PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4132693

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KENNETH A. JACOBSON	08/30/2012
BHALCHANDRA V. JOSHI	08/29/2012
THATIKONDA SANTHOSH KUMAR	09/08/2012

RECEIVING PARTY DATA

Name:	THE UNITED STATES OF AMERICA,AS REPRESENTED BY THE SECRETARY,DEPARTMENT OF HEALTH AND HUMAN SERVICES	
Street Address:	OFFICE OF TECHNOLOGY TRANSFER, NATIONAL INSTITUTES OF HEALTH 6011 EXECUTIVE BOULEVARD, SUITE 325	
Internal Address:	MSC 7660	
City:	BETHESDA	
State/Country:	MARYLAND	
Postal Code:	20892-7660	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15046630

CORRESPONDENCE DATA

Fax Number: (860)286-0115

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

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 8602862929

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Correspondent Name: CANTOR COLBURN LLP

Address Line 1: 20 CHURCH ST., 22ND FLOOR
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ATTORNEY DOCKET NUMBER:	UCT0170USD2	
NAME OF SUBMITTER:	KAREN A. LECUYER	
SIGNATURE:	/Karen A. LeCuyer/	
DATE SIGNED:	11/08/2016	
This document serves as an Oath/Declaration (37 CFR 1.63).		

Total Attachments: 9

PATENT REEL: 040253 FRAME: 0159

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PATENT REEL: 040253 FRAME: 0160

ASSIGNMENT FOR NIH/FDA INVENTIONS (NIH OR FDA CO-INVENTORS ONLY)

WHEREAS, I/we, Kenneth A. Jacobson of 10 Cambridge Crossing, Avon, Connecticut 06001 and Bhalchandra V. Joshi of 108 Glen View Drive, Madison, Alabama 35758, and Thatikonda Santhosh Kumar of 873 Clopper Rd., Apt. # B4, Gaithersburg, MD 20878, employees of the National Institutes of Health, a component of the United States Department of Health and Human Services having an address at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, MD 20892-7660 ("NIH Inventors"), and

Bruce Liang of 10 Cambridge Crossing, Avon, CT 06001, an employee of the University of Connecticut, USA, having an address at 263 Farmington Avenue- Farmington, Connecticut 06030-6207;

have made certain inventions as described and claimed in the U.S. Patent Application having United States Serial Number 13/031,805, filed February 22, 2011, which claims priority to United States Provisional Application 61/306,687, filed February 22, 2010, and which is entitled "COMPOSITIONS AND METHODS TO TREAT CARDIAC DISEASES" ("U.S. Application") and;

WHEREAS, I/we are the co-applicant(s) named in the above-identified U.S. Application; and

WHEREAS, the inventions described and claimed therein were made under conditions such as to entitle THE UNITED STATES OF AMERICA, as represented by the Secretary, Department of Health and Human Services [hereinafter THE GOVERNMENT] under Executive Order 10096 and its amendments, 35 USC §§200-201, §§206-207, and §210 and 37 CFR Part 501 to the entire right, title, and interest in such inventions; and

WHEREAS, THE GOVERNMENT is desirous of acquiring all domestic and foreign right, title, and interest in the inventions described and claimed in the U.S. Application; and

NOW, THEREFORE, the NIH Inventors having the legal obligation to assign my/our right, title and interest in the inventions described and claimed in the above-identified patent application to THE GOVERNMENT, having a place of business at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, MD 20892-7660 and for consideration, the receipt and sufficiency of which are hereby acknowledged, I/we hereby assign and transfer to THE GOVERNMENT:

the entire right, title, and interest in and to any and all inventions described and claimed in said U.S. Application and any and all Letters Patent which may be granted thereon, and any and all continuations, divisions, reissues or extensions thereof; and

all rights to claim priority on the basis of said U.S. Application including but not limited to applications filed through the provisions of the Patent Cooperation Treaty ("PCT Applications"); and

all applications for Letters Patent that may be filed for any and all inventions described and claimed is said U.S. Application that may be filed in any foreign country and all Letters Patents that may be granted thereon in any foreign country and all extensions, renewals, and reissues thereof; and

any and all such Letters Patents as may be granted in the United States or any foreign country to be held by **THE GOVERNMENT** to the end of the term for which the same would have been held by the inventors had this assignment not been made.

Page 1 of 3

I/we further agree to make, execute, and deliver to THE GOVERNMENT, upon request, any and all papers, documents, affidavits, or other instruments that may be necessary in the prosecution of any application or applications for improvements or reissues of Letters Patent, and to assist THE GOVERNMENT in every way as may be requested in protecting said invention.

IN WITNESS WHEREOF we subscribe our hands and seals on the dates shown below:

Inventor 1:
August 30, 2012 Leanth Question Kenneth & Jacobson
County of Howard ss:
State of recury lanel
Subscribed and sworn to before me this 30 day of August, 2012.
[Seal] Notary Public for Haddy D. Jagne NOTARY PUBLIC My Commission Expires ward-County, Maryland My Commission Expires 9/13/2012

Inventor 2:	
Dete	Dhalabandua V. Jaabi
Date	Bhalchandra V. Joshi
County of	
Ss:	
G0.	
State of	
Subscribed and sworn to before me this	day of
[Seal]	
	Notary Public for
	My Commission Expires:
	My Commission Expires.
Inventor 3:	
myentor J.	
Date	Thatikonda Santhosh Kumar
County of	
Ss:	
State of	
Subscribed and sworn to before me this	day of
Subscribed and sworn to before the this	,
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	Notary Public for
	My Commission Expires:

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Inventor 1:	
Date	Kenneth A. Jacobson
County ofSs:	
3 8.	
State of	
Subscribed and sworn to before me this	s day of
[Sool]	
[Seal]	Notary Public for
	My Commission Expires:

Inventor 2:	
08 29 2012 Bhalchandra-V. Joshi	
County of <u>Madeson</u> Ss: State of <u>Alakama</u>	
Subscribed and sworn to before me this <u>29</u> day of <u>August</u> , <u>2012</u>	
[Seal] Notary Public for Alabama My Commission Expires: PAULETTE TYLER Notary Public, Alabama State At La My Commission Expires December 20,	rge 2014
Inventor 3:	
Date Thatikonda Santhosh Kumar	
County ofSs:	
State of	
Subscribed and sworn to before me this day of,	
[Seal] Notary Public for	
My Commission Expires:	

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Page 1 of 3

ASSIGNMENT Altorney Occket No: E-102-2011/0 UCT0170US2

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IN WITNESS WHEREOF we subscribe our hands and seals on the dates shown below:

Inventor 1:	
Date	Kenneth A. Jacobson
County of	
Ss	:
State of	
Subscribed and sworn to before me	e this day of
[Seal]	
	Notary Public for
	My Commission Expires:
	,

Page 2 of 3

ASSIGNMENT Altorney Docket No: E-102-2011/0 UCT0170US2

Inventor 2:	
,	
Date	Bhalchandra V. Joshi
County of	
Ss:	
State of	
Subscribed and sworn to before me thi	is day of,
[Seal]	
[[]	Matanu Flublia for
	Notary Public for
	My Commission Expires:
Inventor 3:	
1 1	Nas S
09/08/12	A 0000
Date	Thatikonda Santhosh Kumar
County of USA (Middle Sex)	•
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State of MA	0 . 1 /
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