501947724 06/07/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
Michael John Watson	05/02/2012
David Davis	04/27/2012
Emily Faimington Douglas	05/11/2012

RECEIVING PARTY DATA

Name:	Johnson Matthey PLC
Street Address:	5th Floor
Internal Address:	25 Farringdon Street
City:	London
State/Country:	UNITED KINGDOM
Postal Code:	EC4A 4AB

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13387586

CORRESPONDENCE DATA

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 610-407-0700

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Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US

Mail.

Correspondent Name: Christopher R. Lewis
Address Line 1: P.O. Box 980

Address Line 4: Valley Forge, PENNSYLVANIA 19482-0980

ATTORNEY DOCKET NUMBER:	JMYS-221US
NAME OF SUBMITTER:	Christopher R. Lewis

Total Attachments: 4

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> PATENT REEL: 028337 FRAME: 0016

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501947724

ASSIGNMENT - Patent Application			Docket Number: JMYS-221US		
Whereas, the Ass	ignor, co	mprising the following named inven	tors:		
	1. Mic	hael John Watson	2. David Davis		
ASSIGNOR(s)/ INVENTOR(s)	3. Emily Fairnington Douglas		4.		
	5.		6.	6.	
made an invention	entitled:	DEOXYGENATION PROCESS			
for which an applic (Select one of the fo	cation for	Letters Patent of the United States			
is executed was filed in tas U.S. Pate	he U.S. F	ntly herewith Patent and Trademark Office on <u>Jar</u> ation Serial No.: <u>13/387,586</u>	าuary 27, 2012,		
ASSIGNEE (Full Name and Ac	ddress)	Johnson Matthey PLC 5 th Floor 25 Farringdon Street London EC4A 4AB United Kingdom			

is desirous of acquiring the entire interest in and to said invention and the Letters Patent to be obtained therefor.

Now, therefore, in consideration of the payment by Assignee to Assignor of a sum corresponding to One Dollar (\$1.00), and for other good and valuable consideration, the receipt of which is hereby acknowledged, Assignor, intending to be legally bound, hereby sells, assigns and transfers to Assignee, its successors and assigns, the full and exclusive right, title and interest in and to said invention, all applications for Letters Patent for said invention, including all divisions, continuations, and continuations-in-part thereof, all rights to claim priority based thereon, and all Letters Patent, including reissues, to be obtained therefor, including any and all foreign patent rights in this invention corresponding thereto.

Assignor hereby warrants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment.

Assignor agrees it shall be legally bound, upon request of the Assignee or its successors or assigns or a legal representative thereof, to supply all information and evidence of which the Assignor has knowledge or possession, relating to the making and practice of said invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention in the United States of America and foreign countries in the name of the Assignee, and to execute all instruments proper to carry out the intent of this instrument.

If the invention requires a biological deposit, Assignor also grants to Assignee such control over any deposit made by Assignor as may be necessary to the validity of the patent rights assigned herein.

PATENT Page 1 of 2 Modified 2/6/03 REEL: 028337 FRAME: 0017

ASSIGNMENT	-	Patent	Application
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Docket Number: JMYS-221US

Assignor authorizes Assignor's attorney to insert at the end hereof, the serial number and filing date of the aforesaid application for United States Letters Patent and/or the Attorney Docket or file designation for this application if not identified above.

If the Assignor includes more than one individual, these obligations shall apply to these individuals both individually and collectively.

In witness whereof, this Assignment is executed on the day indicated below.

	•				
	Typed or Printe	d Name	Signature		Date
	1. Michael John V	Vatson	MWats		2/5/12
		$\frac{1}{2}$	Linage	ς <u></u>	2/5/12
	2. David Davis	4	Witness to Assignor #D		7-14/17.
		<u></u>	VCUQCO Witness to Assignor #2	2	7/4/12
	Emily Fairnings Douglas	on	VICIOSS to ASSIGNATE		delia lee da come da da deli da come d
SIGNATURE		* 1	Witness to Assignor #3		
SIGNATURE	- Historia transaction and a state of the st		VILTIESS to ASSIGNOF #3		
	4.				
		* \	Witness to Assignor #4		
	5.	The state of the s	Titilioso (O Assignor #1	or annual to the first and the first transfer and the first transfer and the first annual field and the first	demonstratification of many terms or an international and an in-
	J 5.			·	
		* V	Vitness to Assignor #5		
	6.				
					
	ntitititi kaljani kanda afratti kira Niki Arteri makera kalaki ti maceri na a agrava	* V	Vitness to Assignor #6	erathathan-ur-water-announce da harachata ara-anga ang	Wellow all market by the Automatic and the supplier of the supplier of the Automatic and the supplier of the s
	Jnited States Letters				
Serial No.: Filed:		13/387,586			
-11ea: Attorney Docket		01/27/2012			
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otal Number of	Accianment Dage	[D] (* Witness signature recomme	andad mandatane	£ 1

PATENT Page 2 of 2 Modified 2/6/03 REEL: 028337 FRAME: 0018

SYN/60173US/SHMG

ASSIGNMENT - Patent Application			Docket Number: JMYS-221US		
Whereas, the Ass	Whereas, the Assignor, comprising the following named inventors:				
	1. Michael John Watson		2. David Davis		
ASSIGNOR(s)/ INVENTOR(s)	3. Emi	ly Fairnington Douglas	4.		
	5.		6.	1	
made an inventior	n entitled:	DEOXYGENATION PROCESS			
for which an applic	cation for ollowing):	Letters Patent of the United State	es:		
is executed concurrently herewith was filed in the U.S. Patent and Trademark Office on <u>January 27, 2012</u> , as U.S. Patent Application Serial No.: <u>13/387,586</u>					
ASSIGNEE (Full Name and Ad	ddress)	Johnson Matthey PLC 5 th Floor 25 Farringdon Street London EC4A 4AB United Kingdom			

is desirous of acquiring the entire interest in and to said invention and the Letters Patent to be obtained therefor,

Now, therefore, in consideration of the payment by Assignee to Assignor of a sum corresponding to One Dollar (\$1.00), and for other good and valuable consideration, the receipt of which is hereby acknowledged, Assignor, intending to be legally bound, hereby sells, assigns and transfers to Assignee, its successors and assigns, the full and exclusive right, title and interest in and to said invention, all applications for Letters Patent for said invention, including all divisions, continuations, and continuations-in-part thereof, all rights to claim priority based thereon, and all Letters Patent, including reissues, to be obtained therefor, including any and all foreign patent rights in this invention corresponding thereto.

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PATENT Page 1 of 2 Modified 2/6/03 REEL: 028337 FRAME: 0019

ASSIGNMENT - Patent Application

Docket Number: JMYS-221US

Assignor authorizes Assignor's attorney to insert at the end hereof, the serial number and filing date of the aforesaid application for United States Letters Patent and/or the Attorney Docket or file designation for this application if not identified above.

If the Assignor includes more than one individual, these obligations shall apply to these individuals both individually and collectively.

In witness whereof, this Assignment is executed on the day indicated below.

	Typed or Printed	Name	Signature ·	Date
	1. Michael John W	atson		
		*	Witness to Assignor #1	* Untilization to the definition of the contract of the contra
	2. David Davis			
		*	Witness to Assignor #2	
	3. Emily Fairningto Douglas		Daigle	11/05/12
SIGNATURE			Witness to Assignor #3	11/05/12
	4.	. · · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
	***************************************	*	Witness to Assignor #4	
	5.			
				
		*	Witness to Assignor #5	
	6.	And and and		
		*	Witness to Assignor #6	
		···		
Application for U	Jnited States Letters F	Patent:		,
Serial No.:		13/387,586		
Filed:	9	01/27/2012		
Attorney Docker	t Number:	<u>JMYS-221US</u>	· · · · · · · · · · · · · · · · · · ·	
otal Number o	f Assignment Pages	2	* Witness signature recommen	nded, mandatory for some countries

Page 2 of 2 PATENT Modified 2/6/03

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RECORDED: 06/07/2012