504788409 02/22/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GEOFFREY J.S. SUPRAN	02/16/2018
KATHERINE W. SONG	02/16/2018
GYUWEON HWANG	02/14/2018
RAOUL EMILE CORREA	02/16/2018
YASUHIRO SHIRASAKI	02/14/2018
MOUNGI G. BAWENDI	02/16/2018
VLADIMIR BULOVIC	02/16/2018

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PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	14101867
Application Number:	61735344

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ATTORNEY DOCKET NUMBER: 14952.0466

NAME OF SUBMITTER: LINDA M FIELDING

SIGNATURE: /Linda M. Fielding/

504788409 PATENT REEL: 045000 FRAME: 0766

DATE SIGNED:	02/22/2018			
Total Attachments: 9				
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PATENT REEL: 045000 FRAME: 0767 Attorney Docket No: 14952,0466/ MIT Case No.: 16034K

BASSIGNMENT

For valuable consideration, we, Geoffrey J.S. SUPRAN of Cambridge, MA, Katherine W. SONG of Cambridge, MA, Gyuweon HWANG of Cambridge, MA, Raoul Emile CORREA of West Hartford, CT, Yasuhiro SHIRASAKI of Tokyo, JP, Moungi G. BAWENDI of Cambridge, MA, Vladimir BULOVIC of Lexington, MA, and Jennifer Scherer of Cambridge, MA; hereby assign to: Massachusetts Institute of Technology, a corporation of Massachusetts, having a place of business at 77 Massachusetts Avenue, Cambridge, MA 02142; its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of applications for United States Patent signed by us, entitled NEAR-INFRARED LIGHT EMITTING DEVICE <u>USING SEMICONDUCTOR NANOCRYSTALS</u>, filed <u>December 10, 2013</u>, and assigned U.S. Application Number 14/101,867, and entitled HIGH EFFICIENCY AND BRIGHTNESS NEAR-INFRARED QUANTUM-DOT LEDS USING CORE-SHELL (PBS-CDS) COLLOIDAL QUANTUM-DOTS, filed December 10, 2012, and assigned U.S. Application Number 61/735,344, we authorize and request the attorneys appointed in said applications to hereafter complete these assignments by inserting above the filing date and serial number of said applications when known; these assignments including said applications, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said applications under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully these assignments.

	Attorn	ey Docket N	io: 14952.0466	V MIT Case No).: 16034K
Inventor Signature:	- Art	Control of the Contro		ate: 02/16/	18
Printed Name:	Geoffrey J.S. SUPRAN				
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Attorney Docket No: 14952.0466/ MIT Case No.: 16034K

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Signat 02/16 /2018 Date	ure witnessed by:	WITNESS: Printed Name Address:	Lisa Song 7004 115th Ct SE Newcastle, WA 98056
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Mountain New, CA 94040

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Inventor Signature:			Date	2018 2 14	
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		WITNESS			
Date		Printed Name			
		Address			

REEL: 045000 FRAME: 0771

Attorney Docket No: 14952.0466/ MIT Case No.: 16034K Date: 2/16/2018 Inventor Signature: Raoul Emile CORREA Printed Name: 6282 Turnberry Circle Address: Huntington Beach, CA 92648 Signature witnessed by: WITNESS: Date Printed Name: Address: Signature witnessed by: WITNESS: Date Printed Name:

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, ************************************	Tokyo, Japan 190	-0023			
Signa	ture witnessed by:				
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Date		Printed Name:			
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Attorney Docket No: 14952.0466/ MIT Case No.: 16034K

Signature witnessed by:

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Signature witnessed by:

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WITNESS:

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Inventor Signature:	<u> </u>	4. I	D	ate: 02	16/18
Printed Name:	Vladimir BWLC	<u>ovic</u>			
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	Lexington, MA	02240			
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2/16/18		WITNESS:	16	July	
Date		Printed Name:	Danc	deli	uilettes
		Address:	119 6	.llege	Avenu
			Somer	ille.	MA 02144
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Signa	ture witnessed by		C_{-1}	\mathcal{N}	U -
-//6//8		WITNESS:	Com	u th	Invell
Date		Printed Name:	Sama		Classi
		Address:	80 11	10/108	STINEA

Attorney Docket No: 14952.0466/ MIT Case No.: 16034K

Inventor Signature: _______ Date: ______

Printed Name: Jennifer Scherer

Address: 32 Bristol St. Apt 3

Cambridge, MA 02141

	Signature witnessed by:		
		WITNESS:	
Date		Printed Name:	
		Address:	
	Signature witnessed by:		
		WITNESS:	
Date		Printed Name:	
		Address:	

Page 9 of 9