# 504645562 11/16/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

Version v1.1 EPAS ID: PAT4692282

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
JIE ZHANG	09/28/2017
RALPH ETIENNE-CUMMINGS	10/02/2017
TAO XIONG	09/21/2017
TRAC D. TRAN	11/16/2017
SANG H. CHIN	09/20/2017

#### **RECEIVING PARTY DATA**

Name:	THE JOHNS HOPKINS UNIVERSITY
Street Address:	3400 N. CHARLES STREET
City:	BALTIMORE
State/Country:	MARYLAND
Postal Code:	21218

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15785301

## **CORRESPONDENCE DATA**

**Fax Number:** (410)322-8114

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: 4103328913
Email: patents@saul.com

**Correspondent Name:** GIANNA JULIAN-ARNOLD **Address Line 1:** 500 EAST PRATT STREET

Address Line 2: SUITE 900

Address Line 4: BALTIMORE, MARYLAND 21202

ATTORNEY DOCKET NUMBER:	369988.00003
NAME OF SUBMITTER:	GIANNA JULIAN-ARNOLD
SIGNATURE:	/Gianna Julian-Arnold/
DATE SIGNED:	11/16/2017

Total Attachments: 10

PATENT REEL: 044477 FRAME: 0293



PATENT REEL: 044477 FRAME: 0294

WHEREAS, I have made an invention entitled FLEXIBLE PIXEL-WISE EXPOSURE CONTROL AND READOUT, for which U.S. Patent Application No. 15/785,301 was filed on 10-16-2017; which claims priority to U.S. Provisional Application No. 62/411,176, filed on October 21, 2016;

WHEREAS, THE JOHNS HOPKINS UNIVERSITY ("ASSIGNEE"), a corporation or other business entity whose postal address is 3400 N. Charles Street, Baltimore, Maryland 21218, in the United States of America, desires to acquire the entire right, title, and interest in and to the invention, the application, and any Letters Parent to be granted for the invention in the United States and in all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) paid to us by ASSIGNEE, and other good and valuable consideration, the receipt and sufficiency of which I acknowledge, I have sold, assigned, transferred, and set over, and do 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 invention, the application, all applications claiming benefit of the application, including, but not limited to, all divisions and continuations of the application, and all Letters Patent that may be granted thereon in the United States and in all foreign countries, and all reissues thereof, together with the right to claim priority under the International Convention in all member countries; the same to be held and enjoyed by said Assignee its successors and assigns, as fully and entirely as the same would have been held and enjoyed by said Assignor had this assignment and sale not been made, together with all claims for damages by reason of past infringement of said Patent Properties with the right to sue for, and collect the same for its own use and for the use of its successors, assigns and other legal representatives; and I authorize and request the Director of the United States Patent and Trademark Office to issue all Letters Patent for the invention to ASSIGNEE, its successors, legal representatives, and assigns in accordance with the terms of this Assignment,

AND I covenant and agree that I have the full right to convey the entire right, title, and interest herein assigned and that I have not executed and will not execute any assignment or other instrument in conflict with this Assignment;

AND I further covenant and agree that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, I will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the invention in the United States and in all foreign countries, including, but not limited to, communicate with ASSIGNEE, its successors, legal representatives, and/or assigns any facts known to me/us regarding the invention, testify in any legal proceeding, sign all lawful papers, execute and deliver all papers that may be necessary or desirable to perfect the title to the invention in ASSIGNEE, its successors, legal representatives, and/or assigns, execute all divisional, continuation, and reissue applications, and make all rightful oaths, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns;

IN WITNESS WHEREOF, I have executed this Assignment on the date indicated below.

Signature:	A 111
Date:	9/28/2017
Full Name:	Jie Zhang
Address:	150 Heard Street, Apartment 515
	Chelsea, MA 02150
***************************************	USA
Signature:	
Date:	
Full Name:	Ralph Etienne-Cummings
Address:	1520 Kingman Place, NW
95 99555555	Washington, DC 20005
	USA
Olimentaria	
Signature:	
Date:	X21
Full Name:	Tao Xiong
Address:	2828 Damascus Court, Apartment C
	Baltimore, MD 21209
	USA
Signature:	
Date:	
Full Name:	Trac D. Tran
Address:	11689 Farside Road
***************************************	Ellicott City, MD 21042
	USA
Otanous	
Signature: Date:	
Full Name:	Sang H. Chin
Address:	248 Concord Avenue
, exert 6:30 .	Cambridge, MA 02138
	USA

WHEREAS, I have made an invention entitled FLEXIBLE PIXEL-WISE EXPOSURE CONTROL AND READOUT, for which U.S. Patent Application No. 15/785 301 was filed on 10-16-2017; which claims priority to U.S. Provisional Application No. 62/411,176, filed on October 21, 2016;

WHEREAS, THE JOHNS HOPKINS UNIVERSITY ("ASSIGNEE"), a corporation or other business entity whose postal address is 3400 N. Charles Street, Baltimore, Maryland 21218, in the United States of America, desires to acquire the entire right, title, and interest in and to the invention, the application, and any Letters Patent to be granted for the invention in the United States and in all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) paid to us by ASSIGNEE, and other good and valuable consideration, the receipt and sufficiency of which I acknowledge, I have sold, assigned, transferred, and set over, and do 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 invention, the application, all applications claiming benefit of the application, including, but not limited to, all divisions and continuations of the application, and all Letters Patent that may be granted thereon in the United States and in all foreign countries, and all reissues thereof, together with the right to claim priority under the International Convention in all member countries; the same to be held and enjoyed by said Assignee its successors and assigns, as fully and entirely as the same would have been held and enjoyed by said Assignor had this assignment and sale not been made, together with all claims for damages by reason of past infringement of said Patent Properties with the right to sue for, and collect the same for its own use and for the use of its successors, assigns and other legal representatives; and Lauthorize and request the Director of the United States Patent and Trademark Office to issue all Letters Patent for the invention to ASSIGNEE, its successors, legal representatives, and assigns in accordance with the terms of this Assignment;

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ì

IN WITNESS WHEREOF, I have executed this Assignment on the date indicated below.

Signature:	
Date:	
Full Name:	Jie Zhang
Address:	150 Heard Street, Apartment 515
	Chelsea, MA 02150
	USA
	043
Signature:	RHTE
Date:	10/2/2017
Full Name:	Ralph Etienne-Cummings
Address:	1520 Kingman Place, NW
40000	Washington, DC 20005
	USA
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Signature:	
Date:	
Full Name:	Tao Xiong
Address:	2828 Damascus Court, Apartment C
***************************************	Baltimore, MD 21209
	USA
Signature:	
Date:	
Full Name:	Trac D. Tran
Address:	11689 Farside Road
	Ellicott City, MD 21042
	USA
Signature:	
Date:	
Full Name:	Sang H. Chin
Address:	248 Concord Avenue
	Cambridge, MA 02138
	USA
	***************************************

WHEREAS, I have made an invention entitled FLEXIBLE PIXEL-WISE EXPOSURE CONTROL AND READOUT, for which U.S. Patent Application No. 15/785.301 was filed on 10-16-2017; which claims priority to U.S. Provisional Application No. 62/411,176, filed on October 21, 2016;

WHEREAS, THE JOHNS HOPKINS UNIVERSITY ("ASSIGNEE"), a corporation or other business entity whose postal address is 34(x) N. Charles Street, Baltimore, Maryland 21218, in the United States of America, desires to acquire the entire right, title, and interest in and to the invention, the application, and any Letters Patent to be granted for the invention in the United States and in all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) paid to us by ASSIGNEE. and other good and valuable consideration, the receipt and sufficiency of which I acknowledge, I have sold, assigned, transferred, and set over, and do 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 invention, the application, all applications claiming benefit of the application, including, but not limited to, all divisions and continuations of the application, and all Letters Patent that may be granted thereon in the United States and in all foreign countries, and all reissues thereof, together with the right to claim priority under the International Convention in all member countries; the same to be held and enjoyed by said Assignee its successors and assigns, as fully and entirely as the same would have been held and enjoyed by said Assignor had this assignment and sale not been made, together with all claims for damages by reason of past infringement of said Patent Properties with the right to sue for, and collect the same for its own use and for the use of its successors, assigns and other legal representatives; and I authorize and request the Director of the United States Patent and Trademark Office to issue all Letters Patent for the invention to ASSIGNEE, its successors, legal representatives, and assigns in accordance with the terms of this Assignment;

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(3771) 4.1 (09/12/2017

IN WITNESS WHEREOF, I have executed this Assignment on the date indicated below.

Signature:	99994.5000
Date:	
Full Name:	Jie Zhang
Address:	150 Fleard Street, Apartment 515
	Chelsca, MA 02150
	USA
Signature:	
Date:	
Full Name:	Rulph Etienne-Cummings
Address:	1520 Kingman Place, NW
	Washington, DC 20005
	USA
Signature:	Ton XIONS
Date:	61/2/1201/
Full Name:	Tao Xiong
Address:	2828 Damescus Court, Aparlment C
	Baltimore, MD 21209
	USA
Signature:	
Date:	
Full Name:	Trac D. Tran
Address:	11689 Farside Road
***************************************	Ellicon City, MD 21042
	USA
Signature:	
Date:	
Full Name:	Sang H. Chin
Address:	248 Concord Avenue
	Cambridge, MA 02138
	USA

WHEREAS, I have made an invention entitled FLEXIBLE PIXEL-WISE EXPOSURE CONTROL AND READOUT, for which U.S. Patent Application No. 15/785,301 was filed on 10-16-2017 ; which claims priority to U.S. Provisional Application No. 62/411,176, filed on October 21, 2016;

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Signature:	
Date:	
Full Name:	Jie Zhang
Address:	150 Heard Street, Apartment 515
	Chelsea, MA 02150
	USA
Signature:	
Date:	
Full Name:	Ralph Etienne-Cummings
Address:	1520 Kingman Place, NW
	Washington, DC 20005
**************************************	USA
Signature:	50 20000000 TUS TUS-TUS
Date:	
Full Name:	Tao Xiong
Address:	2828 Damascus Court, Apartment C
	Baltimore, MD 21209
	USA
	and the second of the second o
Signature:	~ UUUV V
Date:	11/16/2017
Full Name:	Trac D. Tran
Address:	11689 Farside Road
	Ellicott City, MD 21042
	USA
Signature:	
Date:	
Full Name:	Sang H. Chin
Address:	248 Concord Avenue
	Cambridge, MA 02138
	USA
	***************************************

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1277114.1 09/12/2017

WHEREAS, I have made an invention entitled FLEXIBLE PIXEL-WISE EXPOSURE CONTROL AND READOUT, for which U.S. Patent Application No. 16/785,301 was filed on 10-16-2017; which claims priority to U.S. Provisional Application No. 62/411,176, filed on October 21, 2016;

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(377) (4.) 09/19/2017

IN WITNESS WHEREOF, I have executed this Assignment on the date indicated below.

Signature:	
Date;	
Full Name:	Jie Zhang
Address:	150 Heard Street, Apartment 515
	Chelsea, MA 02150
***************************************	USA
SES	
Signature:	
Date:	
Full Name:	Ralph Etienne-Cummings
Address:	1520 Kingman Place, NW
	Washington, DC 20005 USA
Signature:	
Date:	
Full Name:	Tao Xiong
Address:	2828 Damascus Court, Apartment C
	Baltimore, MD 21209
	USA
Signature;	
Date:	
Full Name:	Trac D. Tran
Address:	11689 Farside Road
744401 £55;	Ellicott City, MD 21042
	USA
<del> </del>	
Signature:	Ahchin
Date:	7/80/2019
Full Name:	Sang H. Chin
Address:	248 Concord Avenue
	Cambridge, MA 02138
	USA
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**RECORDED: 11/16/2017**