

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Frank Riske	02/12/2009
Michael Hayes	03/23/2009
Gary Lazarus	05/05/2009

RECEIVING PARTY DATA

Name:	Genzyme Corporation
Street Address:	500 Kendall Street
City:	Cambridge
State/Country:	MASSACHUSETTS
Postal Code:	02142

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12227618

CORRESPONDENCE DATA

Fax Number: (978)341-0136
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.
 Phone: 978.341.0036
 Email: lisa.bevere@hbsr.com
 Correspondent Name: Anne J. Collins, Esq.
 Address Line 1: 530 Virginia Road, P.O. Box 9133
 Address Line 2: Hamilton, Brook, Smith & Reynolds, P.C.
 Address Line 4: Concord, MASSACHUSETTS 01742-9133

ATTORNEY DOCKET NUMBER:	1932.2171-003
NAME OF SUBMITTER:	Lisa Bevere

Total Attachments: 9
 source=19322171003ASSIGN#page1.tif

CH \$40.00 12227618

500872681

**PATENT
 REEL: 022755 FRAME: 0718**

source=19322171003ASSIGN#page2.tif
source=19322171003ASSIGN#page3.tif
source=19322171003ASSIGN#page4.tif
source=19322171003ASSIGN#page5.tif
source=19322171003ASSIGN#page6.tif
source=19322171003ASSIGN#page7.tif
source=19322171003ASSIGN#page8.tif
source=19322171003ASSIGN#page9.tif

JointASSIGNMENT

WHEREAS, we, **Frank Riske, Michael Hayes and Gary Lazarus**, have invented a certain improvement in **Use of Polysaccharides for Promotion of Enzymatic Activity** described in an application for Patent,

- the specification of which is about to be filed in the United States Patent Office (*use for utility (37 CFR § 1.53(b)) and design filings only*);
- is about to be filed in the United States Patent Office as a Provisional Application;
- the specification of which is United States Application No. [], filed [];
- the specification of which is a Patent Cooperation Treaty Application, International Application No. **PCT/US2006/021092**, filed **May 31, 2006**, which designates the United States of America and assigned United States Application No. **12/227,618**;
- which was patented under United States Patent No. [].

WHEREAS, **Genzyme Corporation** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **500 Kendall Street, Cambridge, Massachusetts 02142** desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein; we hereby expressly authorize the filing of an International Patent Application under the Patent Cooperation Treaty which corresponds to and claims the priority of the above-identified application;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature: Frank Riske
Frank Riske

State/Commonwealth of Massachusetts
County of Middlesex

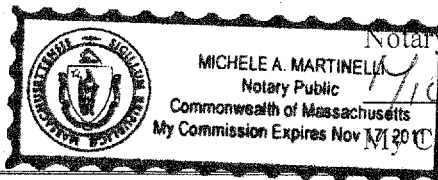
On this 12th day of February 2009, before me, the undersigned notary public, personally appeared **Frank Riske**,

personally known to me, or

proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)



Notary Public Michele A. Martinelli
Michele A. Martinelli (print name)
My Commission Expires Nov 17, 2011

Inventor's Signature: _____

Michael Hayes

State/Commonwealth
of _____

County of _____

On this _____ day of _____ 20____, before me, the undersigned notary public, personally appeared **Michael Hayes**,

personally known to me, or

proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

Notary Public _____

_____ (print name)

My Commission expires ____/____/____

Inventor's Signature: _____

Gary Lazarus

State/Commonwealth
of _____

County of _____

On this _____ day of _____ 20____, before me, the undersigned notary public, personally appeared **Gary Lazarus**,

personally known to me, or

proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

Notary Public _____

_____ (print name)

My Commission expires ____/____/____

JointASSIGNMENT

WHEREAS, we, **Frank Riske, Michael Hayes and Gary Lazarus**, have invented a certain improvement in **Use of Polysaccharides for Promotion of Enzymatic Activity** described in an application for Patent,

- the specification of which is about to be filed in the United States Patent Office (*use for utility (37 CFR § 1.53(b)) and design filings only*);
- is about to be filed in the United States Patent Office as a Provisional Application;
- the specification of which is United States Application No. [], filed [];
- the specification of which is a Patent Cooperation Treaty Application, International Application No. **PCT/US2006/021092**, filed **May 31, 2006**, which designates the United States of America and assigned United States Application No. **12/227,618**;
- which was patented under United States Patent No. [].

WHEREAS, **Genzyme Corporation** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **500 Kendall Street, Cambridge, Massachusetts 02142** desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein; we hereby expressly authorize the filing of an International Patent Application under the Patent Cooperation Treaty which corresponds to and claims the priority of the above-identified application;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature: _____

Frank Riske

State/Commonwealth
of _____
County of _____

On this _____ day of _____ 20____, before me, the undersigned notary public, personally appeared **Frank Riske**,

- personally known to me, or
- proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

Notary Public _____

(print name)

My Commission expires ____/____/____

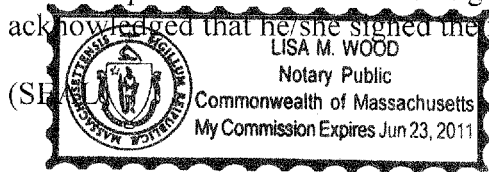
Inventor's Signature: Michael Hayes
Michael Hayes

State/Commonwealth
of Massachusetts
County of Middlesex

On this 23rd day of March 2009, before me, the undersigned notary public, personally appeared **Michael Hayes**,

- personally known to me, or
- proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.



Notary Public Lisa M. Wood
LISA M. WOOD (print name)
My Commission expires June 23 / 2011

Inventor's Signature: _____
Gary Lazarus

State/Commonwealth
of _____
County of _____

On this _____ day of _____ 20____, before me, the undersigned notary public, personally appeared **Gary Lazarus**,

- personally known to me, or
- proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL) Notary Public _____

(print name)
My Commission expires ____ / ____ / ____

JointASSIGNMENT

WHEREAS, we, **Frank Riske, Michael Hayes and Gary Lazarus**, have invented a certain improvement in **Use of Polysaccharides for Promotion of Enzymatic Activity** described in an application for Patent,

- the specification of which is about to be filed in the United States Patent Office (*use for utility (37 CFR § 1.53(b)) and design filings only*);
- is about to be filed in the United States Patent Office as a Provisional Application;
- the specification of which is United States Application No. [], filed [];
- the specification of which is a Patent Cooperation Treaty Application, International Application No. **PCT/US2006/021092**, filed **May 31, 2006**, which designates the United States of America and assigned United States Application No. **12/227,618**;
- which was patented under United States Patent No. [].

WHEREAS, **Genzyme Corporation** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **500 Kendall Street, Cambridge, Massachusetts 02142** desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein; we hereby expressly authorize the filing of an International Patent Application under the Patent Cooperation Treaty which corresponds to and claims the priority of the above-identified application;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature: _____

Frank Riske

State/Commonwealth
of _____
County of _____

On this _____ day of _____ 20____, before me, the undersigned notary public, personally appeared **Frank Riske**,

- personally known to me, or
- proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

Notary Public _____

_____(print name)

My Commission expires ____/____/____

Inventor's Signature: _____

Michael Hayes

State/Commonwealth
of _____
County of _____

On this _____ day of _____ 20____, before me, the undersigned notary public, personally appeared **Michael Hayes**,

- personally known to me, or
- proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL) Notary Public _____

(print name)

My Commission expires ____/____/____

Inventor's Signature: _____

Gary Lazarus

State/Commonwealth
of New York
County of Oneida

On this 5th day of May 2009, before me, the undersigned notary public, personally appeared **Gary Lazarus**,

- personally known to me, or
- proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/~~her~~ free act and deed.

(SEAL) Notary Public Darlene A. Pulkinen
Darlene A. Pulkinen (print name)

My Commission expires 4/8/11

Darlene A. Pulkinen
Notary Public, State of New York
Registration #01PU4976800
Qualified in Madison County
My Commission Expires April 8, 2011