Electronic Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Eric E. Swayze	11/12/2008
Andrew M. Siwkowski	10/30/2008
Balkrishen Bhat	11/11/2008
Thazha P. Prakash	10/29/2008
Charles Allerson	10/30/2008
Punit P. Seth	11/12/2008

RECEIVING PARTY DATA

Name:	Isis Pharmaceuticals, Inc.
Street Address:	1896 Rutherford Road
City:	Carlsbad
State/Country:	CALIFORNIA
Postal Code:	92008

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12192847

CORRESPONDENCE DATA

Fax Number: (760)603-3820

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

760-603-2553 Phone: leames@isisph.com Correspondent Name: Isis Pharmaceuticals, Inc. Address Line 1: 1896 Rutherford Road

Address Line 4: Carlsbad, CALIFORNIA 92008

ATTORNEY DOCKET NUMBER:	CHEM0041US
NAME OF SUBMITTER:	Laura Eames

500702527 **REEL: 021825 FRAME: 0070**

Email:

PATENT

Stylesheet Version v1.1

Total Attachments: 8
source=CHEM0041USASGN#page1.tif
source=CHEM0041USASGN#page2.tif
source=CHEM0041USASGN#page3.tif
source=CHEM0041USASGN#page4.tif
source=CHEM0041USASGN#page5.tif
source=CHEM0041USASGN#page6.tif
source=CHEM0041USASGN#page7.tif
source=CHEM0041USASGN#page8.tif

PATENT REEL: 021825 FRAME: 0071

ASSIGNMENT

WHEREAS, I/we, Eric E. Swayze, of Carlsbad, CA, Andrew M. Siwkowski, of Carlsbad,

CA, Balkrishen Bhat, of Carlsbad, CA, Thazha P. Prakash, of Carlsbad, CA, Charles Allerson,

of San Diego, CA, Punit P. Seth, of Carlsbad, CA, has/have invented a certain invention entitled

TETRAHYDROPYRAN NUCLEIC ACID ANALOGS, for which I/we have made an application

for letters patent of the United States, said application having been filed 8/15/2008 and assigned

application no 12/192,847; and

WHEREAS, ISIS Pharmaceuticals, Inc. hereinafter referred to as the assignee, of 1896

Rutherford Road, Carlsbad CA, a corporation of Delaware, is desirous of acquiring 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.

ASSIGNMENT - Page 1 of 8

PATENT

REEL: 021825 FRAME: 0072

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.

ASSIGNMENT - Page 2 of 8

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

Dated: 11/12 20 08

Eric E. Swayze

State of <u>California</u>

SS.

County of San Diago

On Nov. 12, 2008 before me, Laura L. Eames , Notary Public, personally appeared Eric E. Swayze, 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 capacities(ies), and that by his/her/their signatures(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 # 1794238
Notary Public - California
San Diego County
My Comm. Expires Apr 13, 2012

WITNESS my hand and official seal.

DOCKET NO.: CHEM0041US

PATENT

Dated: 10 85 2008

Andrew M. Siwkowski

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

On October 30, 2008 before me, Laura L. Fames, Notary Public, personally appeared Andrew M. Siwkowski, 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 capacities(ies), and that by his/her/their signatures(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 # 1794238 Notary Public - California 🔮 San Diego County

WITNESS my hand and official seal.

PATENT

Balkrishen Bhat

SS.

before me, Laura L. Eames, Notary Public, personally appeared Balkrishen Bhat, 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 capacities(ies), and that by his/her/their signatures(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 # 1794238 Notary Public - California 🔮 San Diego County MyComm. Expires Apr 13, 2012

WITNESS my hand and official seal.

Dated: 10.29. 2008

Thazha P. Prakash

State of California)

SS.

County of San Diego

On October 21, 2008 before me, Laura L Eames, Notary Public, personally appeared Thazha P. Prakash, 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 capacities(ies), and that by his/her/their signatures(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 # 1794238
Notary Public - California
San Diego County
My Comm. Expires Apr 13, 2012

WITNESS my hand and official seal.

PATENT

DOCKET NO.: CHEM0041US

Dated: October 30 2008

Charles Allerson

State of California

SS.

County of San Digo

On October 30, 2008 before me, Laura L. Eames , Notary Public, personally appeared Charles Allerson, 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 capacities(ies), and that by his/her/their signatures(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 # 1794238
Notary Public - California
San Diego County
MyComm. Expires Apr 13, 2012

WITNESS my hand and official seal.

State of <u>California</u>)

County of <u>San Viego</u>

ss.

On Nov. 12,2008 before me, Laura L. Eames , Notary Public, personally appeared **Punit P. Seth**, 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 capacities(ies), and that by his/her/their signatures(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 # 1794238
Notary Public - California
San Diego County
My Comm. Expires Apr 13, 2012

RECORDED: 11/12/2008

WITNESS my hand and official seal.

Signature of Notary

ASSIGNMENT - Page 8 of 8

PATENT REEL: 021825 FRAME: 0079