507293666 05/19/2022

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
NAOHISA NISHIDA	11/15/2021
TATSUMI OBA	11/16/2021
YUJI UNAGAMI	11/15/2021
TADANORI TERUYA	11/19/2021
NUTTAPONG ATTRAPADUNG	11/25/2021
GOICHIRO HANAOKA	11/19/2021

RECEIVING PARTY DATA

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Postal Code:	90504

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17546606

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ATTORNEY DOCKET NUMBER:	P1030348US01
NAME OF SUBMITTER:	TETSUO HIRABAYASHI
SIGNATURE:	/Tetsuo HIRABAYASHI/
DATE SIGNED:	05/19/2022

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Total Attachments: 2

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PATENT REEL: 059964 FRAME: 0730

Panasonic Ref*:	P1030348US01	Application Serial No		
Japan Firm Name:	Nii Patent Firm	Japan Firm Ref:	FP200360	
US Firm Name*:	GB	US Firm Ref:		
(* wust he filled)				

ASSIGNMENT

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

		vi illication entitled has the entitled the invention entitled.
		Box 1
		Title of Invention:
	ENTICATION SYSTEM	SECURE AUTHENTICATION METHOD AND SECURE AUTH
aly one hay helaw)	I.S. natent application (check on	1. For use when signing Declaration prior to filing
ily one box below)	s.e. paterit application (oneon on	1. To take when digning Bediaration prior to ming
urrently herewith, or	by the undersigned concu	(a) \blacksquare for which an application for U.S. patent has been executed
	• · · · -	(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 it
and,	PCT Application No.	(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)
ion	n after filing U.S. patent applicati	2. For use when signing Declaratio
and,	Application Filing Date	(d)□ for which an application for U.S. patent has been filed on:

WHEREAS, Panasonic Intellectual Property Corporation of America of 2050 W 190th Street Suite 450, Torrance, CA 90504 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 D	ate below)	
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(1)	Naohisa NISHIDA	/Naohisa NISHIDA/	Month, Date, Year Nov. 15, 2021
(2)	Tatsumi OBA	/Tatsumi OBA/	Month, Date, Year Nov. 16, 2021
(3)	Yuji UNAGAMI	/Yuji UNAGAMI/	Month, Date, Year Nov. 15, 2021
(4)	Tadanori TERUYA	/Tadanori TERUYA/	Month, Date, Year Nov. 19, 2021

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

ASSIGNMENT (Cont.)

Additional Inventors:

Box2	(Continued)			
	(e) First Na	me, Last Name	(f) Signature	(g) Date signed
(5)	Nuttapong	ATTRAPADUNG	/Nuttapong ATTRAPADUNG/	Month, Date, Year Nov. 25, 2021
(6)	Goichiro	HANAOKA	/Goichiro HANAOKA/	Month, Date, Year Nov. 19, 2021
(7)				Month, Date, Year
(8)				Month, Date, Year
(9)				Month, Date, Year
(10)				Month, Date, Year
(11)				Month, Date, Year
(12)				Month, Date, Year
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(18)				Month, Date, Year
				Month, Date, Year
(19)				Month, Date, Year
(20)				Month, Date, Year
(21)				Month, Date, Year
(22)				

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

RECORDED: 05/19/2022

PATENT REEL: 059964 FRAME: 0732

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