PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 **EPAS ID: PAT7873946** Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JIASHU LI	10/07/2020
JEFFERY KRAMER	10/07/2020
VINOD SHARMA	10/09/2020

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	18192536

CORRESPONDENCE DATA

Fax Number: (651)735-1102

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

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 6517351100

Email: pairdocketing@ssiplaw.com, rs.patents.five@medtronic.com

SHUMAKER & SIEFFERT, P.A. **Correspondent Name:**

Address Line 1: 1625 RADIO DRIVE

Address Line 2: SUITE 100

Address Line 4: WOODBURY, MINNESOTA 55125

ATTORNEY DOCKET NUMBER:	A0003270US02CON/1123-492U
NAME OF SUBMITTER:	ANGELA D. MALIK LUCK
SIGNATURE:	/Angela D. Malik Luck/
DATE SIGNED:	03/29/2023

Total Attachments: 4

source=A0003270US01_Assignment#page1.tif source=A0003270US01_Assignment#page2.tif source=A0003270US01 Assignment#page3.tif

 $source = A0003270US01_Assignment\#page 4.tif$

ASSIGNMENT OF APPLICATION(S)

WHEREAS I/WE, the below named inventor(s), with residence as indicated below, have made one or more inventions relating to:

	SENSING CARDIAC SIGNALS WITH LEADS IMPLANTED IN EPIDURAL SPACE
\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 U.S. Provisional Application No was filed on;
	for which the above application claims the benefit of U.S. Provisional Patent Application No, filed on; and/or
	for which an application identified as PCT International Patent Application No was filed on
her	d for which I/WE hereby authorize the below identified ASSIGNEE and its successors, representatives and assigns to eafter insert the application number and/or filing date of the above-identified application(s) after such information omes known to them).

WHEREAS, Medtronic, Inc. ("ASSIGNEE"), a corporation organized and existing under the laws of the State of Minnesota and having a principal place of business at 710 Medtronic Parkway NE., Minneapolis, Minnesota 55432-5604, desires to acquire the entire right, title and interest throughout the world in and to said inventions, including the entire right, title and interest in and to the application(s) identified above and all other patent applications filed for the inventions, and in and to all patents throughout the world that have granted or may be granted hereafter for the inventions, including but not limited to patents granted or based on any application(s) identified above or any other patent applications for the inventions, and including any and all rights of priority in the application(s) identified above and any other patent applications for the inventions;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/WE do hereby acknowledge that I/WE have sold, assigned, and transferred and set over and by these presents do sell, assign, transfer and set over unto ASSIGNEE, and its successors, representatives and assigns, the entire right, title and interest throughout the world in and to the inventions, including the entire-right, title and interest in and to all applications that have been filed or may be filed in the United States and all organizations for the invention(s), including the application(s) identified above and all other applications for the invention(s), all applications claiming benefit or priority to the application(s) identified above, and all divisional, continuation, continuation-in-part, substitute, renewal, reissue, re-examinations, provisional, non-provisional, and all other applications for patent which have been or shall be filed in the United States and all foreign countries for the inventions; including the entire right, title and interest in and to all original and reissued or re-examined patents which have been or shall be issued in the United States and all foreign countries for the inventions, including all patents granted on or based on the application(s) identified above or any of the other foregoing applications, and including any utility models, design registrations, inventor's certificates or other like rights of exclusion granted for the inventions; and specifically including any and all rights of priority in the inventions and the application(s) identified above and any of the other foregoing applications, including the right to file the application(s) identified above and any of the other foregoing applications, and the right to claim the priority of the application(s) identified above and any of the other foregoing applications under the International Convention for the Protection for Industrial Property, or any other conventions, treaties, laws or agreements of like purposes; and including the right to enforce and sue for past, present and future infringement of any patents issuing from or based on the application(s) identified above or any of the other foregoing applications for the full term of such patents, all such rights to be held and enjoyed by ASSIGNEE and its successors, representatives, and assigns, for its own use and benefit to the

full end of the term for which any of the U.S. parents, foreign patents, unlity models, design registrations, inventor's certificates, or like rights of exclusion are granted.

AND I'W: materially represent to ASSIGNEE, its successors, representatives, and assigns, that I'WE are the sole perful owners of the entire unencumbered right, table and interest in and to said inventions, and that I WE have good right and leaded authority to sell and convey the same in the manner becomes forth, and hereby covernant that I WE have not and will not execute any writing or do any act whatsever conflicting with these presents.

AND I WE individually covered and agree that when requested and at the approach ASSIGNEE, it is successed approached assigns, but at no charge to ASSIGNEE, will it execute all discussed continuous and assigns, but at no charge to ASSIGNEE, will it execute all discussed continuous and assigns approached based on each own to the property of the property and other papers and assigns as and assigns as as a policy and as a policy and assigns as a continuous and assigns as a policy as a continuous assigns as a continuous assigns as a continuous as a continuous assigns as a continuous assigns as a continuous assigns as a continuous assigns as a continuous and assigns as a continuous as a

AND I Will do be chy ell, assign to elegand convert to ASSIGNED to account of the control and assigned for Control and all remotes aroung our arranged on a control and all the control and account of the date of assignment and assigned for the control and account of the control acc

In water where I Milliam control are on the decided and the later

ANNU.	
	100
Manual Park MA	

Given Name (first and middle initial [if any]): Jeffery	Family Name or Surname (last name): Kramer
Inventor's Signature:	Date: 700m000ペー 2020
City and State: Minneapolis, MN	Country: USA

Given Name (first and middle initial [if any]): Vinod	Family Name or Surname (last name): Sharma
Inventor's Signature: Vinod Sharma	Date: October 9, 2020
City and State: Maple Grove, MN	Country: USA

RECORDED: 03/29/2023