# 503811272 05/04/2016

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

in v1.1 EPAS ID: PAT3857920

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ALAN DE LA RAMA	11/20/2015
CARY HATA	11/20/2015
DON CURTIS DENO	01/15/2016
CARLO PAPPONE	02/25/2016

## **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:	14760682

### **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:** 651-756-5591 **Email:** skranz@sjm.com

Correspondent Name: ST. JUDE MEDICAL, INC.

Address Line 1: 5050 NATHAN LANE NORTH

Address Line 2: SHEENA K. KRANZ

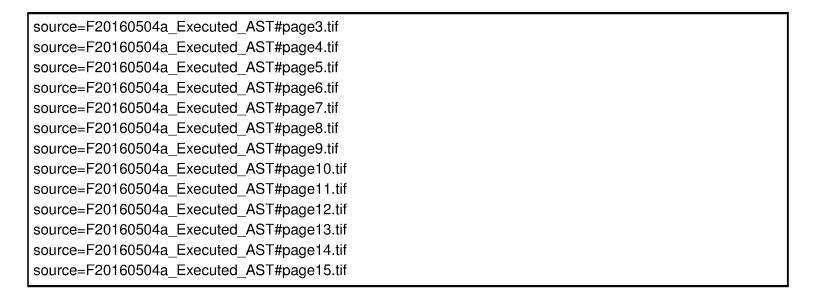
Address Line 4: PLYMOUTH, MINNESOTA 55442

ATTORNEY DOCKET NUMBER:	0F-050505US
NAME OF SUBMITTER:	SHEENA K. KRANZ
SIGNATURE:	/Sheena K. Kranz/
DATE SIGNED:	05/04/2016

**Total Attachments: 15** 

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PATENT 503811272 REEL: 038453 FRAME: 0315



#### ASSIGNMENT

WHEREAS, WE, Alan de la Rama of 11315 Felson Street, Cerritos, California 90703; Cary Hata of 39 Waterspout, Irvine, California 92620; Donald C. Deno of 4090 137<sup>th</sup> Lane NW, Andover, Minnesota 55304; and Carlo Pappone of 9 Piazza San Giovanni, Cernusco Lombardone 23870, Italy, hereinafter ASSIGNORS, have invented certain new and useful improvements in FLEXIBLE HIGH-DENSITY MAPPING CATHETER TIPS AND FLEXIBLE ABLATION CATHETER TIPS WITH ONBOARD HIGH-DENSITY MAPPING ELECTRODES, for which United States patent application number 14/760,682 was filed on 13 July 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 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 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;

Assignors' Initials

AD CH DCD CP

AND WE HEREBY FURTHER covenant and agree that this Assignment is effective as of 13 July 2015.

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

Date:	Alan de la Rama
Date: 11/20/15	Cary Hata
Date:	Donald C. Deno
Date:	Carlo Pappone

Assign	ors' Inîtis	als		
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A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Alan de la Rama, 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.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

November 20th , 2015 (Date)

OKANGE, IRVINE, CALIFORNIA

(County/City/State)

JULY 10 2019

(Commission Expiry Date)

Laure

SEAL

D. J. LEE

Commission No. 2118926
NOTARY PUBLIC-CALIFORNIA
DRANGE COUNTY
My Comm. Express JULY 10, 2019

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Cary Hata, 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.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

NOVEMBER 20th, 2015

ORANGE, IRVINE, CAUFORNIA (County/City/State)

(Date)

(County/City/State)

SEAL

JULY 10, 2019

(Commission Expiry Date)

(Notary Patric: Signature and Name)

D. J. LEE

Commission No. 2118926 Representation No. 211892

Assignors' Initials

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Page 3 of 5

TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Donald C. Deno, 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 Carlo Pappone, 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)	

SAID ASSIGNEE HEREBY acknowledges the aforesaid statements and accepts the aforesaid Assignment, transfer, and set over of said invention;

Assignors' Initials

AD CH DCD CP

AND, IN TESTIMONY WHEREOF, said ASSIGNEE hereunto sets its hand on the under-mentioned day and year. (ASSIGNEE: Signature) Thomas Rendos Vice President St. Jude Medical, Cardiology Division, Inc. Awdyn H.B. Echart
(Witness Signature)

Printed name: Carolyo H.B. Eckart TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Thomas Rendos, 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. 17/2015 Hangun/Plymouth/MU (County/City/State) SHEENA KRISTINE KRANZ NOTARY PUBLIC - MINNESOTA

Assignors' Initials

AD CH DCD CP

(Commission Expiry Date)

(Notary Public: Signature and Name)

My Commission Expires January 31, 2020

Don Curtis Deno DOD 2016-01-15

ASSIGNMENT

WHEREAS, WE, Alan de la Rama of 11315 Felson Street, Cerritos, California 90703; Cary Hata of 39 Waterspout, Irvine, California 92620; Donald C. Deno of 4090 137<sup>th</sup> Lane NW, Andover, Minnesota 55304; and Carlo Pappone of 9 Piazza San Giovanni, Cernusco Lombardone 23870, Italy, hereinafter ASSIGNORS, have invented certain new and useful improvements in FLEXIBLE HIGH-DENSITY MAPPING CATHETER TIPS AND FLEXIBLE ABLATION CATHETER TIPS WITH ONBOARD HIGH-DENSITY MAPPING ELECTRODES, for which United States patent application number 14/760,682 was filed on 13 July 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 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 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;

Assig	nors' Initial	s / Will	1	/
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AND WE HEREBY FURTHER covenant and agree that this Assignment is effective as of 13 July 2015.

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

Alan de la Rama		
Cary Hata		
We Cuts Dea	•••••	
Donald C. Dono  Don Curtis Deno	S41)	2016-01-15
	Williams .	
	Donald C. Dono  Don Curtis Deno	Donald C. Dono  Den Curtis Deno  Den Curtis Deno

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.			
TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Alan de la Rama, 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.			
I certify under PENA that the foregoing paragraph	LTY OF PERJURY under the laws of the State of California is true and correct.		
(Date)	(County/City/State)		
	SEAL		
(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 Cary Hata, 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.			
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.			
(Date)	(County/City/State)		
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(Commission Expiry Date) (Notary Public: Signature and Name)			
Assignors' Initials			

# Don Cartis Deno

2016-01-15

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personally appeared Donald evidence to be the person will acknowledged to me that he	ME, a Notary Public in and for the under- E Deno, who proved to me on the basis of nose name is subscribed to the foregoing a executed the same in his authorized capace to of the same was a free will act and deed.	of satisfactory ssignment and city and
1//5// <u>(</u> (Date)	Ramscy/St. Paul/Minnesota (County/City/State)	EMILY ANN VOGT
1/31//9 (Commission Expiry Date)	Emily Ann Vog + (Notary Public: Signature and Name)	MOTARY PUBLIC - MINNESOTA My Commission Expires January 31, 2019
<b>{</b>	ME, a Notary Public in and for the under-rappone, who proved to me on the basis of	- · · · · · · · · · · · · · · · · · · ·

personally appeared Carlo Pa evidence to be the person wh acknowledged to me that he	ME, a Notary Public in and for the under-meappone, who proved to me on the basis of sales and its subscribed to the foregoing assexecuted the same in his authorized capacity of the same was a free will act and deed.	itisfactory
(Date)	(County/City/State)	SEAL
(Commission Expiry Date)	(Notary Public: Signature and Name)	

SAID ASSIGNEE HEREBY acknowledges the aforesaid statements and accepts the aforesaid Assignment, transfer, and set over of said invention;

Assignors' Initials

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Page 4 of 5

(Date)	(ASSIGNEE: Signature) Thomas Rendos Vice President St. Jude Medical, Cardiology Division, Inc.	
	(Witness: Signature)	
	Printed name:	
personally appeared Thomas evidence to be the person wh acknowledged to me that he	ME, a Notary Public in and for the under-mentioned place Rendos, who proved to me on the basis of satisfactory lose name is subscribed to the foregoing assignment and executed the same in his authorized capacity and of the same was a free will act and deed.	<b>3</b> ,
(Date)	(County/City/State)	
	SEAL	
(Commission Expiry Date)	(Notary Public: Signature and Name)	:

AND, IN TESTIMONY WHEREOF, said ASSIGNEE hereunto sets its hand on the under-mentioned day and year.

Assign	ors' Initia _/	18 / OO	<i>y</i>	
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#### ASSIGNMENT

WHEREAS, WE, Alan de la Rama of 11315 Felson Street, Cerritos, California 90703; Cary Hata of 39 Waterspout, Irvine, California 92620; Donald C. Deno of 4090 137th Lane NW, Andover, Minnesota 55304; and Carlo Pappone of 9 Piazza San Giovanni, Cernusco Lombardone 23870, Italy, hereinafter ASSIGNORS, have invented certain new and useful improvements in FLEXIBLE HIGH-DENSITY MAPPING CATHETER TIPS AND FLEXIBLE ABLATION CATHETER TIPS WITH ONBOARD HIGH-DENSITY MAPPING ELECTRODES, for which United States patent application number 14/760,682 was filed on 13 July 2015;

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Date:	Alan de la Rama
Date:	Cary Hata
Date:	Donald C. Deno
pere: <u>25/07/2016</u>	Carlo Pappone

Assignors' Initials

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Page 2 of 5

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.		
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(Commission Expiry Date)	(Notary Public: Signature and Name)	
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(Date)	(County/City/State)	
	SEAL	
(Commission Expiry Date)	(Notary Public: Signature and Name)	
Assignors' Initials //// AD CH DCD CP	Page 3 of 5	

personally appeared Carlo-Pappone, 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)
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Commission Expiry Date) (Notary Public: Signature and Name)		n of the same was a free will act and deed.
	acknowledged that execution	n of the same was a free will act and deed.  (County/Cjty/State)

Page 4 of 5

Assignors' Initials

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AND, IN TESTIMONY WHEREOF, said ASSIGNEE hereunto sets its hand on the under-mentioned day and year.

(ASSIGNEE: Signature) Thomas Rendos Vice President St. Jude Medical, Cardiology Division, Inc.
(Witness: Signature) Printed name:
ME, a Notary Public in and for the under-mentioned place, Rendos, who proved to me on the basis of satisfactory tose name is subscribed to the foregoing assignment and executed the same in his authorized capacity and to of the same was a free will act and deed.
(County/City/State)
SEAL SEAL
(Notary Public: Signature and Name)
Page 5 of 5

Page 5 of 5