PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
Matthew Bellgard	07/16/2007
David John Hampson	07/16/2007
Tom La	07/11/2007

RECEIVING PARTY DATA

Name:	Novartis AG
Street Address:	Lichtstrasse 35
City:	Basel
State/Country:	SWITZERLAND
Postal Code:	4056

Name:	Murdoch University
Street Address:	South Street
City:	Murdoch, Western Australia
State/Country:	AUSTRALIA

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12672054

CORRESPONDENCE DATA

Fax Number: (206)224-0779

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

(206)682-8100 Phone: Email: efiling@cojk.com Correspondent Name: Tineka J. Quinton, Esq.

Address Line 1: Christensen O'Connor Johnson Kindness

1420 Fifth Avenue, Suite 2800 Address Line 2: Address Line 4: Seattle, WASHINGTON 98101-2347

PATENT

REEL: 026052 FRAME: 0167

ATTORNEY DOCKET NUMBER:	GHAC134358	
NAME OF SUBMITTER:	Tineka J. Quinton	
Total Attachments: 3 source=34358_Assignment_Inventors_to_Novartis_and_Murdoch#page1.tif source=34358_Assignment_Inventors_to_Novartis_and_Murdoch#page2.tif source=34358_Assignment_Inventors_to_Novartis_and_Murdoch#page3.tif		

PATENT REEL: 026052 FRAME: 0168



Case No. 50346

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ASSIGNMENT

For good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, we

(1) Matthew BELLGARD, (2) David John HAMPSON and (3) Tom LA,

respectively residing at

- (1) 20 Campion Crescent, Attadale, 6156, Australia,
- (2) 28 Haslemere Drive, Mt. Nasura, 6112, Western Australia and
- (3) 248 William Street, Beckenham, 6107, Western Australia,

do hereby sell, assign and transfer to Novartis AG, a company organized under the laws of the Swiss Confederation, of Lichtstrasse 35, 4056 Basel, Switzerland, and its successors, assigns and legal representatives, all our right, title and interest for all countries of the world (Murdoch University and Novartis AG hereinafter referred to as the "ASSIGNEE") in and to (1) all of our inventions and discoveries described in the patent application(s) entitled

Novel Genes and Proteins of Brachyspira hyodysenteriae and Uses Thereof

_, 20<u>이국</u> and accorded International Patent filed* in the RO/ESP ___, (2) said patent application(s), (3) (3) all national Application Number PCT EPICON/058045 stages of said international patent application, (4) all other patent applications in all countries and regions claiming the priority of the Australia, patent application filed on August 09, 2006, and accorded Application Number 2006904311, (5) all continuations and divisions of all of said patent applications (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2)-(5) hereinafter referred to collectively as "patent applications"), (6) all patents that are granted on any of said patent applications, (7) all registrations and confirmations of, and importation certificates based on, one or more of said patents and (8) all reissues, renewals and extensions of said patents, reexamination certificates issued for said patents and supplementary protection certificates based on said patents (including the right to file patent applications on said inventions and discoveries in the names of ASSIGNEE, their designees or in any or all of our names, at their election and in accordance with applicable law in all countries and regions and all rights of priority in all countries and regions for all of said patent applications under the International Convention for the Protection of Industrial Property, and all other applicable similar international agreements), the same to be held and enjoyed by said ASSIGNEE, their successors, assigns and legal representatives, to the full ends of the terms for which all patents therefor may be granted, as fully and entirely as the same would have been held and enjoyed by us if this sale, assignment and transfer had not been made.

> PATENT REEL: 026052 FRAME: 0169

Name: Tom LA

*We hereby authorize ASSIGNEE and their representatives to insert in this instrument the Application Number and the filing date of said patent application when notified thereof.

And we hereby covenant and agree that we will, at any time, upon the request and at the expense of ASSIGNEE, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, patent applications, patents, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates and supplementary protection certificates in ASSIGNEE, their successors, assigns or other legal representatives, including the execution and procurement of all further documents evidencing this sale, assignment and transfer 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, that we will, at any time, upon the request and at the expense of ASSIGNEE, execute all additional patent applications, applications for registration and/or confirmation of one or more of said patents, applications for reissues, renewals and extensions of one or more of said patents and supplemental protection certificates based upon one or more of said patents, and that we will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of ASSIGNEE, the successors, assigns or other legal representatives.

Executed this	6 day of	July	20_07
Name: Matthewa	Z. J. GARD	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	L.S.
(value: wattingsa)	38 " F" (" 193 V. S.) ("		
Executed this	day of	JULY	20 <u>07</u>
		800	L.S.
Name: David Jos	in HAMPS()N	
Executed this 11	day q(_	JULY	. 20.07.
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ACCEPTANCE OF ASSIGNMENT

With reference to the Assignment to Novartis AG of an invention entitled "Novel Genes and Proteins of Brachyspira hyodysenteriae and Uses Thereof" signed by Matthew BELLGARD, David John HAMPSON and Tom LA; this will certify that Novartis AG accepts such Assignment.

Novartis AG

Ву:

Name:

Steve Braithwaite

Function :

Admin. Professional

Date:

Lynne Kamibayashi

Patent Attorney

618/2007

PATENT REEL: 026052 FRAME: 0171

RECORDED: 03/30/2011