

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Sandra B. Charlton	04/24/2013
Troy E. Jackson	05/01/2013
Benjamin P. Rhodes	05/02/2013
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:	13832202
CORRESPONDENCE DATA	
Fax Number:	6513670471
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	763-526-0938
Email:	carrie.m.arcand@medtronic.com
Correspondent Name:	Michael C. Soldner
Address Line 1:	710 Medtronic Parkway
Address Line 2:	Mail Stop LC340
Address Line 4:	Minneapolis, MINNESOTA 55432
ATTORNEY DOCKET NUMBER:	C00001432.USU2/LG10126
NAME OF SUBMITTER:	Carrie M. Arcand
Signature:	/Carrie M. Arcand/

PATENT

502333992

REEL: 030341 FRAME: 0604

CH \$40.00 13832202

Date:

05/03/2013

Total Attachments: 6

source=C00001432USU2_Assignment#page1.tif

source=C00001432USU2_Assignment#page2.tif

source=C00001432USU2_Assignment#page3.tif

source=C00001432USU2_Assignment#page4.tif

source=C00001432USU2_Assignment#page5.tif

source=C00001432USU2_Assignment#page6.tif

ASSIGNMENT OF APPLICATION(S)

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

**UTILIZATION OF MORPHOLOGY DISCRIMINATION AFTER T-WAVE OVERSENSING
DETERMINATION FOR UNDERLYING RHYTHMS IN THE THERAPY ZONE**

- ☐ 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. 13/832,202; was filed on 03/15/2013;
- ☐ 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, 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 55432-5604, 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;

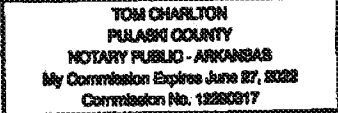

AND, for the consideration aforesaid, we materially represent to Corporation, its successors and assigns, that at the time of the execution and delivery of these presents, we are the sole lawful owners of the entire right, title and interest in and to the invention, application and Letters Patent above 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.

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]): Sandra B.		Family Name or Surname (last name): Charlton	
Inventor's Signature: <i>Sandra B. Charlton</i>		Date: 4/24/2013	
City and State: Little Rock, Arkansas		Country: USA	Citizenship: US
STATE OF ARKANSAS) COUNTY OF <u>PULASKI</u>) ss. On this <u>24TH</u> day of <u>APRIL</u> , <u>2013</u> , before me personally 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)		  Notary Public	

Given Name (first and middle initial [if any]): Troy E.		Family Name or Surname (last name): Jackson	
Inventor's Signature:		Date:	
Residence (City and State): New Brighton, Minnesota		Country: USA	Citizenship: US
STATE OF MINNESOTA) COUNTY OF <u>RAMSEY</u>) ss. On this _____ day of _____, _____, before me personally 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)		_____ Notary Public	

Given Name (first and middle initial [if any]): Benjamin P.		Family Name or Surname (last name): Rhodes	
Inventor's Signature:		Date:	
Residence (City and State): Columbia Heights, Minnesota		Country: USA	Citizenship: US
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY) On this _____ day of _____, before me personally 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) _____ <div style="text-align: right;">Notary Public</div>			

ASSIGNMENT OF APPLICATION(S)

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

**UTILIZATION OF MORPHOLOGY DISCRIMINATION AFTER T-WAVE OVERSENSING
DETERMINATION FOR UNDERLYING RHYTHMS IN THE THERAPY ZONE**

- ☐ 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. **13/832,202**; was filed on **03/15/2013**;
- ☐ 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, 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 55432-5604, 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;

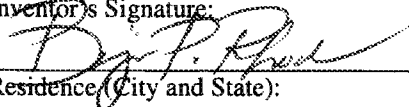


AND, for the consideration aforesaid, we materially represent to Corporation, its successors and assigns, that at the time of the execution and delivery of these presents, we are the sole lawful owners of the entire right, title and interest in and to the invention, application and Letters Patent above 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

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.

Given Name (first and middle initial [if any]): Sandra B.		Family Name or Surname (last name): Charlton	
Inventor's Signature:		Date:	
City and State: Little Rock, Arkansas		Country: USA	Citizenship: US
STATE OF ARKANSAS)) ss. COUNTY OF _____)			
On this _____ day of _____, _____, before me personally 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)		_____ Notary Public	

Assignment

Given Name (first and middle initial [if any]): Benjamin P.		Family Name or Surname (last name): Rhodes	
Inventor's Signature: 		Date: <i>May 2, 2013</i>	
Residence (City and State): Columbia Heights, Minnesota		Country: USA	Citizenship: US
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY) On this <i>2nd</i> day of <i>May</i> , <i>2013</i> , before me personally 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)  CARRIE M. ARCAND Notary Public-Minnesota My Commission Expires Jan 31, 2015		 Notary Public	