506019627 04/17/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6066340

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the INVENTORSHIP TO INCLUDE AN INVENTOR THAT WAS ERRONEOUSLY OMITTED previously recorded on Reel 051434 Frame 0241. Assignor(s) hereby confirms the ASSIGNMENT.

CONVEYING PARTY DATA

Name	Execution Date
SHOICHI TOYA	12/18/2019
TAKESHI NAKASHIMA	12/19/2019
YOHEI YAMADA	12/19/2019
CHIE KASHIKI	12/06/2019
YOSHIKATSU ITO	12/06/2019

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16627754	

CORRESPONDENCE DATA

Fax Number: (202)756-8087

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.

Phone: 2027568000

Email: mblakey@mwe.com, ipdocketmwe@mwe.com,

WDCIPPTSClerks@mwe.com

Correspondent Name: MCDERMOTT WILL & EMERY LLP

Address Line 1: THE MCDERMOTT BUILDING

Address Line 2: 500 NORTH CAPITOL STREET, NW

Address Line 4: WASHINGTON, D.C. 20001

ATTORNEY DOCKET NUMBER:	065933-0777
NAME OF SUBMITTER:	MONIQUE BLAKEY
SIGNATURE:	/Monique Blakey/

PATENT 506019627 REEL: 052432 FRAME: 0467

Total Attachments: 6
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source=065933-0777 ASSIGNMENT COVERSHEET#page2.tif
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PATENT REEL: 052432 FRAME: 0468 Assignment Page 1 of 2

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHOICHI TOYA	12/18/2019
TAKESHI NAKASHIMA	12/19/2019
YOHEI YAMADA	12/19/2019
CHIE KASHIKI	12/06/2019

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		
Application Number:	16627754	

CORRESPONDENCE DATA

Fax Number: (202)756-8087 **Phone:** 202-756-8000

Email: mblakey@mwe.com, ipdocketmwe@mwe.com, wdcipptsclerks@mwe.com

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.

Correspondent Name: MCDERMOTT WILL & EMERY LLP
Address Line 1: THE MCDERMOTT BUILDING
Address Line 2: 500 NORTH CAPITOL STREET, NW
Address Line 4: WASHINGTON, D.C. 20001

ATTORNEY DOCKET NUMBER:	065933-0777
NAME OF SUBMITTER:	MONIQUE BLAKEY FOR TOMOKI TANIDA
Signature:	/Monique Blakey for Tomoki Tanida/

Assignment Page 2 of 2

Panasonic Ref*: P1009003US01	Application Serial No
Japan Firm Name: PRIMEWORKS IP Attorneys	Japan Firm Ref: PA-70141US
US Firm Name*: McDermott, Will & Emery	ÜS Firm Ref:

ASSIGNMENT

WHEREAS, the undersigned has (have) invented the invention entitled:		
Box 1		
Title of Invention:		:
STORAGE BATTERY UNIT AND CONNECTOR		
1. For use when signing Declaration prior to filing	U.S. patent application (check only one i	box below)
(a) for which an application for U.S. patent has been executed	by the undersigned concurrent	ly herewith, or
(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 if		, Of enter the date(s) on which you signed the Declaration).
(c) 88 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.	PCT/JP2018/018577and,
2. For use when signing Declaratio	n after filing U.S. patent application	129 12
(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, 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 provisionais, 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 plaims 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 descriptor.

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 b	pelow)	
- C	(e) First Name, Last Name	(f) Signature	(g) Date signed
(1)	Sholchi TOYA	5. Tona	Month, Date, Year Dec 18, 2019
(2)	Takeshi NAKASHIMA		Month, Date, Year
(3)	Yohei YAMADA	*	Month, Date, Year
(4)	Chie KASHIKI		Month, Date, Year

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

Panasonic Ref*: P1009003US01	Application Serial No
Japan Firm Name: PRIMEWORKS IP Attorneys	Japan Firm Ref: PA-70141US
US Firm Name*: McDermott, Will & Emery	US Firm Ref:

ASSIGNMENT

Box 1		
Title of Invention:		
STORAGE BATTERY UNIT AND CONNECTOR		#
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 conc	urrently herewith, or
(b) or 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 black. If if		
(c) ior which an International Application has been filed as: Sor the PCT-US national entry. Sheek only (c) and enter PCT application number in the right)	PCT Application No.	PCT/JP2018/018577and,
2. For use when signing Declaratio	n after tiling U.S. patent applicati	ōπ
(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, 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

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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)	Sheichi TOYA		Month, Dats, Year
(2)	Takeshi NAKASHIMA	Takeshi Nakadima	Month, Date, Year Pet. [9] Z0[9]
(3)	Yohei YAMADA	Gobei Gomodor	Month, Date, Year Dec. 19, 2019
(4)	Chie KASHIKI	±8	Month, Date, Year

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

PATENT REEL: 052432 FRAME: 0472

Panasonic Ref*: <u>P1009003US01</u>	Application Serial No
Japan Firm Name: PRIMEWORKS IP Attorneys	Japan Firm Ref: <u>PA-70141US</u>
US Firm Name*: <u>McDermott, Will & Emery</u> (* aus be filled)	US Firm Ref:

ASSIGNMENT

vyneries, the undersigned has (have) invented the invention entitled:		
Box 1		
Title of Invention:		The state of the s
STORAGE BATTERY UNIT AND CONNECTOR		
For use when signing Declaration prior to filing	U.S. patent application (check onl	y ona box below)
(a)□ for which an application for U.S. patent has been executed	by the undersigned concu	rrently herewith, or
(b) or which an application for U.S. patent has been executed @Declaration & Assignment are righted on the same day, check (a) and make no entry in the blank, (f.	on the following date(s):	Of variant, order the date(s) on which you signed the Declaration:
(c) 88 for which an International Application has been filed as: Sor the PCT-US national entry, check only (c) and enter PCT application number in the right)	PCT Application No.	PCT/JP2018/018577and,
2. For use when signing Declaration	on after filing U.S. patent application	n *
(d)□ for which an application for U.S. patent has been filed on:	Application Filing Date	and,

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Box2	(Each Inventor, please Sign and Date below)		
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(1)	Shoichi TOYA		Month. Date, Year
(2)	Takeshi NAKASHIMA	8 8	Month, Date, Year
(3)	Yohel YAMADA		Month, Date, Year
(4)	Chie KASHIKI	The Lashike	Month, Date, Year Dec. 6, 2019

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

PATENT

ASSIGNMENT (Cont.)

Additional Inventors:

	(Continued)		
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(5)	Yoshikatsu ITO	(f) Signature Hathikateu Ito	Month, Date, Year Dec., 6 , 20 (Month, Date, Year
(6)	*	*	Month, Date, Year
(7)		8 8 8	Month, Dafe, Year
(8)	8	*	Month, Date, Year
(9)	*	*	Month, Date, Year
10)	* *	* *	Monith, Date, Year
11)	***	*	Month, Date, Year
(2)		** ** ** ** ** ** ** ** ** ** ** ** **	Month. Date, Year
3)	* *	*	Month, Date, Year
4)	<u>*</u>	* * *	Month, Date, Year
15)	: :		Month, Date, Year
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9)	· ·		Month, Date, Year
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1)			Month, Date, Year
2)			Month, Dafe, Year

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

PATENT REEL: 052432 FRAME: 0474