

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5576692

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
YIZHOU LIU	02/07/2019
JONATHAN S. LINDSEY	06/12/2019
SRINIVASA RAO ALLU	02/07/2019
HIKARU FUJITA	02/08/2019
RECEIVING PARTY DATA	
Name:	NORTH CAROLINA STATE UNIVERSITY
Street Address:	1021 MAIN CAMPUS DRIVE, 2ND FLOOR
City:	RALEIGH
State/Country:	NORTH CAROLINA
Postal Code:	27606
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16323607
CORRESPONDENCE DATA	
Fax Number:	(919)854-1401
<i>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.</i>	
Phone:	919-854-1400
Email:	MSPINELLI@MYERSBIGEL.COM
Correspondent Name:	MYERS BIGEL, P.A.
Address Line 1:	4140 PARKLAKE AVENUE
Address Line 2:	SUITE 600
Address Line 4:	RALEIGH, NORTH CAROLINA 27612
ATTORNEY DOCKET NUMBER:	5051-900
NAME OF SUBMITTER:	MADDIE SPINELLI
SIGNATURE:	/Maddie Spinelli/
DATE SIGNED:	06/18/2019
Total Attachments: 6	
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ASSIGNMENT

THIS ASSIGNMENT, made by us, **Yizhou Liu**, a citizen of the United States of America, having an address at 1913 Junewood Avenue, San Jose, California 95132; **Jonathan S. Lindsey**, a citizen of the United States of America, having an address at 1236 Canterbury Road, Raleigh, North Carolina 27608; **Srinivasa Rao Allu**, a citizen of India, having an address at 4141 Spruce Street, Apartment 407, Philadelphia, Pennsylvania 19104; and **Hikaru Fujita**, a citizen of Japan and residing in Japan.

WITNESSETH: That,

WHEREAS, we are joint inventors of certain new and useful improvements in **NORTHERN-SOUTHERN ROUTE TO SYNTHESIS OF BACTERIOCHLORINS**, for which for which U.S. Provisional Application No. 62/376,078 was filed on August 17, 2016; PCT International Application No. PCT/US2017/047266 was filed on August 17, 2017; and U.S. Application No. 16/323,607 was filed on February 6, 2019, in the United States Patent and Trademark Office; and

WHEREAS, we have previously assigned our rights in the priority application(s) for said application to North Carolina State University, but we wish for a more complete record to confirm our prior assignment and, to the extent applicable, to assign any remaining right, title, and interest in and to said invention as described in said application; and

WHEREAS, **North Carolina State University**, a constituent institution of The University of North Carolina and an educational institution chartered under the laws of the State of North Carolina having a principal place of business at 1021 Main Campus Drive, 2nd Floor, Raleigh, North Carolina 27606, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention as described in said application, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we have sold and by these presents do hereby sell, assign, transfer, and convey unto the said assignee, its successors and assigns, the entire right, title, and interest in and to the said invention and applications, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues or other forms of protection thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted along with any term extensions thereon or therefor, together with the right to claim the priority of said applications in all foreign countries in accordance with the

International Convention, the same to be held and enjoyed by said assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by assignors if this assignment and sale had not been made.

We hereby request that said Letters Patent be issued in accordance with this assignment.

We further covenant and agree that, at the time of the execution and delivery of these presents, and to the extent not already assigned to the assignee, we have the unencumbered right and authority to make this assignment.

We further covenant and agree to promptly communicate to said assignee or its representatives any facts known to us relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors, or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said assignee, its successors, assigns, and other legal representatives; and we hereby instruct, and further covenant and agree to bind our heirs, legal representatives, and assigns, to do same, without further compensation, but at the expense of said assignee or its representatives.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 7 day of

A notary public, or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF

COUNTY OF State of California
County of Santa Clara

Yizhou Liu (SEAL)

ss:

Before me personally appeared the person described in and who executed the foregoing instrument, and he/she acknowledged to me that he/she executed the same for the purposes therein stated, this 7th day of February, 2019.

SEAL  S. B. SHAN
COMM. # 2158335
NOTARY PUBLIC - CALIFORNIA
COUNTY OF SANTA CLARA
MY COMM. Exp. JUNE 12, 2020

S. B. Shan
Notary Public

My Commission Expires: 12th June 2020

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 12th day
of June, 2019.

Jonathan S. Lindsey
Jonathan S. Lindsey

STATE OF North Carolina
COUNTY OF Wake) ss:

Before me personally appeared the person described in and who executed the foregoing
instrument, and he/she acknowledged to me that he/she executed the same for the purposes
therein stated, this 12th day of June, 2019.



Jodi J. Falk
Notary Public

July 29, 2019

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 7th day of February, 2019.

A. Srinivasa Rao Allu (SEAL)
Srinivasa Rao Allu

STATE OF Pennsylvania)
COUNTY OF Philadelphia) ss:

Before me personally appeared the person described in and who executed the foregoing instrument, and he/she acknowledged to me that he/she executed the same for the purposes therein stated, this 7th day of February, 2019.

Candice Adams
Notary Public

SEAL

My Commission Expires: August 26, 2022

Commonwealth of Pennsylvania - Notary Seal
CANDICE ADAMS, Notary Public
Philadelphia County
My Commission Expires August 26, 2022
Commission Number 1257260

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 8th day of February, 2019.

Hikaru Fujita (SEAL)
Hikaru Fujita

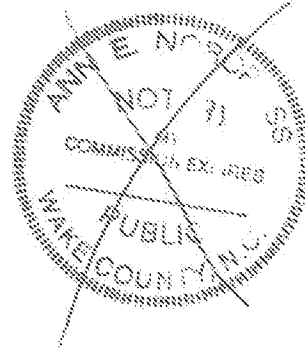
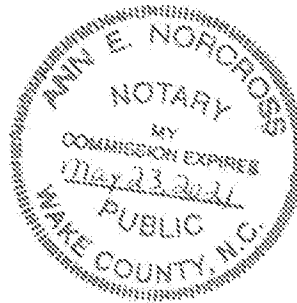
STATE OF North Carolina)
COUNTY OF Wake) ss:

Before me personally appeared the person described in and who executed the foregoing instrument, and he/she acknowledged to me that he/she executed the same for the purposes therein stated, this 8th day of February, 2019.

Ann E. Norcross
Notary Public

SEAL

My Commission Expires: May 23, 2021



IN WITNESS WHEREOF, North Carolina State University, by signature below on this 14 day of June, 2019, hereby acknowledges and accepts receipt of this Assignment. The undersigned warrants and represents that he/she has the authority to sign this Assignment on behalf of the Assignee.

By: [Signature]

Printed Name: Kultaran Chohan, Ph.D., LL.M.

Title: Director of Licensing

STATE OF NORTH CAROLINA)
) ss:
COUNTY OF WAKE)

Before me personally appeared the person described in and who executed the foregoing instrument, and he/she acknowledged to me that he/she executed the same for the purposes therein stated, this 14 day of June, 2019.



[Signature]
Notary Public