PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Karl Johnson	10/29/2008
Aliakbar Mobasseri	11/06/2008
Xiaomei Bai	10/31/2008
Kyle Kinealy	11/01/2008

RECEIVING PARTY DATA

Name:	Neose Technologies, Inc.
Street Address:	102 Rock Road
City:	Horsham
State/Country:	PENNSYLVANIA
Postal Code:	19044

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12162952

CORRESPONDENCE DATA

Fax Number: (415)576-0300

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

Phone: (206) 467-9600 Email: jms@townsend.com Jennifer M. Smolen Correspondent Name:

Address Line 1: Townsend and Townsend and Crew LLP Address Line 2: Two Embarcadero Center, 8th Floor Address Line 4: San Francisco, CALIFORNIA 94111

ATTORNEY DOCKET NUMBER:	019957-021810US
NAME OF SUBMITTER:	Jennifer M. Smolen

Total Attachments: 4

PATENT REEL: 021938 FRAME: 0584

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> PATENT REEL: 021938 FRAME: 0585

Attorney Docket No.: 019957-021810US Client Reference No.: NRC00384US

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Karl Johnson of 5230 Ivystream Road, Hatboro, PA 19040; Aliakbar Mobasseri of 29 Rollingwood Drive, Voorhees, NJ 08043; Xiaomei BAI of 12557-C El Camino Real, San Diego, CA 92130; and Kyle Kinealy of 192 Eaton Square, Plymouth Meeting, PA 19462, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

MODIFICATIONS OF CST-II FOR INCREASED PROTEIN

EXPRESSION

Date(s) of execution of Declaration:

Oct. 29. 2008

Filing Date:

July 31, 2008

Application No.:

12/162,952; and

WHEREAS, Neose Technologies, Inc., located at 102 Rock Road, Horsham, PA 19044, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: 10-29-2008	Karl F Johnson
	Karl Johnson
Dated:	
	Aliakbar Mobasseri

PATENT REEL: 021938 FRAME: 0586

Attorney Docket No.: 019957-021810US Client Reference No.: NRC00384US

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Karl Johnson of 5230 Ivystream Road, Hatboro, PA 19040; Aliakbar Mobasseri of 29 Rollingwood Drive, Voorhees, NJ 08043; Xiaomei BAI of 12557-C El Camino Real, San Diego, CA 92130; and Kyle Kinealy of 192 Eaton Square, Plymouth Meeting, PA 19462, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

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IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated:		Karl Johnson
Dated:	11/6/08	aliakbar Mobasser
		Aliakhar Mohasseri

Assignment Attorney Docket No.: 019957-021810US Page 2	_
Dated: [0/3//08	Xiaomei BAI
Dated:	Kyle Kinealy

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Dated:_ Xiaomei BAI

Dated: Nov 1/08

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