PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6450367

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PETER A. SIMS	10/29/2020
SAYANTAN BOSE	11/11/2020
JINZHOU YUAN	10/30/2020

RECEIVING PARTY DATA

Name:	THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK
Street Address:	412 LOW MEMORIAL LIBRARY
Internal Address:	535 WEST 116TH STREET, MAIL CODE 4308
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10027

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16766928

CORRESPONDENCE DATA

Fax Number: (202)318-7707

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: 4436224533

Email: patents@potomaclaw.com

Correspondent Name: POTOMAC LAW GROUP PLLC

Address Line 1: 8229 BOONE BOULEVARD SUITE 430

Address Line 2: SUITE 430

Address Line 4: VIENNA, VIRGINIA 22182

ATTORNEY DOCKET NUMBER:	448-0184US01	
NAME OF SUBMITTER:	CHRISTINE ARTHUR, PARALEGAL	
SIGNATURE:	/Christine Arthur/	
DATE SIGNED:	12/15/2020	

Total Attachments: 7

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PATENT REEL: 054649 FRAME: 0729

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Assignment

WHEREAS, I/We, Peter A. SIMS; Sayantan BOSE; Jinzhou YUAN have made an invention entitled "RNA Printing and Sequencing Devices, Methods, and Systems," which I/We have filed an application for Letters Patent of the United States on May 26, 2020 under Application No. 16/766,928; and

WHEREAS, The Trustees of Columbia University in the City of New York ("ASSIGNEE"), a business entity organized under the laws of NEW YORK, and whose postal address is 412 Low Memorial Library, 535 West 116th St., Mail Code 4308, New York, NY 10027, desires to acquire the entire right, title, and interest in and to the invention in the United States and all foreign countries throughout the world, and in and to an application for Letters Patent on the invention and any Letters Patent to be granted for the invention in the United States and in all foreign countries;

NOW, THEREFORE, in consideration of good and valuable consideration, the receipt and sufficiency of which I/We acknowledge, I/We, have, assigned, transferred, and set over, and do hereby assign, transfer, and set over unto ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the invention, including any improvement thereof, the application, all applications claiming benefit of the application, including, but not limited to, all divisions, continuations, and continuation-in-part of the application, and all Letters Patent that may be granted thereon in the United States and in all foreign countries, and all reissues or re-exams thereof, together with the right to claim priority under the International Convention in all member countries, for said invention or improvements, including all priority rights, and any and all Letters Patent which may be granted in foreign countries therefor, and in and to any other applications based in whole or in part on any of the foregoing; and I/We authorize and request the Director of the United States Patent and Trademark Office to issue all Letters Patent for the invention to ASSIGNEE, its successors, legal representatives, and assigns in accordance with the terms of this Assignment;

AND I/We covenant and agree that I/We have the full right to convey the entire right, title, and interest herein assigned and that I/We have not executed and will not execute any assignment or other instrument in conflict with this Assignment;

AND I/We represent and warrant that I/We have the full power to make this assignment and that the rights, titles, and interests assigned are not encumbered by any grant, license, or right heretofore given;

AND I/We further covenant and agree that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, I/We will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the invention in the United States and in all foreign countries, including, but not limited to, communicate with ASSIGNEE, its successors, legal representatives, and/or assigns any facts known to me/us regarding the invention, testify in any legal proceeding, sign all lawful papers, execute and deliver all papers that may be necessary or desirable to perfect the title to the invention in ASSIGNEE, its successors, legal representatives, and/or assigns, execute all divisional, continuation, and reissue

applications, and make all rightful oaths, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns;

AND I/WE further hereby authorize ASSIGNEE or its attorneys or agents to insert the correct application number and filing date into this Assignment, if none is indicated on that date of my/our execution of this Assignment.

IN WITNESS WHEREOF, I/We have	e executed this Assignment on the date(s) indicated
below.	
Signature: 7 A	and the second of the second o
Date: 60/29/2020	
Full Name: Peter A. SIMS	and the second of the second o
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Signature:	
Signature.	
Date:	
Full Name: Sayantan BOSE	en e
Signature:	
Date:	
	$(A_{i},A_{$
Full Name: Jinzhou YUAN	

Assignment

WHEREAS, I/We, Peter A. SIMS; Sayantan BOSE; Jinzhou YUAN have made an invention entitled "RNA Printing and Sequencing Devices, Methods, and Systems," which I/We have filed an application for Letters Patent of the United States on May 26, 2020 under Application No. 16/766,928; and

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AND I/We further covenant and agree that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, I/We will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the invention in the United States and in all foreign countries, including, but not limited to, communicate with ASSIGNEE, its successors, legal representatives, and/or assigns any facts known to me/us regarding the invention, testify in any legal proceeding, sign all lawful papers, execute and deliver all papers that may be necessary or desirable to perfect the title to the invention in ASSIGNEE, its successors, legal representatives, and/or assigns, execute all divisional, continuation, and reissue

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IN WITNESS WHEREOF, I/We have executed this Assignment on the date(s) indicated below.

Signature:
Date:
Full Name: Peter A. SIMS
Signature:
794 S
Date:
The State of Control Troops
Full Name: Sayantan BOSE
Signature: JL
Date: 19/30/2020
Full Name: Jinzhou YUAN

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Assignment

WHEREAS, I/We, <u>Peter A. SIMS</u>; <u>Sayantan BOSE</u>; <u>Jinzhou YUAN</u> have made an invention entitled "<u>RNA Printing and Sequencing Devices, Methods, and Systems</u>," which I/We have filed an application for Letters Patent of the United States on <u>May 26, 2020</u> under Application No. <u>16/766,928</u>; and

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IN WITNESS WHEREOF, I/We have executed this Assignment on the date(s) indicated below.

Signature:
Date:
Full Name: Peter A. SIMS
, m
Signature: Say 15 cm
, and
Date: Nov //**, 2020
Full Name: Sayantan BOSE
Signature:
Date:
Full Name: Jinzhou YUAN

ACCEPTANCE BY ASSIGNEE

In connection with an assignment in any jurisdiction in which an acceptance by ASSIGNEE is required, I hereby accept this assignment on behalf of The Trustees of Columbia University in the City of New York. I declare under penalty of perjury under the laws of the United States of America, and under penalty of the laws of any other jurisdiction before which this document may be presented, that (check all that apply):

- IX I am an officer of the above-identified ASSIGNEE,
- IX I have signed this document on behalf of ASSIGNEE with the full authority of the ASSIGNEE.

Dated: 12/15/20 By:				
Dec 12/15/20	 (]-(]-X'	y: ,	12) 13) 20	Dated: _
	Je Ja M. AKAKO		12/15/20	FN:(

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PATENT REEL: 054649 FRAME: 0737

RECORDED: 12/15/2020