

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5289699

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
ATRICURE, INC.	02/23/2018
ATRICURE, LLC	02/23/2018
ENDOSCOPIC TECHNOLOGIES, LLC	02/23/2018
NCONTACT SURGICAL, LLC	02/23/2018

RECEIVING PARTY DATA

Name:	SILICON VALLEY BANK
Street Address:	3003 TASMAN DRIVE
Internal Address:	HF 150
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 198

Property Type	Number
Patent Number:	6086586
Patent Number:	6517536
Patent Number:	6546935
Patent Number:	6849075
Patent Number:	6889694
Patent Number:	6893442
Patent Number:	6896673
Patent Number:	6899710
Patent Number:	6905498
Patent Number:	6923806
Patent Number:	6932811
Patent Number:	6974454
Patent Number:	6984233
Patent Number:	7001415
Patent Number:	7063698
Patent Number:	7074180

PATENT

Property Type	Number
Patent Number:	7113831
Patent Number:	7226448
Patent Number:	7241292
Patent Number:	7288092
Patent Number:	7291161
Patent Number:	7294103
Patent Number:	7393353
Patent Number:	7399300
Patent Number:	7410487
Patent Number:	7468061
Patent Number:	7487780
Patent Number:	7530980
Patent Number:	7542807
Patent Number:	7543589
Patent Number:	7572257
Patent Number:	7582086
Patent Number:	7591818
Patent Number:	7604634
Patent Number:	7674258
Patent Number:	7682305
Patent Number:	7749157
Patent Number:	7753908
Patent Number:	7758578
Patent Number:	7780661
Patent Number:	7785324
Patent Number:	7803155
Patent Number:	7819867
Patent Number:	7828795
Patent Number:	7909761
Patent Number:	7931578
Patent Number:	7951069
Patent Number:	7951147
Patent Number:	7957820
Patent Number:	7981125
Patent Number:	8002770
Patent Number:	8029528
Patent Number:	8034051
Patent Number:	8034053

Property Type	Number
Patent Number:	8057471
Patent Number:	8083739
Patent Number:	8096990
Patent Number:	8114075
Patent Number:	8211011
Patent Number:	8216221
Patent Number:	8235990
Patent Number:	8241273
Patent Number:	8241277
Patent Number:	8267951
Patent Number:	8348939
Patent Number:	8353907
Patent Number:	8409198
Patent Number:	8419729
Patent Number:	8430875
Patent Number:	8454593
Patent Number:	8454598
Patent Number:	8465479
Patent Number:	8518038
Patent Number:	8523759
Patent Number:	8535307
Patent Number:	8545498
Patent Number:	8603083
Patent Number:	8628522
Patent Number:	8636754
Patent Number:	8696556
Patent Number:	8715302
Patent Number:	8721597
Patent Number:	8814778
Patent Number:	8852218
Patent Number:	8858528
Patent Number:	8858552
Patent Number:	8876820
Patent Number:	8888766
Patent Number:	8915878
Patent Number:	8915908
Patent Number:	8932308
Patent Number:	8945151

Property Type	Number
Patent Number:	8992557
Patent Number:	8998892
Patent Number:	8998900
Patent Number:	9017349
Patent Number:	9066741
Patent Number:	9072518
Patent Number:	9072522
Patent Number:	9101364
Patent Number:	9173705
Patent Number:	9265486
Patent Number:	9282973
Patent Number:	9308042
Patent Number:	9370395
Patent Number:	9393023
Patent Number:	9398932
Patent Number:	9408659
Patent Number:	9427277
Patent Number:	9427278
Patent Number:	9439714
Patent Number:	9445864
Patent Number:	9463024
Patent Number:	9474574
Patent Number:	9498113
Patent Number:	9561044
Patent Number:	9561065
Patent Number:	9572624
Patent Number:	9603657
Patent Number:	9603658
Patent Number:	9750566
Patent Number:	9808280
Patent Number:	9861371
Patent Number:	9883867
Patent Number:	D544602
Application Number:	62615912
Application Number:	62615895
Application Number:	62615872
Application Number:	15868270
Application Number:	15874257

Property Type	Number
Application Number:	62611247
Application Number:	62599767
Application Number:	62592194
Application Number:	62586020
Application Number:	15726251
Application Number:	62555203
Application Number:	15694642
Application Number:	62547990
Application Number:	15669639
Application Number:	15651937
Application Number:	62526392
Application Number:	15436610
Application Number:	15424449
Application Number:	15423139
Application Number:	15335296
Application Number:	15334157
Application Number:	15299176
Application Number:	15289750
Application Number:	15271078
Application Number:	15260154
Application Number:	15231777
Application Number:	15224346
Application Number:	15207893
Application Number:	15167845
Application Number:	15154714
Application Number:	15136766
Application Number:	15094830
Application Number:	15051363
Application Number:	15046183
Application Number:	14989985
Application Number:	14990030
Application Number:	14964930
Application Number:	14864697
Application Number:	14799576
Application Number:	14799535
Application Number:	14745136
Application Number:	14529822
Application Number:	15014314

Property Type	Number
Application Number:	14585712
Application Number:	14549811
Application Number:	14707907
Application Number:	14668479
Application Number:	14634608
Application Number:	14605790
Application Number:	14594682
Application Number:	14593961
Application Number:	14582868
Application Number:	14509789
Application Number:	14462930
Application Number:	14138275
Application Number:	14085836
Application Number:	14071234
Application Number:	14024434
Application Number:	14021368
Application Number:	13861154
Application Number:	13735225
Application Number:	13541580
Application Number:	13270067
Application Number:	13117863
Application Number:	13104848
Application Number:	13074960
Application Number:	12886436
Application Number:	12879106
Application Number:	12463760
Application Number:	12339331
Application Number:	11970005
Application Number:	11558423
Application Number:	11408307

CORRESPONDENCE DATA

Fax Number: (800)494-7512

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: 202-370-4750

Email: ipteam@coagencyglobal.com

Correspondent Name: JOANNA MCCALL

Address Line 1: 1025 VERMONT AVE NW, SUITE 1130

Address Line 2: COGENCY GLOBAL INC.

PATENT

REEL: 047951 FRAME: 0501

Address Line 4: WASHINGTON, D.C. 20005	
ATTORNEY DOCKET NUMBER:	1027465
NAME OF SUBMITTER:	LAURA A. KENERSON
SIGNATURE:	/Laura A. Kenerson/
DATE SIGNED:	12/18/2018
Total Attachments: 17 source=USPTO Submission - Atricure 2018 (Patents) (2)#page2.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page3.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page4.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page5.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page6.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page7.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page8.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page9.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page10.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page11.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page12.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page13.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page14.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page15.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page16.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page17.tif source=USPTO Submission - Atricure 2018 (Patents) (2)#page18.tif	

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Joint Intellectual Property Security Agreement (this "**Agreement**") is entered into as of February 23, 2018 by and among (i) **SILICON VALLEY BANK** ("**Agent**") and (ii) **ATRICURE, INC.**, a Delaware corporation with its chief executive office located at 7555 Innovation Way, Mason, Ohio 45040 ("**Atricure**"), (iii) **ATRICURE, LLC**, a Delaware limited liability company ("**Atricure LLC**") (iv) **ENDOSCOPIC TECHNOLOGIES, LLC**, a Delaware limited liability company ("**Endoscopic**") and (v) **nCONTACT SURGICAL, LLC**, a Delaware limited liability company ("**nContact**", and together with Atricure, Atricure LLC and Endoscopic, individually and collectively, jointly and severally, the "**Grantor**").

RECITALS

A. Agent and Lenders have agreed to make certain advances of money and to extend certain financial accommodations to Grantor (the "**Loans**") in the amounts and manner set forth in that certain Loan and Security Agreement, dated as of the date hereof (as the same may be further amended, modified or supplemented from time to time, the "**Loan Agreement**"; capitalized terms used herein are used as defined in the Loan Agreement). Agent and Lenders are willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Agent, for the ratable benefit of the Lenders, a security interest in certain Copyrights, Trademarks, Patents, and Mask Works (as each term is described below) to secure the obligations of Grantor under the Loan Agreement.

B. Pursuant to the terms of the Loan Agreement, Grantor has granted to Agent, for the ratable benefit of the Lenders, a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement, Grantor grants and pledges to Agent, for the ratable benefit of the Lenders, a security interest in all of Grantor's right, title and interest in, to and under its intellectual property (all of which shall collectively be called the "**Intellectual Property Collateral**"), including, without limitation, the following:

1. Any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held, including without limitation those set forth on Exhibit A attached hereto (collectively, the "**Copyrights**");

2. Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

3. Any and all design rights that may be available to Grantor now or hereafter existing, created, acquired or held;

4. All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the

same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "**Patents**");

5. Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "**Trademarks**");

6. All mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired, including, without limitation those set forth on Exhibit D attached hereto (collectively, the "**Mask Works**");

7. Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

8. All licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights;

9. All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and

10. All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

This security interest is granted in conjunction with the security interest granted to Agent under the Loan Agreement. The rights and remedies of Agent with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Agent as a matter of law or equity. Each right, power and remedy of Agent provided for herein or in the Loan Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Agent of any one or more of the rights, powers or remedies provided for in this Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Agent and/or any Lender, of any or all other rights, powers or remedies.

[Signature page follows.]

IN WITNESS WHEREOF, the parties have caused this Joint Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address of Grantor:

c/o AtriCure, Inc.
7555 Innovation Way
Mason, Ohio 45040
Attn: M. Andrew Wade
Fax: (513) 644-1315
Email: awade@atricure.com

ATRICURE, INC.

By: M. Andrew Wade
Name: M. Andrew Wade
Title: SVP : CFO

ATRICURE LLC

By: M. Andrew Wade
Name: M. Andrew Wade
Title: SVP : CFO

ENDOSCOPIC TECHNOLOGIES, LLC

By: M. Andrew Wade
Name: M. Andrew Wade
Title: SVP : CFO

nCONTACT SURGICAL, LLC

By: M. Andrew Wade
Name: M. Andrew Wade
Title: SVP : CFO

AGENT:

SILICON VALLEY BANK

Address of Bank:

Silicon Valley Bank
380 Interlocken Crescent, Suite 600
Broomfield, Colorado 80021
Attn: Tom Hertzberg
Fax: (303) 469-9088
Email: thertzberg@svb.com

By: _____
Name: _____
Title: _____

[Signature Page to Intellectual Property Security Agreement]

PATENT
REEL: 047951 FRAME: 0505

IN WITNESS WHEREOF, the parties have caused this Joint Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address of Grantor:

c/o AtriCure, Inc.
7555 Innovation Way
Mason, Ohio 45040
Attn: M. Andrew Wade
Fax: (513) 644-1315
Email: awade@atricure.com

ATRICURE, INC.

By: _____

Name: _____

Title: _____

ATRICURE LLC

By: _____
Name: _____
Title: _____

ENDOSCOPIC TECHNOLOGIES, LLC

By: _____

Name: _____

Title: _____

nCONTACT SURGICAL, LLC

By: _____
Name: _____
Title: _____

AGENT:

Address of Bank:

SILICON VALLEY BANK

Silicon Valley Bank
380 Interlocken Crescent, Suite 600
Broomfield, Colorado 80021
Attn: Tom Hertzberg
Fax: (303) 469-9088
Email: thertzberg@svb.com

By: Tom Hertzberg
Name: Tom Hertzberg
Title: Director

[Signature Page to Intellectual Property Security Agreement]

PATENT
REEL: 047951 FRAME: 0506

EXHIBIT A

Copyrights

None.

EXHIBIT B

Patents

<u>U.S. Patents Issued</u>	<u>Patent No.</u>	<u>Issued</u>
Bipolar Tissue Grasping Apparatus and Tissue Welding Method	6,086,586	7/11/2000
Transmural Ablation Device and Method	6,517,536	2/11/2003
Method for Transmural Ablation	6,546,935	4/15/2003
Cardiac Ablation Devices and Methods (fusion)	6,849,075	2/1/2005
Transmural Ablation Method	6,889,694	5/10/2005
Vacuum Coagulation Probe for Atrial Fibrillation Treatment	6,893,442	5/17/2005
Method for Transmural Ablation	6,896,673	5/24/2005
Combination Ablation and Visualization Apparatus for Ablating Cardiac Tissue	6,899,710	5/31/2005
Transmural Ablation Device with EKG Sensor and Pacing Electrode	6,905,498	6/14/2005
Transmural Ablation Device with Spring Loaded Jaws	6,923,806	8/2/2005
Transmural Ablation Device with Integral EKG Sensor	6,932,811	8/23/2005
Transmural Ablation Device with Thermocouple for Measuring Tissue Temperature	6,974,454	12/13/2005
Transmural Ablation Device with Parallel Electrodes	6,984,233	1/10/2006
Transmural Ablation Device	7,001,415	2/21/2006
Vacuum Coagulation Probes	7,063,698	6/20/2006
Visualization During Closed-Chest Surgery	7,074,180	7/11/2006
Transmural Ablation Device	7,113,831	9/26/2006
Cardiac Treatment Devices and Methods	7,226,448	6/5/2007
Cardiac Ablation Device with Movable Hinge	7,241,292	7/10/2007
Method and Apparatus for Ablating Cardiac Tissue with Guide Facility	7,288,092	10/30/2007
Articulated Clamping Member	7,291,161	11/6/2007
Retractor with Inflatable Blades	7,294,103	11/13/2007
Transmural Ablation Device with Temperature Sensor	7,393,353	7/1/2008
Cardiac Ablation Devices and Methods	7,399,300	7/15/2008
Vacuum Coagulation Probe for Atrial Fibrillation Treatment	7,410,487	8/12/2008
Transmural Ablation Device with Integral EKG Sensor	7,468,061	12/23/2008
Sub-Xyphoid Method for Ablating Cardiac Tissue	7,487,780	2/10/2009
Bipolar Transmural Ablation Method and Apparatus	7,530,980	5/12/2009
Conduction Block Verification Probe and Method of Use	7,542,807	6/2/2009
Method for Ablating Cardiac Tissue	7,543,589	6/9/2009
Vacuum Coagulation & Dissection Probes	7,572,257	8/11/2009
Surgical Clamp	7,582,086	9/1/2009
Cardiac Ablation Devices and Methods	7,591,818	9/22/2009
Transmural Ablation Device	7,604,634	10/20/2009
Electrophysiology Electrode Having Multiple Power Connections and Electrophysiology Devices Including the Same	7,674,258	3/9/2010
Methods and Devices for Cardiac Surgery	7,682,305	3/23/2010
Methods & Devices for Minimally Invasive Cardiac Surgery for Atrial Fibrillation	7,749,157	7/6/2010
Apparatus for Securing an Electrophysiology Probe to a Clamp	7,753,908	7/13/2010
Methods of Coagulating Tissue	7,758,578	7/20/2010
Vacuum Coagulation Probes	7,780,661	8/24/2010
Clamp Based Lesion Formation Apparatus and Methods Configured to Protect Non-Target Tissue	7,785,324	8/31/2010
Vacuum Coagulation Probes	7,803,155	9/28/2010

Cardiac Treatment Devices and Methods	7,819,867	10/26/2010
Surgical Ablation and Pacing Device	7,828,795	11/9/2010
Atraumatic Tissue Retraction Device	7,909,761	3/22/2011
Methods and Systems for Tissue Cavity Closure	7,931,578	4/26/2011
Methods & Devices for Minimally Invasive Cardiac Surgery for Atrial Fibrillation	7,951,069	5/31/2011
Surgical Clamp	7,951,147	5/31/2011
Conduction Block Verification Probe and Method of Use	7,957,820	6/7/2011
Surgical Knot Pusher and Cutter	7,981,125	7/19/2011
Clamp Based Methods and Apparatus for Forming Lesions in Tissue and Confirming Whether a Therapeutic Lesion has been Formed	8,002,770	8/23/2011
Instrument Guide and Method for Use	8,029,528	10/4/2011
Ablation Device with Sensor	8,034,051	10/11/2011
Vacuum Coagulation & Dissection Probes	8,034,053	10/11/2011
Surgical Ablation and Pacing Device	8,057,471	11/15/2011
Two-Piece Jaw For Bipolar Ablation Device	8,083,739	12/27/2011
Ablative Treatment of the Heart to Improve Patient Outcomes Following Surgery	8,096,990	1/17/2012
Method and Apparatus for Ablating Cardiac Tissue with Guide Facility	8,114,075	2/14/2012
Diaphragm Entry for Posterior Surgical Access	8,211,011	7/3/2012
Cardiac Ablation Systems and Methods	8,216,221	7/10/2012
Vacuum Coagulation Probes	8,235,990	8/7/2012
Method and Devices for Coagulation of Tissue	8,241,273	8/14/2012
Apparatus for Securing an Electrophysiology Probe to a Clamp	8,241,277	8/14/2012
Dissecting Cannula and Methods of Use thereof	8,267,951	9/18/2012
Ablation Device with Sensor	8,348,939	1/8/2013
Ablation Device with Internally Cooled Electrodes	8,353,907	1/15/2013
Clamp Based Methods and Apparatus for Forming Lesions in Tissue and Confirming Whether a Therapeutic Lesion has been Formed	8,409,198	4/2/2013
Cardiac Ablation Devices and Methods	8,419,729	4/16/2013
Magnetic Navigation Systems and Methods	8,430,875	4/30/2013
Method for Ablating Heart Tissue to Treat a Cardiac Arrhythmia	8,454,593	6/4/2013
Vacuum Coagulation Probes	8,454,598	6/4/2013
Methods and Devices for Performing Biatial Coagulation	8,465,479	6/18/2013
Electrophysiology Electrode Having Multiple Power Connections and Electrophysiology Devices Including the Same	8,518,038	8/27/2013
Methods and Devices for Cardiac Surgery	8,523,759	9/3/2013
Cardiac Treatment Devices and Methods	8,535,307	9/17/2013
Cardiac Ablation Devices and Methods	8,545,498	10/1/2013
Matrix Router for Surgical Ablation	8,603,083	12/10/2013
Cardiac Ablation Systems and Methods	8,628,522	1/14/2014
Clip Applicator	8,636,754	1/28/2014
Tissue Retractors with Fluid Evacuation/Infusion and/or Light Emission Capability	8,696,556	4/15/2014
Left Atrial Appendage Treatment Systems and Methods	8,715,302	5/6/2014
Diaphragm Entry for Posterior Surgical Access	8,721,597	5/13/2014
Pericardial Devices, Systems and Methods For Occluding An Atrial Appendage	8,814,778	8/26/2014
Apparatus and Methods for Occluding an Anatomical Structure	8,852,218	10/7/2014
Articulating Cannula Access Device	8,858,528	10/14/2014
Vacuum Coagulation Probes	8,858,552	10/14/2014
Surgical Clamp	8,876,820	11/4/2014
Method and Devices for Performing Biatial Coagulation	8,888,766	11/18/2014

Ablation Device with Internally Cooled Electrodes	8,915,878	12/23/2014
Cryogenic Probe	8,915,908	12/23/2014
Left Atrial Appendage Treatment Systems and Methods	8,932,308	1/13/2015
Surgical Clip Applicator and Apparatus including the Same	8,945,151	2/3/2015
Dissecting Cannula and Methods of Use Thereof	8,992,557	3/31/2015
Ablation Device With Cooled Electrodes And Methods of Use	8,998,892	4/7/2015
Vacuum Coagulation Probes	8,998,900	4/7/2015
Appendage Clamp Deployment Assist Device	9,017,349	4/28/2015
Robotic Toolkit	9,066,741	6/30/2015
High-voltage pulse ablation systems and methods	9,072,518	7/7/2015
Adjustable Clamp Systems and Methods	9,072,522	7/7/2015
Cardiac Ablation Devices and Methods	9,101,364	8/11/2015
Subxyphoid Epicardial Ablation	9,173,705	11/3/2015
Surgical Device	9,265,486	2/23/2016
Clip Deployment Tool and Associated Methods	9,282,973	3/15/2016
Vacuum Coagulation Probes	9,308,042	4/12/2016
Ablation Clamp with Malleable Jaws	9,370,395	6/21/2016
Apparatus and Methods for Deploying a Clip to Occlude an Anatomical Structure	9,393,023	7/19/2016
Clamp Based Method and Apparatus for Forming Lesions in Tissue and Confirming Whether a Therapeutic Lesion has been Formed	9,398,932	7/26/2016
Surgical Instrument with Separate Tool Head and Method of Use	9,408,659	8/9/2016
Ablative Treatment of the Heart to Improve Patient Outcomes Following Surgery	9,427,277	8/30/2016
Electrophysiology Electrode Having Multiple Power Connections and Electrophysiology Devices Including the Same	9,427,278	8/30/2016
Vacuum Coagulation Probes	9,439,714	9/13/2016
Adjustable Clamp Systems and Methods	9,445,864	9/20/2016
Pericardial Devices, Systems and Methods for Occluding an Atrial Appendage	9,463,024	10/11/2016
Stabilized Ablation Systems and Methods	9,474,574	10/25/2016
Diaphragm Entry for Posterior Surgical Access	9,498,113	11/22/2016
Diaphragm Entry for Posterior Surgical Access	9,561,044	2/7/2017
Robotic Toolkit	9,561,065	2/7/2017
Bipolar Belt Systems and Methods	9,572,624	2/21/2017
Vacuum Coagulation Probe for Atrial Fibrillation Treatment	9,603,657	3/28/2017
Methods of Coagulating Tissue	9,603,658	3/28/2017
Magnetic Navigation Systems and Methods	9,750,566	9/5/2017
Diaphragm Entry for Posterior Surgical Access	9,808,280	11/7/2017
Surgical Tool	9,861,371	1/9/2018
Surgical Tool	9,883,867	2/6/2018
Handle for Surgical Device	D544,602	6/12/2007

<u>U.S. Patent Applications</u>	<u>Application No.</u>	<u>Filing Date</u>
Device and Accessories for a Percutaneous Endoscopic Ablation System	62/615,912	1/10/2018
Sub-Xiphoid LAAM Device	62/615,895	1/10/2018
Rigid Beam LAAM	62/615,872	1/10/2018
Occlusion Clip	15/868,270	1/11/2018
Apparatus and Methods for Occluding an Anatomical Structure	15/874,257	1/18/2018
Open Chest Clip Deployment	62/611,247	12/28/2017
Access and Visualization Devices	62/599,767	12/17/2017

Cryopad	62/592,194	11/29/2017
Open Chest Clip Deployment	62/586,020	11/14/2017
Diaphragm Entry for Posterior Surgical Access	15/726,251	10/5/2017
Tissue Stop	62/555,203	9/7/2017
Magnetic Navigation Systems and Methods	15/694,642	9/1/2017
Exterior Pattern for Thermal Protection	62/547,990	8/21/2017
Cardiac Ablation Systems and Methods	15/669,639	7/17/2017
Hemostatic Stabilization System	15/651,937	7/17/2017
Numerical Model Simulation of Impedance Based Control for RF Ablation using the Isolator Synergy Clamp	62/526,392	6/29/2017
Bipolar Belt Systems and Methods	15/436,610	2/17/2017
Diaphragm Entry for Posterior Surgical Access	15/424,449	2/3/2017
Robotic Toolkit	15/423,139	2/2/2017
Vacuum Coagulation Probe for Atrial Fibrillation Treatment	15/335,296	10/26/2016
Stabilized Ablation Systems and Methods	15/334,157	10/25/2016
Diaphragm Entry for Posterior Surgical Access	15/299,176	10/20/2016
Pericardial Devices, Systems and Methods for Occluding an Atrial Appendage	15/289,750	10/10/2016
Adjustable Clamp Systems and Methods	15/271,078	9/20/2016
Vacuum Coagulation Probes	15/260,154	9/8/2016
Robotic Assisted Clip Applier	15/231,777	8/8/2016
Ablation Devices and Methods of Use	15/224,346	7/29/2016
Surgical Instrument with Separate Tool Head and Method of Use	15/207,893	7/12/2016
Beating Heart Controller and Simulator	15/167,845	5/27/2016
Access Visualization System	15/154,714	5/13/2016
Method and Devices for Coagulation of Tissue	15/136,766	4/22/2016
Vacuum Coagulation Probes	15/094,830	4/8/2016
Medical Devices	15/051,363	2/23/2016
Inflatable Atrial Appendage Occlusion Apparatus and Methods	15/046,183	2/17/2016
Surgical Device	14/989,985	1/7/2016
Surgical Device	14/990,030	1/7/2016
Occlusion Clip	14/964,930	12/10/2015
Subxyphoid Epicardial Ablation	14/864,697	9/24/2015
Surgical Tool	14/799,576	7/15/2015
Surgical Tool	14/799,535	7/14/2015
High-Voltage Pulse Ablation Systems and Methods	14/745,136	6/19/2015
Surgical Clamp	14/529,822	10/31/2014
Clip Deployment Tool and Associated Methods	15/014,314	2/3/2016
Appendage Clamp Deployment Assist Device	14/585,712	12/30/2014
Occlusion Clip	14/549,811	11/21/2014
Methods of Coagulating Tissue	14/707,907	5/8/2015
Dissecting Cannula and Methods of Use Thereof	14/668,479	3/25/2015
Vacuum Coagulation Probes	14/634,608	2/27/2015
Methods to Prevent Stress Remodeling of Atrial Tissue	14/605,790	1/26/2015
Surgical Clip Applicator and Apparatus including the Same	14/594,682	1/12/2015

Left Atrial Appendage Treatment Systems and Methods	14/593,961	1/9/2015
Systems and Methods for Left Atrial Appendage Closure	14/582,868	12/24/2014
Articulating Cannula Access Device	14/509,789	10/8/2014
Apparatus and Methods for Occluding an Anatomical Structure	14/462,930	8/19/2014
Clip Applicator	14/138,275	12/23/2013
Occlusion Clip	14/085,836	11/21/2013
Matrix Router for Surgical Ablation	14/071,234	11/4/2013
Cardiac Treatment Devices and Methods	14/024,434	9/11/2013
Left Atrial Appendage Devices and Methods	14/021,368	9/9/2013
Left Atrial Appendage Devices and Methods	13/861,154	4/11/2013
Ablation Device with Sensor	13/735,225	1/7/2013
Method and Devices for Coagulation of Tissue	13/541,580	7/3/2012
Vacuum Coagulation & Dissection Probes	13/270,067	10/10/2011
Methods and Devices for Minimally Invasive Cardiac Surgery for Atrial Fibrillation	13/117,863	5/27/2011
Vacuum Coagulation Probes	13/104,848	5/10/2011
Protective Systems and Methods for Use During Ablation Procedures	13/074,960	3/29/2011
Left Atrial Appendage Devices and Methods	12/886,436	9/20/2010
Scope and Magnetic Introducer Systems and Methods	12/879,106	9/10/2010
Conduction Block Systems and Methods	12/463,760	5/11/2009
Magnetic Introducer Systems and Methods	12/339,331	12/19/2008
Ablation System, Clamp and Method of Use	11/970,005	1/7/2008
Vacuum Coagulation Probes	11/558,423	11/9/2006
Diaphragm Entry for Posterior Surgical Access	11/408,307	4/21/2006

<u>Germany Patents Issued</u>	<u>Patent No.</u>	<u>Filing Date</u>
Ablation System and Clamp	1943973	1/11/2008
Articulated Clamping Member	1549239	9/26/2003
Lighted Dissector and Method for Use	1722689	2/9/2005
Surgical Clamp	1809194	10/19/2005
Ablation Device with Internally Cooled Electrodes	2113217	12/22/2008

<u>Great Britain Patents Issued</u>	<u>Patent No.</u>	<u>Filing Date</u>
Ablation System and Clamp	1943973	1/11/2008
Articulated Clamping Member	1549239	9/26/2003
Surgical Clamp	1809194	10/19/2005
Ablation Device with Internally Cooled Electrodes	2113217	12/22/2008

<u>France Patent Issued</u>	<u>Patent No.</u>	<u>Filing Date</u>
Ablation Device with Internally Cooled Electrodes	2113217	12/22/2008

<u>Italy Patent Issued</u>	<u>Patent No.</u>	<u>Filing Date</u>
Ablation Device with Internally Cooled Electrodes	2113217	12/22/2008

Italy Patent Issued

Ablation Device with Internally Cooled Electrodes

**Patent
No.**

2113217

Filing Date

12/22/2008

Japan Patents Issued

Vacuum Coagulation Probes

**Patent
No.**

5054116

Filing Date

11/9/2006

Diaphragm Entry for Posterior Surgical Access

5256206

11/9/2006

Vacuum Coagulation Probes

5320065

4/21/2006

Surgical Device

6239509

8/15/2012

China Patent Issued

Surgical Device

Patent No.

103841906

Filing Date

8 /15/2012

Hong Kong Patent Issued

Surgical Device

Patent No.

1193014

Filing Date

8 /15/2012

Russia Patent Issued

Surgical Device

Patent No.

2559922

Filing Date

8 /15/2012

Foreign Patent Applications**European Patent Applications****Application No.**

Surgical Device

12823764.1

Occlusion Clip

14864255.6

Clip Deployment Tool and Associated Methods

13738225.5

Stabilized Ablation Systems and Methods

11839128.3

Systems and Methods for Left Atrial Appendage Closure

14877463.1

Occlusion Clip

15843078.5

Surgical Tool

16177862.6

Surgical Tool

16177861.8

Vacuum Coagulation & Dissection Probes

20140156217

Diaphragm Entry for Posterior Surgical Access

20060751099

Vacuum Coagulation Probes

20060846269

Articulating Cannula Access Device

20090734553

Dissecting Cannula and Methods of Use Thereof

20090763463

Diaphragm Entry for Posterior Surgical Access

06839809.8

Vacuum Coagulation Probes

14156217.3

Vacuum Coagulation Probes

06846269.6

Dissecting Cannula and Methods of Use Thereof

09763463.8

Diaphragm Entry for Posterior Surgical Access

6839809.8

Access Visualization Systems

TBD

China Patent Applications**Application No.**

8136158.3

Occlusion Clip	201480071898.X	11/21/2014
Systems and Methods for Left Atrial Appendage Closure	201480071851.3	12/24/2014
Occlusion Clip	201580004333.4	12/10/2015
Surgical Tool	201610412383.2	6/13/2016
Surgical Tool	201610374442.1	5/31/2016
Access Visualization Systems	201680034074.4	12/11/2017

Hong Kong Patent Applications

	<u>Application No.</u>	<u>Filing Date</u>
Occlusion Clip	17103042.3	11/21/2014
Systems and Methods for Left Atrial Appendage Closure	17105222.0	12/30/2013
Occlusion Clip	16114376.7	12/10/2015
Occlusion Clip	17102745.5	12/10/2015
Surgical Tool	17107199.5	7/18/2017
Surgical Tool	17107200.2	7/18/2017

Japan Patent Applications

Occlusion Clip	2016-532569	11/21/2014
Systems and Methods for Left Atrial Appendage Closure	2016-561988	12/24/2014
Occlusion Clip	2017-550084	12/10/2015
Surgical Tool	2016-98274	5/16/2016
Surgical Tool	2016-101028	5/20/2016
Diaphragm Entry for Posterior Surgical Access	2016-74412	7/28/2012

Russia Patent Application

	<u>Application No.</u>	<u>Filing Date</u>
Occlusion Clip	2016124217	11/21/2014

Brazil Patent Applications

	<u>Application No.</u>	<u>Filing Date</u>
Surgical Device	112014003655-1	8/15/2012
Occlusion Clip	1120160115724	11/21/2014
Surgical Tool	1020160162068	7/12/2016
Surgical Tool	1020160091969	4/25/2016

Canada Patent Application

	<u>Application No.</u>	<u>Filing Date</u>
Surgical Device	2,844,687	8/15/2012

Taiwan Patent Application

	<u>Application No.</u>	<u>Filing Date</u>
Surgical Device	TBD	2/7/2014

EXHIBIT C

Trademarks

<u>US Trademark Registrations</u>	<u>Registration No.</u>	<u>Registered Date</u>
COOLRAIL	3,455,055	6/24/2008
ATRICURE	2,708,992	4/22/2003
COBRA	4,409,688	10/1/2013
FUSION	4,870,939	12/15/2015
COBRA FUSION	4,290,128	2/12/2013
AFFIRM (STYLIZED)	3,677,933	9/1/2009
ESTECH	2,539,354	2/19/2002
ATRICLIP	3,573,736	2/10/2009
GILLINOV-COSGROVE	3,788,532	5/11/2010
SYNERGY ACCESS	3,986,413	6/28/2011
ISOLATOR	3,142,212	9/12/2006
CRYOICE	3,993,674	7/12/2011
ATRICLIP PRO	4,351,248	6/11/2013
OPVAC	2,475,494	8/7/2001
ATRICLIP PRO2	5,237,683	7/4/2017
ATRICURE	5,094,066	12/6/2016
CRYOICE CRYOFORM	5,018,977	8/9/2016
CRYOFORM	5,018,972	8/9/2016
NUMERIS	3,670,662	8/18/2009
VISITRAX	3,477,330	7/29/2008
NCONTACT	5,177,042	4/4/2017
SUBTLE	4,753,217	6/9/2015
NCONTACT SURGICAL	3,655,149	7/14/2009
EPI-SENSE	4,518,068	4/22/2014
<u>US Trademark Applications</u>	<u>Application No.</u>	<u>Application Date</u>
ATRICLIP PRO-V	86/698,660	7/20/2015
PRO-V	86/698,679	7/20/2015
FLEX-V	87/440,917	5/8/2017
TRAC-AF	87/689,005	11/17/2017
CRYOSPHERE	87/688,990	11/17/2017

<u>Country</u>	<u>Trademark Registration</u>	<u>Registration No.</u>	<u>Registered Date</u>
Australia	COOLRAIL	1841838	11/29/2017
Australia	ATRICLIP	1841839	11/29/2017
Australia	ISOLATOR	1841837	11/29/2017
Australia	cryoICE	1841835	11/29/2017
Australia	cryoFORM	1841836	11/29/2017
Australia	PRO-V	1841841	11/29/2017
Australia	EPI-Sense	1841840	11/29/2017
Benelux	ATRICURE	1004784	11/14/2016
Benelux	CRYOICE	1004785	11/14/2016
Benelux	CRYOFORM	1004786	11/14/2016
Benelux	COOLRAIL	1013561	5/1/2017
Benelux	AtriClip	1013565	5/1/2017
Benelux	SYNERGY ACCESS	1013562	5/1/2017
Benelux	ISOLATOR	1013560	5/1/2017
Benelux	EPI-Sense	1013563	5/1/2017
Benelux	PRO-V	1013564	5/1/2017
Benelux	ATRICURE	1004784	11/14/2016
Benelux	CRYOFORM	1004786	11/14/2016
Benelux	CRYOICE	1004785	11/14/2016
China	ATRICLIP	19136421	3/28/2017
China	ATRICLIP PRO	19136422	3/28/2017
China	ATRICLIP PRO-V	19136423	3/28/2017
China	ATRICLIP PRO2	19136424	3/28/2017
China	ATRICURE	19136425	3/28/2017
China	ATRICURE	19136426	3/28/2017
China	COBRA FUSION	19136427	3/28/2017
China	CRYOFORM	19136429	3/28/2017
China	CRYOICE	19136430	3/28/2017
China	CRYOICE CRYOFORM	19136431	3/28/2017
China	EPI-SENSE	19136486	3/28/2017
China	ESTECH	19136482	3/28/2017
China	GILLINOV-COSGROVE	19136480	3/28/2017
China	ISOLATOR LONG	19136478	3/28/2017
China	NCONTACT	19136477	3/28/2017

China	NCONTACT SURGICAL	19136476	3/28/2017
China	NUMERIS	19136475	3/28/2017
China	SUBTLE	19136473	3/28/2017
China	SYNERGY ACCESS	19136472	3/28/2017
China	VISITRAX	19136471	3/28/2017
European Union IP Office	ATRICURE	16028763	3/15/2017
European Union IP Office	CRYOICE	16028771	3/13/2017
European Union IP Office	CRYOFORM	16028789	3/13/2017
European Union IP Office	ISOLATOR	16666232	10/13/2017
European Union IP Office	COOLRAIL	16666241	8/31/2017
European Union IP Office	SYNERGY ACCESS	16666257	8/29/2017
European Union IP Office	EPI-SENSE	16666265	9/5/2017
European Union IP Office	ATRICLIP	16666281	8/31/2017
Hong Kong	ATRICLIP	304029840	1/23/2017
Hong Kong	ATRICLIP PRO	304029859	1/23/2017
Hong Kong	ATRICLIP PRO-V	304029877	1/23/2017
Hong Kong	ATRICLIP PRO2	304029886	1/23/2017
Hong Kong	ATRICURE	304029895	1/23/2017
Hong Kong	ATRICURE	304029903	1/23/2017
Hong Kong	COBRA FUSION	304029912	1/23/2017
Hong Kong	COOLRAIL	304030244	1/24/2017
Hong Kong	CRYOFORM	304029921	1/23/2017
Hong Kong	CRYOICE	304029930	1/23/2017
Hong Kong	CRYOICE CRYOFORM	304029949	1/23/2017
Hong Kong	EPI-SENSE	304029958	1/23/2017
Hong Kong	ESTECH	304030091	1/24/2017
Hong Kong	GILLINOV-COSGROVE	304030118	1/24/2017
Hong Kong	NCONTACT	304030145	1/24/2017
Hong Kong	NCONTACT SURGICAL	304030334	1/24/2017
Hong Kong	NUMERIS	304030343	1/24/2017
Hong Kong	PRO-V	304030389	1/24/2017
Hong Kong	SUBTLE	304030398	1/24/2017
Hong Kong	SYNERGY ACCESS	304030154	1/24/2017
Hong Kong	VISITRAX	304030163	1/24/2017
WO	Fusion	1129677	7/10/2012

WO	Cobra Fusion	1129678	7/10/2012
<u>Country</u>	<u>Trademark Application</u>	<u>Application No.</u>	<u>Application Date</u>
Australia	SYNERGY ACCESS	1841842	5/2/2017
Canada	COOLRAIL	1,839,228	5/16/2017
Canada	AtriClip	1,839,274	5/16/2017
Canada	SYNERGY ACCESS	1,839,227	5/16/2017
Canada	ISOLATOR	1,839,229	5/16/2017
Canada	cryoICE	1,839,272	5/16/2017
Canada	cryoFORM	1,839,271	5/16/2017
Canada	PRO-V	1,839,225	5/16/2017
Canada	Epi-Sense	1,839,226	5/16/2017
China	ISOLATOR	19136479	2/23/2016
Hong Kong	ISOLATOR	304030127	1/24/2017
Hong Kong	ISOLATOR LONG	304030136	1/24/2017
Japan	COOLRAIL	2017-62072	5/2/2017
Japan	AtriClip	2017-62076	5/2/2017
Japan	SYNERGY ACCESS	2017-62073	5/2/2017
Japan	ISOLATOR	2017-62071	5/2/2017
Japan	cryoICE	2017-62069	5/2/2017
Japan	cryoFORM	2017-62070	5/2/2017
Japan	PRO-V	2017-62075	5/2/2017
Japan	Epi-Sense	2017-62074	5/2/2017
Korea	COOLRAIL	40-2017-0057305	5/10/2017
Korea	ATRICLIP	40-2017-0057309	5/10/2017
Korea	SYNERGY ACCESS	40-2017-0057306	5/10/2017
Korea	ISOLATOR	40-2017-0057303	5/10/2017
Korea	cryoICE	40-2017-0057300	5/10/2017
Korea	cryoFORM	40-2017-0057301	5/10/2017
Korea	PRO-V	40-2017-0057307	5/10/2017
Korea	Epi-Sense	40-2017-0057292	5/10/2017

EXHIBIT D

Mask Works

None.

8136158.3

5