501794708 01/23/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Patrick A. Helm	01/04/2012
Shuanghe Shi	01/04/2012

RECEIVING PARTY DATA

Name:	Medtronic Navigation, Inc.
Street Address:	826 Coal Creek Circle
City:	Louisville
State/Country:	COLORADO
Postal Code:	80027

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13355929

CORRESPONDENCE DATA

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 (248)641-0270

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 248-641-1600

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Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US

Mail.

Correspondent Name: HARNESS, DICKEY & PIERCE, P.L.C.

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Address Line 4: BLOOMFIELD HILLS, MICHIGAN 48303

ATTORNEY DOCKET NUMBER: 5074A-000132

NAME OF SUBMITTER: Richard W. Warner

Total Attachments: 5

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ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT is made by Patrick A. Helm, residing at 220 Gun Hill St.,

Milton, Massachusetts 02186; and Shuanghe Shi, residing at 6 Bay Path Lane,

Southborough, Massachusetts 01772 (hereinafter referred to as Assignors), respectively;

WHEREAS, Assignors have invented certain new and useful improvements in

Automatic Implant Detection From Image Artifacts, set forth in a Patent application for

Letters Patent of the United States, executed on even date preparatory to filing (each

inventor should sign this Assignment on the same day as he/she signs the Declaration);

and

WHEREAS, Medtronic Navigation, Inc., a Corporation organized under and

pursuant to the laws of Delaware having its principal place of business at 826 Coal Creek

Circle, Coal Creek Corporate Center One, Louisville, Colorado 80027 (hereinafter

referred to as Assignee), is desirous of acquiring the entire right, title and interest in and

to said inventions and said Application for Letters Patent of the United States, and in and

to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which

is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by

these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal

representatives and assigns, the entire right, title and interest in and to the above-

mentioned inventions and application for Letters Patent, and in and to any and all direct

and indirect divisions, continuations and continuations-in-part of said application, and any

and all Letters Patent in the United States and all foreign countries which may be granted

therefore and thereon, and reissues, reexaminations and extensions of said Letters

Patent, and all rights under the International Convention for the Protection of Industrial

Property, including the right to recover for past infringements, the same to be held and

enjoyed by Assignee, for its own use and benefit and the use and benefit of its

successors, legal representatives and assigns, to the full end of the term or terms for

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which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

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AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

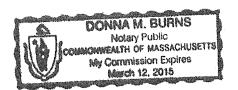
HARNESS, DICKEY & PIERCE, P.L.C.

All practitioners at Customer Number 27572

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

5074A-000132/US

	Patrich Hel
	/ Patrick A. Helm
Date: 1 /4/2012	
United States of America)	
State of MA) ss	\$.;
County of Narfolk)	
On this 4th day of January	, <u>2012</u> , before me
personally came Patrick A. Helm	, to me known to be the individual
described in and who executed the foregoing	instrument, and acknowledged execution
of the same.	Donnam Burns
	Notary Public



	Shigh Sh
	Shuanghe Shi
Date: $1/4/20/2$	
United States of America) State of // A) ss. County of // A) ss.	;
On this 4th day of January personally came Shuanghe Shi	, <u>2012</u> , before me , to me known to be the individual
described in and who executed the foregoing i of the same.	
	Notary Public

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