

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
SUOMEN PUNAINEN RISTI, VERIPALVELU	05/17/2013
RECEIVING PARTY DATA	
Name:	GLYKOS FINLAND OY
Street Address:	Viikinkaari 6
City:	Helsinki
State/Country:	FINLAND
Postal Code:	FI-00790
PROPERTY NUMBERS Total: 15	
Property Type	Number
Application Number:	11921563
Application Number:	13352269
Application Number:	11988564
Application Number:	12084636
Application Number:	12084626
Application Number:	12306774
Application Number:	12522853
Application Number:	12522801
Application Number:	12523628
Application Number:	12523586
Application Number:	12522858
Application Number:	12530389
Application Number:	12355457
Application Number:	13003493
Patent Number:	8110366

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CORRESPONDENCE DATA**Fax Number:** 7032058050*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.***Phone:** 703-205-8000**Email:** strandbl@bskb.com, mailroom@bskb.com**Correspondent Name:** Birch Stewart Kolasch & Birch LLP**Address Line 1:** PO Box 747**Address Line 4:** Falls Church, VIRGINIA 22040-0747**ATTORNEY DOCKET NUMBER:**

0933-0649M

NAME OF SUBMITTER:

Lisa A. Strandberg

Signature:

/Lisa A. Strandberg/

Date:

05/29/2013

Total Attachments: 7

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ASSIGNMENT

This Assignment Agreement is entered into by and between Suomen Punainen Risti, Veripalvelu ("FRCBS"), an organization whose address is Kivihaantie 7, FI-00310 Helsinki, Finland, and Glykos Finland Oy ("GLYKOS"), a Finnish limited liability company whose address is Viikinkaari 6, FI-00790 Helsinki, Finland.

For good and valuable consideration, the receipt of which is hereby acknowledged, FRCBS does hereby assign, sell and transfer to GLYKOS and its successors and assigns, all of FRCBS' right, title and interest (obtained directly or indirectly from inventors listed in the paragraph Patents and Patent Applications) for all countries throughout the world in and to

(1) all inventions and discoveries disclosed in the paragraph Patents and Patent Applications;

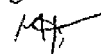
(2) the patents and patent applications identified in paragraph (1), and all applications claiming priority from such application(s), directly or indirectly, including all national stages of any international patent application(s);

(3) the full and complete right to file patent, utility model, or other applications on any invention or discovery disclosed in any of the applications identified in paragraphs (1) and (2), including the right to file such applications on said inventions and discoveries in the names of GLYKOS or its designee, or on behalf or in the name(s) of the inventor(s) of said inventions and discoveries at GLYKOS', or its designee's, election; and the right to file all patent, utility model, or other applications in all countries and regions claiming the priority of any of the application(s) identified in paragraphs (1) or (2);

(4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2), and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property and other international agreements;

(5) all continuations, continuations-in-part, and divisionals or international patent application(s), any national stages of any international application(s), and any other patent application(s) described in paragraphs (1) through (4) hereof;

(6) all patents, utility models, or other grants that issue from any of the applications referred to



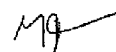
herein and all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under any law permitting remedies for infringement prior to issuance of the patent;

(7) all registrations and confirmations of, and importation certificates based upon, one or more of said patents, utility models, or other grants, and applications for such registrations, confirmations and importation certificates and;

(8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said GLYKOS to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by FRCBS if this sale, assignment and transfer had not been made.

FRCBS hereby authorizes GLYKOS and their representatives to insert in paragraph (1) of this Assignment the filing date(s) and applications number(s) of said patent, utility model, or other application(s) when notified thereof.

FRCBS agrees, at any time, upon request of GLYKOS, to execute and to deliver to GLYKOS any additional documents, if any, as are necessary or desirable to secure protection on said inventions, discoveries and applications within the scope of paragraphs (1) to (8) throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect any and all rights of GLYKOS under this Assignment Agreement, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region. FRCBS further agrees to execute all applications within the scope of paragraphs (1) to (8) and to make rightful oaths and declarations and cooperate with GLYKOS obtaining the same.



Patents and Patent Applications:

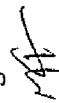
Title	Inventors	PCT Publ No.	PCT Appl No.	PCT Appl Date	Patent Family	Priority Appl No. and Date
METHOD OF PROFILING A CELL POPULATION	Jaatinen, Taina; Hemmoraanta, Heidi; Partanen, Jukka; Laine, Jarmo; Satomaa, Tero; Natunen, Jari; Blomqvist, Maria	WO 2006131599	WO 2006-FI050237	20060606	AU 2006-256650 CA 2006-2650841 EP 2006-764482 US 11/921563	FI 2005-5291 20050606 FI 2005-5464 20050831 FI 2006-0206 20060301
Method for evaluating cell populations	Laine, Jarmo; Jaatinen, Taina; Anderson, Heidi; Nystedt, Johanna; Tiitinen, Sari; Laitinen, Anita; Impola, Ulla; Satomaa, Tero; Natunen, Jari; Heiskanen, Annamari; Blomqvist, Maria; Olonen, Anne	WO 2007068864	WO 2006-FI050323	20060707	AU 2006-268553 (patent) CA 2006-2652767 EP 2006-778519 US 11/988418 US 8110366 US 13/352269	FI 2005-5398 20050708
NOVEL CARBOHYDRATE PROFILE COMPOSITIONS FROM HUMAN CELLS AND METHODS FOR ANALYSIS AND MODIFICATION THEREOF	Satomaa, Tero; Natunen, Jari; Laine, Jarmo; Heiskanen, Annamari; Blomqvist, Maria; Olonen, Anne; Saarinen, Juhani; Jaatinen, Taina; Impola, Ulla; Mikkola, Milla; Anderson, Heidi	WO 2007068870	WO 2006-FI050336	20060711	AU 2006-268559 CA 2006-2652232 EP 2006-764561 US 11/988564	FI 2005-5403 20050711 FI 2005-1130 20051108 FI 2006-0452 20060509 FI 2006-0630 20060629 WO 2006-FI050336 20060711
Novel carbohydrate profile compositions from human cells and methods for analysis and modification thereof	Laine, Jarmo; Satomaa, Tero; Natunen, Jari; Heiskanen, Annamari; Blomqvist, Maria; Olonen, Anne; Saarinen, Juhani; Jaatinen, Taina; Impola, Ulla; Mikkola, Milla	WO 2007054620	WO 2006-FI050483	20061108	EP 2006-808024 US 12/084636	FI 2005-1130 20051108 FI 2006-0452 20060509 FI 2006-0630 20060629 WO 2006-FI050336 20060711
Novel carbohydrate profile compositions from human cells and methods for analysis and modification thereof	Laine, Jarmo; Satomaa, Tero; Natunen, Jari; Heiskanen, Annamari; Blomqvist, Maria; Olonen, Anne; Saarinen, Juhani; Jaatinen, Taina; Impola, Ulla; Mikkola, Milla	WO 2007054622	WO 2006-FI050485	20061108	CA 2006-2667137 US 12/084626	FI 2005-1130 20051108 FI 2006-0452 20060509 FI 2006-0630 20060629 WO 2006-FI050336 20060711
NOVEL CELLULAR GLYCAN COMPOSITIONS	Laine, Jarmo; Satomaa, Tero; Natunen, Jari; Heiskanen, Annamari; Saarinen, Juhani; Jaatinen, Taina; Mikkola, Milla; Natunen, Suvi	WO 2008000918	WO 2007-FI050405	20070629	AU 2007-264845 CA 2007-2682443 EP 2007-788780 US 2009-306774 (US 12/306774)	FI 2006-0630 20060629 WO 2006-FI050336 20060711 WO 2006-FI050485 20061108 FI 2007-0200 20070308 FI 2007-0369 20070510 FI 2007-5030 20070118
Method for modifying cells	Laine, Jarmo; Satomaa, Tero; Natunen, Jari; Jaatinen, Taina; Heiskanen, Annamari; Nystedt, Johanna	WO 2008087255	WO 2008-FI050015	20080118	CA 2008-2712425 EP 2008-701715 JP 2009-545964 US 12/522853	FI 2007-5030 20070118
NOVEL METHODS AND	Laine, Jarmo; Satomaa, Tero;	WO 2008087257	WO 2008-FI050016	20080118	AU 2008-206884 (patent)	FI 2007-5033 20070118

REAGENTS DIRECTED TO PRODUCTION OF CELLS	Natunen, Jari; Heiskanen, Annamari; Blomqvist, Maria; Olonen, Anne; Saarinen, Juhani; Tiitinen, Sari; Impola, Ulla; Mikkola, Milla; Valmu, Leena; Tiitinen, Minna					CA 2008-2676323 EP 2008-701716 JP 2009-545965 US 12/522801	FI 2007-5034 20070118
NOVEL CARBOHYDRATE FROM HUMAN CELLS AND METHODS FOR ANALYSIS AND MODIFICATION THEREOF	Laine, Jarmo; Satomaa, Tero; Natunen, Jari; Heiskanen, Annamari; Blomqvist, Maria; Olonen, Anne; Saarinen, Juhani; Tiitinen, Sari; Impola, Ulla; Aitio, Olli; Valmu, Leena; Anderson, Heidi; Pitkanen, Virve; Partanen, Jukka; Jaatinen, Taina	WO 2008087258	WO 2008-FI050017	20080118		AU 2008-206885 CA 2008-2712556 EP 2008-701717 JP 2009-545966 US 12/523586	FI 2007-5033 20070118 FI 2007-0205 20070313
NOVEL CARBOHYDRATE PROFILE COMPOSITIONS FROM HUMAN CELLS AND METHODS FOR ANALYSIS AND MODIFICATION THEREOF	Laine, Jarmo; Satomaa, Tero; Natunen, Jari; Heiskanen, Annamari; Blomqvist, Maria; Olonen, Anne; Saarinen, Juhani; Tiitinen, Sari; Impola, Ulla; Mikkola, Milla; Salo, Hanna; Aitio, Olli; Valmu, Leena; Natunen, Suvi; Anderson, Heidi; Pitkanen, Virve; Partanen, Jukka; Jaatinen, Taina; Tiitinen, Minna; Hirvonen, Tia	WO 2008087259	WO 2008-FI050018	20080118		US 12/523628	FI 2007-5033 20070118 FI 2007-5034 20070118 FI 2007-0200 20070308 FI 2007-0205 20070313 FI 2007-0368 20070510 FI 2007-0369 20070510 WO 2007-FI050405 FI 2007-0650 20070629 FI 2007-0650 20070828
Novel specific cell binders	Laine, Jarmo; Satomaa, Tero; Natunen, Jari; Heiskanen, Annamari; Blomqvist, Maria; Olonen, Anne; Saarinen, Juhani; Tiitinen, Sari; Impola, Ulla; Aitio, Olli; Valmu, Leena; Natunen, Suvi; Salo, Hanna	WO 2008087260	WO 2008-FI050019	20080118		AU 2008-206887 (patent) CA 2008-2712562 EP 2008-701719 JP 2009-545967 US 12/522858	FI 2007-5033 20070118 FI 2007-0368 20070510 FI 2007-0650 20070828
NOVEL ACIDIC GLYCAN MARKERS OF HUMAN CELLS	Natunen, Suvi; Satomaa, Tero; Natunen, Jari; Valmu, Leena; Pitkanen, Virve	WO 2008107522	WO 2008-FI050110	20080307		AU 2008-223754 (patent) CA 2008-2717680 EP 2008-718563 JP 2009-552238 US 12/530389	FI 2007-0199 20070308
Human monoclonal antibodies directed to sialyl Lewis X, sialyl Tn and N-glycolylneuraminic acid epitopes for analysis of stem cells comprising said epitopes	Laukkanen, Marja-Leena; Takkinen, Kristina; Natunen, Jari; Satomaa, Tero; Parkkinen, Jaakko; Valmu, Leena; Tiitinen, Sari; Natunen, Suvi	WO 2009060129	WO 2008-FI050543	20081110		AU 2008-324073 CA 2008-2743032 EP 2008-847066 JP 2010-532633 US 12/741987	FI 2007-0853 20071109
MODIFIED BLOOD CELLS	Laine, Jarmo; Satomaa, Tero; Natunen, Jari; Jaatinen, Taina; Heiskanen, Annamari					US 12/355457	US 61/022207 20080118



CULTURE OF CELLS	Impola, Ulla; Tiittanen, Minna; Mikkola, Milla; Partanen, Jukka; Natunen, Jari; Satomaa, Tero; Saarinen, Juhani	WO 2010004096	WO 2009-FI050624	20090713	US 12/171866 AU 2009-267964 EP 2009-784152 US 13/003493	FI 2008-5724 20080711
A method of evaluating the integrity of the plasma membrane of cells by detecting glycans found only intracellularly	Hivonen, Tia; Kotovuori, Annika; Pitkanen, Virve; Natunen, Suvi; Nystedt, Johanna; Tiittinen, Sari; Valmu, Leena; Natunen, Jari	WO 2010007213	WO 2009-FI050627	20090716	EP 2009-797547 US 13/054632	US 61/081748 20080718 FI 2009-5418 20090416
ENZYMATIC MODIFICATION OF CELL GLYCOSYLATION USING SERUM ALBUMIN AND DIVALENT CATIONS	Nystedt, Johanna; Anderson, Heidi; Valmu, Leena; Natunen, Jari; Satomaa, Tero	WO 2010007214	WO 2009-FI050628	20090716	EP 2008-397517 AU 2009-272654 EP 2009-797548 US 13/054541	EP 2008-397517 20080716
AN ANTIBODY-GLYCAN COMPLEX TARGETING THE DISIALYL CORE II AND SIALYL LEWIS X STRUCTURES, AND USES THEREOF INVOLVING ANALYSIS OF STEM CELLS OR CANCER CELLS	Natunen, Suvi; Nystedt, Johanna; Anderson, Heidi; Natunen, Jari	WO 2010122232	WO 2010-FI050338	20100423	13/265953	FI 2009-5452 20090423
Antibodies directed to TRA antigens, and methods of production, screening and analysis of said antibodies, as well as methods of analysis of stem cells and cancer cell	Satomaa, Tero; Natunen, Suvi; Valmu, Leena; Natunen, Jari	WO 2010122234	WO 2010-FI050340	20100426	US 13/266090	FI 2009-5459 20090424
SULPHATED HYALURONIC ACID IN COMBINATION WITH G-CSF FOR USE IN MOBILISING BLOOD STEM CELLS	Nystedt, Johanna; Anderson, Heidi; Satomaa, Tero; Natunen, Jari; Helin, Jari; Saarinen, Juhani	WO 2011138512	WO 2011-FI050423	20110506	EP 2010-162117 EP 2011-165109 US 13/102451	EP 2010-162117 20100506 US 61/331888 20100506
METHOD FOR ISOLATING CD34+ HEMATOPOIETIC STEM CELLS, NATURAL KILLER CELLS AND REGULATORY T LYMPHOCYTES FROM A SAMPLE OF HUMAN UMBILICAL CORD BLOOD BY USING AN ANTI-GD3 ANTIBODY, AS WELL AS COMPOSITIONS THEREOF	Kotovuori, Annika; Natunen, Suvi; Valmu, Leena	WO 2011154615	WO 2011-FI050552	20110610		FI 2010-5660 20100610 FI 2010-6213 20101117
Method for isolating cells using	Partanen, Jukka; Natunen, Jari	WO 2012045913	WO 2011-FI050862	20111006		FI 2010-6031 20101006

antibodies and a cell population thereof	Kotovuori, Annika; Natunen, Suvi; Valmu, Leena	WO 2012085348	WO 2011-FI051142	20111220			FI 2010-6354	20101220
METHOD OF PRODUCING HUMAN RETINAL PIGMENTED EPITHELIAL CELLS	Skottman, Heli; Hongisto, Heidi; Vaejasaari, Hanna; Partanen, Jukka; Alftan, Kaija							
Method of distinguishing undifferentiated mesenchymal stem cells and differentiated mesenchymal stem cells from each other by using an antibody against the blood group i antigen	Kotovuori, Annika; Natunen, Suvi; Valmu, Leena	WO 2011073517	WO 2010-FI051032	20101215			FI 2009-6331	20091215
Glycosyltransferase gene expression markers to detect the differentiation status of a stem cell population	Natunen, Suvi; Anderson, Heidi; Tuimala, Jarmo; Partanen, Jukka	WO 2011101550	WO 2011-FI050156	20110221			FI 2010-5166	20100219



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Executed this 17 day of May, 2013.

Suomen Punainen Risti, Veripalvelu

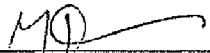
By 

Print Name:

Title: **Martti Syrjälä**
Veripalvelun johtaja

Witness 

Print Name: **Jukka Paavola**

Witness 

Print Name: **MICHAEL JONES**