06/27/2017 504433711

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4480412

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
QI AN	06/26/2017
PRAMODSINGH HIRASINGH THAKUR	06/21/2017
KEITH R. MAILE	06/22/2017
BIN MI	06/26/2017
JOHN D. HATLESTAD	06/20/2017

RECEIVING PARTY DATA

Name:	CARDIAC PACEMAKERS, INC.
Street Address:	4100 HAMLINE AVENUE NORTH
City:	ST. PAUL
State/Country:	MINNESOTA
Postal Code:	55112-5798

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15634677

CORRESPONDENCE DATA

Fax Number: (612)339-3061

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: 612-373-6900 Email: uspto@slwip.com

Correspondent Name: SCHWEGMAN LUNDBERG & WOESSNER/BSC

PO BOX 2938 Address Line 1:

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	279.N83US1	
NAME OF SUBMITTER:	KATHLEEN GANNON	
SIGNATURE:	/Kathleen Gannon/	
DATE SIGNED:	O : 06/27/2017	
	This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachmenta, 6	<u>'</u>	

Total Attachments: 6

PATENT REEL: 042829 FRAME: 0690

504433711

PATENT REEL: 042829 FRAME: 0691

Attorney Docket No.: **279.N83US1**

Page 1 of 2

Client Ref No. 16-0140US01

Title: ENERGY EFFICIENT HEART SOUND

DATA COLLECTION

ASSIGNMENT

WHEREAS, I, Qi An, Pramodsingh Hirasingh Thakur, Keith R. Maile, Bin Mi, John D. Hatlestad, have
invented certain new and useful improvements as described in U.S. patent application, entitled ENERGY
EFFICIENT HEART SOUND DATA COLLECTION, the application having been executed on even date herewith
and/or being identified in the United States Patent and Trademark Office ("USPTO") by Application
No. 15/634,677 , filed June 27, 2017 ("Invention"); and

WHEREAS, Cardiac Pacemakers, Inc., a Corporation of the State of Minnesota, and having an address of 4100 Hamline Avenue North, St. Paul, MN 55112-5798 (together with its successors and assigns, the "Assignee"), seeks to memorialize its ownership of the entire right, title and interest in and to the Invention;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I transfer to Assignee my entire right, title, and interest in and to the Invention, including all inventions disclosed or claimed in the above-identified patent application, including any improvements thereof, any corresponding domestic applications (e.g., provisional, non-provisional, divisional, continuation, continuation-in-part, reexamination, and/or reissue patent), any corresponding foreign applications, all patents issuing thereon, or other patent application based off or claiming priority to the above-identified patent application, and all rights and benefits under any applicable treaty or convention. I authorize the USPTO (or foreign equivalent thereof) to issue any patent (or similar legal protection) to the Assignee.

I authorize the Assignee to insert in this instrument the filing date and application number of the application when ascertained. I hereby authorize the Assignee (or its designee) to apply for patent (or similar legal protection) in its own name if desired, in any and all countries.

I represent to the Assignee that I have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I agree when requested, without additional consideration, but at the expense of the Assignee, to provide additional reasonable assistance necessary to memorialize this assignment, to execute all oaths, declarations, assignments, powers of attorney and other papers necessary to perfect and vest title to the rights assigned herein to the Assignee; and will render all assistance in filing, obtaining, maintaining, and enforcing any patent (or similar legal protection) on the Invention in any and all countries.

DECLARATION

I have reviewed and understand the contents of the above-identified patent application including the claims, and I believe I am an original or an original joint inventor of a claimed invention in the above-identified patent application. The above-identified patent application was made or authorized to be made by me. I am aware of and acknowledge my duty to disclose to the USPTO all information known to me to be material to patentability of the claims in the above-identified patent application. I acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

A an	
Qi An	Keith R. Maile
Date 6/26/17	Date

Attorney Docket No.: Page 2 of 2

279.N83US1

Client Ref No. 16-0140US01

Title: ENERGY EFFICIENT HEART SOUND DATA COLLECTION

Aganah	
Pramodsingh Hirasingh Thakur	Bin Mi
Date 6/21/17	Date
John D. Hatlestad	
Date	

PATENT REEL: 042829 FRAME: 0693

Attorney Docket No.: 279.N83US1

Page 1 of 2

Client Ref No. 16-0140US01

Title: ENERGY EFFICIENT HEART SOUND DATA COLLECTION

ASSIGNMENT

WHEREAS, I, Qi An, Pramodsingh Hirasingh Thakur, Keith R. Maile, Bin Mi, John D. Hatlestad, have invented certain new and useful improvements as described in U.S. patent application, entitled ENERGY EFFICIENT HEART SOUND DATA COLLECTION, the application having been executed on even date herewith, and/or being identified in the United States Patent and Trademark Office ("USPTO") by Application No. <u>15/634,677</u>, filed June <u>27, 2017</u> ("Invention"); and

WHEREAS, Cardiac Pacemakers, Inc., a Corporation of the State of Minnesota, and having an address of 4100 Hamline Avenue North, St. Paul, MN 55112-5798 (together with its successors and assigns, the "Assignee"), seeks to memorialize its ownership of the entire right, title and interest in and to the Invention;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I transfer to Assignee my entire right, title, and interest in and to the Invention, including all inventions disclosed or claimed in the above-identified patent application, including any improvements thereof, any corresponding domestic applications (e.g., provisional, non-provisional, divisional, continuation, continuation-in-part, reexamination, and/or reissue patent), any corresponding foreign applications, all patents issuing thereon, or other patent application based off or claiming priority to the above-identified patent application, and all rights and benefits under any applicable treaty or convention. I authorize the USPTO (or foreign equivalent thereof) to issue any patent (or similar legal protection) to the Assignee.

I authorize the Assignee to insert in this instrument the filing date and application number of the application when ascertained. I hereby authorize the Assignee (or its designee) to apply for patent (or similar legal protection) in its own name if desired, in any and all countries.

I represent to the Assignee that I have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I agree when requested, without additional consideration, but at the expense of the Assignee, to provide additional reasonable assistance necessary to memorialize this assignment, to execute all oaths, declarations, assignments, powers of attorney and other papers necessary to perfect and vest title to the rights assigned herein to the Assignee; and will render all assistance in filing, obtaining, maintaining, and enforcing any patent (or similar legal protection) on the Invention in any and all countries.

DECLARATION

I have reviewed and understand the contents of the above-identified patent application including the claims, and I believe I am an original or an original joint inventor of a claimed invention in the above-identified patent application. The above-identified patent application was made or authorized to be made by me. I am aware of and acknowledge my duty to disclose to the USPTO all information known to me to be material to patentability of the claims in the above-identified patent application. I acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

	1CMa7
Qi An	Keith R. Maile
Date	Date (e/27)17

Attorney Docket No.: 279.N83US1

Page 2 of 2

Client Ref No. 16-0140US01

Title: ENERGY EFFICIENT HEART SOUND

DATA COLLECTION

Dromodeingh Hiracingh Thalaur	Bin Mi
Pramodsingh Hirasingh Thakur	DIII IVII
Date	Date
~ 0 ~ 0 ~ 1 ~ 1	

REEL: 042829 FRAME: 0695

Attorney Docket No.: 279.N83US1

Page 1 of 2

Client Ref No. 16-0140US01

Title: ENERGY EFFICIENT HEART SOUND

DATA COLLECTION

<u>ASSIGNMENT</u>	
WHEREAS, I, Qi An, Pramodsingh Hirasingh TI invented certain new and useful improvements as describe EFFICIENT HEART SOUND DATA COLLECTION, the and/or being identified in the United States Patent and Tra No15/634,677, filed _June 27, 2017 ("	e application having been executed on even date herewith, demark Office ("USPTO") by Application
WHEREAS, Cardiac Pacemakers, Inc., a Corpora 4100 Hamline Avenue North, St. Paul, MN 55112-5798 (seeks to memorialize its ownership of the entire right, title	
NOW, THEREFORE, in exchange for good and are hereby acknowledged, I transfer to Assignee my entire all inventions disclosed or claimed in the above-identified any corresponding domestic applications (e.g., provisional in-part, reexamination, and/or reissue patent), any corresponder patent application based off or claiming priority to the benefits under any applicable treaty or convention. I author any patent (or similar legal protection) to the Assignee.	patent application, including any improvements thereof, non-provisional, divisional, continuation, continuation-onding foreign applications, all patents issuing thereon, or ne above-identified patent application, and all rights and
I authorize the Assignee to insert in this instrume when ascertained. I hereby authorize the Assignee (or its oin its own name if desired, in any and all countries.	nt the filing date and application number of the application designee) to apply for patent (or similar legal protection)
I represent to the Assignee that I have not and sha conflicting with this Assignment. I agree when requested the Assignee, to provide additional reasonable assistance r oaths, declarations, assignments, powers of attorney and o assigned herein to the Assignee; and will render all assista patent (or similar legal protection) on the Invention in any	necessary to memorialize this assignment, to execute all ther papers necessary to perfect and vest title to the rights nee in filing, obtaining, maintaining, and enforcing any
<u>DECLARATION</u>	
I have reviewed and understand the contents of the claims, and I believe I am an original or an original joint in patent application. The above-identified patent application of and acknowledge my duty to disclose to the USPTO all of the claims in the above-identified patent application. I adeclaration is punishable under 18 U.S.C. 1001 by fine or	n was made or authorized to be made by me. I am aware information known to me to be material to patentability acknowledge that any willful false statement made in this
Qi An	Keith R. Maile
Date	Date

PATENT REEL: 042829 FRAME: 0696

Attorney Docket No.: 279.N83US1

Page 2 of 2

Client Ref No. 16-0140US01

Title: ENERGY EFFICIENT HEART SOUND

DATA COLLECTION

	Bon
Pramodsingh Hirasingh Thakur	Bin Mi
Date	Date $\frac{6/26}{17}$
John D. Hatlestad	

PATENT REEL: 042829 FRAME: 0697

RECORDED: 06/27/2017