504257090 03/06/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4303770

SUBMISSION TYPE:		NEW ASSIGNMEN	NEW ASSIGNMENT				
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT				
CONVEYING PARTY	ΟΑΤΑ						
		Name	Name		te		
SAUL E. GREENHUT							
MICHAEL T. HEMMING	G			04/22/2015			
RECEIVING PARTY D	ΑΤΑ						
Name:	MEDTF	MEDTRONIC, INC.					
Street Address:	710 ME	710 MEDTRONIC PARKWAY NE.					
Internal Address:	MS: LC	MS: LC340 LEGAL PATENTS					
City:	MINNE	MINNEAPOLIS					
State/Country:	MINNE	MINNESOTA					
Postal Code:	55432	55432					
Property Type		Number					
PROPERTY NUMBER	S Total: 1						
Application Number:		15450182					
CORRESPONDENCE DATA Fax Number: (651)		651)367-0471					
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ATTORNEY DOCKET NUMBER:		C00005544.USC3	C00005544.USC3				
NAME OF SUBMITTER	:	MICHAEL J. OSTF	MICHAEL J. OSTROM				
SIGNATURE:		/Michael J. Ostrom	/Michael J. Ostrom/				
DATE SIGNED:		03/06/2017	03/06/2017				
Total Attachments: 2							
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ASSIGNMENT OF APPLICATION(S)

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

METHOD AND APPARATUS FOR DETECTION OF INTRINSIC DEPOLARIZATION FOLLOWING HIGH ENERGY CARDIAC ELECTRICAL STIMULATION

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.; was filed on

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.

which application is identified as PCT International Patent Application No.; filed;

Whereas, <u>Medtronic, Inc.</u>, a corporation organized and existing under the laws of the State of Minnesota and having a principle place of business at <u>710 Medtronic Parkway N.E.</u>, <u>Minneapolis</u>, <u>Minnesota 55432-5604</u>, 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 application(s) identified above and in and to any application claiming benefit thereto 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.

Assignment

Page 1 of 2 Attorney Docket No.: C00005544.USU1 Medtronic, Inc., 710 Medtronic Parkway, Minneapolis, MN 55432

PATENT REEL: 041472 FRAME: 0126

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 se	t forth below.				
Given Name (first and middle initial [if any]):	Family N	ame or Surname (last nam	ie):				
Saul E.	GREEN	HUT					
Inventer a Signature		Date: , / /					
ME heer T		Date: 4/22/15					
City and State:		Country:	Citizenship;				
Aurora, Colorado		US	US				
STATE OF COLORADO							
COUNTY OF CONVCS) SS.							
On this 23th day of ADEN			ersonally appeared the above-named,				
and who executed the foregoing instrument, as said person's free act and deed, on the day and year aforesaid.							
(Seal) KATHLEEN D. CHRISTE	ENSEN {	<u>Rathlan D</u> Notary Public	8				
STATE OF COLORAD	<u>o ě</u>	Millionnesico	n Expires 05/11/2015				
lacaaaaaaaaaaa	nannannannan 18-19-19-19-19-19-19-19-	, ,	,				
Given Name (first and middle initial [if any]): Family Name or Surname (last name):							
Michael T.	HEMM	ING					
Inventor's Signature:		Date: 22April 2	2015				
Residence (City and State):		·····					
g an		Country:	Citizenship:				
Kiowa, Colorado		US	Citizenship: US				
		(···					
Kiowa, Colorado STATE OF COLORADO)		(···					
Kiowa, Colorado STATE OF COLORADO) COUNTY OF DOLOGO		US	US				
Kiowa, Colorado STATE OF COLORADO COUNTY OF DOUCLOS On this SO ^{DD} day of ACCIN	id person's	US, <u>20\5</u> , before me p	US				
Kiowa, Colorado STATE OF COLORADO SS. COUNTY OF DOLOCS On this Solution day of ACCI and who executed the foregoing instrument, as sa	•	US, <u>20\5</u> , before me p	US				
Kiowa, Colorado STATE OF COLORADO COUNTY OF DOUCLOS On this SO ^{DD} day of ACCIN	•	US , <u>2015</u> , before me p free act and deed, on the d	US ersonally appeared the above-named , lay and year aforesaid.				
Kiowa, Colorado STATE OF COLORADO SS. COUNTY OF DOLOCS On this Solution day of ACCI and who executed the foregoing instrument, as sa		US, <u>20\5</u> , before me p	US ersonally appeared the above-named , lay and year aforesaid.				
Kiowa, Colorado STATE OF COLORADO COUNTY OF DUCCE On this Do day of ADD and who executed the foregoing instrument, as sa (Seal) KATHLEEN D. CHRISTED NOTARY PUBLIC	NSEN	US , <u>2015</u> , before me p free act and deed, on the d	US ersonally appeared the above-named , lay and year aforesaid.				
Kiowa, Colorado STATE OF COLORADO COUNTY OF <u>DOCC</u> On this <u>2012</u> day of <u>AOC</u> and who executed the foregoing instrument, as sa (Seal) <u>KATHLEEN D. CHRISTER</u>	NSEN	US , $\frac{2015}{5}$, before me p free act and deed, on the d	US ersonally appeared the above-named , lay and year aforesaid.				

Assignment

Page 2 of 2 Attorney Medtronic, Inc., 710 Medtronic Parkway, Minneapolis, MN 55432

Attorney Docket No.: C00005544.USU1

PATENT REEL: 041472 FRAME: 0127

RECORDED: 03/06/2017