505197635 11/19/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SAMUEL LAI	10/03/2018
ARTHI KANNAN	11/08/2018
KENETTA NUNN	10/14/2018
DURAI BABU SUBRAMANI	10/30/2018
BING YANG	09/27/2018
JUSTIN MCCALLEN	09/29/2018

RECEIVING PARTY DATA

Name:	THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
Street Address:	109 CHURCH STREET
City:	CHAPEL HILL
State/Country:	NORTH CAROLINA
Postal Code:	27516

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16138643

CORRESPONDENCE DATA

Fax Number: (919)854-1401

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: 919-854-1400

Email: bmedlin@myersbigel.com
Correspondent Name: MYERS BIGEL, P.A.

Address Line 1: P.O. BOX 37428

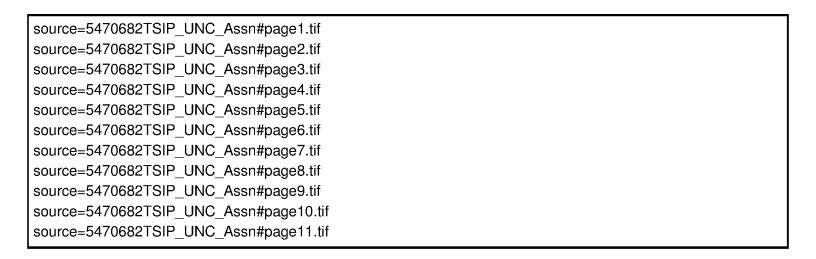
Address Line 4: RALEIGH, NORTH CAROLINA 27627

ATTORNEY DOCKET NUMBER:	5470-682TSIP
NAME OF SUBMITTER:	BETTY-LOU MEDLIN
SIGNATURE:	/bettyloumedlin/
DATE SIGNED:	11/19/2018

Total Attachments: 11

PATENT REEL: 047546 FRAME: 0130

505197635



ASSIGNMENT

THIS ASSIGNMENT, made by us, Samuel Lai, a citizen of Canada, residing at 106 Oak

Spring Ct. Carrboro, North Carolina 27510; Arthi Kannan, a citizen of the United States of

13 UNICU SQ, APT 1414, UNION CTTY, CA 94581 AR 118/18 KANNAN

America, residing at 02-521, Rik 303, Clementi Avenue A, Singapore, 120303; Kenetti Nunn, a

citizen of the United States of America, residing at 113 Styner Avenue, Apt. 12, Moscow, Idaho

83843; Bural Babu Subramani, a citizen of India, residing at 1521 E. Franklin Street #C206,

Chapel Hill, North Carolina 27514; Bing Yang, a citizen of the United States of America, having

a mailing address of 105 Crane Meadow Place, Chapel Hill, North Carolina 27514; and Justin

Mecallen, a citizen of the United States of America, having a mailing address of 200 Fosbury

Way, Apt. C, Greenville, North Carolina 27834; and

WITNESSETH: That,

WHEREAS, we are the joint inventors, along with Ying-Ying Wang and Richard Cone, of certain new and useful improvements in COMPOSITIONS AND METHODS FOR INHIBITING PATHOGEN INFECTION for which U.S. Patent Application No. 16/138,643 was filed on September 21, 2018 in the United States Patent and Trademark Office; and

WHEREAS, The University of North Carolina at Chapel Hill, 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 109 Church Street, Chapel Hill, North Carolina 27516, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention as described in said applications, 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 said assignce, 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,

ASSIGNMENT

THIS ASSIGNMENT, made by us, Samuel Lai, a citizen of Canada, residing at 106 Oak Spring Ct, Carrboro, North Carolina 27510; Arthi Kannan, a citizen of the United States of America, residing at 02-521, Blk 303, Clementi Avenue 4, Singapore, 120303; Kenetta Nunn, a 242 N Asbury St. & 1 km 10/1/8 citizen of the United States of America, residing at 113 Styner Avenue, Apr. 12, Moscow, Idaho 83843; Durai Babu Subramani, a citizen of India, residing at 1521 E. Franklin Street #C206, Chapel Hill, North Carolina 27514; Bing Yang, a citizen of the United States of America, having a mailing address of 105 Crane Meadow Place, Chapel Hill, North Carolina 27514; and Justin Mecallen, a citizen of the United States of America, having a mailing address of 200 Fosbury Way, Apr. C, Greenville, North Carolina 27834; and

WITNESSETH: That.

WHEREAS, we are the joint inventors, along with Ying-Ying Wang and Richard Cone, of certain new and useful improvements in COMPOSITIONS AND METHODS FOR INHIBITING PATHOGEN INFECTION for which U.S. Patent Application No. 16/138,643 was filed on September 21, 2018 in the United States Patent and Trademark Office; and

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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 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,

ASSIGNMENT

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Spring Ct, Carrboro, North Carolina 27510; Arthi Kannan, a citizen of the United States of
America, residing at 02-521, Blk 303, Clementi Avenue 4, Singapore, 120303; Kenetta Nunn, a
citizen of the United States of America, residing at 113 Styner Avenue, Apt. 12, Moscow, Idaho
83843; Durai Babu Subramani, a citizen of India, residing at 1521 E. Franklin Street #C206,
Chapel Hill, North Carolina 27514; Bing Yang, a citizen of the United States of America, having
a mailing address of 105 Crane Meadow Place, Chapel Hill, North Carolina 27514; and Justin
Mccallen, a citizen of the United States of America, having a mailing address of 200 Fosbury JM 9/29/18
Way, Apt. C, Greenville, North Carolina 27834; and

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WHEREAS, The University of North Carolina at Chapel Hill, 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 109 Church Street, Chapel Hill, North Carolina 27516, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention as described in said applications, 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 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 us 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, we possess full title to the invention and applications above-mentioned, and that 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 bereunto set my band and seal on this 3^{rQ} day of Detables., 201 8. (SEAL)

COUNTY OF Want

Before me personally appeared the person described in and who executed the foregoing instrument, and s/he acknowledged to me that s/he executed the same for the purposes therein

stated, this 3 day of October, 2018.

Notary Public

1 anoun

Page 2 of 8

Attorney Docket No. 5470-682TSIP

IN WITNESS WHEREOF, I have hereunto set my hand a	nd seal on	this 8th day of
November, 2018.		
& AAMi	(SEAL)	SEE ATTACTIFC
Arthi Kannan		A STATE OF THE STA

Witnessed By P. Nathaw & Date: 118 18

California all-purpose acknowledgmen	
	rahs সংক্রম গ্রুক্ত বিশ্বর প্রকর্ত বিশ্বর প্রকর্ত বিশ্বর প্রক্রম করে বিশ্বর প্র lies only the identity of the individual who signed the document accuracy, or validity of that document.
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may or during }	
55	PORTAN CASTILLO, NOTALY /VOLL Here insert Name and Title of the Officer
	and a second
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of the within instrument and acknowledged to me that uthorized capacity(les), and that by his/her/their signation behalf of which the person(s) acted, executed the	sture(s) on the instrument the person(a), or the entity
ACRIAN CACRILLO First by Public - Carlosina Associa Courty	I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official sell.
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Title or Type of Document;	2 PULLATION
Document Date: 1// 19/70/8	Number of Pages: 3
Signer(s) Other Than Named Above: Samu	n IA
Capacity(ies) Claimed by Signer(s)	
Signar's Name:	Signer's Name,
C Corporate Officer – Title(x): D Partner – D Limited D General	Corporate Officer - Title(s): Destroer - Delimited Coeneral
D Individual D Altorney in Fect	D Individual D Attorney in Fact
© Fraction of Conservator © Conservator	© Trustee © Guardian of Conservator
Proceedings for the process of the contract of	Signer is Representing:
Segment's Representing:	Signer is Representing.

M1304-09 (09/17)

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this _ff day of
Cotologe ,2018
Kenetta Nunn (SEAL)
STATE OF IDAHO)
COUNTY OF LATAH
Before me personally appeared the person described in and who executed the foregoing
instrument, and s/he acknowledged to me that s/he executed the same for the purposes therein
stated, this 17th day of October , 2018.
March Colom
Notary Public
SEAL.
My Commission Expires: 3/31/2021
JOHN C GREGG COMMISSION NUMBER 67422 NOTARY PUBLIC STATE OF IDAHO

Sep,2018.	REOF, I have here Bing Yang	unto set my hand	i and seal o (SEAL)		Z day of
STATE OF NORTH CARO	LINA) }				
Before me personally instrument, and s/he acknow stated, this 27 day of	ledged to me that	s/he executed the			,
**		Notary Pub	lic	>	v e.
SEAL. My Commission Expires:) × 24, 201	3	111.541 111.641	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
				Paric	CLIFE, W

and the second s	CEOF, I have hereun	to set my hand	and seal on this <u>29</u> day of
Sptenher, 2018.	Justin WcCal Justin Mccallen	len	(SEAL)
STATE OF NORTH CAROL	LINA)		
Before me personally instrument, and s/he acknowless stated, this $Z_7^{\prime\prime}$ day of $S_1^{\prime\prime}$	edged to me that s/h	e executed the s	nd who executed the foregoing same for the purposes therein
SEAL	luci	Nand Mu Notary Publi	ntle c
My Commission Expires:	2/20/2023		

WHEREBY The University of North Carolina at Chapel Hill acknowledges and accepts the assignment;

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 13th day of Nivembex, 2018. The undersigned warrants and represents that he/she has the authority to sign this Assignment on behalf of the Assignee, The University of North Carolina at Chapel Mill.

By: _____(SEAL)

Title: <u>Director of Licensing</u>

STATE OF NORTH CAROLINA)

COUNTY OF DRANGE

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 13% day of 100% , 201%.

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Samo.

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Page 8 of 8

RECORDED: 11/19/2018