501989534 07/16/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Gourab Bhattacharjee	07/11/2012
Alexey Revenko	07/11/2012
Robert A. MacLeod	07/11/2012

RECEIVING PARTY DATA

Name:	Isis Pharmaceuticals, Inc.
Street Address:	2855 Gazelle Court
City:	Carlsbad
State/Country:	CALIFORNIA
Postal Code:	92010

PROPERTY NUMBERS Total: 1

Property Type	Number
PCT Number:	US2012041743

CORRESPONDENCE DATA

Fax Number: (760)603-3820 760-603-2553 Phone: Email: leames@isisph.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US

Mail.

Correspondent Name: Isis Pharmaceuticals, Inc. Address Line 1: 2855 Gazelle Court

Address Line 4: Carlsbad, CALIFORNIA 92010

ATTORNEY DOCKET NUMBER:	BIOL0155WO
NAME OF SUBMITTER	Laura Fames

Total Attachments: 5

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> **PATENT** REEL: 028555 FRAME: 0857

501989534

ASSIGNMENT

WHEREAS, I/we, Gourab Bhattacharjee, of San Diego, CA, Alexey Revenko, of San

Diego, CA, and Robert A. MacLeod, of San Diego, CA, has/have invented a certain invention

entitled METHODS FOR MODULATING KALLIKREIN (KLKB1) EXPRESSION, for

which I/we have made an application for patents in the United States and foreign jurisdictions

through the Patent Cooperation Treaty, said application having been filed June 8, 2012 and

assigned Application No. PCT/US2012/041743; and

WHEREAS, ISIS Pharmaceuticals, Inc. hereinafter referred to as the assignee, of 2855

Gazelle Court, Carlsbad CA, a corporation of Delaware, desires to acquire the entire right, title

and interest in and to the said inventions or improvements and in and to the said application, and

in, to and under any and all Letters Patent which may be granted on or as a result thereof in any

and all countries:

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to each

of us in hand paid by said assignee, and other good and valuable consideration, the receipt of

which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set

over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the

entire right, title and interest in and to said inventions or improvements and said application and

any and all continuations, divisions and renewals of and substitutes for said application, and in,

to and under any and all Letters Patent which may be granted on or as a result thereof in the

United States and any and all other countries, and any reissue or reissues or extension or

extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names

applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee,

its successors, assigns, nominees or legal representatives, to the full end of the term or terms for

which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely

as the same would have been held and enjoyed by us had this assignment, sale and transfer not

been made.

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AND we hereby covenant that we have full right to convey the entire interest herein

assigned, and that we have not executed and will not execute any agreement in conflict herewith,

and we further covenant and agree that we will each time request is made and without undue

delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to

said inventions or improvements, said application and said Letters Patent to said assignee, its

successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to

said assignee or to its nominee all known facts respecting said inventions or improvements, said

application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to

execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all

rightful oaths, and generally to do everything possible to aid said assignee, its successors,

assigns, nominees and legal representatives to obtain and enforce for its or their own benefit

proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks of

the United States and any official of any country or countries foreign to the United States whose

duty it is to issue patents on applications as aforesaid, to issue to said assignee, as assignee of the

entire right, title and interest, any and all Letters Patent for said inventions or improvements,

including any and all Letters Patent of the United States which may be issued and granted on or

as a result of the application aforesaid, in accordance with the terms of this assignment.

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IN WITNESS WHEREOF, we have hereunto set our hands and seals.

Dated: $\frac{7}{11}$ 2012

Gourab Bhattacharjee

State of <u>California</u>)
County of San Disas

SS.

On <u>July 11, 2012</u> before me, <u>Laura L Farnes</u>, Notary Public, personally appeared Gourab Bhattacharjee, who is 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.

LAURA L. EAMES
Commission # 1972276
Notary Public - California
San Diego County
My Comm. Expires Apr 13, 2016

WITNESS my hand and official seal.

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Mercy Revarlo U.

State of <u>California</u>

County of <u>San Diego</u>

On July 11, 2012 before me, Laura L. Earnes, personally appeared Alexey Revenko, who is 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.

LAURA L. EAMES Commission # 1972276 Notary Public - California San Diego County My Comm. Expires Apr 13, 2016 WITNESS my hand and official seal.

Robert A. MacLeod

State of California

County of San Diego

SS

On July 11, 2012 before me, Laura L. Eames, Notary Public, personally appeared Robert A. MacLeod, who is 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.

LAURA L. EAMES
Commission # 1972276
Notary Public - California
San Diego County
My Comm. Expires Apr 13, 2016

WITNESS my hand and official seal.

ignature of Notary

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PATENT REEL: 028555 FRAME: 0862