PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5397867

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Albert Selden Benjamin	12/19/2017
Cassandra Ann Svendsen	01/03/2018
Charles Anthony Plowe	02/20/2018
Paul Joseph Robinson	02/21/2018

RECEIVING PARTY DATA

Name:	CARDIO FLOW, INC.	
Street Address:	P.O. BOX 120018	
City:	ST. PAUL	
State/Country:	MINNESOTA	
Postal Code:	55112	

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	16168087
Application Number:	15440402

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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: +1 (612) 638-5763

Email: apsi@fr.com

Correspondent Name: MICHAEL T. HAWKINS
Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	ORNEY DOCKET NUMBER: 37537-0020001_0020002	
NAME OF SUBMITTER: JUDITH A. WITZEL		
SIGNATURE: /Judith A. Witzel/		
DATE SIGNED: 02/28/2019		

Total Attachments: 6

PATENT REEL: 048465 FRAME: 0419



PATENT REEL: 048465 FRAME: 0420

ASSIGNMENT

For valuable consideration, the receipt of which we acknowledge, and intending to be bound legally, we, <u>ALBERT SELDEN BENJAMIN</u>, <u>CASSANDRA ANN PIIPPO SVENDSEN</u>, <u>CHARLES ANTHONY PLOWE</u>, and <u>PAUL JOSEPH ROBINSON</u>, each individually assign to <u>CARDIO FLOW, INC.</u>, a corporation formed under the laws of <u>Delaware</u> and having a principal place of business at <u>P.O. Box 120018</u>, <u>St. Paul, MN 55112</u>, and its successors, transferees, and assignees (collectively the "Assignee"), all of our individual and joint right, title, and interest throughout the world in the subject matter (the "Subject Matter") of a patent application that names us as inventors, is titled "<u>ATHERECTOMY DEVICES AND METHODS</u>," and was filed in the United States Patent and Trademark Office on <u>February 23</u>, 2017, as application <u>15/440,402</u> (the "Application").

This Assignment assigns (a) the Application and all other applications that may be made for, and all patents, utility models, design registrations, and other rights of exclusion and inventors' certificates for, any of the Subject Matter (collectively the "Applications and Granted Rights") in every country or region, (b) the right to claim priority based on and the benefit of the filing date of any of the Applications and Granted Rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other applicable treaties or conventions, and (c) the right to pursue, collect, and retain in the Assignee's name or otherwise, damages and any other remedies arising from any past, present, or future infringement of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment.

We authorize the Assignee to apply for and pursue protection for any or all of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment in all countries, regions, and territories of the world, in our names or in the Assignee's name.

We represent and warrant that we have the right and power to make this Assignment and that we have not made and will not make any other assignment that conflicts with this Assignment.

We will communicate to the Assignee (or at the request of the Assignee to other parties) all known facts in any form relating to the Subject Matter, will execute and provide all oaths and declarations, statements, testimony, assignments, powers of attorney, applications, and documents, and will perform all other lawful acts necessary or desirable to secure fully to the Assignee the rights, titles, and interests assigned by this Assignment.

Date: 12-19-2017

State of Minnesota

County of KUMSEY

This instrument was acknowledged before me on 12/19/2017
Albert Selden Benjamin (name(s) of person(s))

(name(s) of person(s)).

(Signature of notarial officer)

My commission expires:

Assignment Page 2 of 6

Cassandra Anny Piippo Svendsen

Date: 01/03/18

State of Minnesota

County of Minnesota

This instrument was acknowledged before me on MNUAYY3, 2019 by CASSANGIA MIN PIPPA SIMSON name(s) of person(s)).

SYDNEY SYONGSAY

BUTAN PUBLIC MARROTS

AN COMMISSION SCHOOL SOLUTION

(Signature of notarial officery)

Blanch Suparvisor (TOF Barry North)

My commission expires: (1/2)/2022

Charles Anthony Plowe Date: 2-20-2018	
State of Minnesota County of	
This instrument was acknowledged before me on 2/20/2018 by Charles Anthony Plane (name(s) of person(s)).	
(Signature of potatial officer)	
Notary Lublic	
Title (and Rank) My commission expires: 0(-31-2020)	
HEIDI M EGGERSGLUSS Notary Public Minnesota My Commission Expires January 31, 2020	

Paul Joseph Robinson

State of Minnesota
County of 150011

This instrument was acknowledged before me on 21 of Feb 2018 by
Paul 20610(0) (name(s) of person(s)).

(Signature of notarial officer)

Title (and Rank)

My commission expires: \(\supersize 3\)\ \(\frac{2022}{}\)



The Assignee hereby acknowledges and ac	cepts the foregoing assignment.	
Assignee: CARDIO FLOW, INC.		
Signature:	<u> </u>	
Name: Michael Kallok		
Title: Chief Executive Officer		
State of Minnesota County of		
This instrument was acknowledged before me on		
	(Signature of notarial officer)	
JENNIFER L BALDWIN NOTARY PUBLIC - MINNESOTA WY COMMISSION EXPIRES 01/31/2022	(Signature of notarial officer)	
	Nolay	
	Title (and Rank) / My commission expires: 1/31/202 Q	

61443514.doc