506289332 10/05/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6336080

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
NANAKO HIRASHITA	05/26/2020
SATOSHI TAMURA	05/20/2020
DAISUKE SHIBATA	05/20/2020
SHINJI UJITA	05/20/2020

RECEIVING PARTY DATA

Name:	PANASONIC CORPORATION
Street Address:	1006, OAZA KADOMA, KADOMA-SHI
City:	OSAKA
State/Country:	JAPAN
Postal Code:	571-8501

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16962556

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:	P1011843US01
NAME OF SUBMITTER:	ASAMI KATO
SIGNATURE:	/Asami KATO/
DATE SIGNED:	10/05/2020

Total Attachments: 4

source=Assignment 16962556(P1011843US01 Westerman)#page1.tif source=Assignment 16962556(P1011843US01 Westerman)#page2.tif source=Assignment 16962556(P1011843US01 Westerman)#page3.tif

PATENT 506289332 REEL: 053977 FRAME: 0965

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PATENT REEL: 053977 FRAME: 0966

Panasonic Ref*:	P1011843US01		Application Serial No	ı
Japan Firm Name:	Nii Patent Firm		Japan Firm Ref:	FP18775
US Firm Name*:	Westerman, Hattori, Daniels &	Adrian, LLP	US Firm Ref:	
(# (T CH I)	-			

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

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Box 1						
Title of Invention:	Title of Invention:					
SEMICONDUCTOR LIGHT RECEIVING ELEMENT AND SEM	IICONDUCTOR RELAY					
1. For use when signing Declaration prior to filing t	LS patent application (check on	ly one hax helaw)				
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(a) □ for which an application for LLS, patent has been executed.	by the undersigned conc	irrently herewith or				
(a) to which an application to 0.5. patent has been executed	(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 data(s):						
(b)□ for which an application for LLS, patent has been executed	on the following date(s):		or			
(b) for which an application for U.S. patent has been executed		unment enter the date(s) on which you signed the De	, 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 the		gnment, enter the date(s) on which you signed the De				
	e Declaration was signed before this Assi		claration)			
(if Declaration & Assignment are signed on the same day, check (a) and make no entry in the blank; if the		gnment, enter the date(s) on which you signed the De				
(if Declaration & Assignment are signed on the same day, check (a) and make no entry in the blank; if the (c) ■ for which an International Application has been filed as:	e Declaration was signed before this Assi, PCT Application No.	PCT/JP2019/000863	claration)			
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WHEREAS, Panasonic Corporation of 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501 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.

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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 Da	ite below)	
	(e) First Nam	e, Last Name	(f) Signature	(g) Date signed
(1)	Nanako	HIRASHITA	/Nanako HIRASHITA/	Month, Date, Year May 26, 2020
(2)	Satoshi	TAMURA		Month, Date, Year
(3)	Daisuke	SHIBATA		Month, Date, Year
(4)	Shinji	UJITA		Month, Date, Year

□Check if additional paper(s) is/are attached. Total of __1_ pages are submitted.

Panasonic Ref*:	P1011843US01	Application Serial N	0
Japan Firm Name:	Nii Patent Firm	Japan Firm Ref:	FP18775
_	Westerman, Hattori, Daniels & Adrian, LLP	US Firm Ref:	
(* must be filled)			

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

Box 1					
Title of Invention:					
SEMICONDUCTOR LIGHT RECEIVING ELEMENT AND SEM	IICONDUCTOR RELAY				
1. For use when signing Declaration prior to filing L	J.S. patent application (check on	ly 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 (if Declaration & Assignment are signed on the same day, check (a) and make no entry in the blank; if the		gnment, enter the date(s) on which you signed the Do	, Or eclaration)		
(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.	PCT/JP2019/000863	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 Corporation of 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501 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.

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Box2	(Each Inventor,	please Sign and Da	ate below)	
	(e) First Name	, Last Name	(f) Signature	(g) Date signed
(1)	Nanako	HIRASHITA		Month, Date, Year
(2)	Satoshi	TAMURA	/Satoshi TAMURA/	Month, Date, Year May 20, 2020
(3)	Daisuke	SHIBATA		Month, Date, Year
(4)	Shinji	UJITA		Month, Date, Year

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

Panasonic Ref*:	P1011843US01		Application Seri	al No.		
Japan Firm Name:	Nii Patent Firm		Japan Firm Ref	:	FP18775	
US Firm Name*:	Westerman, Hattori, Daniels & Adrian,	<u>LLP</u>	US Firm Ref: _			
(* must be filled)	·					

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1. For use when signing Declaration prior to filing U	I.C. natant application (shock on	ly and hay halaw)	
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(a)□ for which an application for U.S. patent has been executed by the undersigned concurrently herewith, or			
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		3,	
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Japan Firm Name: Nii Patent Firm	Japan Firm Ref: FP18775
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Box 1	440	
Title of Invention: SEMICONDUCTOR LIGHT RECEIVING ELEMENT AND SEM	MICONDUCTOR RELAY	
 For use when signing Declaration prior to fling 	U.S. patent application (check only	ane bax 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 (f) Declaration of Assignment on signed on the manager which is grand write on sort; in the block of the	on the following date(s):	. OF Here, enter the date(s) on which you signed the Deckaration)
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(3)	Daisuke	SHIBATA		Month, Date, Year	
(4)	Shinji	ATILU	Shinji Ujeta	Month, Daie, Year May, 20, 2020	

PATENT REEL: 053977 FRAME: 0970