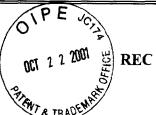
FORM PTO-1595 (Rev. 6-93)



10-25-2001 101886519

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

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Attorney Docket No.: 044574-5054-US

THE	Attorney Docket No.: 044374-3034-03		
To the Assistant Commissioner for Patents: Please record the attached original documents or copy thereof.	ATTN: BOX ASSIGNMENT		
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):		
Kathryn G. KLEMIC, executed on March 20, 2001 James F. KLEMIC, executed on March 22, 2001 Mark A. REED. executed on April 12, 2001	Name: Yale University		
Frederick J. SIGWORTH, executed on April 6, 2001	Internal Address:		
Additional name(s) of conveying party(ies) attached? YesX_ No			
3. Nature of conveyance:	Street Address: 451 College Street		
X Assignment Merger Security Agreement Change of Name Other	City: New Haven State: CT Zip: 06520		
	Additional name(s) & address(es) attached? _ Yes X No		
 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) 09/780,630 B. Patent Additional numbers attached:YesNo 	u dé		
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1		
Name: Mr. Reid G. Adler Internal Address: Customer No. 09629 Morgan, Lewis & Bockius LLP	7. Total fee (37 C.F.R § 3.41):\$40.00 X Enclosed Authorized to be charged to deposit account 50-0310		
Street Address: 1800 M Street, N.W. City: Washington State: D.C. Zip: 20036	Deposit account number: 50-0310 Attach duplicate of 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.			
Sally P. Teng, Reg. No. 45,397 Name of Person Signing Date October 22, 2001 Date			
Total number of pages including cover sheet, attachments and documents: 9			

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

for which I/WE executed an application for United States Letters Patent application for United States Letters Patent on February 12, 2001, (States Letters Patent on February 12, 2001), (States Letters Paten	erial No; or filed an	
WHEREAS, <u>Yale University</u> , a corporation of <u>Connecticut</u> , whose post office address is <u>451 College Street</u> , <u>New Haven, Connecticut 06520</u> (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in an to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;		
NOW THEREFORE, be it known that, for and in consideration of the sum of One Dollar (\$1.00) in hand paid and other good and valuable consideration the receipt of which from assignee is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;		
AND, I/WE HEREBY covenant that I/WE have the full right to convey the interest assigned by this Assignment, and I/WE have not executed and will not execute any agreement in conflict with this Assignment;		
AND, I/WE HEREBY further covenant and agree that I/WE vits successors and assigns, any facts known to ME/US respecting this in papers when called upon to do so, execute and deliver any and all paper invention in said assignee, its successors or assigns, execute all division oaths and generally do everything possible to aid assignee, its successor for this invention in the United States and any foreign country, it being papers shall be borne by the assignee, its successors and assigns.	rs that may be necessary or desirable to perfect the title to this nal, continuation, and reissue applications, make all rightful rs and assigns, to obtain and enforce proper patent protection	
AND, I/WE HEREBY authorize and request the attorneys I/WE have empowered in the Declaration and Power of Attorney in this application, to insert here in parentheses (Application No. 09/780,630 filed February 12, 2001) the filing date and application number of said application when known.		
IN TESTIMONY WHEREOF, I/WE have hereunto set our ha	nd(s).	
County of NEW HAVEN State of COUNTECTICAT	Kathryn G. Klemic Full Name of Sole or First Assignor	
State of	260 Willow St, New Haven, CT 06511 Address	
Subscribed and sworn to before me this 20 day of Marcet 2001.	Hathyn J. Klemic First Assignor's Signature	
MY COMMISSION ENPIRES 10/31/03	March 20, 2001 Date	
Names of additional inventors	attached [X] Yes [] No	
L		
1-WA/1537928.1		

County of State of Subscribed and sworn to before me this day of, 20 Notary Public	SS.	James F. Klemic Full Name of Second Assignor 260 Willow Street, New Haven, CT 06511 Address Second Assignor's Signature Date
County of State of Subscribed and sworn to before me this day of, 20 Notary Public	SS.	Mark A. Reed Full Name of Third Assignor 129 Guinea Road, Monroe, CT 06468 Address Third Assignor's Signature Date
County of State of Subscribed and sworn to before me this day of, 20 Notary Public Names of additional	SS.	Frederick J. Sigworth Full Name of Forth Assignor 138 Vineyard Road, Hamden, CT 06517 Address Forth Assignor's Signature Date attached [] Yes [X] No

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

for which I/WE executed an application for United States Letters Patent			
application for United States Letters Patent on February 12, 2001, (Se	rial No); and		
WHEREAS, Yale University, a corporation of Connecticut, whose post office address is 451 College Street, New Haven, Connecticut 06520 (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;			
NOW THEREFORE, be it known that, for and in consideration of the sum of One Dollar (\$1.00) in hand paid and other good and valuable consideration the receipt of which from assignee is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;			
AND, I/WE HEREBY covenant that I/WE have the full right to convey the interest assigned by this Assignment, and I/WE have not executed and will not execute any agreement in conflict with this Assignment;			
AND, I/WE HEREBY further covenant and agree that I/WE wits successors and assigns, any facts known to ME/US respecting this in papers when called upon to do so, execute and deliver any and all paper invention in said assignee, its successors or assigns, execute all division oaths and generally do everything possible to aid assignee, its successor for this invention in the United States and any foreign country, it being papers shall be borne by the assignee, its successors and assigns.	rs that may be necessary or desirable to perfect the title to this hal, continuation, and reissue applications, make all rightful rs and assigns, to obtain and enforce proper patent protection		
AND, I/WE HEREBY authorize and request the attorneys I/W in this application, to insert here in parentheses (Application No. $09/$ application number of said application when known.	TE have empowered in the Declaration and Power of Attorney 780, 630, filed February 12, 2001) the filing date and		
IN TESTIMONY WHEREOF, I/WE have hereunto set our ha	nd(s).		
	Wathern C Marris		
County of	Kathryn G. Klemic Full Name of Sole or First Assignor		
State of	260 Willow St, New Haven, CT 06511		
SS.	Address		
Subscribed and sworn to before me this day of, 20	First Assignor's Signature		
Notary Public			
	Date		
Names of additional inventors	attached [X] Yes [] No		

1-WA/1537928.1

State of	Full Name of Second Assignor 260 Willow Street, New Haven, CT 06511 Address Famus 7. Rem' Second Assignor's Signature March 23 2001 Date
County of State of Subscribed and sworn to before me this day of, 20 Notary Public	Mark A. Reed Full Name of Third Assignor 129 Guinea Road, Monroe, CT 06468 Address Third Assignor's Signature Date
County of State of Subscribed and sworn to before me this day of, 20 Notary Public Names of additional invento	Frederick J. Sigworth Full Name of Forth Assignor 138 Vineyard Road, Hamden, CT 06517 Address Forth Assignor's Signature Date rs attached [] Yes [X] No

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

for which I/WE executed an application for United States Letters Patent application for United States Letters Patent on February 12, 2001, (Se	concurrently herewith; or on; or filed an rial No); and
WHEREAS, <u>Yale University</u> , a corporation of <u>Connecticu</u> New Haven, <u>Connecticut 06520</u> (hereinafter referred to as Assignee), to this invention in all countries throughout the world, and in and to the and the Letters Patent to be issued upon this application;	is desirous of securing the entire right, title, and interest in and
NOW THEREFORE, be it known that, for and in consideration good and valuable consideration the receipt of which from assignee is hassigned, transferred, and set over, and do hereby sell, assign, transfer, assigns, MY/OUR entire right, title, and interest in and to this invention thereof, and all Letters Patent of the United States which may be grante priority on the basis of such application, and all applications for Letters foreign country and all Letters Patent which may be granted on this inversisues thereof; and I/WE hereby authorize and request the Commission official of any foreign country whose duty it is to issue patents on application to assignee, its successors and assigns, in accordance with the	ereby acknowledged, I/WE, as assignor(s), have sold, and set over unto the assignee, its lawful successors and and this application, and all divisions, and continuations d thereon, and all reissues thereof, and all rights to claim Patent which may hereafter be filed for this invention in any ention in any foreign country, and all extensions, renewals, and oner of Patents and Trademarks of the United States and any cations as described above, to issue all Letters Patent for this
AND, I/WE HEREBY covenant that I/WE have the full right thave not executed and will not execute any agreement in conflict with the second seco	o convey the interest assigned by this Assignment, and I/WE his Assignment;
AND, I/WE HEREBY further covenant and agree that I/WE wits successors and assigns, any facts known to ME/US respecting this in papers when called upon to do so, execute and deliver any and all pape invention in said assignee, its successors or assigns, execute all division oaths and generally do everything possible to aid assignee, its successor for this invention in the United States and any foreign country, it being papers shall be borne by the assignee, its successors and assigns.	rs that may be necessary or desirable to perfect the title to this hal, continuation, and reissue applications, make all rightful rs and assigns, to obtain and enforce proper patent protection
AND, I/WE HEREBY authorize and request the attorneys I/W in this application, to insert here in parentheses (Application No. 29) application number of said application when known.	E have empowered in the Declaration and Power of Attorney (780,630) filed February 12, 2001) the filing date and
IN TESTIMONY WHEREOF, I/WE have hereunto set our ha	nd(s).
County of	Kathryn G. Klemic
Character of	Full Name of Sole or First Assignor
State of	260 Willow St, New Haven, CT 06511 Address
Subscribed and sworn to before me this day of, 20	First Assignor's Signature
Notary Public	Date
Names of additional inventors	
Traines of additional inventors	()

1-WA/1537928.1

County of	James F. Klemic
State of	Full Name of Second Assignor
State of	260 Willow Street, New Haven, CT 06511
SS.	Address
Subscribed and sworn to before me	
this day of, 20	Second Assignor's Signature
Notary Public	
	Date
County of New Have n	Mark A. Reed
State of Connecticut	Full Name of Third Assignor
	129 Guinea Road, Monroe, CT 06468
SS.	Address
Subscribed and sworn to before me	- of white
this 2 day of DOROTHY K. CHAMBERS	Third Assignor's Signature
Notary Public NOTARY PRESENTS NOTARY PUBLIC NOTARY PROBLEM STATE OF SECS	APRIL 12, 2001
	Date
County of	Frederick J. Sigworth
State of	Full Name of Forth Assignor
	138 Vineyard Road, Hamden, CT 06517
SS.	Address
Subscribed and sworn to before me	
this day of, 20	Forth Assignor's Signature
Notary Public	
	Date
Names of additional inventors	attached [] Yes [X] No

REEL: 012270 FRAME: 0986

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

		additional inventors at	tached [X] Yes [] No	
	Notary Public	_	Date	
11	d sworn to before me, 20		First Assignor's S	Signature
		SS.	Address	
			260 Willow St, New Have	n, CT 06511
State of			Full Name of Sole or	First Assignor
County of			Kathryn G. K	
IN TES	STIMONY WHEREOF, I/WE have	hereunto set our hand	l(s).	
in this applicatio	I/WE HEREBY authorize and reque on, to insert here in parentheses (Appleted of said application when known	plication No. 09/		
its successors an papers when call invention in said oaths and genera for this invention	I/WE HEREBY further covenant and assigns, any facts known to ME/U led upon to do so, execute and delived assignee, its successors or assigns, ally do everything possible to aid as in the United States and any foreignorne by the assignee, its successors	JS respecting this involver any and all papers execute all divisional signee, its successors gn country, it being u	ention, and testify in any legal prothat may be necessary or desirable, continuation, and reissue applicand assigns, to obtain and enforc	oceeding, sign all lawful le to perfect the title to this ations, make all rightful e proper patent protection
AND, I/WE HEREBY covenant that I/WE have the full right to convey the interest assigned by this Assignment, and I/WE have not executed and will not execute any agreement in conflict with this Assignment;				
NOW THEREFORE, be it known that, for and in consideration of the sum of One Dollar (\$1.00) in hand paid and other good and valuable consideration the receipt of which from assignee is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;				
WHEREAS, <u>Yale University</u> , a corporation of <u>Connecticut</u> , whose post office address is <u>451 College Street</u> , <u>New Haven, Connecticut 06520</u> (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention				
application for L	Jnited States Letters Patent on Febr	ruary 12, 2001, (Seri	concurrently herewith; or on al No); and	; or filed an

1-WA/1537928.1

County of State of	7 7	James F. Klemic Full Name of Second Assignor 260 Willow Street, New Haven, CT 06511
Subscribed and sworn to before me this day of, 20	SS.	Address Second Assignor's Signature
Notary Public		Date
County of		Mark A. Reed Full Name of Third Assignor
	SS.	129 Guinea Road, Monroe, CT 06468 Address
Subscribed and sworn to before me this day of, 20		Third Assignor's Signature
Notary Public		Date
County of NEW HAVEN State of CONNECTICUT		Frederick J. Sigworth Full Name of Forth Assignor
Subscribed and sworn to before me this Lay of ARIL, 2001.	SS.	Address Forth Assignor's Signature
Lough Pulos Notary Public Notary Public 16/31/03	ıl inventor	4 /6 /200 (Date s attached [] Yes [X] No

RECORDED: 10/22/2001

REEL: 012270 FRAME: 0988