503497616 09/27/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3544241

		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY DA	ATA			
		Name	Execution Date	
AYAKO HORIUCHI			04/06/2015	
HIDETOSHI SUZUKI			02/24/2015	
KAZUKI TAKEDA			02/22/2015	
LILEI WANG			03/02/2015	
RECEIVING PARTY DAT	ТА			
Name:	PANAS	ONIC INTELLECTUAL PROPERTY COR	PORATION OF AMERICA	
Street Address:	20000 1	MARINER AVENUE		
Internal Address:	SUITE	200		
City:	TORRA	NCE		
State/Country:	CALIFO	CALIFORNIA		
Postal Code:	90503			
PROPERTY NUMBERS	Total: 1			
Property Type		Number		
Application Number:		14443980		
	ATA e sent to provideo	<i>the e-mail address first; if that is unsu</i> <i>if that is unsuccessful, it will be sent</i> kunou.yoshie@kk.jp.panasonic.com PANASONIC IP MANAGEMENT CO., LTI 7F OBP PANASONIC TOWER 1-61, SHIROMI 2-CHOME, CHUO-KU OSAKA, JAPAN 540-6207	via US Mail.	
CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	ATA e sent to provideo	<i>the e-mail address first; if that is unsu</i> <i>; if that is unsuccessful, it will be sent</i> kunou.yoshie@kk.jp.panasonic.com PANASONIC IP MANAGEMENT CO., LTI 7F OBP PANASONIC TOWER 1-61, SHIROMI 2-CHOME, CHUO-KU OSAKA, JAPAN 540-6207	via US Mail.	
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CORRESPONDENCE D/ Fax Number: Correspondence will be using a fax number, if p Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 2: Address Line 4:	ATA e sent to provideo	<i>the e-mail address first; if that is unsu</i> <i>; if that is unsuccessful, it will be sent</i> kunou.yoshie@kk.jp.panasonic.com PANASONIC IP MANAGEMENT CO., LTI 7F OBP PANASONIC TOWER 1-61, SHIROMI 2-CHOME, CHUO-KU OSAKA, JAPAN 540-6207 P642414-02 CHIKA EDA	via US Mail.	
CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET NU IAME OF SUBMITTER: SIGNATURE:	ATA e sent to provideo	the e-mail address first; if that is unsu f; if that is unsuccessful, it will be sent kunou.yoshie@kk.jp.panasonic.com PANASONIC IP MANAGEMENT CO., LTI 7F OBP PANASONIC TOWER 1-61, SHIROMI 2-CHOME, CHUO-KU OSAKA, JAPAN 540-6207 P642414-02 CHIKA EDA /Chika EDA/	via US Mail.	

PATENT REEL: 036663 FRAME: 0917

Assignment Form 3.0 (Oct. 2008)

D-8*-	P642414-0
Ref*:	P042414-0

Japan Firm Name: WASHIDA & ASSOCIATES

Seed IP

Japan Firm Ref: US Firm Ref:

Application Serial No.

2F13012-US-P

3012-US-P

14/443980

US Firm Name*: (*musthe/IRal)

Panasonic

ASSIGNMENT

WHEREAS, the undersigned has (have) invented the invention entitled:		
Box 1		
Title of Invention:		
BASE STATION, TERMINAL, TRANSMISSION METHOD, AND RECE	PTION METHOD	•
1. For use when signing Declaration prior to filing U	S. patent application (check only one	box below)
(a)□ for which an application for U.S. patent has been executed by the un	idersigned concurrently here	with, or
(b) for which an application for U.S. patent has been executed on the fol (Detendent designation signation the same day desk (a) admote momy in the Mark of the Deckreton was specified	lowing date(s): gin: disAsignma, and the date(s) and ide you	sigax/darDecknatics)
(c)■ for which an International Application has been filed as: for the PCFUS trainant entry, decidently (c) and enter PCF application methor in the right)	PCT Application No.	PCT/CN2013/071085 and,
2. For use when signing Declaration	n after filing U.S. patent application	
(d)□ for which an application for U.S. patent has been filed on:	Application Filing Date	and,

WHEREAS, <u>Panasonic Intellectual Property Corporation of America of 20000 Mariner Avenue, Suite 200. Torrance, CA 90503, U.S.A.</u>, its/their heirs, successors, legal representatives and assigns (nereinafter 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 (ii) any and all Letters Patent(s), including all renewals, extensions, reissues and recarmination certificates which may be granted therefore, and all rights to sue for past and future infiningement 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 claims 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 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)	Ayako HORIUCHI	ayake Horinhi	April 6,2015
(2)	Hidetoshi SUZUKI	Jorde landi	Feb 29, 2015
(3)	Kazuki TAKEDA	Kapiki Jakeda	Martin, Date, Year Fieb. 22, 2015
(4)	Lilei WANG		Month, Date, Year

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

1

Assignment Form 3.0 (Oct. 2008)

PATENT RFFL: 036663 FRAME: 0919

Panasonic Ref*:	P642414-02	Application Serial No.	14/443980
Japan Firm Name:	WASHIDA & ASSOCIATES	Japan Firm Ref.	2F13012-US-P
US Firm Name*:	Seed IP	US Firm Ref.	

ASSIGNMENT

WHEREAS, the undersigned has (have) invented the invention entitled:			
Box 1			
Title of Invention:			
BASE STATION, TERMINAL, TRANSMISSION METHOD, AND REC	EPTION METHOD		
1. For use when signing Declaration prior to filing	U.S. patent application (check only one	box below)	
(a) \square for which an application for U.S. patent has been executed by the \square	undersigned concurrently here	with, or	
(b) for which an application for U.S. patent has been executed on the for (Dxtantion & Assignment as signal or the same day dark for authorizants) in the Nark (the Dxtantion unsigna)		, OT	
(c)■ for which an International Application has been filed as: (ordePCF4.Stational any: duels of (grant any PCT application under in the injut)	PCT Application No.	PCT/CN2013/071085 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 Intellectual Property Corporation of America of 20000 Mariner Avenue, Suite 200. Torrance, CA 90503, U.S.A., 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 claims 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.

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(Each Inventor, please Sign and Date below)		
(e) First Name, Last Name	(f) Signature	(g) Date signed
Ayako HORIUCHI		Month, Date, Yeer
Hidetoshi SUZUKI		Month, Date, Year
Kazuki TAKEDA		Month, Date, Year
Lilei WANG	Liki Wang	Month Cale Veer Marreh 2, 2015
	Ayako HORIUCHI Hidetoshi SUZUKI Kazuki TAKEDA	(e) First Name, Last Name (f) Signature Ayako HORIUCHI

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

1

RECORDED: 09/27/2015