PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BRIAN ALEXANDER MARTIN	09/11/2018
YUXIN WEI	09/25/2018
HIDEJI WAKABAYASHI	09/25/2018
SHINICHIRO TSUDA	09/26/2018
CHRYSOVALANTIS KOSTA	01/24/2019

RECEIVING PARTY DATA

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City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	108-0075	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16303146

CORRESPONDENCE DATA

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NAME OF SUBMITTER:	CHRISTINE GRIMES
SIGNATURE:	/christine grimes/
DATE SIGNED:	01/31/2019

Total Attachments: 6

PATENT REEL: 048203 FRAME: 0429

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PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT	
ASSIGNOR(S): (Insert Inventor(s) name, or	city/state, country of residence)
MARTIN, Brian Alexander Basingstol	ke (GB)
TSUDA, Shinichiro Basingstoke (GB)
WEI, Yuxin Basingstoke (GB)	G-SECOND CONTRACTOR CO
KOSTA, Chrysovalantis Basingstok	e (GB)
WAKABAYASHI, Hideji Basingstok	te (GB)
ASSIGNEE: (Insert Company or Assignee I	Name and Address)
Sony Corporation 1-7-1 Konan, Minato-ku	monoral diseases of
Tokyo 108-0075 Japan	tentian des l'Americanists
Tokyo Too-oo7a dapan	y
• • • • • • • • • • • • • • • • • • • •	above, are inventor(s) of an invention entitled: TIONS APPARATUS AND METHODS
Application No, fi	led
with Customer No. 154930, the power to	es and requests ASSIGNEE'S legal representatives, of Xsensus, LLP, associated insert on this assignment any further identification, including the application cessary or desirable in order to comply with the rules of the United States Patent this document.
WHEREAS, Sony Corporand interest in and to the Invention and in in any and all foreign countries;	(ASSIGNEE), is desirous of acquiring the entire right, title and to any letters patent that may be granted therefor in the United States and
acknowledged, ASSIGNOR(S) hereby se right, title and interest in and to said Inve patent which may be granted for said Inv and all foreign countries, and in any and	age for good and valuable consideration, the receipt of which is hereby all, assign and transfer unto ASSIGNEE its successors and assigns, the entire nation and any improvements thereto, said Application and any and all letters ention in the United States of America and its territorial possessions and in any all provisional, divisions, reissues, re-examinations and continuations thereof, ions directly in the name of ASSIGNEE and to claim priority rights deriving

and prosecution of applications for United States and foreign letters patent on said Invention, for litigation regarding said letters patent, or for the purpose of protecting title to said Invention or letters patent therefor.

AND ASSIGNOR(S) DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said letters patent before or after issuance,

AND ASSIGNOR(S) DOES HEREBY covenant and agree that ASSIGNOR(S) will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Invention or said application, and testify in any legal proceeding, assist in the preparation of any other patent document relating to the application and the Invention or any improvements made thereto, sign/execute all lawful papers, provide all requested documents, execute and make all rightful oaths and/or declarations in connection, with the application and the Invention including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Invention in the United States, its territories, and all foreign countries. These provisions are binding upon our heirs, legal representatives, administrators, and assigns.

Hidr Wahrhyan	Date 23/Septenber/2018
(Signature of Inventor) (人) こうしょう (人)	Date: 25/09/2018
(Signature of Inventor)	Date
Charle of Inventor)	Date: 24/01/2019
	Date:
(Signature of Inventor)	
(Signature of Inventor)	Date:
(Signature of Inventor)	Date:

PATENT ASSIGNMENT

PARTIES TO THE ASS	IGNMENT	
ASSIGNOR(S): (Insert Inv	entor(s) name, city/state, co	ountry of residence)
MARTIN, Brian Alexand	ler Basingstoke (GB)	
TSUDA, Shinichiro Ba	asingstoke (GB)	
WEI, Yuxin Basingsto	ike (GB)	
KOSTA, Chrysovalanti	s Basingstoke (GB)	
WAKABAYASHI, Hide	ji Basingstoke (GB)	
ASSIGNEE: (Insert Compa	ny or Assignee Name and /	Address)
Sony Corporation		
1-7-1 Konan, Minato-l	ku	
Tokyo 108-0075 Japa	in	
AGREEMENT		
Whereas, ASSIG	NOR(S) listed above, are	inventor(s) of an invention entitled:
		APPARATUS AND METHODS
Application No.		
with Customer No. 154930), the power to insert on the may be necessary or	nests ASSIGNEE'S legal representatives, of Xsensus, LLP, associated this assignment any further identification, including the application desirable in order to comply with the rules of the United States Patent nent.
WHEREAS, So and interest in and to the It in any and all foreign coun	ivention and in and to an	(ASSIGNEE), is desirous of acquiring the entire right, title by letters patent that may be granted therefor in the United States and
acknowledged, ASSIGNO. right, title and interest in at patent which may be grant and all foreign countries, a including the right to file from said application to who therwise, said invention, its successors and assigns it would have been held and ASSIGNOR(S) hereby auti	R(S) hereby sell, assign and to said Invention and a ed for said Invention in the ind in any and all provision oreign applications direct said foreign application and all letters for their use and benefit a enjoyed by ASSIGNOR (horize and request the Content of the interest of the interest and request the Content in the interest and request the Content in the interest and request the Content in the interest and int	and valuable consideration, the receipt of which is hereby and transfer unto ASSIGNEE its successors and assigns, the entire any improvements thereto, said Application and any and all letters he United States of America and its territorial possessions and in any onal, divisions, reissues, re-examinations and continuations thereof, tly in the name of ASSIGNEE and to claim priority rights deriving tions are entitled by virtue of international convention, treaty or a patent on said Invention to be held and enjoyed by ASSIGNEE and and of their successors and assigns as fully and entirely as the same (S) had this assignment, transfer and sale not been made, ommissioner of Patents and Trademarks to issue all letters patent on see to execute all instruments and documents required for the making a

and prosecution of applications for United States and foreign letters patent on said Invention, for litigation regarding said letters patent, or for the purpose of protecting title to said Invention or letters patent therefor.

AND ASSIGNOR(S) DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said letters patent before or after issuance,

AND ASSIGNOR(S) DOES HEREBY covenant and agree that ASSIGNOR(S) will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Invention or said application, and testify in any legal proceeding, assist in the preparation of any other patent document relating to the application and the Invention or any improvements made thereto, sign/execute all lawful papers, provide all requested documents, execute and make all rightful oaths and/or declarations in connection, with the application and the Invention including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Invention in the United States, its territories, and all foreign countries. These provisions are binding upon our heirs, legal representatives, administrators, and assigns.

(Signature of Inventor)	Date: 9/11/18
(Signature of Inventor)	Date:

PATENT ASSIGNMENT

PARTIES TO THE ASSI	<u>GNMENT</u>	
ASSIGNOR(S): (Insert Inve	ntor(s) name, city/state, count	y of residence)
MARTIN, Brian Alexande	er Basingstoke (GB)	
TSUDA, Shinichiro Ba	singstoke (GB)	
WEI, Yuxin Basingsto	(e (GB)	
KOSTA, Chrysovalantis	Basingstoke (GB)	
WAKABAYASHI, Hideji	Basingstoke (GB)	
ASSIGNEE: (Insert Compan	y or Assignee Name and Add	ess)
Sony Corporation		
1-7-1 Konan, Minato-k	u	
Tokyo 108-0075 Japar	<u> </u>	
AGREEMENT		
Whereas, ASSIGN	IOR(S) listed above, are in	rentor(s) of an invention entitled:
(title of invention) TELECO	MMUNICATIONS API	PARATUS AND METHODS,
Application No.		
ASSIGNOR(S) he with Customer No. 154930	reby authorizes and request , the power to insert on this ich may be necessary or des	s ASSIGNEE'S legal representatives, of Xsensus, LLP, associated assignment any further identification, including the application irable in order to comply with the rules of the United States Patent
WHEREAS, Son and interest in and to the In in any and all foreign count	vention and in and to any le	(ASSIGNEE), is desirous of acquiring the entire right, title tters patent that may be granted therefor in the United States and
acknowledged, ASSIGNOF right, title and interest in an patent which may be grante and all foreign countries, ar including the right to file forom said application to whotherwise, said invention, a its successors and assigns for would have been held and exassignor(S) hereby authors.	R(S) hereby sell, assign and did to said Invention and any and for said Invention in the land in any and all provisiona preign applications directly ich said foreign application pplication and all letters part their use and benefit and enjoyed by ASSIGNOR(S) norize and request the Communication and reques	and valuable consideration, the receipt of which is hereby transfer unto ASSIGNEE its successors and assigns, the entire improvements thereto, said Application and any and all letters United States of America and its territorial possessions and in any, divisions, reissues, re-examinations and continuations thereof, in the name of ASSIGNEE and to claim priority rights deriving are entitled by virtue of international convention, treaty or tent on said Invention to be held and enjoyed by ASSIGNEE and of their successors and assigns as fully and entirely as the same and this assignment, transfer and sale not been made, missioner of Patents and Trademarks to issue all letters patent on the execute all instruments and documents required for the making a

and prosecution of applications for United States and foreign letters patent on said Invention, for litigation regarding said letters patent, or for the purpose of protecting title to said Invention or letters patent therefor.

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(Signature of Inventor)	Date: 5eg. 26 2018
(Signature of Inventor)	Date:
(Signature of Inventor)	Date: