

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
EFFECTIVE DATE:	11/22/2005

CONVEYING PARTY DATA

Name	Execution Date
Mr. Gregory J. Haubrich	11/18/2005
Mr. George C. Rosar	11/18/2005
Mr. Len D. Twetan	11/18/2005
Mr. Quentin S. Denzene	11/18/2005
Mr. David Peichel	11/21/2005
Mr. Charles H. Dudding	11/22/2005

RECEIVING PARTY DATA

Name:	Medtronic, Inc.
Street Address:	710 Medtronic Parkway NE
Internal Address:	LC-340
City:	Minneapolis
State/Country:	MINNESOTA
Postal Code:	55432-5640

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11224593

CORRESPONDENCE DATA

Fax Number: (763)505-2530
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.
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 Email: molly.a.mcclellan@medtronic.com
 Correspondent Name: Michael C. Soldner
 Address Line 1: 710 Medtronic Parkway NE
 Address Line 2: LC-340
 Address Line 4: Minneapolis, MINNESOTA 55432

CH \$40.00 11224593

PATENT

ATTORNEY DOCKET NUMBER:

P22283.00

NAME OF SUBMITTER:

Michael C. Soldner

Total Attachments: 7

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ASSIGNMENT

WHEREAS, WE, Gregory J. Haubrich; Len D. Twetan; David Feichel; Charles H. Dudding; George C. Rosar; and Quentin S. Denzere, are the inventors of COMMUNICATION SYSTEM AND METHOD WITH PREAMBLE ENCODING FOR AN IMPLANTABLE MEDICAL DEVICE, for which an application for a United States Patent was filed on September 12, 2005, under Serial No. 11/224,593; and

WHEREAS, MEDTRONIC, INC. a corporation organized and existing under the laws of the State of Minnesota and having a principal place of business at 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432-5640, 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 therefor;

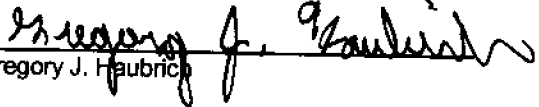
NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Corporation, its successors and assigns, the entire right, title and interest 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 therefor 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 behoof and use and behoof 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, and also hereby authorize Corporation and its employees to fill in the serial number and filing date above after this document has been executed;

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 hereby grant Corporation the right to fill in the serial number and filing date in this document upon their receipt;

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 or 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 hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Corporation in accordance with this instrument.

IN WITNESS WHEREOF, I have hereunto set my hand on this 18TH day of NOV, 2005.

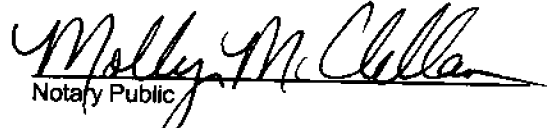

Gregory J. Haubrich

STATE OF MINNESOTA
COUNTY OF ANOKA

On this 18 day of November, 2005, before me personally appeared Gregory J. Haubrich, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.




Notary Public

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Corporation in accordance with this instrument.

IN WITNESS WHEREOF, I have hereunto set my hand on this 18 day of November, 2005.

George C. Rosar
George C. Rosar

STATE OF MINNESOTA

COUNTY OF ANOKA

On this 18 day of November, 2005, before me personally appeared George C. Rosar, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.



Molly McClellan
Notary Public

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Corporation in accordance with this instrument.

IN WITNESS WHEREOF, I have hereunto set my hand on this 18 day of November, 2005.



Len D. Twetan

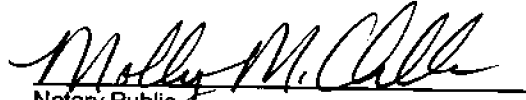
STATE OF MINNESOTA

COUNTY OF ANOKA

On this 18 day of November, 2005, before me personally appeared Len D. Twetan, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.

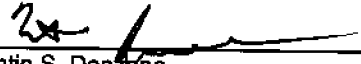




Notary Public

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Corporation in accordance with this instrument.

IN WITNESS WHEREOF, I have hereunto set my hand on this 18 day of NOVEMBER, 2005.



Quentin S. Denzere

STATE OF MINNESOTA
COUNTY OF ANOKA

On this 18 day of November, 2005, before me personally appeared Quentin S. Denzere, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.



Notary Public



I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Corporation in accordance with this instrument.

IN WITNESS WHEREOF, I have hereunto set my hand on this 21 day of November, 2005.

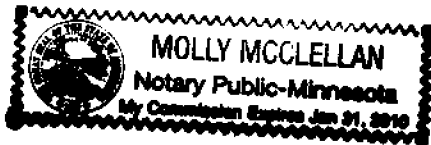


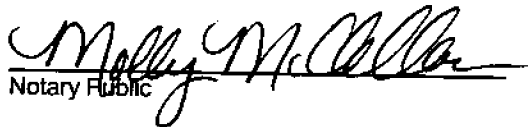
David Peichel

STATE OF MINNESOTA
COUNTY OF ANOKA

On this 21 day of November, 2005, before me personally appeared David Peichel, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.





Notary Public

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Corporation in accordance with this instrument.

IN WITNESS WHEREOF, I have hereunto set my hand on this 22 day of Nov, 2005.

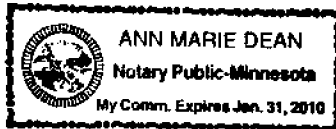
Charles H. Dudding
Charles H. Dudding

STATE OF MINNESOTA

COUNTY OF ANOKA

On this 22nd day of November, 2005, before me personally appeared Charles H. Dudding, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.



AM Dean
Notary Public