FRIEDRICH LLP (DC)Address Line 1:100 E WISC. AVE., SUITE 3300Address Line 4:MILWAKEE, WISCONSIN 53202		e	00504					
Fax Number:Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent varing a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.Phone:202-747-9560Email:dcipdocket@michaelbest.com, mtanaka@michaelbest.comCorrespondent Name:MICHAEL BEST & FRIEDRICH LLP (DC)Address Line 1:100 E WISC. AVE., SUITE 3300Address Line 4:MILWAKEE, WISCONSIN 53202	Property Typ Application Number:	e	295944					
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: MILWAKEE, WISCONSIN 53202	Application Number:		295944					
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: MILWAKEE, WISCONSIN 53202	Application Number:		295944					
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: MILWAKEE, WISCONSIN 53202	Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will</i>	DATA be sent to	o the e-	45 mail address first; if that is				
Correspondent Name:MICHAEL BEST & FRIEDRICH LLP (DC)Address Line 1:100 E WISC. AVE., SUITE 3300Address Line 4:MILWAKEE, WISCONSIN 53202	Application Number: CORRESPONDENCE Fax Number: Correspondence will using a fax number,	DATA be sent to	o the e- d; if tha	45 mail address first; if that is t is unsuccessful, it will be				
Address Line 1:100 E WISC. AVE., SUITE 3300Address Line 4:MILWAKEE, WISCONSIN 53202	Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will</i> <i>using a fax number, i</i> Phone:	DATA be sent to if provideo	o the e- d; if tha 202-74	45 mail address first; if that is t is unsuccessful, it will be 7-9560	e sent	via US I	Mail.	
Address Line 4: MILWAKEE, WISCONSIN 53202	Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will</i> <i>using a fax number, i</i> Phone: Email:	DATA be sent to if provideo	o the e- d; if tha 202-74 dcipdoo	145 <i>mail address first; if that is</i> <i>t is unsuccessful, it will be</i> 7-9560 cket@michaelbest.com, mta	e <i>sent</i> Inaka@	via US I Pmichae	Mail.	
	Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will</i> <i>using a fax number, i</i> Phone: Email:	DATA be sent to if provideo	o the e- d; if tha 202-74 dcipdoo MICHA	145 <i>mail address first; if that is</i> <i>t is unsuccessful, it will be</i> 7-9560 cket@michaelbest.com, mta EL BEST & FRIEDRICH LL	e <i>sent</i> Inaka@	via US I Pmichae	Mail.	
TTORNEY DOCKET NUMBER: 880701-1004-US01	Application Number: CORRESPONDENCE Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name	DATA be sent to if provideo	o the e- d; if tha 202-74 dcipdod MICHA 100 E \	145 <i>mail address first; if that is</i> <i>t is unsuccessful, it will be</i> 7-9560 cket@michaelbest.com, mta .EL BEST & FRIEDRICH LL WISC. AVE., SUITE 3300	e <i>sent</i> Inaka@	via US I Pmichae	Mail.	
	Application Number: CORRESPONDENCE Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 4:	DATA be sent to if provideo	o the e- d; if tha 202-74 dcipdoo MICHA 100 E \ MILWA	M45 mail address first; if that is t is unsuccessful, it will be 7-9560 cket@michaelbest.com, mta EL BEST & FRIEDRICH LL NISC. AVE., SUITE 3300 KEE, WISCONSIN 53202	e sent Inaka@	via US I Pmichae	Mail.	
AME OF SUBMITTER: BRIAN K. DUTTON	Application Number: CORRESPONDENCE Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 4:	DATA be sent to if provided e: NUMBER:	o the e- d; if tha 202-74 dcipdoo MICHA 100 E \ MILWA	mail address first; if that is t is unsuccessful, it will be 7-9560 cket@michaelbest.com, mta EL BEST & FRIEDRICH LL WISC. AVE., SUITE 3300 KEE, WISCONSIN 53202	e sent Inaka@	via US I Pmichae	Mail.	
	Application Number: CORRESPONDENCE Fax Number: Correspondence will using a fax number, in Phone: Email: Correspondent Name Address Line 1: Address Line 4:	DATA be sent to if provided e: NUMBER:	o the e- d; if tha 202-74 dcipdod MICHA 100 E \ MILWA	mail address first; if that is t is unsuccessful, it will be 7-9560 cket@michaelbest.com, mta EL BEST & FRIEDRICH LL NISC. AVE., SUITE 3300 KEE, WISCONSIN 53202 880701-1004-US01 BRIAN K. DUTTON	e sent Inaka@	via US I Pmichae	Mail.	
IGNATURE: /Brian K. Dutton/	Application Number: CORRESPONDENCE Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER	DATA be sent to if provided e: NUMBER:	o the e- d; if tha 202-74 dcipdod MICHA 100 E \ MILWA 8 E E /	mail address first; if that is t is unsuccessful, it will be 7-9560 cket@michaelbest.com, mta EL BEST & FRIEDRICH LL NISC. AVE., SUITE 3300 KEE, WISCONSIN 53202 380701-1004-US01 3RIAN K. DUTTON Brian K. Dutton/	e sent Inaka@	via US I Pmichae	Mail.	
TTORNEY DOCKET NUMBER: 880701-1004-US01	Application Number: CORRESPONDENCE Fax Number: Correspondence will	DATA be sent to	o the e-	45 mail address first; if that is				
	Application Number: CORRESPONDENCE Fax Number: Correspondence will using a fax number, in Phone: Email: Correspondent Name Address Line 1: Address Line 4:	DATA be sent to if provided e: NUMBER:	o the e- d; if tha 202-74 dcipdoo MICHA 100 E \ MILWA	mail address first; if that is t is unsuccessful, it will be 7-9560 cket@michaelbest.com, mta EL BEST & FRIEDRICH LL WISC. AVE., SUITE 3300 KEE, WISCONSIN 53202	e sent Inaka@	via US I Pmichae	Mail.	
	Application Number: CORRESPONDENCE Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER	DATA be sent to if provided e: NUMBER:	o the e- d; if tha 202-74 dcipdod MICHA 100 E \ MILWA	mail address first; if that is t is unsuccessful, it will be 7-9560 cket@michaelbest.com, mta EL BEST & FRIEDRICH LL NISC. AVE., SUITE 3300 KEE, WISCONSIN 53202 880701-1004-US01 BRIAN K. DUTTON	e sent Inaka@	via US I Pmichae	Mail.	
IGNATURE: /Brian K. Dutton/	Application Number: CORRESPONDENCE Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER SIGNATURE:	DATA be sent to if provided e: NUMBER:	o the e- d; if tha 202-74 dcipdod MICHA 100 E \ MILWA 8 E E /	mail address first; if that is t is unsuccessful, it will be 7-9560 cket@michaelbest.com, mta EL BEST & FRIEDRICH LL NISC. AVE., SUITE 3300 KEE, WISCONSIN 53202 380701-1004-US01 3RIAN K. DUTTON Brian K. Dutton/	e sent Inaka@	via US I Pmichae	Mail.	
IGNATURE: /Brian K. Dutton/	Application Number: CORRESPONDENCE Fax Number: Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER SIGNATURE:	DATA be sent to if provided e: NUMBER:	o the e- d; if tha 202-74 dcipdod MICHA 100 E \ MILWA 8 E 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	mail address first; if that is t is unsuccessful, it will be 7-9560 cket@michaelbest.com, mta EL BEST & FRIEDRICH LL NISC. AVE., SUITE 3300 KEE, WISCONSIN 53202 880701-1004-US01 BRIAN K. DUTTON Brian K. Dutton/ 1/09/2017	e sent	via US I Pmichae	<i>Mail.</i> best.com	

source=22161537_880701-1004-US01_Declaration_and_Assignment#page2.tif

Client Reference No.: DJ16 0004US1 Attorney Docket No: 880701-1004-US01

DECLARATION AND ASSIGNMENT

ROBOT

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 29/594,445, filed on February 17, 2017.

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 Mobile Communications Inc., 4-12-3 Higashi-Shinagawa, Shinagawa-ku, Tokyo 140-0002, 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

> PATENT REEL: 044085 FRAME: 0255

ĩ

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 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 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.

Yujin MORISAWA Legal Name of Inventor

Signature of Inventor

Date	2017	06/20	

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

RECORDED: 11/09/2017