#### PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2590957

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
YANZHU ZHAO	10/24/2013
NICHOLAS C. WINE	10/24/2013
JOYCE K. YAMAMOTO	10/24/2013

#### **RECEIVING PARTY DATA**

Name:	MEDTRONIC, INC.
Street Address:	710 MEDTRONIC PARKWAY NE.
City:	MINNEAPOLIS
State/Country:	MINNESOTA
Postal Code:	55432

### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14062923

#### **CORRESPONDENCE DATA**

Fax Number: (651)367-0471 763-526-0929 Phone:

Email: madonna.schroeder@medtronic.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: MICHAEL J. OSTROM

710 MEDTRONIC PARKWAY NE. Address Line 1:

Address Line 2: MAIL STOP MVC22

Address Line 4: MINNEAPOLIS, MINNESOTA 55110

ATTORNEY DOCKET NUMBER:	C00002394.USU2
NAME OF SUBMITTER:	MICHAEL J. OSTROM
Signature:	/Michael J. Ostrom/
	PATENT

REEL: 031474 FRAME: 0937

**PATENT** 

Date:	10/25/2013
Total Attachments: 6 source=C00002394-USU2-Assignment-ALL source=C00002394-USU2-Assignment-ALL source=C00002394-USU2-Assignment-ALL source=C00002394-USU2-Assignment-ALL source=C00002394-USU2-Assignment-ALL source=C00002394-USU2-Assignment-ALL	#page2.tif #page3.tif #page4.tif #page5.tif

PATENT REEL: 031474 FRAME: 0938

Attorney Docket No.: C00002394.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

# IMPLANTABLE MEDICAL DEVICES HAVING HOLLOW CAP COFIRE CERAMIC STRUCTURES AND METHODS OF FABRICATING THE SAME

for which an application for a United States Patent or a U.S. Provisional Application is being filed

K-78	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 ;
$\boxtimes$	for which above application claims priority to U.S. Provisional Patent Application No. 61/888,075; filed on October 8, 2013;
	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

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

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Assignment

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]):	Family Name or Surname (last name):			
Yanzhu	Zhao			
Inventor's Signature:	***************************************	Date:		
		Oct 24.	20/3	
City and State:		Country:	Citizenship:	
Blaine, Minnesota		US	US	
STATE OF MINNESOTA )				
) SS.				
COUNTY OF RAMSEY ) On this Lift day of Other		2018 hafara ma mana	nally appeared the above-named,	
and who executed the foregoing instrument, as sai	id person's fr	ree act and deed, on the day a	nd year aforesaid.	
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🖟 🔆 MADONNA M. SCHROEDER	50	I SANTA	rillia	
(Seal) Notary Public Minnesota	Ž.	Notary Public		
X POSICA Ny Creminia Expert Jac 38, 2018 Similarahanana mpinana amin'ny tanàna amin'ny taona 2018.	À	restary raunc		
Z 17 SEE 14 Mar Commission Explore Jan 31, 2018 Mary See Market Mar	<u> </u>	Notary rathic		
Given Name (first and middle initial [if any]):	Family Na	ame or Surname (last name):		
Given Name (first and middle initial [if any]): Nicholas C.				
Given Name (first and middle initial [if any]): Nicholas C.	Family Na Wine	ame or Surname (last name):  Date:		
Given Name (first and middle initial [if any]): Nicholas C. Inventor's Signature:	Family Na Wine	nme or Surname (last name):  Date:  Octobe: 2	4,03	
Given Name (first and middle initial [if any]): Nicholas C. Inventor's Signature: Residence (City and State):	Family Na Wine	nme or Surname (last name):  Date:  Ocもレシレー 2  Country:	Citizensinp.	
Given Name (first and middle initial [if any]): Nicholas C. Inventor's Signature:	Family Na Wine	nme or Surname (last name):  Date:  Octobe: 2	Citizenship:	
Given Name (first and middle initial [if any]): Nicholas C. Inventor's Signature: Residence (City and State): Minneapolis, Minnesota  STATE OF MINNESOTA )	Family Na Wine	nme or Surname (last name):  Date:  Ocもレシレー 2  Country:	Citizensinp.	
Given Name (first and middle initial [if any]): Nicholas C. Inventor's Signature: Residence (City and State): Minneapolis, Minnesota  STATE OF MINNESOTA )	Family Na Wine	nme or Surname (last name):  Date:  Ocもレシレー 2  Country:	Citizensinp.	
Given Name (first and middle initial [if any]): Nicholas C.  Inventor's Signature: Residence (City and State): Minneapolis, Minnesota  STATE OF MINNESOTA )  SS.  COUNTY OF RAMSEY	Family Na Wine	Date:  October 2  Country: US	US US	
Given Name (first and middle initial [if any]): Nicholas C.  Inventor's Signature:  Residence (City and State): Minneapolis, Minnesota  STATE OF MINNESOTA )  SS.  COUNTY OF RAMSEY ) On this day of	Family Na Wine	Date:  October 2  Country: US	nally appeared the above-named,	
Given Name (first and middle initial [if any]): Nicholas C.  Inventor's Signature: Residence (City and State): Minneapolis, Minnesota  STATE OF MINNESOTA )  SS.  COUNTY OF RAMSEY	Family Na Wine	Date:  October 2  Country: US	nally appeared the above-named,	
Given Name (first and middle initial [if any]): Nicholas C.  Inventor's Signature:  Residence (City and State): Minneapolis, Minnesota  STATE OF MINNESOTA  SS.  COUNTY OF RAMSEY  On this day of and who executed the foregoing instrument, as sa	Family Na Wine	Date:  October 2  Country: US	nally appeared the above-named,	
Given Name (first and middle initial [if any]): Nicholas C.  Inventor's Signature:  Residence (City and State): Minneapolis, Minnesota  STATE OF MINNESOTA )  SS.  COUNTY OF RAMSEY ) On this day of	Family Na Wine	Date:  October 2  Country: US	nally appeared the above-named,	

Given Name (first and middle initial [if any]): Joyce K.	Family Name or Surname (last name): Yamamoto		
Inventor's Signature:	Date:		
Residence (City and State):	Country:	Citizenship:	
Maple Grove, Minnesota	US	US	
STATE OF MINNESOTA )  ) ss.  COUNTY OF			
(Seal)	Notary Public		

Page 3 of 3 Medtronic, Inc., 710 Medtronic Parkway, Minneapolis, MN 55432 Attorney Docket No.: C00002394.USU2

Attorney Docket No.: C00002394.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

## IMPLANTABLE MEDICAL DEVICES HAVING HOLLOW CAP COFIRE CERAMIC STRUCTURES AND METHODS OF FABRICATING THE SAME

$\boxtimes$	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 ;
$\boxtimes$	for which above application claims priority to U.S. Provisional Patent Application No. <b>61/888,075</b> ; filed on <b>October 8, 2013</b> ;
	which application is identified as PCT International Patent Application No.; filed;

Whereas, <u>Medtronic</u>, <u>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

Assignment Page 1 of 3 Attorney Docket No.: C00002394.USU2

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]): Family Name or Surname (last name): Yanzhu Inventor's Signature: Date: City and State: Citizenship: Country: Blaine, Minnesota US US STATE OF MINNESOTA ) SS. COUNTY OF RAMSEY \_, before me personally appeared the above-named, On this day of 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]): Family Name or Surname (last name): Nicholas C. Wine Inventor's Signature: Date: Residence (City and State): Country: Citizenship: Minneapolis, Minnesota US US STATE OF MINNESOTA ) COUNTY OF RAMSEY , 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]):  Joyce K.	Family Name or Surname (last name):  Yamamoto			
Inventor's Signature:		Date: 24 6 42 6 2		
Residence (City and State):  Maple Grove, Minnesota		Country:	Citizenship: US	
STATE OF MINNESOTA )  SS.  COUNTY OF AMOUNTS SS.  On this July day of Amount State of the above-named, and who executed the foregoing instrument, as said person's free act and deed, on the day and year aforesaid.				
(Seal)  LINDA MARIE SKIBA  Notary Public  State of Minnesota  My Commission Expires	or the contract of the contrac	Landa Ma Notary Public	rilslika	

Assignment

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**RECORDED: 10/25/2013**