

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM384157

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	SECURITY INTEREST		
CONVEYING PARTY DATA			
Name	Formerly	Execution Date	Entity Type
ReCor Medical, Inc.		05/12/2016	Corporation: DELAWARE
RECEIVING PARTY DATA			
Name:	Otsuka Holdings Co., Ltd.		
Street Address:	Shinagawa Grand Central Tower, 2-16-4		
City:	Konan Minato-ku, Tokyo		
State/Country:	JAPAN		
Entity Type:	Corporation: JAPAN		
PROPERTY NUMBERS Total: 4			
Property Type	Number	Word Mark	
Serial Number:	86029311		
Registration Number:	4829591	PARADISE	
Serial Number:	86963754	RADIANCE	
Serial Number:	86963863	RECOR MEDICAL	
CORRESPONDENCE DATA			
Fax Number:	4152687522		
<i>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.</i>			
Phone:	415-268-7000		
Email:	kes8@mofo.com		
Correspondent Name:	Jennifer Lee Taylor		
Address Line 1:	425 Market Street		
Address Line 2:	c/o Morrison & Foerster LLP		
Address Line 4:	San Francisco, CALIFORNIA 94105		
NAME OF SUBMITTER:	Jennifer Lee Taylor		
SIGNATURE:	/JLT2/		
DATE SIGNED:	05/12/2016		
Total Attachments: 12			
source=1 - [Sound] Patent and Trademark Security Agreement#page1.tif			
source=1 - [Sound] Patent and Trademark Security Agreement#page2.tif			
source=1 - [Sound] Patent and Trademark Security Agreement#page3.tif			

CH \$115.00 86029311

source=1 - [Sound] Patent and Trademark Security Agreement#page4.tif
source=1 - [Sound] Patent and Trademark Security Agreement#page5.tif
source=1 - [Sound] Patent and Trademark Security Agreement#page6.tif
source=1 - [Sound] Patent and Trademark Security Agreement#page7.tif
source=1 - [Sound] Patent and Trademark Security Agreement#page8.tif
source=1 - [Sound] Patent and Trademark Security Agreement#page9.tif
source=1 - [Sound] Patent and Trademark Security Agreement#page10.tif
source=1 - [Sound] Patent and Trademark Security Agreement#page11.tif
source=1 - [Sound] Patent and Trademark Security Agreement#page12.tif

PATENT AND TRADEMARK SECURITY AGREEMENT

This PATENT AND TRADEMARK SECURITY AGREEMENT (this “**Agreement**”), dated as of May 12, 2016, is entered into between ReCor Medical, Inc., a Delaware corporation (the “**Grantor**”), and Otsuka Holdings Co., Ltd., a Japanese corporation (the “**Secured Party**”).

RECITALS

A. The Grantor has issued to the Secured Party a Secured Convertible Promissory Note dated as of May 12, 2016 (as amended, modified, renewed or extended from time to time, the “**Note**”).

B. Pursuant to the Security Agreement, dated as of May 12, 2016, between the Grantor and the Secured Party (as amended, modified, renewed or extended from time to time, the “**Security Agreement**”), the Grantor has granted to the Secured Party a security interest in all of Grantor’s present and future personal property assets, including all of Grantor’s present and future general intangibles, and including without limitation the Patents and Trademarks (each, as defined below), to secure the Secured Obligations (as defined in the Security Agreement).

C. To supplement the Secured Party’s security interest in the Patents and Trademarks pursuant to the Security Agreement, Grantor is executing and delivering this Agreement.

NOW, THEREFORE, Grantor and Secured Party each agrees as follows:

To secure the payment and performance of all Secured Obligations (including, without limitation, interest which, but for the filing of a petition in bankruptcy with respect to the Grantor, would accrue on such obligations) and without limiting any other security interest the Grantor has granted to the Secured Party, the Grantor hereby grants, assigns, and conveys to the Secured Party a security interest in the Grantor’s entire right, title, and interest in and to all of the following, whether now owned and hereafter acquired (collectively, but excluding the Excluded Property, the “**Collateral**”): all patents and patent applications, domestic or foreign, all licenses relating to any of the foregoing and all income and royalties with respect to any licenses (including, without limitation, such patents and patent applications as described in Schedule A) (collectively, the “**Patents**”), all rights to sue for past, present or future infringement thereof, all rights arising therefrom and pertaining thereto and all reissues, divisions, continuations, renewals, extensions and continuations-in-part thereof; all state (including common law), federal and foreign trademarks, service marks and trade names, and applications for registration of such trademarks, service marks and trade names, all licenses relating to any of the foregoing and all income and royalties with respect to any licenses (including, without limitation, such marks, names and applications as described in Schedule B) (collectively, the “**Trademarks**”), whether registered or unregistered and wherever registered, all rights to sue for past, present or future infringement or unconsented use thereof, all rights arising therefrom and pertaining thereto and all reissues, extensions and renewals thereof; the entire goodwill of or associated with the businesses now or hereafter conducted by the Grantor connected with and symbolized by any of the aforementioned properties and assets; all accounts, all intangible intellectual or other similar property and other general intangibles associated with or arising out of any of the

aforementioned properties and assets and not otherwise described above, including all license payments and payments under insurance (whether or not the Secured Party is the loss payee thereof) or any indemnity, warranty or guaranty payable by reason of loss or damage to or otherwise with respect to the foregoing Collateral; all commercial tort claims associated with or arising out of any of the aforementioned properties and assets; and all products, proceeds and supporting obligations of or with respect to any and all of the foregoing.

This Agreement has been granted in conjunction with the security interest granted to Secured Party under the Security Agreement. The rights and remedies of the Secured Party with respect to the security interests granted herein are without prejudice to, and are in addition to those set forth in the Security Agreement, all terms and provisions of which are incorporated herein by reference.

This Agreement is subject to modification only by a writing signed by the parties. To the extent that any provision of this Agreement conflicts with any provision of the Security Agreement, the provision giving the Secured Party greater rights or remedies shall govern, it being understood that the purpose of this Agreement is to add to, and not detract from, the rights granted to the Secured Party under the Security Agreement.

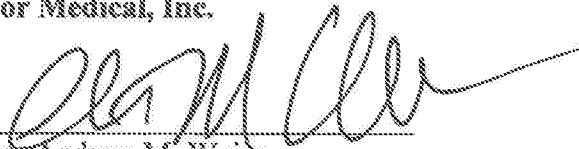
The benefits and burdens of this Agreement shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the parties; *provided* that the Grantor may not transfer any of the Collateral or any of its rights or obligations hereunder, without the prior written consent of the Secured Party, except as specifically permitted by the Note or the Security Agreement.

THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF DELAWARE.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement, as of the date first above written.

GRANTOR: ReCor Medical, Inc.

By: 
Name: Andrew M. Weiss
Title: Chief Executive Officer

SECURED PARTY: Otsuka Holdings Co., Ltd.

By: _____
Name: Tatsuo Higuchi
Title: President and Representative Director, CEO


By: _____
Name: Kazumichi Kobayashi
Title: Operating Officer and Director,
Business Development and Planning,
Otsuka RDN Project Leader

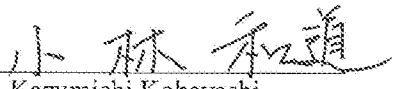
IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement, as of the date first above written.

GRANTOR: **ReCor Medical, Inc.**

By: _____
Name: Andrew M. Weiss
Title: Chief Executive Officer

SECURED PARTY: **Otsuka Holdings Co., Ltd.**

By: 
Name: Tatsuo Higuchi
Title: President and Representative Director, CEO

By: 
Name: Kazumichi Kobayashi
Title: Operating Officer and Director,
Business Development and Planning,
Otsuka RDN Project Leader

[Signature Page to Patent and Trademark Security Agreement]

Schedule A

PATENTS AND PATENT APPLICATIONS

Table of Patents/Applications Owned by ReCor Medical, Inc.

Application/Pub. No./Pat No.	Country	Entitled
App. # 09/161,079 Pat. # 6,355,030	US	Instruments and Methods Employing Thermal Energy for the Repair and Replacement of Cardiac Valves
App. # 09/659,068 Pub. # 2001/0045200 Pat. # 6,599,256	US	Occlusion of Tubular Anatomical Structures by Energy Application
App. # 09/691,825 Pat. # 6,669,655	US	Sonic Element and Catheter Incorporating Same
App. # 09/815,863 Pub. # 2002/0002371 Pat. # 6,605,084	US	Apparatus and Methods for Intrabody Thermal Treatment
App. # 2,399,570 Pat. # 2,399,570 C	CA	Apparatus and Methods for Intrabody Thermal Treatment
App. # 01918957.0 Pat. # EP 1265674 B1	EP	Apparatus and Methods for Intrabody Thermal Treatment
App. # 01918957.0 Pat. # EP 1265674 B1	FR	Apparatus and Methods for Intrabody Thermal Treatment
App. # 60135836D Pat. # EP 1265674 B1	DE	Apparatus and Methods for Intrabody Thermal Treatment
App. # 01918957.0 Pat. # EP 1265674 B1	GB	Apparatus and Methods for Intrabody Thermal Treatment
App. # 11/267,123 Pub. # 2006/0058711 Pat. # 7,540,846	US	Energy Application With Inflatable Annular Lens
App. # 2001273468 Pat. # 2001273468 B2	AU	Energy Application With Inflatable Annular Lens
App. # 2,415,671 Pat. # 2,415,671 C	CA	Energy Application With Inflatable Annular Lens
App. # 01812752.5 Pub. # 1441651 Pat. # 1239127 C	CN	Energy Application With Inflatable Annular Lens
App. # 01952746.4 Pat. # EP 1299038 B1	EP	Energy Application With Inflatable Annular Lens
App. # 01952746.4 Pat. # EP 1299038 B1	FR	Energy Application With Inflatable Annular Lens
App. # 01952746.4 Pat. # EP 1299038 B1	DE	Energy Application With Inflatable Annular Lens
App. # 01952746.4 Pat. # EP 1299038 B1	GB	Energy Application With Inflatable Annular Lens
App. # 11189579.3 Pub. # EP 2455015 A2	EP	Energy Application With Inflatable Annular Lens
App. # 11189581.9 Pub. # EP 2430998 A2	EP	Ultrasonic Emitter Configured to Receive a Liquid

Application/Pub. No./Pat No.	Country	Entitled
App. # 11189580.1 Pub. # EP 2430997 A2	EP	Ultrasonic Emitter With Reflective Interface
App. # 11189578.5 Pub. # EP 2430996 A2	EP	Energy-Emitting Catheter With Balloon
App. # 09/905,227 Pub. # 2002/0065512 Pat. # 6,635,054	US	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # 10/227,092 Pub. # 2003/0050632 Pat. # 7,083,614	US	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # 11/228,575 Pub. # 2006/0009753 Pat. # 7,326,201	US	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # 2001273471 Pub. # 2001273471 Pat. # 2001273471 B2	AU	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # 2,415,134 Pat. # 2,415,134 C	CA	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # 01815508.1 Pub. # 1455655 A Pat. # 1241658 C	CN	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # 01952750.6 Pat. # EP 1299035 B1	EP	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # 10010582.4 Pub. # EP 2275174 A2	EP	Thermal Treatment Methods and Apparatus With Ultrasound Energy Application
App. # 10010583.2 Pub. # EP 2275175 A2	EP	Thermal Treatment Methods and Apparatus With Ultrasound Energy Application
App. # 01952750.6 Pat. # EP 1299035 B1	FR	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # 01952750.6 Pat. # EP 1299035 B1	DE	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # 01952750.6 Pat. # EP 1299035 B1	GB	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # 2002-511799 Pat. # 4099388	JP	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # IN/PCT/2002/1585/KOL Pat. # 206728	IN	Thermal Treatment Methods and Apparatus With Focused Energy Application
App. # 13/478,825 Pub. # 2013/0072928	US	Intraluminal Method and Apparatus for Ablating Nerve Tissue
App. # 13/681,311 Pub. # 2013/0131668	US	Intraluminal Methods of Ablating Nerve Tissue
App. # 13/801,369 Pub. # 2013/0197555	US	Intraluminal Devices and Methods for Denervation
App. # 10/783,310 Pub. # 2004/0176757 Pat. # 7,837,676	US	Cardiac Ablation Devices
App. # 04713413.5 Pub. # EP 1596746 A0	EP	Cardiac Ablation Devices

Application/Pub. No./Pat No.	Country	Entitled
App. # 2010-087782 Pub. # 2010-221038 A Pat. # 5073000 B2	JP	Cardiac Ablation Devices
App. # 12/227,508 Pub. # 2010/0130892	US	Ablation Device With Optimized Input Power Profile and Method of Using the Same
App. # 61/204,744	US	Treatment of Mitral Valve Insufficiency
App. # 12/684,067 Pub. # 2010/0179424 Pat. # 8,974,445	US	Methods and Apparatus For Treatment of Cardiac Valve Insufficiency
App. # PCT/US10/20333 Pub. # WO 2010/080886	PCT	Methods and Apparatus For Treatment of Mitral Valve Insufficiency
App. # 10729496.9 Pub. # EP 2376011 A0	EP	Methods and Apparatus For Treatment of Mitral Valve Insufficiency
App. # 61/256,429	US	Method and Apparatus For Treatment of Hypertension Through Ultrasound Renal Denervation
App. # 61/292,618	US	Method and Apparatus For Treatment of Hypertension Through Ultrasound Renal Denervation
App. # 13/503,109 Pub. # 2012/0232436	US	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 13/826,645 Pub. # 2014/0031727	US	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 14/731,347 Pub. # 2015/0290427	US	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # PCT/US10/54637 Pub. # WO 2011/053757	PCT	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 2010313379 Pub. # 2010313379 A1 Pat. # 2010313379 B2	AU	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 2016200432	AU	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 2,779,386 Pub. # 2,779,386	CA	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 201080049201.0	CN	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 10776878.0 Pub. # EP 2493569 A0 Pat. # EP 2493569 B1	EP	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 15182333.3 Pub. # EP 2995350 A1	EP	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 10776878.0 Pat. # EP 2493569 B1	FR	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 302010027916.2 Pat. # EP 2493569 B1	DE	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 10776878.0 Pat. # EP 2493569 B1	UK	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 2012-537097 Pat. # 5768056 B2	JP	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation

Application/Pub. No./Pat No.	Country	Entitled
App. # 2014-255602	JP	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 1256/MUMNP/2012	IN	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # 10-2012-7013496	KR	Method and Apparatus For Treatment of Hypertension Through Percutaneous Ultrasound Renal Denervation
App. # PCT/US11/025543 Pub. # WO 2012/112165	PCT	Apparatus For Effecting Renal Denervation Using Ultrasound
App. # 14/000,168 Pub. # 2014/0163540	US	Apparatus For Effecting Renal Denervation Using Ultrasound
App. # 11709820.2 Pub. # EP 2675525 A0	EP	Apparatus For Effecting Renal Denervation Using Ultrasound
App. # 2013-554427 Pub. # 2014-512882	JP	Apparatus For Effecting Renal Denervation Using Ultrasound
App. # 227958 Pub. # 227958	IL	Apparatus For Effecting Renal Denervation Using Ultrasound
App. # 61/784,164	US	Methods of Plating or Coating Ultrasound Transducers
App. # 14/210,007 Pub. # 2014/0272110	US	Methods of Plating or Coating Ultrasound Transducers
App. # PCT/US14/22796 Pub. # WO 2014/159273	PCT	Methods of Plating or Coating Ultrasound Transducers
App. # 201480013826.X	CN	Methods of Plating or Coating Ultrasound Transducers
App. # 14721031.4 Pub. # EP 2971232 A0	EP	Methods of Plating or Coating Ultrasound Transducers
App. # 2016-501070	JP	Methods of Plating or Coating Ultrasound Transducers
App. # 61/784,790	US	Ultrasound-Based Neuromodulation System
App. # 61/814,167	US	Ultrasound-Based Neuromodulation System
App. # 14/209,948 Pub. # 2014/0277033	US	Ultrasound-Based Neuromodulation System
App. # 14/773,285 Pub. # 2016/0016016	US	Ultrasound-Based Neuromodulation System
App. # PCT/US14/22804 Pub. # WO 2014/159276	PCT	Ultrasound-Based Neuromodulation System
App. # 201480020963.6	CN	Ultrasound-Based Neuromodulation System
App. # 14775754.6 Pub. # EP 2968984 A0	EP	Ultrasound-Based Neuromodulation System
App. # 2016-501074	JP	Ultrasound-Based Neuromodulation System

Table of Patents/Applications Exclusively Licensed by ReCor Medical, Inc.

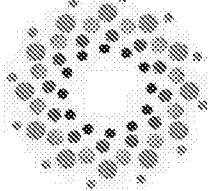
Application/Pub. No./Pat No.	Country	Entitled
App. # 2,368,707 Pat. # 2,638,707 C	CA	Intrabody HIFU Applicator

Application/Pub. No./Pat No.	Country	Entitled
App. # 2000000144513 Pat. # 144513	IL	Intrabody HIFU Applicator
App. # 09/523,915 Pat. # 6,508,774	US	HIFU Application With Feedback Control Using Bubble Detection
App. # IN/PCT/2002/01586/KOL Pat. # 210,835	IN	Apparatus And Method For Applying Ultrasonic Energy To Tissue Within The Body Of A Living Subject
App. # 01997326.2 Pub. # EP 1335669 A0	EP	Ultrasound Transducer Unit And Planar Ultrasound Lens
App. # 10/062,693 Pub. # 2002/0115990 Pat. # 6,672,312	US	Pulmonary Vein Ablation With Myocardial Tissue Locating
App. # 09/904,620 Pub. # 2003/0013968 Pat. # 6,763,722	US	Ultrasonic Transducers
App. # 02761063.3 Pub. # EP 1415146 A0	EP	Ultrasonic Transducers
App. # 03763254.4 Pub. # EP 1545314 A0	EP	Cardiac Ablation Using Microbubbles
App. # 10/244,271 Pub. # 2004/0054362 Pat. # 6,808,524	US	Balloon Alignment and Collapsing System
App. # 10/635,170 Pub. # 2004/0068257 Pat. # 7,189,229	US	Balloon Alignment and Collapsing System
App. # 2003000821846 Pub. # 1681446 Pat. # 100344267 C	CN	Balloon Alignment and Collapsing System
App. # 03749615.5 Pub. # EP 1539008 A0	EP	Balloon Alignment and Collapsing System
App. # 2004-571988 Pub. # 2005-538820 Pat. # 04498931 B2	JP	Balloon Alignment and Collapsing System
App. # 11/665,321 Pub. # 2008/0255449	US	Ablation Devices And Methods With Ultrasonic Imaging
App. # 05823419.6 Pub. # EP 1802244 A2 Pat. # EP 1802244 B1	EP	Ablation Devices And Methods With Ultrasonic Imaging
App. # 2007-536941 Pub. # 2008-516689 Pat. # 04792467 B2	JP	Ablation Devices And Methods With Ultrasonic Imaging
App. # 06813181.2 Pub. # EP 1871478 A0	EP	Ultrasound Generating Method, Apparatus and Probe
App. # 11/440,953 Pub. # 2006/0273695 Pat. # 7,573,182	US	Ultrasonic Transducer
App. # 07776968.5 Pub. # EP 2021846 A0	EP	Ablation Device With Optimized Input Power Profile And Method of Using the Same
App. # 12/663,307	US	Ultrasonic Assembly With Adjustable Fluid Lens

Application/Pub. No./Pat No.	Country	Entitled
Pub. # 2010/0185126 Pat. # 8,475,442		
App. # 200880024237.6 Pub. # 101686830	CN	Ultrasonic Assembly With Adjustable Fluid Lens
App. # 08789205.5 Pub. # EP 2166951 A0	EP	Ultrasonic Assembly With Adjustable Fluid Lens
App. # 20100515640 Pub. # 2010533024 Pat. # 4892102 B2	JP	Ultrasonic Assembly With Adjustable Fluid Lens
App. # 12/742,658 Pub. # 2010/0259832 Pat. # 8,233,221	US	Adjustable Lens System For Real-Time Applications
App. # 12/074,559 Pub. # 2009/0228003	US	Tissue Ablation Device Using Radiofrequency and High Intensity Focused Ultrasound

Schedule B

TRADEMARKS AND TRADEMARK APPLICATIONS

Country	Mark	Filing Date/ Issuance Date	Reg. No. or Ser. No.	Class/Goods
U.S.		August 5, 2013	Serial No. 86/029311	Class 10: Energy emitting catheter-based devices for medical procedures in the nature of denervation; Ultrasound-emitting catheters used to perform denervation.
U.S.	PARADISE	October, 13, 2015	Registration No. 4829591	Class 10: Ultrasound-emitting catheter used to perform denervation in arteries of human beings.
U.S.	RADIANCE	April 4, 2016	Serial No. 86/963754	Class 10: Medical devices for treating hypertension; medical devices used to perform renal denervation.
U.S.	RECOR MEDICAL	April 4, 2016	Serial No. 86/963863	Class 10: Medical devices for treating hypertension; medical devices used to perform denervation.
Australia	PARADISE	May 31, 2012	Registration No. 1468636	Class 10: Ultrasound-emitting catheter used to perform denervation in arteries of human beings; energy emitting catheter-based devices for medical procedures.
Canada	PARADISE	January 9, 2012	Application No. 1558993	Class 10: Ultrasound-emitting catheter used to perform denervation in arteries of human beings. Energy emitting catheter-based devices for intraluminal ablative medical procedures.

Country	Mark	Filing Date/ Issuance Date	Reg. No. or Ser. No.	Class/Goods
European Union	PARADISE	December 15, 2011	Registration No. 10118164	Class 10: Ultrasound-emitting catheter used to perform denervation in arteries of human beings.
New Zealand	PARADISE	July 10, 2012	Registration No. 854833	Class 10: Ultrasound-emitting catheter used to perform denervation in arteries of human beings; energy emitting catheter-based devices for medical procedures.