

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
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EPAS ID: PAT4323565

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the FIRST ASSIGNOR DOC DATE previously recorded on Reel 032231 Frame 0673. Assignor(s) hereby confirms the ASSIGNMENT.
<b>RESUBMIT DOCUMENT ID:</b>	504248225

**CONVEYING PARTY DATA**

Name	Execution Date
DORAI RAMPRASAD	11/02/2009
CRAIG BREEN	12/20/2007
JONATHAN S. STECKEL	12/20/2007

**RECEIVING PARTY DATA**

<b>Name:</b>	QD VISION, INC.
<b>Street Address:</b>	29 HARTWELL AVENUE
<b>City:</b>	LEXINGTON
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	02421

**PROPERTY NUMBERS Total: 1**

Property Type	Number
<b>Application Number:</b>	13768714

**CORRESPONDENCE DATA**

**Fax Number:** (860)286-0115  
*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:** 8602862929  
**Email:** usptopatentmail@cantorcolburn.com  
**Correspondent Name:** CANTOR COLBURN LLP  
**Address Line 1:** 20 CHURCH STREET, 22ND FLOOR  
**Address Line 4:** HARTFORD, CONNECTICUT 06103

<b>ATTORNEY DOCKET NUMBER:</b>	PNK1621USC2
<b>NAME OF SUBMITTER:</b>	JAMES J. MERRICK
<b>SIGNATURE:</b>	/James J. Merrick/
<b>DATE SIGNED:</b>	03/17/2017

**Total Attachments: 5**  
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## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4294903

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT								
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the FIRST ASSIGNOR DOC DATE previously recorded on Reel 032231 Frame 0673. Assignor(s) hereby confirms the ASSIGNMENT.								
<b>RESUBMIT DOCUMENT ID:</b>	504105810								
<b>CONVEYING PARTY DATA</b>									
	<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>DORAI RAMPRASAD</td> <td>11/02/2009</td> </tr> <tr> <td>CRAIG BREEN</td> <td>12/20/2007</td> </tr> <tr> <td>JONATHAN S. STECKEL</td> <td>12/20/2007</td> </tr> </tbody> </table>	Name	Execution Date	DORAI RAMPRASAD	11/02/2009	CRAIG BREEN	12/20/2007	JONATHAN S. STECKEL	12/20/2007
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JONATHAN S. STECKEL	12/20/2007								
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<b>City:</b>	LEXINGTON								
<b>State/Country:</b>	MASSACHUSETTS								
<b>Postal Code:</b>	02421								
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<b>Phone:</b>	8602862929								
<b>Email:</b>	usptopatentmail@cantorcolburn.com								
<b>Correspondent Name:</b>	CANTOR COLBURN LLP								
<b>Address Line 1:</b>	20 CHURCH STREET, 22ND FLOOR								
<b>Address Line 4:</b>	HARTFORD, CONNECTICUT 02421								
<b>ATTORNEY DOCKET NUMBER:</b>	QDV5213/4723USC1								
<b>NAME OF SUBMITTER:</b>	JAMES J. MERRICK								
<b>SIGNATURE:</b>	/James J. Merrick/								
<b>DATE SIGNED:</b>	02/28/2017								
<b>Total Attachments: 3</b> source=7S09424#page1.tif									

JOINT INVENTION

ASSIGNMENT

(Worldwide Rights)

WHEREAS We, the undersigned (herein after referred to as "Assignors" or "We"), are named as inventors in the patent application entitled:

**SEMICONDUCTOR NANOCRYSTALS AND COMPOSITIONS AND DEVICES INCLUDING SAME**

for which International Patent Application No. PCT/US2007/024312 was filed on 21 November 2007, and

WHEREAS, QD Vision, Inc., a corporation of Delaware (U.S.A.), whose post office address is 313 Pleasant Street, 4<sup>th</sup> Floor, Watertown, Massachusetts 02472 (hereby referred to as Assignee), is desirous of securing the entire right, title, and interest throughout the world in and to the inventions and improvements which are the subject of the above identified application;

NOW THEREFORE, be it known that for good and valuable consideration, the receipt and sufficiency of which from Assignee is hereby acknowledged, We, as Assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, the entire right, title, and interest throughout the world in and to the inventions and improvements which are the subject of said application, this assignment including said application, all utility applications claiming priority from said application, divisions, continuations-in-part, and continuations of the foregoing, any and all Letters Patent of the United States which may be granted for any of said inventions and improvements, any and all reissues thereof, any and all foreign patents, utility models, and design registrations granted for any of said inventions and improvements in any foreign country, any and all extensions, renewals, and reissues thereof, all rights to claim priority based on the filing date of said application, including the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other statutes and treaties of like purpose; and We authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models and design registrations and like rights of exclusion and for inventor's certificates for said inventions and improvements; and We hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that We have the full right to convey the interest assigned by this Assignment, and We have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree for ourselves and our respective heirs, legal representatives and assigns that We will, without further compensation, perform such lawful acts as Assignee may reasonably request to effectuate fully this assignment, including, but not limited to, communicating with Assignee, its successors and assigns, any facts known to us respecting said inventions and improvements, testifying in any legal proceeding, signing all lawful papers when called upon to do so, executing and delivering any and all papers that may be necessary or desirable to perfect the title to said inventions and improvements in said Assignee, its successors and assigns, executing said application and all further applications, making all rightful oaths and generally performing other lawful acts reasonably requested by Assignee, its successors and assigns, to obtain and

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enforce proper patent and other rights in and to said inventions and improvements in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

IN WITNESS WHEREOF, I hereto set my hand:

FULL NAME OF FIRST ASSIGNOR: DORAI RAMPRASAD
Address: Apt 139, 10635 Gramercy Place, Columbia MD 21044
Signature: <i>Dora Ramprasad</i>
Date: <i>NOV 2 2007</i> <del>2007</del> <i>2009</i> <del>DRP</del> <i>Feb 24, 2017</i>

IN WITNESS WHEREOF, I hereto set my hand:

FULL NAME OF SECOND ASSIGNOR: CRAIG BREEN
Address: 85 Orchard Street, Somerville, MA 02144
Signature:
Date:

IN WITNESS WHEREOF, I hereto set my hand:

FULL NAME OF THIRD ASSIGNOR: JONATHAN S. STECKEL
Address: 231 Brookline Street, Apt. 3, Cambridge, MA 02139
Signature:
Date:

JOINT INVENTION

ASSIGNMENT

(Worldwide Rights)

WHEREAS We, the undersigned (herein after referred to as "Assignors" or "We"), are named as inventors in the patent application entitled:

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NOW THEREFORE, be it known that for good and valuable consideration, the receipt and sufficiency of which from Assignee is hereby acknowledged, We, as Assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, the entire right, title, and interest throughout the world in and to the inventions and improvements which are the subject of said application, this assignment including said application, all utility applications claiming priority from said application, divisions, continuations-in-part, and continuations of the foregoing, any and all Letters Patent of the United States which may be granted for any of said inventions and improvements, any and all reissues thereof, any and all foreign patents, utility models, and design registrations granted for any of said inventions and improvements in any foreign country, any and all extensions, renewals, and reissues thereof, all rights to claim priority based on the filing date of said application, including the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other statutes and treaties of like purpose; and We authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models and design registrations and like rights of exclusion and for inventor's certificates for said inventions and improvements; and We hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that We have the full right to convey the interest assigned by this Assignment, and We have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree for ourselves and our respective heirs, legal representatives and assigns that We will, without further compensation, perform such lawful acts as Assignee may reasonably request to effectuate fully this assignment, including, but not limited to, communicating with Assignee, its successors and assigns, any facts known to us respecting said inventions and improvements, testifying in any legal proceeding, signing all lawful papers when called upon to do so, executing and delivering any and all papers that may be necessary or desirable to perfect the title to said inventions and improvements in said Assignee, its successors and assigns, executing said application and all further applications, making all rightful oaths and generally performing other lawful acts reasonably requested by Assignee, its successors and assigns, to obtain and

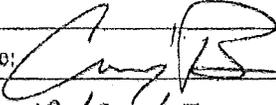
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enforce proper patent and other rights in and to said inventions and improvements in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

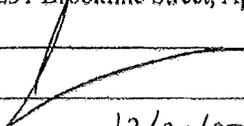
IN WITNESS WHEREOF, I hereto set my hand:

FULL NAME OF FIRST ASSIGNOR: <b>DORAI RAMPRASAD</b>
Address: 316 N. 41st Street, Allentown, PA 18104
Signature:
Date:

IN WITNESS WHEREOF, I hereto set my hand:

FULL NAME OF SECOND ASSIGNOR: <b>CRAIG BREEN</b>
Address: 85 Orchard Street, Somerville, MA 02144
Signature: 
Date: 12/20/07

IN WITNESS WHEREOF, I hereto set my hand:

FULL NAME OF THIRD ASSIGNOR: <b>JONATHAN S. STECKEL</b>
Address: 231 Brookline Street, Apt. 3, Cambridge, MA 02139
Signature: 
Date: 12/20/07