PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5563703

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ST. JUDE MEDICAL LUXEMBOURG HOLDING S.À R.L.	12/15/2015

RECEIVING PARTY DATA

Name:	ST JUDE MEDICAL INTERNATIONAL HOLDING S.À R.L.
Street Address:	4, RUE DICKS, L-1417
City:	LUXEMBOURG
State/Country:	LUXEMBOURG

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16189904

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: KRISTOFOR L. STORVICK
Address Line 1: ONE ST. JUDE MEDICAL DRIVE

Address Line 1: ONE ST. JUDE MEDICAL DRIVE Address Line 4: ST. PAUL, MINNESOTA 55117

ATTORNEY DOCKET NUMBER:	CD-934USC8
NAME OF SUBMITTER:	JILLIAN K. AWE
SIGNATURE:	/Jillian K. Awe/
DATE SIGNED:	06/10/2019

Total Attachments: 10

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CONFIRMATORY ASSIGNMENT

WHEREAS St. Jude Medical Luxembourg Holding S.à r.l., a corporation organized and existing under the laws of Grand Duchy of Luxembourg, having its registered offices at 4, rue Dicks, L-1417 Luxembourg, Grand Duchy of Luxembourg, registered with the Luxembourg trace and companies registered (Registre de Commerce et des Sociétés de Luxembourg) under registration number B 143811, hereinafter ASSIGNOR, by an agreement being executed concurrently (hereinafter said Concurrent Agreement), has assigned its entire right, title, and interest in, to, and under the inventions, patent applications, and patents set forth in Schedules A, B, C, and D hereto, including its entire right, title, and interest in, to, and under any and all patents obtained, or yet to be obtained, therefor throughout the world (hereinafter the Territory);

NOW, THEREFORE, for and in consideration of good and valuable consideration, the receipt of which is hereby acknowledged, said **ASSIGNOR** hereby confirms that, via said **Concurrent Agreement**, it has sold, assigned, and transferred unto **St. Jude Medical International Holding S.à r.l.**, a private limited liability company (société à responsabilité limitée) incorporated and existing under the laws of the Grand Duchy of Luxembourg, with registered office at 4, rue Dicks, L-1417 Luxembourg, Grand Duchy of Luxembourg, and registered with the Luxembourg trade and companies register (*Registre de Commerce et des Sociétés de Luxembourg*) under registration number B 181342 (hereinafter **ASSIGNEE**), its successors and assigns, **ASSIGNOR**'s entire right, title, and interest in, to, and under said inventions, said applications, and said patents set forth in **Schedules A, B, C, and D** hereto, and all divisions, continuations, continuations-in-part, reissues, or renewals thereof, and any other patents that have issued and that may or shall issue therefor in said **Territory**, including all of **ASSIGNOR**'s entire rights under any and all international conventions, and including the **ASSIGNOR**'s right to sue for infringement, to seek injunctive relief, and to collect, inter alia, money damages, royalties, lost profits, attorney fees, and costs for any infringement of the intellectual property assets covered by the **Concurrent Agreement** and this **Confirmatory Assignment**, whether such infringement may have already occurred or may occur in the future;

AND **ASSIGNOR** HEREBY confirms that **ASSIGNEE**, its successors and assigns, or anyone it has properly designated, is authorized to apply for patents, in its own name if desired, throughout said **Territory**, and additionally is authorized to claim the filing date of any aforesaid application, and otherwise take advantage of the provisions of any and all international conventions:

AND **ASSIGNOR** HEREBY authorizes and requests 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 said **ASSIGNEE**, its successors and assigns, in accordance herewith;

AND ASSIGNOR HEREBY covenants and agrees with ASSIGNEE, its successors and assigns, that ASSIGNOR had the full right to convey the entire interest assigned in said Concurrent Agreement and confirmed herein, and that ASSIGNOR has not executed, and will not execute, any agreement in conflict herewith, and that ASSIGNOR will not do any other act whatsoever conflicting with these presents, and that ASSIGNOR or its 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 inventions, and testify in any legal proceedings, sign any lawful papers, execute any original, divisional, continuation, continuation-in-part, and reissue applications, make any rightful oaths, 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 inventions throughout said Territory;

AND **ASSIGNOR** HEREBY FURTHER covenants and agrees that this **Confirmatory Assignment** is effective as of // December 2015, same as the effective date of said **Concurrent Agreement**; and **ASSIGNOR** hereby confirms title in said **ASSIGNEE** as of this date.

ASSIGNOR'S Initials

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and delivers this Confirmatory Assignment.

St. Jude Medical Luxembourg Holding S.à r.l.

By:

(Signature of ASSIGNOR Representative)

(Printed Name of ASSIGNOR Representative)

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

I, Jeyus KUSSELOL, Notary Public residing in Remove (Lu Rumkony)

Grand Duchy of Luxembourg, hereby certify that:

- 1. St. Jude Medical Luxembourg Holding S.à r.l. (the **Company**) is a private limited liability company (société à responsabilité limitée) incorporated and existing under the laws of the Grand Duchy of Luxembourg.
- 2. the signature of the individual who signed the confirmatory assignment above (the Confirmatory Assignment) is a genuine signature; and
- 3. according to the resolutions of the sole shareholder of the Company adopted on 5 October 2015 before Maître Jacques Kesseler, notary public residing in Pétange, Grand Duchy of Luxembourg, the individual who has signed the Confirmatory Assignment is the liquidator of the Company and is duly authorised to execute the Confirmatory Assignment in the name and on behalf of the Company through his sole.

(Date) 16 XII 1815

(Place)

(Commission Expiry Date)

(Notary Public: Signature and Name)

SAID **ASSIGNEE** HEREBY acknowledges the aforesaid statements and accepts the aforesaid **Confirmatory Assignment**;

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

St. Jude Medical International Holding S.à r.l.

By:

(Signature of ASSIGNEE Representative)

(Printed Name of ASSIGNEE Representative)

(Title of ASSIGNEE Representative)

(Witness #1: Signature)

[former Endosense US]

Country	Application No.	Filing Date	Title	Publication No.	Patent No.	Issue Date
US	10/518,979	21-Dec-04	CATHETERIZATION METHOD AND SYSTEM		7,640,053	29-Dec-09
US	11/450,072	9-Jun-06	CATHETER HAVING TRI- AXIAL FORCE SENSOR		8,048,063	1-Nov-11
US	11/435,926	15-May-06	CATHETER HAVING OPTICAL FIBER LOAD SENSING SYSTEM		8,075,498	11-Dec-11
US	11/753,429	24-May-07	TOUCH SENSING CATHETER		8,157,789	17-Apr-12
US	11/237,053	28-Sep-05	CATHETER HAVING OPTICAL FIBER LOAD SENSING SYSTEM		8,182,433	22-May-12
US	12/152,473	14-May-08	TEMPERATURE COMPENSATED STRAIN SENSING CATHETER		8,298,227	30-Oct-12
US	13/179,076	8-Jul-11	CATHETER HAVING TRI- AXIAL FORCE SENSOR		8,435,232	7-May-13
US	12/352,426	12-Jan-09	TRIAXIAL FIBER OPTIC FORCE SENSING CATHETER		8,567,265	29-Oct-13
US	12/127,657	27-May-08	ELONGATED SURGICAL MANIPULATOR WITH BODY POSITION AND DISTAL FORCE SENSING		8,622,935	7-Jan-14
US	12/776,762	10-May-10	METHOD AND APPARATUS FOR CONTROLLING LESION SIZE IN CATHETER- BASED ABLATION TREATMENT		8,641,705	4-Feb-14
US	11/989,902	22-Nov-10	CATHETER HAVING OPTICAL FIBER LOAD SENSING SYSTEM		8,894,589	25-Nov-14
US	13/084,214	11-Apr-11	CONTROL HANDLE FOR A CONTACT FORCE ABLATION CATHETER		8,906,013	9-Dec-14

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Country	Application No.	Filing Date	Title	Publication No.	Patent No.	Issue Date
US	13/096,647	28-Apr-11	MEDICAL APPARATUS SYSTEM HAVING OPTICAL FIBER LOAD SENSING CAPABILITY		8,932,288	13-Jan-15
US	13/308,196	30-Nov-11	MEDICAL APPARATUS SYSTEM HAVING OPTICAL FIBER LOAD SENSING CAPABILITY		8,961,436	24-Feb-15
US	13/930,988	28-Jun-13	BI-DIRECTIONAL PLUNGER-TYPE CATHETER STEERING HANDLE		9,095,682	4-Aug-15
US	13/337,896	27-Dec-11	PREDICTION OF LEFT ANTERIOR WALL RECONNECTION BASED ON CONTACT FORCE MEASURED DURING RF ABLATION		9,149,327	6-Oct-15
US	13/842,349	15-iMar-13	STEERING CONTROL MECHANISMS FOR CATHETERS		9,174,024	3-Nov-15
US	13/104,726	10-May-11	FINNED ABLATION HEAD		9,179,968	10-Nov-15
US	60/704,825	1-Aug-05	CATHETER HAMNG OPTICAL FIBER LOAD SENSING SYSTEM			
US	60/931,762	25-May-07	MANIPULATOR ARM WITH POSITION AND TOUCH SENSING			
US	61/143,718	9-Jan-09	FIBER OPTIC FORCE SENSING CATHETER			
US	61/176,519	8-May-09	METHOD AND APPARATUS FOR CONTROLLING LESION SIZE IN CATHETER- BASED ABLATION TREATMENT			

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Country	Application No.	Filing Date	Title	Publication No.	Patent No.	Issue Date
S	61/176,853	8-May-09	METHOD AND APPARATUS FOR VISUALIZING LESIONS IN CATHETER-BASED ABLATION TREATMENT			
US	61/177,180	10-Jun-09	METHOD AND APPARATUS FOR VISUALIZING LESIONS IN CATHETER-BASED ABLATION TREATMENT			
US	61/322,627	9-Apr-10	VARIABLE STIFFNESS STEERING MECHANISM FOR CATHETERS			
US	61/322,670	9-Apr-10	CONTROL HANDLE FOR A CONTACT FORCE ABLATION CATHETER			
US	61/333,045	10-May-10	FINNED ABLATION HEAD			
US	61/381,643	10-Sep-10	CONTROL HANDLE FOR A CONTACT FORCE ABLATION CATHETER			
US	61/409,379	2-Nov-10	CONTROL HANDLE FOR A CONTACT FORCE ABLATION CATHETER			
US	61/424,445	17-Dec-10	VARIABLE STIFFNESS STEERING MECHANISM FOR CATHETERS			
US	61/427,423	27-Dec-10	PREDICTION OF LEFT ANTERIOR WALL RECONNECTION BASED ON CONTACT FORCE MEASURED DURING RF ABLATION			

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Country	Application No.	Filing Date	Title	Publication No.	Patent No.	Issue Date
US	61/427,425	27-Dec-10	METHOD FOR PREDICTING LESION DEPTH AND THE PROBABILITY OF STEAM POP IN RF ABLATION THERAPY			
US	13/084,155	11-Apr-11	VARIABLE STIFFNESS STEERING MECHANISM FOR CATHETERS	2011-0251519		
US	61/475,384	14-Apr-11	COMPACT FORCE SENSOR FOR CATHETERS			
US	13/337,920	27-Dec-11	METHOD FOR PREDICTING THE PROBABILITY OF STEAM POP IN RF ABLATION THERAPY			
US	13/447,813	16-Apr-12	COMPACT FORCE SENSOR FOR CATHETERS	2012-0265102		
US	61/817,661	30-Apr-13	BI-DIRECTIONAL PLUNGER-TYPE CATHETER STEERING HANDLE			
US	61/819,216	3-May-13	DUAL BEND RADII STEERING CATHETER			
US	61/819,335	3-May-13	BI-DIRECTIONAL PLUNGER-TYPE CATHETER STEERING HANDLE			
US	14/011,286	27-Aug-13	DUAL BEND RADII STEERING CATHETER	2014-0330251		
US	14/064,898	28-Oct-13	TRIAXIAL FIBER OPTIC FORCE SENSING CATHETER	2014-0121537		
US	14/147,859	6-Jan-14	ELONGATED SURGICAL IMANIPULATOR WITH BODY POSITION AND DISTAL FORCE SENSING			

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Country	Application No.	Filing Date	Title	Publication No.	Patent No.	Issue Date
US	14/160,108	21-Jan-14	METHOD AND APPARATUS FOR CONTROLLING LESION SIZE IN CATHETER- BASED ABLATION TREATMENT	2014-0194869		
US	14/562,370	5-Dec-14	CONTROL HANDLE FOR A CONTACT FORCE ABLATION CATHETER	2015-0157399		
US	14/573,666	17-Dec-14	MEDICAL APPARATUS SYSTEM HAVING OPTICAL FIBER LOAD SENSING CAPABILITY	2015-0216612		
US	14/799,745	15-Jul-15	BI-DIRECTIONAL PLUNGER-TYPE CATHETER STEERING HANDLE			
US	14/876,786	5-Oct-15	PREDICTION OF LEFT ANTERIOR WALL RECONNECTION BASED ON CONTACT FORCE MEASURED DURING RF ABLATION			
US	14/928,699	30-Oct-15	STEERING CONTROL MECHANISMS FOR CATHETERS			

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