

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7254358

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZACHARY LEE HELGESON	11/13/2014
ALEXANDER CARSON HOUCK	11/06/2014
JOHN SON HER	12/10/2014
SALOME A GONZALEZ	11/18/2014
SOMALLY MOM	11/18/2014
BRIAN MICHAEL MONAHAN	12/03/2014
NEIL DAVID HAWKINSON	11/13/2014
JAMES REGINALD NIGG	11/06/2014
JAMES CLAYTON MARRS	11/13/2014
XUAN YEN KHIEU	11/13/2014
TROY TERRANCE TEGG	01/12/2015
JILL LAFAVOR	11/05/2014
ISRAEL A. BYRD	08/11/2016

RECEIVING PARTY DATA

Name:	ST. JUDE MEDICAL, CARDIOLOGY DIVISION, INC.
Street Address:	177 EAST COUNTY ROAD B
City:	ST. PAUL
State/Country:	MINNESOTA
Postal Code:	55117

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17338354

CORRESPONDENCE DATA

Fax Number:

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: 2246682839
 Email: rosario.guadarrama@abbott.com
 Correspondent Name: KATHERINE J. RAHLIN
 Address Line 1: 5050 NATHAN LANE N.

PATENT

Address Line 4: PLYMOUTH, MINNESOTA 55442

ATTORNEY DOCKET NUMBER: CD-854USC1

NAME OF SUBMITTER: ROSARIO GUADARRAMA

SIGNATURE: /Rosario Guadarrama/

DATE SIGNED: 03/30/2022

Total Attachments: 38

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ASSIGNMENT

WHEREAS, WE, Zachary Lee Helgeson of 2106 35th Street E. Minneapolis, Minnesota 55407, United States of America; Alexander Carson Houck of 229 13th Avenue N., Hopkins, Minnesota 55343, United States of America; John Son Her of 6724 Adair Avenue North, Brooklyn Park, Minnesota 55429, United States of America; Salome A. Gonzalez of 13301 Maple Knoll Way #1610, Maple Grove, Minnesota 55369, United States of America; Somally Mom of 6155 140th Street W., Savage, Minnesota 55378, United States of America; Brian Michael Monahan of 12488 194th Lane NW., Elk River, Minnesota 55330, United States of America; Neil David Hawkinson of 7334 149th Avenue, Ramsey, Minnesota 55303, United States of America; James Reginald Nigg of 9249 97th Street SW., Howard Lake, Minnesota 55349, United States of America; James Clayton Marrs of 1748 Chatham Avenue, Arden Hills, Minnesota 55112, United States of America; Xuan Yen Khieu of 7300 Inland Lane North, Maple Grove, Minnesota 55311, United States of America; Troy Terrance Tegg of 19307 Baldwin Street, Elk River, Minnesota 55330, United States of America; and Jill LaFavor of 16700 Seymour Drive, Minnetonka, Minnesota 55345, United States of America, hereinafter ASSIGNORS, have invented certain new and useful improvements in elongate medical device including chamfered ring electrode and variable shaft, for which United States provisional patent application number 61/936,677 was filed on 06 February 2014;

AND WHEREAS St. Jude Medical, Cardiology Division, Inc., a corporation organized and existing under the laws of Delaware, and having a business address at 177 East County Road B, St. Paul, MN 55117, hereinafter ASSIGNEE, is desirous of acquiring the entire right, title, and interest in, to, and under said invention, said application, and any and all patents to be obtained therefore throughout the world;


NOW, THEREFORE, for and in consideration of good and valuable consideration to us in hand paid by ASSIGNEE, the receipt of which is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do hereby sell, assign, and transfer unto ASSIGNEE, its successors and assigns, our entire right, title, and interest in and to said invention, said application, all divisions, continuations, continuations-in-part, reissues, or renewals thereof, and said patents, both foreign and domestic, that may or shall issue, including all of our entire rights under any and all international conventions;

AND WE HEREBY authorize ASSIGNEE, its successors and assigns, or anyone it may properly designate, to apply for patents, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of said United States application and otherwise take advantage of the provisions of any and all international conventions;

AND WE HEREBY authorize and request any official of any State whose duty consists of issuing patents, or other evidence or forms of any industrial property protection on any aforesaid application, to issue same to ASSIGNEE, its successors and assigns, in accordance herewith;

AND WE HEREBY covenant and agree with ASSIGNEE, its successors and assigns, that we have the full right to convey the entire interest assigned herein, and that we have not

Assignors' Initials

AH / XK / JLM / NH / SM / SA / BMM / TT / 

executed, and will not execute, any agreement in conflict herewith, and that we will not do any other act whatsoever conflicting with these presents, and that we or our successors, assigns, executors, or administrators will at any time upon request, without further or additional consideration, but at the expense of ASSIGNEE, its successors and assigns, communicate to ASSIGNEE, its successors and assigns, any facts known to ASSIGNORS respecting said invention, and testify in any legal proceedings, sign any lawful papers, execute any original, divisional, continuation, and continuation-in-part applications, make any rightful oaths or declarations, and generally do such additional acts as ASSIGNEE, its successors and assigns, may deem necessary or desirable to obtain and enforce proper protection for said invention throughout the world;


AND WE HEREBY FURTHER covenant and agree that this Assignment is effective as of 06 February 2014.

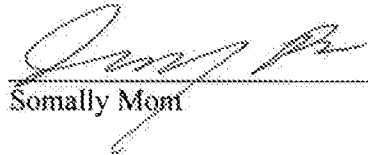
IN TESTIMONY WHEREOF, ASSIGNORS hereunto set their hands on the under-mentioned date, and deliver this Assignment.

Date: _____
Zachary Lee Helgeson

Date: 06 Nov 2014 
Alexander Carson Houck


Date: _____
John Son Her

Date: 11-18-14 
Salome A. Gonzalez

Date: 11-18-14 
Somally Mom

Date: 12-3-14 
Brian Michael Monahan

Assignors' Initials

AH / XK / JCM / NH / SM / SA / BMM / TT / 

Date: 13 NOV 2014

Neil David Hawkinson
Neil David Hawkinson

Date: _____

James Reginald Nigg

Date: 13 Nov 2014

James Clayton Marris
James Clayton Marris

Date: 12 Nov 2014

Xuan Yen Khieu
Xuan Yen Khieu

Date: 1/12/2015

Troy Terrance Tegg
Troy Terrance Tegg

Date: 05 NOV 2014

Jill LaFavor
Jill LaFavor

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Zachary Lee Helgeson, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

(Commission Expiry Date)

(Notary Public: Signature and Name)

SEAL

Assignors' Initials

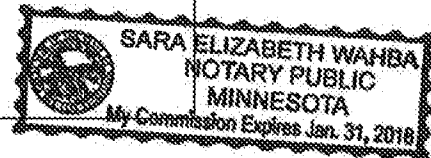
AH / XK / JCM / NH / SM / EA / DMW / TT / *JL*

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Alexander Carson Houck, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

11-6-2014 Hennepin / Plymouth / Minnesota
(Date) (County/City/State)

1-31-2018 Sara Wahba
(Commission Expiry Date) (Notary Public: Signature and Name)

SEAL



TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared John Son Her, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date) (County/City/State)

(Commission Expiry Date) (Notary Public: Signature and Name)

SEAL

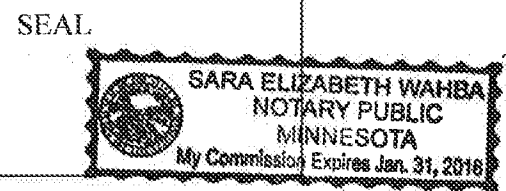
Assignors' Initials

AH / XK / JCM / AH / SH / SA / BMW TT / [Signature]

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Salome A. Gonzalez, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

11-18-2014 Hennepin / Plymouth / Minnesota
(Date) (County/City/State)

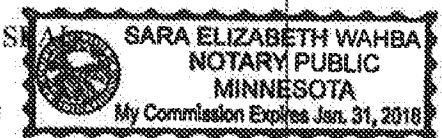
1-31-2018 Sara Wahba
(Commission Expiry Date) (Notary Public: Signature and Name)



TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Somally Mom, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

11-18-2014 Hennepin / Plymouth / Minnesota
(Date) (County/City/State)

1-31-2018 Sara Wahba
(Commission Expiry Date) (Notary Public: Signature and Name)



Assignors' Initials
AH / XK / ACM / NH / SM / SA / BM / TT / [Signature]

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Brian Michael Monahan, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.


12-3-2014 Hennepin / Plymouth / Minnesota
(Date) (County/City/State)

1-31-2018 Sara Wahba SEAL
(Commission Expiry Date) (Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Neil David Hawkinson, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

1-13-2014 Hennepin / Plymouth / Minnesota
(Date) (County/City/State)

1-31-2018 Sara Wahba SEAL
(Commission Expiry Date) (Notary Public: Signature and Name)



Assignors' Initials

AH / XR / JM / NH / SM / GA / BM / TT / JJ

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared James Reginald Nigg, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared James Clayton Marrs, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)



SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

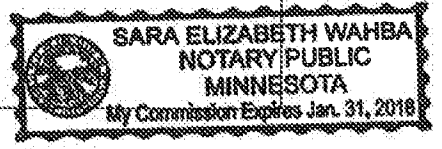
AH / XK / JCM / NH / SM / SA / DMN / TT / [Signature]

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Xuan Yen Khieu, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

11-12-2014 Hennepin / Plymouth / Minnesota
(Date) (County/City/State)

1-31-2018 Sara Wahba
(Commission Expiry Date) (Notary Public: Signature and Name)

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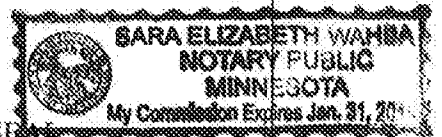


TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Troy Terrance Tegg, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

1-12-2015 Hennepin / Plymouth / Minnesota
(Date) (County/City/State)

1-31-2018 Sara Wahba
(Commission Expiry Date) (Notary Public: Signature and Name)

SEAL



Assignors' Initials

AH / XK / CM / WH / SM / SA / DM / TT / [Signature]

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Jill LaFavor, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that she executed the same in her authorized capacity and acknowledged that execution of the same was a free will act and deed.

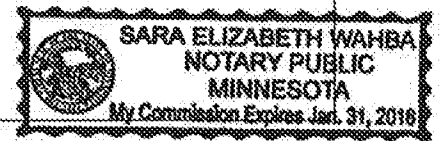
11/5/2014
(Date)

Hennepin / Plymouth / Minnesota
(County/City/State)

1-31-2018
(Commission Expiry Date)

Sara Wahba
(Notary Public: Signature and Name)

SEAL



Assignors' Initials

AH / XIC / JCM / NH / SM / SA / BAW / TT / g

ASSIGNMENT

7432 Elliot Ave. So. Richfield Minnesota

ZLH
06/Nov/14

55423

WHEREAS, WE, Zachary Lee Helgeson of ~~2106 35th Street E. Minneapolis, Minnesota~~ ~~55407~~, United States of America; Alexander Carson Houck of 229 13th Avenue N., Hopkins, Minnesota 55343, United States of America; John Son Her of 6724 Adair Avenue North, Brooklyn Park, Minnesota 55429, United States of America; Salome A. Gonzalez of 13301 Maple Knoll Way #1610, Maple Grove, Minnesota 55369, United States of America; Somally Morn of 6155 140th Street W., Savage, Minnesota 55378, United States of America; Brian Michael Monahan of 12488 194th Lane NW., Elk River, Minnesota 55330, United States of America; Neil David Hawkinson of 7334 149th Avenue, Ramsey, Minnesota 55303, United States of America; James Reginald Nigg of 9249 97th Street SW., Howard Lake, Minnesota 55349, United States of America; James Clayton Marrs of 1748 Chatham Avenue, Arden Hills, Minnesota 55112, United States of Amrica; Xuan Yen Khieu of 7300 Inland Lane North, Maple Grove, Minnesota 55311, United States of America; Troy Terrance Tegg of 19307 Baldwin Street, Elk River, Minnesota 55330, United States of America; and Jill LaFavor of 16700 Seymour Drive, Minnetonka, Minnesota 55345, United States of America, hereinafter ASSIGNORS, have invented certain new and useful improvements in elongate medical device including chamfered ring electrode and variable shaft, for which United States provisional patent application number 61/936,677 was filed on 06 February 2014;

AND WHEREAS St. Jude Medical, Cardiology Division, Inc., a corporation organized and existing under the laws of Delaware, and having a business address at 177 East County Road B, St. Paul, MN 55117, hereinafter ASSIGNEE, is desirous of acquiring the entire right, title, and interest in, to, and under said invention, said application, and any and all patents to be obtained therefore throughout the world;

NOW, THEREFORE, for and in consideration of good and valuable consideration to us in hand paid by ASSIGNEE, the receipt of which is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do hereby sell, assign, and transfer unto ASSIGNEE, its successors and assigns, our entire right, title, and interest in and to said invention, said application, all divisions, continuations, continuations-in-part, reissues, or renewals thereof, and said patents, both foreign and domestic, that may or shall issue, including all of our entire rights under any and all international conventions;

AND WE HEREBY authorize ASSIGNEE, its successors and assigns, or anyone it may properly designate, to apply for patents, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of said United States application and otherwise take advantage of the provisions of any and all international conventions;

AND WE HEREBY authorize and request any official of any State whose duty consists of issuing patents, or other evidence or forms of any industrial property protection on any aforesaid application, to issue same to ASSIGNEE, its successors and assigns, in accordance herewith;

AND WE HEREBY covenant and agree with ASSIGNEE, its successors and assigns, that we have the full right to convey the entire interest assigned herein, and that we have not

Assignors' Initials

_____ ZLH

executed, and will not execute, any agreement in conflict herewith, and that we will not do any other act whatsoever conflicting with these presents, and that we or our successors, assigns, executors, or administrators will at any time upon request, without further or additional consideration, but at the expense of ASSIGNEE, its successors and assigns, communicate to ASSIGNEE, its successors and assigns, any facts known to ASSIGNORS respecting said invention, and testify in any legal proceedings, sign any lawful papers, execute any original, divisional, continuation, and continuation-in-part applications, make any rightful oaths or declarations, and generally do such additional acts as ASSIGNEE, its successors and assigns, may deem necessary or desirable to obtain and enforce proper protection for said invention throughout the world;

AND WE HEREBY FURTHER covenant and agree that this Assignment is effective as of 06 February 2014.

IN TESTIMONY WHEREOF, ASSIGNORS hereunto set their hands on the under-mentioned date, and deliver this Assignment.

Date: 13 NOV 14 
Zachary Lee Helgeson

Date: _____
Alexander Carson Houck

Date: _____
John Son Her

Date: _____
Salome A. Gonzalez

Date: _____
Somally Mom

Date: _____
Brian Michael Monahan

Assignors' Initials

_____ ZLH

Date: _____
Neil David Hawkinson

Date: _____
James Reginald Nigg

Date: _____
James Clayton Marrs

Date: _____
Xuan Yen Khieu

Date: _____
Troy Terrance Tegg

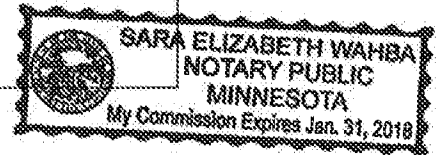
Date: _____
Jill LaFavor

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Zachary Lee Helgeson, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

11-13-2014 Hennepin / Plymouth / Minnesota
(Date) (County/City/State)

1-31-2018 Sara Wahba
(Commission Expiry Date) (Notary Public: Signature and Name)

SEAL



Assignors' Initials

_____ ZLH

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place,
personally appeared Alexander Carson Houck, who proved to me on the basis of
satisfactory evidence to be the person whose name is subscribed to the foregoing
assignment and acknowledged to me that he executed the same in his authorized capacity
and acknowledged that execution of the same was a free will act and deed.

(Date) (County/City/State)

SEAL

(Commission Expiry Date) (Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place,
personally appeared John Son Her, who proved to me on the basis of satisfactory evidence to be
the person whose name is subscribed to the foregoing assignment and acknowledged to me that
he executed the same in his authorized capacity and acknowledged that execution of the same
was a free will act and deed.

(Date) (County/City/State)

SEAL

(Commission Expiry Date) (Notary Public: Signature and Name)

Assignors' Initials

_____ ZLH

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Brian Michael Monahan, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

_____ (Date)

_____ (County/City/State)

SEAL

_____ (Commission Expiry Date)

_____ (Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Neil David Hawkinson, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

_____ (Date)

_____ (County/City/State)

SEAL

_____ (Commission Expiry Date)

_____ (Notary Public: Signature and Name)

Assignors' Initials

_____/_____/_____/_____/_____/_____/_____/_____/_____/_____/_____ ZH

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared James Reginald Nigg, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared James Clayton Marrs, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

_____ *ZLH*

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Xuan Yen Khieu, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Troy Terrance Tegg, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

_____ ZLA

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place,
personally appeared Jill LaFavor, who proved to me on the basis of satisfactory evidence to be
the person whose name is subscribed to the foregoing assignment and acknowledged to me that
she executed the same in her authorized capacity and acknowledged that execution of the same
was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

_____ ZLA

ASSIGNMENT

WHEREAS, WE, Zachary Lee Helgeson of 2106 35th Street E. Minneapolis, Minnesota 55407, United States of America; Alexander Carson Houck of 229 13th Avenue N., Hopkins, Minnesota 55343, United States of America; John Son Her of 6724 Adair Avenue North, Brooklyn Park, Minnesota 55429, United States of America; Salome A. Gonzalez of 13301 Maple Knoll Way #1610, Maple Grove, Minnesota 55369, United States of America; Somally Mom of 6155 140th Street W., Savage, Minnesota 55378, United States of America; Brian Michael Monahan of 12488 194th Lane NW., Elk River, Minnesota 55330, United States of America; Neil David Hawkinson of 7334 149th Avenue, Ramsey, Minnesota 55303, United States of America; James Reginald Nigg of 9249 97th Street SW., Howard Lake, Minnesota 55349, United States of America; James Clayton Marrs of 1748 Chatham Avenue, Arden Hills, Minnesota 55112, United States of Amrica; Xuan Yen Khieu of 7300 Inland Lane North, Maple Grove, Minnesota 55311, United States of America; Troy Terrance Tegg of 19307 Baldwin Street, Elk River, Minnesota 55330, United States of America; and Jill LaFavor of 16700 Seymour Drive, Minnetonka, Minnesota 55345, United States of America, hereinafter ASSIGNORS, have invented certain new and useful improvements in elongate medical device including chamfered ring electrode and variable shaft, for which United States provisional patent application number 61/936,677 was filed on 06 February 2014;

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NOW, THEREFORE, for and in consideration of good and valuable consideration to us in hand paid by ASSIGNEE, the receipt of which is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do hereby sell, assign, and transfer unto ASSIGNEE, its successors and assigns, our entire right, title, and interest in and to said invention, said application, all divisions, continuations, continuations-in-part, reissues, or renewals thereof, and said patents, both foreign and domestic, that may or shall issue, including all of our entire rights under any and all international conventions;

AND WE HEREBY authorize ASSIGNEE, its successors and assigns, or anyone it may properly designate, to apply for patents, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of said United States application and otherwise take advantage of the provisions of any and all international conventions;

AND WE HEREBY authorize and request any official of any State whose duty consists of issuing patents, or other evidence or forms of any industrial property protection on any aforesaid application, to issue same to ASSIGNEE, its successors and assigns, in accordance herewith;

AND WE HEREBY covenant and agree with ASSIGNEE, its successors and assigns, that we have the full right to convey the entire interest assigned herein, and that we have not

Assignors' Initials

JRN / _____

executed, and will not execute, any agreement in conflict herewith, and that we will not do any other act whatsoever conflicting with these presents, and that we or our successors, assigns, executors, or administrators will at any time upon request, without further or additional consideration, but at the expense of ASSIGNEE, its successors and assigns, communicate to ASSIGNEE, its successors and assigns, any facts known to ASSIGNORS respecting said invention, and testify in any legal proceedings, sign any lawful papers, execute any original, divisional, continuation, and continuation-in-part applications, make any rightful oaths or declarations, and generally do such additional acts as ASSIGNEE, its successors and assigns, may deem necessary or desirable to obtain and enforce proper protection for said invention throughout the world;

AND WE HEREBY FURTHER covenant and agree that this Assignment is effective as of 06 February 2014.

IN TESTIMONY WHEREOF, ASSIGNORS hereunto set their hands on the under-mentioned date, and deliver this Assignment.

Date: _____
Zachary Lee Helgeson

Date: _____
Alexander Carson Houck

Date: _____
John Son Her

Date: _____
Salome A. Gonzalez

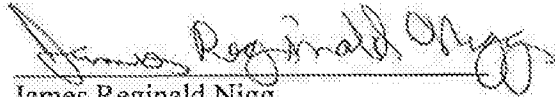
Date: _____
Somally Mom

Date: _____
Brian Michael Monahan

Assignors' Initials

JRN / _____

Date: _____
Neil David Hawkinson

Date: 11/6/2014

James Reginald Nigg

Date: _____
James Clayton Marrs

Date: _____
Xuan Yen Khieu

Date: _____
Troy Terrance Tegg

Date: _____
Jill LaFavor

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Zachary Lee Helgeson, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date) (County/City/State)

SEAL

(Commission Expiry Date) (Notary Public: Signature and Name)

Assignors' Initials
JRH / _____ / _____ / _____ / _____ / _____ / _____ / _____ / _____

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Alexander Carson Houck, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared John Son Her, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

JRH / _____

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Salome A. Gonzalez, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Somally Mom, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

JRN / _____ / _____ / _____ / _____ / _____ / _____ / _____ / _____ / _____

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Brian Michael Monahan, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Neil David Hawkinson, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

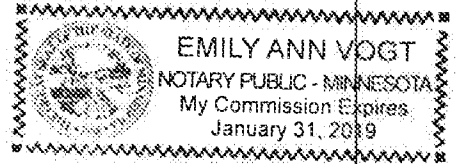
Assignors' Initials

JRM / / / / / / / / / /

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared James Reginald Nigg, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

11/6/14
(Date)

Ramsey/St. Paul/MN
(County/City/State)



SEAL

1/31/19
(Commission Expiry Date)

Emily Vogt
(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared James Clayton Marrs, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

JRN / _____ / _____ / _____ / _____ / _____ / _____ / _____ / _____ / _____

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Xuan Yen Khieu, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Troy Terrance Tegg, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Jill LaFavor, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that she executed the same in her authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

JRL / / / / / / / / / / / / / /

ASSIGNMENT

WHEREAS, WE, Zachary Lee Helgeson of 2106 35th Street E. Minneapolis, Minnesota 55407, United States of America; Alexander Carson Houck of 229 13th Avenue N., Hopkins, Minnesota 55343, United States of America; John Son Her of 6724 Adair Avenue North, Brooklyn Park, Minnesota 55429, United States of America; Salome A. Gonzalez of 13301 Maple Knoll Way #1610, Maple Grove, Minnesota 55369, United States of America; Somally Mom of 6155 140th Street W., Savage, Minnesota 55378, United States of America; Brian Michael Monahan of 12488 194th Lane NW., Elk River, Minnesota 55330, United States of America; Neil David Hawkinson of 7334 149th Avenue, Ramsey, Minnesota 55303, United States of America; James Reginald Nigg of 9249 97th Street SW., Howard Lake, Minnesota 55349, United States of America; James Clayton Marrs of 1748 Chatham Avenue, Arden Hills, Minnesota 55112, United States of America; Xuan Yen Khieu of 7300 Inland Lane North, Maple Grove, Minnesota 55311, United States of America; Troy Terrance Tegg of 19307 Baldwin Street, Elk River, Minnesota 55330, United States of America; and Jill LaFavor of 16700 Seymour Drive, Minnetonka, Minnesota 55345, United States of America, hereinafter ASSIGNORS, have invented certain new and useful improvements in elongate medical device including chamfered ring electrode and variable shaft, for which United States provisional patent application number 61/936,677 was filed on 06 February 2014;

AND WHEREAS St. Jude Medical, Cardiology Division, Inc., a corporation organized and existing under the laws of Delaware, and having a business address at 177 East County Road B, St. Paul, MN 55117, hereinafter ASSIGNEE, is desirous of acquiring the entire right, title, and interest in, to, and under said invention, said application, and any and all patents to be obtained therefore throughout the world;

NOW, THEREFORE, for and in consideration of good and valuable consideration to us in hand paid by ASSIGNEE, the receipt of which is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do hereby sell, assign, and transfer unto ASSIGNEE, its successors and assigns, our entire right, title, and interest in and to said invention, said application, all divisions, continuations, continuations-in-part, reissues, or renewals thereof, and said patents, both foreign and domestic, that may or shall issue, including all of our entire rights under any and all international conventions;

AND WE HEREBY authorize ASSIGNEE, its successors and assigns, or anyone it may properly designate, to apply for patents, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of said United States application and otherwise take advantage of the provisions of any and all international conventions;

AND WE HEREBY authorize and request any official of any State whose duty consists of issuing patents, or other evidence or forms of any industrial property protection on any aforesaid application, to issue same to ASSIGNEE, its successors and assigns, in accordance herewith;

AND WE HEREBY covenant and agree with ASSIGNEE, its successors and assigns, that we have the full right to convey the entire interest assigned herein, and that we have not

Assignors' Initials



Date: _____
Neil David Hawkinson

Date: _____
James Reginald Nigg

Date: _____
James Clayton Marrs

Date: _____
Xuan Yen Khieu

Date: _____
Troy Terrance Tegg

Date: _____
Jill LaFavor

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place,
personally appeared Zachary Lee Helgeson, who proved to me on the basis of satisfactory
evidence to be the person whose name is subscribed to the foregoing assignment and
acknowledged to me that he executed the same in his authorized capacity and
acknowledged that execution of the same was a free will act and deed.

_____ (Date) _____ (County/City/State)

_____ (Commission Expiry Date) _____ (Notary Public: Signature and Name)

SEAL

Assignors' Initials
 J | _____

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Alexander Carson Houck, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

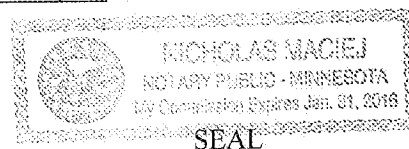
(Commission Expiry Date)

(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared John Son Her, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

12/10/2014
(Date)

Hennepin County Minnesota
(County/City/State)



SEAL

01/31/2016
(Commission Expiry Date)

[Signature]
(Notary Public: Signature and Name)

Assignors' Initials

J _____

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Salome A. Gonzalez, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Somally Mom, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

 F _____

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared James Reginald Nigg, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared James Clayton Marrs, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

J _____

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Xuan Yen Khieu, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Troy Terrance Tegg, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

 J _____

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Jill LaFavor, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that she executed the same in her authorized capacity and acknowledged that execution of the same was a free will act and deed.

(Date)

(County/City/State)

SEAL

(Commission Expiry Date)

(Notary Public: Signature and Name)

Assignors' Initials

JL _____

ASSIGNMENT

WHEREAS, I, Israel A. Byrd of 7104 Stevens Avenue, Richfield, Minnesota 55423, along with Zachary Lee Helgeson of 7432 Elliot Ave. So., Richfield, Minnesota 55423; Alexander Carson Houck of 229 13th Avenue N., Hopkins, Minnesota 55343; John Son Her of 6724 Adair Avenue North, Brooklyn Park, Minnesota 55429; Salome A. Gonzalez of 13301 Maple Knoll Way #1610, Maple Grove, Minnesota 55369; Somally Mom of 6155 140th Street W., Savage, Minnesota 55378; Brian Michael Monahan of 12488 194th Lane NW, Elk River, Minnesota 55330; Neil David Hawkinson of 7334 149th Avenue, Ramsey, Minnesota 55303; James Reginald Nigg of 9249 97th Street SW, Howard Lake, Minnesota 55349; James Clayton Marrs of 1748 Chatham Avenue, Arden Hills, Minnesota 55112; Xuan Yen Khieu of 7300 Inland Lane North, Maple Grove, Minnesota 55331; Troy Terrance Tegg of 19307 Baldwin Street, Elk River, Minnesota 55330; and Jill LaFavor of 16700 Seymour Drive, Minnetonka, Minnesota 55345; hereinafter ASSIGNORS, have invented certain new and useful improvements in Elongate medical device including chamfered ring electrode and variable shaft, for which United States provisional patent application number 61/936,677 was filed on 06 February 2014, and International patent application number PCT/US2015/014254 was filed on 03 February 2015;

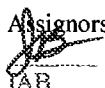
AND WHEREAS St. Jude Medical, Cardiology Division, Inc., a corporation organized and existing under the laws of the State of Delaware, and having a business address at 177 East County Road B, St. Paul, Minnesota 55117, hereinafter ASSIGNEE, is desirous of acquiring the entire right, title, and interest in, to, and under said invention, said application, and any and all patents to be obtained therefore throughout the world;

NOW, THEREFORE, for and in consideration of good and valuable consideration to me in hand paid by ASSIGNEE, the receipt of which is hereby acknowledged, I have sold, assigned, and transferred, and by these presents do hereby sell, assign, and transfer unto ASSIGNEE, its successors and assigns, my entire right, title, and interest in and to said invention, said application, all divisions, continuations, continuations-in-part, reissues, or renewals thereof, and said patents, both foreign and domestic, that may or shall issue, including all of my entire rights under any and all international conventions;

AND I HEREBY authorize ASSIGNEE, its successors and assigns, or anyone it may properly designate, to apply for patents, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of said United States application and otherwise take advantage of the provisions of any and all international conventions;

AND I HEREBY authorize and request any official of any State whose duty consists of issuing patents, or other evidence or forms of any industrial property protection on any aforesaid application, to issue same to ASSIGNEE, its successors and assigns, in accordance herewith;

AND I HEREBY authorize ASSIGNEE, its successors and assigns, or anyone it may properly designate, to insert into this instrument the application number and filing date of said U.S. patent application once known;

Assignors' Initials

IAB

AND I HEREBY covenant and agree with ASSIGNEE, its successors and assigns, that I have the full right to convey the entire interest assigned herein, and that I have not executed, and will not execute, any agreement in conflict herewith, and that I will not do any other act whatsoever conflicting with these presents, and that I or my successors, assigns, executors, or administrators will at any time upon request, without further or additional consideration, but at the expense of ASSIGNEE, its successors and assigns, communicate to ASSIGNEE, its successors and assigns, any facts known to ASSIGNOR respecting said invention, and testify in any legal proceedings, sign any lawful papers, execute any original, divisional, continuation, and continuation-in-part applications, make any rightful oaths or declarations, and generally do such additional acts as ASSIGNEE, its successors and assigns, may deem necessary or desirable to obtain and enforce proper protection for said invention throughout the world;

AND I HEREBY FURTHER covenant and agree that this Assignment is effective as of 06 February 2014.

IN TESTIMONY WHEREOF, ASSIGNOR hereunto sets his hand on the under-mentioned day and year, and delivers this Assignment.

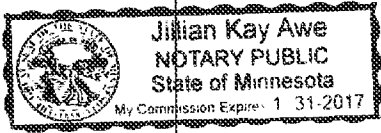
Date: 11 AUG 2016 Israel Byrd
Israel A. Byrd

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Israel A. Byrd, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the foregoing assignment and acknowledged to me that he executed the same in his authorized capacity and acknowledged that execution of the same was a free will act and deed.

Aug. 11, 2016 Ramsey / St. Paul / Minnesota
(Date) (County/City/State)

Jan. 31, 2017 Jillian Kay Awe
(Commission Expiry Date) (Notary Public: Signature and Name)

SEAL



Assignors' Initials
LAB