

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT7144259

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the REMOVE INCORRECT APPLICATION NUMBER, 14/572221 AND REPLACE WITH 14/527221 previously recorded on Reel 040815 Frame 0649. Assignor(s) hereby confirms the CORRECTION.

## CONVEYING PARTY DATA

Name	Execution Date
SONY CORPORATION	07/14/2016

## RECEIVING PARTY DATA

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

## PROPERTY NUMBERS Total: 75

Property Type	Number
Application Number:	14560865
Application Number:	14562880
Application Number:	14560750
Application Number:	14511818
Application Number:	14502077
Application Number:	14283893
Application Number:	14186636
Application Number:	14193708
Application Number:	14186437
Application Number:	14181054
Application Number:	15059489
Application Number:	14283539
Application Number:	14973429
Application Number:	14567777
Application Number:	14605791
Application Number:	14570765
Application Number:	14567067

PATENT

Property Type	Number
Application Number:	14604273
Application Number:	14597738
Application Number:	14615197
Application Number:	15028138
Application Number:	14559713
Application Number:	13862201
Application Number:	13963796
Application Number:	14597753
Application Number:	14448663
Application Number:	14513511
Application Number:	14476469
Application Number:	14484012
Application Number:	14477639
Application Number:	15025944
Application Number:	14513515
Application Number:	14323532
Application Number:	14549312
Application Number:	14311958
Application Number:	14323510
Application Number:	15045425
Application Number:	14523621
Application Number:	14338886
Application Number:	14904779
Application Number:	14454129
Application Number:	14912659
Application Number:	14313462
Application Number:	14338929
Application Number:	14783565
Application Number:	14942715
Application Number:	15029717
Application Number:	14323518
Application Number:	14902073
Application Number:	14783896
Application Number:	14779403
Application Number:	14751100
Application Number:	14906616
Application Number:	14225045
Application Number:	15072472

Property Type	Number
Application Number:	14780640
Application Number:	13843306
Application Number:	14954502
Application Number:	14759734
Application Number:	14649396
Application Number:	14159066
Application Number:	14409707
Application Number:	14649643
Application Number:	15086919
Application Number:	14362422
Application Number:	13883696
Application Number:	15087872
Application Number:	14527221
Application Number:	13299951
Application Number:	14492335
Application Number:	15065429
Application Number:	14071188
Application Number:	14636445
Application Number:	14593702
Application Number:	14695830

#### 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

**Correspondent Name:** SHERIDAN ROSS P.C.

**Address Line 1:** 1560 BROADWAY

**Address Line 2:** SUITE 1200

**Address Line 4:** DENVER, COLORADO 80202-5141

<b>ATTORNEY DOCKET NUMBER:</b>	SC TO SSS-2ND CORR JMM
<b>NAME OF SUBMITTER:</b>	JOANNA MONTGOMERY
<b>SIGNATURE:</b>	/Joanna Montgomery/
<b>DATE SIGNED:</b>	01/27/2022

#### Total Attachments: 24

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APPLICATION NUMBER: 13862201 FILING DATE: 04/12/2013  
PATENT NUMBER: ISSUE DATE:  
TITLE: INTEGRATED CIRCUIT SYSTEM WITH NON-VOLATILE MEMORY AND METHOD OF  
MANUFACTURE THEREOF

APPLICATION NUMBER: 13883696 FILING DATE: 05/06/2013  
PATENT NUMBER: 9531958 ISSUE DATE: 12/27/2016  
TITLE: IMAGE PROCESSING DEVICE, IMAGING DEVICE, IMAGE PROCESSING  
METHOD, AND PROGRAM HAVING DIFFERENT EXPOSURE START TIMES

APPLICATION NUMBER: 13963796 FILING DATE: 08/09/2013  
PATENT NUMBER: ISSUE DATE:  
TITLE: NON-VOLATILE MEMORY SYSTEM WITH RELIABILITY ENHANCEMENT  
MECHANISM AND METHOD OF MANUFACTURE THEREOF

APPLICATION NUMBER: 14071188 FILING DATE: 11/04/2013  
PATENT NUMBER: ISSUE DATE:  
TITLE: SYSTEM AND METHOD FOR CORRELATING CAMERA VIEWS

APPLICATION NUMBER: 14159066 FILING DATE: 01/20/2014  
PATENT NUMBER: 9356161 ISSUE DATE: 05/31/2016  
TITLE: SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING SEMICONDUCTOR  
DEVICE

APPLICATION NUMBER: 14181054 FILING DATE: 02/14/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: MEMORY DEVICE WITH VARIABLE TRIM PARAMETERS

APPLICATION NUMBER: 14186437 FILING DATE: 02/21/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: MEMORY DEVICE COMPRISING TILES WITH SHARED READ AND WRITE  
CIRCUITS

APPLICATION NUMBER: 14186636 FILING DATE: 02/21/2014  
PATENT NUMBER: 9496034 ISSUE DATE: 11/15/2016  
TITLE: MEMORY DEVICE WITH A COMMON SOURCE LINE MASKING CIRCUIT

APPLICATION NUMBER: 14193708 FILING DATE: 02/28/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: MEMORY DEVICE COMPRISING DOUBLE CASCODE SENSE AMPLIFIERS

APPLICATION NUMBER: 14225045 FILING DATE: 03/25/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID STATE IMAGING APPARATUS AND ELECTRONIC DEVICE

APPLICATION NUMBER: 14283539 FILING DATE: 05/21/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHOD FOR FORMING A METAL CAP IN A SEMICONDUCTOR MEMORY DEVICE

APPLICATION NUMBER: 14283893 FILING DATE: 05/21/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHOD FOR A DRY EXHUMATION WITHOUT OXIDATION OF A CELL AND  
SOURCE LINE

APPLICATION NUMBER: 14311958 FILING DATE: 06/23/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE CAPTURE DEVICE AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14313462 FILING DATE: 06/24/2014  
PATENT NUMBER: 9502459 ISSUE DATE: 11/22/2016  
TITLE: IMAGE PICKUP DEVICE, METHOD OF MANUFACTURING IMAGE PICKUP  
DEVICE, AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14323510 FILING DATE: 07/03/2014  
PATENT NUMBER: 9379160 ISSUE DATE: 06/28/2016  
TITLE: SOLID-STATE IMAGING APPARATUS, METHOD OF MANUFACTURING THE SAME,  
AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14323518 FILING DATE: 07/03/2014  
PATENT NUMBER: 9356063 ISSUE DATE: 05/31/2016  
TITLE: IMAGE SENSOR, PRODUCTION APPARATUS, PRODUCTION METHOD, AND  
ELECTRONIC DEVICE

APPLICATION NUMBER: 14323532 FILING DATE: 07/03/2014  
PATENT NUMBER: 9386245 ISSUE DATE: 07/05/2016  
TITLE: SOLID-STATE IMAGING DEVICE, SOLID-STATE IMAGING METHOD, AND  
ELECTRONIC APPARATUS

APPLICATION NUMBER: 14338886 FILING DATE: 07/23/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGING ELEMENT AND ELECTRONIC APPARATUS WITH IMPROVED WIRING  
LAYER CONFIGURATION

APPLICATION NUMBER: 14338929 FILING DATE: 07/23/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING APPARATUS, METHOD OF MANUFACTURING THE SAME,  
AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14362422 FILING DATE: 06/03/2014  
PATENT NUMBER: 9443912 ISSUE DATE: 09/13/2016  
TITLE: SOLID-STATE IMAGE PICKUP DEVICE AND MANUFACTURING METHOD THEREOF

APPLICATION NUMBER: 14409707 FILING DATE: 12/19/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE, METHOD OF MANUFACTURING SOLID-STATE  
IMAGING DEVICE, AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14448663 FILING DATE: 07/31/2014  
PATENT NUMBER: 9426438 ISSUE DATE: 08/23/2016  
TITLE: IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD, AND  
ELECTRONIC APPARATUS TO DETECT AND CORRECT FALSE COLOR IN HIGH  
DYNAMIC RANGE IMAGING

APPLICATION NUMBER: 14454129 FILING DATE: 08/07/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE, ELECTRONIC APPARATUS, AND INSPECTION  
APPARATUS

APPLICATION NUMBER: 14476469 FILING DATE: 09/03/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGING DEVICE, APPARATUS AND METHOD FOR PRODUCING THE SAME AND  
ELECTRONIC APPARATUS

APPLICATION NUMBER: 14477639 FILING DATE: 09/04/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID STATE IMAGE SENSOR, PRODUCTION METHOD THEREOF AND  
ELECTRONIC DEVICE

APPLICATION NUMBER: 14484012 FILING DATE: 09/11/2014  
PATENT NUMBER: 9538104 ISSUE DATE: 01/03/2017  
TITLE: IMAGING APPARATUS, IMAGING METHOD, MANUFACTURING APPARATUS,  
MANUFACTURING METHOD, AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14492335 FILING DATE: 09/22/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE, MANUFACTURING METHOD THEREOF,  
CAMERA, AND ELECTRONIC DEVICE

APPLICATION NUMBER: 14502077 FILING DATE: 09/30/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: MEMORY WITH DISTRIBUTED REPLACEMENT WORD LINES

APPLICATION NUMBER: 14511818 FILING DATE: 10/10/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: RESISTIVE MEMORY WITH A THERMALLY INSULATING REGION

APPLICATION NUMBER: 14513511 FILING DATE: 10/14/2014  
PATENT NUMBER: 9515110 ISSUE DATE: 12/06/2016  
TITLE: SOLID-STATE IMAGING DEVICE, METHOD OF MANUFACTURING SOLID-STATE  
IMAGING DEVICE, AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14513515 FILING DATE: 10/14/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE SENSOR, OPERATING METHOD THEREFOR, AND ELECTRONIC DEVICE

APPLICATION NUMBER: 14523621 FILING DATE: 10/24/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGING DEVICE, SIGNAL PROCESSING DEVICE, AND ELECTRONIC  
APPARATUS HAVING PIXEL SHARING UNITS THAT INCLUDE PORTIONS OF A  
COLOR FILTER ARRANGEMENT

APPLICATION NUMBER: 14549312 FILING DATE: 11/20/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD, SOLID-STATE  
IMAGING DEVICE, AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14559713 FILING DATE: 12/03/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID STATE IMAGING DEVICE, ELECTRONIC APPARATUS, AND METHOD FOR  
MANUFACTURING SOLID STATE IMAGING DEVICE

APPLICATION NUMBER: 14560750 FILING DATE: 12/04/2014  
PATENT NUMBER: 9373397 ISSUE DATE: 06/21/2016  
TITLE: PAGE PROGRAMMING SEQUENCES AND ASSIGNMENT SCHEMES FOR A MEMORY  
DEVICE

APPLICATION NUMBER: 14560865 FILING DATE: 12/04/2014  
PATENT NUMBER: 9379013 ISSUE DATE: 06/28/2016  
TITLE: METHOD FOR FORMING A SELF-ALIGNED CONTACT IN A DAMASCENE  
STRUCTURE USED TO FORM A MEMORY DEVICE

APPLICATION NUMBER: 14562880 FILING DATE: 12/08/2014  
PATENT NUMBER: 9349952 ISSUE DATE: 05/24/2016  
TITLE: METHODS FOR FABRICATING A MEMORY DEVICE WITH AN ENLARGED SPACE  
BETWEEN NEIGHBORING BOTTOM ELECTRODES

APPLICATION NUMBER: 14567067 FILING DATE: 12/11/2014  
PATENT NUMBER: 9450121 ISSUE DATE: 09/20/2016  
TITLE: SOLID-STATE IMAGING DEVICE AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14567777 FILING DATE: 12/11/2014  
PATENT NUMBER: 9373655 ISSUE DATE: 06/21/2016  
TITLE: IMAGING DEVICE AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14570765 FILING DATE: 12/15/2014  
PATENT NUMBER: 9515115 ISSUE DATE: 12/06/2016  
TITLE: SOLID-STATE IMAGE SENSOR, METHOD OF PRODUCING THE SAME, AND ELECTRONIC APPARATUS

APPLICATION NUMBER: ~~14572221~~ 14/527221 FILING DATE: 12/16/2014  
PATENT NUMBER: 9536510 ISSUE DATE: 01/03/2017  
TITLE: SOUND SYSTEM INCLUDING AN ENGINE SOUND SYNTHESIZER

APPLICATION NUMBER: 14593702 FILING DATE: 01/09/2015  
PATENT NUMBER: 9531972 ISSUE DATE: 12/27/2016  
TITLE: SOLID-STATE IMAGING DEVICE, METHOD FOR DRIVING THE SAME, AND IMAGING DEVICE

APPLICATION NUMBER: 14597738 FILING DATE: 01/15/2015  
PATENT NUMBER: 9412791 ISSUE DATE: 08/09/2016  
TITLE: SOLID STATE IMAGING ELEMENT, PRODUCTION METHOD THEREOF AND ELECTRONIC DEVICE

APPLICATION NUMBER: 14597753 FILING DATE: 01/15/2015  
PATENT NUMBER: 9432646 ISSUE DATE: 08/30/2016  
TITLE: IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD, PROGRAM AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14604273 FILING DATE: 01/23/2015  
PATENT NUMBER: 9419040 ISSUE DATE: 08/16/2016  
TITLE: IMAGE PICKUP APPARATUS, SEMICONDUCTOR DEVICE, AND ELECTRONIC DEVICE INCLUDING A BURIED PORTION DISPOSED ADJACENT TO A BONDING PORTION, AND METHOD FOR MANUFACTURING THE SAME

APPLICATION NUMBER: 14605791 FILING DATE: 01/26/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD, AND PROGRAM

APPLICATION NUMBER: 14615197 FILING DATE: 02/05/2015  
PATENT NUMBER: 9479718 ISSUE DATE: 10/25/2016  
TITLE: SIGNAL PROCESSING APPARATUS, SIGNAL PROCESSING METHOD, IMAGE PICKUP ELEMENT, AND IMAGING APPARATUS

APPLICATION NUMBER: 14636445 FILING DATE: 03/03/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD AND MANUFACTURING APPARATUS

APPLICATION NUMBER: 14649396 FILING DATE: 06/03/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGING DEVICE, IMAGING APPARATUS, ELECTRONIC APPARATUS, THRESHOLD VALUE CALCULATION APPARATUS, AND IMAGING METHOD

APPLICATION NUMBER: 14649643 FILING DATE: 06/04/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGING DEVICE, ELECTRONIC APPARATUS AND IMAGING METHOD



APPLICATION NUMBER: 14695830 FILING DATE: 04/24/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: BLOCK ARCHITECTURE FOR VERTICAL MEMORY ARRAY

APPLICATION NUMBER: 14751100 FILING DATE: 06/25/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: NON-VOLATILE MEMORY SYSTEM WITH RESET VERIFICATION MECHANISM AND  
METHOD OF OPERATION THEREOF

APPLICATION NUMBER: 14759734 FILING DATE: 07/08/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGE PICKUP UNIT AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14779403 FILING DATE: 09/23/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: WAVEGUIDE, WAVEGUIDE MANUFACTURING METHOD, AND WIRELESS  
TRANSMISSION SYSTEM

APPLICATION NUMBER: 14780640 FILING DATE: 09/28/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGE PICKUP UNIT, METHOD OF MANUFACTURING THE SAME,  
AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14783565 FILING DATE: 10/09/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: CONNECTOR APPARATUS AND RADIO TRANSMISSION SYSTEM

APPLICATION NUMBER: 14783896 FILING DATE: 10/12/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: CONNECTOR APPARATUS AND WIRELESS TRANSMISSION SYSTEM

APPLICATION NUMBER: 14902073 FILING DATE: 12/30/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: RECEIVING CIRCUIT AND TRANSMITTING CIRCUIT, AND COMMUNICATION  
SYSTEM AND COMMUNICATION METHOD

APPLICATION NUMBER: 14904779 FILING DATE: 01/13/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGE PICKUP DEVICE AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14906616 FILING DATE: 01/21/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: PIXEL CIRCUIT

APPLICATION NUMBER: 14912659 FILING DATE: 02/18/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING APPARATUS, MANUFACTURING METHOD THEREFOR,  
AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14942715 FILING DATE: 11/16/2015  
PATENT NUMBER: 9455413 ISSUE DATE: 09/27/2016  
TITLE: IMAGE PICKUP DEVICE AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14954502 FILING DATE: 11/30/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGE PICKUP DEVICE, ELECTRONIC APPARATUS, AND  
MANUFACTURING METHOD INCLUDING VARIOUS SHAPED MICROLENSES

APPLICATION NUMBER: 14973429 FILING DATE: 12/17/2015  
PATENT NUMBER: 9406879 ISSUE DATE: 08/02/2016  
TITLE: CONDUCTIVE BRIDGE MEMORY SYSTEM AND METHOD OF MANUFACTURE  
THEREOF

APPLICATION NUMBER: 15025944 FILING DATE: 03/30/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE-CAPTURING DEVICE, RADIATION DETECTION APPARATUS, AND  
CONTROL METHOD FOR IMAGE-CAPTURING DEVICE

APPLICATION NUMBER: 15028138 FILING DATE: 04/08/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: CONTROL APPARATUS, CONTROL METHOD, CABLE, ELECTRONIC APPARATUS,  
AND COMMUNICATION APPARATUS

APPLICATION NUMBER: 15029717 FILING DATE: 04/15/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE AND MANUFACTURING METHOD THEREFOR,  
AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 15045425 FILING DATE: 02/17/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID STATE IMAGING DEVICE HAVING A SHARED PIXEL STRUCTURE AND  
ELECTRONIC APPARATUS

APPLICATION NUMBER: 15059489 FILING DATE: 03/03/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: INTERFACIAL CAP FOR ELECTRODE CONTACTS IN MEMORY CELL ARRAYS

APPLICATION NUMBER: 15065429 FILING DATE: 03/09/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SYSTEM AND METHOD FOR CORRELATING CAMERA VIEWS

APPLICATION NUMBER: 15072472 FILING DATE: 03/17/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHOD FOR FABRICATING A METAL HIGH-K GATE STACK FOR A BURIED  
RECESSED ACCESS DEVICE

APPLICATION NUMBER: 15086919 FILING DATE: 03/31/2016  
PATENT NUMBER: 9478585 ISSUE DATE: 10/25/2016  
TITLE: SOLID-STATE IMAGE PICKUP DEVICE AND MANUFACTURING METHOD THEREOF

APPLICATION NUMBER: 15087872 FILING DATE: 03/31/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE AND ELECTRONIC APPARATUS INCLUDING A  
PHOTOELECTRIC CONVERSION UNIT DISPOSED BETWEEN ANOTHER  
PHOTOELECTRIC CONVERSION UNIT AND A PHOTOELECTRIC CONVERSION  
FILM

ASSIGNMENT RECORDATION BRANCH  
PUBLIC RECORDS DIVISION

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4169687

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the NATURE OF CONVEYANCE previously recorded on Reel 039635 Frame 0495. Assignor(s) hereby confirms the ASSIGNMENT.	
<b>CONVEYING PARTY DATA</b>		
<b>Name</b>		<b>Execution Date</b>
SONY CORPORATION		07/14/2016
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	SONY SEMICONDUCTOR SOLUTIONS CORPORATION	
<b>Street Address:</b>	4-14-1 ASahi-CHO, ATSUGI-SHI	
<b>City:</b>	KANAGAWA	
<b>State/Country:</b>	JAPAN	
<b>Postal Code:</b>	243-0017	
<b>PROPERTY NUMBERS Total: 75</b>		
<b>Property Type</b>	<b>Number</b>	
Application Number:	14560865	
Application Number:	14562880	
Application Number:	14560750	
Application Number:	14511818	
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PATENT

Property Type	Number
Application Number:	14615197
Application Number:	15028138
Application Number:	14559713
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Application Number:	14597753
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Application Number:	14649396
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Application Number:	15065429
Application Number:	14071188
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Application Number:	14695830

#### 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: smarkham@sheridanross.com

Correspondent Name: SHERIDAN ROSS P.C.

Address Line 1: 1560 BROADWAY

Address Line 2: SUITE 1200

Address Line 4: DENVER, COLORADO 80202

ATTORNEY DOCKET NUMBER:	SONY TO SSS CORRECTIVE
NAME OF SUBMITTER:	BRADLEY M. KNEPPER
SIGNATURE:	/Bradley M. Knepper/
DATE SIGNED:	12/05/2016

#### Total Attachments: 9

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# UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

SEPTEMBER 7, 2016

PTAS

SHERIDAN ROSS P.C. BRAD KNEPPER  
1560 BROADWAY  
SUITE 1200  
DENVER, CO 80202

**503952546**

## UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

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RECORDATION DATE: 08/09/2016

REEL/FRAME: 039635/0495  
NUMBER OF PAGES: 6

BRIEF: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: SEE ATTACHED

### ASSIGNOR:

SONY CORPORATION

DOC DATE: 07/14/2016

### ASSIGNEE:

SONY SEMICONDUCTOR SOLUTIONS  
CORPORATION  
4-14-1 ASAHI-CHO, ATSUGI-SHI  
KANAGAWA, JAPAN 243-0014

APPLICATION NUMBER: 13299951

FILING DATE: 11/18/2011

PATENT NUMBER:

ISSUE DATE:

TITLE: SOLID-STATE IMAGING DEVICE AND MANUFACTURING METHOD THEREOF, AND  
ELECTRONIC APPARATUS

APPLICATION NUMBER: 13843306

FILING DATE: 03/15/2013

PATENT NUMBER:

ISSUE DATE:

TITLE: INTEGRATED CIRCUIT SYSTEM WITH NON-VOLATILE MEMORY STRESS  
SUPPRESSION AND METHOD OF MANUFACTURE THEREOF

APPLICATION NUMBER: 13862201 FILING DATE: 04/12/2013  
PATENT NUMBER: ISSUE DATE:  
TITLE: INTEGRATED CIRCUIT SYSTEM WITH NON-VOLATILE MEMORY AND METHOD OF  
MANUFACTURE THEREOF

APPLICATION NUMBER: 13883696 FILING DATE: 05/06/2013  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE PROCESSING DEVICE, IMAGING DEVICE, IMAGE PROCESSING  
METHOD, AND PROGRAM HAVING DIFFERENT EXPOSURE START TIMES

APPLICATION NUMBER: 13963796 FILING DATE: 08/09/2013  
PATENT NUMBER: ISSUE DATE:  
TITLE: NON-VOLATILE MEMORY SYSTEM WITH RELIABILITY ENHANCEMENT  
MECHANISM AND METHOD OF MANUFACTURE THEREOF

APPLICATION NUMBER: 14071188 FILING DATE: 11/04/2013  
PATENT NUMBER: ISSUE DATE:  
TITLE: SYSTEM AND METHOD FOR CORRELATING CAMERA VIEWS

APPLICATION NUMBER: 14159066 FILING DATE: 01/20/2014  
PATENT NUMBER: 9356161 ISSUE DATE: 05/31/2016  
TITLE: SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING SEMICONDUCTOR  
DEVICE

APPLICATION NUMBER: 14181054 FILING DATE: 02/14/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: MEMORY DEVICE WITH VARIABLE TRIM PARAMETERS

APPLICATION NUMBER: 14186437 FILING DATE: 02/21/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: MEMORY DEVICE COMPRISING TILES WITH SHARED READ AND WRITE  
CIRCUITS

APPLICATION NUMBER: 14186636 FILING DATE: 02/21/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: MEMORY DEVICE WITH A COMMON SOURCE LINE MASKING CIRCUIT

APPLICATION NUMBER: 14193708 FILING DATE: 02/28/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: MEMORY DEVICE COMPRISING DOUBLE CASCODE SENSE AMPLIFIERS

APPLICATION NUMBER: 14225045 FILING DATE: 03/25/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID STATE IMAGING APPARATUS AND ELECTRONIC DEVICE

APPLICATION NUMBER: 14283539 FILING DATE: 05/21/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHOD FOR FORMING A METAL CAP IN A SEMICONDUCTOR MEMORY DEVICE

APPLICATION NUMBER: 14283893 FILING DATE: 05/21/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHOD FOR A DRY EXHUMATION WITHOUT OXIDATION OF A CELL AND  
SOURCE LINE

APPLICATION NUMBER: 14311958 FILING DATE: 06/23/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE CAPTURE DEVICE AND ELECTRONIC APPARATUS



APPLICATION NUMBER: 14313462 FILING DATE: 06/24/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE PICKUP DEVICE, METHOD OF MANUFACTURING IMAGE PICKUP  
DEVICE, AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14323510 FILING DATE: 07/03/2014  
PATENT NUMBER: 9379160 ISSUE DATE: 06/28/2016  
TITLE: SOLID-STATE IMAGING APPARATUS, METHOD OF MANUFACTURING THE SAME,  
AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14323518 FILING DATE: 07/03/2014  
PATENT NUMBER: 9356063 ISSUE DATE: 05/31/2016  
TITLE: IMAGE SENSOR, PRODUCTION APPARATUS, PRODUCTION METHOD, AND  
ELECTRONIC DEVICE

APPLICATION NUMBER: 14323532 FILING DATE: 07/03/2014  
PATENT NUMBER: 9386245 ISSUE DATE: 07/05/2016  
TITLE: SOLID-STATE IMAGING DEVICE, SOLID-STATE IMAGING METHOD, AND  
ELECTRONIC APPARATUS

APPLICATION NUMBER: 14338886 FILING DATE: 07/23/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGING ELEMENT AND ELECTRONIC APPARATUS WITH IMPROVED WIRING  
LAYER CONFIGURATION

APPLICATION NUMBER: 14338929 FILING DATE: 07/23/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING APPARATUS, METHOD OF MANUFACTURING THE SAME,  
AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14362422 FILING DATE: 06/03/2014  
PATENT NUMBER: 9443912 ISSUE DATE: 09/13/2016  
TITLE: SOLID-STATE IMAGE PICKUP DEVICE AND MANUFACTURING METHOD THEREOF

APPLICATION NUMBER: 14409707 FILING DATE: 12/19/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE, METHOD OF MANUFACTURING SOLID-STATE  
IMAGING DEVICE, AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14448663 FILING DATE: 07/31/2014  
PATENT NUMBER: 9426438 ISSUE DATE: 08/23/2016  
TITLE: IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD, AND  
ELECTRONIC APPARATUS TO DETECT AND CORRECT FALSE COLOR IN HIGH  
DYNAMIC RANGE IMAGING

APPLICATION NUMBER: 14454129 FILING DATE: 08/07/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE, ELECTRONIC APPARATUS, AND INSPECTION  
APPARATUS

APPLICATION NUMBER: 14476469 FILING DATE: 09/03/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGING DEVICE, APPARATUS AND METHOD FOR PRODUCING THE SAME AND  
ELECTRONIC APPARATUS

APPLICATION NUMBER: 14477639 FILING DATE: 09/04/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID STATE IMAGE SENSOR, PRODUCTION METHOD THEREOF AND  
ELECTRONIC DEVICE

APPLICATION NUMBER: 14484012 FILING DATE: 09/11/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGING APPARATUS, IMAGING METHOD, MANUFACTURING APPARATUS,  
MANUFACTURING METHOD, AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14492335 FILING DATE: 09/22/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE, MANUFACTURING METHOD THEREOF,  
CAMERA, AND ELECTRONIC DEVICE

APPLICATION NUMBER: 14502077 FILING DATE: 09/30/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: MEMORY WITH DISTRIBUTED REPLACEMENT WORD LINES

APPLICATION NUMBER: 14511818 FILING DATE: 10/10/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: RESISTIVE MEMORY WITH A THERMALLY INSULATING REGION

APPLICATION NUMBER: 14513511 FILING DATE: 10/14/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE, METHOD OF MANUFACTURING SOLID-STATE  
IMAGING DEVICE, AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14513515 FILING DATE: 10/14/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE SENSOR, OPERATING METHOD THEREFOR, AND ELECTRONIC DEVICE

APPLICATION NUMBER: 14523621 FILING DATE: 10/24/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGING DEVICE, SIGNAL PROCESSING DEVICE, AND ELECTRONIC  
APPARATUS HAVING PIXEL SHARING UNITS THAT INCLUDE PORTIONS OF A  
COLOR FILTER ARRANGEMENT

APPLICATION NUMBER: 14527221 FILING DATE: 10/29/2014  
PATENT NUMBER: 9450114 ISSUE DATE: 09/20/2016  
TITLE: SOLID-STATE IMAGING DEVICE AND ELECTRONIC APPARATUS HAVING A  
PLURALITY OF PHOTOELECTRIC CONVERSION LAYER FOR CORRESPONDING  
WAVELENGTH REGIONS (AS AMENDED)

APPLICATION NUMBER: 14549312 FILING DATE: 11/20/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD, SOLID-STATE  
IMAGING DEVICE, AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14559713 FILING DATE: 12/03/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID STATE IMAGING DEVICE, ELECTRONIC APPARATUS, AND METHOD FOR  
MANUFACTURING SOLID STATE IMAGING DEVICE

APPLICATION NUMBER: 14560750 FILING DATE: 12/04/2014  
PATENT NUMBER: 9373397 ISSUE DATE: 06/21/2016  
TITLE: PAGE PROGRAMMING SEQUENCES AND ASSIGNMENT SCHEMES FOR A MEMORY  
DEVICE

APPLICATION NUMBER: 14560865 FILING DATE: 12/04/2014  
PATENT NUMBER: 9379013 ISSUE DATE: 06/28/2016  
TITLE: METHOD FOR FORMING A SELF-ALIGNED CONTACT IN A DAMASCENE  
STRUCTURE USED TO FORM A MEMORY DEVICE

APPLICATION NUMBER: 14562880 FILING DATE: 12/08/2014  
PATENT NUMBER: 9349952 ISSUE DATE: 05/24/2016  
TITLE: METHODS FOR FABRICATING A MEMORY DEVICE WITH AN ENLARGED SPACE  
BETWEEN NEIGHBORING BOTTOM ELECTRODES

APPLICATION NUMBER: 14567067 FILING DATE: 12/11/2014  
PATENT NUMBER: 9450121 ISSUE DATE: 09/20/2016  
TITLE: SOLID-STATE IMAGING DEVICE AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14567777 FILING DATE: 12/11/2014  
PATENT NUMBER: 9373655 ISSUE DATE: 06/21/2016  
TITLE: IMAGING DEVICE AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14570765 FILING DATE: 12/15/2014  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGE SENSOR, METHOD OF PRODUCING THE SAME, AND  
ELECTRONIC APPARATUS

APPLICATION NUMBER: 14593702 FILING DATE: 01/09/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE, METHOD FOR DRIVING THE SAME, AND  
IMAGING DEVICE

APPLICATION NUMBER: 14597738 FILING DATE: 01/15/2015  
PATENT NUMBER: 9412791 ISSUE DATE: 08/09/2016  
TITLE: SOLID STATE IMAGING ELEMENT, PRODUCTION METHOD THEREOF AND  
ELECTRONIC DEVICE

APPLICATION NUMBER: 14597753 FILING DATE: 01/15/2015  
PATENT NUMBER: 9432646 ISSUE DATE: 08/30/2016  
TITLE: IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD, PROGRAM AND  
ELECTRONIC APPARATUS

APPLICATION NUMBER: 14604273 FILING DATE: 01/23/2015  
PATENT NUMBER: 9419040 ISSUE DATE: 08/16/2016  
TITLE: IMAGE PICKUP APPARATUS, SEMICONDUCTOR DEVICE, AND ELECTRONIC  
DEVICE INCLUDING A BURIED PORTION DISPOSED ADJACENT TO A BONDING  
PORTION, AND METHOD FOR MANUFACTURING THE SAME

APPLICATION NUMBER: 14605791 FILING DATE: 01/26/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD, AND PROGRAM

APPLICATION NUMBER: 14615197 FILING DATE: 02/05/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: SIGNAL PROCESSING APPARATUS, SIGNAL PROCESSING METHOD, IMAGE  
PICKUP ELEMENT, AND IMAGING APPARATUS

APPLICATION NUMBER: 14636445 FILING DATE: 03/03/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD AND  
MANUFACTURING APPARATUS

APPLICATION NUMBER: 14649396 FILING DATE: 06/03/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGING DEVICE, IMAGING APPARATUS, ELECTRONIC APPARATUS,  
THRESHOLD VALUE CALCULATION APPARATUS, AND IMAGING METHOD

APPLICATION NUMBER: 14649643 FILING DATE: 06/04/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGING DEVICE, ELECTRONIC APPARATUS AND IMAGING METHOD

APPLICATION NUMBER: 14695830 FILING DATE: 04/24/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: BLOCK ARCHITECTURE FOR VERTICAL MEMORY ARRAY

APPLICATION NUMBER: 14751100 FILING DATE: 06/25/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: NON-VOLATILE MEMORY SYSTEM WITH RESET VERIFICATION MECHANISM AND  
METHOD OF OPERATION THEREOF

APPLICATION NUMBER: 14759734 FILING DATE: 07/08/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGE PICKUP UNIT AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14779403 FILING DATE: 09/23/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: WAVEGUIDE, WAVEGUIDE MANUFACTURING METHOD, AND WIRELESS  
TRANSMISSION SYSTEM

APPLICATION NUMBER: 14780640 FILING DATE: 09/28/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGE PICKUP UNIT, METHOD OF MANUFACTURING THE SAME,  
AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14783565 FILING DATE: 10/09/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: CONNECTOR APPARATUS AND RADIO TRANSMISSION SYSTEM

APPLICATION NUMBER: 14783896 FILING DATE: 10/12/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: CONNECTOR APPARATUS AND WIRELESS TRANSMISSION SYSTEM

APPLICATION NUMBER: 14902073 FILING DATE:  
PATENT NUMBER: ISSUE DATE:  
TITLE: RECEIVING CIRCUIT AND TRANSMITTING CIRCUIT, AND COMMUNICATION  
SYSTEM AND COMMUNICATION METHOD

APPLICATION NUMBER: 14904779 FILING DATE: 01/13/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGE PICKUP DEVICE AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14906616 FILING DATE: 01/21/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: PIXEL CIRCUIT

APPLICATION NUMBER: 14912659 FILING DATE: 02/18/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING APPARATUS, MANUFACTURING METHOD THEREFOR,  
AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14942715 FILING DATE: 11/16/2015  
PATENT NUMBER: 9455413 ISSUE DATE: 09/27/2016  
TITLE: IMAGE PICKUP DEVICE AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 14954502 FILING DATE: 11/30/2015  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGE PICKUP DEVICE, ELECTRONIC APPARATUS, AND  
MANUFACTURING METHOD INCLUDING VARIOUS SHAPED MICROLENSSES

APPLICATION NUMBER: 14973429 FILING DATE: 12/17/2015  
PATENT NUMBER: 9406879 ISSUE DATE: 08/02/2016  
TITLE: CONDUCTIVE BRIDGE MEMORY SYSTEM AND METHOD OF MANUFACTURE  
THEREOF

APPLICATION NUMBER: 15025944 FILING DATE: 03/30/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: IMAGE-CAPTURING DEVICE, RADIATION DETECTION APPARATUS, AND  
CONTROL METHOD FOR IMAGE-CAPTURING DEVICE

APPLICATION NUMBER: 15028138 FILING DATE: 04/08/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: CONTROL APPARATUS, CONTROL METHOD, CABLE, ELECTRONIC APPARATUS,  
AND COMMUNICATION APPARATUS

APPLICATION NUMBER: 15029717 FILING DATE: 04/15/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE AND MANUFACTURING METHOD THEREFOR,  
AND ELECTRONIC APPARATUS

APPLICATION NUMBER: 15045425 FILING DATE: 02/17/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID STATE IMAGING DEVICE HAVING A SHARED PIXEL STRUCTURE AND  
ELECTRONIC APPARATUS

APPLICATION NUMBER: 15059489 FILING DATE: 03/03/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: INTERFACIAL CAP FOR ELECTRODE CONTACTS IN MEMORY CELL ARRAYS

APPLICATION NUMBER: 15065429 FILING DATE: 03/09/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SYSTEM AND METHOD FOR CORRELATING CAMERA VIEWS

APPLICATION NUMBER: 15072472 FILING DATE: 03/17/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: METHOD FOR FABRICATING A METAL HIGH-K GATE STACK FOR A BURIED  
RECESSED ACCESS DEVICE

APPLICATION NUMBER: 15086919 FILING DATE: 03/31/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGE PICKUP DEVICE AND MANUFACTURING METHOD THEREOF

APPLICATION NUMBER: 15087872 FILING DATE: 03/31/2016  
PATENT NUMBER: ISSUE DATE:  
TITLE: SOLID-STATE IMAGING DEVICE AND ELECTRONIC APPARATUS

ASSIGNMENT RECORDATION BRANCH  
PUBLIC RECORDS DIVISION

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3999202

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	CHANGE OF NAME

## CONVEYING PARTY DATA

Name	Execution Date
SONY CORPORATION	07/14/2016

## RECEIVING PARTY DATA

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

## PROPERTY NUMBERS Total: 75

Property Type	Number
Application Number:	14560865
Application Number:	14562880
Application Number:	14560750
Application Number:	14511818
Application Number:	14502077
Application Number:	14283893
Application Number:	14186636
Application Number:	14193708
Application Number:	14186437
Application Number:	14181054
Application Number:	15059489
Application Number:	14283539
Application Number:	14973429
Application Number:	14567777
Application Number:	14605791
Application Number:	14570765
Application Number:	14567067
Application Number:	14604273
Application Number:	14597738
Application Number:	14615197

PATENT

Property Type	Number
Application Number:	15028138
Application Number:	14559713
Application Number:	13862201
Application Number:	13963796
Application Number:	14597753
Application Number:	14448663
Application Number:	14513511
Application Number:	14476469
Application Number:	14484012
Application Number:	14477639
Application Number:	15025944
Application Number:	14513515
Application Number:	14323532
Application Number:	14549312
Application Number:	14311958
Application Number:	14323510
Application Number:	15045425
Application Number:	14523621
Application Number:	14338886
Application Number:	14904779
Application Number:	14454129
Application Number:	14912659
Application Number:	14313462
Application Number:	14338929
Application Number:	14783565
Application Number:	14942715
Application Number:	15029717
Application Number:	14323518
Application Number:	14902073
Application Number:	14783896
Application Number:	14779403
Application Number:	14751100
Application Number:	14906616
Application Number:	14225045
Application Number:	15072472
Application Number:	14780640
Application Number:	13843306
Application Number:	14954502

Property Type	Number
Application Number:	14759734
Application Number:	14649396
Application Number:	14159066
Application Number:	14409707
Application Number:	14649643
Application Number:	15086919
Application Number:	14362422
Application Number:	13883696
Application Number:	15087872
Application Number:	14527221
Application Number:	13299951
Application Number:	14492335
Application Number:	15065429
Application Number:	14071188
Application Number:	14636445
Application Number:	14593702
Application Number:	14695830

#### 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: cjacquet@sheridanross.com

Correspondent Name: SHERIDAN ROSS P.C. BRAD KNEPPER

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Address Line 2: SUITE 1200

Address Line 4: DENVER, COLORADO 80202

ATTORNEY DOCKET NUMBER: SEE ATTACHED

NAME OF SUBMITTER: BRADLEY M. KNEPPER

SIGNATURE: /Bradley M. Knepper/

DATE SIGNED: 08/09/2016

#### Total Attachments: 3

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### WORLDWIDE ASSIGNMENT

WHEREAS, Sony Corporation, a Japanese corporation having a place of business at 1-7-1 Konan, Minato-ku, Tokyo 108-0075, Japan ("ASSIGNOR"), is the owner of an interest in and to the patents and patent applications listed in Schedule A, attached hereto and incorporated herein by reference:

WHEREAS, Sony Semiconductor Solutions Corporation, a Japanese corporation having a place of business at 4-14-1 Asahi-cho, Atsugi-shi, Kanagawa 243-0014, Japan ("ASSIGNEE"), desires to acquire the entire right, title, and interest in and to the patents and patent applications listed in Schedule A, consistent with the terms set forth below;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) paid to ASSIGNOR by ASSIGNEE, and other good and valuable consideration, the receipt and sufficiency of which is acknowledged, ASSIGNOR has sold, assigned, transferred, and set over, and does hereby sell, assign, transfer, and set over unto ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the patents and patent applications listed in Schedule A, the inventions and subject matter described therein, all applications claiming benefit of the patents and patent applications listed in Schedule A, including, but not limited to, all divisional, continuation, continuation-in-part, substitution or renewal of the Applications, and all Letters Patent that may be granted thereon in the United States and in all other countries throughout the World, and all reissues thereof, together with the right to claim priority under the International Convention in all member countries (collectively, the "Patent Assets"), together with any and all causes of action, either in law or in equity, for past, present, or future infringement based on the Patent Assets;

AND ASSIGNOR covenants and agrees that it has the full right to convey the entire right, title, and interest herein assigned and that it has not executed and will not execute any assignment or other instrument in conflict with this Assignment.

The Director of the U.S. Patent and Trademark Office, and any Official of any country or countries foreign to the U.S. whose duty it is to issue patents or other forms of industrial property, is hereby authorized to issue the same for the Patent Assets to ASSIGNEE, its successors, legal representatives and assigns, as the assignee of the entire right, title and interest therein.

ASSIGNOR  
SONY CORPORATION

Date: July 14th, 2016

By: Sohei Suzuki

Name: Sohei Suzuki

Title: Senior General Manager, Intellectual Property Division

# SCHEDULE A

Docket No.	Application Serial No.	Filing Date
6810-717	14/560865	12/4/2014
6810-716	14/562880	12/8/2014
6810-715	14/560750	12/4/2014
6810-714	14/511818	10/10/2014
6810-713	14/502077	9/30/2014
6810-712	14/283893	5/21/2014
6810-711	14/186636	2/21/2014
6810-710	14/193708	2/28/2014
6810-709	14/186437	2/21/2014
6810-708	14/181054	2/14/2014
6810-707-CON	15/059489	3/3/2016
6810-706	14/283539	5/21/2014
6810-705-CON	14/973429	12/17/2015
6810-536	14/567777	12/11/2014
6810-624	14/605791	1/26/2015
6810-611	14/570765	12/15/2014
6810-608	14/567067	12/11/2014
6810-623	14/604273	1/23/2015
6810-620	14/597738	1/15/2015
6810-625	14/615197	2/5/2015
6810-759	15/028138	10/3/2014
6810-605	14/559713	12/3/2014
6810-704	13/862201	4/12/2013
6810-703	13/963796	8/9/2013
6810-621	14/597753	1/15/2015
6810-554	14/448663	7/31/2014
6810-590	14/513511	10/14/2014
6810-563	14/476469	9/3/2014
6810-565	14/484012	9/11/2014
6810-564	14/477639	9/4/2014
6810-749	15/025944	9/2/2014
6810-591	14/513515	10/14/2014
6810-544	14/323532	7/3/2014
6810-602	14/549312	11/20/2014
6810-528	14/311958	6/23/2014
6810-542	14/323510	7/3/2014
6810-527-CON	15/045425	2/17/2016
6810-594	14/523621	10/24/2014
6810-550	14/338886	7/23/2014

6810-745	14/904779	7/8/2014
6810-560	14/454129	8/7/2014
6810-756	14/912659	8/15/2014
6810-539	14/313462	6/24/2014
6810-551	14/338929	7/23/2014
6810-727	14/783565	3/27/2014
6810-540-CON	14/942715	11/16/2015
6810-776	15/029717	10/14/2014
6810-543	14/323518	7/3/2014
6810-743	14/902073	6/5/2014
6810-724	14/783896	3/27/2014
6810-726	14/779403	3/12/2014
6810-700-CON	14/751100	6/25/2015
6810-750	14/906616	7/17/2014
6810-516	14/225045	3/25/2014
6810-699-CON-2	15/072472	3/17/2016
6810-682	14/780640	3/27/2014
6810-698	13/843306	3/15/2013
6810-489-CON	14/954502	11/30/2015
6810-681	14/759734	12/19/2013
6810-679	14/649396	11/29/2013
6810-484	14/159066	1/20/2014
6810-636	14/409707	6/19/2013
6810-676	14/649643	11/25/2013
6810-763-CON	15/086919	3/31/2016
6810-763	14/362422	11/30/2012
6810-687	13/883696	10/24/2011
6810-221-CON-2	15/087872	3/31/2016
6810-221-CON	14/527221	10/29/2014
6810-469	13/299951	11/18/2011
6810-72-DIV	14/492335	9/22/2014
6810-674-CON-DIV-CON	15/065429	3/9/2016
6810-674-CON-DIV	14/071188	11/4/2013
6810-137-CON-2	14/636445	3/3/2015
6810-315-CON-2	14/593702	1/9/2015
6810-669	14/695830	4/24/2015