

FORM PTO-1595 (Modified)  
1-31-92

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

### RECORDATION FORM COVER SHEET PATENTS ONLY

Attorney Docket  
No.: 040853-01-5050

To the Assistant Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies):</p> <p>Shawn DeFrees David Zopf Robert Bayer Caryn Bowe David Hakes Xi Chen</p>	<p>2. Name and address of receiving party(ies):</p> <p><b>Neose Technologies, Inc.</b> 102 Witmer Road Horsham, Pennsylvania 19044</p>
<p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment      <input type="checkbox"/> Merger  <input type="checkbox"/> Security Agreement      <input type="checkbox"/> Change of Name  <input type="checkbox"/> Other:</p> <p>Execution Date: April 1 and 6, 2004</p>	

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

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

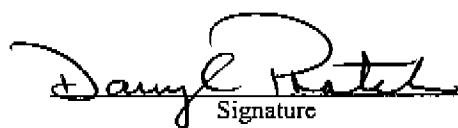
<p>A. Patent Application No.(s):</p> <p>10/492,261, filed October 9, 2002.</p>	<p>B. Patent No.(s):</p>
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Additional numbers attached?  Yes  No

<p>5. Name and address of party to whom correspondence document should be mailed:</p> <p><b>KATHRYN DOYLE, Ph.D., J.D.</b> <b>MORGAN, LEWIS &amp; BOCKIUS, L.L.P.</b> 1701 Market Street Philadelphia, PA 19103 Telephone: (215) 963-5000 <b>Direct Dial: (215) 963-4723</b> Facsimile: (215) 963-5299 E-Mail: kdoyle@morganlewis.com</p>	<p>6. Total number of applications and patents involved: [1]</p> <p>7. Total fee (37 C.F.R. 3.41) Cal. 1 x \$40.00 = <b>\$40.00</b></p> <p><input type="checkbox"/> Check enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account</p> <p>8. Deposit account number: <b>50-0310</b> (Billing No.: 040853-01-5050)</p>
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DO NOT USE THIS SPACE

9. Statement and signature  
*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Darryl Pratcher            June 22, 2004  
Name of Person Signing      Signature      Date

Total number of pages including cover sheet, attachments and document: [11]

OMB No. 0651-0011 (exp. 4/94)

/dp

CH \$40.00 600310 10492261

Attorney Docket No. 40853-01-5050  
(NEO00180)

**ASSIGNMENT**

**WHEREAS**, we, **Shawn DeFrees, David Zopf, Robert Bayer, Caryn Bowe, David Hakes**, respectively citizens of the United States; and **Xi Chen**, a citizen of the People's Republic of China, with respective post office addresses of 126 Filly Drive, North Wales, PA 19454; 560 W. Beechtree Lane, Wayne, PA 19087; 6105 Dirac Street, San Diego, CA 92122; 276 Cherry Lane, Doylestown, PA 18901; 14 Fern Avenue, Willow Grove, PA 19090 and 107 Whitney Place, Lansdale, PA 19446, hereinafter generally referred to as "ASSIGNORS," have invented a certain new and useful

**REMODELING AND GLYCOCONJUGATION OF PEPTIDES**

for which we have executed a United States patent application, Application No. 10/492,261, filed October 9, 2002, and

**ASSIGNORS** authorize **ASSIGNEE** or **ASSIGNEE's** representative to insert the Application Number and Filing date of this application if they are unknown at the time of execution of this Assignment.

**WHEREAS, Neose Tehnologies, Inc.**, a corporation having a place of business at 102 Witmer Road, Horsham, PA 19044, hereinafter generally referred to as "**ASSIGNEE**", is desirous of acquiring said invention and said patent application.

**NOW, THEREFORE**, in consideration of the sum of One Dollar and other good and valuable executed consideration, the full receipt and sufficiency of all of which are hereby acknowledged and intending to be legally bound hereby, we, the undersigned **ASSIGNORS**, hereby agree to sell, assign, transfer and convey and by these presents do sell, assign, transfer and convey unto the above-named **ASSIGNEE**, the whole and entire right, title and interest

in and to said invention as described in the above patent application, for the territory of the United States and its possessions and territories and all foreign countries;

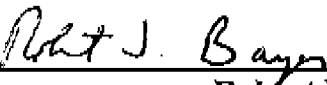
in and to the above patent application and any and all related United States and foreign patent applications disclosing said invention, including provisionals, non-provisionals, divisions and continuations thereof, along with all rights of priority created by said patent application under any treaty relating thereto; and

in and to all United States and foreign patents which may be granted on any and all of said patent applications, including extensions, reissues and reexamination certificates thereof;

said invention, application(s) and patent(s) to be held and enjoyed by the above-named ASSIGNEE, for ASSIGNEE's own use and benefit, and for ASSIGNEE's legal representatives and assigns to the full end of the term or terms for which said patent(s) may be granted, as fully and entirely as the same would have been held by the undersigned ASSIGNORS had this assignment and sale not been made; and for the aforesaid consideration ASSIGNORS hereby covenant, agree and undertake to execute, whenever requested by the above-named ASSIGNEE, all patent applications, assignments, lawful oaths and any other papers which ASSIGNEE may deem necessary or desirable for securing to ASSIGNEE or for maintaining for ASSIGNEE all the patent(s) hereby assigned or agreed to be assigned; all without further compensation to the undersigned ASSIGNORS.

4/1/2004  
(Date)  (Seal)  
Shawn DeFrees

4/1/2004  
(Date)  (Seal)  
David Zopf

4/1/2004  
(Date)  (Seal)  
Robert Bayer

(Date) 4/1/2004  (Seal)  
Caryn Bowe

(Date) 4/1/2004  (Seal)  
David Hakes

(Date) \_\_\_\_\_ (Seal)  
Xi Chen

STATE OF Pennsylvania :  
 : ss.  
COUNTY OF Montgomery :

Before me, a notary public in and for the State and County aforesaid, on this 1 day of April, 2004, personally appeared **Shawn DeFrees**, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

Suzanne Gannon  
Notary Public

My Commission Expires:



STATE OF Pennsylvania :  
 : ss.  
COUNTY OF Montgomery :

Before me, a notary public in and for the State and County aforesaid, on this 1 day of April, 2004, personally appeared **David Zopf**, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

Suzanne Gannon  
Notary Public

My Commission Expires:

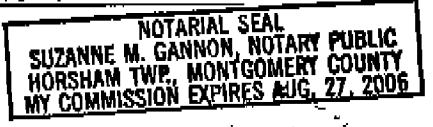


STATE OF Pennsylvania :  
COUNTY OF Montgomery : ss.

Before me, a notary public in and for the State and County aforesaid, on this 1 day of April, 2004, personally appeared **Robert Bayer**, who being to me personally known and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

Suzanne Gannon  
Notary Public

My Commission Expires:

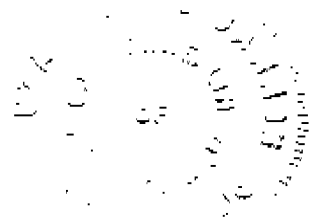


STATE OF Pennsylvania :  
COUNTY OF Montgomery : ss.

Before me, a notary public in and for the State and County aforesaid, on this 1 day of April, 2004, personally appeared **Caryn Bowe**, who being to me personally known and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

Suzanne Gannon  
Notary Public

My Commission Expires:



STATE OF Pennsylvania :  
 : ss.  
COUNTY OF Montgomery :

Before me, a notary public in and for the State and County aforesaid, on this 1 day of April, 2004, personally appeared **David Hakes**, who being to me personally known and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

Suzanne Gannon  
Notary Public

My Commission Expires:



STATE OF \_\_\_\_\_ :  
 : ss.  
COUNTY OF \_\_\_\_\_ :

Before me, a notary public in and for the State and County aforesaid, on this \_\_\_ day of \_\_\_\_\_, 2004, personally appeared **Xi Chen**, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

\_\_\_\_\_  
Notary Public

My Commission Expires:

**Attorney Docket No. 40853-01-5050  
(NEO00180)**

**ASSIGNMENT**

**WHEREAS, we, Shawn DeFrees, David Zopf, Robert Bayer, Caryn Bowe, David Hakes, respectively citizens of the United States; and Xi Chen, a citizen of the People's Republic of China, with respective post office addresses of 126 Filly Drive, North Wales, PA 19454; 560 W. Beechtree Lane, Wayne, PA 19087; 6105 Dirac Street, San Diego, CA 92122; 276 Cherry Lane, Doylestown, PA 18901; 14 Fern Avenue, Willow Grove, PA 19090 and 107 Whitney Place, Lansdale, PA 19446, hereinafter generally referred to as "ASSIGNORS," have invented a certain new and useful**

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for which we have executed a United States patent application, Application No. 10/492,261, filed October 9, 2002, and

**ASSIGNORS** authorize ASSIGNEE or ASSIGNEE's representative to insert the Application Number and Filing date of this application if they are unknown at the time of execution of this Assignment.

**WHEREAS, Neose Tehnologies, Inc.,** a corporation having a place of business at 102 Witmer Road, Horsham, PA 19044, hereinafter generally referred to as "ASSIGNEE", is desirous of acquiring said invention and said patent application.

**NOW, THEREFORE,** in consideration of the sum of One Dollar and other good and valuable executed consideration, the full receipt and sufficiency of all of which are hereby acknowledged and intending to be legally bound hereby, we, the undersigned **ASSIGNORS,** hereby agree to sell, assign, transfer and convey and by these presents do sell, assign, transfer and convey unto the above-named **ASSIGNEE,** the whole and entire right, title and interest

in and to said invention as described in the above patent application, for the territory of the United States and its possessions and territories and all foreign countries;

in and to the above patent application and any and all related United States and foreign patent applications disclosing said invention, including provisionals, non-provisionals, divisions and continuations thereof, along with all rights of priority created by said patent application under any treaty relating thereto; and

in and to all United States and foreign patents which may be granted on any and all of said patent applications, including extensions, reissues and reexamination certificates thereof;

said invention, application(s) and patent(s) to be held and enjoyed by the above-named ASSIGNEE, for ASSIGNEE's own use and benefit, and for ASSIGNEE's legal representatives and assigns to the full end of the term or terms for which said patent(s) may be granted, as fully and entirely as the same would have been held by the undersigned ASSIGNORS had this assignment and sale not been made; and for the aforesaid consideration ASSIGNORS hereby covenant, agree and undertake to execute, whenever requested by the above-named ASSIGNEE, all patent applications, assignments, lawful oaths and any other papers which ASSIGNEE may deem necessary or desirable for securing to ASSIGNEE or for maintaining for ASSIGNEE all the patent(s) hereby assigned or agreed to be assigned; all without further compensation to the undersigned ASSIGNORS.

(Date) \_\_\_\_\_ (Seal)  
**Shawn DeFrees**

(Date) \_\_\_\_\_ (Seal)  
**David Zopf**

(Date) \_\_\_\_\_ (Seal)  
**Robert Bayer**

(Date) \_\_\_\_\_ (Seal)  
**Caryn Bowe**

(Date) \_\_\_\_\_ (Seal)  
**David Hakes**

(Date) 04/06/2004 Chen Xi (Seal)  
**Xi Chen**



STATE OF \_\_\_\_\_ :  
: ss.  
COUNTY OF \_\_\_\_\_ :

Before me, a notary public in and for the State and County aforesaid, on this \_\_\_ day of \_\_\_\_\_, 2004, personally appeared **Shawn DeFrees**, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

\_\_\_\_\_  
**Notary Public**

My Commission Expires:

STATE OF \_\_\_\_\_ :  
: ss.  
COUNTY OF \_\_\_\_\_ :

Before me, a notary public in and for the State and County aforesaid, on this \_\_\_ day of \_\_\_\_\_, 2004, personally appeared **David Zopf**, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

\_\_\_\_\_  
**Notary Public**

My Commission Expires:

STATE OF \_\_\_\_\_ :  
: ss.  
COUNTY OF \_\_\_\_\_ :

Before me, a notary public in and for the State and County aforesaid, on this \_\_\_ day of \_\_\_\_\_, 2004, personally appeared **Robert Bayer**, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

\_\_\_\_\_  
**Notary Public**

My Commission Expires:

STATE OF \_\_\_\_\_ :  
: ss.  
COUNTY OF \_\_\_\_\_ :

Before me, a notary public in and for the State and County aforesaid, on this \_\_\_ day of \_\_\_\_\_, 2004, personally appeared **Caryn Bowe**, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

\_\_\_\_\_  
**Notary Public**

My Commission Expires:

STATE OF \_\_\_\_\_ :  
: ss.  
COUNTY OF \_\_\_\_\_ :

Before me, a notary public in and for the State and County aforesaid, on this \_\_\_ day of \_\_\_\_\_, 2004, personally appeared **David Hakes**, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

\_\_\_\_\_  
Notary Public

My Commission Expires:

STATE OF CALIFORNIA :  
: ss.  
COUNTY OF YOLO :

Before me, a notary public in and for the State and County aforesaid, on this 6<sup>th</sup> day of APRIL, 2004, personally appeared **Xi Chen**, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

\_\_\_\_\_  
Notary Public

My Commission Expires: 12/21/2007

