

DOCKET NO.: C1037.70014US00

11-17-2005
 SHEET
 DEPARTMENT OF COMMERCE
 Patent and Trademark Office

FORM PTO-1595 U.S.
 (Rev. 6-93)
 OMB No. 0551-0011 (exp. 4/94)

103120651

To the Commissioner for Patents : Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
 1. Stephen L. Hutcherson
 2. Josephine Glover

2. Name and address of receiving party(ies)
 Name: **Isis Pharmaceuticals, Inc.**
 Internal Address:

Additional name(s) of conveying party(ies) attached? Yes No

3. Nature of conveyance:
 Assignment Merger
 Security Agreement Change of Name
 Other Correction of Assignment Document

Street Address: **2280 Faraday Avenue**
Carlsbad, CA 08/467929

Additional name(s) & addresses(es) attached? Yes No

Execution Date: 1. 7/13/95 2. 7/25/95

09/467,929

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is
 A. Patent Application No.(s) **08/467,930**
 B. Patent No.(s) **5,663,153**

Additional numbers attached? Yes No

5. Name and address of party to whom correspondence Concerning document should be mailed:

Name: **Helen C. Lockhart, Ph.D.**
 Address: **Wolf, Greenfield & Sacks, P.C.**
600 Atlantic Avenue
Boston, MA 02210-2206

6. Total number of applications and patents involved: **[1]**

7. Total fee (37 CFR 3.41) **\$ 40.00**

Enclosed

Authorized to be charged to deposit account

The Commissioner is authorized to charge any deficiencies in the enclosed payment to:

B. Deposit Account No: 23/2825

DO NOT USE THIS SPACE

9. Statement and signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Helen C. Lockhart, Ph.D.

Helen Lockhart

November 8, 2005

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: **[11]**

FORM PTO-155
1-31-92
Docket No.



10-19-1995



100078428

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

RECOR

SHEET



MD 9-18-95

To The Honorable Commissioner of Patents and Trademarks. Please record the attached original document(s) or copy thereof.

1. Name of conveying party(ies): Stephen L. Hutcherson, Josephine M. Glover	2. Name and address of receiving party(ies): Name: Isis Pharmaceuticals, Inc. Internal Address: 2280 Faraday Avenue Street Address: 2280 Faraday Avenue City: Carlsbad State: CA Zip: 92008
Additional name(s) of conveying party(ies) attached? () YES (XX) NO	Additional names (s) & address attached? () YES (XX) NO
3. Nature of Conveyance (XX) Assignment () Merger () Change of Name () Security Agreement () Other: Execution date: July 25, 1995	

4. Application number(s) or patent number(s). If this document is being filed together with a new application, the execution date of the application is:	
A. Patent Application No(s): 08/467,929 filed June 6, 1995	B. Patent No(s):

Additional numbers attached? () YES (XX) NO	
5. Name and address of party to whom correspondence concerning documents should be mailed: Internal Address: Jane Massey Licata, Esq. Law Offices of Jane Massey Licata Woodland Falls Corporate Park 210 Lake Drive East Suite 201 Cherry Hill, New Jersey 08002 Street Address: Jane Massey Licata, Esq. Law Offices of Jane Massey Licata Woodland Falls Corporate Park 210 Lake Drive East Suite 201 Cherry Hill, New Jersey 08002	6. Total number of applications and patents involved. One (1)
	7. Total fee (17 CFR 1.41) \$ () Enclosed (XX) Authorized to be charged to deposit account.
	8. Deposit Account number: 12-1086 (Attach duplicate copy of this page if paying by deposit account.)

DO NOT USE THIS SPACE

9. Statement and signature.
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Jane Massey Licata, Reg. No. 32,257	<i>Jane Massey Licata</i>	September 15, 1995
Name of Person Signing	Signature	Date

Total number of pages comprising cover sheet, attachments, and document: **four**

Do not detach this portion
cover sheet information to:
Commissioner of Patents and Trademarks
Box Assignments
Washington, D.C. 20231

VM50111 10/06/95 08467929 12 1086 050 581 40.00CH

Attorney Docket No.: ISPH-0141

A S S I G N M E N T

WHEREAS, we Stephen L. Hutcherson and Josephine M. Glover, hereinafter referred to as the assignors, residing respectively at 703 Gordon School Court, Richmond, VA 23236 and 6 Fairlawn Park, Kettlawell Hill, Woking, Surrey GU21 4HT, United Kingdom are the joint inventors of certain inventions or improvements for which we have made application for Letters Patent to the United States, identified as Serial No. 08/467,929, filed June 6, 1995, entitled Immune Stimulation by Phosphorothioate Oligonucleotide Analogs; and

WHEREAS, Isis Pharmaceuticals, Inc. ^{930 SH 10/15/05} hereinafter referred to as the assignee, of Carlsbad, California, 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.

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.

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

Stephen L. Hutcherson (L.S.)
Stephen L. Hutcherson

Josephine M. Glover (L.S.)
Josephine M. Glover

[WHERE ALL INVENTORS SIGN BEFORE THE SAME NOTARY:]

COUNTY OF _____ SS

On this _____ day of _____, 19____, before me personally came the above named _____ to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

Notary Public

[WHERE INVENTORS SIGN BEFORE SEPARATE NOTARIES:]

State of California :

COUNTY OF San Diego :

SS

On this 13th day of July, 1995, before me personally came the above named Stephen L. Hutchinson to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.



Charmaine G. Webb
Notary Public

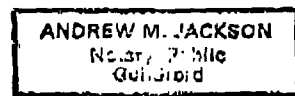
KINGDOM OF ENGLAND :

COUNTY OF SURREY :

SS

On this 25th day of July, 1995, before me personally came the above named Joseph M. Glover to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

[Signature]
Notary Public



My Commission continues for as long as I shall practice

FO: 153:3:1074

Correction of Erroneous Assignment

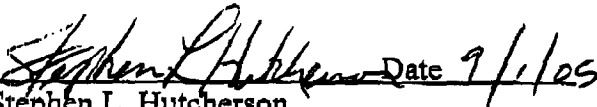
Re: U.S. Non-Provisional Patent Application Entitled:
IMMUNE STIMULATION BY PHOSPHOROTHIOATE
OLIGONUCLEOTIDE ANALOGS
Inventors: Stephen L. Hutcherson and Josephine M. Glover
Serial No: 08/467,930 Filing Date: June 6, 1995
Our File No.: C1037.70014 Patent No. 5,663,153

This document provides a record of the circumstances surrounding action taken to correct a previously recorded erroneous Assignment document for the above-identified Patent.

The original Assignment document, signed by me on July 13, 1995 assigned my rights in the Invention to ISIS Pharmaceuticals, Inc., of Carlsbad, California. This Assignment was recorded by the USPTO on Reel 7658 Frame 0030 on September 18, 1995. The serial number on the assignment document was incorrect. According to the records in the file, the Patent Office sent the attorney of record the incorrect serial number, No. 08/467,929. The Assignment document was created using the incorrect serial number. Subsequently the USPTO sent the correct number, No. 08/467,930, which appears on the other documents. However, the original Assignment document which I signed on July 13, 1995 was not corrected prior to this date. It is my understanding that the error was made unintentionally and has recently been brought to my attention. A letter from the attorney of record to the USPTO dated August 21, 1995 and documenting these facts is attached hereto.

In order to correct the inadvertent Assignment error, a copy of the original Assignment document was corrected by hand to correct the serial number as outlined in MPEP § 323. I have initialed and dated the corrected Assignment document.

I hereby confirm the above facts.

 Date 9/1/95
Stephen L. Hutcherson
Inventor

Correction of Erroneous Assignment

Re: U.S. Non-Provisional Patent Entitled:
IMMUNE STIMULATION BY PHOSPHOROTHIOATE
OLIGONUCLEOTIDE ANALOGS
Inventors: Stephen L. Hutcherson and Josephine M. Glover
Serial No: 08/467,930 Filing Date: June 6, 1995
Our File No.: C1037.70014

This document provides a record of the circumstances surrounding action taken to correct a previously recorded erroneous Assignment document for the above-identified application.

The original Assignment document, submitted on September 13, 1995 assigned the rights of Inventors, Stephen L. Hutcherson and Josephine M. Glover, to ISIS Pharmaceuticals, Inc., of Carlsbad, California. This Assignment was recorded by the USPTO on Reel 7658 Frame 0030 on September 18, 1995. The serial number on the assignment document was incorrect. According to the records in the file, the Patent Office sent the attorney of record the incorrect serial number, No. 08/467,929, based on which the Assignment document was created. Subsequently the USPTO sent the correct number, No. 08/467,930, which appears on the other documents. However, the original Assignment document which I signed on July 25, 1995 was never corrected. It is my understanding that the error was made unintentionally and has recently been brought to my attention.

In order to correct the inadvertent Assignment error, a copy of the original Assignment document was corrected by hand to correct the serial number as outlined in MPEM § 323. I have initialed and dated the corrected Assignment document.

I hereby confirm the above facts.



Josephine M. Glover
Inventor

Date 3/10/05

Attorney Docket No.: ISPH-0141

A S S I G N M E N T

WHEREAS, we Stephen L. Hutcherson and Josephine M. Glover, hereinafter referred to as the assignors, residing respectively at 703 Gordon School Court, Richmond, VA 23236 and 6 Fairlawn Park, Kettlewell Hill, Woking, Surrey GU21 4HT, United Kingdom are the joint inventors of certain inventions or improvements for which we have made application for Letters Patent to the United States, identified as Serial No. 08/467,929, filed June 6, 1995, entitled Immune Stimulation by Phosphorothioate Oligonucleotide Analogs; and

930 June 21/05
WHEREAS, Isis Pharmaceuticals, Inc. hereinafter referred to as the assignee, of Carlsbad, California, 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.

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.

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

Stephen L. Hutcherson (L.S.)
Stephen L. Hutcherson

Josephine M. Glover (L.S.)
Josephine M. Glover

[WHERE ALL INVENTORS SIGN BEFORE THE SAME NOTARY:]

COUNTY OF _____ SS

On this _____ day of _____, 19__, before me personally came the above named _____ to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

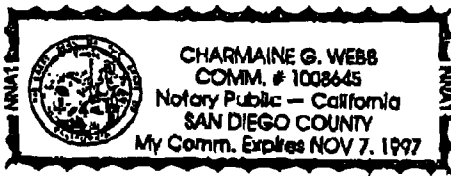
Notary Public

[WHERE INVENTORS SIGN BEFORE SEPARATE NOTARIES:]

State of California :

COUNTY OF San Diego : SS

On this 13th day of July, 1995, before me personally came the above named Stephen L. Hutcherson to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.



Charmaine G. Webb
Notary Public

Kingdom of England :

COUNTY OF SURREY : SS

On this 25th day of July, 1995, before me personally came the above named Joseph M. Glens to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

[Signature]
Notary Public



My Commission continues for as long as I shall practice

FO: (53:3:1)1074