PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7255988

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JATIN RELAN	05/09/2021
STEVEN KIM	03/11/2020
MARK HAGFORS	03/22/2021
DON CURTIS DENO	03/11/2020

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: 2

Property Type	Number
Application Number:	62845433
Application Number:	17604220

CORRESPONDENCE DATA

Fax Number: (651)756-2808

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: 6517562000

Email: jillian.awe@abbott.com **Correspondent Name:** SCOTT KRUEGER

Address Line 1: ONE ST. JUDE MEDICAL DRIVE ST. PAUL, MINNESOTA 55117

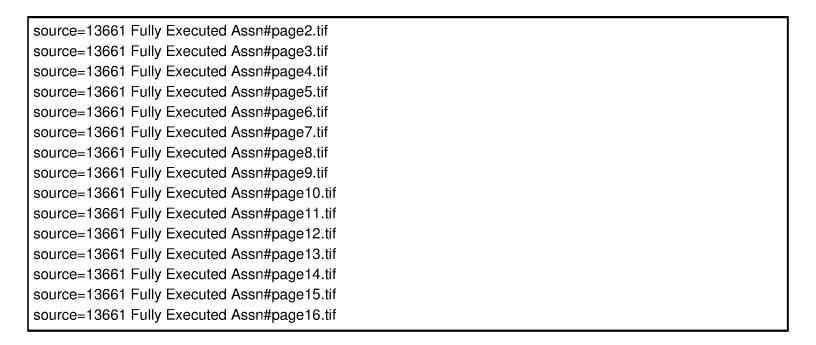
ATTORNEY DOCKET NUMBER:	13661
NAME OF SUBMITTER:	JILLIAN K. AWE
SIGNATURE:	/Jillian K. Awe/
DATE SIGNED:	03/31/2022

Total Attachments: 16

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PATENT REEL: 059458 FRAME: 0376

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PATENT REEL: 059458 FRAME: 0377

WHEREAS, WE, Jatin Relan of 8 Alle du 7eme Art, Bordeaux Aquitaine 33400 France, Steven Kim of 7 Bond Street #3B, New York, New York 10012, Mark Hagfors of 1 Scotch Pine Road, North Oaks, Minnesota 55127, and Don Curtis Deno of 409 137th Lane N.W., Andover, Minnesota 55304, hereinafter ASSIGNORS, have invented certain new and useful improvements in System and Method for Mapping Pulmonary Vein Isolations, for which United States patent application number 62/845,433 was filed on 09 May 2019 and International Patent application number PCT/US2020/031775 was filed on 07 May 2020;

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;

Assign	iors' Initia	als		
_JR _	_/	/	/	
JR	SK	MH	DCD	

PATENT REEL: 059458 FRAME: 0378

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

Date:9th May 2021	Jatin Relan	
Date:	Steven Kim	
Date:	Mark Hagfors	
Date:	Don Curtis Deno	
personally appeared Steven to be the person whose name acknowledged to me that he	ME, a Notary Public in and for the under Kim, who proved to me on the basis of se is subscribed to the foregoing assignment executed the same in his authorized capen of the same was a free will act and dee	eatisfactory evidence ent and acity and
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(Commission Expiry Date)	(Notary Public: Signature and Name)	

Page 2 of 4

Assignors' Initials

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personally appeared Mark Hag evidence to be the person whos acknowledged to me that he ex	E, a Notary Public in and for the under-mentioned place, gfors, who proved to me on the basis of satisfactory se name is subscribed to the foregoing assignment and secuted the same in his authorized capacity and 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)	
TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Don Curtis 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)	

Assign	nors' Initia	als		
_JR	/	/	/	
JR	SK	MH	DCD	

WHEREAS, WE, Jatin Relan of 8 Alle du 7eme Art, Bordeaux Aquitaine 33400 France, Steven Kim of 7 Bond Street #3B, New York, New York 10012, Mark Hagfors of 1 Scotch Pine Road, North Oaks, Minnesota 55127, and Don Curtis Deno of 409 137th Lane N.W., Andover, Minnesota 55304, hereinafter ASSIGNORS, have invented certain new and useful improvements in System and Method for Mapping Pulmonary Vein Isolations, for which United States patent application number 62/845,433 was filed on 09 May 2019;

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

/ / / /
JR SK MH DCD

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

	Jatin Relan	
Date: 3/11/2020	Steven Kim	
Date:	Mark Hagfors	
Date:	Don Curtis Deno	
to be the person whose nam acknowledged to me that he	ME, a Notary Public in and for the under- Kim, who proved to me on the basis of sa he is subscribed to the foregoing assignment e executed the same in his authorized capa on of the same was a free will act and deed	itisfactory evidence nt and city and
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personally appeared Mark H evidence to be the person wh acknowledged to me that he	ME, a Notary Public in and for the under-tagfors, who proved to me on the basis of a cose name is subscribed to the foregoing a executed the same in his authorized capacat of the same was a free will act and deed.	satisfactory ssignment and city and
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(Commission Expiry Date)	(Notary Public: Signature and Name)	

Assign	ors' Initia	ls		
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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;

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Assignors' Initials

JR SK MH DCD

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

Date:		
· · · · · · · · · · · · · · · · · · ·	Jatin Relan	
No.		
Date:	Steven Kim	
Date: 3/22/2021	Mark Hagfors	
Date:	Don Curtis Deno	
personally appeared Steven to be the person whose nam acknowledged to me that he	ME, a Notary Public in and for the under- Kim, who proved to me on the basis of sa e is subscribed to the foregoing assignme e executed the same in his authorized capa on of the same was a free will act and deed	atisfactory evidence nt and acity and
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personally appeared Don Cu evidence to be the person wh acknowledged to me that he	ME, a Notary Public in and for the under-mertis Deno, who proved to me on the basis of cose name is subscribed to the foregoing assexecuted the same in his authorized capacita of the same was a free will act and deed.	f satisfactory signment and
(Date)	(County/City/State)	
		SEAL
(Commission Expiry Date)	(Notary Public: Signature and Name)	

Assignors' Initials

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JR SK MH DCD

WHEREAS, WE, Jatin Relan of 8 Alle du 7eme Art, Bordeaux Aquitaine 33400 France, Steven Kim of 7 Bond Street #3B, New York, New York 10012, Mark Hagfors of 1 Scotch Pine Road, North Oaks, Minnesota 55127, and Don Curtis Deno of 409 137th Lane N.W., Andover, Minnesota 55304, hereinafter ASSIGNORS, have invented certain new and useful improvements in System and Method for Mapping Pulmonary Vein Isolations, for which United States patent application number 62/845,433 was filed on 09 May 2019;

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;

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Assignars' Initials

JR SK MH DCD

PATENT REEL: 059458 FRAME: 0387

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

Date:		
	Jatin Relan	
Date:	Steven Kím	
Date:	Mark Hagfors	
Date: 11- Mar- 2020	Don Curlis Deno	
personally appeared Steve to be the person whose na acknowledged to me that	E ME, a Notary Public in and for the under-mentioned place, en Kim, who proved to me on the basis of satisfactory evidence ame is subscribed to the foregoing assignment and he executed the same in his authorized capacity and tion of the same was a free will act and deed.	×
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personally appeared Mark H evidence to be the person wh acknowledged to me that he	AE, a Notary Public in and for the under-mentioned place, agfors, 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 to fithe same was a free will act and deed.	
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personally appeared Don Cu evidence to be the person wh acknowledged to me that he	ME, a Notary Public in and for the under-mentioned place, rtis Deno, who proved to me on the basis of satisfactory nose name is subscribed to the foregoing assignment and executed the same in his authorized capacity and 1 of the same was a free will act and deed.	
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Assignors' Initials

JR SK MH DCD

Page 3 of 4

WHEREAS, WE, Jatin Relan of 8 Alle du 7eme Art, Bordeaux Aquitaine 33400 France, Steven Kim of 7 Bond Street #3B, New York, New York 10012, Mark Hagfors of 1 Scotch Pine Road, North Oaks, Minnesota 55127, and Don Curtis Deno of 409 137th Lane N.W., Andover, Minnesota 55304, hereinafter ASSIGNORS, have invented certain new and useful improvements in System and Method for Mapping Pulmonary Vein Isolations, for which United States patent application number 62/845,433 was filed on 09 May 2019 and International Patent application number PCT/US2020/031775 was filed on 07 May 2020;

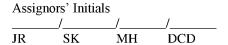
AND WHEREAS St. Jude Medical, Cardiology Division, Inc., a corporation organized and existing under the laws of the State of Delaware, and having a business address at 177 East County Road B, St. Paul, Minnesota 55117, hereinafter ASSIGNEE, is desirous of acquiring the entire right, title, and interest 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;



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

Date:	Jatin Relan	
Date:	Steven Kim	
Date:	Mark Hagfors	
Date:	Don Curtis Deno	
personally appeared Steven to be the person whose name acknowledged to me that he	ME, a Notary Public in and for the unde Kim, who proved to me on the basis of e is subscribed to the foregoing assignm executed the same in his authorized cap n of the same was a free will act and dec	satisfactory evidence ent and pacity and
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(Commission Expiry Date)	(Notary Public: Signature and Name)	
Assignors' Initials		

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TODAY, BEFORE ME, a Notary Public in and for the under-mentioned place, personally appeared Mark Hagfors, 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 Don Curtis 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)		

Assignors' Initials

/ / / /
JR SK MH DCD

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

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

(Date)

(ASSIGNEE: Signature)
Jon C. Trachtenberg
Division Counsel

St. Jude Medical, Cardiology Division, Inc.