

<b>PATENT ASSIGNMENT COVER SHEET</b>
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 Stylesheet Version v1.2

EPAS ID: PAT6254149

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MICHAEL GLOSS	04/10/2017
PATRICK GRIFFIN	03/29/2017
JEFFREY SANDSTROM	03/28/2017
DAVID O'TOOLE	03/28/2017
RISHI MANDA	03/29/2017
NIALL DUFFY	04/03/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MEDTRONIC, INC.
<b>Street Address:</b>	710 MEDTRONIC PARKWAY
<b>City:</b>	MINNEAPOLIS
<b>State/Country:</b>	MINNESOTA
<b>Postal Code:</b>	55432
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16995351
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(707)543-5420
<i>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.</i>	
<b>Phone:</b>	707-566-1375
<b>Email:</b>	rs.vasciption@medtronic.com
<b>Correspondent Name:</b>	MEDTRONIC VASCULAR, INC. IP LEGAL DEPART
<b>Address Line 1:</b>	3576 UNOCAL PLACE
<b>Address Line 4:</b>	SANTA ROSA, CALIFORNIA 95403
<b>ATTORNEY DOCKET NUMBER:</b>	C00014612US01DIV
<b>NAME OF SUBMITTER:</b>	STEPHANIE M. KWONG
<b>SIGNATURE:</b>	/Stephanie M. Kwong/
<b>DATE SIGNED:</b>	08/17/2020
<b>Total Attachments: 8</b>	

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ASSIGNMENT

WHEREAS we, the below named inventor(s), **MICHAEL GLOSS; PATRICK GRIFFIN; JEFFREY SANDSTROM; DAVID O'TOOLE; and RISHI MANDRA**, have made an invention in

<b>TENSION MEMBER ROUTING DESIGNS TO ACHIEVE TRANSCATHETER STENTED PROSTHESIS COMPRESSION</b>
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for which a U.S. Provisional Application No. **62/477,516**, was filed on **March 28, 2017** ;

WHEREAS, **MEDTRONIC, INC.**, a Minnesota corporation having a place of business at 710 Medtronic Parkway, Minneapolis, MN 55432 hereinafter referred to as "ASSIGNEE," 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 therefor;


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 ASSIGNEE, 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 therefor 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 ASSIGNEE 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 us 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 ASSIGNEE, 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 ASSIGNEE, 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 is lawful and desirable, or that a reissue or 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 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 ASSIGNEE, its successors or assigns, but at ASSIGNEE'S expense.

We hereby authorize and request the Honorable Commissioner of Patents to issue any and all Letters Patent to ASSIGNEE in accordance with this instrument.

IN WITNESS WHEREOF, we have signed our name(s) below on this 10 day of April, 2017.

  
\_\_\_\_\_  
MICHAEL GLOSS

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
PATRICK GRIFFIN

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
JEFFREY SANDSTROM

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
DAVID O'TOOLE

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
RISHI MANDRA

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
MICHAEL GLOSS

IN WITNESS WHEREOF, we have signed our name(s) below on this 29 day of Mar, 2017.

  
\_\_\_\_\_  
PATRICK GRIFFIN

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
JEFFREY SANDSTROM

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
DAVID O'TOOLE

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
RISHI MANDRA

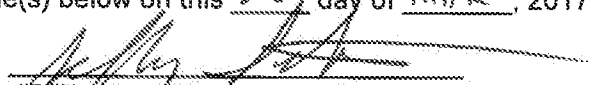
IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
**MICHAEL GLOSS**

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
**PATRICK GRIFFIN**

IN WITNESS WHEREOF, we have signed our name(s) below on this 28 day of MAR, 2017.

  
\_\_\_\_\_  
**JEFFREY SANDSTROM**

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
**DAVID O'TOOLE**

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
**RISHI MANDRA**

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
MICHAEL GLOSS

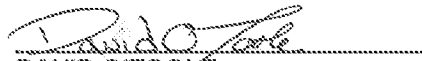
IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
PATRICK GRIFFIN

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
JEFFREY SANDSTROM

IN WITNESS WHEREOF, we have signed our name(s) below on this 26<sup>th</sup> day of MARCH, 2017.

  
\_\_\_\_\_  
DAVID O'TOOLE

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
RISHI MANDRA

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
MICHAEL GLOSS

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
PATRICK GRIFFIN

IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
JEFFREY SANDSTROM

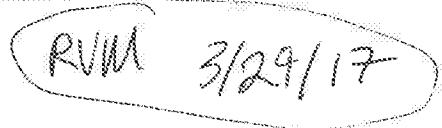
IN WITNESS WHEREOF, we have signed our name(s) below on this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
DAVID O'TOOLE

IN WITNESS WHEREOF, we have signed our name(s) below on this 29 day of March, 2017.

  
\_\_\_\_\_  
RISHI MANDRA

MANDA





## ASSIGNMENT

WHEREAS I/we, the below named inventor(s), **Niall DUFFY**, has made an invention in

**TIP ASSEMBLIES, SYSTEMS, AND METHODS FOR FRACTURING A FRAME OF A  
DEPLOYED VALVE PROSTHESIS**

- for which an application for a United States Patent or a U.S. Provisional Application is being filed contemporaneously herewith;
- for which a U.S. Provisional Application No. \_\_\_\_\_, was filed on \_\_\_\_\_;
- for which an application for a United States Patent identified as U.S. Patent Application No. **15/938,576**, was filed on **March 28, 2018**;
- 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 \_\_\_\_\_; and

WHEREAS, **MEDTRONIC, INC.** a corporation organized and existing under the laws of the State of Minnesota and having a principal place of business at 710 Medtronic Parkway, Minneapolis, Minnesota 55432, 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 therefor;

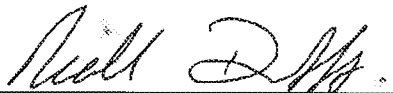
NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/we have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto ASSIGNEE, its successors and assigns, the entire right, title and interest 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 therefor 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 ASSIGNEE 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 us 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 ASSIGNEE, its successors and assigns, that at the time of the execution and delivery of these presents, I/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 I/we have good right and lawful authority to sell and convey the same in the manner herein set forth;

AND, for the consideration aforesaid, I/we hereby individually covenant and agree to and with ASSIGNEE, 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 is lawful and desirable, or that a reissue or extension of said Letters Patent is lawful and desirable, I/we, or our 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 ASSIGNEE, its successors or assigns, but at ASSIGNEE'S expense.

I/we hereby authorize and request the Honorable Commissioner of Patents to issue any and all Letters Patent to ASSIGNEE in accordance with this instrument.

IN WITNESS WHEREOF, I have signed our name(s) below on this 3<sup>rd</sup> day of April, 2018.

  
\_\_\_\_\_  
Niall DUFFY