502171515 12/20/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Heart Metabolics Limited	12/04/2012

RECEIVING PARTY DATA

Name:	The University of Birmingham	
Street Address:	Edgbaston	
City:	Birmingham	
State/Country:	UNITED KINGDOM	
Postal Code:	B15 2TT	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13319986

CORRESPONDENCE DATA

Fax Number: 7038164100

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

Phone: 703-816-4000

Email: ewm@nixonvan.com

Correspondent Name: Willem F. Gadiano

Address Line 1: NIXON & VANDERHYE P.C.

Address Line 2: 901 North Glebe Road, 11th Floor

Address Line 4: Arlington, VIRGINIA 22203-1808

ATTORNEY DOCKET NUMBER:	WFG-5913-6
NAME OF SUBMITTER:	Willem F. Gadiano

Total Attachments: 5

source=5913-6_Confirmatory_Assignment#page1.tif source=5913-6_Confirmatory_Assignment#page2.tif source=5913-6_Confirmatory_Assignment#page3.tif source=5913-6_Confirmatory_Assignment#page4.tif source=5913-6_Confirmatory_Assignment#page5.tif

> PATENT REEL: 029510 FRAME: 0926

CH \$40.00 133199

CONFIRMATORY ASSIGNMENT OF PATENT RIGHTS FOR PATENT APPLICATION

WHEREAS, Heart Metabolics Limited, (hereinafter ASSIGNOR), a corporation organized existing under the laws of England and whose registered office is at 33 St. James's Square, London, SWI Y 4JS, is the current owner of the entire right, title and interest in and to U.S. Patent Application No. 13/319,986, filed January 27, 2012, entitled "PERHEXILINE FOR USE IN THE TREATMENT OF HYPERTROPHIC CARDIOMYOPATHY (HCM)" the invention covered thereby, and priority rights claimed therein or corresponding thereto, including any and all extensions, renewals, reissues, continuations, divisions and prolongations thereof;

WHEREAS, The University of Birmingham, incorporated by Royal Charter in the United Kingdom, whose principal address is at Edgbaston, Birmingham, B15 2TT, United Kingdom (hereinafter ASSIGNEE), is desirous of acquiring, for the United States of America and all countries foreign to the United States of America, the entire right, title and interest in, to and under (1) the Invention, (2) all patent applications that may be filed for the Invention and that may ultimately claim the benefit of priority from the filing date of the above-identified United States Application, and (3) any Letters Patent that may be granted for said Invention, as hereinafter more fully set forth:

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, in consideration of the sum of Ten Dollars (\$10.00) to the Assignors in hand paid and/or of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the Assignee, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the Invention, and all applications for Letters Patent that may hereafter be filed for said Invention in any country and all Letters Patent that may be granted for said Invention in any country (including, without limitation, all extensions, renewals, reissues, reexaminations and the like thereof and such other forms of protection of industrial property as may be provided by any country), and all rights of priority in any country that are based upon the filing date of the above-identified United States Application and that are created by any law, treaty or international convention; the above transferred right, title and interest to be held and enjoyed by said Assignee, its successors, legal representatives and assigns as fully and entirely as the same would have been held and enjoyed by the Assignor had this assignment not been made;

AND THE ASSIGNORS HEREBY authorize and request all appropriate and competent Officials in all countries, whose duty it is to issue or grant Letters Patents on applications as aforesaid, to issue or grant all Letters Patent for said Invention to the Assignee, its successors, legal representatives and assigns, in accordance with the terms of this instrument:

Page 1 of 4

PATENT REEL: 029510 FRAME: 0927 **AND THE ASSIGNORS HEREBY** represent and covenant that they have the full right to convey the entire interest herein assigned and that they have not executed, and will not execute, any agreement in conflict herewith;

AND THE ASSIGNORS HEREBY further covenant and agree that, at the request and expense of the Assignee, its successors, legal representatives and assigns, but without demanding further consideration therefor, they will (1) assist in the prosecution of all applications for Letters Patent as herein described and any other applications for Letters Patent that may be made covering said Invention; (2) communicate any and all facts known to him respecting said Invention; (3) testify in any legal proceeding involving said Invention; (4) execute and acknowledge all lawful papers and legal instruments; (5) execute all divisional, continuing, reissue and reexamination applications; (6) make all rightful oaths; and (6) generally do any and every lawful act deemed necessary to aid and cooperate with the Assignee, its successors, legal representatives and assigns in perfecting and maintaining the entire interest conveyed herein and in obtaining and enforcing proper patent or industrial property protection for said Invention in any country, particularly in cases of opposition, interference and litigation;

AND THE ASSIGNORS HEREBY covenant and agree that the rights and obligations set forth in this instrument shall be binding upon, and inure to the benefit of, their heirs, legal representatives, successors and assigns;

AND THE ASSIGNORS HEREBY grant the Assignee, its successors, legal representatives and assigns, the power to insert on this instrument any further identification that may be necessary or desirable to comply with the recordation rules of any appropriate and competent authority, including, without limitation, the United States Patent and Trademark Office.

AND THE PARTIES HEREBY agree that this Assignment may be executed in two or more counterparts each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

IN TESTIMONY WHEREOF, the Assignors and Assignee hereunto sets their hands and seals the day and year set opposite their signatures.

SIGNATURES BEGIN ON THE NEXT PAGE

Page 2 of 4

PATENT REEL: 029510 FRAME: 0928 BY ASSIGNOR:

Dec 4, 20/2

Date

Dat

Witnessed by:

Name: _____ Date:

Date: _____ Date:

This Assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses. In all cases any formalities of execution required by the by-laws of the assignor company and the state or country having jurisdiction over the assignor, should be observed.

CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

State of California	
County of SANTA CLARA	Section 1985
Jounty of	
No execution of the second	THE AND I PARTY WATER OF PORTE
n DEC. 4,2012 before me,	IK ANAL PANDIT, NOTARY PORLIC. (Here insert name and title of the officer)
	·
ersonally appeared PETER G. MI	r ne k
who proved to me on the basis of satisfactory evidence within instrument and acknowledged to me that apacity (iss), and that by his/her/ther signature(s) of which the person(s) acted, executed the instrument.	ence to be the person(s) whose name(s) is/are subscribed to the/she/they executed the same in his/her/their authorized on the instrument the person(s), or the entity upon behalf of
next at TV OU DED H DV under the	laws of the State of California that the foregoing paragraph
certify under PENALTH OF TELECONT united and struct and correct.	SOMORESHICH GORDON CONTROL SOMORES MAULIK ANIL PANDIT
3 II the time and and	COMM. # 1916213 COMM. # 1916213 ROTARY PUBLIC - CALIFORNIA E SANTA CLARA COLINY CANTA CLARA COLINY
and official seal	B PO SANTA CLARA COUNTY
WITNESS my hand and official seal.	SANTA CLARA COUNTY My Comm. Exp. Dec. 10, 2014 Suprogrammangumangumangumangumangumangumanguman
Atamelik	(Notary Seal)
Signature of Notary Public	
ADDITIONAL OP	TIONAL INFORMATION
Apprilonation	INTERFECTIONS FOR COMPLETING THIS FORM
A STATE OF THE PROPERTY OF THE	Any acknowledgment completed in California must contain vertiage exactly at
DESCRIPTION OF THE ATTACHED DOCUMENT	properly completed and attached to that accument. The only account of
Assignment of Pertent Right (Title or description of attached document)	document is to be recorded outside of
(Title or description of attached document)	acknowledgment verbiage as may be printed on such a document so long as the
	verbiage does not require the notary to an something that is megaly in
and the second second second sections of the second sections of the second second sections of the section section sections of the section section section sections of the section section section sections of the section section section section sections section s	verbiage does not require the notary to do sometang that is magain. Please check the California (i.e. certifying the authorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required.
(Title or description of attached document continued)	verbiage does not require the notary to as sometime that it insight for Colifornia (i.e. certifying the authorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required.
(Title or description of attached document continued) Number of Pages Document Date	verblage does not require the notary to as sometime that it integrally of the signer). Please check the document carefully for proper notarial wording and attach this form if required. • State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment. Details of notarization must be the date that the signer(s) personally appeared whice
· · · · · · · · · · · · · · · · · · ·	verblage does not require the notary to do sometime that is treggly for Colifornia (i.e. certifying the authorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required. • State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment. • Date of notarization must be the date that the signer(s) personally appeared which the same date the acknowledgment is completed.
· · · · · · · · · · · · · · · · · · ·	verbiage does not require the notary to do someting that stage. Colifornia (i.e. certifying the authorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required. State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment. Date of notarization must be the date that the signer(s) personally appeared whice must also be the same date the acknowledgment is completed. The notary public must print his or her name as it appears within his or her started as the property public).
Number of Pages Document Date	verbiage does not require the notary to do someting that is the document carefully for proper notarial wording and attach this form if required. State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment. Date of notarization must be the date that the signer(s) personally appeared whice must also be the same date the acknowledgment is completed. The notary public must print his or her name as it appears within his or he commission followed by a comma and then your title (notary public). Print the name(s) of document signer(s) who personally appear at the time of
Number of Pages Document Date (Additional information)	verbiage does not require the notary to do someting that it tags. Please check the document carefully for proper notarial wording and attach this form if required. State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment. Date of notarization must be the date that the signer(s) personally appeared whice must also be the same date the acknowledgment is completed. The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public). Print the name(s) of document signer(s) who personally appear at the time contarization. Indicate the correct singular or plural forms by crossing off incorrect forms (i.e., below there, is late,) or circling the correct forms. Failure to correctly indicate this
Number of Pages Document Date (Additional information) CAPACITY CLAIMED BY THE SIGNER Individual (s)	verblage does not require the notary to do coment a thing. Colifornia (i.e. certifying the authorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required. State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment. Date of notarization must be the date that the signer(s) personally appeared whice must also be the same date the acknowledgment is completed. The notary public must print his or her name as it appears within his or her commission followed by a comma and then your little (notary public). Print the name(s) of document signer(s) who personally appear at the time of notarization. Indicate the correct singular or plural forms by crossing off incorrect forms (i.e., she/she/shey, is/are) or circling the correct forms. Failure to correctly indicate the information may lead to rejection of document recording.
Number of Pages Document Date	 verbiage does not require the notary to do donetering that is given. Please check the Colifornia (i.e. certifying the unthorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required. State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment. Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed. The notary public must print his or her name as it appears within his or he commission followed by a comma and then your title (notary public). Print the name(s) of document signer(s) who personally appear at the time of notarization. Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. he/she/shey, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording. The notary seal impression must be clear and photographically reproducible impression must not cover text or lines. If seal impression smudges, re-seal if impression must not cover text or lines. If seal impression smudges, re-seal if
Number of Pages Document Date	 verbiage does not require the notary to do donetering that is given. Please check the Colifornia (i.e. certifying the unthorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required. State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment. Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed. The notary public must print his or her name as it appears within his or he commission followed by a comma and then your title (notary public). Print the name(s) of document signer(s) who personally appear at the time of notarization. Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. he/she/shey, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording. The notary seal impression must be clear and photographically reproducible impression must not cover text or lines. If seal impression smudges, re-seal if impression must not cover text or lines. If seal impression smudges, re-seal if
Number of Pages Document Date	 verbiage does not require the notary to do sometang that is giner). Please check the document carefully for proper notarial wording and attach this form if required. State and County information must be the State and County where the document signer(s) personally appeared before the notary public for scknowledgment. Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed. The notary public must print his or her name as it appears within his or he commission followed by a comma and then your title (notary public). Print the name(s) of document signer(s) who personally appear at the time of notarization. Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. he/she/hey, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording. The notary seal impression must be clear and photographically reproducible impression must not cover text or lines. If seal impression smudges, re-seal if sufficient area permits, otherwise complete a different acknowledgment form. Signature of the notary public must match the signature on file with the office of the country clerk.
Number of Pages Document Date	 verblage does not require the notary to do something that is given. Please check the document carefully for proper notarial wording and attach this form if required. State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment. Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed. The notary public must print his or her name as it appears within his or he commission followed by a comma and then your little (notary public). Print the name(s) of document signer(s) who personally appear at the time of notarization. Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. he/she/hey, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording. The notary seal impression must be clear and photographically reproducible impression must not cover text or lines. If seal impression smudges, re-seal if sufficient area permits, otherwise complete a different acknowledgment form. Signature of the notary public must match the signature on file with the office of the county clerk. Additional information is not required but could help to ensure the county clerk.
Number of Pages Document Date	verbiage does not require the notary to do sometantly must street the Colifornia (i.e. certifying the unthorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required. State and County information must be the State and County where the document signer(s) personally appeared before the notary public for scknowledgment. Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed. The notary public must print his or her name as it appears within his or he commission followed by a comma and then your title (notary public). Print the name(s) of document signer(s) who personally appear at the time of notarization. Indicate the correct singular or plutal forms by crossing off incorrect forms (i.e. he/she/they; is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording. The notary seal impression must be clear and photographically reproducible impression must not cover text or lines. If seal impression smudges, re-seal if sufficient area permits, otherwise complete a different acknowledgment form. Signature of the notary public must match the signature on file with the office of the county clerk. Additional information is not required but could heip to ensure the acknowledgment is not misused or attached to a different document. Additional information has not required but could heip to ensure the acknowledgment is not misused or attached to a different document. Indicate title or type of attached document, number of pages and date.
Number of Pages Document Date	 verblage does not require the notary to do someting that strength. Please check the document carefully for proper notarial wording and attach this form if required. State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment. Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed. The notary public must print his or her name as it appears within his or he commission followed by a comma and then your title (notary public). Print the name(s) of document signer(s) who personally appear at the time contarization. Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. he/she/they; is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording. The notary scal impression must be clear and photographically reproducible impression must not cover text or lines. If seal impression smudges, re-seal if sufficient area permits, otherwise complete a different acknowledgment form. Signature of the notary public must match the signature on file with the office of the county clerk. Additional information is not required but could help to ensure the acknowledgment is not misused or attached to a different document. Indicate title or type of attached document, number of pages and date.

PATENT REEL: 029510 FRAME: 0930

BY ASSIGNEE:	
10 Sec 2012	Je 40 X
Date:	The University of Birmingham Edghaston Or J William B15 2TT Director of Research & Commercial Services
Witnessed by: J. O. J. Commiss.	Financa Office University Of Birmingham
Name: Jonathan Wollans 0	one 10 December 2012
Nome: <u>MKaury , Helauje Kadire</u> D	no 10 December 2012

This Assignment should preferably be signed before (a) a Votary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses. In all cases any formalities of execution required by the by-laws of the assignor company and the state or country having jurisdiction over the assignor, should be observed.