502315238 04/18/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YOSHIKO SAITO	12/27/2012
AYAKO HORIUCHI	12/27/2012
SEIGO NAKAO	12/27/2012
AKIHIKO NISHIO	12/28/2012
DAICHI IMAMURA	12/27/2012
ALEXANDER GOLITSCHEK EDLER VON ELBWART	01/07/2013
SUJUAN FENG	01/07/2013

RECEIVING PARTY DATA

Name:	Panasonic Corporation	
Street Address:	1006 Oaza Kadoma, Kadoma-shi	
City:	Osaka	
State/Country:	JAPAN	
Postal Code:	571-8501	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13811031

CORRESPONDENCE DATA

502315238

Fax Number: 2029120774

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 2029123800

Email: ppc@us.panasonic.com Correspondent Name: Panasonic Patent Center

Address Line 1: 1130 Connecticut Ave., N.W., Suite 1100 Washington, DISTRICT OF COLUMBIA 20036 Address Line 4:

NAME OF SUBMITTER:	Kazuko NAKAGAWA
	PATENT

PATENT REEL: 030238 FRAME: 0803

Signature:	/Kazuko NAKAGAWA/
Date:	04/18/2013
Total Attachments: 4 source=Assignment 13811031(P609889-02 source=Assignment 13811031(P609889-02 source=Assignment 13811031(P609889-02 source=Assignment 13811031(P609889-02	Pearn)#page2.tif Pearn)#page3.tif

PATENT REEL: 030238 FRAME: 0804

As	sigr	ment	Form	3.0	(Oct.	2008)
	`	10		n	١.	1

Panasonic Ref*:	P609889-02	Application Serial No.	<u> 13/8/103/</u>
Japan Firm Name:	WASHIDA & ASSOCIATES	Japan Firm Ref:	2F11114-US-P
US Firm Name*:	PG	US Firm Ref:	

ASSIGNMENT

WHEREAS, the undersigned has (have) invented the invention entitled:

The state of the s				
Box 1				
Title of Invention:				
BASE STATION DEVICE, TERMINAL DEVICE, TRANSMISSION MET	HOD, AND RECEPTION M	ETHOD		
	,			
1. For use when signing Declaration prior to filing U	l.S. patent application (check only one	box below)		
(a)□ for which an application for U.S. patent has been executed by the undersigned concurrently herewith, or				
(b) or which an application for U.S. patent has been executed on the following date(s):, or ### OF Christian & Assignment as signed unifer a support of the support				
(c) for which an International Application has been filed as: ரீசர்சு PCFUS மன்ன வரு க்கல் ஸ்டு வர்கள் PCT வுக்கள்ளாளிகாள் சார்திரி	PCT Application No.	PCT/JP2011/003899 and,		
2. For use when signing Declaration after filing U.S. patent application				
(d)□ for which an application for U.S. patent has been filed on:	Application Filing Date	and,		

WHEREAS, PANASONIC CORPORATION of 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501 Japan, its/their heirs, successors, legal representatives and assigns (hereinafter designated as "Assignee(s)") is/are desirous of acquiring the entire right, title, and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and intended to be legally bound hereby, the undersigned, by these presents, does sell, assign and transfer unto said Assignee(s) the entire and exclusive right, title and interest in and to; (i) said invention in the United States of America, its territories, dependencies and possessions (hereinafter designated as the United States) and in all countries foreign to the United States; and (ii) this patent application and any and all related patent application(s) disclosing said invention, including provisionals, non-provisionals, conversions, divisions, continuations, continuations-in-part and relasues thereof in the United States and all countries foreign to the United States (hereinafter designated as "Related Applications"), along with all rights of priority created by this patent application under any treaty relating thereto; and (iii) any and all Letters Patent(s), including all renewals, extensions, reissues and reexamination certificates which may be granted therefore, and all rights to sue for past and future infringement thereunder, in the United States and in all countries foreign to the United States for the full term or terms thereof.

The undersigned agree(s) to execute all papers necessary in connection with this application and any and all Related Applications thereof, all papers and documents and perform any act which may be necessary in connection with dairns or provisions of the International Convention for Protection of Industrial Property or similar agreements, all papers necessary in connection with any interference which may be declared concerning this application or any and all Related Applications thereof and to cooperate with the Assignee(s) in every way possible in obtaining and producing evidence and proceeding with such interference, and for any and all litigations regarding, or for the purpose of protecting the right, title and interest in and to said invention, this application and any and all Related Applications or Letters Patent(s) therefore, and to testify in any legal proceeding relating thereto and in support thereof, for the benefit of Assignee(s), and also to execute separate assignments in connection with such applications as the Assignee(s) may deem necessary or expedient.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States and any foreign patent(s) to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by the undersigned if this Assignment had not been made.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents, and officials of all foreign countries, whose duty is to issue patents, to issue any and all Letters Patent(s) resulting from said application or any and all Related Applications thereof to said Assignee(s) and hereby covenants that the undersigned has (have) full right to convey the entire interest herein assigned, and that the undersigned has (have) not executed, and will not execute, any assignment, sale, agreement or encumbrances in conflict herewith.

The undersigned hereby does sell, assign and transfer unto said Assignee(s) the full and exclusive authority for revoking power of attorney(s) executed by the undersigned in connection with this application and for appointing a new power of attorney in place thereof.

The undersigned hereby grant(s) the Assignee(s) and the appointed U.S. patent attorneys and agents the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent Office for recordation of this document.

The undersigned hereby agree(s) that the above obligations shall apply to the undersigned both individually and collectively.

The undersigned hereby agree(s) that this Assignment shall be construed in accordance with the law of the appropriate jurisdiction within the United States. IN WITNESS WHEREOF, executed by the undersigned on the date(s) following the undersigned name(s) and signature(s).

Box2	(Each Inventor, please Sign and Date below)		
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(1)	Yoshiko SAITO	Yoshiko Saits	Month, Date, Year Dec. 21. 2012
(2)	Ayako HÖRIÜCHI	agako Hornichi	Month, Date, Year Dec. 27, 2012
(3)	Seigo NAKAO	Leizo Muhao	Month, Date, Year Dec 27, 2012
(4)	Akihiko NISHIO	Alihiko Vishio	Month, Detc, Yeer (Dec 28, Z.0(2

MCheck if additional paper(s) is/are attached. Total of __2_ pages are submitted.

ASSIGNMENT (Cont.)

Additional Inventors: \(\begin{align*} \lambda \lambda \lambda \end{align*} \]

Box2	(Continued)		7 7 0 7 7
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(5)	Daichi IMAMURA	Daidh Imama	Month, Date, Year Dec 27.20/2
(6)	Alexander GOLITSCHEK EDLER VON ELBWART	<i></i>	Month, Cate, Year
(7)	Sujuan FENG		Month, Date, Year
(8)			Month, Date, Year
(9)			Month, Data, Year
(10)			Month, Date, Year
(11)			Month, Dafe, Year
(12)			Month, Date, Year
(13)			Month, Date, Year
(14)			Month, Date, Year
(15)			Month, Date, Year
(16)			Month, Date, Year
(17)			Month, Date, Year
(18)			Morth, Date, Year
(19)			Morth, Cato, Year
(20)			Month, Date, Year
			Month, Date, Year
(21)			Month, Date, Year
(22)			

Assignment Form 3.0 (Oct. 2008)

Panasonic Ref*:	P609889-02	Application Serial No.	<u> 13/81/03 </u>
Japan Firm Name: ,	WASHIDA & ASSOCIATES	Japan Firm Ref:	2F11114-US-P
US Firm Name*:	PG	US Firm Ref:	

ASSIGNMENT

WHEREAS, the undersigned has (have) invented the invention entitled:

IETHOD, AND RECEPTION METH	QD
•	
ing U.S. patent application (check only one box b	elow)
e undersigned concurrently herewith,	or
following date(s):	. or
PCT Application No.	PCT/JP2011/003899 and,
ration atterning U.S. patent application	
Application Filing Date	and.
r opiocaci i mig bate	and,
	IETHOD, AND RECEPTION METH ing U.S. patent application (check only one box be a undersigned concurrently herewith, a following date(s): packlefore this Assignment order the date(s) and thich you signed. PCT Application No. ration after filling U.S. patent application Application Filling Date

WHEREAS, PANASONIC CORPORATION of 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501 Japan, its/their heirs, successors, legal representatives and assigns (hereinafter designated as "Assignee(s)") is/are desirous of acquiring the entire right, title, and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and intended to be legally bound hereby, the undersigned, by these presents, does sell, assign and transfer unto said Assignee(s) the entire and exclusive right, title and interest in and to; (i) said invention in the United States of America, its territories, dependencies and possessions (hereinafter designated as the United States) and in all countries foreign to the United States; and (ii) this patent application and any and all related patent application(s) disclosing said Invention, including provisionals, non-provisionals, conversions, divisions, continuations, continuations-in-part and reissues thereof in the United States and all countries foreign to the United States (hereinafter designated as "Related Applications"), along with all rights of priority created by this patent application under any treaty relating thereto; and (iii) any and all Letters Patent(s), including all renewals, extensions, reissues and reexamination certificates which may be granted therefore, and all rights to sue for past and future infringement thereunder, in the United States and in all countries foreign to the United States for the full term or terms thereof.

The undersigned agree(s) to execute all papers necessary in connection with this application and any and all Related Applications thereof, all papers and documents and perform any act which may be necessary in connection with dairns or provisions of the International Convention for Protection of Industrial Property or similar agreements, all papers necessary in connection with any interference which may be declared concerning this application or any and all Related Applications thereof and to cooperate with the Assignee(s) in every way possible in obtaining and producing evidence and proceeding with such interference, and for any and all litigations regarding, or for the purpose of protecting the right, title and interest in and to said invention, this application and any and all Related Applications or Letters Patent(s) therefore, and to testify in any legal proceeding relating thereto and in support thereof, for the benefit of Assignee(s), and also to execute separate assignments in connection with such applications as the Assignee(s) may deem necessary or expedient.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States and any foreign patent(s) to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by the undersigned if this Assignment had not been made

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents, and officials of all foreign countries, whose duty is to issue patents, to issue any and all Letters Patent(s) resulting from said application or any and all Related Applications thereof to said Assignee(s) and hereby covenants that the undersigned has (have) full right to convey the entire interest herein assigned, and that the undersigned has (have) not executed, and will not execute, any assignment, sale, agreement or encumbrances in conflict herewith.

The undersigned hereby does self, assign and transfer unto said Assignee(s) the full and exclusive authority for revoking power of attorney(s) executed by the undersigned in connection with this application and for appointing a new power of attorney in place thereof.

The undersigned hereby grant(s) the Assignee(s) and the appointed U.S. patent attorneys and agents the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent Office for recordation of this document.

The undersigned hereby agree(s) that the above obligations shall apply to the undersigned both individually and collectively.

The undersigned hereby agree(s) that this Assignment shall be construed in accordance with the law of the appropriate jurisdiction within the United States.

IN WITNESS WHEREOF, executed by the undersigned on the date(s) following the undersigned name(s) and signature(s).

ox2 (E	(Each Inventor, please Sign and Date below)			
	(e) First Name, Last Name	(f) Signature	(g) Date signed	
(1)	Yoshiko SAITO		Month, Deta, Year	
(2)	Ayako HORIUCHI		Month, Dale, Year	
(3)	Seigo NAKAO		Month, Date, Year	
(4)	Akihiko NISHIO		Month, Date, Year	

Check if additional paper(s) is/are attached. Total of 2 pages are submitted.

ASSIGNMENT (Cont.)

Additional Inventors:

(3/8//03/

Box2	(Continued)		
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(5)	Daichi IMAMURA		mong cas, ita
(6)	Alexander GOLITSCHEK EDLER VON ELBWART	Alexan SLOVE Elen Short Sujuam Fang	Month, Date, Year 7 Jan 2013 Month, Date, Year
(7)	Sujuan FENG	Sujuam Fang	0 7 /01/2013
(8)		U V	Month, Date, Year
(9)			Month, Dafe, Year
(10)			Month, Date, Year
(11)			Month, Data, Year
(12)			Month, Date, Year
(13)			Mordin, Dalle, Year
(14)			Montin, Date, Year
(15)	*******		Month, Date, Year
(16)			Month, Date, Year
(17)			Month, Date, Year
(18)			Month, Date, Year
(19)			Morth, Date, Year
(20)		<u></u>	Month, Date, Year
(21)		<u> </u>	Month, Cate, Year
(22)			Month, Date, Year