Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Brian Seed	02/17/1993
Alejandro Aruffo	01/05/1993
David Simmons	01/27/1993
Siegfried Stengelin	09/24/1990
Leander Lauffer	10/24/1990
David Camerini	09/12/1990
Carmen Patricia Oquendo	09/25/1990
Janet Allen	09/12/1990
Ivan Stamenkovic	10/05/1990
Martine Amiot	10/03/1990

RECEIVING PARTY DATA

Name:	The General Hospital Corporation
Street Address:	Thirteenth Street, Bldg. 149, Ste. 1101
City:	Charlestown
State/Country:	MASSACHUSETTS
Postal Code:	02129

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	09836544

CORRESPONDENCE DATA

Fax Number: (303)499-8089

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

303-499-8080 Phone:

Diane@greenwin.com Email: Correspondent Name: Donna M. Ferber

4875 Pearl East Circle, Suite 200 Address Line 1:

REEL: 017470 FRAME: 0001

PATENT

500094124

Address Line 2: Greenlee, Winner & Sullivan, P.C. Boulder, COLORADO 80301 Address Line 4: ATTORNEY DOCKET NUMBER: 11-88L NAME OF SUBMITTER: Donna M. Ferber Total Attachments: 34 source=11-88L_Assignment#page1.tif source=11-88L_Assignment#page2.tif source=11-88L_Assignment#page3.tif source=11-88L_Assignment#page4.tif source=11-88L_Assignment#page5.tif source=11-88L_Assignment#page6.tif source=11-88L_Assignment#page7.tif source=11-88L_Assignment#page8.tif source=11-88L_Assignment#page9.tif source=11-88L_Assignment#page10.tif source=11-88L_Assignment#page11.tif source=11-88L_Assignment#page12.tif source=11-88L_Assignment#page13.tif source=11-88L_Assignment#page14.tif source=11-88L_Assignment#page15.tif source=11-88L_Assignment#page16.tif source=11-88L_Assignment#page17.tif source=11-88L_Assignment#page18.tif source=11-88L_Assignment#page19.tif source=11-88L_Assignment#page20.tif source=11-88L_Assignment#page21.tif source=11-88L_Assignment#page22.tif source=11-88L_Assignment#page23.tif source=11-88L_Assignment#page24.tif source=11-88L_Assignment#page25.tif source=11-88L_Assignment#page26.tif source=11-88L_Assignment#page27.tif source=11-88L_Assignment#page28.tif source=11-88L_Assignment#page29.tif source=11-88L_Assignment#page30.tif source=11-88L_Assignment#page31.tif source=11-88L_Assignment#page32.tif

source=11-88L_Assignment#page33.tif source=11-88L_Assignment#page34.tif

WHEREAS WE, Brian Seed, David Simmons and Alejandro Aruffo (herein called "ASSIGNORS"), having addresses respectively at 47A Joy Street, Boston, Massachusetts 02114; John Radcliffe Hospital, Headington, Oxford OX3 9DU, United Kingdom; and Bristol Myers Squibb Research Institute, 3005 First Avenue, Seattle, Washington 98121; are co-inventors of the invention in "RAPID IMMUNOSELECTION CLONING METHOD" for which we have executed an application for a Patent of the United States, filed December 1, 1992, Serial No. 983,647;

WHEREAS, The General Hospital Corporation (herein called "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts having a principal place of business at Thirteenth Street, Bldg. 149, Suite 1101, Charlestown, Massachusetts 02129, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, 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, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority of of the United States, the International Convention of the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of \subseteq industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

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 or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND WE HEREBY covenant and agree 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 HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper

IN TESTIMONY seals the day and year	WHEREOF, we hereunto set our hands and set opposite our signatures.
Dated:, 199	Brian Seed
state of	: : SS
County of	;
Subscribed and, 19	sworn to before me this day of
,	Notary Public
My commission expires:	
Dated: MOI, 1993 State of OXFORD	David Simmons.
	: : SS
County of $U.K$,	:
Subscribed and	sworn to before me this day of
My commission expires:	Notary Public co
Dated:, 199_	Alejandro Aruffo
State of	:
County of	: SS :
Subscribed and	sworn to before me this day of .
My commission expires.	Notary Public

protection for said invention in all countries.

PATENT REEL: 017470 FRAME: 0004 TRAME

WHEREAS WE, Brian Seed, David Simmons and Alejandro Aruffo (herein called "ASSIGNORG"), having addresses respectively at 47A Joy Street, Boston, Massachusetts 02114; John Radcliffe Hospital, Headington, Oxford OX3 9DU, United Kingdom; and Bristol Myers Squibb Research Institute, 3005 First Avenue, Seattle, Washington 98121; are co-inventors of the invention in "RAPID IMMUNOSELECTION CLONING METHOD" for which we have executed an application for a Patent of the United States, filed December 1, 1992, Serial No. 983,647;

WHEREAS, The General Hospital Corporation (herein called "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts having a principal place of business at Thirteenth Street, Bldg. 149, Suite 1101, Charlestown, Massachusetts 02129, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, 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, unto the said ASSIGNEE, its successors, legal $\overline{\mbox{\sc op}}$ representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign ton the United States, together with the right to file such applications and the right to claim for the same the priorityof the United States, the International Convention of the O Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or ____ countries foreign to the United States and all extensions, renewals and reissues thereof;

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 dut; it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND WE HEREBY covenant and agree 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 HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, topating enforce proper

REEL: 017470 FRAME: 0005

r set opposite our signatures.
Brian Seed
: : ss :
l sworn to before me this day o
Notary Public
13/13/96
David Simmons
:
: SS :
sworn to before me this day o
Notary Public
Alejandro Aruffo
: SS :
sworn to before me this day of

protection for said invention in all countries.

WHEREAS WE, Brian Seed, David Simmons and Alejandro Aruffo (herein called "ASSIGNORS"), having addresses respectively at 47A Joy Street, Boston, Massachusetts 02114; John Radcliffe Hospital, Headington, Oxford OX3 9DU, United Kingdom; and Bristol Myers Squibb Research Institute, 3005 First Avenue, Seattle, Washington 98121; are co-inventors of the invention in "RAPID IMMUNOSELECTION CLONING METHOD" for which we have executed an application for a Patent of the United States, filed December 1, 1992, Serial No. 983,647;

WHEREAS, The General Hospital Corporation (herein called "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts having a principal place of business at Thirteenth Street, Bldg. 149, Suite 1101, Charlestown, Massachusetts 02129, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, 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, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority of the United States, the International Convention of the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs of the patents. which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

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 or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND WE HEREBY covenant and agree 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 HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper

sears the day and year	Y WHEREOF, we hereunto set our hands r set opposite our signatures.	
Dated:, 199_	Brian Seed	
State of	:	
County of	: SS :	
Subscribed and	l sworn to before me this da	уof
	Notary Public	······································
My commission expires:		
Dated:, 199_	David Simmons	
State of	:	
County of	: SS :	
Subscribed and	sworn to before me this day	of
	Notary Public	
My commission expires:		
	Notary Public	6446
My commission expires: Dated: / 5 , 19973	Notary Public	246
Dated: / 5 , 199 <u>7</u> 3	Notary Public Notary Public Alejandro Aruffo	246
	Notary Public Notary Public Alejandro Aruffo	246
Dated: / 5 , 19993 State of Washington County of KING	Notary Public Notary Public Alejandro Aruffo	6449 0027
Dated: / 5 , 19993 State of Washington County of KING	Notary Public Alejandro Aruffo Seworn to before me this 575 day	5449 0027 t
Dated: / 5 , 19973 State of Washington County of KING Subscribed and s January , 1993	Notary Public Alejandro Aruffo : : SS:	5449 0027 t

MAR 12 93

protection for said invention in all countries.

WHEREAS WE, Brian Seed, Janet Allen, Alejandro Aruffo, David Camerini, Leander Lauffer, Carmen Patricia Oquendo, David Simmons, Ivan Stamenkovic, Siegfried Stengelin, and Martine Amiot (herein called "ASSIGNORS"), are coinventors of the invention entitled "Rapid Immunoselection Cloning Method" for which we have executed an application for a Patent of the United States, filed July 13, 1990, Serial No. 07/553,759;

WHEREAS, The General Hospital Corporation (herein called "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, having a usual place of business at 32 Fruit Street, Boston, Massachusetts 02114, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, 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, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority of the United States, the International Convention of the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

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 or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND WE HEREBY covenant and agree 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 HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

	, 1990	
Place of Executio	n:	Brian Seed Massachusetts General Hospital Wellman Building Boston, MA 02114
I was personally me, execute the a	present a bove assic	nd did see Brian Seed, who is known t ynment.
Dated:	, 1990	Witness: Print Name: Address:
Dated:		Janet Allen
Place of Execution	:	University of Cambridge Department of Physiology Downing Street Cambridge, CB23EG
		England
I was personally p ne, execute the ab	resent and ove assign	England
I was personally p me, execute the ab Dated:	ara abbigi	England d did see Janet Allen, who is known to nment. Witness: Print Name:
	ara abbigi	England d did see Janet Allen, who is known to nment. Witness: Print Name:
	_, 1990	England d did see Janet Allen, who is known to nament. Witness: Print Name: Address:
Dated:	_, 1990 _, 1990	England d did see Janet Allen, who is known to nment. Witness: Print Name: Address:
Dated: Dated: Dace of Execution:	_, 1990 _, 1990	England d did see Janet Allen, who is known to nament. Witness: Print Name: Address: Alejandro Aruffo 12 Park Road Belmont, MA 02178

 O_{1} $C_{i,j}$

David Camerini Johnsson Cancer Center Factor Bldg., Rm. 11-934 University of California at Los Angeles Medical School Los Angeles, CA 90024 t and did see David Camerini, who is know e assignment. Witness: Print Name: Address:
t and did see David Camerini, who is known assignment. Witness: Print Name:
90 Witness: Print Name:
Address:
0
Leander Lauffer Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany
and did see Leander Lauffer, who is know assignment.
Witness: Print Name: Address:
·
Carmen Patricia Oquendo Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany
and did see Carmen Patricia Oquendo, who he above assignment.
Witness: Print Name: Address:
ε -

Dated:, 1990 Place of Execution:	David Simmons John Radcliffe Hospital Headington, Oxford OX3 9DU England
I was personally present ar to me, execute the above as	nd did see David Simmons, who is know signment.
Dated:, 1990	Witness: Print Name: Address:
Dated:, 1990	
Place of Execution:	Ivan Stamenkovic 125 Pleasant Street Brookline, MA 02146
I was personally present and to me, execute the above ass	did see Ivan Stamenkovic, who is known signment.
Dated:, 1990	Witness: Print Name: Address:
	Address:
Dated: 9-74-90, 1990	Circles Shl:
	Siegffied Stengelin Hoechst AG, Pharma Fo. Biochemie 6230 Frankfurt am Main 80 West Germany
Place of Execution:	Hoechst AG, Pharma Fo. Biochemie 6230 Frankfurt am Main 80 West Germany
0 / . /	Hoechst AG, Pharma Fo. Biochemie 6230 Frankfurt am Main 80 West Germany did see Siegfried Stengelin, who is be assignment.
Place of Execution: I was personally present and known to me, execute the above pated: Oated: 1990	Hoechst AG, Pharma Fo. Biochemie 6230 Frankfurt am Main 80 West Germany
Place of Execution: I was personally present and known to me, execute the above the property of the property	did see Siegfried Stengelin, who is witness: Print Name:
Place of Execution: I was personally present and known to me, execute the above pated: 1990 19	did see Siegfried Stengelin, who is witness: Print Name:
Place of Execution: I was personally present and known to me, execute the above pated: 1990 19	did see Siegfried Stengelin, who is witness: Print Name:
Place of Execution: I was personally present and known to me, execute the above pated: 1990 19	Martine Amiot Massachusetts General Hospital Wellman Building Boston, MA 02114
Place of Execution: I was personally present and known to me, execute the above pated: 1990 19	Martine Amiot Massachusetts General Hospital Wellman Building Boston, MA 02114

PATENT
REEL: 017470 FRAME: 0012

O. Oi

WHEREAS WE, Brian Seed, Janet Allen, Alejandro Aruffo, David Camerini, Leander Lauffer, Carmen Patricia Oquendo, David Simmons, Ivan Stamenkovic, Siegfried Stengelin, and Martine Amiot (herein called "ASSIGNORS"), are coinventors of the invention entitled "Rapid Immunoselection Cloning Method" for which we have executed an application for a Patent of the United States, filed July 13, 1990, Serial No. 07/553,759;

WHEREAS, The General Hospital Corporation (herein called "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, having a usual place of business at 32 Fruit Street, Boston, Massachusetts 02114, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, 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, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority of the United Convention of the Protection of States, the International Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

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 or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND WE HEREBY covenant and agree 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 HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, we hereunto set our hands and seals the day and year set opposite our signatures.

Brian Seed Massachusetts General Hospital Wellman Building Boston, MA 02114 I was personally present and did see Brian Seed, who is known to me, execute the above assignment. Dated:	Dated:,	1990	
me, execute the above assignment. Dated:	Place of Execution:		Massachusetts General Hospital Wellman Building
Dated:	I was personally pre me, execute the abov	sent and e assign	did see Brian Seed, who is known to
Janet Allen University of Cambridge Department of Physiology Downing Street Cambridge, CB23EG England I was personally present and did see Janet Allen, who is known to me, execute the above assignment. Dated:, 1990 Place of Execution: I was personally present and did see Alejandro Aruffo 12 Park Road Belmont, MA 02178 I was personally present and did see Alejandro Aruffo, who is known to me, execute the above assignment. Dated:, 1990 Witness: Print Name:	Dated:,	1990	Print Name:Address:
England I was personally present and did see Janet Allen, who is known to me, execute the above assignment. Dated:, 1990		1990	University of Cambridge Department of Physiology Downing Street
Alejandro Aruffo 12 Park Road Belmont, MA 02178 I was personally present and did see Alejandro Aruffo, who is know to me, execute the above assignment. Dated:, 1990 Witness: Print Name:	me, execute the above	e assign	Witness: Print Name: Address:
to me, execute the above assignment. Dated:, 1990 Witness: Print Name:		, 1990	12 Park Road
Print Name:	I was personally pre	sent and	did see Alejandro Aruffo, who is known signment.
	Dated:	, 1990	Print Name:

Place of Executi I was personally to me, execute to Dated:	present a he above a	David Camerini Johnsson Cancer Center Factor Bldg., Rm. 11-934 University of California at Los Angeles Medical School Los Angeles, CA 90024 and did see David Camerini, who is knowned to the control of
	a u.	nd did see David Camerini, who is know
		ssignment.
	, 1990	Witness: Print Name:Address:
Dated:	, 1990	
Place of Executio		Leander Lauffer Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany
I was personally to me, execute th	present and e above as	d did see Leander Lauffer, who is know signment.
Dated:		Witness: Print Name: Address:
Pated:		Carmen Patricia Oquendo Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany
was personally p s known to me, ex	oresent and secute the	did see Carmen Patricia Oquendo, who above assignment.
ated:		Witness: Print Name:

Dated: 12/09/90, 1990 Place of Execution:	David Simmons John Radcliffe Hospital Headington, Oxford OX3 9DU England
I was personally present an to me, execute the above as:	d did see David Simmons, who is known
Dated: 12/9/90 , 1990	Witness: Print Name: Town Address: Imm, Taba Challer Highles, Fight
Dated:, 1990	
Place of Execution:	Ivan Stamenkovic 125 Pleasant Street Brookline, MA 02146
I was personally present and to me, execute the above ass	did see Ivan Stamenkovic, who is known signment.
Dated:, 1990	Witness: Print Name: Address:
Dated:, 1990 Place of Execution: I was personally present and known to me, execute the above	Siegfried Stengelin Hoechst AG, Pharma Fo. Biochemie 6230 Frankfurt am Main 80 West Germany did see Siegfried Stengelin, who is we assignment.
Dated:, 1990 PEGG, U.ID PEGG, U.ID Orr:Gi	Witness: Print Name: Address:
197.21 1	
Dated:, 1990	
Place of Execution:	Martine Amiot Massachusetts General Hospital Wellman Building Boston, MA 02114
I was personally present and to me, execute the above assi	did see Martine Amiot, who is known gnment.
Dated:, 1990	Witness: Print Name:Address:

WHEREAS WE, Brian Seed, Janet Allen, Alejandro Aruffo, David Camerini, Leander Lauffer, Carmen Patricia Oquendo, David Simmons, Ivan Stamenkovic, Siegfried Stengelin, and Martine Amiot (herein called "ASSIGNORS"), are coinventors of the invention entitled "Rapid Immunoselection Cloning Method" for which we have executed an application for a Patent of the United States, filed July 13, 1990, Serial No. 07/553,759;

WHEREAS, The General Hospital Corporation (herein called "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, having a usual place of business at 32 Fruit Street, Boston, Massachusetts 02114, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, 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, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority of the United States, the International Convention of the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property limitation, patents, utility protection, including, without models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

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 or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND WE HEREBY covenant and agree 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 HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, we hereunto set our hands and seals the day and year set opposite our signatures.

Dated:,	1990	
Place of Execution:		Brian Seed Massachusetts General Hospital Wellman Building Boston, MA 02114
I was personally preme, execute the above		did see Brian Seed, who is known to
Dated:,	1990	Witness: Print Name: Address:
Dated:, Place of Execution:	1990	Janet Allen University of Cambridge Department of Physiology Downing Street Cambridge, CB23EG England
I was personally preme, execute the above		did see Janet Allen, who is known to
Dated:,	1990	Witness: Print Name: Address:
Dated:,	1990	
Place of Execution:		Alejandro Aruffo 12 Park Road Belmont, MA 02178
I was personally pres to me, execute the a	ent and d bove assi	id see Alejandro Aruffo, who is known gnment.
Dated:,	1990	Witness: Print Name: Address:

Dated:, 19	990
Place of Execution:	David Camerini Johnsson Cancer Center Factor Bldg., Rm. 11-934 University of California at Los Angeles Medical School Los Angeles, CA 90024
I was personally preser to me, execute the abov	at and did see David Camerini, who is know e assignment.
Dated:, 19	90 Witness: Print Name: Address:
·	
Delete to the Co	
Dated: 10/24 , 19	90 Leander Lauffer Leander Lauffer
Place of Execution:	Forschung Molekular Biologie
Marburg, F.R.G.	Behringwerke AG, D3550 Marburg West Germany
I was personally present to me, execute the above	and did see Leander Lauffer, who is known as assignment.
Dated: 10/24 , 199	<u> </u>
Dated:, 199	0
Place of Execution:	Carmen Patricia Oquendo Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany
I was personally present is known to me, execute	and did see Carmen Patricia Oquendo, who the above assignment.
Dated:, 199	

Dated:, 1990		
Place of Execution:	David Simmons John Radcliffe Hospital Headington, Oxford OX3 9DU England	
I was personally present a to me, execute the above a	and did see David Simmons, who is	knowi
Dated:, 1990	Witness:	
	Print Name:Address:	
Dated:, 1990		
Place of Execution:	Ivan Stamenkovic 125 Pleasant Street Brookline, MA 02146	
to me, execute the above a Dated:, 1990		
Dated:, 1990 Place of Execution:	Siegfried Stengelin Hoechst AG, Pharma Fo. Biochem 6230 Frankfurt am Main 80 West Germany	
I was personally present a known to me, execute the ak	nd did see Siegfried Stengelin, w oove assignment.	ho is
Dated:, 1990	Witness:	
RECORDED	Print Name:	
PAYETT ALD TRADEHAR!	Address:	
07F108 197-21 - 22		
Dated:, 1990	-	
Place of Execution:	Martine Amiot Massachusetts General Hospital Wellman Building Boston, MA 02114	
was personally present and the me, execute the above as	nd did see Martine Amiot, who is k signment.	cnown
oated:, 1990	Witness: Print Name: Address:	
	wantess:	

PATENT REEL: 017470 FRAME: 0020 WHEREAS WE, Brian Seed, Janet Allen, Alejandro Aruffo, David Camerini, Leander Lauffer, Carmen Patricia Oquendo, David Simmons, Ivan Stamenkovic, Siegfried Stengelin, and Martine Amiot (herein called "ASSIGNORS"), are coinventors of the invention entitled "Rapid Immunoselection Cloning Method" for which we have executed an application for a Patent of the United States, filed July 13, 1990, Serial No. 07/553,759;

WHEREAS, The General Hospital Corporation (herein called "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, having a usual place of business at 32 Fruit Street, Boston, Massachusetts 02114, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, 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, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority of the United States, the International Convention of the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

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 or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND WE HEREBY covenant and agree 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 HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

I was personally present and did see Alejandro Aruffo, who is known to me, execute the above assignment. Witness: Print Name: Address:

Dated:_____, 1990

Dated: 9/12, 1990 Place of Execution: Los Angeles, CA USA	David Camerini Johnsson Cancer Center Factor Bldg., Rm. 11-934 University of California at Los Angeles Medical School Los Angeles, CA 90024
I was personally present and to me, execute the above assi	did see David Camerini, who is known gnment.
Dated: 9/12 , 1990	Witness: 3: Non Illilian Print Name: O'ZIPFORA MILLIAMS Ch.O. Address: 424 S. BEDEORO OI. BEYERLY-HILLS (A. 9011)
Dated:, 1990 Place of Execution:	Leander Lauffer Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany
I was personally present and o to me, execute the above assi	did see Leander Lauffer, who is known gnment.
Dated:, 1990	Witness: Print Name: Address:
Dated:, 1990 Place of Execution:	Carmen Patricia Oquendo Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany
I was personally present and is known to me, execute the a	did see Carmen Patricia Oquendo, who bove assignment.
Dated:, 1990	Witness: Print Name: Address:

3

Dated:	, 1990	
Place of Execution:		David Simmons John Radcliffe Hospital Headington, Oxford OX3 9DU England
I was personally pr to me, execute the		d did see David Simmons, who is known ignment.
Dated:	, 1990	Witness: Print Name: Address:
Dated:	, 1990	Ivan Stamenkovic 125 Pleasant Street Brookline, MA 02146
I was personally pro to me, execute the		did see Ivan Stamenkovic, who is known ignment.
Dated:	, 1990	Witness: Print Name: Address:
Dated:	1990	
Place of Execution:		Siegfried Stengelin Hoechst AG, Pharma Fo. Biochemie 6230 Frankfurt am Main 80 West Germany
I was personally pr known to me, execut		d did see Siegfried Stengelin, who is ove assignment.
Dated: REGORE PATENT FOR TO OFFICE LEV 21	AED ADEMANA E	Witness: Print Name: Address:
Dated:	, 1990	
Place of Execution:	***************************************	Martine Amiot Massachusetts General Hospital Wellman Building Boston, MA 02114
I was personally pr to me, execute the	resent an above ass	d did see Martine Amiot, who is known signment.
Dated:	, 1990	Witness: Print Name: Address:

WHEREAS WE, Brian Seed, Janet Allen, Alejandro Aruffo, David Camerini, Leander Lauffer, Carmen Patricia Oquendo, David (herein called "ASSIGNORS"), are coinventors of the invention entitled "Rapid Immunoselection Cloning Method" for which we have July 13, 1990, Serial No. 07/553,759;

WHEREAS, The General Hospital Corporation (herein called "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, having a usual place of business at 32 Fruit Street, Boston, Massachusetts 02114, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, 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, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority of the United States, the International Convention of the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

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 or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND WE HEREBY covenant and agree 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 HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal protection for said invention in all countries.

Dated:	1990	
Place of Execution:		Brian Seed Massachusetts General Hospital Wellman Building Boston, MA 02114
I was personally preme, execute the above	esent ar e assig	nd did see Brian Seed, who is known to Inment.
Dated:,		
Dated:, Place of Execution:	1990	Janet Allen University of Cambridge Department of Physiology Downing Street Cambridge, CB23EG
I was personally presme, execute the above	assigi	Witness: Print Name:
		Address:
Dated:	1990	
Place of Execution:	·	Alejandro Aruffo 12 Park Road Belmont, MA 02178
was personally presence the above	ent and ove ass	did see Alejandro Aruffo, who is known ignment.
Dated:	1990	Witness: Print Name: Address:

CD

Dated:, 1990	
Place of Execution:	David Camerini Johnsson Cancer Center Factor Bldg., Rm. 11-934
	University of California at Los Angeles Medical School Los Angeles, CA 90024
I was personally present and to me, execute the above as	d did see David Camerini, who is known signment.
Dated:, 1990	Witness: Print Name: Address:
Dated:, 1990 Place of Execution:	Leander Lauffer Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany
to me, execute the above ass	did see Leander Lauffer, who is known ignment. Witness: Print Name: Address:
Dated: 4/25/40 , 1990	
Place of Execution: Marbrig / W. Gurmany	Carmen Patricia Oquendo Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany
was personally present and s known to me, execute the a $Q/\lambda - Q$	did see Carmen Patricia Oquendo, who
ated: $9/2-/9_0$, 1990	Witness: L. Grundwaun

WHEREAS WE, Brian Seed, Janet Allen, Alejandro Aruffo, David Camerini, Leander Lauffer, Carmen Patricia Oquendo, David Simmons, Ivan Stamenkovic, Siegfried Stengelin, and Martine Amiot (herein called "ASSIGNORS"), are coinventors of the invention entitled "Rapid Immunoselection Cloning Method" for which we have executed an application for a Patent of the United States, filed July 13, 1990, Serial No. 07/553,759;

WHEREAS, The General Hospital Corporation (herein called "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, having a usual place of business at 32 Fruit Street, Boston, Massachusetts 02114, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, 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, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority of the United States, the International Convention of the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

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 or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND WE HEREBY covenant and agree 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 HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, we hereunto set our hands and seals the day and year set opposite our signatures.

Dated:,	1990	
Place of Execution:		Brian Seed Massachusetts General Hospital Wellman Building Boston, MA 02114
I was personally pre me, execute the abov	esent and e assignm	did see Brian Seed, who is known to ent.
Dated:,	1990	Witness: Print Name: Address:
Dated: 12 September, Place of Execution: Countridy	1990	Janet Allen University of Cambridge Department of Physiology Downing Street Cambridge, CB23EG England
I was personally pre me, execute the abov Dated: <u>12 Septembe</u> ,	e assignm	did see Janet Allen, who is known to ent. Witness: Print Name: IMM M. GLYNN TRINITY COLLEGE CAMBRIGGE
Dated:, Place of Execution:	1990	Alejandro Aruffo 12 Park Road Belmont, MA 02178
I was personally pres to me, execute the a	ent and d	id see Alejandro Aruffo, who is known gnment.
Dated:,	1990	Witness: Print Name: Address:

2

David Camerini Johnson Cancer Center Factor Bldg., Rm. 11-934 University of California at Los Angeles Medical School Los Angeles, CA 90024 I was personally present and did see David Camerini, who is known to me, execute the above assignment. Dated:, 1990 Place of Execution: Dated:, 1990 I was personally present and did see Leander Lauffer Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany I was personally present and did see Leander Lauffer, who is known to me, execute the above assignment. Dated:, 1990 Carmen Patricia Oquendo Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany Carmen Patricia Oquendo Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany was personally present and did see Carmen Patricia Oquendo, who sknown to me, execute the above assignment. Address:	Dated:, 1990	
I was personally present and did see David Camerini, who is known to me, execute the above assignment. Dated:, 1990		David Camerini Johnsson Cancer Center Factor Bldg., Rm. 11-934 University of California at Los Angeles Medical School
Dated:		and did see David Camerini, who is kno assignment.
Dated:	, 1990	Print Name:Address:
Place of Execution: Leander Lauffer Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany I was personally present and did see Leander Lauffer, who is known to me, execute the above assignment. Dated: , 1990 Carmen Patricia Oquendo Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany Was personally present and did see Carmen Patricia Oquendo, who is known to me, execute the above assignment. ated: , 1990 Witness: Print Name: Print Name:		
Dated:		Forschung Molekular Biologie Behringwerke AG D3550 Morbourg
Dated:	I was personally present an to me, execute the above as	nd did see Leander Lauffer, who is know
Carmen Patricia Oquendo Place of Execution: Carmen Patricia Oquendo Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany was personally present and did see Carmen Patricia Oquendo, who is known to me, execute the above assignment. ated: 1990 Witness: Print Name:		Witness: Print Name: Address:
Carmen Patricia Oquendo Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany was personally present and did see Carmen Patricia Oquendo, who s known to me, execute the above assignment. ated:		
Carmen Patricia Oquendo Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany was personally present and did see Carmen Patricia Oquendo, who s known to me, execute the above assignment. ated:	Dated:, 1990	
ated:, 1990 Witness:Print Name:		rorschung Molekular Biologie Behringwerke AG. D3550 Marburg
ated:, 1990 Witness: Print Name:	was personally present and s known to me, execute the	I did see Carmen Patricia Oquendo, who
		Witness: Print Name:

Dated:, 19 Place of Execution:	J H	David Simmons John Radcliffe Hospital Headington, Oxford OX3 9DU England
I was personally presento me, execute the above	nt and d ve assign	lid see David Simmons, who is known nment.
Dated:, 19		Witness: Print Name: Address:
Dated:, 1: Place of Execution:		Ivan Stamenkovic 125 Pleasant Street Brookline, MA 02146
I was personally presento me, execute the abo	nt and di ve assig	id see Ivan Stamenkovic, who is known gnment.
Dated:, 1	.990	Witness: Print Name: Address:
Dated:, 1 Place of Execution:	1990	Siegfried Stengelin Hoechst AG, Pharma Fo. Biochemie 6230 Frankfurt am Main 80 West Germany
I was personally pres	ent and the abov	did see Siegfried Stengelin, who is
Dated:	1990 Ú Œ. ###	Witness: Print Name: Address:
Dated:, Place of Execution:	1990	Martine Amiot Massachusetts General Hospital Wellman Building Boston, MA 02114
I was personally pres to me, execute the ab	sent and	d did see Martine Amiot, who is known ignment.
Dated:,		Witness: Print Name:Address:

WHEREAS WE, Brian Seed, Janet Allen, Alejandro Aruffo, David Camerini, Leander Lauffer, Carmen Patricia Oquendo, David Simmons, Ivan Stamenkovic, Siegfried Stengelin, and Martine Amiot (herein called "ASSIGNORS"), are coinventors of the invention entitled "Rapid Immunoselection Cloning Method" for which we have executed an application for a Patent of the United States, filed July 13, 1990, Serial No. 07/553,759;

WHEREAS, The General Hospital Corporation (herein called "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, having a usual place of business at 32 Fruit Street, Boston, Massachusetts 02114, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, 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, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority of the United States, the International Convention of the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

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 or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND WE HEREBY covenant and agree 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 HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, we hereunto set our hands and seals the day and year set opposite our signatures.

Χ

7.

Dated: Oct 3 , 1990	_ Bin Such
Place of Execution:	Brian Seed
	Massachusetts General Hospital Wellman Building
Boston, MA	Boston, MA 02114
I was personally present an me, execute the above assign	d did see Brian Seed, who is known to
Dated: Oct 3 , 1990	- /
, 1990	Witness: Elaine Line Print Name: Elaine Line
	Messachusetts Stores / Hess
	Buston 0214
D. A.	
Dated:, 1990	
Place of Execution:	Janet Allen
	University of Cambridge Department of Physiology
	Downing Street
	Cambridge, CB23EG
	England
I was personally present and me, execute the above assignment that it is a second particle of the second particle	Witness: Print Name: Address:
Dated: <i>Oct 8</i> . , 1990	Dander Dulle
Place of Execution:	Alejandro Aruffo
Execution:	12 Park Road
	Belmont, MA 02178
I was personally present and d to me, execute the above assic	id see Alejandro Aruffo, who is known gnment.
Dated: Ock 8 , 1990	Witness: Elast / /
,	Print Name: ELAING TYNCH
	Address: of Tel Aftern
	11//4.15
	Mussagnee His German Hugarite

Dated:, 1990)
Place of Execution:	David Camerini Johnsson Cancer Center Factor Bldg Daniel
	University of California at Los Angeles Medical School Los Angeles, CA 90024
I was personally present a to me, execute the above a	and did see David Camerini, who is kno
Dated:, 1990	
, 1990	Print Name:Address:
Dated:, 1990	
Place of Execution:	Leander Lauffer Forschung Molekular Biologie Behringwerke AG, D3550 Marburg West Germany
-	- Colimany
I was personally present and to me, execute the above as	d did see Leander Lauffer, who is know signment.
Dated.	signment.
Dated:, 1990	Witness: Print Name
	Address
ated:	
ated:, 1990	Communication
lace of Execution:	Carmen Patricia Oquendo Forschung Molekular Di
	Forschung Molekular Biologie Behringwerke AG, D3550 Marburg
	West Germany
was personally present and known to me, execute the a	did see Carmen Patricia Oquendo, who
ted:, 1990	
, 1990	Witness: Print Name:
	Address.

Dated:, 1990	
Place of Execution:	David Simmons John Radcliffe Hospital Headington, Oxford OX3 9DU England
I was personally present at to me, execute the above as	nd did see David Simmons, who is knows
Dated:, 1990	Witness: Print Name: Address:
Dated: $10/5/10$, 1990 Place of Execution:	Ivan Stamenkovic
1502 for	125 Pleasant Street Brookline, MA 02146
I was personally present and to me, execute the above as: Dated: $lo/s/$, 1990	did see Ivan Stamenkovic, who is known signment. Witness: \(\frac{\lambda_{qing}}{\lambda_{qing}}\) \(\lamb
Dated:, 1990	
Place of Execution:	Siegfried Stengelin Hoechst AG, Pharma Fo. Biochemie 6230 Frankfurt am Main 80 West Germany
PATENT ATO TRADESAR OFFICE	Witness: Print Name: Address:
1107 21 1590 ated: 3 Gchobu, 1990 lace of Execution:	Martine Amiot Massachusotta Connection
Boston 7A	Massachusetts General Hospital Wellman Building Boston, MA 02114
	did see Martine Amiot, who is known gnment.
ated: <u>3 October</u> , 1990	Witness: Elaine Lynch Print Name: ELAINE LYNCH Address: Office of Technology Affices Mossachusetts General Hospital Beston 02/14

RECORDED: 04/13/2006

PATENT

⁴ REEL: 017470 FRAME: 0036