PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jamu Alford	01/24/2013
Steven M. Goetz	01/24/2013
Lothar Krinke	01/24/2013
Mark S. Lent	01/23/2013
Erik R. Scott	01/23/2013
Xuan K. Wei	01/23/2013
John D. Welter	01/23/2013

RECEIVING PARTY DATA

Name:	Medtronic, Inc.
Street Address:	710 Medtronic Parkway NE
Internal Address:	LC340
City:	Minneapolis
State/Country:	MINNESOTA
Postal Code:	55432

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13749237

CORRESPONDENCE DATA

Fax Number: 7635268378

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

Phone: 763-505-5000

Correspondent Name: Medtronic Inc. (Neuro)

Address Line 1: 710 Medtronic Parkway NE

Address Line 2: MS: LC340 Legal Patents

Address Line 4: Minneapolis, MINNESOTA 55432

PATENT

REEL: 029688 FRAME: 0763

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ATTORNEY DOCKET NUMBER:	C00004225.USU2/LG10137
NAME OF SUBMITTER:	Beth L. McMahon
Total Attachments: 8 source=EFILEC4225USU2_ASSIGNMENT; source=EFILEC4225USU2_ASSIGNMENT; source=EFILEC4225USU2_ASSIGNMENT; source=EFILEC4225USU2_ASSIGNMENT; source=EFILEC4225USU2_ASSIGNMENT; source=EFILEC4225USU2_ASSIGNMENT; source=EFILEC4225USU2_ASSIGNMENT; source=EFILEC4225USU2_ASSIGNMENT; source=EFILEC4225USU2_ASSIGNMENT;	#page2.tif #page3.tif #page4.tif #page5.tif #page6.tif #page6.tif

PATENT REEL: 029688 FRAME: 0764

Attorney Docket No.: C00004225.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

	ULTRASOUND DIAGNOSTIC AND THERAPY MANAGEMENT SYSTEM AND ASSOCIATED METHOD
\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. 61/692,022; filed on August 22, 2012;
	which application is identified as PCT International Patent Application No.; filed;
refe Un	Whereas, <u>Medtronic, Inc.</u> , a corporation organized and existing under the laws of the State of Minnesota and ing a principle place of business at 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432-5604, hereinafted 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;

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

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Attorney Docket No.:

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

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. Family Name or Surname (last name): Given Name (first and middle initial [if any]): Jama Alford Inventor's Signature: Date: City and State Citizenship: Country: Ham Lake, MN **USA** STATE OF MINNESOTA COUNTY OF ANOKA On this 24^{44} day of $\frac{30/3}{}$, 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. RAMONA SLY **NOTARY PUBLIC** (Seal) MINNESOTA My Commission Expires Jan, 31, 2011 Given Name (first and middle initial (if anyl): Family Name or Surname (last name): Steven M. Gaetz Inventor's Signature: Date: Residence (City and State Country: Citizenship: North Oaks, MN USA US STATE OF MINNESOTA SS. COUNTY OF ANOKA On this 24th 2013, before me personally appeared the above-named, day of said person's free act and deed, on the day and year aforesaid. KARLA K. WEIS NOTARY PUBLIC - MINNESOTA (Seal) MY COMMISSION EXPIRES JANUARY 31, 2015

Given Name (first and middle initial [if any]): Lothar	Family N Krinke	lame or Surname (last n	iame):	
Inventor's Signature:		Date:	***************************************	
Residence (City and State): Eden Prairie, MN		Country: USA		Citizenship: JS
STATE OF MINNESOTA)				
COUNTY OF ANOKA) ss.				
On this day of and who executed the foregoing instrument, as s	aid person's	,, before me free act and deed, on the	e personal e day and	ly appeared the above-named, year aforesaid.
(Seal)		Notary Public		
Given Name (first and middle initial [if any]):	Comily	Name or Surname (last n	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Mark S.	Lent	vame or Surname (rast n	iaine);	
Inventor's Signature:		Date: 1 23 13		
Residence (City and State): Brooklyn Park, MN		Country: USA	2	Citizenship: U S
STATE OF MINNESOTA)		***************************************		
COUNTY OF ANOKA) ss.		_		
On this 23 nd day of January and who executed the foregoing instrument, as s	aid person's	, <u>2013</u> , before m free act and deed, on th	e personal e day and	ly appeared the above-named, year aforesaid.
RAMONA SLY NOTARY PUBLIC Seal) RAMONA SLY NOTARY PUBLIC MINNESOTA	Secret Communication and the communication a	Notary Public	Sly	
My Commission Expires_lan. 31;2	200 S	Notary Public	~	
Given Name (first and middle initial [if any]): Erik R.	Family I	Name or Surname (last r	name):	
Inventor's Signature:		Date: 1/23/20	13	
Residence (City and State): Maple Grove, MN		Country: USA		Citízenship: US
STATE OF MINNESOTA)				
COUNTY OF ANOKA) ss.	m. t. i	1412		
On this 33 day of Januar and who executed the foregoing instrument, as s	said person's	free act and deed, on the	ne personal ne day and	ity appeared the above-named, year aforesaid.
RAMONA SLY NOTARY PUBLIC MINNESOTA My Commission Expires Jan. 31, 29	016	Notary Public	. St	

Given Name (first and middle initial [if any]): Xuan K.	Family N Wei	ame or Surname (last	name):
A CONTRACTOR OF THE CONTRACTOR	44.62	,	· · · · · · · · · · · · · · · · · · ·
Inventor's Signature:		Date:	· · ·
		1/23/20 Country:	15
Residence (City and State):	***************************************	Country:	Citizenship:
Minnetonka, MN		USA	US
STATE OF MINNESOTA)) ss.		·····	
COUNTY OF ANOKA)			
On this 23 nd day of Jauuary		.2013 . before	me personally appeared the above-named,
and who executed the foregoing instrument, as sa	id person's i	free act and deed, on	the day and year aforesaid.
RAMONA SLY NOTARY PUBLIC (Seal) MINNESOTA	***************************************	Jamona	_ Sleg
My Commission Expires Jan. 31, 2018		Notary Public	
Given Name (first and middle initial [if any]):	Family N	ame or Surname (last	t name):
John D.	Welter		
Inventor's Signature:	 	Date:	
John Nelf		1/23/	Lo13 Citizenship:
Residence (City and State):	7		Citizenship:
Plymouth, MN		USA	US
STATE OF MINNESOTA)			
) ss.			
COUNTY OF ANOKA)			
On this 23 rd day of January		2013, before	me personally appeared the above-named,
and who executed the foregoing instrument, as sa	aid person's	free act and deed, on	the day and year aforesaid.
yearn	Story		
RAMONA SLY NOTARY PUBLIC	od de la companya de	A Comment of the Comm	(1 m
(Seal) WINNESOTA	down	Quena	444
My Commission Expires Jan. 31, 20	48}	Notary Public	√ }.

Attorney Docket No.: C00004225.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

	ULTRASOUND DIAGNOSTIC AND THERAPY MANAGEMENT SYSTEM AND ASSOCIATED METHOD
	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;
	for which above application claims priority to U.S. Provisional Patent Application No. 61/692,022; filed on August 22, 2012;
	which application is identified as PCT International Patent Application No.; filed;
refe Uni	Whereas, Medtronic, Inc., a corporation organized and existing under the laws of the State of Minnesota and ing a principle place of business at <u>710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432-5604</u> , hereinafter tred to as "Corporation," is desirous of acquiring the entire right, title and interest in and to said invention for the ted States and for all foreign countries and in and to any and all foreign and domestic Letters Patent which may be need 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

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Attorney Docket No.:

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

PATENT REEL: 029688 FRAME: 0769 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/			
Given Name (first and middle initial [if any]): Jamu	Family N Alford	lame or Surname (la	st name):
Inventor's Signature:		Date:	
City and State: Ham Lake, MN		Country: USA	Citizenship: CA
STATE OF MINNESOTA)) ss. COUNTY OF ANOKA)			
On this day of and who executed the foregoing instrument, as si	aid person's	free act and deed, or	e me personally appeared the above-named, in the day and year aforesaid.
(Seal)		Notary Public	
8.23. XV (2.32. V 1.18. 22. X2. X2.		Y. C. (1)	
Given Name (first and middle initial [if any]): Steven M.	Goetz	Name or Surname (la	st name):
Inventor's Signature:	***************************************	Date:	
Residence (City and State): North Oaks, MN		Country: USA	Citizenship: US
STATE OF MINNESOTA)) ss. COUNTY OF ANOKA)			
On this day of and who executed the foregoing instrument, as s	aid person's	, before free act and deed, or	e me personally appeared the above-named , in the day and year aforesaid.

Given Name (first and middle initial [if any]): Lothar	Family Na Krinke	ime or Surname (last name):	
Inventor's Signature:		Date: 1-24-20	
Residence (City and State): Eden Prairie, MN		Country: USA	Citizenship: US
STATE OF MINNESOTA) SS. COUNTY OF ANOKA) On this 24 day of January and who executed the foregoing instrument, desai JACKIE HALLBERG Notary Public State of Minnesota My Commission Expires January 31, 2015	d person's fi	2013, before me person resect and deed, on the day an Audional Public	a year aforesaid.
Given Name (first and middle initial [if any]): Mark S.	Family Na Lent	ame or Surname (last name):	
Inventor's Signature:		Date:	
Residence (City and State): Brooklyn Park, MN		Country: USA	Citizenship: US
STATE OF MINNESOTA)	id person's f	before me person ree act and deed, on the day an Notary Public	ally appeared the above-named , d year aforesaid.
Given Name (first and middle initial [if any]): Erik R.	Scott	ame or Surname (last name):	
Inventor's Signature:		Date:	
Residence (City and State): Maple Grove, MN		Country: USA	Citizenship: US
STATE OF MINNESOTA)	id person's f	, before me person iree act and deed, on the day an	ually appeared the above-named , ad year aforesaid.
(Seal)		Notary Public	

Assignment

Page 3 of 4 Medtronic, Inc., 710 Medtronic Parkway, Minneapolis, MN 55432 Attorney Docket No.:

Given Name (first and middle initial [if any]): Xnan K.	Family Name or Surnam Wei	e (last name):	
	77.53		
Inventor's Signature:	Date:		
Residence (City and State):	Country:	Citizenship:	
Minnetonka, MN	USA	US	
STATE OF MINNESOTA)) ss. COUNTY OF ANOKA)	,		
On this day of	, b	efore me personally appeared the	above-named,
On thisday of and who executed the foregoing instrument, as sai	d person's free act and dee	d, on the day and year aforesaid.	
(Seal)	 Notary Public		
Given Name (first and middle initial [if any]): John D.	Family Name or Surnam Welter		
	Family Name or Surnar		
John D.	Family Name or Surnam Welter		
John D. Inventor's Signature:	Family Name or Surnam Welter Date:	e (last name):	
John D.	Family Name or Surnam Welter		
John D. Inventor's Signature: Residence (City and State):	Family Name or Surnam Welter Date: Country:	e (last name): Citizenship:	
John D. Inventor's Signature: Residence (City and State): Plymouth, MN STATE OF MINNESOTA)) ss. COUNTY OF ANOKA)	Family Name or Surnam Welter Date: Country: USA	e (last name): Citizenship: US	above-named.
John D. Inventor's Signature: Residence (City and State): Plymouth, MN STATE OF MINNESOTA)) ss.	Family Name or Surnam Welter Date: Country: USA	e (last name): Citizenship: US efore me personally appeared the	above-named,
John D. Inventor's Signature: Residence (City and State): Plymouth, MN STATE OF MINNESOTA) SS. COUNTY OF ANOKA) On this day of	Family Name or Surnam Welter Date: Country: USA	e (last name): Citizenship: US efore me personally appeared the	above-named,
John D. Inventor's Signature: Residence (City and State): Plymouth, MN STATE OF MINNESOTA) SS. COUNTY OF ANOKA) On this day of	Family Name or Surnam Welter Date: Country: USA	e (last name): Citizenship: US efore me personally appeared the	above-named,
John D. Inventor's Signature: Residence (City and State): Plymouth, MN STATE OF MINNESOTA)	Family Name or Surnam Welter Date: Country: USA	e (last name): Citizenship: US efore me personally appeared the od, on the day and year aforesaid.	above-named,

Assignment

Page 4 of 4 Medtronic, Inc., 710 Medtronic Parkway, Minneapolis, MN 55432 Attorney Docket No.: