

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4499568

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MARWAN ABOUD	09/25/2015
RACHID MAHROUCHE	09/28/2015
TERESA ANN MIHALIK	09/28/2015
GILES DESROCHERS	09/23/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MEDTRONIC CRYOCATH LP
<b>Street Address:</b>	199 BAY STREET, SUITE 5300
<b>City:</b>	TORONTO, ONTARIO
<b>State/Country:</b>	CANADA
<b>Postal Code:</b>	M5L 1B9
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14522045
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(954)828-9122
<i>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.</i>	
<b>Phone:</b>	954-828-1488
<b>Email:</b>	ptomail@cwiplaw.com
<b>Correspondent Name:</b>	JOHN CHRISTOPHER
<b>Address Line 1:</b>	CHRISTOPHER & WEISBERG, P.A.
<b>Address Line 2:</b>	200 EAST LAS OLAS BOULEVARD, SUITE 2040
<b>Address Line 4:</b>	FORT LAUDERDALE, FLORIDA 33301
<b>ATTORNEY DOCKET NUMBER:</b>	21819-194CIP1CON1DIV1CON1
<b>NAME OF SUBMITTER:</b>	JOHN CHRISTOPHER
<b>SIGNATURE:</b>	/John Christopher/
<b>DATE SIGNED:</b>	07/12/2017
<b>Total Attachments: 8</b>	
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**ASSIGNMENT OF APPLICATION**

Whereas I/we, the below named inventor(s), with residence and citizenship as indicated below, have made an invention in

**METHOD AND APPARATUS FOR INFLATING AND DEFLATING BALLOON CATHETERS**

- for which an application for a United States Patent or a U.S. Provisional Application is being filed contemporaneously herewith;
- for which an application for a United States Patent identified as U.S. Patent Application No. **14/522045** ; was filed on **October 23, 2014** ;
- for which an application for a U.S. Provisional Application No. ; was filed on ;
- for which above application claims priority to U.S. Provisional Patent Application No. ; filed on ;
- which application is identified as PCT International Patent Application No. ; filed ;

Whereas, Medtronic CryoCath LP, a corporation organized and existing under the laws of Ontario, Canada and having a principal place of business at 199 Bay Street, Suite 5300, Toronto, Ontario M5L 1B9, hereinafter referred to as "Corporation," is desirous of acquiring the entire right, title and interest in and to said invention for the United States and for all foreign countries and in and to any and all foreign and domestic Letters Patent which may be granted therefore;


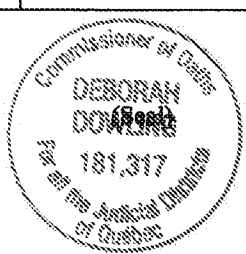
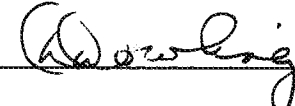
NOW, Therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Corporation, its successors and assigns, the entire right, title and interest in and to said invention and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefore including our rights under the International Convention for the Protection of Industrial Property, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Letters Patent that may be granted, the same to be held and enjoyed by Corporation for its own use and benefit and use and benefit of its successors and assigns to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made, including the right to enforce such Letters Patent as fully and entirely as the same would have been held and enjoyed by the assignors if this assignment had not been made; together with all claims by assignors for damages by reason of past infringement or for provisional rights and including the right to sue for, and collect the same for its own use and benefit, and for the use and benefit of its successors, assigns, and other legal representatives;

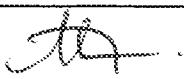

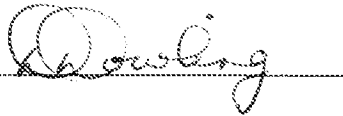
AND, for the consideration aforesaid, we materially represent to Corporation, its successors and assigns, that at the time of the execution and delivery of these presents, we are the sole lawful owners of the entire right, title and interest in and to the invention, application and Letters Patent above mentioned, and that the same are unencumbered, and that we have good right and lawful authority to sell and convey the same in the manner herein set forth;

AND, for the consideration aforesaid, we hereby individually covenant and agree to and with Corporation, its successors and assigns, that whenever its counsel or the counsel of its successors or assigns, learned in the law, shall advise that an amendment or division of, or continuation or any continuation-in-part thereof, or any other proceeding in connection with the filing or prosecution of said domestic or foreign patent applications, including interference proceedings, is lawful and desirable, or that a reissue of extension of said Letters Patent is lawful and desirable, we, or our executors, administrators or assigns will sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for the procurement of valid Letters Patent for said invention, or for the reissue or extension of the same, without charge to Corporation, its successors or assigns, but at Corporation's expense.


I/We do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said Medtronic CryoCath LP, as the assignee of the entire right, title, and interest therein.


In witness whereof, I/we have signed my/our name(s) on the day and year set forth below.

Given Name (first and middle initial [if any]): Marwan		Family Name or Surname (last name): ABBOUD	
Inventor's Signature: 		Date: <u>Sep 25 - 2015</u>	
Residence (City and State): Pierrefonds, Quebec		Country: CA	Citizenship: CA
Solemnly affirmed before me at <u>Pointe-à-Claire, Québec</u> (place) this <u>25<sup>th</sup></u> day of <u>September</u> , 20 <u>15</u> (date)			
			

Given Name (first and middle initial [if any]): Rachid		Family Name or Surname (last name): MAHROUCHE	
Inventor's Signature: 		Date: 2015.09.28	
Residence (City and State): Lasalle, Quebec		Country: CA	Citizenship: CA
Solemnly affirmed before me at <u>Pointe-Claire, Quebec</u> (place) this <u>28<sup>th</sup></u> day of <u>September</u> , 20 <u>15</u> (date)			
			

Given Name (first and middle initial [if any]): Chadi	Family Name or Surname (last name): <b>HARMOUCHE</b>	
Inventor's Signature:	Date:	
Residence (City and State): Montreal, Quebec	Country: CA	Citizenship: CA
Solemnly affirmed before me at _____ (place)		
this ____ day of _____, 20____ (date)		
		(Seal)
_____		

Given Name (first and middle initial [if any]): Teresa Ann		Family Name or Surname (last name): MIHALIK	
Inventor's Signature: <i>Teresa Ann Mihalik</i>		Date: 28 Sept 2015	
Residence (City and State): Montreal, Quebec		Country: CA	Citizenship: CA
Solemnly affirmed before me at <u>Pointe-Claire, Québec</u> (place)			
this <u>28<sup>th</sup></u> day of <u>September</u> , 20 <u>15</u> (date)			
<i>D. Dowling</i>			

Given Name (first and middle initial [if any]): Giles		Family Name or Surname (last name): <b>DESROCHERS</b>	
Inventor's Signature: <i>Arthur Desrochers</i>		Date: <i>23 sept 2015</i>	
Residence (City and State): Beaconsfield, Quebec		Country: CA	Citizenship: CA
Solemnly affirmed before me at <u>Pointe-Claire, Quebec</u> (place)			
this <u>23<sup>rd</sup></u> day of <u>September</u> , 20 <u>15</u> (date)			
<i>Arthur Desrochers</i>			



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**SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)**

Title of Invention	METHOD AND APPARATUS FOR INFLATING AND DEFLATING BALLOON CATHETERS
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This statement is directed to:

The attached application,  
OR  
 United States application or PCT international application number 14/522045 filed on October 23, 2014

**LEGAL NAME of inventor to whom this substitute statement applies:**

(E.g., Given Name (first and middle (if any)) and Family Name or Surname)

**Chadi HARMOUCHE**

Residence (except for a deceased or legally incapacitated inventor):

City <b>St-Laurent</b>	State <b>Quebec</b>	Country <b>Canada</b>
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Mailing Address (except for a deceased or legally incapacitated inventor):

**2735 O'Grady**

City <b>St-Laurent</b>	State <b>Quebec</b>	Zip <b>H4M 2W5</b>	Country <b>Canada</b>
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I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

The above-identified application was made or authorized to be made by me.

I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Relationship to the inventor to whom this substitute statement applies:

- Legal Representative (for deceased or legally incapacitated inventor only),
- Assignee,
- Person to whom the inventor is under an obligation to assign,
- Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or
- Joint Inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- Inventor is deceased,  
 Inventor is under legal incapacity,  
 Inventor cannot be found or reached after diligent effort, or  
 Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

### WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

### PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: **Stephen W. Bauer**Date (Optional): **3-14-2017**

Signature:



### APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

**Medtronic CryoCath LP**

Applicant Name:

Title of Person Executing This Substitute Statement: **Senior Patent Director, Medtronic, Inc.**

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

### Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City: **Stillwater**      State: **MN**      Country: **U.S.A.**

### Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Country: \_\_\_\_\_

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.