501856584 03/16/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Eric E. Swayze	06/18/2008
Stephen Hanessian	07/10/2008
Janek Szychowski	06/23/2008
Susanta Sekhar Adhikari	02/07/2008
Kandasamy Pachamuthu	07/26/2008
Xiaojing Wang	06/25/2008
Michael T. Migawa	06/18/2008
Richard H. Griffey	06/17/2008

RECEIVING PARTY DATA

Name:	ISIS Pharmaceuticals, Inc.
Street Address:	1896 Rutherford Road
City:	Carlsbad
State/Country:	CALIFORNIA
Postal Code:	92008-7208

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13344247

CORRESPONDENCE DATA

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

via US Mail.

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Correspondent Name: Cooley LLP

Address Line 1: 777 - 6th Street NW, Ste. 1100
Address Line 2: Attn: Patent Dept/Emily W. Wagner

Address Line 4: Washington, DISTRICT OF COLUMBIA 20001

PATENT

REEL: 027880 FRAME: 0197

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ATTORNEY DOCKET NUMBER:	ACHA-011/04US 308043-2326	
NAME OF SUBMITTER:	Emily W. Wagner	
Total Attachments: 9 source=ACHA011_04US_ASSIGN#page1.ti source=ACHA011_04US_ASSIGN#page2.ti source=ACHA011_04US_ASSIGN#page3.ti source=ACHA011_04US_ASSIGN#page4.ti source=ACHA011_04US_ASSIGN#page5.ti source=ACHA011_04US_ASSIGN#page6.ti source=ACHA011_04US_ASSIGN#page7.ti	f f f f	
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PATENT REEL: 027880 FRAME: 0198

ASSIGNMENT

WHEREAS, we,

Name	Residence Address	
Eric E. Swayze	7789 Palenque Street, Carlsbad, California 92009	;
Stephen Hanessian	65 Gables Court, Beaconsfield, Québec, Canada H9W 5H3	;
Janek Szychowski	1700 Rue Aladin, Val Belair, Québec, Canada G3K 1G3	;
Susanta Sekhar Adhikari	17 Bagmari Lane, B.r.s. 10 Block-3, Flat-31, Kankurgachi, Calcutta, West Bengal, India	;
Kandasamy Pachamuthu	500 Murray Ross Parkway, Apartment #1816, North York, Ontario, Canada M3J 2Z3	;
Xiaojing Wang	736 Bounty Drive #3604, Foster City, California 94404	;
Michael T. Migawa	930 Wind Drift Drive, Carlsbad, California 92011	; and
Richard H. Griffey	360 Barsby Street, Vista, California 92084	

(hereinafter referred to as ASSIGNORS), having residence addresses as listed above next to our names, are the listed inventors/applicants of the patent application entitled "ANTIBACTERIAL 4,5-SUBSTITUTED AMINOGLYCOSIDE ANALOGS HAVING MULTIPLE SUBSTITUTENTS," as filed with the U.S. Patent and Trademark Office on May 3, 2008, and assigned Application No. 12/130,048. This application is a continuation of International Application No. PCT/US2006/046122 filed December 1, 2006; which claims the benefit of U.S. Provisional Patent Application No. 60/742,051 filed December 2, 2005.

WHEREAS, **ISIS Pharmaceuticals, Inc.** (hereinafter referred to as ASSIGNEE), a corporation of the State of Delaware having a place of business at 1896 Rutherford Road, Carlsbad, California 92008-7208, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and

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PATENT REEL: 027880 FRAME: 0199 enjoyed by ASSIGNEE and its successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

This Assignment is effective as of December 1, 2006.			
6/18/2008 Date	Eric E. Swayze		
State of California			
On June 18, 2008 , before me, La personally appeared <u>Eric E. Swayze</u>	wa L. Eames, Notary Public, (Here insert name and title of the officer)		
who proved to me on the basis of satisfactor subscribed to the within instrument and ackno	ry evidence to be the person(s) whose name(s) is/are byledged to me that he/she/they executed the same in		
his/her/their authorized capacity(ies), and that by or the entity upon behalf of which the person(s) are certify under PENALTY OF PERJURY under the			
paragraph is true and correct. WITNESS my hand and official seal.	LAURA L. EAMES Commission # 1794238 Notary Public - California		
Saucteur	San Diego County My Comm. Expires Apr 13, 2012 (Notary Seal)		

Signature of Notary Public

Application No. 12/130,048

Date 10, 2008	Stephen Hanessian
Province of	
Country of Canada)	SS.

I certify that I know or have satisfactory evidence that **Stephen Hanessian** is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

Dated	July	10,	2008	
Signature of		/	1 0	

Printed Name Joce Lyne Giguère

My appointment never expires.

06-23-2008	Janek Szychowski
Date	Janek Szychowski
Province of Quite(SS.
Country of Canada)	

I certify that I know or have satisfactory evidence that **Janek Szychowski** is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

My appointment never expires.

Dated 06 - 23 - 2008	
Signature of Notary Public	
Printed Name Vickie Mercier	

02-07-108	Susanta Sekhar	ASh' Kori
Date	Susanta Sekhar Adhikari	
Witnessed by: Skhani Sala		
Date: 02.07. 08		

July 26, 2008	K. Pass
Date	Kandasamy Pachamuthù
Province of ON	SS.
Country of Canada)	33.

I certify that I know or have satisfactory evidence that **Kandasamy Pachamuthu** is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

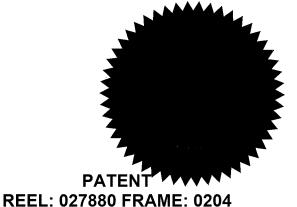
Signature of Notary Public

Printed Name

Chaol David Rown

My appointment never expires.

CHAD D. RAWN
BARRISTER, SOLICITOR, NOTARY PUBLIC
469 Lawrence Ave. West, Suite 100
Toronto, Ontario M5M 1C6
Tel.: 416-712-8315 Fax: 416-781-2668



6-25-08 Date	Xiaojing Wang	
State of California		
County of San Mateo		
on	ory evidence to be the powledged to me that he say his her their signature (s) acted, executed the instrum	erson(s) whose name(s) is are she they executed the same in on the instrument the person(s), nent.
WITNESS my hand and official seal.	(Notary S	SEPTEMBER C. PLUMLEE Commission # 1633981 Notary Public - California San Francisco County My Comm. Expires Jan 1, 2010 Seal)

6/18/2008 M. Sult M.	
Date / Michael T. Migawa	-
State of California	
County of <u>San Diego</u>	
On <u>June 18, 2008</u> , before me, <u>Laura L. Earnes</u> , <u>Netury Public</u> personally appeared <u>Michael T. Migawa</u> who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/s subscribed to the within instrument and acknowledged to me that he/she/they executed the same his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s)	in e
or the entity upon behalf of which the person(s) acted, executed the instrument.	γ-);
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. LAURA L. EAMES Commission # 1794238 Notary Public - California San Diego County My Comm. Explos Apr 13, 2012	
Signature of Notary Public (Notary Seal)	

6/17/08 Rue	ef H- Giffe
Date Richard I	I. Griffey
State of California	
County of <u>San Diago</u>	
On <u>June 17, 2008</u> , before me, <u>Laura</u> , (Here insert na personally appeared <u>Richard H. Griffey</u>	L Eames me and title of the officer)
who proved to me on the basis of satisfactory evidence subscribed to the within instrument and acknowledged this/her/their authorized capacity(ies), and that by his/her/theor the entity upon behalf of which the person(s) acted, exec	o me that he/ she/they executed the same in eir signature(s/) on the instrument the person(s/),
I certify under PENALTY OF PERJURY under the laws of the paragraph is true and correct.	e State of California that the foregoing
WITNESS my hand and official seal. Signature of Notary Public	LAURA L. EAMES Commission # 1794238 Notary Public - California San Diego County MyComm. Expires Apr 13, 2012 (Notary Seal)

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