

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT4970723

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
Name		Execution Date
VACTRONIX SCIENTIFIC, INC.		05/16/2018
RECEIVING PARTY DATA		
Name:	VACTRONIX SCIENTIFIC, LLC	
Street Address:	18618 TUSCANY STONE, SUITE 100	
City:	SAN ANTONIO	
State/Country:	TEXAS	
Postal Code:	78258-3466	
PROPERTY NUMBERS Total: 47		
Property Type	Number	
Patent Number:	7018408	
Patent Number:	8268340	
Patent Number:	8313523	
Patent Number:	8329021	
Patent Number:	8348990	
Patent Number:	8372139	
Patent Number:	8458879	
Patent Number:	8460333	
Patent Number:	8512579	
Patent Number:	8529616	
Patent Number:	8617238	
Patent Number:	8632583	
Patent Number:	8641754	
Patent Number:	8647700	
Patent Number:	8668818	
Patent Number:	8679517	
Patent Number:	8697175	
Patent Number:	8709066	
Patent Number:	8715335	
Patent Number:	8728563	

PATENT

Property Type	Number
Patent Number:	8732935
Patent Number:	8845713
Patent Number:	8906085
Patent Number:	8910363
Patent Number:	8920660
Patent Number:	8932347
Patent Number:	8992597
Patent Number:	9050394
Patent Number:	9107605
Patent Number:	9132001
Patent Number:	9272077
Patent Number:	9284637
Patent Number:	9320626
Patent Number:	9375330
Patent Number:	9399087
Patent Number:	9421100
Patent Number:	9422633
Patent Number:	9433515
Patent Number:	9439789
Patent Number:	9463305
Patent Number:	9532890
Patent Number:	9566148
Patent Number:	9566633
Patent Number:	9640359
Patent Number:	9662230
Patent Number:	9668852
Patent Number:	9788980

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 6318-999

NAME OF SUBMITTER: DAVID G. ROSENBAUM

SIGNATURE:	/David G. Rosenbaum/
DATE SIGNED:	05/21/2018
Total Attachments: 9 source=Assignment to LLC#page1.tif source=Assignment to LLC#page2.tif source=Assignment to LLC#page3.tif source=Assignment to LLC#page4.tif source=Assignment to LLC#page5.tif source=Assignment to LLC#page6.tif source=Assignment to LLC#page7.tif source=Assignment to LLC#page8.tif source=Assignment to LLC#page9.tif	

ASSIGNMENT AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, **VACTRONIX SCIENTIFIC, INC.**, (hereinafter "ASSIGNOR"), a Delaware corporation, having a principle place of business at 18618 Tuscany Stone, Suite 100, San Antonio, TX 78258-3466 has sold, assigned and transferred and does hereby sell, assign and transfer unto **VACTRONIX SCIENTIFIC, LLC** (hereinafter "ASSIGNEE"), a Delaware limited liability company, having a principle place of business at 18618 Tuscany Stone, Suite 100, San Antonio, TX 78258-3466, and its successors, assigns and legal representatives, the entire right, title and interest for the United States of America in and to certain inventions relating to improvements in and to certain patents and patent applications set forth in Exhibit A, together with the entire right, title and interest in and to said application, and in and to Letters Patent which may be issued upon said application, and upon any division, extension, continuation or reissue thereof.

ASSIGNOR also hereby sells, assigns and transfers unto the said **ASSIGNEE**, the entire right, title and interest in and to said invention and in and to applications for Letters Patent therefor in all countries foreign to the United States of America, including all rights under any and all international conventions and treaties in respect of said inventions and said applications for Letters Patent in foreign countries, and **ASSIGNOR** further authorizes the said **ASSIGNEE** to apply for Letters Patent in foreign countries directly in its own name, and to claim the priority of the filing date of the said application for Letters Patent of the United States of America under the provisions of any and all international conventions and treaties.

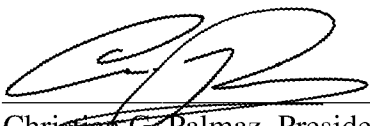
ASSIGNOR hereby authorizes and requests the Commissioner of Patents of the United States of America and similarly appointed representatives of all foreign countries to issue or grant Letters Patent or other patent rights upon the aforesaid application, division, extension, continuation or reissue, to the **ASSIGNEE** for the sole use and behoof of said **ASSIGNEE**, its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted, the same as they would have been held and enjoyed by **ASSIGNOR** had this assignment not been made, and **ASSIGNOR** hereby authorizes and requests the equivalent

authorities in foreign countries to issue the patents of their respective countries to the said **ASSIGNEE**.

ASSIGNOR agrees that, when requested, **ASSIGNOR** will, without charge to said **ASSIGNEE**, but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in all countries and for vesting title thereto in said **ASSIGNEE**, its successors, assigns and legal representatives or nominees.

ASSIGNOR covenants with said **ASSIGNEE**, its successors, assigns and legal representatives, that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license or other encumbrance.

ASSIGNOR: Vactronix Scientific, Inc.
Address: 18618 Tuscany Stone, Suite 100, San Antonio, TX 78258-3466

Signature: 
Christian G. Palmaz, President and CEO

Date: May 16, 2018

EXHIBIT A **TO ASSIGNMENT AGREEMENT**

U.S. Patent No./ U.S. Application Serial No.	Title	Filing/Issue Date
4,793,348	Balloon Expandable Vena Cava Filter to Prevent Migration of Lower Extremity Venous Clots into the Pulmonary Circulation	12/27/1988
5,382,261	Method and Apparatus for Occluding Vessels	1/17/1995
5,656,036	Apparatus for Occluding Vessels	8/12/1997
6,190,404	Intravascular Stent and Method for Manufacturing an Intravascular Stent	2/20/2001
6,379,383	Endoluminal Device Exhibiting Improved Endothelialization and Method of Manufacture Thereof	4/30/2002
6,458,153	Endoluminal Cardiac and Venous Valve Prostheses and Methods of Manufacture and Delivery Thereof	10/1/2002
6,537,310	Endoluminal Implantable Devices and Method of Making Same - Webbed Stent	3/25/2003
6,652,578	Endoluminal Cardiac and Venous Valve Prostheses and Methods of Manufacture and Delivery Thereof	11/25/2003
6,695,865	Embolic Protection Device	2/24/2004
6,733,513	Balloon Catheter Having Metal Balloon and Method of Making Same	5/11/2004
6,820,676	Endoluminal Device Exhibiting Improved Endothelialization and Methods of Manufacture Thereof	11/23/2004
6,849,085	Self-Supporting Laminated Films, Structural Materials and Medical Devices Manufactured Therefrom and Method of Making Same	2/1/2005
6,923,829	Implantable Expandable Medical Devices Having Regions of Differential Mechanical Properties and Methods of Making Same	8/2/2005
6,936,066	Compliant Implantable Medical Devices and Methods of Making Same	8/30/2005
7,018,408	Endoluminal Cardiac and Venous Valve Prostheses and Methods of Manufacture and Delivery Thereof	3/28/2006
7,122,049	Endoluminal Stent Having Mid-Strut Interconnecting Members	10/17/2006
7,195,641	Valvular Prostheses Having Metal or Pseudometallic Construction and Methods of Manufacture	3/27/2007
7,235,092	Guidewires and Thin Film Catheter-Sheaths and Method of Making Same	6/26/2007
7,235,098	Medical Devices Having MEMs Functionality and Methods of Making Same	6/26/2007

PATENT

REEL: 046196 FRAME: 0621

EXHIBIT A **TO ASSIGNMENT AGREEMENT**

U.S. Patent No./ U.S. Application Serial No.	Title	Filing/Issue Date
7,300,457	Self-Supporting Metallic Implantable Grafts, Compliant Implantable Medical Devices and Methods of Making Same	11/27/2007
7,335,426	High Strength Vacuum Deposited NiTiNol Alloy Films and Method of Making Same	2/26/2008
7,338,520	Endoluminal Cardiac and Venous Valve Prostheses and Methods of Manufacture and Delivery Thereof	3/4/2008
7,491,226	Endoluminal Implantable Stent-Grafts	2/17/2009
7,625,594	Endoluminal Device Exhibiting Improved Endothelialization and Method of Manufacture Thereof	12/1/2009
7,641,680	Endoluminal Implantable Stent-Grafts	1/5/2010
7,641,682	Compliant Implantable Medical Devices and Methods of Making Same	1/5/2010
7,670,690	High Strength Vacuum Deposited NiTiNol Alloy Films and Method of Making Same	3/2/2010
7,704,274	Implantable Graft and Methods of Making Same	4/27/2010
7,736,687	Medical Devices with Monolithic Construction and Methods of Making Same	6/15/2010
7,799,069	Endoluminal Cardiac and Venous Valve Prostheses and Methods of Manufacture and Delivery Thereof	9/21/2010
7,980,289	Endoluminal Stent Having Mid-Strut Interconnecting Members	7/19/2011
8,037,733	Methods and Apparatus for Manufacturing an Intravascular Stent	10/18/2011
8,083,908	High Strength Vacuum Deposited Nitinol Alloy Films and Method of Making Same	12/27/2011
8,128,690	Endoluminal Device for In Vivo Delivery of Bioactive Agents	3/6/2012
8,142,490	Stent Segments Axially Connected by Thin Film	3/27/2012
8,142,491	Stent Segments Axially Connected by Thin Film	3/27/2012
8,147,859	Implantable Material Patterned Surface of Raised Elements and Photochemically Altered Elements and Method of Making Same	4/3/2012
8,187,318	Stent-Graft with Proximal and Distal Attachment, Delivery Catheter and Methods of Making Same	5/29/2012
8,221,493	Endoluminal Cardiac and Venous Valve Prostheses and Methods of Manufacture and Delivery Thereof	7/17/2012
8,247,020	Methods of Making Medical Devices	8/21/2012
8,252,044	Device for In Vivo Delivery of Bioactive Agents and Methods of Making Same	8/28/2012

PATENT

REEL: 046196 FRAME: 0622

**EXHIBIT A
TO ASSIGNMENT AGREEMENT**

U.S. Patent No./ U.S. Application Serial No.	Title	Filing/Issue Date
8,268,340	Implantable Materials Having Engineered Surfaces and Method of Making Same	9/18/2012
8,313,523	Metallic Implantable Grafts and Method of Making Same	11/20/2012
8,329,021	Method for Mass Transfer of Micro-Patterns onto Medical Devices	12/11/2012
8,348,990	Implantable Expandable Medical Devices Having Regions of Differential Mechanical Properties and Methods of Making Same	1/8/2013
8,372,139	In Vivo Sensor and Method of Making Same	2/12/2013
8,458,879	Compliant Implantable Medical Devices and Methods of Making Same	6/11/2013
8,460,333	Balloon Catheter Having Metal Balloon and Method of Making Same	6/11/2013
8,512,579	Method for Making Grooves on a Luminal Surface of an Intravascular Stent	8/20/2013
8,529,616	Implantable Expandable Medical Devices Having Regions of Differential Mechanical Properties and Methods of Making Same	9/10/2013
8,617,238	Transluminal Cardiac Ball Valve and Method for Deployment Thereof	12/31/2013
8,632,583	Implantable Medical Device having Enhanced Endothelial Migration Features and Methods of Making the Same	1/21/2014
8,641,754	Endoluminal Stent, Self-Supporting Endoluminal Graft and Methods of Making Same	2/4/2014
8,647,700	Methods of Making Medical Devices	2/11/2014
8,668,818	Method for Mass Transfer of Micro-Patterns onto Medical Devices	3/11/2014
8,679,517	Implantable Materials Having Engineered Surfaces and Method of Making Same	3/25/2014
8,697,175	Endoluminal Device for In Vivo Delivery of Bioactive Agents	4/15/2014
8,709,066	Implantable Materials Having Engineered Surfaces Comprising a Pattern of Features and Method of Making Same	4/29/2014
8,715,335	Endoluminal Implantable Stent-Grafts	5/6/2014
8,728,563	Endoluminal Implantable Surfaces, Stents, and Grafts and Method of Making the Same	5/20/2014
8,732,935	Stent-Graft with Proximal and Distal Attachment, Delivery Catheter and Methods of Making Same	5/27/2014

PATENT

REEL: 046196 FRAME: 0623

EXHIBIT A **TO ASSIGNMENT AGREEMENT**

U.S. Patent No./ U.S. Application Serial No.	Title	Filing/Issue Date
8,845,713	Self-Supporting Laminated Films, Structural Materials and Medical Devices Manufactured Therefrom and Methods of Making Same	9/30/2014
8,906,085	Stent Segments Axially Connected by Thin Film	12/9/2014
8,910,363	Compliant Implantable Medical Devices and Methods of Making Same	12/16/2014
8,920,660	Method for Making Grooves on a Luminal Surface of an Intravascular Stent	12/30/2014
8,932,347	Implantable Materials Having Engineered Surfaces and Method of Making Same	1/13/2015
8,992,597	Endoluminal Cardiac and Venous Valve Prostheses and Methods of Manufacture and Delivery Thereof	3/31/2015
9,050,394	Method for Making Topographical Features on a Surface of a Medical Device	6/9/2015
9,107,605	Device for In Vivo Delivery of Bioactive Agents and Method of Manufacture Thereof	8/18/2015
9,132,001	Metallic Implantable Grafts and Method of Making Same	9/15/2015
9,272,077	Implantable Materials Having Engineered Surfaces and Method of Making Same	3/1/2016
9,284,637	Implantable Graft and Methods of Making Same	3/15/2016
9,320,626	Guidewires and Thin Film Catheter-Sheaths and Method of Making Same	4/26/2016
9,375,330	Methods of Making Medical Devices	6/28/2016
9,399,087	Implantable Materials Having Engineered Surfaces Comprising a Pattern of Features and Method of Making Same	7/26/2016
9,421,100	Endoluminal Cardiac and Venous Valve Prostheses and Methods of Manufacture and Delivery Thereof	8/23/2016
9,422,633	Method for Mass Transfer of Micro-Patterns onto Medical Devices	8/23/2016
9,433,515	In Vivo Sensor and Method of Making Same	9/6/2016
9,439,789	Implantable Medical Device having Enhanced Endothelial Migration Features and Methods of Making the Same	9/13/2016
9,463,305	Balloon Catheter Having Metal Balloon and Method of Making Same	10/11/2016
9,532,890	Implantable Expandable Medical Devices Having Regions of Differential Mechanical Properties and Methods of Making Same	1/3/2017

PATENT
REEL: 046196 FRAME: 0624

EXHIBIT A **TO ASSIGNMENT AGREEMENT**

U.S. Patent No./ U.S. Application Serial No.	Title	Filing/Issue Date
9,566,148	Self-Supporting Laminated Films, Structural Materials and Medical Devices Manufactured Therefrom and Methods of Making Same	2/14/2017
9,566,633	Stents having a Hybrid Pattern and Methods of Manufacture	2/14/2017
9,640,359	Inverted Cylindrical Magnetron (ICM) System and Methods of Use	5/2/2017
9,662,230	Implantable Medical Devices Having Controlled Surface Properties for Improved Healing Response	5/30/2017
9,668,852	Metallic Implantable Grafts and Method of Making Same	6/6/2017
9,788,980	Method for Making Grooves on a Luminal Surface of an Intravascular Stent	10/17/2017
09/707,685	Endoluminal Stent and Self-supporting Endoluminal Graft and Methods of Making Same	11/7/2000
10/120,800	Endoluminal Stent, Self-Supporting Endoluminal Graft and Methods of Making Same	4/11/2002
10/258,087	Device for In Vivo Delivery of Bioactive Agents and Method of Manufacture Thereof	8/19/2003
10/901,661	Medical Device Having Multiple Drug-Eluting Cavities	7/29/2004
10/936,883	Stents with Metallic Covers and Methods of Making Same	9/9/2004
11/226,548	Methods of Making Shape Memory Films by Chemical Vapor Deposition and Shape Memory Devices Made Thereby	9/14/2005
11/227,052	Shape Memory Thin Film Embolic Protection Device	9/15/2005
11/227,691	Shape Memory Thin Film Embolic Protection Device with Frame	9/15/2005
11/697,151	Thin Film Tissue Repair Matrix	4/5/2007
11/752,058	Medical Devices Having MEMs Functionality and Methods of Making Same	5/22/2007
11/873,060	Medical Sheet	10/16/2007
12/205,838	Medical Device including a Thin Metallic Film Component Attached to a Polymeric Component and Associated Methods	9/5/2008
12/210,789	Stents with Metallic Covers and Methods of Making Same	9/15/2008
12/408,608	Interosteal and Intramedullary Implants and Method of Implanting Same	3/20/2009
12/973,854	Interosteal and Intramedullary Implants and Method of Implanting Same	12/20/2010

PATENT
REEL: 046196 FRAME: 0625

**EXHIBIT A
TO ASSIGNMENT AGREEMENT**

U.S. Patent No./ U.S. Application Serial No.	Title	Filing/Issue Date
13/168,865	Method of Making Implantable Medical Devices Having Controlled Surface Properties	6/24/2011
13/213,973	Grooved Drug-Eluting Medical Devices and Method of Making Same	8/19/2011
13/589,683	Device for In Vivo Delivery of Bioactive Agents and Method of Making Same	8/20/2012
13/794,215	Device for In Vivo Delivery of Bioactive Agents and Method of Manufacture Thereof	3/11/2013
13/801,173	Topographical Features and Patterns on a Surface of a Medical Device and Methods of Making the Same	3/13/2013
13/836,513	Thin Film Tissue Repair Matrix	3/15/2013
13/847,996	Methods of Making Devices	3/20/2013
14/087,489	Transluminar Cardiac Ball Valve and Method for Deployment Thereof	11/22/2013
14/213,974	Monolithic Medical Devices, Methods of Making and Using the Same	3/14/2014
14/249,278	Endoluminal Device for In Vivo Delivery of Bioactive Agents	4/9/2014
14/262,643	Adaptive Guide Bushing for Laser Tube Cutting Systems	4/25/2014
14/276,741	Endoluminal Implantable Surfaces, Stents, and Grafts and Method of Making Same	5/13/2014
14/288,284	Stent-Graft with Proximal and Distal Attachment, Delivery Catheter and Methods of Making Same	5/27/2014
14/502,134	Self-Supporting Laminated Films, Structural Materials and Medical Devices Manufactured Therefrom and Methods of Making Same	9/30/2014
14/571,572	Compliant Implantable Medical Devices and Methods of Making Same	12/16/2014
14/825,526	Device for In Vivo Delivery of Bioactive Agents and Method of Manufacture Thereof	8/13/2015
15/012,610	Implantable Graft and Methods of Making Same	2/1/2016
15/057,986	Implantable Materials Having Engineered Surfaces and Method of Making Same	3/1/2016
15/137,746	Guidewires and Thin Film Catheter-Sheaths and Method of Making Same	4/25/2017
15/149,788	Monolithic Medical Devices and Methods of Use	5/9/2016
15/194,117	Methods of Making Medical Devices	6/27/2016
15/219,133	Implantable Biomaterials Having Engineered Functional Surfaces	7/25/2016
15/245,068	Endoluminal Cardiac and Venous Valve Prostheses and Methods of Manufacture and Delivery Thereof	8/23/2016

PATENT

REEL: 046196 FRAME: 0626

**EXHIBIT A
TO ASSIGNMENT AGREEMENT**

U.S. Patent No./ U.S. Application Serial No.	Title	Filing/Issue Date
15/257,885	In Vivo Sensor and Method of Making Same	9/6/2016
15/263,029	Implantable Medical Device Having Enhanced Endothelial Migration Features and Methods of Making the Same	9/12/2016
15/290,833	Balloon Catheter Having Metal Balloon and Method of Making Same	10/11/2016
15/360,846	Grooved Drug-Eluting Medical Devices and Method of Making Same	11/23/2016
15/397,334	Implantable Expandable Medical Devices Having Regions of Differential Mechanical Properties and Methods of Making Same	1/3/2017
15/432,087	Stents Having a Hybrid Pattern and Methods of Manufacture	2/14/2017
15/432,546	Monolithic Biocompatible Implantable Laminated Materials	2/14/2017
15/583,916	Inverted Cylindrical Magnetron (ICM) System and Methods of Use	5/1/2017
15/785,244	Method of Making Recessed Features on Inner Surface of Tubular Structure by Photolithography	10/16/2017
15/785,265	Method of Making Recessed Features on Inner Surface of Tubular Structure by Thermal Ablation	10/16/2017

PATENT

REEL: 046196 FRAME: 0627

RECORDED: 05/21/2018