505410338 04/04/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5457128

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MASAYUKI AIHARA	10/22/2018
SHIGENORI YATSURI	10/23/2018
YOSHIO MATSUMURA	10/22/2018
HIROYUKI SHOBAYASHI	10/22/2018
KATSUMI UMEDA	10/27/2018
NOBUYUKI HIROSE	10/26/2018
KAZUKI MIYAMA	10/26/2018

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:	16190716

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:	P1011922US01
NAME OF SUBMITTER:	ASAMI KATO
SIGNATURE:	/Asami KATO/
DATE SIGNED:	04/04/2019

Total Attachments: 6

source=Assignment 16190716(P1011922US01 Renner)#page1.tif source=Assignment 16190716(P1011922US01 Renner)#page2.tif source=Assignment 16190716(P1011922US01 Renner)#page3.tif source=Assignment 16190716(P1011922US01 Renner)#page4.tif source=Assignment 16190716(P1011922US01 Renner)#page5.tif source=Assignment 16190716(P1011922US01 Renner)#page6.tif

		Assignment Form (Oct. 2014)
Panasonic Ref*: _	P1011922US01	Application Serial No. <u>/6 / 19 0 7 / 6</u>
Japan Firm Name:	PIPM Direct	Japan Firm Ref:
US Firm Name*:		US Firm Ref:
/* must be filled)		

ASSIGNMENT

WHEREAS, the undersigned has (have) invented the invention entitled:		
Box 1		
Title of Invention: IMAGING DEVICE, DISPLAY SYSTEM, AND IMAGII	NG SYSTEM	
1. For use when signing Declaration prior to filing	g U.S. patent application (check or	ily one box below)
(a)∎ for which an application for U.S. patent has been executed	by the undersigned concur	rently 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 to	he Declaration was signed before this Assign	ment, enter the date(s) on which you signed the Declaration)
(c) for which an International Application has been filed 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 Declarat	tion after filing U.S. patent applicat	ion
(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

<u>Japan</u>,

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.

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 grapt(s) the Assignee(s) and the appointing to the power to insert on this assignment any

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 be	low)	
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(1)	Masayuki AIHARA	marayuhi Dihara	Month, Date, Year Oct. 12, 20/8
(2)	Shigenori YATSURI	Lhigenori Yatsuri	Month, Date, Year Oct. 23, 2018
(3)	Yoshio MATSUMURA		Month, Date, Year
(4)	Hiroyuki SHOBAYASHI		Month, Date, Year

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

Panasonic Ref*: P1011922US01

ASSIGNMENT (Cont.)

Additional Inventors:

	tional Inventors: (Continued)	·	
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(5)	Katsumi UMEDA	(f) Signature Vatsumi Umeda	Month, Date, Year October 27 2018
(6)	Nobuyuki HIROSE		Month, Date, Year
(7)	Kazuki MIYAMA		Month, Date, Year
(8)			Month, Date, Year
(9)			Month, Dale, Year
(10)			Month, Date, Year
(11)			Month, Date, Year
(12)			Month, Date, Year
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(19)			Month, Date, Year
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(21)			Month, Date, Year
(22)			Month, Date, Year

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Panasonic Ref*:	P1011922US01	Application Serial No. 16/190716
Japan Firm Name: _	PIPM Direct	Japan Firm Ref:
US Firm Name*:		US Firm Ref:
(* must be filled)		

Japan,

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	(e) First Name, Last Name	(f) Signature	(g) Date signed
(1)	Masayuki AIHARA		Month, Date, Year
(2)	Shigenori YATSURI		Month, Date, Year
(3)	Yoshio MATSUMURA	Yozhio Mateumura	Month, Date, Year Oct. 22, 2018
(4)	Hiroyuki SHOBAYASHI	Hirozuki Shabayashi	Month, Date, Year Oct. 22, 2018

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

Panasonic Ref*: P1011922US01

ASSIGNMENT (Cont.)

Additional Inventors:

Box2 (x2 (Continued)				
	(e) First Name, Last Name	(f) Signature	(g) Date signed		
(5)	Katsumi UMEDA		Month, Date, Year		
(6)	Nobuyuki HIROSE	Nobuyuki Hirose	Month, Date, Year October, 26, 2018		
(7)	Kazuki MIYAMA		Month, Date, Year		
(8)			Month, Date, Year		
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	D404400011004	Assignment Form (Oct. 2014
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Panasonic Ref*: P1011922US01

ASSIGNMENT (Cont.)

Additional Inventors:

	Additional Inventors: Box2 (Continued)					
DOX2 ((e) First Name, Last Name	/ft Signature	(a) Date signed			
	(e) First Name, Last Name	(f) Signature	(g) Date signed			
(5)	Katsumi UMEDA		Month, Date, Year			
(6)	Nobuyuki HIROSE		Month, Date, Year			
(7)	Kazuki MIYAMA	Mozuki Miyama	Month, Date, Year Oct., 26, 2018			
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RECORDED: 04/04/2019