

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM575490

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|---|---|-----------------------|---|
| SUBMISSION TYPE: | NEW ASSIGNMENT | | |
| NATURE OF CONVEYANCE: | NUNC PRO TUNC ASSIGNMENT | | |
| EFFECTIVE DATE: | 09/30/2019 | | |
| CONVEYING PARTY DATA | | | |
| Name | Formerly | Execution Date | Entity Type |
| TELEFLEX INNOVATIONS S.À R.L. | | 12/16/2019 | Professional Limited Liability Company: LUXEMBOURG |
| RECEIVING PARTY DATA | | | |
| Name: | TELEFLEX MEDICAL DEVICES S.À R.L. | | |
| Street Address: | 26, BOULEVARD DE KOCKELSCHEUER | | |
| City: | LUXEMBOURG | | |
| State/Country: | LUXEMBOURG | | |
| Postal Code: | L-1821 | | |
| Entity Type: | Private Limited Liability Company: LUXEMBOURG | | |
| PROPERTY NUMBERS Total: 4 | | | |
| Property Type | Number | Word Mark | |
| Serial Number: | 87625094 | RAIDER | |
| Serial Number: | 87037941 | OCTANE | |
| Serial Number: | 86654688 | FLUENT | |
| Serial Number: | 87625101 | BANDIT | |
| CORRESPONDENCE DATA | | | |
| Fax Number: | | | |
| <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: | 6122599700 | | |
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| Address Line 4: | Minneapolis, MINNESOTA 55402 | | |
| ATTORNEY DOCKET NUMBER: | 16386.011500 | | |
| NAME OF SUBMITTER: | Draeke H. Weseman | | |
| SIGNATURE: | /DHW/ | | |
| DATE SIGNED: | 05/08/2020 | | |

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Total Attachments: 23

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CONFIRMATION OF PATENT AND TRADEMARK ASSIGNMENT

TELEFLEX MEDICAL DEVICES S.À R.L.

This Confirmation of Patent and Trademark Assignment (hereinafter referred to as “Assignment”) is made by Teleflex Medical Devices S.à r.l., a private limited liability company (*société à responsabilité limitée*) formed under the laws of the Grand Duchy of Luxembourg, having its registered office at 26, boulevard de Kockelscheuer, L-1821 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 185.177 (hereinafter referred to as “Teleflex Medical Devices”).

Teleflex Medical Devices and Teleflex Innovations S.à r.l., a private limited liability company (*société à responsabilité limitée*) formed under the laws of the Grand Duchy of Luxembourg, having its registered office at 26, boulevard de Kockelscheuer, L-1821 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 216.223 (hereinafter referred to as “Teleflex Innovations”) are parties to certain agreements dated September 30, 2019, in which Teleflex Innovations granted to Teleflex Medical Devices all assets and rights, including all intellectual property rights, as set forth in those agreements. Teleflex Innovations was merged into Teleflex Medical Devices and subsequently dissolved as a result of the merger.

Teleflex Medical Devices hereby confirms that, as stated in the agreements dated September 30, 2019, Teleflex Innovations assigned to Teleflex Medical Devices all right, title and interest in and to the patents and patent applications and trademarks and trademark applications listed on Exhibit A attached hereto, any continuations, continuations-in-part, divisionals, reissues, or other patents or patent applications claiming priority to any of the patents or patent applications listed on Exhibit A, and any renewals and extensions of the trademarks or trademark applications, unregistered and common law rights in trademarks and services marks, and the goodwill of the business associated with the trademarks or trademark applications listed on Exhibit A.

[Signature page follows]

TELEFLEX MEDICAL DEVICES S.À R.L.

J. Elguicze
By: Jacob Elguicze
Its: Manager, Category A
NOTARY

16 December 2019
Date

By: Luc Sunnen
Its: Manager, Category B
NOTARY

Date

NOTARY ACKNOWLEDGMENT

Commonwealth of Pennsylvania)
)SS:
County of Montgomery)

On this, the 16th day of December, 2019, before me a notary public, personally appeared Jacob Elguicze, known to me to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained. In witness hereof, I hereunto set my hand and official seal.

Pamela L. Carr [SEAL]
Pamela L. Carr, Notary Public

Commonwealth of Pennsylvania – Notary Seal
PAMELA L. CARR – Notary Public
Montgomery County
My Commission Expires Apr 8, 2022
Commission Number: 1023886


TELEFLEX MEDICAL DEVICES S.À R.L.

By: Jacob Elguicze
Its: Manager, Category A
NOTARY

Date



By: Luc Sunnen
Its: Manager, Category B
NOTARY



Date

The undersigned Maître Martine DECKER, notary residing in Hesperange (GD of Luxembourg), hereby certifies and attests the signature of Mr Luc SUNNEN apposed on the present document.

This certification doesn't contain any verification of the accuracy of facts mentioned in the present document.

Hesperange, December 16th, 2019.

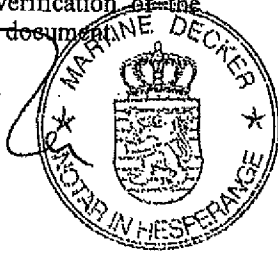
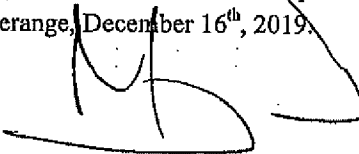


EXHIBIT A

| Patents | | | | | | | | | |
|---------------|-----------|--|---------|-----------------|-------------|------------|------------|--|--|
| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date | | |
| VSI-0984-US01 | Abandoned | ULTRASONIC TRANSMISSION APPARATUS | U.S. | 07/842,529 | 2/27/1992 | 5269297 | 12/14/1993 | | |
| VSI-0985-US01 | Expired | IN VIVO ULTRASONIC SYSTEM WITH ANGIOPLASTY AND ULTRASONIC CONTRAST IMAGING | U.S. | 07/449,465 | 12/12/1989 | 5163421 | 11/17/1992 | | |
| VSI-0986-US01 | Abandoned | ULTRASOUND TRANSMISSION APPARATUS AND METHOD OF USING SAME | U.S. | 08/858,247 | 5/19/1997 | 5971949 | 10/26/1999 | | |
| VSI-0987-US01 | Abandoned | ULTRASOUND TRANSMISSION APPARATUS HAVING A TIP | U.S. | 09/321,268 | 5/27/1999 | 6241703 | 6/5/2001 | | |
| VSI-0988-US01 | Abandoned | VASCULAR SEALING DEVICE | U.S. | 08/067,213 | 5/25/1993 | 5383896 | 1/24/1995 | | |
| VSI-0988-US02 | Abandoned | VASCULAR SEALING DEVICE | U.S. | 08/303,088 | 9/8/1994 | | | | |
| VSI-0988-US03 | Expired | VASCULAR SEALING DEVICE | U.S. | 08/832,600 | 3/31/1997 | 5957952 | 9/28/1999 | | |
| VSI-0989-US01 | Abandoned | VASCULAR SEALING APPARATUS | U.S. | 08/549,430 | 10/27/1995 | | | | |
| VSI-0989-US02 | Abandoned | VASCULAR SEALING APPARATUS | U.S. | 08/877,255 | 6/17/1997 | 6017359 | 1/25/2000 | | |
| VSI-0989-US03 | Abandoned | Vascular sealing apparatus | U.S. | 09/491,108 | 1/25/2000 | 6296658 | 10/2/2001 | | |
| VSI-0990-US01 | Abandoned | VASCULAR SEALING APPARATUS AND METHOD | U.S. | 08/549,332 | 10/27/1995 | 5626601 | 5/6/1997 | | |
| VSI-0990-US02 | Expired | VASCULAR SEALING APPARATUS AND METHOD | U.S. | 08/850,477 | 5/5/1997 | 5868778 | 2/9/1999 | | |
| VSI-0991-US01 | Expired | THROMBIN AND COLLAGEN PROCOAGULANT AND PROCESS FOR MAKING THE SAME | U.S. | 09/031,847 | 2/27/1998 | 5951583 | 9/14/1999 | | |

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| VSI-0991-US02 | Abandoned | THROMBIN AND COLLAGEN PROCOAGULANT AND PROCESS FOR MAKING THE SAME | U.S. | 09/345,889 | 7/1/1999 | | |
| VSI-0992-US01 | Abandoned | Shaped Introducer For Vascular Access | U.S. | 11/942,635 | 11/19/2007 | | |
| VSI-0992-USPR | Expired | Shaped introducer for vascular intervention | U.S. | 60/860,678 | 11/21/2006 | | |
| VSI-0993-US01 | Abandoned | Laser fiber for endovenous therapy having a shielded distal tip | U.S. | 10/879,701 | 6/29/2004 | | |
| VSI-0993-US02 | Abandoned | Laser fiber for endovenous therapy having a shielded distal tip | U.S. | 11/648,086 | 12/29/2006 | | |
| VSI-0994-EP01 | Abandoned | FLOW MONITOR AND VASCULAR ACCESS SYSTEM WITH CONTINUOUSLY VARIABLE FREQUENCY CONTROL | EP | 93109712.5 | 6/17/1993 | 574923 | 10/9/2002 |
| VSI-0994-US01 | Expired | FLOW MONITOR AND VASCULAR ACCESS SYSTEM WITH CONTINUOUSLY VARIABLE FREQUENCY CONTROL | U.S. | 07/901,466 | 6/19/1992 | 5259386 | 11/9/1993 |
| VSI-0994-US02 | Expired | FLOW MONITOR AND VASCULAR ACCESS SYSTEM WITH CONTINUOUSLY VARIABLE FREQUENCY CONTROL | U.S. | 08/142,151 | 10/25/1993 | 5363852 | 11/15/1994 |
| VSI-0995-CA01 | Abandoned | APPARATUS FOR THE CANNULATION OF BLOOD VESSELS | Canada | 2085912 | 12/21/1992 | | |
| VSI-0995-EP01 | Abandoned | APPARATUS FOR THE CANNULATION OF BLOOD VESSELS | EP | 92121687.5 | 12/21/1992 | 548872 | 6/25/1997 |
| VSI-0995-US01 | Expired | APPARATUS FOR THE CANNULATION OF BLOOD VESSELS | U.S. | 07/813,123 | 12/23/1991 | 5259385 | 11/9/1993 |

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|---------------|-----------|---|--------|-------------------|------------|---------|------------|
| VSI-0996-US01 | Expired | SYRINGE WITH ULTRASOUND EMITTING TRANSDUCER FOR FLOW-DIRECTED CANNULATION OF ARTERIES AND VEINS | U.S. | 08/003,203 | 1/12/1993 | 5311871 | 5/17/1994 |
| VSI-0997-US01 | Expired | APPARATUS FOR USE IN CANNULATION OF BLOOD VESSELS | U.S. | 07/296,272 | 1/11/1989 | 4887606 | 12/19/1989 |
| VSI-0998-CA01 | Abandoned | COAXIAL CABLE VASCULAR ACCESS SYSTEM | Canada | 2168781 | 8/4/1994 | | |
| VSI-0998-EP01 | Abandoned | COAXIAL CABLE VASCULAR ACCESS SYSTEM FOR USE IN VARIOUS NEEDLES | EP | 94924111.1 | 8/4/1994 | 712294 | 1/2/2003 |
| VSI-0998-US01 | Expired | COAXIAL CABLE VASCULAR ACCESS SYSTEM FOR USE IN VARIOUS NEEDLES | U.S. | 08/102,607 | 8/5/1993 | 5484416 | 1/16/1996 |
| VSI-0999-CA01 | Abandoned | GUIDED HYPODERMIC CANNULA | Canada | 2587604 | 11/16/2005 | | |
| VSI-0999-US01 | Abandoned | GUIDED HYPODERMIC CANNULA | U.S. | 11/084,491 | 3/18/2005 | | |
| VSI-0999-USPR | Expired | NEEDLE AND PROBE ASSEMBLY | U.S. | 60/628,809 | 11/17/2004 | | |
| VSI-1000-US01 | Issued | GUIDE WIRE LOADING METHOD AND APPARATUS | U.S. | 12/218,031 | 7/9/2008 | 8206321 | 6/26/2012 |
| VSI-1001-EP01 | Abandoned | GUIDE WIRE LOADING METHOD AND APPARATUS WITH TOWEL ATTACHMENT MECHANISM | EP | 9795106.5 | 7/8/2009 | | |
| VSI-1001-US01 | Issued | GUIDE WIRE LOADING METHOD AND APPARATUS WITH TOWEL ATTACHMENT MECHANISM | U.S. | 12/498,965 | 7/7/2009 | 8231550 | 7/31/2012 |
| VSI-1001-WO01 | Expired | GUIDE WIRE LOADING METHOD AND APPARATUS WITH TOWEL ATTACHMENT MECHANISM | PCT | PCT/US2009/049912 | 7/8/2009 | | |
| VSI-1002-US01 | Issued | GUIDE WIRE LOADING METHOD AND APPARATUS WITH TOWEL ATTACHMENT MECHANISM AND RETAINING MEMBER | U.S. | 12/831,630 | 7/7/2010 | 8366638 | 2/5/2013 |

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| VSI-1003-US01 | Issued | HAND HELD VEIN REMOVAL DEVICE | U.S. | 13/410,440 | | 3/2/2012 | 8834500 | 9/16/2014 |
| VSI-1003-USPR | Expired | HAND HELD VEIN REMOVAL DEVICE | U.S. | 61/449,334 | | 3/4/2011 | | |
| VSI-1004-US01 | Issued | VASCULAR ACCESS CLOSURE SYSTEM | U.S. | 10/452,826 | | 6/2/2003 | 7488340 | 2/10/2009 |
| VSI-1006-US01 | Issued | HEMOSTATIC CLIP | U.S. | 12/483,698 | | 6/12/2009 | 8246585 | 8/21/2012 |
| VSI-1006-USPR | Expired | HEMOSTATIC CLIP | U.S. | 61/073,622 | | 6/18/2008 | | |
| VSI-1007-CA01 | Issued | Elongated Expandable Member for Occluding Varicose Veins | Canada | 2817242 | | 11/1/2012 | 2817242 | 5/1/2018 |
| VSI-1007-DEEP | Issued | Elongated Expandable Member for Occluding Varicose Veins | Germany | 12801657.3 | | 11/1/2012 | 2673014 | 5/4/2016 |
| VSI-1007-EP01 | Issued | Elongated Expandable Member for Occluding Varicose Veins | EP | 12801657.3 | | 11/1/2012 | 2673014 | 5/4/2016 |
| VSI-1007-GBEP | Issued | Elongated Expandable Member for Occluding Varicose Veins | United Kingdom | 12801657.3 | | 11/1/2012 | 2673014 | 5/4/2016 |
| VSI-1007-IEEP | Issued | Elongated Expandable Member for Occluding Varicose Veins | Ireland | 12801657.3 | | 11/1/2012 | 2673014 | 5/4/2016 |
| VSI-1007-NOEP | Issued | Elongated Expandable Member for Occluding Varicose Veins | Norway | 12801657.3 | | 11/1/2012 | 2673014 | 5/4/2016 |
| VSI-1007-US01 | Issued | Elongated Expandable Member for Occluding Varicose Veins | U.S. | 13/310,503 | | 12/2/2011 | 8758427 | 6/24/2014 |
| VSI-1007-US02 | Issued | Elongated Expandable Member for Occluding Varicose Veins | U.S. | 14/298,066 | | 6/6/2014 | 9351736 | 5/31/2016 |
| VSI-1007-WO01 | Expired | Elongated Expandable Member for Occluding Varicose Veins | PCT | PCT/US2012/063101 | | 11/1/2012 | | |
| VSI-1008-US01 | Issued | SMALL DIAMETER INTRAVASCULAR CATHETER WITH SCREW TIP AND LIMITED TORSIONAL DISPLACEMENT | U.S. | 11/585,371 | | 10/24/2006 | 7981091 | 7/19/2011 |
| VSI-1010-US01 | Issued | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 11/416,629 | | 5/3/2006 | 8048032 | 11/1/2011 |

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| VSI-1010-US02 | Issued | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 12/824,734 | 6/28/2010 | 8142413 | 3/27/2012 |
| VSI-1010-US03 | Issued | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 13/359,059 | 1/26/2012 | 8292850 | 10/23/2012 |
| VSI-1010-USRE1 | Issued | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 14/070,161 | 11/1/2013 | RE45380 | 2/17/2015 |
| VSI-1010-USRE10 | Pending | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 16/220,996 | 12/14/2018 | | |
| VSI-1010-USRE2 | Issued | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 14/195,385 | 3/3/2014 | RE45760 | 10/20/2015 |
| VSI-1010-USRE3 | Issued | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 14/195,413 | 3/3/2014 | RE45776 | 10/27/2015 |
| VSI-1010-USRE4 | Issued | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 14/195,435 | 3/3/2014 | RE46116 | 8/23/2016 |
| VSI-1010-USRE5 | Issued | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 14/984,273 | 12/30/2015 | RE47379 | 5/7/2019 |
| VSI-1010-USRE6 | Pending | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 16/184,706 | 11/8/2018 | | |
| VSI-1010-USRE7 | Pending | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 16/220,925 | 12/14/2018 | | |
| VSI-1010-USRE8 | Pending | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 16/220,951 | 12/14/2018 | | |
| VSI-1010-USRE9 | Pending | COAXIAL GUIDE CATHETER FOR INTERVENTIONAL CARDIOLOGY PROCEDURES | U.S. | 16/220,975 | 12/14/2018 | | |

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| VSI-1012-US01 | Abandoned | ABDOMINAL TISSUE SUPPORT FOR FEMORAL PUNCTURE PROCEDURES | U.S. | 11/029,908 | 1/5/2005 | 7455649 | 11/25/2008 |
| VSI-1013-US01 | Issued | METAL VASCULAR APERTURE CLOSURE DEVICE | U.S. | 12/501,998 | 7/13/2009 | 8192456 | 6/5/2012 |
| VSI-1013-US02 | Issued | METAL VASCULAR APERTURE CLOSURE DEVICE | U.S. | 12/502,034 | 7/13/2009 | 8252022 | 8/28/2012 |
| VSI-1014-DEEP | Abandoned | SURGICAL SNARE APPARATUS | Germany | 1916539.8 | 3/9/2001 | 1263336 | 2/18/2004 |
| VSI-1014-EPO1 | Abandoned | SURGICAL SNARE APPARATUS | EP | 1916539.8 | 3/9/2001 | 1263336 | 2/18/2004 |
| VSI-1014-ESEP | Abandoned | SURGICAL SNARE APPARATUS | Spain | 1916539.8 | 3/9/2001 | 1263336 | 2/18/2004 |
| VSI-1014-FREP | Abandoned | SURGICAL SNARE APPARATUS | France | 1916539.8 | 3/9/2001 | 1263336 | 2/18/2004 |
| VSI-1014-GBEP | Abandoned | SURGICAL SNARE APPARATUS | United Kingdom | 1916539.8 | 3/9/2001 | 1263336 | 2/18/2004 |
| VSI-1014-IEEP | Abandoned | SURGICAL SNARE APPARATUS | Ireland | 1916539.8 | 3/9/2001 | 1263336 | 2/18/2004 |
| VSI-1014-ITEP | Abandoned | SURGICAL SNARE APPARATUS | Italy | 1916539.8 | 3/9/2001 | 1263336 | 2/18/2004 |
| VSI-1014-US01 | Issued | SMALL DIAMETER SNARE | U.S. | 09/803,308 | 3/9/2001 | 6554842 | 4/29/2003 |
| VSI-1014-USPR | Expired | SMALL DIAMETER SNARE | U.S. | 60/188,390 | 3/10/2000 | | |
| VSI-1014-W001 | Expired | SURGICAL SNARE APPARATUS | PCT | PCT/US01/07680 | 3/9/2001 | | |
| VSI-1015-US01 | Issued | CONVERTIBLE GUIDEWIRE SYSTEM AND METHODS | U.S. | 12/204,583 | 9/4/2008 | 8083690 | 12/27/2011 |
| VSI-1016-IT01 | Issued | Two-lumen suction catheter for distal protection in a percutaneous intervention | Italy | MI2002A002666 | 12/17/2002 | 102002901072607 | 10/18/2007 |
| VSI-1016-US01 | Issued | TWO-LUMEN CATHETER FOR DISTAL PROTECTION IN PERCUTANEOUS CORONARY AND PERIPHERAL INTERVENTION | U.S. | 10/462,079 | 6/13/2003 | 7025751 | 4/11/2006 |

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| VSI-1017-US01 | Issued | GUIDEWIRE AND CATHETER MANAGEMENT DEVICE | U.S. | 12/498,985 | 7/7/2009 | 8523824 | 9/3/2013 |
| VSI-1018-US01 | Expired | MEDICAL DEVICE PACKAGE | U.S. | 29/182,858 | 6/2/2003 | D489973 | 5/18/2004 |
| VSI-1019-US01 | Issued | GUIDEWIRE TIPPED LASER FIBER DEVICES AND METHODS FOR CROSSING A CHRONIC TOTAL OCCLUSION | U.S. | 11/860,880 | 9/25/2007 | 8298215 | 10/30/2012 |
| VSI-1020-EP01 | Abandoned | DEVICES AND METHODS FOR CROSSING A CHRONIC TOTAL OCCLUSION | EP | 4781984.2 | 8/19/2004 | | |
| VSI-1020-EP02 | Abandoned | DEVICES AND METHODS FOR CROSSING A CHRONIC TOTAL OCCLUSION | EP | 7023966 | 8/19/2004 | | |
| VSI-1020-JP01 | Abandoned | DEVICES AND METHODS FOR CROSSING A CHRONIC TOTAL OCCLUSION | Japan | 2006-525359 | 8/19/2004 | 4680907 | |
| VSI-1020-US01 | Issued | DEVICES AND METHODS FOR CROSSING A CHRONIC TOTAL OCCLUSION | U.S. | 10/653,879 | 9/2/2003 | 7763012 | 7/27/2010 |
| VSI-1020-WO01 | Expired | DEVICES AND METHODS FOR CROSSING A CHRONIC TOTAL OCCLUSION | PCT | PCT/US04/27405 | 8/19/2004 | | |
| VSI-1021-US01 | Issued | VASCULAR DILATOR SYSTEMS, KITS, AND METHODS | U.S. | 13/784,073 | 3/4/2013 | 9078991 | 7/14/2015 |
| VSI-1021-US02 | Abandoned | VASCULAR DILATOR SYSTEMS, KITS, AND METHODS | U.S. | 14/735,974 | 6/10/2015 | | |
| VSI-1022-US01 | Issued | SYSTEM AND METHOD FOR FREEZE-DRYING AND PACKAGING | U.S. | 14/553,722 | 11/25/2014 | 9561893 | 2/7/2017 |
| VSI-1022-US02 | Issued | SYSTEM AND METHOD FOR FREEZE-DRYING AND PACKAGING | U.S. | 15/399,643 | 1/5/2017 | 10377520 | 8/13/2019 |
| VSI-1022-US03 | Published | SYSTEM AND METHOD FOR FREEZE-DRYING AND PACKAGING | U.S. | 16/386,026 | 4/16/2019 | | |
| VSI-1022-USPR | Expired | SYSTEM AND METHOD FOR FREEZE-DRYING AND PACKAGING | U.S. | 61/912,281 | 12/5/2013 | | |
| VSI-1023-US01 | Abandoned | ELONGATE EXPANDABLE MEMBER FOR OCCLUDING VASCULAR VESSEL | U.S. | 14/630,291 | 2/24/2015 | | |

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|----------------|-----------|--|----------------|----------------|-----------|------------------|-----------|
| VSI-1023-USPR | Expired | ELONGATE EXPANDABLE MEMBER FOR OCCLUDING VASCULAR VESSEL | U.S. | 61,945,699 | 2/27/2014 | | |
| VSI-1024-US01 | Published | GUIDEWIRE CAPTURE | U.S. | 14/709,531 | 5/12/2015 | | |
| VSI-1024-USPR | Expired | GUIDEWIRE CAPTURE | U.S. | 62,048,734 | 9/10/2014 | | |
| VSI-1025-US01 | Issued | GUIDEWIRES AND METHODS FOR PERCUTANEOUS OCCLUSION CROSSING | U.S. | 14/697,819 | 4/28/2015 | 10391282 | 8/27/2019 |
| VSI-1025-USPR | Expired | GUIDEWIRES AND METHODS FOR PERCUTANEOUS OCCLUSION CROSSING | U.S. | 62/022,024 | 7/8/2014 | | |
| VSI-1026-CN01 | Issued | PERFUSION CATHETERS AND RELATED METHODS | China | 201580060554.3 | 9/10/2015 | ZL201580060554.3 | 6/28/2019 |
| VSI-1026-CN02 | Published | PERFUSION CATHETERS AND RELATED METHODS | China | 201710468567.5 | 9/10/2015 | | |
| VSI-1026-DEEP | Issued | PERFUSION CATHETERS AND RELATED METHODS | Germany | 3125781 | 9/10/2015 | 3125781 | 11/7/2018 |
| VSI-1026-DEEP2 | Unfiled | PERFUSION CATHETERS AND RELATED METHODS | Germany | 3400886 | 9/10/2015 | 3400886 | |
| VSI-1026-EP01 | Issued | PERFUSION CATHETERS AND RELATED METHODS | EP | 15770712.6 | 9/10/2015 | 3125781 | 11/7/2018 |
| VSI-1026-EP02 | Published | PERFUSION CATHETERS AND RELATED METHODS | EP | 18177601.4 | 9/10/2015 | | |
| VSI-1026-ESEP | Issued | PERFUSION CATHETERS AND RELATED METHODS | Spain | 3125781 | 9/10/2015 | 3125781 | 11/7/2018 |
| VSI-1026-FREP | Issued | PERFUSION CATHETERS AND RELATED METHODS | France | 3125781 | 9/10/2015 | 3125781 | 11/7/2018 |
| VSI-1026-FREP2 | Unfiled | PERFUSION CATHETERS AND RELATED METHODS | France | 3400886 | 9/10/2015 | 3400886 | |
| VSI-1026-GBEP | Issued | PERFUSION CATHETERS AND RELATED METHODS | United Kingdom | 3125781 | 9/10/2015 | 3125781 | 11/7/2018 |
| VSI-1026-GBEP2 | Unfiled | PERFUSION CATHETERS AND RELATED METHODS | United Kingdom | 3400886 | 9/10/2015 | 3400886 | |

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| VSI-1026-HKCN | Published | PERFUSION CATHETERS AND RELATED METHODS | Hong Kong | 17109379.3 | 9/10/2015 | | |
| VSI-1026-HKCN2 | Published | PERFUSION CATHETERS AND RELATED METHODS | Hong Kong | 18105018.7 | 9/10/2015 | | |
| VSI-1026-JEEP2 | Unfiled | PERFUSION CATHETERS AND RELATED METHODS | Ireland | 3400886 | 9/10/2015 | 3400886 | |
| VSI-1026-ITEP | Issued | PERFUSION CATHETERS AND RELATED METHODS | Italy | 3125781 | 9/10/2015 | 3125781 | 11/7/2018 |
| VSI-1026-JP01 | Issued | PERFUSION CATHETERS AND RELATED METHODS | Japan | 2016-515958 | 9/10/2015 | 6097447 | 2/24/2017 |
| VSI-1026-JP02 | Issued | PERFUSION CATHETERS AND RELATED METHODS | Japan | 2017-28336 | 9/10/2015 | 6326517 | 4/20/2018 |
| VSI-1026-NLEP2 | Unfiled | PERFUSION CATHETERS AND RELATED METHODS | Netherlands | 3400886 | 9/10/2015 | 3400886 | |
| VSI-1026-US01 | Issued | PERFUSION CATHETERS AND RELATED METHODS | U.S. | 14/850,095 | 9/10/2015 | 10159821 | 12/25/2018 |
| VSI-1026-US02 | Issued | PERFUSION CATHETERS AND RELATED METHODS | U.S. | 15/296,183 | 10/18/2016 | 9968763 | 5/15/2018 |
| VSI-1026-US03 | Published | PERFUSION CATHETERS AND RELATED METHODS | U.S. | 16/191,833 | 11/15/2018 | | |
| VSI-1026-USPR | Expired | PERFUSION CATHETER | U.S. | 62/048,726 | 9/10/2014 | | |
| VSI-1026-WO01 | Expired | PERFUSION CATHETERS AND RELATED METHODS | PCT | PCT/US15/49356 | 9/10/2015 | | |
| VSI-1027-USPR | Expired | PERFUSION CATHETERS AND RELATED METHODS | U.S. | 62/078,240 | 11/11/2014 | | |
| VSI-1028-US01 | Abandoned | VASCULAR INTRODUCER INCLUDING EXPANDABLE PASSAGE MEMBER | U.S. | 13/191,889 | 7/27/2011 | | |
| VSI-1028-US02 | Abandoned | VASCULAR INTRODUCER INCLUDING EXPANDABLE PASSAGE MEMBER | U.S. | 14/734,967 | 6/9/2015 | | |
| VSI-1029-US01 | Issued | DRAINAGE OR FEEDING CATHETER ASSEMBLY | U.S. | 14/206,940 | 3/12/2014 | 9522253 | 12/20/2016 |
| VSI-1029-USPR | Expired | DRAINAGE OR FEEDING CATHETER ASSEMBLY | U.S. | 61/780,832 | 3/13/2013 | | |

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| VSI-1030-CA01 | Issued | CAPTURE ASSEMBLY AND METHOD | Canada | 2955841 | 9/10/2015 | 2955841 | 6/27/2017 |
| VSI-1030-DEEP | Issued | CAPTURE ASSEMBLY AND METHOD | Germany | 3125789 | 9/10/2015 | 602015004478.9 | 8/30/2017 |
| VSI-1030-EP01 | Issued | CAPTURE ASSEMBLY AND METHOD | EP | 15767400.3 | 9/10/2015 | 3125789 | 8/30/2017 |
| VSI-1030-ESEP | Issued | CAPTURE ASSEMBLY AND METHOD | Spain | 15767400.3 | 9/10/2015 | 3125789 | 8/30/2017 |
| VSI-1030-FREP | Issued | CAPTURE ASSEMBLY AND METHOD | France | 15767400.3 | 9/10/2015 | 3125789 | 8/30/2017 |
| VSI-1030-GBEP | Issued | CAPTURE ASSEMBLY AND METHOD | United Kingdom | 15767400.3 | 9/10/2015 | 3125789 | 8/30/2017 |
| VSI-1030-ITEP | Issued | CAPTURE ASSEMBLY AND METHOD | Italy | 3125789 | 9/10/2015 | 502017000132140 | 8/30/2017 |
| VSI-1030-US01 | Issued | CAPTURE ASSEMBLY AND METHOD | U.S. | 14/849,774 | 9/10/2015 | 9351747 | 5/31/2016 |
| VSI-1030-US02 | Issued | CAPTURE ASSEMBLY AND METHOD | U.S. | 15/148,038 | 5/6/2016 | 10390849 | 8/27/2019 |
| VSI-1030-USPR | Expired | THROMBECTOMY ASSEMBLY AND METHOD | U.S. | 62/048,736 | 9/10/2014 | | |
| VSI-1030-WO01 | Expired | CAPTURE ASSEMBLY AND METHOD | PCT | PCT/US15/49299 | 9/10/2015 | | |
| VSI-1031-USPR | Abandoned | GUIDEWIRE CATHETER | U.S. | 62/048,741 | 9/10/2014 | | |
| VSI-1032-US01 | Issued | CATHETER | U.S. | 14/673,966 | 3/31/2015 | 9636477 | 5/2/2017 |
| VSI-1032-US02 | Published | CATHETER | U.S. | 15/441,352 | 2/24/2017 | | |
| VSI-1032-USPR | Expired | CATHETER | U.S. | 62/061,781 | 10/9/2014 | | |
| VSI-1033-EP01 | Abandoned | GUIDE WIRE CONTROL CATHETERS FOR CROSSING OCCLUSIONS AND RELATED METHODS OF USE | EP | 3783618.6 | 11/18/2003 | | |
| VSI-1033-JP01 | Abandoned | GUIDE WIRE CONTROL CATHETERS FOR CROSSING | Japan | 2004-555478 | 11/18/2003 | 4546250 | |

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| VSI-1033-US01 | Abandoned | OCCLUSIONS AND RELATED METHODS OF USE | U.S. | 10/301,779 | 11/22/2002 | | |
| VSI-1033-US02 | Abandoned | GUIDE WIRE CONTROL CATHETER FOR CROSSING OCCLUSIONS AND RELATED METHODS OF USE | U.S. | 12/207,391 | 9/9/2008 | | |
| VSI-1033-US03 | Abandoned | GUIDE WIRE CONTROL CATHETER FOR CROSSING OCCLUSIONS AND RELATED METHODS OF USE | U.S. | 14/619,730 | 2/11/2015 | | |
| VSI-1033-WO01 | Expired | GUIDE WIRE CONTROL CATHETERS FOR CROSSING OCCLUSIONS AND RELATED METHODS OF USE | PCT | PCT/US03/36783 | 11/18/2003 | EP1722697 | 11/22/2006 |
| VSI-1035-EP01 | Abandoned | SMALL-DIAMETER SNARE | EP | 5724826.2 | 3/7/2005 | | |
| VSI-1035-US01 | Abandoned | SMALL-DIAMETER SNARE | U.S. | 11/074,827 | 3/7/2005 | | |
| VSI-1035-USPR | Expired | SMALL-DIAMETER SNARE | U.S. | 60/551,313 | 3/8/2004 | | |
| VSI-1035-WO01 | Expired | SMALL-DIAMETER SNARE | PCT | PCT/US05/07361 | 3/7/2005 | | |
| VSI-1036-US01 | Abandoned | SYSTEM AND METHOD FOR REMOVAL OF MATERIAL FROM A BLOOD VESSEL USING A SMALL DIAMETER CATHETER | U.S. | 11/583,873 | 10/19/2006 | | |
| VSI-1036-WO01 | Expired | SYSTEM AND METHOD FOR REMOVAL OF MATERIAL FROM A BLOOD VESSEL USING A SMALL DIAMETER CATHETER | PCT | PCT/US07/22216 | 10/18/2007 | | |
| VSI-1037-US01 | Abandoned | SYSTEM AND METHOD FOR REMOVAL OF MATERIAL FROM A BLOOD VESSEL | U.S. | 12/275,822 | 11/21/2008 | | |

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| VSI-1038-US01 | Abandoned | SYSTEM AND METHOD FOR REMOVAL OF MATERIAL FROM A BLOOD VESSEL USING A SMALL DIAMETER CATHETER | U.S. | 12/098,201 | 4/4/2008 | |
| VSI-1039-EP01 | Abandoned | GUIDE WIRE AND CATHETER MANAGEMENT DEVICE | EP | 9795110.7 | 7/8/2009 | |
| VSI-1039-JP01 | Abandoned | GUIDE WIRE AND CATHETER MANAGEMENT DEVICE | Japan | 2011-517563 | 7/8/2009 | |
| VSI-1039-US01 | Abandoned | GUIDE WIRE AND CATHETER MANAGEMENT DEVICE | U.S. | 12/217,852 | 7/8/2008 | |
| VSI-1039-WO01 | Expired | GUIDE WIRE AND CATHETER MANAGEMENT DEVICE | PCT | PCT/US09/49919 | 7/8/2009 | |
| VSI-1040-US01 | Abandoned | GUIDE WIRE RETENTION AND POSITIONING APPARATUS | U.S. | 12/148,681 | 4/21/2008 | |
| VSI-1042-US01 | Abandoned | TISSUE TRACT SEALING DEVICE | U.S. | 10/007,786 | 12/7/2001 | 6840952 |
| VSI-1043-US01 | Abandoned | TISSUE TRACT SEALING DEVICE | U.S. | 10/145,179 | 5/13/2002 | |
| VSI-1044-US01 | Abandoned | METHOD AND APPARATUS FOR COAGULATION AND CLOSURE OF PSEUDOANEURYSMS | U.S. | 09/943,584 | 8/30/2001 | |
| VSI-1045-US01 | Allowed | Stenotic Region Scoring Assembly and Method | U.S. | 14/991,065 | 1/8/2016 | |
| VSI-1045-USPR | Expired | Stenotic Region Scoring Assembly and Method | U.S. | 62/129,997 | 3/9/2015 | |
| VSI-1046-US01 | Published | PATH CREATION THROUGH OCCLUSION | U.S. | 15/254,386 | 9/1/2016 | |
| VSI-1046-USPR | Expired | PATH CREATION THROUGH OCCLUSION | U.S. | 62/257,777 | 11/20/2015 | |
| VSI-1047-CA01 | Issued | Guidewire Fixation | Canada | 2974544 | 5/24/2016 | 2974544 |
| VSI-1047-CN01 | Issued | Guidewire Fixation | China | 201680011318.7 | 5/24/2016 | ZL201680011318.7 |
| VSI-1047-DEEP | Issued | Guidewire Fixation | Germany | 3302674 | 5/24/2016 | 3302674 |

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| VSI-1047-EP01 | Issued | Guidewire Fixation | EP | 16728179.9 | 5/24/2016 | 3302674 | 1/30/2019 |
| VSI-1047-EP02 | Published | Guidewire Fixation | EP | 18204252.3 | 5/24/2016 | | |
| VSI-1047-ESEP | Issued | Guidewire Fixation | Spain | 3302674 | 5/24/2016 | 3302674 | 1/30/2019 |
| VSI-1047-FREP | Issued | Guidewire Fixation | France | 3302674 | 5/24/2016 | 3302674 | 1/30/2019 |
| VSI-1047-GBEP | Issued | Guidewire Fixation | United Kingdom | 3302674 | 5/24/2016 | 3302674 | 1/30/2019 |
| VSI-1047-HKCN | Published | Guidewire Fixation | Hong Kong | 17111832 | 5/24/2016 | | |
| VSI-1047-IEEP | Issued | Guidewire Fixation | Ireland | 3302674 | 5/24/2016 | 3302674 | 1/30/2019 |
| VSI-1047-ITEP | Issued | Guidewire Fixation | Italy | 3302674 | 5/24/2016 | 502019000029906 | 1/30/2019 |
| VSI-1047-JP01 | Published | Guidewire Fixation | Japan | 2017-542898 | 5/24/2016 | | |
| VSI-1047-JP02 | Published | Guidewire Fixation | Japan | 2018-212119 | 5/24/2016 | | |
| VSI-1047-NLEP | Issued | Guidewire Fixation | Netherlands | 3302674 | 5/24/2016 | 3302674 | 1/30/2019 |
| VSI-1047-US01 | Published | Guidewire Fixation | U.S. | 15/163,044 | 5/24/2016 | | |
| VSI-1047-USPR | Expired | Guidewire Fixation | U.S. | 62/166,259 | 5/26/2015 | | |
| VSI-1047-USPR2 | Expired | Guidewire Fixation | U.S. | 62/190,879 | 7/10/2015 | | |
| VSI-1047-WO01 | Expired | Guidewire Fixation | PCT | PCT/US2016/033904 | 5/24/2016 | | |
| VSI-1048-US01 | Issued | Magnetically-Driven Delivery Assembly and Method | U.S. | 15/004,012 | 1/22/2016 | 9943314 | 4/17/2018 |
| VSI-1048-USPR | Expired | Magnetically-Driven Delivery Assembly and Method | U.S. | 62/147,008 | 4/14/2015 | | |
| VSI-1049-CA01 | Issued | Closure Device for Sealing Percutaneous Opening in a Vessel | Canada | 2975309 | 2/10/2016 | 2975309 | 3/5/2019 |

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| VSI-1049-CN01 | Published | Closure Device for Sealing Percutaneous Opening in a Vessel | China | 201680009204.9 | 2/10/2016 | |
| VSI-1049-EP01 | Published | Closure Device for Sealing Percutaneous Opening in a Vessel | EP | 16712553.3 | 2/10/2016 | |
| VSI-1049-HKCN | Published | Closure Device for Sealing Percutaneous Opening in a Vessel | Hong Kong | 17111871.2 | 2/10/2016 | |
| VSI-1049-JP01 | Published | Closure Device for Sealing Percutaneous Opening in a Vessel | Japan | 2017-539600 | 2/10/2016 | |
| VSI-1049-US01 | Issued | Closure Device for Sealing Percutaneous Opening in a Vessel | U.S. | 15/040,023 | 2/10/2016 | 10016188 |
| VSI-1049-US02 | Published | Closure Device for Sealing Percutaneous Opening in a Vessel | U.S. | 15/920,665 | 3/14/2018 | |
| VSI-1049-USPR | Expired | Closure Device for Sealing Percutaneous Opening in a Vessel | U.S. | 62/114,101 | 2/10/2015 | |
| VSI-1049-WO01 | Expired | Closure Device for Sealing Percutaneous Opening in a Vessel | PCT | PCT/US2016/017238 | 2/10/2016 | |
| VSI-1050-US01 | Issued | RESORBABLE EMBOLIZATION SPHERES | U.S. | 15/131,534 | 4/18/2016 | 10071181 |
| VSI-1050-US02 | Pending | RESORBABLE EMBOLIZATION SPHERES | U.S. | 15/664,358 | 7/31/2017 | |
| VSI-1050-US03 | Issued | RESORBABLE EMBOLIZATION SPHERES | U.S. | 16/034,670 | 7/13/2018 | 10179188 |
| VSI-1050-US04 | Pending | RESORBABLE EMBOLIZATION SPHERES | U.S. | 16/034,695 | 7/13/2018 | |
| VSI-1050-USPR | Expired | RESORBABLE EMBOLIZATION SPHERES | U.S. | 62/148,889 | 4/17/2015 | |
| VSI-1051-USPR | Abandoned | RESORBABLE EMBOLIZATION SPHERES | U.S. | 62/148,899 | 4/17/2015 | |
| VSI-1052-US01 | Issued | CATHETER CUTTING DEVICE | U.S. | 15/063,575 | 3/8/2016 | 10065331 |
| VSI-1052-USPR | Expired | CATHETER CUTTING DEVICE | U.S. | 62/166,274 | 5/26/2015 | |
| VSI-1053-US01 | Published | FLUID DELIVERY OR REMOVAL SYSTEM | U.S. | 15/144,879 | 5/3/2016 | |
| VSI-1053-USPR | Expired | FLUID DELIVERY OR REMOVAL SYSTEM | U.S. | 62/203,439 | 8/11/2015 | |

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| VSI-1054-US01 | Issued | CATHETER TIP | U.S. | 14/860,997 | 9/22/2015 | 9782561 | 10/10/2017 |
| VSI-1054-USPR | Expired | CATHETER TIP | U.S. | 62/203,431 | 8/11/2015 | | |
| VSI-1055-US01 | Published | SYSTEM AND METHOD FOR FREEZE-DRYING AND PACKAGING | U.S. | 15/343,381 | 11/4/2016 | | |
| VSI-1055-USPR | Expired | SYSTEM AND METHOD FOR FREEZE-DRYING AND PACKAGING | U.S. | 62/279,955 | 1/18/2016 | | |
| VSI-1056-CA01 | Pending | PACING GUIDEWIRE | Canada | 3012709 | 3/10/2017 | | |
| VSI-1056-CN01 | Published | PACING GUIDEWIRE | China | 201780018077.3 | 3/10/2017 | | |
| VSI-1056-EP01 | Published | PACING GUIDEWIRE | EP | 17712389 | 3/10/2017 | | |
| VSI-1056-HKEP | Pending | PACING GUIDEWIRE | Hong Kong | 19100446.9 | 3/10/2017 | | |
| VSI-1056-JP01 | Published | PACING GUIDEWIRE | Japan | 2019-500221 | 3/10/2017 | | |
| VSI-1056-US01 | Published | PACING GUIDEWIRE | U.S. | 15/455,254 | 3/10/2017 | | |
| VSI-1056-US02 | Issued | PACING GUIDEWIRE | U.S. | 15/455,265 | 3/10/2017 | 10173052 | 1/8/2019 |
| VSI-1056-US03 | Published | PACING GUIDEWIRE | U.S. | 16/214,800 | 12/10/2018 | | |
| VSI-1056-USPR | Expired | PACING GUIDEWIRE | U.S. | 62/310,044 | 3/18/2016 | | |
| VSI-1056-USPR2 | Expired | PACING GUIDEWIRE | U.S. | 62/346,214 | 6/6/2016 | | |
| VSI-1056-USPR3 | Expired | PACING GUIDEWIRE | U.S. | 62/378,258 | 8/23/2016 | | |
| VSI-1056-USPR4 | Expired | PACING GUIDEWIRE | U.S. | 62/436,750 | 12/20/2016 | | |
| VSI-1056-WO01 | Expired | PACING GUIDEWIRE | PCT | PCT/US2017/021719 | 3/10/2017 | | |
| VSI-1057-US01 | Issued | METHODS FOR FACILITATING REVASCULARIZATION OF OCCLUSION | U.S. | 15/340,026 | 11/1/2016 | 10245050 | 4/2/2019 |

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| VSI-1057-USPR | Expired | METHODS FOR FACILITATING REVASCULARIZATION OF OCCLUSION | U.S. | 62/401,964 | 9/30/2016 | |
| VSI-1058-DEEP | Unfiled | GUIDE EXTENSION CATHETER | Germany | | 9/27/2017 | |
| VSI-1058-EP01 | Published | GUIDE EXTENSION CATHETER | EP | 17193571.1 | 9/27/2017 | |
| VSI-1058-FREP | Unfiled | GUIDE EXTENSION CATHETER | France | | 9/27/2017 | |
| VSI-1058-GBEP | Unfiled | GUIDE EXTENSION CATHETER | United Kingdom | | 9/27/2017 | |
| VSI-1058-IIEP | Unfiled | GUIDE EXTENSION CATHETER | Ireland | | 9/27/2017 | |
| VSI-1058-US01 | Published | GUIDE EXTENSION CATHETER | U.S. | 15/581,176 | 4/28/2017 | |
| VSI-1058-USPR | Expired | GUIDE EXTENSION CATHETER | U.S. | 62/431,911 | 12/9/2016 | |
| VSI-1058-USPR2 | Expired | GUIDE EXTENSION CATHETER | U.S. | 62/440,438 | 12/30/2016 | |
| VSI-1059-USPR | Closed | INTRA-VESSEL SEALING COMPONENT | U.S. | | | |
| VSI-1061-CA01 | Allowed | CATHETER | Canada | 3029522 | 6/6/2018 | |
| VSI-1061-CA02 | Pending | CATHETER | Canada | 3050931 | 6/6/2018 | |
| VSI-1061-CN01 | Published | CATHETER | China | 201880003146.8 | 6/6/2018 | |
| VSI-1061-CN02 | Published | CATHETER | China | 201910214671.0 | 6/6/2018 | |
| VSI-1061-EP01 | Published | CATHETER | EP | 18737025.9 | 6/6/2018 | |
| VSI-1061-EP02 | Published | CATHETER | EP | 19163614.1 | 6/6/2018 | |
| VSI-1061-HKEP | Pending | CATHETER | Hong Kong | 19127209.5 | 6/6/2018 | |
| VSI-1061-HKEP2 | Unfiled | CATHETER | Hong Kong | | 6/6/2018 | |

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| VSI-1061-JP01 | Pending | CATHETER | Japan | 2019-508840 | 6/6/2018 | |
| VSI-1061-JP02 | Published | CATHETER | Japan | 2019-042568 | 6/6/2018 | |
| VSI-1061-US01 | Issued | CATHETER | U.S. | 15/686,962 | 8/25/2017 | 10238834 |
| VSI-1061-US02 | Published | CATHETER | U.S. | 16/266,785 | 2/4/2019 | |
| VSI-1061-WO01 | Published | CATHETER | PCT | PCT/IB2018/054054 | 6/6/2018 | |
| VSI-1063-US01 | Published | GUIDE EXTENSION CATHETER | U.S. | 16/264,803 | 2/1/2019 | |
| VSI-1063-USPR | Expired | GUIDE EXTENSION CATHETER | U.S. | 62/630,321 | 2/14/2018 | |
| VSI-1063-WO01 | Published | GUIDE EXTENSION CATHETER | PCT | PCT/US19/16235 | 2/1/2019 | |
| VSI-1064-EP01 | Pending | SUBINTIMAL CATHETER DEVICE AND ASSEMBLY | EP | 18797326.8 | 10/15/2018 | |
| VSI-1064-US01 | Published | SUBINTIMAL CATHETER DEVICE, ASSEMBLY AND RELATED METHODS | U.S. | 16/160,162 | 10/15/2018 | |
| VSI-1064-USPR | Expired | SUBINTIMAL CATHETER DEVICE, ASSEMBLY AND RELATED METHODS | U.S. | 62/577,283 | 10/26/2017 | |
| VSI-1064-WO01 | Published | SUBINTIMAL CATHETER DEVICE AND ASSEMBLY | PCT | PCT/US18/55832 | 10/15/2018 | |
| VSI-1065-US01 | Published | BALLOON CATHETER FOR CONTRAST AGENT FILTRATION AND REMOVAL | U.S. | 16/264,790 | 2/1/2019 | |
| VSI-1065-USPR | Expired | BALLOON CATHETER FOR CONTRAST AGENT FILTRATION AND REMOVAL | U.S. | 62/630,468 | 2/14/2018 | |
| VSI-1067-EP01 | Pending | PERFUSION CATHETERS AND RELATED METHODS | EP | 19178585.6 | 6/5/2019 | |
| VSI-1067-US01 | Pending | PERFUSION CATHETERS AND RELATED METHODS | U.S. | 16/414,921 | 5/17/2019 | |

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| VSI-1067-USPR | Expired | PERFUSION CATHETERS AND RELATED METHODS | U.S. | 62/701,362 | 7/20/2018 | |
| VSI-1068-US01 | Pending | ELUTING PERFUSION CATHETERS AND RELATED METHODS | U.S. | 16/540,844 | 8/14/2019 | |
| VSI-1068-USPR | Expired | ELUTING PERFUSION CATHETERS AND RELATED METHODS | U.S. | 62/719,000 | 8/16/2018 | |
| VSI-1068-WO01 | Pending | ELUTING PERFUSION CATHETERS AND RELATED METHODS | PCT | PCT/US2019/046545 | 8/14/2019 | |
| VSI-1069-USPR | Pending | GUIDE EXTENSION CATHETER | U.S. | 62/807,613 | 2/19/2019 | |
| VSI-1070-USPR | Pending | GUIDE EXTENSION CATHETER | U.S. | 62/771,658 | 11/27/2018 | |
| VSI-1070-WO01 | Pending | GUIDE EXTENSION CATHETER | PCT | PCT/US2019/058783 | 10/30/2019 | |
| VSI-1071-USPR | Pending | GUIDE EXTENSION CATHETER | U.S. | 62/781,973 | 12/19/2018 | |
| VSI-1071-WO01 | Pending | GUIDE EXTENSION CATHETER | PCT | PCT/US2019/058786 | 10/30/2019 | |
| VSI-1072-USPR | Pending | GUIDE EXTENSION CATHETER | U.S. | 62/789,000 | 1/7/2019 | |
| VSI-1072-WO01 | Pending | GUIDE EXTENSION CATHETER | PCT | PCT/US2019/058794 | 10/30/2019 | |
| VSI-1073-US01 | Pending | SYSTEM AND METHOD FOR FREEZE-DRYING AND PACKAGING | U.S. | 16/295,165 | 3/7/2019 | |

| Trademarks | | | | | | |
|------------|---|-----------------|------------------|------------|------------|--|
| Mark | Country | Application No. | Registration No. | Reg. Date | Status | |
| ACOLYSIS | U.S. | 75-256,292 | 2517658 | 12/11/2001 | Registered | |
| AUTO-FILL | U.S. | 78-329,341 | 2894004 | 10/12/2004 | Registered | |
| BANDIT | U.S. | 87-625,101 | 5618758 | 11/27/2018 | Registered | |
| DRAINER | U.S. | 85-066,819 | 3972115 | 5/31/2011 | Registered | |
| D-STAT | U.S. | 78-102,841 | 2754442 | 8/19/2003 | Registered | |
| EZPLAZ | Madrid protocol | 1455699 | 1455699 | 2/12/2019 | Registered | |
| EZPLAZ | European Community, United Kingdom (via Madrid protocol) | 1455699 | 1455699 | 2/12/2019 | Registered | |
| FLUENT | U.S. | 86-654,688 | 5129777 | 1/24/2017 | Registered | |
| GREBSET | U.S. | 77-840,407 | 3790069 | 5/18/2010 | Registered | |
| GUIDELINER | U.S. | 77-706,364 | 3797195 | 6/1/2010 | Registered | |
| GUIDELINER | Japan, European Community, Norway, Switzerland, United Kingdom (via Madrid protocol) | 1399698 | 1399698 | 1/25/2018 | Registered | |
| GUIDELINER | Canada | 1,876,752 | 1,876,752 | 9/5/2019 | Registered | |
| GUIDELINER | China (via Madrid protocol) | 1,399,698 | | | Pending | |
| LANGSTON | U.S. | 78-455,490 | 3024795 | 12/6/2005 | Registered | |
| LANGSTON | Japan, European Community, Norway, Switzerland, United Kingdom (via Madrid protocol) | 1399699 | 1399699 | 1/25/2018 | Registered | |
| LANGSTON | Canada | 1,876,762 | | | Pending | |
| MINNIE | U.S. | 77-818,971 | 3752325 | 2/23/2010 | Registered | |
| OCTANE | U.S. | 87-037,941 | 5551287 | 8/28/2018 | Registered | |
| PIGGYBACK | U.S. | 77-840,531 | 3858113 | 10/5/2010 | Registered | |
| PRONTO | U.S. | 78-181,211 | 3353155 | 12/11/2007 | Registered | |
| RAIDER | U.S. | 87-625,094 | 5562562 | 9/11/2018 | Registered | |
| REPLAS | U.S. | 86-604,593 | 5256745 | 8/1/2017 | Registered | |

| | | | | | |
|------------------------|---|------------|-----------|------------|------------|
| RINGER | European Community | 17997580 | 17997580 | 5/7/2019 | Registered |
| SMARTNEEDLE | U.S. | 75-620,674 | 2568826 | 5/14/2002 | Registered |
| SMARTNEEDLE | Canada | 1022096 | TMA574650 | 1/29/2003 | Registered |
| SPECTRE | U.S. | 87-207,092 | 5,267,675 | 8/15/2017 | Registered |
| THROMBI-GEL (Stylized) | U.S. | 77-450,693 | 3,632,771 | 6/2/2009 | Registered |
| THROMBIX | U.S. | 78-139,033 | 3,032,755 | 12/20/2005 | Registered |
| TURNPIKE | U.S. | 86-327,454 | 4,721,667 | 4/14/2015 | Registered |
| TURNPIKE | Japan, European Community, Norway, Switzerland, United Kingdom (via Madrid protocol) | 1405113 | 1405113 | 1/25/2018 | Registered |
| TURNPIKE | Canada | 1,876,753 | 1,876,753 | 9/5/2019 | Registered |
| TRAPLINER | U.S. | 86-830,610 | 5,200,901 | 5/9/2017 | Registered |
| TWIN-PASS | U.S. | 78-602,796 | 3,122,103 | 7/25/2006 | Registered |
| TWIN-PASS | Japan, European Community, United Kingdom (via Madrid protocol) | 1399596 | 1399596 | 1/25/2018 | Registered |
| TWIN-PASS | Canada | 1,876,754 | 1,876,754 | 9/5/2019 | Registered |
| TWIN-PASS | Switzerland (via Madrid protocol) | 1399596 | | | Pending |
| TWIN-PASS | Norway (via Madrid protocol) | 1399596 | | | Pending |
| TWIN-PASS TORQUE | Canada | 1,876,761 | 1,876,761 | 9/5/2019 | Registered |
| VARI-LASE | U.S. | 78-217,901 | 2,846,854 | 5/25/2004 | Registered |
| VENTURE | U.S. | 78-378,442 | 3,700,341 | 10/20/2009 | Registered |