## 502514462 09/30/2013

## PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
Bernhard H. GEIERSTANDGER	04/04/2013
Weijia OU	04/05/2013
Susan E. CELLITTI	04/05/2013
Tetuo UNO	04/04/2013
Tiffany CROSSGROVE	06/15/2011
Hsien-Po CHIU	06/10/2011
Xueshi HAO	06/10/2011
Jan GRUNEWALD	06/10/2011

#### **RECEIVING PARTY DATA**

Name:	IRM LLC
Street Address:	131 Front Street
Internal Address:	P.O. Box HM 2899
City:	Hamilton
State/Country:	BERMUDA
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## PROPERTY NUMBERS Total: 3

Property Type	Number
Application Number:	61108434
Application Number:	13125547
PCT Number:	US2009061954

## **CORRESPONDENCE DATA**

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Date: 09/30/2013				
Total Attachments: 11				
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#### **ASSIGNMENT**

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

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Jan Grunewald	citizen of Germany	Genomics Institute of the Novartis Research
as const.	Ginzeri or Germany	Foundation
		10675 John Jay Hopkins Drive
		San Diego, California 92121, US

do hereby sell, assign and transfer to IRM LLC, a Delaware Limited Liability Company, a body corporate organized according to the laws of the United States of America, of 131 Front Street, P. O. Box HM 2899, Hamilton HM LX, Bermuda (hereinafter referred to as the "ASSIGNEE") and its successors, assigns and legal representatives, all of my right, title and interest for all countries of the world in and to (1) all of my inventions and discoveries described in the patent application(s) titled

# BIOSYNTHETICALLY GENERATED PYRROLINE-CARBOXY-LYSINE AND SITE SPECIFIC PROTEIN MODIFICATIONS VIA CHEMICAL DERIVATIZATION OF PYRROLINE-CARBOXY-LYSINE AND PYRROLYSINE RESIDUES

and filed in the United States Patent and Trademark Office on "21 April 2011 and accorded Application Number "13/125,547 and/or filed in the RO/US on "23 October 2009 and accorded International Patent Application Number "PCT/US2009/061954, (2) the patent application(s) identified in (1), (3) all national stages of any international patent application identified in (1), (4) all other patent applications in all countries and regions claiming the priority of the provisional or non-provisional patent application filed in the United States Patent and Trademark Office on 24 October 2008 and accorded Application Number 61/108,434, (5) for all patent applications, all rights of priority based upon the United States patent application Identified in (4) in all countries and regions under the Paris Convention for the Protection of Industrial Property, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application identified in (4) is a provisional patent application, under 35 USC 119(e)

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(including the right to file patent applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our names, at their election and in accordance with applicable law in all countries and regions), (6) all continuations and divisions of any United States patent application or international patent application designating the United States identified in (1), any national stages of any international application identified in (1) and any patent applications within the scope of (4) (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2)-(4) and (6) hereinafter referred to collectively as "patent applications"), (7) all patents that are granted on any of said patent applications, (8) all registrations and confirmations of, and importation certificates based upon, one or more of said patents and applications for such registrations, confirmations and importation certificates and (9) all reissues, renewals and extensions of said patents, 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 ASSIGNEE and their successors, assigns and legal representatives to the full ends of the terms for which said patents, 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 us if this sale, assignment and transfer had not been made.

"We hereby authorize ASSIGNEE and their representatives to insert in this Assignment the filing date(s) and Application Number(s) of said patent application(s) when notified thereof.

And we hereby covenant and agree that we will, at any time, (i) upon the request, but at the expense, of ASSIGNEE or their successors, assigns or legal representatives 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, supplementary protection certificates and applications within the scope of (8) and (9) in ASSIGNEE or their successors, assigns or 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, (ii) upon the request, but at the expense, of ASSIGNEE or their successors, assigns or legal representatives execute all additional patent applications within the scope of (3), (4) and (6) and all applications within the scope of (8) or (9) and (iii) 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 or their successors, assigns or legal representatives.

This Assignment is effective as from the earliest priority date as stated above.

Page 3 of 11

Executed this 44 day  Bernhard H. GEIERSTANGER	of April 2013.
ACKNOWLEDGEMENT	
State of California	)
	) s.sz
County of San Diego	)
Bernhard H. GEIERSTANGER whose name(s) (s/are subscrib executed the same in his/her/th	efore me, Pamela M. Stone, Notary Public, personally appeared to proved to me on the basis of satisfactory evidence to be the person(st) of to the within instrument and acknowledged to me that fielshe/they air authorized capacity(ies), and that by fis/her/their signature(st) on the ntity upon behalf of which the person(st) acted, executed the instrument.
I certify under PENALTY OF I paragraph is true and correct.	ERJURY under the laws of the State of California that the foregoing
WITNESS my hand and official s	al.
Signature <u>Quala m. d</u>	PAMELA M. STONE Commission # 1870231 Neisry Public - California San Diego County My Comm. Expires Nov 2, 2013

Page 4 of 11

Executed this <u>Σ-Ηλ</u> day	•	, 2013.			
weijia OU UHUGU	L.S.				
ACKNOWLEDGEMENT					
State of California	)				
	) s.s.:				
County of San Diego	)				
On Aria 5, 20/3 be who proved to me on the basis of to the within instrument and act authorized capacity(ies), and that upon behalf of which the person(section)	satisfactory evidence knowledged to me ti by/his/her/their signs	to be the pers hat he/she/the sture(s) on the	son(s) whose ey execute	se name(x)( <u>is/a</u> ed the same in	re subscribed (fig/her/their
I certify under PENALTY OF P paragraph is true and correct.	ERJURY under the	laws of the	State of C	California that t	he foregoing
WITNESS my hand and official se	al.				
Signature & Lande M ad	And (Seal)			PAMELA M. STO Commission # 18) Notary Public - Cali San Diego Coun Comm. Expires Nov	NE 9231 Prorais 2 2 2010 Pro

Page 5 of 11

Executed this5	_day of <del></del>	<u>n'l</u>	, 2013	<b>i</b> .			
Susan E. CELLITTI	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	L.S.					
ACKNOWLEDGEMENT							
State of California	)						
	) s.s.:						
County of San Diego	)						
On	ved to me on the the within instraction ted capacity(ies	ne basis of a ument and i i), and that i	satisfacto acknowle by his/fie	ry evidenc dged to m ighteir sign	e to be the per e that h <b>e</b> (\$h <b>e</b> /t ature( <b>x</b> ) on the	rson(ø) wt hey exect e instrume	uted the
I certify under PENALTY C paragraph is true and correct		under the	laws of	the State	of California	that the	foregoing
WITNESS my hand and offic	ial seal.						
Signature	- 46-a.	(Seal)			PAMELA Commission Notary Publi San Dist My Comm. Exp	M. STONE # # 1870231 ic - Californi ge County ires Nov 2. 2	2013 <b>3</b>

Page 6 of 11

Executed this	$\_$ day of $\_A$	pril,	2013.		
Tetsuo UNO	lla.	LS.			
ACKNOWLEDGEMENT					
State of California	)				
	) s.s.:				
County of San Diego	)				
On	o me on the basi hin instrument all acity(ies), and the which the perso OF PERJURY ct.	s or satisfactory nd acknowledger nat by(his/her/the n(s/) acted, exec	evidence to be the district field to me that fields in signature (s) on uted the instrume	e person <b>is)</b> whose r re/they executed the the instrument the r rit.	name(s) same in person(s);
Signature	e will the stage of	(Seal)		PAMELA M. STONE Commission * 18702 Notary Public - Califor San Olego County My Comm. Expires Nov 2.	31 <b>8</b> 0 nia W <sub>A</sub> 1

# Page 7 of 11

Executed this/5	day of <u>June</u>	, 2011.		
Jyling Co	J	L.S.		
Tiffan <b>/</b> ÉROSSÉROVE	<i>C</i>			
ACKNOWLEDGEME	NT			
State of California	)			
	) s.s.:			
County of San Diego	)			
On June 15, 201	before me, <u>Pame</u> VE who proved to me on the	ela M. Stone, <b>Nota</b> r	ry Public, personally	appeared
name(x)/(s/are subscri same in his/hei/their a	/E who proved to me on the ibed to the within instrumen authorized capacity(ips), and y upon behalf of which the p	it and acknowledge d that by his/ne/th	ed to me that he/she/t eir signature(s) on the	they executed the ending instrument, the
I certify under PENA paragraph is true and	ALTY OF PERJURY unde correct.	r the laws of the	: State of California	that the foregoing
WITNESS my hand ar	nd official seal.	junu Linnu	nomboliotholiotholiotholiotholiotholio M. A. J. SARS A. J.	athahatatatutk.
Signature&	als M. Saa	eal)	Commission # Notary Public - San Diego I My Comm. Expires	1870231 California County 1 Nov 2, 2013

Page 8 of 11

Executed this <u>10</u> day of <u>June</u> , 20	11.
Hsfen-Po CHIU L.S.	
ACKNOWLEDGEMENT	
State of California )	
) s.s.:	
County of San Diego )	
On	evidence to be the person(s) whose name(s) one that he she/they executed the same in signature(s) on the instrument, the person(s), and the instrument.
paragraph is true and correct.	
WITNESS my hand and official seal.	
Signature <u>Pamela M. Johna</u> (Seal)	PAMELA M. STONE PAMELA M. STONE Commission # 1870231 Notary Public - California San Diago County My Comm. Exstras Nov 2, 2013

# Page 9 of 11

Executed this	day of	June	, 2011.				
Xueshi HAQ	an Haro	L.S.					
ACKNOWLEDGEMENT							
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County of San Diego	)						
On	to me on the bas ⁄ithin instrument a apacity(j <b>ø≲</b> ), and t	ils of satisfa and acknowle hat by his/he	otory evidenc adged to me ar/their signa	ce to be the that(he)si ture(s) or	ne person( <b>s)</b> he/they exec i the instrum	whose na uted the s	ime(s)* iame in
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WITNESS my hand and c	official seal.						
Signature	la M. addina.	(Seal)		A STATE OF	PAMELA M. Commission & Commission & Notary Public - San Diego ! Y Comm. Expires	STORE	286

Page 10 of 11

Executed this 10th day of JVNE 2011.
Jan GRUNEWALD L.S.
ACKNOWLEDGEMENT
State of California )
) s.s.: County of San Diego )
On
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.
PAMELA M. STONE Commission # 1870231 Notary Public - Californis Signature (Seal) San Diego County My Comm. Expires Nev 2, 2013

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# ACCEPTANCE OF ASSIGNMENT

With reference to the Assignment to IRM LLC of an invention entitled BIOSYNTHETICALLY GENERATED PYRROLINE-CARBOXY-LYSINE AND SITE SPECIFIC PROTEIN MODIFICATIONS VIA CHEMICAL DERIVATIZATION OF PYRROLINE-CARBOXY-LYSINE AND PYRROLYSINE RESIDUES signed by Bernhard H. GEIERSTANGER, Weijia OU, Susan E. CELLITTI, Tetsuo UNO, Tiffany CROSSGROVE, Hsien-Po CHIU, Xueshi HAO and Jan GRUNEWALD, this will certify that IRM LLC accepts such Assignment.

	IRM LLC			
Ву:	- Any /			
Name:	Daniel E. Raymond, Ph.D.			
Function:	Authorized Signatory and Power of Attorney on behalf of IRM LLC			
Date:	APRIC 12, 2013			
ACKNOWLED	GEMENT			
State of Califor				
Carrate at Can	) 8.83			
County of San	Diego )			
On				
I certify under paragraph is tr	<ul> <li>PENALTY OF PERJURY under the laws of the State of California that the foregoing ue and correct.</li> </ul>			
WITNESS my	hand and official seal.			
Signature	PAMELA M. STONE Commission # 1870231 Notary Public - California San Diego County My Comm. Expires Nov 2, 2013			

RECORDED: 09/30/2013