

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Warren L. Starkebaum	09/20/2010
Roland C. Maude-Griffin	09/20/2010
Elizabeth D Firestone	09/20/2010
Carl A. Schu	09/20/2010
Orhan Soykan	09/20/2010
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Medtronic, Inc.
<b>Street Address:</b>	710 Medtronic Parkway
<b>City:</b>	Minneapolis
<b>State/Country:</b>	MINNESOTA
<b>Postal Code:</b>	55432
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	12887149
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(651)735-1102
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
<b>Phone:</b>	651-735-1100
<b>Email:</b>	pairedocketing@ssiplaw.com
<b>Correspondent Name:</b>	SHUMAKER & SIEFFERT , P.A
<b>Address Line 1:</b>	1625 RADIO DRIVE , SUITE 300
<b>Address Line 4:</b>	WOODBURY, MINNESOTA 55125
<b>ATTORNEY DOCKET NUMBER:</b>	1023-890US01
<b>NAME OF SUBMITTER:</b>	Karen D. Sorensen

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**Total Attachments: 7**

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ASSIGNMENT

For valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/We, Warren L. Starkebaum of 4230 Trenton Lane, Plymouth, Minnesota 55442, Roland C. Maude-Griffin of 4306 Branson Street, Edina, Minnesota 55424, Elizabeth D. Firestone of 1298 Laurel Avenue, St. Paul, Minnesota 55104, Carl A. Schu of 4505 Terrace View Lane, Plymouth, Minnesota 55446, and Orhan Soykan of 5255 Oxford Street N., Shoreview, Minnesota 55126 (collectively hereinafter called "the Assignor(s)"), have sold, assigned, transferred and set over, and hereby do sell, assign, transfer and set over to Medtronic, Inc, a corporation existing under the laws of the State of Minnesota and having a place of business at: 710 Medtronic Parkway, Minneapolis, Minnesota 55432, and its successors and assigns (collectively hereinafter called "the Assignee") the entire right, title and interest throughout the world in and to the inventions and improvements which are the subject of an application for United States Patent signed by us, entitled WAVEFORMS FOR ELECTRICAL STIMULATION THERAPY, filed herewith; this assignment including all right, title and interest in said application, any provisional (including but not limited to U.S. provisional application no. 61/244,431, filed September 21, 2009), continuation, continuation-in-part, divisional, reissue, renewal, extension or other applications disclosing any of said inventions or improvements, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and including any rights, including the right to claim priority based on the filing date of any of these applications under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes, the same to be held and enjoyed by the Assignee for its own use and benefit and the use and benefit of its successors and assigns to the full end of the term for which any patents may be granted on such applications, as fully and entirely as the same would have been held and enjoyed by the Assignor(s) had this assignment and sale not been made, including the right to enforce such patents as fully and entirely as the same would have been held and enjoyed by the Assignor(s) if this assignment had not been made, together with all claims by the Assignor(s) for damages by reason of past infringement or for provisional rights and including the right to sue for, and collect the same for the Assignee's own use and benefit, and for the use and benefit of its successors, assigns, and other legal representatives, and the Assignor(s) authorize the Assignee to

apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and the Assignor(s) agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment. For the consideration noted above, the Assignor(s) materially represent to the Assignee, and its successors and assigns, that at the time of the execution and delivery of this assignment, the Assignor(s) are the sole lawful owners of the entire right, title and interest in and to the inventions, improvements, applications and patents above mentioned, and that the same are unencumbered, and that the Assignor(s) have good right and lawful authority to assign, sell and convey the same in the manner herein set forth. For the consideration noted above, the Assignor(s) hereby individually covenant and agree to and with the Assignee, its successors and assigns, that whenever its counsel or the counsel of its successors or assigns 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 or extension of such patents is lawful and desirable, the Assignor(s), or our executors, administrators or assigns will sign all papers and drawings, take all rightful oaths, and do all acts necessary or required for the procurement of valid patents for said inventions, or for the reissue or extension of the same, without charge to the Assignee, its successors or assigns, but at the Assignee's expense. The Assignor(s) do hereby authorize and request the Commissioner of Patents of the United States Patent and Trademark Office to issue any and all patents which may be granted upon any of the said applications, to the Assignee, as the assignee of the entire right, title, and interest therein.

Date: 9/20/2010

Warren L. Starkebaum  
Warren L. Starkebaum

State of Minnesota )  
County of Anoka ) ss:

On this 20<sup>th</sup> day of September, 2010, before me, Juanita I. Traufler Notary Public, personally appeared Warren L. Starkebaum personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to within the instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Juanita I. Traufler  
Signature of Notary Public  
My Commission Expires: Jan. 31, 2015



Date: 9/20/2010

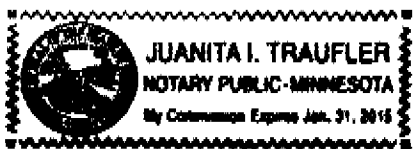
Roland C. Maude-Griffin  
Roland C. Maude-Griffin

State of MINNESOTA )  
County of ANOKA ) ss:

On this 20<sup>th</sup> day of September, 2010, before me, Juanita I. Trautler  
Notary Public, personally appeared Roland C. Maude-Griffin personally known to me (or proved to me  
on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to within the  
instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized  
capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of  
which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Juanita I. Trautler  
Signature of Notary Public  
My Commission Expires: Jan 31, 2015



Date: 20 SEP 2010

Elizabeth D. Firestone  
Elizabeth D. Firestone

State of Minnesota)  
) ss:  
County of Anoka )

On this 20<sup>th</sup> day of September, 2010, before me: Juanita I. Traufler  
Notary Public, personally appeared Elizabeth D. Firestone personally known to me (or proved to me on  
the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to within the  
instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized  
capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of  
which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Juanita I. Traufler  
Signature of Notary Public  
My Commission Expires: Jan. 31, 2015



Date: 20 Sep 2010

Carl A. Schu  
Carl A. Schu

State of Minnesota  
County of Anoka ) ss:

On this 20<sup>th</sup> day of September, 2010, before me, Juanita I. Traufler Notary Public, personally appeared Carl A. Schu personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to within the instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

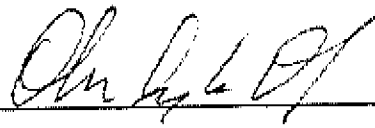
WITNESS my hand and official seal.

Juanita I. Traufler  
Signature of Notary Public  
My Commission Expires: Jan. 31, 2015





Date: 20 SEPT 2010,



Orhan Soykan

State of Minnesota)

) ss:

County of Anoka )

On this 20<sup>th</sup> day of September, 2010, before me, Juanita I. Traufler, Notary Public, personally appeared Orhan Soykan personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to within the instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.



Signature of Notary Public

My Commission Expires: Jan. 31, 2015

