503556448 11/05/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3603075

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XIAODONG XU	09/01/2015
CUIBO YU	09/01/2015
YATENG HONG	09/01/2015
YA LIU	09/01/2015
CONG ZHENG	09/01/2015
LIYAO WEI	09/01/2015
XIAOJIA SONG	09/01/2015
ZHONGBIN QIN	10/12/2015

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:	14889252

CORRESPONDENCE DATA

Fax Number: (703)413-2220

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: (703) 413-3000
Email: cgorham@oblon.com
Correspondent Name: OBLON, SPIVAK, ET AL.
Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	462180US8X PCT
NAME OF SUBMITTER:	CARLA M GORHAM
SIGNATURE:	/Carla M Gorham/

PATENT 503556448 REEL: 036969 FRAME: 0585

DATE SIGNED:	11/05/2015
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 8	
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ritle of nvention Price and method in wireless communication system	
As the below named inventor, I hereby declare that:	
his declaration The attached application, or	
s directed to: United States application or PCT international application number PCT/CN2014/078950 filed on 05/30/2014	
he above-identified application was made or authorized to be made by me.	
believe that I am the original inventor or an original joint inventor of a claimed invention in the application.	
VHEREAS, Sony Corporation	
hereinafter referred to as "ASSIGNEES") having places of business at: 1-7-1, Konan, Minato-ku, Tokyo, Japan 08-0075, respectively are desirous of jointly acquiring interests in the entire right, title and interest in and to sain exention and in and to any Letters Patent that may be granted therefore in the United States and its territorial ossessions and in any and all foreign countries;	
NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby cknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto aid ASSIGNEES, the full and exclusive right to the said invention in the United States and its territorial possession and in all foreign countries (including the right to claim priority under the terms of the International Convention and there relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and terrest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations abstitutions and renewals thereof.	
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEES as the assignees of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEES, their successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.	
Further, I agree that I will communicate to said ASSIGNEES or their representatives any facts known to me specting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional entinuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and of said Letters Patent to be issued to said ASSIGNEES, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEES, their successors and assigns, to obtain and enforce proper protection for said evention in the United States and its territorial possessions and in any and all foreign countries.	
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 in fine or imprisonment of not more than five (5) years, or both.	
EGAL NAME OF INVENTOR	
ventor: Xiaodong XU Date: 2015. 09 0/	
gnature: Xinv dong Xu	

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

Title of Invention Device and method in communication system wireless	
As the below named inventor, I hereby declare that:	
This declaration The attached application, or	
is directed to: United States application or PCT international application number PCT/CN2014/078950 filed on 05/30/2014	
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	
(hereinafter referred to as "ASSIGNEES") having places of business at: 1-7-1, Konan, Minato-ku, Tokyo, Japan 108-0075, respectively are desirous of jointly acquiring interests in the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;	
NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEES, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.	
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEES as the assignees of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEES, their successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.	
Further, I agree that I will communicate to said ASSIGNEES or their representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEES, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEES, their successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.	
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: Cuibo YU Date: 2015.09.0	
Signature: Cuibo YU	

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

Title of Invention	Device and method in wiveless communication system
As the below named	inventor, I hereby declare that:
This declaration	The attached application, or
is directed to:	United States application or PCT international application number PCT/CN2014/078950 filed on 05/30/2014
The above-identified	application was made or authorized to be made by me.
I believe that I am th	e original inventor or an original joint inventor of a claimed invention in the application.
WHEREAS, Sony	Corporation
(hereinafter referred to as "ASSIGNEES") having places of business at: 1-7-1, Konan, Minato-ku, Tokyo, Japan 108-0075, respectively are desirous of jointly acquiring interests in the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;	
acknowledged, and is said ASSIGNEES, the and in all foreign counter relevant Interninterest in and to an	ORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby for other good and valuable consideration, I, by these presents do sell, assign and transfer unto me full and exclusive right to the said invention in the United States and its territorial possessions untries (including the right to claim priority under the terms of the International Convention and ational Treaties and Arrangements from the aforesaid application) and the entire right, title and may and all Letters Patent which may be granted therefor in the United States and its territorial any and all foreign countries and in and to any and all divisions, reissues, continuations, ewals thereof.
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEES as the assignees of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEES, their successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.	
Further, I agree that I will communicate to said ASSIGNEES or their representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEES, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEES, their successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.	
	edge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 tent of not more than five (5) years, or both.
LEGAL NAME OF	INVENTOR
Inventor: Yateng H	IONG Date: Jols. og. of
Signature: Yateng	'

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

Title of Invention	Device and method in wirdess communication system
As the below named	inventor, I hereby declare that:
This declaration	The attached application, or
is directed to:	United States application or PCT international application number PCT/CN2014/078950 filed on 05/30/2014
The above-identified	application was made or authorized to be made by me.
I believe that I am th	e original inventor or an original joint inventor of a claimed invention in the application.
WHEREAS, Sony	Corporation
108-0075, respective invention and in an	to as "ASSIGNEES") having places of business at: 1-7-1, Konan, Minato-ku, Tokyo, Japan ely are desirous of jointly acquiring interests in the entire right, title and interest in and to said d to any Letters Patent that may be granted therefore in the United States and its territorial my and all foreign countries;
acknowledged, and is said ASSIGNEES, if and in all foreign co- other relevant Intern- interest in and to an	ORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby for other good and valuable consideration, I, by these presents do sell, assign and transfer unto be full and exclusive right to the said invention in the United States and its territorial possessions untries (including the right to claim priority under the terms of the International Convention and ational Treaties and Arrangements from the aforesaid application) and the entire right, title and by and all Letters Patent which may be granted therefor in the United States and its territorial any and all foreign countries and in and to any and all divisions, reissues, continuations, ewals thereof.
any and all foreign of assignees of my ent their successors and	e and request the Patent Office Officials in the United States and its territorial possessions and countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEES as the ire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEES, assigns, to the full end of the term for which said Letters Patent may be granted, as fully and would have been held by me had this Assignment and sale not been made.
respecting said invector continuation, substituted all of said Letters P possible to aid said	that I will communicate to said ASSIGNEES or their representatives any facts known to me ention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, ute, renewal and reissue applications, execute all necessary assignment papers to cause any and atent to be issued to said ASSIGNEES, make all rightful oaths, and, generally do everything ASSIGNEES, their successors and assigns, to obtain and enforce proper protection for said and States and its territorial possessions and in any and all foreign countries.
	edge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 tent of not more than five (5) years, or both.
LEGAL NAME OF	
Inventor: Ya LIU	Date: 78/5.0/
Signature:	

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

Invention Device and method in wireless communication system
As the below named inventor, I hereby declare that:
This declaration The attached application, or
is directed to: United States application or PCT international application number PCT/CN2014/078950 filed on 05/30/2014
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
(hereinafter referred to as "ASSIGNEES") having places of business at: 1-7-1, Konan, Minato-ku, Tokyo, Japan 108-0075, respectively are desirous of jointly acquiring interests in the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;
NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEES, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.
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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: Cong ZHENG Date: 245. 01
Signature: Coney 24706

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW

1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

Title of Invention Device and method in mireless communication system
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LEGAL NAME OF INVENTOR
Inventor: Liyao WEI Date: 2015.09.0/
Signature: Lygno UEI

 ${\bf OBLON, SPIVAK, McCLELLAND, MAIER \&\ NEUSTADT, L.L.P.}$

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

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LEGAL NAME OF INVENTOR
Inventor: Xiaojia SONG Date: 705 09 0
Signature: Xiaojia Song

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET

ALEXANDRIA, VIRGINIA 22314

Invention Device and met	hod in mireless communication system	
As the below named inventor, I hereby declare that:		
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is directed to:	ation or PCT international application number PCT/CN2014/078950	
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.		
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108-0075, respectively are desirous of je	") having places of business at: <u>1-7-1. Konan, Minato-ku, Tokyo, Japan</u> pintly acquiring interests in the entire right, title and interest in and to said ent that may be granted therefore in the United States and its territorial entries;	
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I hereby acknowledge that any willful by fine or imprisonment of not more than	false statement made in this declaration is punishable under 18 U.S.C. 1001 five (5) years, or both.	
LEGAL NAME OF INVENTOR	121	
Inventor: Zhongbin QIN	Date: 12th . Oct , 2015	
Signature: Zhongo'm O	·γγ	

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

PATENT REEL: 036969 FRAME: 0594

RECORDED: 11/05/2015

Title of