

Our File No. FIO-10-5000WO-US

RECORDATION FORM COVER SHEET

PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

THE GOVERNING COUNCIL OF THE UNIVERSITY
OF TORONTOAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) July 16, 2010

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other

2. Name and address of receiving party(ies)

Name: FIO CORPORATION

Internal Address:

Street Address: 111 QUEEN STREET EAST
SUITE 500

City: TORONTO

State: ONTARIO

Country: CANADA Zip: M5C 1S2

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No4. Application or patent number(s): ☐ This document is being filed together with a new application.

A. Patent Application No.(s)

12/668,264

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: PATENT GROUP

DLA PIPER LLP (US)

Street Address: 203 N. LaSalle St., Suite 1900

City: Chicago

State: Illinois, 60601

Phone Number: (312) 368-4000

Fax Number: (312) 236-7516

Email Address: patentschgo@dlapiper.com

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00

- ☐ Authorized to be charged by credit card
☒ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

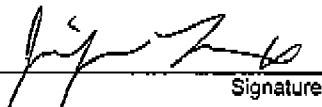
a. Credit Card Last 4 Numbers

Expiration Date

b. Deposit Account Number 18-2284

Authorized User Name: Jennifer E. Lacroix

9. Signature:



Signature

Jennifer E. Lacroix, Reg. No. 46,852

Name of Person Signing

September 15, 2010

Date

Total number of pages including cover sheet, attachments, and documents 9

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
 Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

CH \$40.00 182284 12668264

EXECUTION COPY**PATENT ASSIGNMENT**

WHEREAS all rights, title and interest in and to, and all power and authority in connection with, the inventions further described in the patent applications set out in Schedule "A" attached hereto (the "Inventions"), have been assigned to THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO, having offices at MaRS Centre, Heritage Building, 101 College Street, Suite 320, Toronto, Ontario, M5G 1L7, Canada (the "Assignor") as described in Schedule "B" attached hereto.

WHEREAS FIO CORPORATION whose full post office address is 111 Queen St. E., Suite 500, Toronto, ON (the "Assignee") is desirous of acquiring the rights as may be held by the Assignor in, to and under said Inventions and in, to and under any Letters Patent which may result therefrom.

NOW THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for and in consideration of the sum of Cdn\$2.00 paid by Assignee to the Assignor, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Assignor has sold, assigned, transferred and set over, and does hereby sell, assign, transfer and set over to Assignee, the entire right, title and interest in and to said Inventions, the patent applications set out in Schedule "A" hereto, and any and all continuations, divisions, renewals and substitutes for said patent applications and in, to and under any and all Letters Patent which may be granted on or as a result of the said patent applications and any issue or reissues or extensions or re-examinations of said Letters Patent, the same to be held and enjoyed by the Assignee as fully and entirely as the same could have been held and enjoyed by the Assignor if this sale, assignment and transfer not been made.

AND be it known that the Assignor authorizes and empowers the Assignee, its successors, assigns and legal representatives or nominees, to invoke and claim for any applications for patent or other form of protection for the Inventions filed by it, the benefit of the right of priority provided by the International Convention for Protection of Industrial Property, as amended, or by any Convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from the Assignor, and the Assignor hereby assigns to the Assignee any and all right the Assignor may have to claim such priority in any country from a corresponding International (PCT) patent application and/or U.S. patent application relating to one or more of the Inventions;

Executed this 16th day of July, 2010

Witness:



Name:

Date:

July 16/2010

Assignor:

THE GOVERNING COUNCIL OF THE
UNIVERSITY OF TORONTO



Per: Lino DeFacendis
Director, Information &
Communications Technology / Social
Sciences & Humanities
Innovations & Partnerships Office
University of Toronto

DM_TOR/277974-00074/3751217.2

EXECUTION COPY**SCHEDULE "A"****PATENT APPLICATIONS**

International (PCT) Application No. PCT/CA2008/000623, SYSTEM AND METHOD FOR SIGNAL DECONVOLVING MULTIPLEXED FLUORESCENCE SPECTRAL SIGNALS GENERATED BY QUANTUM DOT OPTICAL CODING TECHNOLOGY, filed on April 2, 2008

Provisional U.S. Patent Application Serial No. 60/909,581, SYSTEM AND METHOD FOR SIGNAL DECONVOLUTION, filed on April 2, 2007

International (PCT) Application No. PCT/CA2008/001264, SYSTEMS AND METHODS FOR ENHANCING FLUORESCENT DETECTION OF TARGET MOLECULES IN A TEST SAMPLE, filed on July 9, 2008

Provisional U.S. Patent Application Serial No. 60/948,643, ENHANCEMENT OF FLUORESCENCE BY CONTROLLABLE LOCALIZED EXCITATION", filed on July 9, 2007

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EXECUTION COPY

SCHEDULE "B"

ASSIGNMENTS OF RIGHTS TO THE UNIVERSITY OF TORONTO

DM_TOR/277974-00074/3751217.2



University of Toronto

OFFICE OF THE VICE-PRESIDENT, RESEARCH AND ASSOCIATE PROVOST

ASSIGNMENT OF RIGHTS TO THE UNIVERSITY OF TORONTO BY THE INVENTOR

In consideration of the terms and mutual covenants hereinafter contained and other good and valuable consideration in the sum of Two Dollars (\$2.00) of lawful money of Canada paid by each of the parties to the other, the receipt and sufficiency of which are hereby acknowledged Warren C. W. Chan, Jeongjin Lee, Jesse M. Klostranec, Qing Xiang, their heirs, executors, administrators and assigns (collectively the "Assignor") and The Governing Council of the University of Toronto, its successors and assigns (collectively the "Assignee") covenant and agree as follows:

1. As used in this Assignment, "Net Revenues" shall mean the royalty, licensing and other revenue received by the Assignee from all rights held by the Assignee in the invention entitled "System and Method for Signal Deconvolution" as described in Appendix A annexed hereto (the "Invention") less legal and other fees that the Assignee incurs directly in the process of establishing and maintaining the legal protection of those rights.
2. The Assignor hereby assigns to the Assignee all right, title and interest, whatever the same may be (but without any representation or warranty as to the nature, extent or validity thereof) which the Assignor now has or may in the future have in the Invention including without limitation the right to apply for patents in Canada, the United States of America and any other country, the right to receive any letters patent that may be issued from any such applications and the right to sell, license or assign the Invention or the rights thereto.
3. In consideration of the rights granted to the Assignee pursuant to this Assignment, the Assignee agrees to pay the Assignor 75% of subsequent Net Revenues.
4. If an arrangement for commercialization of the Invention is made which provides consideration to the Assignee other than cash, the parties will share the proceeds of such non-cash consideration in the same proportion as provided in paragraph 3.
5. Any money to be paid by the Assignee pursuant to this Assignment shall be paid to the Assignor annually on or before the thirtieth day following the anniversary of the execution of this Assignment accompanied by a statement of the Net Revenues received by the Assignee during the previous twelve months.
6. The Assignor agrees to make full and complete disclosure of the Invention to the Assignee, and shall make available to the Assignee any physical embodiments of the Inventions and other data that will be or that may be useful to the Assignee in exercising its rights in the Invention.

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Simcoe Hall, Room 133S, 27 King's College Circle, Toronto ON, M5S 1A1
 ☎ 416.978.7833 ■ 416.978.6821 -✉ paul.mcarthur@utoronto.ca

7. The Assignor agrees to execute, acknowledge and deliver all such further assurances and to do all such acts as may be necessary to carry out the intent and purpose of this Agreement, including without limitation, to execute powers of attorney and other documents required to maintain intellectual property protection of the Invention, and to review and provide comments with respect to such intellectual property protection when requested by the Assignee.
8. The Assignee agrees to indemnify and save the Assignor harmless from and against any loss arising out of or pursuant to any claims or demands in connection with the Invention and all costs, damages and expenses (including reasonable legal fees) incurred by the Assignor in connection therewith, except to the extent caused by the Assignor's breach of any of the Assignor's obligations herein or of any representations or warranties given by the Assignor in the Disclosure.
9. Save and except for the right to enforce the terms contained in this Assignment, the Assignor releases the Assignee from any and all claims that the Assignor may now have or may in future have in respect of the Invention.

Executed at Toronto, Ontario this 14th day of May, 2007.

Witness

B. Alexander

B. Alexander

B. Alexander

B. Alexander

Inventors

Warren C. W. Chan

Warren C. W. Chan

Jeongjin Lee

Jeongjin Lee

Jesse M. Klostraneck

Jesse M. Klostraneck

Qing Xiang

Qing Xiang

The Governing Council of the
University of Toronto

John R.G. Challis, F.R.S.C.

John R.G. Challis, F.R.S.C.

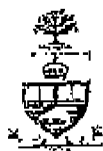
Vice-President, Research and Associate Provost

Louis R. Charpentier

Louis R. Charpentier

Secretary

Appendix A



UNIVERSITY OF TORONTO INVENTIONS POLICY CONFIDENTIAL INTELLECTUAL PROPERTY DISCLOSURE

Office of the Vice-President, Research and Associate Provost
27 King's College Circle, Room 133-S

Tel: (416) 978-7833 Fax: (416) 978-5821 email: ip.officer@utoronto.ca

1. a) Title of Disclosure:

System and method for signal deconvolution

b) Discipline (please check one):

☐ Life Sciences

☐ Physical Sciences

☐ Knowledge Translation

☐ Information Technology & Communications

☒ Other.

2. a) University of Toronto Inventors (individuals who have made an inventive contribution to this invention i.e. faculty, students, postdocs, staffs etc. Attach extra sheet if necessary):

SURNAME, GIVEN NAMES	UNIVERSITY PERSONNEL NO.	DEPARTMENT (List any cross appointments or affiliated institutions)	AFFILIATION WITH UofT (i.e. faculty, research assoc., post- doc, student)	EMAIL ADDRESS	CONTACT INFORMATION (mailing address, phone, fax)
Chan, Warren C.W.	01028843	Institute of biomaterials and biomedical engineering	Faculty	Warren.chan@ utoronto.ca	Terrance Donnelly CCBR 4 th floor Phone: 416-946-3416 Fax: 416-978-4317
Lee, Jeongjin	01058823	Institute of biomaterials and biomedical engineering	Post-doctoral Fellow	j55lee@gmail.u waterloo.ca	Terrance Donnelly CCBR 4 th floor Phone: 416-946-0015 Fax: 416-978-4317
Klostranec, Jesse M.	994208772	Institute of biomaterials and biomedical engineering	Graduate Student	Jesse.klostranec@ utoronto.ca	Terrance Donnelly CCBR 4 th floor Phone: 416-946-0015 Fax: 416-978-4317
Xiang, Qing	01038997	Institute of biomaterials and biomedical engineering	Post-doctoral fellow	qing_xiang2003@ yahoo.ca	Terrance Donnelly CCBR 4 th floor Phone: 416-946-0015 Fax: 416-978-4317

b) External Inventors/Major Contributors (Please provide names and affiliations of non-University of Toronto individuals who have made an inventive contribution to this Intellectual Property, i.e. sponsor employees, academic collaborators, etc.)

For Research Services use only:

Date RECEIVED: _____

DISCLOSURE REFERENCE NO: _____

SURNAME, GIVEN NAMES	ORGANIZATION	CONTACT INFORMATION
NA		

3. Description (Please highlight the novelty or patentable aspects of this Intellectual Property; attach a separate sheet if necessary):

Please see attached

4. Where did the work leading to this Intellectual Property take place?

Chan laboratory, University of Toronto

5. a) How was the work leading to this Intellectual Property funded? (i.e. salaries, equipment used, supplies etc.)

SPONSOR	GRANT OR CONTRACT FUND #	INTELLECTUAL PROPERTY TERMS & CONDITIONS
Genome Canada through the Ontario Genomics Institute	Fund # 459847, CFC# 211449	Schedule D-Intellectual property Terms of the original Genome Canada Competition III contract

- b) Is this Intellectual Property subject to any software licence, material transfer, confidentiality, non-disclosure, collaboration or other agreement, written or oral, not referenced in (a) above? ☐ NO ☒ YES (please provide details)

The intellectual property developed under this grant is subject to confidentiality and non-disclosure agreements with members of the scientific advisory board, whose assembly is required by the terms of the grant, as well as with various service providers.

6. a) What are the potential applications and/or sources of revenue (if any) from this Intellectual Property?

Deconvolution of fluorescence spectrum generated by quantum dot (QD) barcoding technology.

- b) Do you plan to commercialize this invention yourself? ☐ NO ☒ YES (please provide details)

Commercialization of the present technology is an aspect incorporated under the Genome Canada Grant funding this research -see schedule D -Intellectual

property
COMMITTEE

terms, s. 3 - terms for the formation of the COMMERCIALIZATION
(Ccom)


- c) Have you already discussed this disclosure with a Technology Manager from IUT?
X No ☐ Yes - please indicate the name of the IUT contact:

7. To expedite the processing of this disclosure, please choose one of the following options available to you:

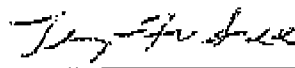
- ☒ Inventor ownership (as per Section 3.2 of the Inventions Policy)
☐ University ownership (as per Section 3.2 of the Inventions Policy)
☐ Meeting to discuss further before deciding.

8. Warranty:

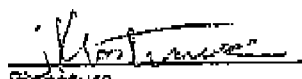
I/We, the Inventors/Contributors listed in Section 2(a), have read, understood and agree to all of the preceding and declare that all of the information provided in this disclosure is complete and correct. To the best of our knowledge, all persons who might legally make an ownership claim in this Intellectual Property are identified in Section 2(a) and 2(b).



Signature Date
Typed Name: Warren C.W. Chan


 Apr. 3, 2007

Signature Date
Typed Name: Jeongjin Lee

 Apr. 3/07

Signature Date
Typed Name: Jesse M. Klostrane

Signature Date
Typed Name:

 Apr. 3, 2007

Signature Date
Typed Name: Qing Xiang

Signature Date
Typed Name: