# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4869181

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
TAKUYA YAMAZAKI	12/18/2017
ATSUSHI NAKAZONO	12/20/2017
HIROSHI ANDO	12/19/2017
KAZUYOSHI HARADA	12/18/2017

# **RECEIVING PARTY DATA**

Name:	PANASONIC INTELLECTUAL PROPERTY MANAGEMENT CO., LTD.	
Street Address: 1-61, SHIROMI 2-CHOME, CHUO-KU, OSAKA-SHI		
City: OSAKA		
State/Country:	JAPAN	
Postal Code:	540-6207	

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	15866703	

## **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.

**Email:** epas.pkp@ml.jp.panasonic.com

Correspondent Name: PASONA KNOWLEDGE PARTNER INC.

Address Line 1: 8F OBP PANASONIC TOWER

Address Line 2: 1-61, SHIROMI 2-CHOME, CHUO-KU

Address Line 4: OSAKA, JAPAN 540-6208

ATTORNEY DOCKET NUMBER:	P1002706US01
NAME OF SUBMITTER:	ASAMI KATO
SIGNATURE:	/Asami KATO/
DATE SIGNED:	03/16/2018

## **Total Attachments: 4**

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PATENT 504822446 REEL: 045244 FRAME: 0142

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PATENT REEL: 045244 FRAME: 0143

Panasonic Ref*:	P1002706US01	Application Serial No.	15/866703
Japan Firm Name: _	PIPIM_Direct	Japan Firm Ref:	P1002706US01
US Firm Name*:		US Firm Ref:	

WHEREAS, the undersigned has (have) invented the invention entitled:
Box 1
Title of Invention:

GROUP DETERMINATION METHOD AND GROUP DETERMINATION APPARATUS

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 undersigned concurrently herewith, or

(b) □ for which an application for U.S. patent has been executed on the following date(s): \_\_\_\_\_\_, or (if Declaration & Assignment are signed on the same day, check (a) and make no entry in the blank; if the Declaration was signed before this Assignment, enter the date(s) on which you signed the Declaration)

(c) □ for which an International Application has been filled as: (for the PCT-US national entry, check only (c) and enter PCT application number in the right)

PCT Application No. 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 Management Co., Ltd. of 1-61, Shiromi 2-chome, Chuo-ku, Osaka-shi, Osaka 540-6207

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 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.

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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.

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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 b	elow)	
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(1)	Takuya YAMAZAKI	Jhya Jmeyski	Month, Date, Year  [2, 18, 2017
(2)	Atsushi NAKAZONO		Month, Date, Year
(3)	Hiroshi ANDO		Month, Date, Year
(4)	Kazuyoshi HARADA		Month, Date, Year

□ Check if additional paper(s) is/are attached. Total of \_\_\_\_ page is submitted.

Panasonic Ref*:	P1002706US01	Application Serial No. 15/866703
Japan Firm Name: _	PIPIM Direct	Japan Firm Ref: P1002706US01
US Firm Name*:		US Firm Ref:

WHEREAS, the undersigned has (have) invented the invention entitled:		
Box 1		
Title of Invention:		
GROUP DETERMINATION METHOD AND GROUP	DETERMINATION A	PPARATUS
_		
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(b) for which an application for U.S. patent has been executed (if Declaration & Assignment are signed on the same day, check (a) and make no entry in the blank; if the		, Or gnment, enter the date(s) on which you signed the Declaration)
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WHEREAS, Panasonic Intellectual Property Management Co., Ltd. of 1-61, Shiromi 2-chome, Chuo-ku, Osaka-shi, Osaka 540-6207

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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.

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	IN WITNESS WHEREOF, executed by the	undersigned on the date(s) following the undersigned name(s	s) and signature(s).		
Box2	2 (Each Inventor, please Sign and Date below)				
	(e) First Name, Last Name	(f) Signature	(g) Date signed		
(1)	Takuya YAMAZAKI		Month, Date, Year		
(2)	Atsushi NAKAZONO	Atsushi NAKAZONO	Month, Date, Year Dec. 20, 2017		
(3)	Hiroshi ANDO		Month, Date, Year		
(4)	Kazuyoshi HARADA		Month, Date, Year		

□Check if additional paper(s) is/are attached. Total of \_\_1\_ page is submitted.

**PATENT** REEL: 045244 FRAME: 0145

Panasonic Ref*:	P1002706US01	. Application Serial No	15/866703
Japan Firm Name: _	PIPIM Direct	Japan Firm Ref:	P1002706US01
US Firm Name*:		. US Firm Ref:	

WHEREAS, the undersigned has (have) invented the invention entitled:		
Box 1		
Title of Invention:		
GROUP DETERMINATION METHOD AND GROUP	<b>DETERMINATION A</b>	PPARATUS
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WHEREAS, Panasonic Intellectual Property Management Co., Ltd. of 1-61, Shiromi 2-chome, Chuo-ku, Osaka-shi, Osaka 540-6207 Japan

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	(e) First Name, Last Name	(f) Signature	(g) Date signed
(1)	Takuya YAMAZAKI		Month, Date, Year
(2)	Atsushi NAKAZONO		Month, Date, Year
(3)	Hiroshi ANDO	Hiroshi Ando	Month, Date, Year Dec. 19, 20/7
(4)	Kazuyoshi HARADA		Month, Date, Year

□Check if additional paper(s) is/are attached. Total of \_\_\_\_ page is submitted.

PATENT REEL: 045244 FRAME: 0146

Panasonic Ref*:	P1002706US01	Application Serial No. 15/866703
Japan Firm Name: _	PIPIM Direct	Japan Firm Ref: P1002706US01
US Firm Name*:		US Firm Ref:

Box 1		
Title of Invention:		
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(4)	Kazuyoshi HARADA	Kazuyoshi Harada	Month, Date, Year Dec. 18, 2017

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PATENT