PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4014109

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUBHAM GHOSH	05/02/2012
JEFFREY M GILLBERG	05/02/2012
ROBERT W STADLER	05/02/2012

RECEIVING PARTY DATA

Name:	Medtronic, Inc.
Street Address:	710 Medtronic Parkway
Internal Address:	Mail Stop LC340
City:	Minneapolis
State/Country:	MINNESOTA
Postal Code:	55432

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14635498

CORRESPONDENCE DATA

Fax Number: (763)505-2530

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: (763) 526-0932

Email: susan.m.nienaber@medtronic.com

Correspondent Name: CAROL F. BARRY

710 MEDTRONIC PARKWAY Address Line 1:

Address Line 2: MAIL STOP LC340

Address Line 4: MINNEAPOLIS, MINNESOTA 55432

ATTORNEY DOCKET NUMBER:	P0040830.USC9	
NAME OF SUBMITTER:	SUSAN M. NIENABER	
SIGNATURE:	/Susan M. Nienaber/	
DATE SIGNED:	08/19/2016	

Total Attachments: 3

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PATENT REEL: 039480 FRAME: 0219

Attorney Docket No.: P0040830.USU2

ASSIGNMENT OF APPLICATION

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

ASSESSING INTRA-CARDIAC ACTIVATION PATTERNS	
for which an application for a United States Patent is being filed contemporaneously herewith;	,
for which an application for a United States Patent identified as U.S. Patent Application No.;	; was filed on
for which above application claims priority to U.S. Provisional Patent Application No. 61/482,0 2011;	53; filed on May 3,
which application is identified as PCT International Patent Application No.; filed;	
Whereas, Medtronic, Inc., a corporation organized and existing under the laws of the State	of Minnesota and
having a principle place of business at 710 Medtronic Parkway N.E., Minneapolis, Minnesota 554:	
referred to as "Corporation," is desirous of acquiring the entire right, title and interest in and to said	
United States and for all foreign countries and in and to any and all foreign and domestic Latters D	atent which may be

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.

granted therefore:

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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, Inc., 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]):	en Name (first and middle initial [if any]): Family Name or Surname (last name):		
Subham	Subham Ghosh		
Inventor's Signature:		Date: 05/02/20	12
City and State:		Country:	Citizenship:
Circle Pines, Minnesota		USA	IN
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY)	14444444444444444444444444444444444444		
On this day of		hofen manage	
and who executed the foregoing instrument, as sai	d nerson's t	ree act and deed on the day a	nally appeared the above-named,
	-	ice act and deed, on the day a	ind year aforesaid.
(Seal) SUSAN M. NIENABER Notery Public-Minnesota My Commission Stylinas Jan 31, 2015	**************************************	Notary Public	<u> inaber</u>
	·	***************************************	27-22-22-200000000000000000000000000000
Given Name (first and middle initial [if any]): Jeffrey M.	Family N Gillberg	ame or Surname (last name):	
Inventor's Signature:		Date: 05/04/2612	
Residence (City and State): Coon Rapids, Minnesota		Country: USA	Citizenship: US
STATE OF MINNESOTA)			
) ss. COUNTY OF RAMSEY)			
On this Oa day of How above-named,			
and who executed the foregoing instrument, as said person's free act and deed, on the day and year aforesaid.			
(Seal) SUSAN M. NIENABER Succession Superior Sup			

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Given Name (first and middle initial [if any]): Robert W.	Family Name or Surname (last name): Stadler		
Inventor's Signature:	Date: May 2,	ZOIZ	
Residence (City and State):	Country:	Citizenship:	
Shoreview, Minnesota	USA	US	
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY) On this day of d			
(Seal) SUSAN M. NIENABER Notary Public-Minnesota Notary Public Notary Public			

RECORDED: 08/19/2016

Attorney Docket No.: P0040830.USU2

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