

FORM PTO-1595

1-31-92

Docket No.: ISPH-0388

09-30-1999

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

101158273

RECORDATION FORM COVER SHEET PATENTS ONLY

ID NO:

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

1. Name of conveying party(ies):

**Nicholas M. Dean, Robert McKay,
Loren Miraglia and Brenda Baker**

2. Name and address of receiving party(ies):

Name: **Isis Pharmaceuticals Inc.**Internal Address: **Carlsbad Research Center**Street Address: **2292 Faraday Avenue**City: **Carlsbad**State: **California**Zip: **92008**Additional name(s) of conveying party(ies)
attached?

() YES (XX) NO

3. Nature of Conveyance:

(XX) Assignment () Merger

() Name Change () Security Agreement

() Other: _____

Additional names (s) & address attached?

() YES (XX) NO

Execution date: **September 13, 1999**

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

A. Patent Application No(s). **09/364,416** **FILED July 30, 1999**

B. Patent No(s).

If this document is being filed together with a new application, the execution date of the application is:

Additional numbers attached? () YES (XX) NO

5. Name and address of party to whom
correspondence concerning documents
should be mailed:**Jane Massey Licata, Esq.****Law Offices of Jane Massey Licata****66 E. Main Street****Marlton, New Jersey 08053**6. Total number of applications and patents involved: **One (1)**

7. Total fee (37 CFR 3.41): \$

() 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**

Name of Person Signing

Signature Jane Massey Licata

September 23, 1999

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

09/30/1999 MTHA11 00000078 121086 09364416

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PATENT
REEL: 010267 FRAME: 0668

A S S I G N M E N T

WHEREAS, We, Nicholas M. Dean, of Encinitas, State of California; Robert McKay, of San Diego, State of California; Loren Miraglia, of Encinitas, State of California; and Brenda Baker, of Carlsbad, State of California, have invented a certain invention entitled Antisense Oligonucleotide Compositions and Methods for the Modulation of Activating Protein 1, for which we have made application for Letters Patent of the United States, said application having been filed July 30, 1999 and assigned Application No. 09/364,416; and

WHEREAS, ISIS Pharmaceuticals, Inc. hereinafter referred to as the assignee, of 2292 Faraday Avenue, 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

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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

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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.

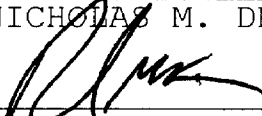
IN WITNESS WHEREOF, we have hereunto set our hands and seals.

DATED: Sept 3, 1999



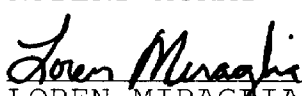
NICHOLAS M. DEAN

DATED: SEPT. 13, 1999




ROBERT MCKAY

DATED: SEP 7, 1999



LOREN MIRAGLIA

DATED: Aug 31, 1999



BRENDA BAKER

[WHERE ALL INVENTORS SIGN BEFORE THE SAME NOTARY]

State of California)
) ss.
County of San Diego)

On this _____ day of _____, 1999, before me, the undersigned, a Notary Public for the state, personally appeared @@, personally known to me/proved to me on the basis of satisfactory evidence to be the person who subscribed the foregoing Assignment and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.

WITNESS my hand and official seal.

Signature of Notary

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[WHERE INVENTORS SIGN BEFORE SEPARATE NOTARIES]

State of California)
) ss.
 County of San Diego)

On this 31st day of August, 1999, before me, the undersigned, a Notary Public for the state, personally appeared Beenda Baker, personally known to me/~~proved to me on the basis of satisfactory evidence~~ to be the person who subscribed the foregoing Assignment and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.



WITNESS my hand and official seal.

Signature of Notary

State of California)
) ss.
 County of San Diego)

On this 3rd day of September, 1999, before me, the undersigned, a Notary Public for the state, personally appeared Nicholas M. Dean, personally known to me/~~proved to me on the basis of satisfactory evidence~~ to be the person who subscribed the foregoing Assignment and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.



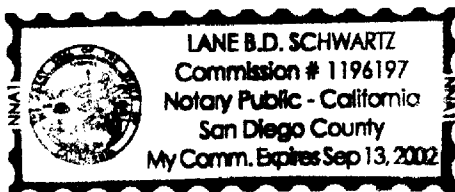
WITNESS my hand and official seal.

Signature of Notary

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State of California)
) ss.
 County of San Diego)

On this 17th day of September, 1999, before me, the undersigned, a Notary Public for the state, personally appeared Loren Mikaglia, personally known to me/~~proved to me on the basis of satisfactory evidence~~ to be the person who subscribed the foregoing Assignment and acknowledged to me that ~~he~~/she executed the same in his/her authorized capacity, and that by his/her signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.



WITNESS my hand and official seal.

Lane B.D. Schwartz
 Signature of Notary

State of California)
) ss.
 County of San Diego)

On this 13th day of September, 1999, before me, the undersigned, a Notary Public for the state, personally appeared Robert McKay, personally known to me/~~proved to me on the basis of satisfactory evidence~~ to be the person who subscribed the foregoing Assignment and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.



WITNESS my hand and official seal.

Lane B.D. Schwartz
 Signature of Notary

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