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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3474739

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TODD J SHELDON	07/29/2015
WADE M DEMMER	07/29/2015
MARGARET G GUO	08/03/2015

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:	14821047

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) 526-0925

Email: susan.m.nienaber@medtronic.com

Correspondent Name: EVANS M. MBURU

710 MEDTRONIC PARKWAY Address Line 1:

Address Line 2: MAIL STOP LC340

Address Line 4: MINNEAPOLIS, MINNESOTA 55432

NAME OF SUBMITTER:	SUSAN M. NIENABER
SIGNATURE:	/Susan M. Nienaber/
DATE SIGNED:	08/07/2015

Total Attachments: 6

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> PATENT REEL: 036279 FRAME: 0047

Attorney Docket No.: C00005900.USU2

ASSIGNMENT OF APPLICATION(S)

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

SENSING AND ATRIAL-SYNCHRONIZED VENTRICULAR PACING IN AN INTRACARDIAC PACEMAKER

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. XX/XXX,XXX; was filed on XXXX; 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. 62/068,363; filed on October 24, 2014; 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;

Assignment

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 the assignors if this assignment had not been made; together with all claims by assignors for damages by reason of past infringement or for

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;

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 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.

Page 1 of 3 Attorney Docket No.: C00005900.USU2

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.

Todd J.	Sheldon	t name):
Inventor's Signature:	Date: ゴル仏 2	9, 2015
City and State: North Oaks, Minnesota	Country: V USA	Citizenship:
and who executed the foregoing instrument, as sai	before id person's free act and deed, on	me personally appeared the above-named, the day and year aforesaid.
(Seal) SUSAN M. NIENABER Notary Public-Minnesota My Commission Expires Jan 31, 2020	Notary Public	tienaher
Given Name (first and middle initial [if any]):	Family Name or Surname (las	f name)
Wade M.	Demmer	
Inventor's Signature:	Date: 7, 9-,), 1,	- 2.017 Citizenship:
Residence (City and State): Coon Rapids, Minnesota	Country: / USA	Citizenship: US
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY On this day of and who executed the foregoing instrument, as sai	id person's free act and deed, on	me personally appeared the above-named, the day and year aforesaid.
(Seal) SUSAN M. NIENABER Notary Public-Minnesota My Commission Expires Jan 31, 2020 S	Notary Public	<u>Lieraber</u>

Attorney Docket No.: C00005900.USU2

Given Name (first and middle initial [if any]): Margaret G.	Guo Family Name or Surname (last	t name):
Inventor's Signature:	Date:	
Residence (City and State): Cambridge, Massachusetts	Country: USA	Citizenship: US
STATE OF MASSACHUSETTS)) ss. COUNTY OF On this day of and who executed the foregoing instrument, as sa	, before and deed, on	me personally appeared the above-named, the day and year aforesaid.
(Seal)	Notary Public	

Assignment

Page 3 of 3 Medtronic, inc., 710 Medtronic Parkway, Minneapolis, MN 55432

Attorney Docket No.: C00005900.USU2

Attorney Docket No C00005900.USU2

ASSIGNMENT OF APPLICATION(S)

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

SENSING AND ATRIAL-SYNCHRONIZED VENTRICULAR PACING IN AN INTRACARDIAC PACEMAKER 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 XX/XXX,XXX; was filed on XXXX; 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. 62/068,363; filed on October 24, 2014; which application is identified as PCT International Patent Application No.; filed; Whereas, Meditonic, Inc., a corporation organized and existing under the laws of the State of Minnesota and having a principle place of business at 710 Meditonic 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

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

granted therefore;

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Attorney Docket No.: C00005900,USU2

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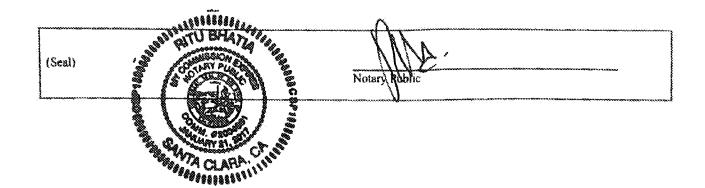
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I/We do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said Medironic, Inc., as the assignee of the entire right, title, and interest therein

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

Todd J.	Family Na Sheldon	une or Surname (i	asi name)
Inventor's Signature		Date	
City and State: North Oaks, Minnesota		Country USA	Citizenship US
STATE OF MINNESOTA)			
COUNTY OF RAMSEY) ss			
On this day of and who executed the foregoing instrument, as s	aid named &	befor	e me personally appeared the abovenamed.
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(Scal)			
		Notary Public	
Given Name (first and middle initial [if any])	Family No	ime or Sutname (1	ast name)
Wade M.	Demmer		
Inventor's Signature		Date:	
Residence (City and State): Coon Rapids, Minnesota		Country: USA	Citizenship. US
STATE OF MINNESOTA)	***************************************		
) \$8.			
COUNTY OF RAMSEY)			
•	aid narean's f	befo	re me personally appeared the abovenamed .
On this day of and who executed the foregoing instrument, as s	aid person's f	, beforee act and deed, o	re me personally appeared the abovenamed ; on the day and year aforesaid.
,	aid person's f		re me personally appeared the abovenamed ; on the day and year aforesaid
On this day of and who executed the foregoing instrument, as s	aid person's f	beforee act and deed, o	re me personally appeared the abovenamed ; on the day and year aforesaid
On this day of and who executed the foregoing instrument, as s		Notary Public	
On thisday of and who executed the foregoing instrument, as s			
On this day of and who executed the foregoing instrument, as s (Seal) Given Name (first and middle initial [if any])	Family No	Notary Public ame or Surname (I	ast name):
On this day of	Family No	Notary Public ame or Surname (I	ast name):
On this day of and who executed the foregoing instrument, as s (Seal) Given Name (first and middle initial [if any]): Margaret G. Inventor's Signature Residence (City and State). Cambridge, Massachusetts	Family No	Notary Public ame or Surname (I Date: 08/03/ Country: USA	ast name):
On this day of	Family No	Notary Public ame or Surname (I Date: 08/03/ Country: USA	ast name):
On this day of and who executed the foregoing instrument, as s (Seal) Given Name (first and middle initial [if any]). Margaret G. Inventor's Signature Residence (City and State). Cambridge, Massachusetts & STATE OF MASSACHUSETTS) CALIFO	Family No	Notary Public The property of the country: USA	ast name): Citizenship: US
On this day of and who executed the foregoing instrument, as s (Seal) Given Name (first and middle initial [if any]): Margaret G. Inventor's Signature Residence (City and State). Cambridge, Massachusetts	Family No Guo	Notary Public The property of the country: USA 2015 before	ast name): Citizenship US re me personally appeared the abovenamed

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Assignment

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