504163478 01/04/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4210155

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RANDALL JEFFREY PLATT	08/09/2014
GUOPING FENG	09/05/2014
YANG ZHOU	09/05/2014

RECEIVING PARTY DATA

Name:	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
Street Address:	77 MASSACHUSETTS AVENUE	
City:	CAMBRIDGE	
State/Country:	MASSACHUSETTS	
Postal Code:	02139	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15349603

CORRESPONDENCE DATA

Fax Number: (212)407-7799

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: 2124077700

Email: ipdocketny@vedderprice.com

THOMAS J. KOWALSKI **Correspondent Name:**

Address Line 1: 1633 BROADWAY Address Line 2: **VEDDER PRICE PC**

Address Line 4: NEW YORK, NEW YORK 10019

ATTORNEY DOCKET NUMBER:	44790.05.2041
NAME OF SUBMITTER:	CHRISTINA COLOCOTRONIS
SIGNATURE:	/Christina Colocotronis/
DATE SIGNED:	01/04/2017

Total Attachments: 6

source=ExecutedAssignment-Platt-Feng-Zhou#page1.tif source=ExecutedAssignment-Platt-Feng-Zhou#page2.tif source=ExecutedAssignment-Platt-Feng-Zhou#page3.tif

> **PATENT REEL: 040843 FRAME: 0808**

504163478

source=ExecutedAssignment-Platt-Feng-Zhou#page4.tif
source=ExecutedAssignment-Platt-Feng-Zhou#page5.tif
source=ExecutedAssignment-Platt-Feng-Zhou#page6.tif

PATENT REEL: 040843 FRAME: 0809

Vedder Price P.C.

File No: 44790.02.2041 Serial No.: 14/481,339

Filing Date: September 9, 2014

ASSIGNMENT

Randall Jeffrey Platt, Guoping Feng and Yang Zhou, have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled: DELIVERY, ENGINEERING AND OPTIMIZATION OF SYSTEMS, METHODS AND COMPOSITIONS FOR SEQUENCE MANIPULATION AND THERAPEUTIC APPLICATIONS and Massachusetts Institute of Technology, whose address is 77 Massachusetts Avenue, Cambridge, Massachusetts 02142, which, together with its successors and assigns is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited, and of confirming the same or any part thereof heretofore acquired by Assignee.

Now, therefore, for valuable consideration furnished by Assignee to each of us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

- 1. Assign and convey to and confirm in Assignee the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or discoveries or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;
- 2. Authorize Assignee to file and prosecute patent applications in any or all countries on any or all of said inventions and discoveries in our name or names or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;
- 3. Authorize and request the Commissioner of Patents of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;
- 4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to Assignee without encumbrance;
- 5. Bind our heirs and legal representatives, as well as ourselves to do, upon Assignee's request and at its expense, but without additional consideration to any of us, all acts

1

reasonably serving to assure that the said inventions and discoveries, the said patent applications and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by each of us or each of our heirs or representatives if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to each of us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in our control or in the control of our heirs or legal representatives and which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

In testimony of which we have affixed our signatures.

Date	Randall Jeffrey Platt
9-5-2-14	(m
Date	Guoping Feng
Date	Yang Zhou

Vedder Price P.C.

File No: 44790.02.2041 Serial No.: 14/481,339

Filing Date: September 9, 2014

ASSIGNMENT

Randall Jeffrey Platt, Guoping Feng and Yang Zhou, have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled: DELIVERY, ENGINEERING AND OPTIMIZATION OF SYSTEMS, METHODS AND COMPOSITIONS FOR SEQUENCE MANIPULATION AND THERAPEUTIC APPLICATIONS and Massachusetts Institute of Technology, whose address is 77 Massachusetts Avenue, Cambridge, Massachusetts 02142, which, together with its successors and assigns is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited, and of confirming the same or any part thereof heretofore acquired by Assignee.

Now, therefore, for valuable consideration furnished by Assignee to each of us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

- 1. Assign and convey to and confirm in Assignee the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or discoveries or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;
- 2. Authorize Assignee to file and prosecute patent applications in any or all countries on any or all of said inventions and discoveries in our name or names or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise:
- 3. Authorize and request the Commissioner of Patents of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;
- 4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to Assignee without encumbrance;
- 5. Bind our heirs and legal representatives, as well as ourselves to do, upon Assignee's request and at its expense, but without additional consideration to any of us, all acts

reasonably serving to assure that the said inventions and discoveries, the said patent applications and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by each of us or each of our heirs or representatives if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to each of us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in our control or in the control of our heirs or legal representatives and which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

In testimony of which we have affixed our signatures.

8/01/14	
Date t /	Randall Jeffrey Platt
Date	Guoping Feng
Date	Yang Zhou

Vedder Price P.C.

File No: 44790.02.2041 Serial No.: 14/481,339

Filing Date: September 9, 2014

ASSIGNMENT

Randall Jeffrey Platt, Guoping Feng and Yang Zhou, have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled: DELIVERY, ENGINEERING AND OPTIMIZATION OF SYSTEMS, METHODS AND COMPOSITIONS FOR SEQUENCE MANIPULATION AND THERAPEUTIC APPLICATIONS and Massachusetts Institute of Technology, whose address is 77 Massachusetts Avenue, Cambridge, Massachusetts 02142, which, together with its successors and assigns is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited, and of confirming the same or any part thereof heretofore acquired by Assignee.

Now, therefore, for valuable consideration furnished by Assignee to each of us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

- 1. Assign and convey to and confirm in Assignee the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or discoveries or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent:
- 2. Authorize Assignee to file and prosecute patent applications in any or all countries on any or all of said inventions and discoveries in our name or names or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;
- 3. Authorize and request the Commissioner of Patents of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;
- 4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to Assignee without encumbrance;
- 5. Bind our heirs and legal representatives, as well as ourselves to do, upon Assignee's request and at its expense, but without additional consideration to any of us, all acts

1

reasonably serving to assure that the said inventions and discoveries, the said patent applications and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by each of us or each of our heirs or representatives if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to each of us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in our control or in the control of our heirs or legal representatives and which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

In testimony of which we have affixed our signatures.

Date	Randall Jeffrey Platt
Date	Guoping Feng
2014-09-05	Yang Zhon
Date	Yang Zhou