

PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT5378870

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BRETT B BUSCH	02/04/2019
JEREMY J CLEMENS	02/05/2019
THOMAS CLEVELAND	02/04/2019
TIMOTHY RICHARD COON	02/04/2019
BRYAN FRIEMAN	02/05/2019
PETER GROOTENHUIS	02/06/2019
CLARA KUANG-JU HSIA	02/05/2019
PING KANG	02/04/2019
MARK THOMAS MILLER	02/02/2019
SARA SABINA HADIDA RUAH	01/31/2019
ANDREAS TERMIN	02/04/2019
JOHNNY UY	02/05/2019
JINGLAN ZHOU	02/05/2019

RECEIVING PARTY DATA

Name:	VERTEX PHARMACEUTICALS (SAN DIEGO) LLC
Street Address:	3215 MERRYFIELD ROW
City:	SAN DIEGO
State/Country:	CALIFORNIA
Postal Code:	92121

PROPERTY NUMBERS Total: 3

Property Type	Number
PCT Number:	US2019018042
Application Number:	16276350
Application Number:	62631453

CORRESPONDENCE DATA

Fax Number:

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: 617.646.1631

Email: karen.young@finnegan.com
Correspondent Name: FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP
Address Line 1: 901 NEW YORK AVENUE
Address Line 4: WASHINGTON, D.C. 20001

ATTORNEY DOCKET NUMBER: 10275.0134 AND 6134

NAME OF SUBMITTER: ERIC J. LEE

SIGNATURE: /Eric J. Lee/

DATE SIGNED: 02/15/2019

Total Attachments: 16

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ASSIGNMENT

WHEREAS I/We, the below-named inventor(s) (hereinafter referred to as Assignor(s)), of an invention entitled:

MODULATORS OF CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR, PHARMACEUTICAL COMPOSITIONS, METHODS OF TREATMENT, AND PROCESS FOR MAKING THE MODULATORS

as disclosed and claimed in the applications identified below this paragraph:

Application Number ^a	Country of Filing	Filing Date
62/631,453	US	February 15, 2018
16/276,350	US	February 14, 2019
PCT/US2019/018042	PCT	February 14, 2019
	AR	
	TW	

^a: We authorize and request a patent practitioner of record in this application, to insert the filing date, country of filing, and application number of the above referenced application(s) when known.

by virtue of our agreements with Vertex Pharmaceuticals (San Diego) LLC, a company of Delaware whose post office address is 3215 Merryfield Row, San Diego, California 92121, USA (hereinafter referred to as Assignee), and/or its predecessors in interest, confirm assignment and hereby assign to assignee the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to all applications for patents on this invention in all countries throughout the world, including any PCT International Application and all national stage applications based thereon that may be filed, and all patents issued upon such applications in all countries throughout the world;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I/We, as Assignors, confirm that all rights in the inventions and applications listed above automatically transferred to Assignee by virtue of my/our agreements. For the avoidance of doubt, Assignors hereby confirm having sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my/our entire right, title, and interest in and to this invention, the above-referenced applications that disclose and/or claim this invention, any PCT International Application and all national stage applications based thereon that may be filed, any other applications for patents filed anywhere in the world that claim this invention, and all divisions, and continuations of any such application, and all patents which may be granted thereon, and all reissues thereof, and all rights to claim priority in any country on the basis of any such applications, and all extensions, renewals, and reissues thereof; and I/We hereby authorize and request that any official of any country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/We covenant that I/We have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/We further covenant and agree that I/We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me/us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to

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SOLE/JOINT INVENTION
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Attorney Docket No. VPI/18-103 WO

perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

Brett B. Busch

Brett B. Busch

Date: Feb 4, 2019

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 California
County of San Diego

On February 4, 2019 before me, Nicola Salamone, Notary Public
(insert name and title of the officer)

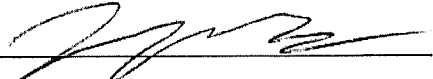
personally appeared Brett B. Busch, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature Nicola Salamone (Seal)





Jeremy J. Clemens

Date: 2/5/2019

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State of California
County of San Diego

On February 5, 2019 before me, Nicola Salamone, Notary Public
(insert name and title of the officer)

personally appeared Jeremy J. Clemens, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature  (Seal)



Thomas Cleveland

Thomas Cleveland

Date: 2/4/2019

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State of California
County of San Diego

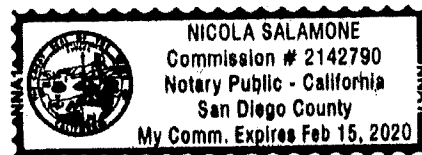
On February 4, 2019 before me, Nicola Salamone, Notary Public
(insert name and title of the officer)

personally appeared Thomas Cleveland, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature Nicola Salamone (Seal)



Timothy R Coon

Timothy Richard Coon

Date: 2/4/19

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State of California
County of San Diego

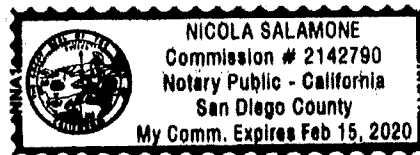
On February 4, 2019 before me, Nicola Salamone Notary Public
(insert name and title of the officer)

personally appeared Timothy Richard Coon, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature Nicola Salamone (Seal)



Bryan Frieman

Bryan Frieman

Date: 2/5/19

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State of California
County of San Diego

On February 5, 2019 before me, Nicola Salamone, Notary Public
(insert name and title of the officer)


personally appeared Bryan Frieman, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature Nicola Salamone (Seal)





Peter Grootenhuis

Date: 2/6/2019

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State of California
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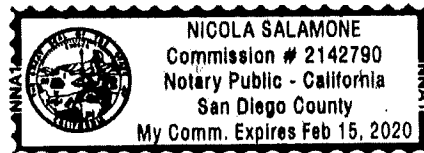
On February 6, 2019 before me, Nicola Salamone, Notary Public
(insert name and title of the officer)

personally appeared Peter Grootenhuis, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature  (Seal)



Clara

Clara Kuang-Ju Hsia

Date: 2/5/2019

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State of California
County of San Diego

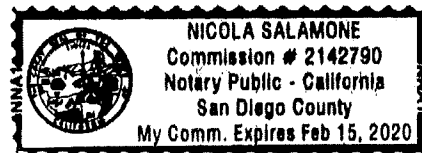
On February 5, 2019 before me, Nicola Salamone, Notary Public
(insert name and title of the officer)

personally appeared Clara Kuang-Ju Hsia, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature Nicola Salamone (Seal)



B 1cs

Ping Kang

Date: 02/04/2019

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State of California
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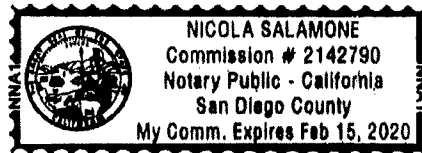
On February 4, 2019 before me, Nicola Salamone, Notary Public
(insert name and title of the officer)

personally appeared Ping Kang, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature Nicola Salamone (Seal)



SOLE/JOINT INVENTION
(Worldwide Rights)

Attorney Docket No. VPI/18-103 WO

Mark Thomas Miller

Mark Thomas Miller

Date: Feb 2, 2019

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State of California
County of San Diego

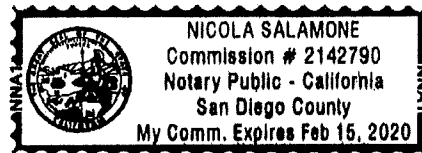
On February 4, 2019 before me, Nicola Salamone, Notary Public
(insert name and title of the officer)

personally appeared Mark Thomas Miller, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature Nicola Salamone (Seal)



Suehade

Sara Sabina Hadida Ruah

Date: 1/31/2015

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State of California
County of San Diego

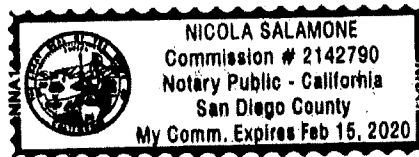
On February 4, 2019 before me, Nicola Salamone Notary Public
(insert name and title of the officer)

personally appeared Sara Sabina Hadida Ruah, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

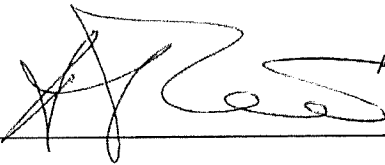
WITNESS my hand and official seal.

Signature Nicola Salamone (Seal)



SOLE/JOINT INVENTION
(Worldwide Rights)

Attorney Docket No. VPI/18-103 WO



Andreas Termin

Date: 02/04/2019

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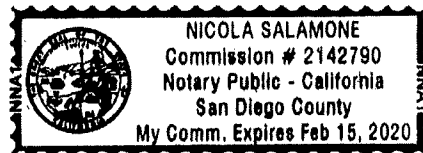
On February 4, 2019 before me, Nicola Salamone Notary Public
(insert name and title of the officer)

personally appeared Andreas Termin, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature  (Seal)





Johnny Uy

Date: Feb 5, 2019

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State of California
County of San Diego

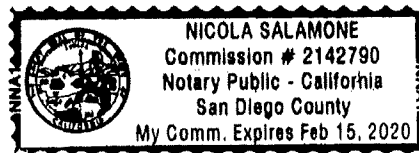
On February 5, 2019 before me, Nicola Salamone Notary Public
(insert name and title of the officer)

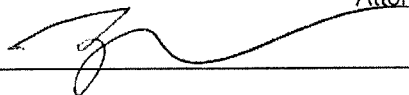
personally appeared Johnny Uy, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature Nicola Salamone (Seal)





Jinglan Zhou

Date: 2/5/2019

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State of California
County of San Diego

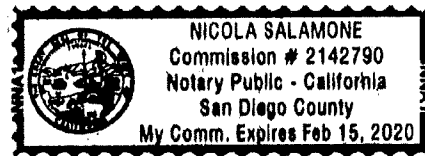
On February 5, 2019 before me, Nicola Salamone, Notary Public
(insert name and title of the officer)

personally appeared Jinglan Zhou, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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 seal.

Signature  (Seal)



ACKNOWLEDGEMENT OF ASSIGNEE

Kerry A. Flynn

Name: Kerry A. Flynn

Title: VP, IP and Chief IP Counsel

On behalf of Vertex Pharmaceuticals (San Diego) LLC

FEBRUARY 7, 2019

Date

Commonwealth of Massachusetts
County of Suffolk

On this 7th day of Feb, 2019, before me, the undersigned notary public, personally appeared Kerry A.

Flynn (name of document signer), proved to me through satisfactory evidence of identification, which was/were

personal knowledge of identity, a driver's license, other (please identify) _____, to be the person whose name is signed on this document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

Lauren M. DeVincenzo

Notary Public

My Commission Expires December 23, 2022

