507031185 12/16/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7078021

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KATSUHIKO HANZAWA	04/27/2021
YOSHIKAZU NITTA	04/27/2021
HIROTAKA MURAKAMI	04/27/2021
KAZUMASA NISHIMURA	05/10/2021
MARK PUDE	04/20/2021
ERIC CHRISTOPHER MOULE	04/20/2021

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16818022

CORRESPONDENCE DATA

Fax Number: (617)646-8646

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: 6176468000

cfallon@wolfgreenfield.com, Email:

SonyAdministrators@WolfGreenfield.com

Correspondent Name: RANDY J. PRITZKER

Address Line 1: WOLF, GREENFIELD & SACKS, P.C.

Address Line 2: **600 ATLANTIC AVENUE**

Address Line 4: BOSTON, MASSACHUSETTS 02210-2211

ATTORNEY DOCKET NUMBER:	S1459.72547US00
NAME OF SUBMITTER:	CONNOR FALLON
SIGNATURE:	/Connor Fallon/
DATE SIGNED:	12/16/2021

Total Attachments: 6 source=S145972547US00-ASI-RJP#page1.tif

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source=S145972547US00-ASI-RJP#page6.tif

Title of Invention	SOLID-STATE IMAGE CAPTURING ELEMENT AND IMAGE CAPTURING DEVICE
As the below i	named inventor, I hereby declare that:
This declaration is directed to:	The attached application, or
	United States application or PCT international application number 16/818,022
	filed on
The above-ide	ntified application was made or authorized to be made by me.
	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 AS	SAHI-CHO, ATSUGI-SHI, KANAGAWA, 243-0014 (hereinafter referred to as ASSIGNEE), is desirous of
	nterest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar in which may be granted therefor in the United States and in any and all foreign countries;
of which are herepresentatives to any and all all priority rig Convention Readheres, and to United States:	FORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency ereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and legal is, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and ghts and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American elating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America of 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;
designee, as a 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 the and countries foreign thereto;
for foreign pat	gree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application ents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which d 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 id invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will e 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 at 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	E OF INVENTOR
Inventor:	KATSUHIKO HANZAWA Date: April 27, 2021
Signature: _/	/ perupito Hansaure /

Attorney Docket No.: S1459.72547US00 Sony Ref. No.: SYP334427US01

Title of Invention SOLID-STATE IMAGE CA	PTURING ELEMENT AND IMAGE CAPTURING DEVICE	
As the below named inventor, I hereby declare that:		
This declaration	ation, or	
Tunited States applied	eation or PCT international application number 16/818,022	
filed on $03/13$	2020	
The above-identified application was made or authorize	ed to be made by me.	
I believe that I am the original inventor or an original journment of the second of th	LUTIONS CORPORATION , with offices at	
4-14-1 ASAHI-CHO, ATSUGI-SHI, KANA	·	
acquiring all interest in, to and under said invention, sa legal protection which may be granted therefor in the U	id application disclosing the invention and in, to and under any Letters Patent or similar inited States and in any and all foreign countries;	
of which are hereby acknowledged, I by these presents of representatives, the entire right, title and interest in said to any and all Letters Patent of the United States, and call priority rights and/or convention rights under the Convention Relating to Patents, Designs and Industrial adheres, and to any other benefits accruing or to accrue	ne Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and legal invention, said application, including any divisions and continuations thereof, and in and ountries foreign thereto, which may be granted for said invention, and in and to any and e International Convention for the Protection of Industrial Property, Inter-American Models, and any other international agreements to which the United States of America e to me with respect to the filing of applications for patents or securing of patents in the by authorize and request the Commissioner of Patents to issue said United States Letters right, title and interest thereto;	
designee, as ASSIGNEE or its successors, assigns	ble and lawful future documents, including assignments in favor of ASSIGNEE or its and legal representatives may from time-to-time present to me and without further modifications, and improvements in said invention, applications and Letters Patent of the	
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, agreer this assignment and sale.	nent or encumbrance has been or will be made or entered into which would conflict with	
I hereby acknowledge that any willful false statement not more than five (5) years, or both.	made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of	
LEGAL NAME OF INVENTOR		
Inventor: YOSHIKAZU NITTA	Date: 4/27/2021	
Signature: /Yoshikazu Nitta/		

Attorney Docket No.: S1459.72547US00 Sony Ref. No.: SYP334427US01

Title of Invention SOLID-STATE IMAGE CAPTURING ELEMENT AND IMAGE CAPTURING DEVICE
As the below named inventor, I hereby declare that:
This declaration is directed to:
United States application or PCT international application number 16/818,022
filed on $03/13/2020$
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 invention in the application. WHEREAS, SONY SEMICONDUCTOR SOLUTIONS CORPORATION , with offices at
4-14-1 ASAHI-CHO, ATSUGI-SHI, KANAGAWA, 243-0014 (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 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: HIROTAKA MURAKAMI Date: 4/27/2021
Signature:/Hirotaka Murakami/

Attorney Docket No.: S1459.72547US00

Sony Ref. No.: SYP334427US01

Title of Invention SOLID-STATE IMAGE CAPTURING ELEMENT AND IMAGE CAPTURING DEVICE INVENTION SOLID-STATE IMAGE CAPTURING ELEMENT AND IMAGE CAPTURING DEVICE INVENTION SOLID-STATE IMAGE CAPTURING ELEMENT AND IMAGE CAPTURING DEVICE INVENTION SOLID-STATE IMAGE CAPTURING ELEMENT AND IMAGE CAPTURING DEVICE INVENTION SOLID-STATE IMAGE CAPTURING ELEMENT AND IMAGE CAPTURING DEVICE INVENTION SOLID-STATE IMAGE CAPTURING ELEMENT AND IMAGE CAPTURING DEVICE INVENTION SOLID-STATE IMAGE CAPTUR	E
As the below named inventor, I hereby declare that:	
This declaration is directed to:	
United States application or PCT international application number 16/818,022	_
filed on $03/13/2020$	
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 invention in the application. WHEREAS, SONY SEMICONDUCTOR SOLUTIONS CORPORATION , with offices	s at
4-14-1 ASAHI-CHO, ATSUGI-SHI, KANAGAWA, 243-0014 (hereinafter referred to as ASSIGNEE), is desirous	
acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similegal protection which may be granted therefor in the United States and in any and all foreign countries;	таг
NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficient of which are hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and learn terms are trained and interest in said invention, said application, including any divisions and continuations thereof, and in a 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 all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-America Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of American 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 United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letter Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;	gal and and can ica the
And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or 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 United States and countries foreign thereto;	her
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 who 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 sa application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and we 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 withis assignment and sale.	ith
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment not more than five (5) years, or both.	of
LEGAL NAME OF INVENTOR	
Inventor: KAZUMASA NISHIMURA Date: May 10, 2021	_
Signature: / Kazumasa Nishimura /	_

Attorney Docket No.: S1459.72547US00 Sony Ref. No.: SYP334427US01

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 SOLID-STATE IMAGE CAPTURING ELEMENT AND IMAGE CAPTURING D	EVICE	
As the below named inventor, I hereby declare that:		
This declaration The attached application, or s directed to:		
United States application or PCT international application number 16/818,022		
filed on $03/13/2020$.		
The above-identified application was made or authorized to be made by me.		
believe that I am the original inventor or an original joint inventor of a claimed invention in the application. WHEREAS, SONY SEMICONDUCTOR SOLUTIONS CORPORATION , with	th offices at	
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equiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Paten egal protection which may be granted therefor in the United States and in any and all foreign countries;	t or similar	
NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and of which are hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assign representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, o any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, International Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States addheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of paulited States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United Statent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;	s, and legal , and in and to any and r-American of America tents in the	
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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 conclude this assignment and sale.	onflict with	
hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprison more than five (5) years, or both.	sonment of	
LEGAL NAME OF INVENTOR		
nventor: MARK PUDE Date: Apr 20, 2021		
Signature: / / / / / / / / / / / / / / / / / / /		

Attorney Docket No.: S1459.72547US00 Sony Ref. No.: SYP334427US01

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

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United States application or PCT international application number 16/818,022	_
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NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficient of which are hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and leg representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in a 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 a all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-Americ Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of Americandheres, 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 Letter Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;	gal nd nd an ica ihe
And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without furth remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of United States and countries foreign thereto;	ner
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I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment not more than five (5) years, or both.	of
LEGAL NAME OF INVENTOR	
Inventor: ERIC CHRISTOPHER MOULE Date: Apr 20, 2021	_
Signature: _/ Tric C Moule	

RECORDED: 12/16/2021