02-19-2004		
	Form PTO-1595 (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002) T U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office	
	To the Honorable Commissioner o. 1026720	2hed original documents or copy thereof
	1. Name of conveying party(ies): Frank C. Bennett Timothy A. Vickers James G. Karras Susan M. Freier Additional name(s) of conveying party(ies) attached? 2.17-04 2.17-04 Yes x No	2. Name and address of receiving party(ies) Name: ISIS PHARMACEUTICALS, INC. Internal Address: Street Address: 2292 Faraday Avenue
	3. Nature of Conveyance: X Assignment	City: Carlsbad State: CA Zip: 92008 Additional name(s) & address(es) attached:
	4. Application number(s) or patent number(s): If this document is being filed together with a new application, the exe A. Patent Application No.(s): 10/641,962 Additional numbers attached.	B. Patent No.(s):
	Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
	Name: Joseph A. Williams, Jr. MARSHALL, GERSTEIN & BORUN LLP	7. Total fee (37 CFR 3.41) \$
	Internal Address: Atty. Dkt.: 30566/39578 (BIOL0020US)	x Enclosed
	Street Address: 233 S. Wacker Drive, Suite 6300 Sears Tower	Authorized to be charged to deposit account Authorized to be charged to credit card (Form 2038 enclosed)
	City: State: Zip: Chicago IL 60606-6357	8. Deposit account number: 13-2855 (Attach duplicate copy of this page if paying by deposit account)
	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. Joseph A. Williams, Jr 38,659 Name of Person Signing Name of Person Signing	
(
02/18/2004 BBYRNE 00000155 Tracking Species including cover sheet, attachments, and documents: 5		
01 FC:8021 40.00 UP		
I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MS Assignment Recordation Services, Director of the US Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below. Dated: February 11, 2004 Signature: Joseph X. Williams, Jr.		

PATENT REEL: 014979 FRAME: 0177

ASSIGNMENT

WHEREAS, we C. Frank Bennett, residing at 1347 Cassins Street, Carlsbad, CA 92009, Timothy A. Vickers, residing at 253 Luiseno Avenue, Oceanside, CA 92057, James G. Karras, residing at 1159 Montura Road, San Marcos, CA 92068 and Susan M. Freier, residing at 2946 Renault Street, San Diego, CA 92122 hereinafter referred to as the assignors, are the joint inventors of certain inventions or improvements for which we have made application for Letters Patent to the United States, identified as Case No. 30566/39578 entitled OLIGONUCLEOTIDE COMPOSITIONS AND METHODS FOR THE MODULATION OF THE EXPRESSION OF B7 PROTEIN; filed August 15, 2003; and

WHEREAS, Isis Pharmaceuticals Inc. hereinafter referred to as the assignee, of 2292 Faraday Ave, Carlsbad, California 92008 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 a 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.

day of January 2004, before me personally came the above-named C. Frank Bennett, who executed the foregoing Assignment in my presence, and who acknowledged to me that he/she executed the same of his/her own free will for the purposes set forth therein.

PAMELA GROOMS Commission # 1296342 Notary Public - California San Diego County My Comm. Dispres Mar 8, 2005

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Dated: 118/04

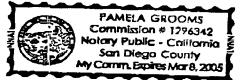
James G. Karras

STATE OF

COUNTY OF

ss.

This M day of MUNICIPY, before me personally came the above-named James G. Karras, who executed the foregoing Assignment in my presence, and who acknowledged to me that he/one executed the same of his/her own free will for the purposes set forth therein.



[SEAL]

PATENT REEL: 014979 FRAME: 0180

COUNTY OF

This 810 day of Annany 2004, before me personally came the above-named Timothy Vickers, who executed the foregoing Assignment in my presence, and who acknowledged to me that he/she executed the same of his/her own free will for the purposes set forth therein.



[SEAL]

ISIS NO. BIOLO020US

Dated: 22- Jan - 04

Susan M. Freier

I → MGB

STATE OF

COUNTY OF San Dugo

SS.

This 200 day of Many 200, before me personally came the above-named Susan M. Freier, who executed the foregoing Assignment in my presence, and who acknowledged to me that he/she executed the same of his/her own free will for the purposes set forth therein.

Con Notar So My Co

PAME! A GROOMS
Commission # 1296342
Notary Public - California
San Diego County
My Comm. Expires Mar 8, 2005

[SEAL]

Notary Public

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PATENT REEL: 014979 FRAME: 0182