502705591 03/04/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2752197

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YANZHU ZHAO	01/30/2014
NICHOLAS C WINE	01/24/2014
JOYCE K YAMAMOTO	01/22/2014

RECEIVING PARTY DATA

Name:	MEDTRONIC, INC.
Street Address:	710 MEDTRONIC PARKWAY N.E.
City:	MINNEAPOLIS
State/Country:	MINNESOTA
Postal Code:	55432-5604

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14163483

CORRESPONDENCE DATA

Fax Number: (651)367-0471

Email: epas@thepatentattorneys.com

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

Correspondent Name: MEDTRONIC, INC.

Address Line 1: 710 MEDTRONIC PARKWAY NE
Address Line 4: MINNEAPOLIS, MINNESOTA 55432

ATTORNEY DOCKET NUMBER:	C00002393.USU1
NAME OF SUBMITTER:	DEIDRA D. RITCHERSON
Signature:	/Deidra D. Ritcherson/
Date:	03/04/2014

PATENT 502705591 REEL: 032347 FRAME: 0304

Total Attachments: 9

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PATENT REEL: 032347 FRAME: 0305

Attorney Docket No.: C00002393.USU1/MDTRP101US

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 COFIRE CERAMIC MODULES AND METHODS OF

<u> </u>	FABRICATING THE SAME	***************************************	
\boxtimes	for which an application for a United States Patent or a U.S. Provisional Application is being contemporaneously herewith;	filed	
	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 ;		
	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;		
	3771		

Whereas, <u>Meditronic</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 Meditronic 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

Page 1 of 3 Attorney Docket No.: C00002393.USU1/MDTRP101US Medtronic, Inc., 710 Medtronic Parkway, Minneapolis, MN 55492

Assignment

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 ye	ar set forth	below.
Given Name (first and middle initial [if any]): Yanzhu		mily Name or Surname (last name):		
Inventor's Signature:		Date:	/30 /	20/4
City and State: Blaine, MN		Country: USA		itizenship: N
STATE OF MINNESOTA) SS. COUNTY OF RAMSEY) On this day of the foregoing instrument, is say and who executed the foregoing instrument, is say (Seal)	aid person's i	2014, before free act and deed, on Notary Public	me personall the day and y	y appeared the above-named, year aforesaid.
Given Name (first and middle initial [if any]): Nicholas C.	Family N Wine	ame or Surname (las	t name):	
Inventor's Signature:		Date:		
Residence (City and State): Minneapolis, MN		Country: USA	:	Stizenship: ISA
STATE OF MINNESOTA) on this day of and who executed the foregoing instrument, as so	aid person's	before	me personall	y appeared the above-named , year aforesaid.
(Seal)		Notary Public		

Page 2 of 3 Attorney Docket No.: C00002393,USU1/MDTRP101US Meditronic, Inc., 710 Meditronic Parkway, Minneapolis, MN 55492

Given Name (first and middle initial [if any]): Joyce K.		Family Name or Surname (last name): Yamamoto			
nventor's Signature:		Date:			
Residence (City and State): Maple Grove, MN		Country: USA		Citizenship: USA	
STATE OF MINNESOTA)) ss.					
COUNTY OF RAMSEY)					
On this day of and who executed the foregoing instrument, as sa	aid person's f	,, before ree act and deed, on	me person the day an	ally appeared the above-named, d year aforesaid.	
(Seal)		Notary Public	,,		
Given Name (first and middle initial [if any]):	Family N	ame or Surname (la	st name):		
Inventor's Signature:		Date:			
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COUNTY OF RAMSEY)					
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Given Name (first and middle initial [if any]):	Family N	ame or Surname (la	st name):	······································	
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Residence (City and State):		Country:		Citizenship:	
STATE OF MINNESOTA)			•••••		
) ss. COUNTY OF RAMSEY)					
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Page 3 of 3 Attorney Decket No.: C00002393.USU1/MDTRP101US Medtronic, Inc., 710 Medironic Parkway, Minneapolis, MN 55432

Attorney Docket No.: C00002393,USU1/MDTRP101US

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 COFIRE CERAMIC MODULES AND METHODS OF

FABRICATING THE SAME	
for which an application for a United States Patent or a U.S. Provisional Application is being to contemporaneously herewith;	filed
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 ;	
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, <u>Medtronic</u> , Inc., a corporation organized and existing under the laws of the St having a principle place of business at <u>710 Medtronic Parkway N.E.</u> , <u>Minneapolis</u> , <u>Minnesota 5</u> referred to as "Corporation," is desirous of acquiring the entire right, title and interest in and to United States and for all foreign countries and in and to any and all foreign and domestic Letters.	5432-5604, hereinafter said invention for the

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

Page 1 of 3 Attorney Docket No.: C00002393.USU1/MDTRP101US Meditronic, Inc., 710 Meditronic Parkway, Minneapolis, MN 55432

granted therefore;

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/				th below.
Given Name (first and middle initial [if any]): Yanzhu	Family N Zhao	ame or Surname (last	name):	
Inventor's Signature:	······································	Date:		
City and State: Blaine, MN		Country: USA		Citizenship: CN
STATE OF MINNESOTA) SS. COUNTY OF RAMSEY)				
On this day of and who executed the foregoing instrument, as sa	aid person's	,, before r free act and deed, on t	ne person he day ar	ally appeared the above-named d year aforesaid.
(Seal)		Notary Public		
Given Name (first and middle initial (if any)):		lame or Surname (last	name):	
Nicholas C.	Wine			
Nicholas C. Inventor's Signature:	yyine Le Z	Date: Janu	aly	24,2014
2 × 2	y ine	Date: Javv Country: USA	ary	24, 2014 Citizenship: USA
Inventor's Signature: Residence (City and State):	Leig N	Country: USA , 2014 perfore 1	me persor	Citizenship: USA nally appeared the above-named

Given Name (first and middle initial [if any]): Joyce K.	Family N Yamamo	ily Name or Surname (last name): namoto		
Inventor's Signature:		Date:		
Residence (City and State): Maple Grove, MN		Country: USA	Citizenship: USA	
STATE OF MINNESOTA)			in the second se	
COUNTY OF RAMSEY) ss.				
On this day of		, before me pe	rsonally appeared the above-named,	
and who executed the foregoing instrument, as sa	aid person's	free act and deed, on the da	y and year aforesaid.	
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Given Name (first and middle initial [if any]):	Family N	lame or Surname (last name	s);	
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STATE OF MINNESOTA) ss.				
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Given Name (first and middle initial [if any]):	Family N	Jame or Surname (last nam		
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STATE OF MINNESOTA)				
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(000)		Notary Public		

Assignment

Page 3 of 3 Attorney Docket No.: C00002393.USU1/MDTRP101US Medironic, Inc., 710 Medironic Parkway, Minneapolis, MN 55432

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	for which above application claims priority to U.S. Provisional Patent Application No. ; filed on ;
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refe Uni	Whereas, <u>Medtronic, Inc.</u> , a corporation organized and existing under the laws of the State of Minnesota and ring a principle place of business at <u>710 Medtronic Parkway N.E.</u> , <u>Minneapolis</u> , <u>Minnesota 55432-5604</u> , hereinafter erred to as "Corporation," is desirous of acquiring the entire right, title and interest in and to said invention for the ited States and for all foreign countries and in and to any and all foreign and domestic Letters Patent which may be inted therefore;

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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;

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> Page 1 of 3 Attorney Docket No.: C00002393,USU1/MDTRP101US

Medironic, Inc., 710 Medironic Parkway, Minneapolis, MN 55432

Assignment

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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 Medtronic, Inc., as the assignee of the entire right, title, and interest therein.

In witness whereof, I/we have signed my/						
Given Name (first and middle initial [if any]):		Family Name or Surname (last name):				
Yanzhu	Zhao					
Inventor's Signature:		Date:				
City and State:		Country:	Citizenship:			
Blaine, MN		USA	CN			
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)						
(Canaly		Notary Public				
	<i>~</i>					
Given Name (first and middle initial [if any]): Nicholas C.	Famuly f Wine	Family Name or Surname (last name):				
	Wille					
Inventor's Signature:		Date:				

Residence (City and State):		Country: USA	Citizenship: USA			
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STATE OF MINNESOTA)						
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Given Name (first and middle initial [if any]): Joyce K.	Family N Yamamo	Name or Surname (last name):					
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STATE OF MINNESOTA)		4					
COUNTY OF RAMSEY) ss.							
On this day of the foregoing in formant, as said person's free act and deed, on the day and year aforesaid.							
LINDA MARTE SKIBA Notary Public		1		מי			
State of Minnesota My Commission Expires Jonuary 31, 2014	0	Fordame	vie Sk	ba			
JOHNALL		Notary Public					
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Given Name (first and middle initial [if any]): Family Name or Surname (last name):							
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STATE OF MINNESOTA)) ss.							
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Page 3 of 3 Attorney Docket No.: C00002393.USU1/MDTRP101US Meditronic, Inc., 710 Meditronic Parkway, Minneapolis, MN 55432