

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
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NATURE OF CONVEYANCE:	ASSIGNMENT
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CONVEYING PARTY DATA

Name	Execution Date
Quantum Dot Corporation	11/04/2005

RECEIVING PARTY DATA

Name:	Invitrogen Corp.
Street Address:	1600 Faraday Avenue
City:	Carlsbad
State/Country:	CALIFORNIA
Postal Code:	92008

PROPERTY NUMBERS Total: 35

Property Type	Number
Patent Number:	6274323
Patent Number:	6630307
Application Number:	10631573
Application Number:	09750223
Application Number:	10911364
Patent Number:	6500622
Application Number:	10331285
Patent Number:	6653080
Application Number:	10716063
Application Number:	09784645
Application Number:	09766273
Application Number:	09784866
Application Number:	09882193
Patent Number:	6734420
Application Number:	10807616

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Application Number:	09827256
Patent Number:	6759235
Application Number:	10832635
Application Number:	09999780
Application Number:	09972744
Application Number:	10374652
Application Number:	10735608
Application Number:	09751670
Application Number:	10726716
Patent Number:	6682596
Patent Number:	6838243
Application Number:	09945379
Patent Number:	6649138
Application Number:	10717288
Application Number:	10716971
Application Number:	10717246
Patent Number:	6815064
Application Number:	10985249
Application Number:	10263366
Application Number:	11011827

CORRESPONDENCE DATA

Fax Number: (541)335-0354
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.
Phone: (541) 335-0040
Email: christopher.buntel@invitrogen.com
Correspondent Name: Christopher J. Buntel
Address Line 1: 29851 Willow Creek Road
Address Line 4: Eugene, OREGON 97402-9132

ATTORNEY DOCKET NUMBER:	QDC
NAME OF SUBMITTER:	Christopher J. Buntel

Total Attachments: 5
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ASSIGNMENT

This ASSIGNMENT is between QUANTUM DOT CORPORATION, a California corporation with a place of business at 26118 Research Road, Hayward, CA, 94545, and INVITROGEN CORPORATION, a Delaware corporation having a place of business at 1600 Faraday Avenue, Carlsbad, CA, 92008.

WHEREAS, QUANTUM DOT CORPORATION is the owner of the entire right, title, and interest to the inventions described in the United States Patent Applications, and United States Patents obtained therefor and thereon, listed in Attachment 1 hereto;

AND WHEREAS, INVITROGEN CORPORATION desires to acquire from QUANTUM DOT CORPORATION the entire right, title and interest in and to said inventions and said applications for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon;

NOW, THEREFORE, for valuable consideration received, the receipt of which is hereby acknowledged, the said assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto the assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, applications for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Union for the Protection of Industrial Property, the same to be held and enjoyed by the said assignee, for its own use and behoof and the use and behoof of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, the said assignors hereby covenant and agree to and with the said assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, the said assignors are the sole and lawful owners of the entire right, title and interest in

and to the said inventions and the application for Letters Patent above-mentioned, and that the same are unencumbered and that the said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

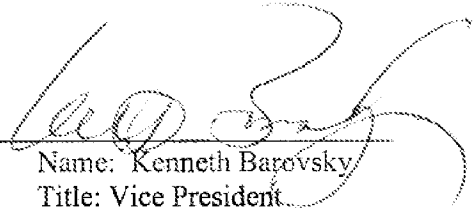
AND for the same consideration, the said assignors hereby covenant and agree to and with the said assignee, its successors, legal representatives and assigns, that the said assignors will, whenever counsel of the said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of the said assignee, its successors, legal representatives and assigns.

AND the said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to the said assignee as the assignee of said inventions and the Letters Patent to be issued thereon for the sole use and behoof of the said assignee, its successors, legal representatives and assigns.

IN WITNESS WHEREOF, QUANTUM DOT CORPORATION has caused this Assignment to be executed by a duly authorized representative thereof.

QUANTUM DOT CORPORATION

Dated: 4 NOV 2005

By: 
Name: Kenneth Barovsky
Title: Vice President

SEE ATTACHED NOTARY ACKNOWLEDGEMENT

Attachment 1			
QDC Docket Number	Title	U.S. Application Serial No.	U.S. Patent No.
0002 - US	A Method of Detecting An Analyte in a Sample Using Semiconductor Nanocrystals as Detectable Labels	09/566,014	6,274,323
0002.01	A Method of Detecting An Analyte in a Sample Using Semiconductor Nanocrystals as Detectable Labels	09/887,914	6,630,307
0002.02	A Method of Detecting An Analyte in a Sample Using Semiconductor Nanocrystals as Detectable Labels	10/631,573	
0005 - US	Immunochemical Methods for Detecting an Analyte in a Sample Which Employ Semiconductor Nanocrystals as Detectable Labels	09/750,223	
0005.01	Immunochemical Methods for Detecting an Analyte in a Sample Which Employ Semiconductor Nanocrystals as Detectable Labels	10/911,364	
0006A	Method of Using Semiconductor Nanocrystals In Bead-based Nucleic Acid Assays	09/815,585	6,500,622
0006A.01	Method of Using Semiconductor Nanocrystals In Bead-based Nucleic Acid Assays	10/331,285	
0006B	Loop Probe Hybridization Assay for Polynucleotide Analysis	09/815,510	6,653,080
0006B.01	Loop Probe Hybridization Assay for Polynucleotide Analysis	10/716,063	
0007	Microarray methods utilizing semiconductor nanocrystals	09/784,645	
0008 - US	Oligonucleotide Semiconductor Nanocrystals for microarrays and fluorescence in situ hybridization	09/766,273	
0009 - US	Single Target counting assays using quantum dot nanoparticles	09/784,866	
0009.20 - US	Single Target counting assays using quantum dot nanoparticles	09/882,193	
0010B-US	Differentiable Spectral Bar Code Methods & Systems	09/827,013	6,734,420
0010B.01	Differentiable Spectral Bar Code Methods & Systems	10/807,616	
0010C	Spatial Positioning of Spectrally Labeled Beads	09/827,256	
0010D	Two-Dimensional Spectral Imaging System	09/827,076	6,759,235
0010D.10	Two-Dimensional Spectral Imaging System Divisional	10/832,635	
0010D.20	Two-Dimensional Spectral Imaging System	09/999,780	
0014	Cells Having a Spectral Signature and Methods of Preparation and Use Thereof	09/972,744	

QDC Docket Number	Title	U.S. Application Serial No.	U.S. Patent No.
0014.01	Cells Having a Spectral Signature and Methods of Preparation and Use Thereof	10/374,652	
0014.20	Method for Enhancing Transport of Semiconductor Nanocrystals Across Biological Membranes	10/735608	
0015	Flow Synthesis of Quantum Dot Nanocrystals	09/751,670	
0015.01	Flow Synthesis of Quantum Dot Nanocrystals	10/726,716	
0015.20	Flow Synthesis of Quantum Dot Nanocrystals	10/032,809	6,682,596
0016	Methods and compositions for polynucleotide analysis using generic capture sequences	09/846,430	6,838,243
0019	Homogeneous assay for DNA analysis using generic molecular beacons	09/945,379	
0020	Surface-modified semiconductive and metallic nanoparticles having enhanced dispersibility in aqueous media	09/841,237	6,649,138
0020.01	Surface-modified semiconductive and metallic nanoparticles having enhanced dispersibility in aqueous media	10/717,288	
0020.02	Surface-modified semiconductive and metallic nanoparticles having enhanced dispersibility in aqueous media	10/716,971	
0020.10	Surface-modified semiconductive and metallic nanoparticles having enhanced dispersibility in aqueous media	10/717,246	
0021	Luminescent Nanoparticles and Methods for Their Preparation	10/198,635	6,815,064
0021.01	Luminescent Nanoparticles and Methods for Their Preparation	10/985,249	
0022	Method of Semiconductor Nanoparticle Synthesis	10/263,366	
0023	Preparation of Stable, Bright Luminescent Nanoparticles Having Compositionally Engineered Properties	11/011,827	

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

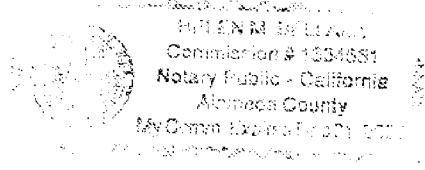
State of California

County of Alameda

On 11/4/05 before me, Helen M. Bellamy
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Kenneth Barovsky
(Name(s) of Signer(s))

personally known to me – **OR** – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

Helen M. Bellamy
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Assignment

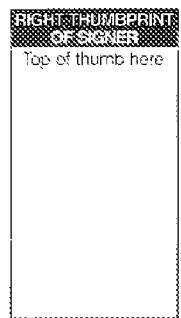
Document Date: 11/4/05 Number of Pages: 4

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

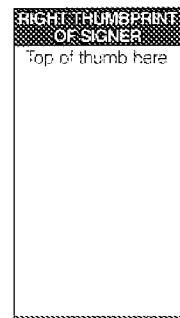
- Individual
- Corporate Officer
Title(s): Vice President
- Partner — Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other: _____



Signer Is Representing:

Signer's Name: _____

- Individual
- Corporate Officer
Title(s): _____
- Partner — Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other: _____



Signer Is Representing:

