504660584 11/28/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4707306

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUTA HASEGAWA	09/30/2017
NOBUYUKI MATSUZAWA	11/10/2017
YOSHIAKI OBANA	10/10/2017
ICHIRO TAKEMURA	10/03/2017
NORIKAZU NAKAYAMA	10/05/2017
MASAMI SHIMOKAWA	09/29/2017
TETSUJI YAMAGUCHI	09/29/2017
IWAO YAGI	10/17/2017
HIDEAKI MOGI	09/29/2017

RECEIVING PARTY DATA

Name:	SONY SEMICONDUCTOR SOLUTIONS CORPORATION
Street Address:	4-14-1 ASAHI-CHO
Internal Address:	ATSUGI-SHI
City:	KANAGAWA
State/Country:	JAPAN
Postal Code:	243-0014

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15575086	

CORRESPONDENCE DATA

Fax Number: (303)863-0223

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: 303-863-9700

Email: sony@sheridanross.com SHERIDAN ROSS P.C. Correspondent Name: Address Line 1: 1560 BROADWAY

Address Line 2: **SUITE 1200**

Address Line 4: DENVER, COLORADO 80202-5141

ATTORNEY DOCKET NUMBER: 6810-1001

NAME OF SUBMITTER:	BRADLEY M. KNEPPER
SIGNATURE:	/Bradley M. Knepper/
DATE SIGNED:	11/28/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 12	
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source=Fully_Exe_Decs#page12.tif	

Title of Invention	DEVICE	AING
As the below	ow named inventor, Thereby declare that:	The second of th
This declaration is directed to:	E-	
	United States application or PCT international application number PCT/JP2016/064887 filed on2016/05/19	· · · · · · · · · · · · · · · · · · ·
	-identified application was made or authorized to be made by me.	
	nat I am the original inventor or an original joint inventor of a claimed invention in the application. SONY SEMICONDUCTOR SOLUTIONS CORPORATION	, with offices at
	Asahi-cho, Atsugi-shi, Kanagawa, Japan (hereinafter referred to as ASSIGN	
	ill interest in, to and under said invention, said application disclosing the invention and in, to and under any Letter ction which may be granted therefor in the United States and in any and all foreign countries;	Patent or similar
legal represent in and to any and all pri Convention Radderes, and to United States Patent to said And I further designee, as remuneration, the United States	re hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successentatives, the entire right, title and interest in said invention, said application, including any divisions and continuary and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invent priority rights and/or convention rights under the International Convention for the Protection of Industrial Propert in Relating to Paients. Designs and Industrial Models, and any other international agreements to which the United it do any other benefits accruing or to accrue to me with respect to the filling of applications for patents or securing and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United ASSIGNEE, as the assignee of the whole right, title and interest thereto; are agree to execute all necessary or desirable and lawful future documents, including assignments in favor of A is ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and on, in order to perfect title in said invention, modifications, and improvements in said invention, applications and States and countries foreign thereto;	ntions thereof, and ion, and in and to y, inter-American States of America g of patents in the need States Letters ASSIGNEE or its 1 without further Letters Patent of
application for	her agree to properly execute and deliver and without further remuneration, such necessary or desirable and I for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissuch may be granted for my aforesaid invention, as said ASSIGNEE thereof shall be cafter require and prepare at its o	ies of any Letters
application, sa	her agree that ASSIGNEE will, upon its request, be provided promptly with all perfinent facts and documents said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible the same in any interference or linigation related thereto;	relating to said e to me and will
And Thereby c	ly covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which wo nent and sale.	ould conflict with
	knowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or an five (5) years, or both.	imprisonment of
LEGAL NAMI	ME OF INVENTOR	
Inventor:	YUTA HASEGAWA Date: 20/7/7	<u> </u>
Signature:	Yuta Hasefewa	

Doc code: Oath

Document Description: Oath or declaration filed

Atty Docket No: 6810-1001 Sony Ref. No.: SP363538US00

PTO/AIA/02 (07-13)

Approved for use through 04/30/2017. OMB 0651-0032
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SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

PHOTOELECT	TRIC CONVE	ERSION ELEME	ENT AND	SOLID-STATE	IMAGING DEVICE
ent is directed to:					2016/05/19
AME of inventor to	whom this su	ubstitute statemen	nt applies:	filed on	
YUKI MATSU	JZAWA		ame)		
except for a deceased yo	3 or legally incap	pacitated inventor): State	Cour	JP ntry	
		pacitated inventor):		<u> </u>	
nagawa		State		243-0014 Zip	JP Country
pplication. identified application v	was made or auth	thorized to be made b	oy me.		
				A s.	
ssignee, erson to whom the inv	ventor is under ar	n obligation to assign	1.		CFR 1.46 is required), or
	ent is directed to: tached application, States application or I AME of inventor to n Name (first and midd YUKI MATSU except for a deceased by except for a deceased by ess (except for a deceased by Semiconductor Solution eagawa a above-named invent polication. identified application we except for a deceased in the semiconductor solution in the semiconductor sol	ent is directed to: tached application, States application or PCT international AME of inventor to whom this sure first and middle (if any)) and FYUKI MATSUZAWA except for a deceased or legally incaptors (except for a deceased or legally incaptors) semiconductor Solutions Corporation, 4- magawa experience application was made or authorized application was made	rent is directed to: tached application, States application or PCT international application number AME of inventor to whom this substitute statement in Name (first and middle (if any)) and Family Name or Surray YUKI MATSUZAWA Texcept for a deceased or legally incapacitated inventor): Typy State Typy Typy State Typy State Typy Typy State Typy Typy State Typy State Typy State Typy State Typy State Typy Typy State Typy State Typy Typy State Typy Sta	ent is directed to: tached application, States application or PCT international application number AME of inventor to whom this substitute statement applies: In Name (first and middle (if any)) and Family Name or Surname) YUKI MATSUZAWA (except for a deceased or legally incapacitated inventor): The sess (except for a deceased or legally incapacitated inventor): The sess (except for a deceased or legally incapacitated inventor): The sess (except for a deceased or legally incapacitated inventor): The sess (except for a deceased or legally incapacitated inventor): The sess (except for a deceased or legally incapacitated inventor): The sess (except for a deceased or legally incapacitated inventor or an application. The sess (except for a deceased or legally incapacitated inventor or an application. The sess (except for a deceased or legally incapacitated inventor or an application. The sess (except for a deceased or legally incapacitated inventor only) is the inventor to whom this substitute statement applies: The sess (except for a deceased or legally incapacitated inventor only) is the inventor to whom this substitute statement applies: The sess (except for a deceased or legally incapacitated inventor only) is the inventor to whom the inventor is under an obligation to assign,	States application or PCT international application number

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case, Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/AIA02 (07-13)

Approved for use through 01/31/2014. OMB 0651-0032

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number,

SUBSTITUTE STATEMENT

Circumstances permitting execution of this su	ubstitute statement:		
Inventor is deceased,			
Inventor is under legal incapacity,			
Inventor cannot be found or reached	d after diligent effort, or	*	
Inventor has refused to execute the	oath or declaration under 37	CFR 1.63.	
If there are joint inventors, please check the	appropriate box below:		
An application data sheet under 37 or is currently submitted.	CFR 1.76 (PTO/AIA/14 or eq	uivalent) naming the en	tire inventive entity has been
OR			
An application data sheet under 37 Statement Supplemental Sheet (PT- information is attached. See 37 CFF	O/AIA/11 or equivalent) nami		
	WARNING:	<u> </u>	71 - 72 - 73 - 74 - 74 - 74 - 74 - 74 - 74 - 74
Petitioner/applicant is cautioned to avoid submice contribute to identity theft. Personal information (other than a check or credit card authorization to support a petition or an application. If this type titioners/applicants should consider redacting JSPTO. Petitioner/applicant is advised that the application (unless a non-publication request in patient. Furthermore, the record from an abance referenced in a published application or an issupport.	on such as social security num in form PTO-2038 submitted for type of personal information is g such personal information is ge record of a patent application in compliance with 37 CFR 1.2 doned application may also build patent (see 37 CFR 1.14)	nbers, bank account nur or payment purposes) is included in documents from the documents befor on is available to the pu 213(a) is made in the ap e available to the public). Checks and credit ca	mbers, or credit card numbers anever required by the USPTO submitted to the USPTO, ore submitting them to the blic after publication of the oplication) or issuance of a cif the application is ard authorization forms
PERSON EXECUTING THIS SUBSTITUTE ST	FATEMENT:		
Name: Terushi Shimizu			Nov 10 20/17 Date (Optional):
Signature: WW 7//~			
APPLICANT NAME AND TITUE OF PERSON			
f the applicant is a juristic entity, list the applica		=	
Sony Semiconductor Applicant Name:			· · · · · · · · · · · · · · · · · · ·
Title of Person Executing This Substitute Statement; Representativ	e Director, President	t	
The signer, whose title is supplied above, is au Residence of the signer (unless provided in			lent):
city Kanagawa	State	Country JP	ieną.
Mailing Address of the signer (unless provi	ided in an application data	sheet, PTO/AIA/14 or o	equivalent)
4-14-1 Asahi-Cho, Atsugi-Shi			
Kanagawa	State	243-001 ⁴	4 Country JP
City Kanagawa Note: Use an additional PTO/AIA/02 form for ea		Zip d, legally incapacitated,	Country

[Page 2 of 2]

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

 The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.

A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to

opposing counsel in the course of settlement negotiations.

 A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to

the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.

A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential

violation of law or regulation.

Title of Invention DEVICE	ND SOLID-STATE IMAGING
As the below named inventor, I hereby declare that:	
This declaration	
☑ United States application or PCT international application	n number PCT/JP2016/064887
filed.on2016/05/19	
The above identified application was made or authorized to be made by me.	
I believe that I am the original inventor or an original joint inventor of a claimed inventor whereas. Sony semiconductor solutions corporation	on in the application. N , with offices at
4-14-1 Asahi-cho, Atsugi-shi, Kanagawa, Japan	(hereinafter referred to as ASSIGNEE), is desirous of
acquiring all interest in, to and under said invention, said application disclosing the inve legal protection which may be granted therefor in the United States and in any and all fo NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good	reign countries;
of which are hereby acknowledged, I by these presents do hereby assign, sell and tran- legal representatives, the entire right, title and interest in said invention, said application in and to any and all Letters Patent of the United States, and countries foreign thereto, any and all priority rights and/or convention rights under the International Convention Ic Convention Relating to Patents, Designs and Industrial Models, and any other internation adheres, and to any other benefits accruing or to accrue to me with respect to the filing United States and countries foreign thereto, and I hereby authorize and request the Com- Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto: And I further agree to execute all necessary or desirable and lawful future documents	, including any divisions and continuations thereof, and which may be granted for said invention, and in and to or the Protection of Industrial Property, Inter-American agreements to which the United States of America of applications for patents or securing of patents in the missioner of Patents to issue said United States Letters
designee, as ASSIGNEE or its successors, assigns and legal representatives may fremuncration, in order to perfect title in said invention, modifications, and improvement the United States and countries foreign thereto;	rom time-to-time present to me and without further
And I further agree to properly execute and deliver and without further remuneration application for foreign patents, for filing subdivisions of said application for patent, and Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall be a subdivision of the said application for patent, and Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall be a subdivision of the said application for patent, and patents are subdivisionally application for patents.	or, for obtaining any reissue or reissues of any Leiters
And I further agree that ASSIGNEE will, upon its request, be provided promptly wapplication, said invention and said Letters Patent and legal equivalents in foreign countestify as to the same in any interference or litigation related thereto:	ith all pertinent facts and documents relating to said ntries as may be known and accessible to me and will
And T hereby covenant that no assignment, sale, agreement or encumbrance has been or this assignment and sale.	will be made or entered into which would conflict with
Thereby acknowledge that any willful false statement made in this declaration is punish not more than five (5) years, or both.	able under 18 U.S.C. 1001 by fine or imprisonment of
LEGAL NAME OF INVENTOR .	
Inventor: YOSHIAKI OBANA	Date: October 10, 2017
Signature: Yoshiaki Obana	

Title of Invention	PHOTOELECTRIC CONVERSION ELEMENT AN DEVICE	ID SOLID-STATE IMAGING
As the below	named inventor, I hereby declare that:	
This declaration is directed to:		
	United States application or PCT international application is filed on 2016/05/19	pumber PCT/JP2016/064887
The above-ide	lentified application was made or authorized to be made by me.	
WHEREAS,	I am the original inventor or an original joint inventor of a claimed invention SONY SEMICONDUCTOR SOLUTIONS CORPORATION	
	sahi-cho, Atsugi-shi, Kanagawa, Japan interest in, to and under said invention, said application disclosing the invent	(hereinafter referred to as ASSIGNEE), is desirous of
legal protection NOW THERE of which are I legal represent in and to any any and all pri Convention Re adheres, and is United States Patent to said And I further designee, as remuneration, the United States	en which may be granted therefor in the United States and in any and all fore EFORE, in consideration of the sum of One Dollar (\$1.00), and other good a hereby acknowledged, I by these presents do hereby assign, sell and transfiniatives, the entire right, title and interest in said invention, said application, it and all Letters Patent of the United States, and countries foreign thereto, which it is an all letters are provided in the International Convention for Relating to Patents, Designs and Industrial Models, and any other internation to any other benefits accruing or to accrue to me with respect to the Illing of and countries foreign thereto, and I hereby authorize and request the Comm. ASSIGNEE, as the assignee of the whole right, title and interest thereto; agree to execute all necessary or desirable and lawful future documents, it ASSIGNEE or its successors, assigns and legal representatives may fro, in order to perfect title in said invention, modifications, and improvements attes and countries foreign thereto;	ign countries; and valuable consideration, the receipt and sufficiency or unto said ASSIGNEE, its successors, assigns, and including any divisions and continuations thereof, and hich may be granted for said invention, and in and to the Protection of Industrial Property, Inter-American all agreements to which the United States of America applications for patents or securing of patents in the issioner of Patents to issue said United States Letters including assignments in favor of ASSIGNEE or its m time-to-time present to me and without further in said invention, applications and Letters Patent of
application for	r agree to properly execute and deliver and without further remuneration, or foreign patents, for filing subdivisions of said application for patent, and o may be granted for my aforesaid invention, as said ASSIGNEE thereof shall	r, for obtaining any reissue or reissues of any Letters
application, sa	r agree that ASSIGNEE will, upon its request, be provided promptly with aid invention and said Letters Patent and logal equivalents in foreign countries same in any interference or litigation related thereto;	i all pertinent facts and documents relating to said ries as may be known and accessible to me and will
And I hereby c this assignmen	covenant that no assignment, sale, agreement or encumbrance has been or wint and sale.	Il be made or entered into which would conflict with
	owledge that any willful false statement made in this declaration is punishab five (5) years, or both.	le under 18 U.S.C. 1001 by fine or imprisonment of
LEGAL NAM	IE OF INVENTOR	
Inventor:	ICHIRO TAKEMURA	Date: 2017/10/3
Signature:	ICHIRO TAKEMURA	

Title of Invention PHOTOELECTRIC CONVERSION ELEMEN DEVICE	T AND SOLID-STATE IMAGING
As the below named inventor, I hereby declare that:	The second section of the second section sec
This declaration The attached application, or	
United States application or PCT international application 2016/05/19 The above-identified application was made or authorized to be made by me.	cation number PCT/JP2016/064887
I believe that I am the original inventor or an original joint inventor of a claimed in	
WHEREAS. SONY SEMICONDUCTOR SOLUTIONS CORPORA 4-14-1 Asahi-cho, Atsugi-shi, Kanagawa, Japan	TION , with offices at (hereinafter referred to as ASSIGNEE), is desirous of
acquiring all interest in, to and under said invention, said application disclosing the legal protection which may be granted therefor in the United States and in any and a	invention and in, to and under any Letters Patent or similar
NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other of which are hereby acknowledged. I by these presents do hereby assign, sell and legal representatives, the entire right, title and interest in said invention, said application and to any and all Letters Patent of the United States, and countries foreign ther any and all priority rights and/or convention rights under the International Convention Convention Relating to Patents, Designs and Industrial Models, and any other interadheres, and to any other benefits accruing or to accrue to me with respect to the fit United States and countries foreign thereto, and I hereby authorize and request the Patent to said ASSIGNEE, as the assignee of the whole right, title and interest there And I further agree to execute all necessary or desirable and lawful future docum designee, as ASSIGNEE or its successors, assigns and legal representatives in remuneration, in order to perfect title in said invention, modifications, and improve	fransfer unto said ASSIGNEE, its successors, assigns, and ation, including any divisions and continuations thereof, and eno, which may be granted for said invention, and in and to ion for the Protection of Industrial Property, Inter-American mational agreements to which the United States of America iling of applications for patents or securing of patents in the Commissioner of Patents to issue said United States Letters to; ments, including assignments in favor of ASSIGNEE or its lay from time-to-time present to me and without further
the United States and countries foreign thereto; And I further agree to properly execute and deliver and without further remune application for foreign patents, for filing subdivisions of said application for patent. Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereo.	eration, such necessary or desirable and lawful papers for , and or, for obtaining any reissue or reissues of any Letters
And I further agree that ASSIGNEE will, upon its request, be provided prompt application, said invention and said Letters Patent and legal equivalents in foreign testify as to the same in any interference or litigation related thereto;	ly with all pertinent facts and documents relating to said countries as may be known and accessible to me and will
And I hereby covenant that no assignment, sale, agreement or encumbrance has been this assignment and sale.	n or will be made or entered into which would conflict with
I hereby acknowledge that any willful false statement made in this declaration is punot more than five (5) years, or both.	mishable under 18 U.S.C. 1001 by fine or imprisonment of
LEGAL NAME OF INVENTOR	**************************************
Inventor: NORIKAZU NAKAYAMA	Date: 2017/10/5
Signature: Notikazu Matayama	

Title of Invention	PHOTOELECTRIC CONVERSION ELEMENT AND SOLID-STATE IMAGING DEVICE
As the below	named inventor, I hereby declare that:
This declaration is directed to:	2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	United States application or PCT international application number PCT/JP2016/064887 filed on 2016/05/19
The above-ide	entified application was made or authorized to be made by me.
WHEREAS,	I am the original inventor or an original joint inventor of a claimed invention in the application. SONY SEMICONDUCTOR SOLUTIONS CORPORATION , with offices at
· · · · · · · · · · · · · · · · · · ·	sahi-cho, Atsugi-shi, Kanagawa, Japan (hereinafter referred to as ASSIGNEE), is desirous of
legal protection NOW THERI of which are legal represent in and to any any and all pro Convention R adheres, and I United States Patent to said And I further designee, as remuneration, the United States	interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar on which may be granted therefor in the United States and in any and all foreign countries; EPORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and natives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to iority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American telating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters ASSIGNEE, as the assignee of the whole right, title and interest thereto; agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of ites and countries foreign thereto;
application for	agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for reforeign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;
application, sa	agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said aid invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will a same in any interference or litigation related thereto;
And I hereby of this assignment	covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with int and sale.
	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of five (5) years, or both.
LEGAL NAM	IE OF INVENTOR
Inventor:	MASAMI SHIMOKAWA Date: 2017 /09/29
Signature: 1	Masami Shimokawa

Title of Invention	DEVICE				
As the below named inventor, I hereby declare that:					
This declaration is directed to:					
	United States application or PCT international application number PCT/JP2016/064887 filed on2016/05/19				
	entified application was made or authorized to be made by me.				
I believe that WHEREAS,	I am the original inventor or an original joint inventor of a claimed invention in the application. SONY SEMICONDUCTOR SOLUTIONS CORPORATION , with offices at				
4-14-1 A:	sahi-cho, Atsugi-shi, Kanagawa, Japan (hereinafter referred to as ASSIGNEE), is desirous of				
acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefor in the United States and in any and all foreign countries;					
NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property. Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other henefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;					
designee, as remuneration,	agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of ites and countries foreign thereto;				
And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;					
And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or liftgation related thereto;					
And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.					
	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of five (5) years, or both.				
LEGAL NAM	IE OF INVENTOR				
Inventor:	TETSUJI YAMAGUCHI Date: 2017/09/29				
Signature:	Tetsuji Yamaguchi				

Title of Invention PHOTOELECTRIC CONVERSION ELEM DEVICE	IENT AND SOLID-STATE IMAGING						
As the below named inventor, I hereby declare that:	below named inventor, Thereby declare that:						
This declaration is directed to:							
filed on2016/05/19	application number PCT/JP2016/064887						
The above-identified application was made or authorized to be made by me.							
I believe that I am the original inventor or an original joint inventor of a claim WHEREAS, SONY SEMICONDUCTOR SOLUTIONS CORPORTS							
4-14-I Asahi-cho, Atsugi-shi, Kanagawa, Japan	(hereinafter referred to as ASSIGNEE), is desirous of						
acquiring all interest in, to and under said invention, said application disclosing legal protection which may be granted therefor in the United States and in any							
of which are hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Partent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto; And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;							
And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;							
And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;							
And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.							
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.							
LEGAL NAME OF INVENTOR							
Inventor: IWAO YAGI	Date: 2017, [0,17						
Signature: Twee Yard							

Attorney Docket No.: Sony Ref. No.: SP363538US00

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of Invention	PHOTOELECTRIC CONVERSION ELEMENT AND SOLID-STATE IMAGING DEVICE						
As the below	As the below named inventor, I hereby declare that:						
This declarati	7 T 4 April 19 April						
	United States application of PCT international application number PCT/JP2016/064887 filed on 2016/05/19						
The above-ide	lentified application was made or authorized to be made by me,						
WHEREAS,	Tam the original inventor or an original joint inventor of a claimed invention in the application. SONY SEMICONDUCTOR SOLUTIONS CORPORATION , with offices at						
	sahi-cho, Atsugi-shi, Kanagawa, Japan (hereinafter referred to as ASSIGNEE), is desirous of						
	interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar on which may be granted therefor in the United States and in any and all foreign countries:						
of which are hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto: And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;							
And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;							
And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;							
And I hereby c	covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with nt and sale.						
I hereby acknown than	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of five (3) years, or both.	THE COMPANY					
LEGAL NAM	TE OF INVENTOR						
Inventor:	HIDEAKI MOGI Date: Sep. 29, 2017						
Signature:	Hidealia Most						

US Firm Name:xx	X	Sheridan Ross P.C. Date	e: 11/17/20	017	
Sony Ref :		SP363538US00			
Firm's Ref:		6810-1001			
Appin No.:		15/575086			
Official Due Date	(yyyy/mm	n/dd):			
Firm's Due Date (
Inquiry:	☐ YES	☐ We will wait for your instruction. ☐ We will proceed as Firm's proposal unless otherwise instructed.			
Comment:					
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PATENT REEL: 044241 FRAME: 0383

RECORDED: 11/28/2017