506633166 04/28/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6679975

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KIYOFUMI ABE	07/22/2020
TAKAHIRO NISHI	07/22/2020
TADAMASA TOMA	07/22/2020
RYUICHI KANOH	07/28/2020
CHONG SOON LIM	07/22/2020
RU LING LIAO	07/23/2020
HAI WEI SUN	07/22/2020
SUGHOSH PAVAN SHASHIDHAR	07/23/2020
HAN BOON TEO	07/22/2020
JING YA LI	07/23/2020

RECEIVING PARTY DATA

Name:	PANASONIC INTELLECTUAL PROPERTY CORPORATION OF AMERICA
Street Address: 20000 MARINER AVENUE	
Internal Address:	SUITE 200
City:	TORRANCE
State/Country:	CALIFORNIA
Postal Code:	90503

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16942601	

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.

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

Address Line 4: OSAKA, JAPAN 540-6208

PATENT REEL: 056061 FRAME: 0693

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ATTORNEY DOCKET NUMBER:	P1013900US02
NAME OF SUBMITTER:	TETSUO HIRABAYASHI
SIGNATURE:	/Tetsuo HIRABAYASHI/
DATE SIGNED:	04/28/2021
Total Attachments: 5	
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PATENT REEL: 056061 FRAME: 0694

Panasonic Ref*:	P1013900US02	Application Serial N	No	
Japan Firm Name:	Nii Patent Firm	Japan Firm Ref: _	FP181058	
US Firm Name*:	Seed	US Firm Ref:		
(* must be filled)	_			

ASSIGNMENT

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

Box 1		
Title of Invention:		
ENCODER, DECODER, ENCODING METHOD, AND DECOL	ING METHOD	
1. For use when signing Declaration prior to filing	U.S. patent application (check on	ly one box below)
() () () () () () ()		
(a)■ for which an application for U.S. patent has been executed	by the undersigned concu	irrently 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 t		
(1) 2 color anon certain and any one of the same and the color of the same and the color of the	T	
(c)□ for which an International Application has been filed as:	PCT Application No.	and,
(for the PCT-US national entry, check only (c) and enter PCT application number in the right)	<u> </u>	,
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(for the PCT-US national entry, check only (c) and enter PCT application number in the right) 2. For use when signing Declaration	n after filing U.S. patent applicati	on .
(for the PCT-US national entry, check only (c) and enter PCT application number in the right)	<u> </u>	,

WHEREAS, Panasonic Intellectual Property Corporation of America of 20000 Mariner Avenue, Suite 200, Torrance, CA 90503, U.S.A., and

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 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

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)	Kiyofumi ABE	/Kiyofumi Abe/	Month, Date, Year July 22, 2020
(2)	Takahiro NISHI	/Takahiro Nishi/	Month, Date, Year July 22, 2020
(3)	Tadamasa TOMA	/Tadamasa Toma/	Month, Date, Year July 22, 2020
(4)	Ryuichi KANOH		Month, Date, Year

 \square Check if additional paper(s) is/are attached. Total of $\underline{}$ pages are submitted.

Panasonic Ref*:	P1013900US02	Application Serial No	ı
Japan Firm Name:	Nii Patent Firm	Japan Firm Ref:	FP181058
US Firm Name*:	Seed	US Firm Ref:	
(* must be filled)			

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Box 1		
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(a)■ for which an application for U.S. patent has been executed	by the undersigned concu	rrently herewith, or
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(if Declaration & Assignment are signed on the same day, check (a) and make no entry in the blank; if the (c) of or which an International Application has been filed as:	he Declaration was signed before this Assi PCT Application No.	gnment, enter the date(s) on which you signed the Declaration) and,

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	(e) First Name, Last Name	(f) Signature	(g) Date signed
(1)	Kiyofumi ABE		Month, Date, Year
(2)	Takahiro NISHI		Month, Date, Year
(3)	Tadamasa TOMA		Month, Date, Year
(4)	Ryuichi KANOH	/Ryuichi Kanoh/	Month, Date, Year July 28, 2020

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

ASSIGNMENT (Cont.)

Additional Inventors:

(e) First Name,	Last Name	(f) Signature	(g) Date signed
(e) i net i tame,	Zaot Hamo	(i) digitation	Month, Date, Year
Chong Soon	LIM		
) Ru Ling	LIAO		Month, Date, Year
, Ru Ling	LIAO		Month, Date, Year
Hai Wei	SUN		Workit, Bate, Tear
Sughosh Pavan	SHASHIDHAR		Month, Date, Year
) Han Boon	TEO		Month, Date, Year
) Jing Ya	LI		Month, Date, Year
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Panasonic Ref*: P1013900US02	Application Serial No.
Japan Firm Name: Nii Patent Firm	Japan Firm Ref: FP181058
US Firm Name*: Seed	US Firm Ref:
(* must be filled)	

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	DING METHOD U.S. patent application (check on by the undersigned concut on the following date(s):_

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(4)	Ryuichi KANOH		Month, Date, Year

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

ASSIGNMENT (Cont.)

Additional Inventors:

ox2 (Continued)		
(e) First Name, Last Name	(f) Signature	(g) Date signed
5) Chong Soon LIM		Month, Date, Year
Chong 30011 Elivi	Conjohn	July, 22, 2020 Month, Date, Year
S) Ru Ling LIAO	Kulina	i
, Ru Ling Line	0,	July 23, 2020
7) Hai Wei SUN	24X)	Month, Date, Year
,	3600700	July, 22, 2020 Month, Date, Year
Sughosh Pavan SHASHIDHAR	FSughosh	July 23, 2020
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Han Boon TEO	An.	
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RECORDED: 04/28/2021

PATENT REEL: 056061 FRAME: 0699