

PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Shawn DeFrees</td><td>05/01/2009</td></tr><tr><td>Marc F. Schwartz</td><td>05/06/2009</td></tr><tr><td>Karl Johnson</td><td>05/11/2009</td></tr></tbody></table>		Name	Execution Date	Shawn DeFrees	05/01/2009	Marc F. Schwartz	05/06/2009	Karl Johnson	05/11/2009		
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RECEIVING PARTY DATA											
<table border="1"><tr><td>Name:</td><td>Novo Nordisk A/S</td></tr><tr><td>Street Address:</td><td>Novo Alle</td></tr><tr><td>City:</td><td>Bagsvaerd</td></tr><tr><td>State/Country:</td><td>DENMARK</td></tr><tr><td>Postal Code:</td><td>DK-2880</td></tr></table>		Name:	Novo Nordisk A/S	Street Address:	Novo Alle	City:	Bagsvaerd	State/Country:	DENMARK	Postal Code:	DK-2880
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PROPERTY NUMBERS Total: 1											
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>12297488</td></tr></tbody></table>		Property Type	Number	Application Number:	12297488						
Property Type	Number										
Application Number:	12297488										
CORRESPONDENCE DATA											
Fax Number: (609)987-5440 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
Phone: 609-987-5800											
Email: nnipatent@novonordisk.com											
Correspondent Name: Novo Nordisk Inc.											
Address Line 1: 100 College Road West											
Address Line 4: Princeton, NEW JERSEY 08540											
ATTORNEY DOCKET NUMBER:	019957-021520US										
NAME OF SUBMITTER:	Lori M. Klewin										
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ASSIGNMENT OF INVENTIONS AND/OR DISCOVERIES

Shawn DeFrees, a citizen of the United States of America, residing in North Wales, Pennsylvania, United States of America

Marc F. Schwartz, a citizen of the United States of America, residing in West Windsor, New Jersey, United States of America

Karl Johnson, a citizen of the United States of America, residing in Harboro, Pennsylvania, United States of America

(hereinafter individually ASSIGNOR), for good and valuable consideration, the receipt of which is hereby acknowledged, each hereby assigns to **NOVO NORDISK A/S**, a corporation organized under the laws of Denmark, located at Novo Allé, DK-2880 Bagsvaerd, Denmark (hereinafter ASSIGNEE), its successors, or assigns, all rights, titles, and interests in discoveries and/or inventions entitled:


**EXPRESSION OF O-GLYCOSYLATED THERAPEUTIC
PROTEINS IN PROKARYOTIC MICROORGANISMS**

for which patent applications have been filed in the United States as Application Number(s) **12/297,488**, filed **October 17, 2008**, including any rights in the application(s), any patents or similar legal protections to be obtained for said inventions and/or discoveries by said patent application(s) or any continuations, continuations-in-part, divisions, renewals, extensions, substitutions, replacements, reissues, or reexamined patents thereof or related thereto, and any rights in any patent applications, patents, and/or similar legal instruments claiming priority from any such applications or patents in any country.

Each ASSIGNOR independently covenants that he or she has full right to convey the entire right, title, and interest hereby assigned. Each ASSIGNOR further independently covenants that he or she will whenever called upon by ASSIGNEE, its successors, legal representatives, or assigns, communicate any known facts relating to the subject matter of the application(s) and/or related technologies; execute and deliver any and all lawful papers (including, without limitation, granting powers of attorney); make all rightful oaths, affidavits, or declarations; testify in any legal proceedings, mediations, arbitrations, or other proceedings; and perform all other lawful acts deemed by ASSIGNEE necessary or desirable to obtain, enjoy the benefit of, and perfect title in the rights hereby assigned including allowing ASSIGNEE to enforce, protect, license, or assign, any rights in the patent application(s), patents, and other rights hereby assigned.

This ASSIGNMENT shall be binding upon each ASSIGNOR's heirs, executors, administrators, successors, and/or assigns.

Date: May 1, 2009


Shawn DeFrees

Date: _____

Marc F. Schwartz

Date: _____

Karl Johnson

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Date: _____

Shawn DeFrees

Date: 5/6/09 _____



Marc F. Schwartz

Date: _____

Karl Johnson

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Date: _____

Shawn DeFrees

Date: _____

Marc F. Schwartz

Date: May 11, 2009

Karl F. Johnson
Karl Johnson