

PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT6194838

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| TELEFLEX MEDICAL DEVICES S.À.R.L. | 12/30/2019 |
| RECEIVING PARTY DATA | |
| Name: | TELEFLEX LIFE SCIENCES LIMITED |
| Street Address: | 171, OLD BAKERY STREET |
| City: | VALLETTA |
| State/Country: | MALTA |
| Postal Code: | VLT 1455 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 16925841 |
| CORRESPONDENCE DATA | |
| Fax Number: | (763)656-4288 |
| <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: | 763-656-4328 |
| Email: | USMIN-ip@teleflex.com |
| Correspondent Name: | VASCULAR SOLUTIONS LLC, TELEFLEX INC. |
| Address Line 1: | 6464 SYCAMORE COURT NORTH |
| Address Line 2: | C/O INTELLECTUAL PROPERTY DEPARTMENT |
| Address Line 4: | MINNEAPOLIS, MINNESOTA 55369 |
| ATTORNEY DOCKET NUMBER: | VSI-1058-US02 |
| NAME OF SUBMITTER: | JULIE WANG |
| SIGNATURE: | /JULIE WANG/ |
| DATE SIGNED: | 07/10/2020 |
| Total Attachments: 60 | |
| source=1058US02-Assignment6of6-20191230-IPAssignment-TMDSarl-TeleflexLifeSciencesLtd#page1.tif | |
| source=1058US02-Assignment6of6-20191230-IPAssignment-TMDSarl-TeleflexLifeSciencesLtd#page2.tif | |
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RECORDABLE ASSIGNMENT

WHEREAS, Teleflex Medical Devices S.à r.l., a private limited liability company (*société à responsabilité limitée*) incorporated 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, registered with the Luxembourg Register of Commerce and Companies under No. B185177 (“ASSIGNOR”), desires to transfer, convey, assign, and deliver all of its right, title, and interest in and to the Intellectual Property (as defined below), including notably the rights to file applications and obtain industrial property rights in all jurisdictions worldwide; and

WHEREAS, Teleflex Life Sciences Limited, a limited liability company duly incorporated and validly existing under the laws of Malta, having its registered office at 171, Old Bakery Street, Valletta VLT 1455, Malta, registered with the Malta Business Registry under No. C94305, (“ASSIGNEE”), desires to acquire all of ASSIGNOR’s right, title, and interest in and to the Intellectual Property (as defined below).

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged by ASSIGNOR, ASSIGNOR hereby further acknowledges that it has assigned and transferred, and by these presents does hereby assign and transfer as of the Transfer Date (as defined below), unto ASSIGNEE, its successors, legal representatives, and assigns, all of ASSIGNOR’s right, title, and interest throughout the world in and to the Intellectual Property (as defined below).

“**Intellectual Property**” means all rights (including rights to enforce) with respect to the following in any jurisdictions throughout the world: (i) patents, patent applications and invention disclosures (including any divisionals, continuations, continuations-in-part, continuing prosecution applications, reexaminations, substitutions, extensions, renewals, post-grant proceedings, utility models, certificates of invention or reissues thereof or therefore), including those set out at Schedule 1 and Schedule 2 of this Recordable Assignment; (ii) trademarks (including any related rights, including reputation, in or to the trade mark), service marks, trade dress, trade names, corporate names, logos, internet domain names and slogans (and all translations, adaptations, derivations and combinations of the foregoing), including those set out at Schedule 3 and Schedule 4 of this Recordable Assignment; (iii) copyrights and copyrightable works; (iv) distribution networks, customer lists, ideas, trade secrets, confidential information, know-how, inventions, proprietary techniques, business models, processes, methods, applications, technical information, disclosures, design rights, unpublished research and development information, manufacturing and operating information, technical data, process characterization data, all documentation relating thereto in any form (including drawings, plans, bills of material and sources of information); (v) rights in software (including all source code, object code, data, databases and collections of data); (vi) registrations or applications or rights to apply for any of the foregoing clauses (i) through (v); and (vii) all other intellectual property (including any other additional applicable marketing and trade intangibles assets), in each of clauses (i) through (vii) in any part of the world and whether or not registered or registerable and to the fullest extent thereof and for the full period therefor and all extensions and renewals thereof, and in each of clauses (i) through (vii) together with any and all income, royalties, damages, and payments due or payable (including damages and payments for past or future infringements or misappropriations thereof) with respect thereto, the right to sue and recover for past infringements or misappropriations

thereof, any and all corresponding rights and interests, that, now or hereafter, may be secured or due throughout the world.

“**Transfer Date**” means December 30, 2019.

As of the Transfer Date, ASSIGNOR does hereby assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all of ASSIGNOR’S claims for damages and remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including ASSIGNOR’S right to sue for, collect, and retain damages for past infringements of any of the Intellectual Property assigned hereby.

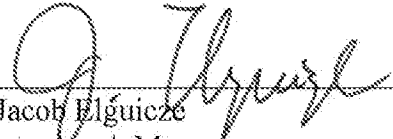
ASSIGNOR hereby covenants and agrees that it will communicate to ASSIGNEE, its successors, legal representatives, and assigns any facts known to ASSIGNOR respecting the Intellectual Property immediately upon becoming aware of those facts, and that it will testify in any legal proceeding involving any of the Intellectual Property, will sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue and foreign applications, make all rightful oaths, and will generally take or cause to be taken all such other actions necessary or desirable for ASSIGNEE, its successors, legal representatives, and assigns to obtain and enforce the benefits of the present Recordable Assignment in all countries.

This Recordable Assignment and any claim, controversy, dispute, or cause of action (whether in contract, tort, or otherwise) based upon, arising out of, or relating to this Recordable Assignment and the transactions contemplated hereby shall be governed by, and construed in accordance with, the laws of the Grand-Duchy of Luxembourg, and submitted to the competent courts of Luxembourg-City, without giving effect to any choice or conflict of law provision or rule (whether of Luxembourg or any other jurisdiction).

[Signature page to follow]

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 30th day of December, 2019.

TELEFLEX MEDICAL DEVICES S.A R.L.

By: 
Name: Jacob Elguicze
Title: Category A Manager

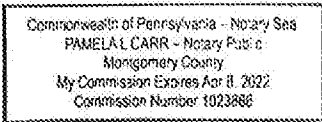
COMMONWEALTH OF PENNSYLVANIA }
COUNTY OF MONTGOMERY }

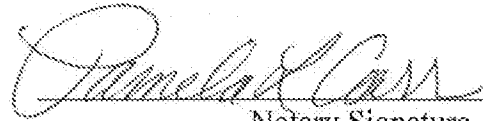
ss.

On December 30, 2019, before me, Pamela L. Carr, notary public, personally appeared Jacob Elguicze, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the entity on behalf of which he acted executed the instrument.

WITNESS my hand and official seal.

[SEAL]




Notary Signature

Schedule 1
Vascular Solutions Patent Portfolio

| 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 |

| Patents | | | | | | | |
|---------------|-----------|--|---------|-----------------|-------------|------------|------------|
| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 |

| Patents | | | | | | | |
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| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| VSI-0995-US01 | Expired | APPARATUS FOR THE CANNULATION OF BLOOD VESSELS | U.S. | 07/813,123 | 12/23/1991 | 5259385 | 11/9/1993 |
| 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 |

| Patents | | | | | | | |
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| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 |
| 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-IIEP | 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 |

| Patents | | | | | | | |
|-----------------|---------|---|---------|-------------------|-------------|------------|------------|
| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 |
| 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 |

| Patents | | | | | | | |
|----------------|-----------|---|----------------|-----------------|-------------|------------|------------|
| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 | | |
| 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-EP01 | 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-IIEP | 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 |

| Patents | | | | | | | | | |
|---------------|-----------|---|---------|-----------------|-------------|-----------------|------------|--|--|
| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date | | |
| 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-WO01 | 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 | M12002A002666 | 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 | | |
| 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 | 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 | | |

| Patents | | | | | | | |
|---------------|-----------|--|---------|-----------------|-------------|------------------|------------|
| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 | | |
| 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 |

| Patents | | | | | | | |
|----------------|-----------|---|----------------|-----------------|-------------|------------|------------|
| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 | |
| 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-IIEP2 | 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 |

| Patents | | | | | | | |
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| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 | | |
| 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 |

| Patents | | | | | | | | | |
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| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date | | |
| 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 OCCLUSIONS AND RELATED METHODS OF USE | Japan | 2004-555478 | 11/18/2003 | 4546250 | | | |
| VSI-1033-US01 | Abandoned | Guide wire control catheters for crossing occlusions and related methods of use | U.S. | 10/301,779 | 11/22/2002 | | | | |

| Patents | | | | | | | |
|---------------|-----------|---|---------|-----------------|-------------|------------|------------|
| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 | | |
| VSI-1035-EP01 | Abandoned | SMALL-DIAMETER SNARE | EP | 5724826.2 | 3/7/2005 | EP1722697 | 11/22/2006 |
| 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 | | |
| 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 | | |

| Patents | | | | | | | |
|---------------|-----------|---|---------|-----------------|-------------|------------------|------------|
| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 | 1/11/2005 |
| 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 | 2/27/2018 |
| VSI-1047-CN01 | Issued | Guidewire Fixation | China | 201680011318.7 | 5/24/2016 | ZL201680011318.7 | 2/15/2019 |
| VSI-1047-DEEP | Issued | Guidewire Fixation | Germany | 3302674 | 5/24/2016 | 3302674 | 1/30/2019 |
| VSI-1047-EP01 | Issued | Guidewire Fixation | EP | 16728179.9 | 5/24/2016 | 3302674 | 1/30/2019 |

| Patents | | | | | | | |
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| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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-IIEP | 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 | | |

| Patents | | | | | | | |
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| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| VSI-1049-CA01 | Issued | Closure Device for Sealing Percutaneous Opening in a Vessel | Canada | 2975309 | 2/10/2016 | 2975309 | 3/5/2019 |
| 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 | 7/10/2018 |
| 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 | 9/11/2018 |
| 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 | 1/15/2019 |
| 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 | 9/4/2018 |

| Patents | | | | | | | |
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| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 | | |
| 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 | | |

| Patents | | | | | | | |
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| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 |
| 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-IEEP | 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 | | |

| Patents | | | | | | | |
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| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 | | |
| 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 | 3/26/2019 |
| 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 | | |

| Patents | | | | | | | |
|---------------|-----------|--|---------|-------------------|-------------|------------|------------|
| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 | | |
| 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 | | |

| Patents | | | | | | | |
|---------------|---------|---|---------|-------------------|-------------|------------|------------|
| Attorney Ref. | Status | Title | Country | Application No. | Filing Date | Patent No. | Issue Date |
| 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 | | |

**Schedule 2
Vidacare Patent Portfolio**

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|-----------------------------------|--------------------|-------------|---------------|------------|
| 040792.024341 | GRANTED - (G) | Medical Device Position Location Systems, Devices and Methods | United States - (US) | 15/048,837 | 19-02-16 | 10,197,518 | 05-02-19 |
| 040792.024343 | GRANTED - (G) | Medical Device Position Location Systems, Devices and Methods | European Patent Convention - (EP) | 16753175.5 | 19-02-16 | 3258839 | 04-09-19 |
| 040792.024344 | FILED - (F) | Medical Device Position Location Systems, Devices and Methods | United States - (US) | 16/180,513 | 05-11-18 | | |
| 040792.024345 | GRANTED - (G) | Medical Device Position Location Systems, Devices and Methods | Germany - (DE) | 16753175.5 | 19-02-16 | 3258839 | 04-09-19 |
| 040792.024346 | GRANTED - (G) | Medical Device Position Location Systems, Devices and Methods | France - (FR) | 16753175.5 | 19-02-16 | 3258839 | 04-09-19 |
| 040792.024347 | GRANTED - (G) | Medical Device Position Location Systems, Devices and Methods | Great Britain - (GB) | 16753175.5 | 19-02-16 | 3258839 | 04-09-19 |
| 040792.024348 | FILED - (F) | Medical Device Position Location Systems, Devices and Methods | European Patent Convention - (EP) | 19195139.1 | 19-02-16 | | |
| 040792.024361 | FILED - (F) | Medical Device Position Location Systems, Devices and Methods | United States - (US) | 15/048,117 | 19-02-16 | | |
| 040792.024363 | FILED - (F) | MEDICAL DEVICE POSITION LOCATION SYSTEMS, DEVICES AND METHODS | European Patent Convention - (EP) | 16753164.9 | 19-02-16 | | |
| 040792.024381 | GRANTED - (G) | Medical Device Position Location Systems, Devices and Methods | United States - (US) | 15/141,843 | 29-04-16 | 10,098,567 | 16-10-18 |
| 040792.024382 | INACTIVE - (I) | Medical Device Position Location Systems, Devices and/or Methods | Patent Cooperation Treaty - (WO) | PCT/US2016/029987 | 29-04-16 | | |
| 040792.024383 | FILED - (F) | Medical Device Position Location Systems, Devices and/or Methods | European Patent Convention - (EP) | 16787208.4 | 29-04-16 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|-----------------------------------|--------------------|-------------|---------------|------------|
| 040792.024384 | FILED - (F) | Medical Device Position Location Systems, Devices and/or Methods | United States - (US) | 16/160,686 | 15-10-18 | | |
| 040792.024400 | GRANTED - (G) | Medical Device Location Systems, Devices And Methods | United States - (US) | 12/949,671 | 18-11-10 | 8,380,289 | 19-02-13 |
| 040792.024420 | GRANTED - (G) | MEDICAL DEVICE LOCATION SYSTEMS, DEVICES AND METHODS | United States - (US) | 12/949,663 | 18-11-10 | 8,391,956 | 05-03-13 |
| 040792.024422 | GRANTED - (G) | Medical Device Location Systems, Devices and Method | European Patent Convention - (EP) | 11840907.7 | 17-11-11 | 2640260 | 19-04-17 |
| 040792.024423 | GRANTED - (G) | Medical Device Location Systems, Devices and Method | Germany - (DE) | 11840907.7 | 17-11-11 | 2640260 | 19-04-17 |
| 040792.024424 | INACTIVE - (I) | Medical Device Location Systems, Devices and Method | Italy - (IT) | 11840907.7 | 17-11-11 | 2640260 | 19-04-17 |
| 040792.024425 | GRANTED - (G) | Medical Device Location Systems, Devices and Method | France - (FR) | 11840907.7 | 17-11-11 | 2640260 | 19-04-17 |
| 040792.024426 | GRANTED - (G) | Medical Device Location Systems, Devices and Method | Great Britain - (GB) | 11840907.7 | 17-11-11 | 2640260 | 19-04-17 |
| 040792.024427 | FILED - (F) | Medical Device Location Systems, Devices and Method | European Patent Convention - (EP) | 16203531.5 | 17-11-11 | | |
| 044774.024060 | GRANTED - (G) | BIOPSY NEEDLE | United States - (US) | 09/955,790 | 19-09-01 | 6,875,183 | 05-04-05 |
| 044774.024061 | INACTIVE - (I) | BIOPSY NEEDLE | Patent Cooperation Treaty - (WO) | PCT/GB2000/001003 | 17-03-00 | | |
| 044774.024062 | GRANTED - (G) | BIOPSY NEEDLE | Japan - (JP) | 2000-606129 | 17-03-00 | 4638051 | 03-12-10 |
| 044774.024063 | GRANTED - (G) | BIOPSY NEEDLE | European Patent Convention - (EP) | 00911068.5 | 17-03-00 | 1164937 | 10-01-07 |
| 044774.024064 | GRANTED - (G) | BIOPSY NEEDLE | Germany - (DE) | 00911068.5 | 17-03-00 | 1164937 | 10-01-07 |
| 044774.024065 | GRANTED - (G) | BIOPSY NEEDLE | France - (FR) | 00911068.5 | 17-03-00 | 1164937 | 10-01-07 |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|----------------------------------|--------------------|-------------|---------------|------------|
| 044774.024066 | GRANTED - (G) | BIOPSY NEEDLE | Great Britain - (GB) | 00911068.5 | 17-03-00 | 1164937 | 10-01-07 |
| 044774.024067 | GRANTED - (G) | BIOPSY NEEDLE | Italy - (IT) | 00911068.5 | 17-03-00 | 1164937 | 10-01-07 |
| 044774.024080 | GRANTED - (G) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | United States - (US) | 11/853,701 | 11-09-07 | 8,656,929 | 25-02-14 |
| 044774.024081 | GRANTED - (G) | Medical Procedures Trays and Related Methods | United States - (US) | 14/189,809 | 25-02-14 | 9,510,910 | 06-12-16 |
| 044774.024100 | GRANTED - (G) | ASSEMBLIES FOR COUPLING INTRAOSSEOUS (IO) DEVICES TO POWERED DRIVERS | United States - (US) | 12/407,651 | 19-03-09 | 8,944,069 | 03-02-15 |
| 044774.024101 | INACTIVE - (I) | Vertebral Access System and Methods | United States - (US) | 14/600,162 | 20-01-15 | | |
| 044774.024102 | FILED - (F) | Vertebral Access System And Methods | United States - (US) | 16/155,505 | 09-10-18 | | |
| 044774.024120 | GRANTED - (G) | ASSEMBLY FOR COUPLING POWERED DRIVER WITH INTRAOSSEOUS DEVICE | United States - (US) | 11/853,678 | 11-09-07 | 8,668,698 | 11-03-14 |
| 044774.024121 | GRANTED - (G) | Assembly for Coupling Powered Driver With Intraosseous Device | United States - (US) | 14/184,194 | 19-02-14 | 10,245,010 | 02-04-19 |
| 044774.024122 | FILED - (F) | Assembly for Coupling Powered Driver With Intraosseous Device | United States - (US) | 16/359,834 | 20-03-19 | | |
| 044774.024140 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Patent Cooperation Treaty - (WO) | PCT/US2003/017167 | 30-05-03 | | |
| 044774.024141 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Australia - (AU) | 2003231939 | 30-05-03 | | |
| 044774.024142 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Brazil - (BR) | PI0311462.7 | 30-05-03 | | |
| 044774.024143 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Canada - (CA) | 2485904 | 30-05-03 | 2485904 | 21-05-13 |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|-----------------------------------|--------------------|-------------|---------------|------------|
| 044774.024144 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Israel - (IL) | 165222 | 30-05-03 | | |
| 044774.024145 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Japan - (JP) | 2004-508669 | 30-05-03 | 4489583 | 09-04-10 |
| 044774.024146 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | European Patent Convention - (EP) | 03756317.8 | 30-05-03 | 1509140 | 13-05-19 |
| 044774.024147 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Switzerland - (CH) | 03756317.8 | 30-05-03 | 1509140 | |
| 044774.024148 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Germany - (DE) | 03756317.8 | 30-05-03 | 1509140 | 13-05-19 |
| 044774.024149 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Spain - (ES) | 03756317.8 | 30-05-03 | 1509140 | |
| 044774.024150 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | France - (FR) | 03756317.8 | 30-05-03 | 1509140 | 13-05-19 |
| 044774.024151 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Great Britain - (GB) | 03756317.8 | 30-05-03 | 1509140 | 13-05-19 |
| 044774.024152 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Italy - (IT) | 03756317.8 | 30-05-03 | 1509140 | 13-05-19 |
| 044774.024153 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Netherland - (NL) | 03756317.8 | 30-05-03 | 1509140 | |
| 044774.024154 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | Sweden - (SE) | 03756317.8 | 30-05-03 | 1509140 | |
| 044774.024155 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | European Patent Convention - (EP) | 09155111.9 | 30-05-03 | 2064997 | 27-04-11 |
| 044774.024156 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Switzerland - (CH) | 09155111.9 | 30-05-03 | 2064997 | |
| 044774.024157 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Germany - (DE) | 09155111.9 | 30-05-03 | 2064997 | 27-04-11 |
| 044774.024160 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW FOR ONCOLOGY AND STEM CELL APPLICATIONS | United States - (US) | 11/781,597 | 23-07-07 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|-----------------------------------|--------------------|-------------|---------------|------------|
| 044774.024161 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW FOR ONCOLOGY AND STEM CELL APPLICATIONS | United States - (US) | 12/701,268 | 23-07-07 | | |
| 044774.024162 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW FOR ONCOLOGY AND STEM CELL APPLICATIONS | United States - (US) | 11/389,733 | 23-07-07 | | |
| 044774.024163 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW FOR ONCOLOGY AND STEM CELL APPLICATIONS | United States - (US) | 11/781,568 | 23-07-07 | | |
| 044774.024164 | GRANTED - (G) | BIOPSY DEVICES AND RELATED METHODS | United States - (US) | 11/853,685 | 11-09-07 | 7,850,620 | 14-12-10 |
| 044774.024165 | GRANTED - (G) | Biopsy Devices and Related Methods | United States - (US) | 12/963,255 | 08-12-10 | 9,717,564 | 01-08-17 |
| 044774.024166 | FILED - (F) | Biopsy Devices and Related Methods | United States - (US) | 15/615,596 | 06-06-17 | | |
| 044774.024180 | INACTIVE - (I) | APPARATUS AND METHODS FOR BIOPSY AND ASPIRATION OF BONE MARROW | United States - (US) | 60/825,325 | 12-09-06 | | |
| 044774.024181 | INACTIVE - (I) | APPARATUS AND METHODS FOR BIOPSY AND ASPIRATION OF BONE MARROW | Patent Cooperation Treaty - (WO) | PCT/US2007/078203 | 11-09-07 | | |
| 044774.024182 | GRANTED - (G) | APPARATUS AND METHODS FOR BIOPSY AND ASPIRATION OF BONE MARROW | China P.R. - (CN) | 200780001198.3 | 11-09-07 | 101365390 | 16-02-11 |
| 044774.024183 | GRANTED - (G) | APPARATUS FOR BIOPSY AND ASPIRATION OF BONE MARROW | European Patent Convention - (EP) | 07842284.7 | 11-09-07 | 2068725 | 09-11-16 |
| 044774.024184 | FILED - (F) | Biopsy & Aspiration of Bone Marrow (Div1) | European Patent Convention - (EP) | 16192247.1 | 11-09-07 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|-----------------------------------|--------------------|-------------|----------------|------------|
| 044774.024185 | GRANTED - (G) | Apparatus and Methods for Biopsy and Aspiration of Bone Marrow | Great Britain - (GB) | 07842284.7 | 11-09-07 | 2068725 | 09-11-16 |
| 044774.024186 | GRANTED - (G) | Apparatus and Methods for Biopsy and Aspiration of Bone Marrow | Germany - (DE) | 07842284.7 | 11-09-07 | 602007048697.1 | 09-11-16 |
| 044774.024187 | GRANTED - (G) | Apparatus and Methods for Biopsy and Aspiration of Bone Marrow | France - (FR) | 07842284.7 | 11-09-07 | 2068725 | 09-11-16 |
| 044774.024188 | GRANTED - (G) | Apparatus and Methods for Biopsy and Aspiration of Bone Marrow | Italy - (IT) | 07842284.7 | 11-09-07 | 2068725 | 09-11-16 |
| 044774.024189 | INACTIVE - (I) | Apparatus and Methods for Biopsy and Aspiration of Bone Marrow | Spain - (ES) | 07842284.7 | 11-09-07 | ES2609923T3 | |
| 044774.024190 | INACTIVE - (I) | Apparatus and Methods for Biopsy and Aspiration of Bone Marrow | Netherland - (NL) | 07842284.7 | 11-09-07 | 2068725 | |
| 044774.024200 | INACTIVE - (I) | BIOPSY DEVICES AND RELATED METHODS | Patent Cooperation Treaty - (WO) | PCT/US2007/078204 | 11-09-07 | | |
| 044774.024201 | GRANTED - (G) | BIOPSY DEVICES AND RELATED METHODS | China P.R. - (CN) | 200780001190.7 | 11-09-07 | 101516274 | 19-10-11 |
| 044774.024202 | GRANTED - (G) | Biopsy Device | European Patent Convention - (EP) | 07842285.4 | 11-09-07 | 2073728 | 07-11-18 |
| 044774.024203 | GRANTED - (G) | BIOPSY DEVICES AND RELATED METHODS | France - (FR) | 07842285.4 | 11-09-07 | 2073728 | 07-11-18 |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
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| 044774.024204 | GRANTED - (G) | BIOPSY DEVICES AND RELATED METHODS | Germany - (DE) | 07842285.4 | 11-09-07 | 2073728 | 07-11-18 |
| 044774.024205 | GRANTED - (G) | BIOPSY DEVICES AND RELATED METHODS | Italy - (IT) | 07842285.4 | 11-09-07 | 2073728 | 07-11-18 |
| 044774.024206 | GRANTED - (G) | BIOPSY DEVICES AND RELATED METHODS | Great Britain - (GB) | 07842285.4 | 11-09-07 | 2073728 | 07-11-18 |
| 044774.024220 | INACTIVE - (I) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | Patent Cooperation Treaty - (WO) | PCT/US2007/078205 | 11-09-07 | | |
| 044774.024221 | GRANTED - (G) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | China P.R. - (CN) | 200780001188.X | 11-09-07 | 101534740 | 20-06-12 |
| 044774.024222 | GRANTED - (G) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | China P.R. - (CN) | 201210110577.9 | 11-09-07 | 102626344 | 11-03-15 |
| 044774.024223 | GRANTED - (G) | Medical procedures trays with intrasoeseous devices | China P.R. - (CN) | 201510050199.3 | 11-09-07 | 104814768 | 13-04-18 |
| 044774.024224 | GRANTED - (G) | Medical Procedure Trays | European Patent Convention - (EP) | 07842286.2 | 11-09-07 | 2068743 | 15-03-17 |
| 044774.024225 | GRANTED - (G) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | Germany - (DE) | 07842286.2 | 11-09-07 | 60 2007 050 227.6 | 15-03-17 |
| 044774.024226 | GRANTED - (G) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | Great Britain - (GB) | 07842286.2 | 11-09-07 | 2068743 | 15-03-17 |
| 044774.024227 | GRANTED - (G) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | France - (FR) | 07842286.2 | 11-09-07 | 2068743 | 15-03-17 |
| 044774.024228 | GRANTED - (G) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | Italy - (IT) | 07842286.2 | 11-09-07 | 2068743 | 15-03-17 |
| 044774.024229 | GRANTED - (G) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | European Patent Convention - (EP) | 17154221.0 | 11-09-07 | 3189787 | 09-01-19 |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
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| 044774.024230 | GRANTED - (G) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | France - (FR) | 17154221.0 | 11-09-07 | 3189787 | 09-01-19 |
| 044774.024231 | GRANTED - (G) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | Great Britain - (GB) | 17154221.0 | 11-09-07 | 3189787 | 09-01-19 |
| 044774.024232 | GRANTED - (G) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | Germany - (DE) | 17154221.0 | 11-09-07 | 602007057418.8 | 09-01-19 |
| 044774.024240 | INACTIVE - (I) | BONE MARROW ASPIRATION DEVICES AND RELATED METHODS | Patent Cooperation Treaty - (WO) | PCT/US2007/078207 | 11-09-07 | | |
| 044774.024241 | INACTIVE - (I) | MEDICAL PROCEDURES TRAYS AND RELATED METHODS | China P.R. - (CN) | 200780001196.4 | 11-09-07 | | |
| 044774.024242 | GRANTED - (G) | BONE MARROW ASPIRATION DEVICES | European Patent Convention - (EP) | 07842288.8 | 11-09-07 | 2066389 | 07-12-16 |
| 044774.024243 | GRANTED - (G) | Bone Marrow Aspiration Devices And Related Methods | Great Britain - (GB) | 07842288.8 | 11-09-07 | 2066389 | 07-12-16 |
| 044774.024244 | GRANTED - (G) | Bone Marrow Aspiration Devices And Related Methods | Germany - (DE) | 07842288.8 | 11-09-07 | 602007049079.0 | 07-12-16 |
| 044774.024245 | GRANTED - (G) | Bone Marrow Aspiration Devices And Related Methods | France - (FR) | 07842288.8 | 11-09-07 | 2066389 | 07-12-16 |
| 044774.024246 | GRANTED - (G) | Bone Marrow Aspiration Devices And Related Methods | Italy - (IT) | 07842288.8 | 11-09-07 | 2066389 | 07-12-16 |
| 044774.024247 | INACTIVE - (I) | Bone Marrow Aspiration Devices And Related Methods | Spain - (ES) | 07842288.8 | 11-09-07 | ES2612955 T3 | |
| 044774.024248 | INACTIVE - (I) | Bone Marrow Aspiration Devices And Related Methods | Netherland - (NL) | 07842288.8 | 11-09-07 | 2066389 | |
| 044774.024249 | FILED - (F) | Bone Marrow Aspiration Devices | European Patent Convention - (EP) | 16196168.5 | 11-09-07 | | |
| 044774.024250 | FILED - (F) | Bone Marrow Aspiration Devices | Germany - (DE) | 16196168.5 | 11-09-07 | | |
| 044774.024251 | FILED - (F) | Bone Marrow Aspiration Devices | Italy - (IT) | 16196168.5 | 11-09-07 | | |
| 044774.024252 | FILED - (F) | Bone Marrow Aspiration Devices | France - (FR) | 16196168.5 | 11-09-07 | | |
| 044774.024253 | FILED - (F) | Bone Marrow Aspiration Devices | Great Britain - (GB) | 16196168.5 | 11-09-07 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|-----------------------------------|--------------------|-------------|---------------|------------|
| 044774.024254 | DOCKETED - (D) | Bone Marrow Aspiration Devices and Related Methods | European Patent Convention - (EP) | | | | |
| 044774.024260 | GRANTED - (G) | INTRAOSSSEOUS NEEDLE SETS AND KITS | United States - (US) | 13/835,046 | 15-03-13 | 9,414,815 | 16-08-16 |
| 044774.024262 | INACTIVE - (I) | INTRAOSSSEOUS NEEDLE SETS AND KITS | Patent Cooperation Treaty - (WO) | PCT/US2014/028564 | 14-03-14 | | |
| 044774.024263 | GRANTED - (G) | Intraosseous Needle Sets and Kits | European Patent Convention - (EP) | 14765525.2 | 14-03-14 | 2967508 | 07-08-19 |
| 044774.024264 | FILED - (F) | INTRAOSSSEOUS NEEDLE SETS AND KITS | Canada - (CA) | 2907150 | 14-03-14 | | |
| 044774.024265 | GRANTED - (G) | INTRAOSSSEOUS NEEDLE SETS AND KITS | Japan - (JP) | 2016-502835 | 14-03-14 | 6420818 | 19-10-18 |
| 044774.024266 | GRANTED - (G) | Intraosseous Needle Sets | United States - (US) | 15/237,213 | 15-03-13 | 10,130,343 | 20-11-18 |
| 044774.024267 | FILED - (F) | Intraosseous Needle Sets and Kits | Japan - (JP) | 2018-101374 | 14-03-14 | | |
| 044774.024268 | FILED - (F) | Intraosseous Needle Sets | United States - (US) | 16/195,343 | 15-03-13 | | |
| 044774.024269 | FILED - (F) | Intraosseous Needle Sets and Kits | European Patent Convention - (EP) | 19183246.8 | 14-03-14 | | |
| 044774.024270 | GRANTED - (G) | Intraosseous Needle Sets and Kits | Germany - (DE) | 14765525.2 | 14-03-14 | 2967508 | 07-08-19 |
| 044774.024271 | GRANTED - (G) | Intraosseous Needle Sets and Kits | France - (FR) | 14765525.2 | 14-03-14 | 2967508 | 07-08-19 |
| 044774.024272 | GRANTED - (G) | Intraosseous Needle Sets and Kits | Great Britain - (GB) | 14765525.2 | 14-03-14 | 2967508 | 07-08-19 |
| 044774.024280 | INACTIVE - (I) | Intraosseous Device Handles, Systems, and Methods | Patent Cooperation Treaty - (WO) | PCT/US2013/031928 | 15-03-13 | | |
| 044774.024281 | GRANTED - (G) | INTRAOSSSEOUS DEVICE HANDLES, SYSTEMS, AND METHODS | Australia - (AU) | 2013381963 | 15-03-13 | 2013381963 | 28-07-17 |
| 044774.024282 | INACTIVE - (I) | Intraosseous Device Handles, Systems, and Methods | South Korea - (KR) | 10-2015-7029737 | 15-03-13 | | |
| 044774.024283 | GRANTED - (G) | Intraosseous Device Handles, Systems, and Methods | Canada - (CA) | 2907053 | 15-03-13 | 2907053 | 02-01-18 |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|---|-----------------------------------|--------------------|-------------|---------------|------------|
| 044774.024284 | GRANTED - (G) | Intraosseous device handles, systems, and methods | Australia - (AU) | 2017204794 | 15-03-13 | 2017204794 | 10-01-19 |
| 044774.024300 | INACTIVE - (I) | ASSISTIVE DEVICE FOR REMOVING A BIOLOGICAL SAMPLE FROM AN INTRAOSSEOUS DEVICE, AND RELATED KITS AND METHODS | United States - (US) | 61/937,365 | 07-02-14 | | |
| 044774.024301 | FILED - (F) | Assistive Device for Removing a Biological Sample from an Intraosseous Device, and Related Kits and Methods | United States - (US) | 14/616,330 | 06-02-15 | | |
| 044774.024302 | INACTIVE - (I) | ASSISTIVE DEVICE FOR REMOVING A BIOLOGICAL SAMPLE FROM AN INTRAOSSEOUS DEVICE, AND RELATED KITS AND METHODS | Patent Cooperation Treaty - (WO) | PCT/US2015/014806 | 06-02-15 | | |
| 044774.024303 | FILED - (F) | Assistive Device For Removing A Biological Sample From An Intraosseous Device, And Related Kits And Methods | China P.R. - (CN) | 2015800178721 | 06-02-15 | | |
| 044774.024304 | GRANTED - (G) | Assistive Device For Removing A Biological Sample From An Intraosseous Device, And Related Kits And Methods | Japan - (JP) | 2016-568468 | 06-02-15 | 6452729 | 21-12-18 |
| 044774.024305 | GRANTED - (G) | Assistive Device For Removing A Biological Sample From An Intraosseous Device, And Related Kits And Methods | European Patent Convention - (EP) | 15746455.3 | 06-02-15 | 3102114 | 09-10-19 |
| 044774.024306 | GRANTED - (G) | Assistive Device For Removing A Biological Sample From An Intraosseous Device, And Related Kits And Methods | Germany - (DE) | 15746455.3 | 06-02-15 | 3102114 | 09-10-19 |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|---|-----------------------------------|--------------------|-------------|---------------|------------|
| 044774.024307 | GRANTED - (G) | Assistive Device For Removing A Biological Sample From An Intraosseous Device, And Related Kits And Methods | France - (FR) | 15746455.3 | 06-02-15 | 3102114 | 09-10-19 |
| 044774.024308 | GRANTED - (G) | Assistive Device For Removing A Biological Sample From An Intraosseous Device, And Related Kits And Methods | Great Britain - (GB) | 15746455.3 | 06-02-15 | 3102114 | 09-10-19 |
| 044774.024309 | FILED - (F) | Assistive Device for Removing A Biological Sample From an Intraosseous Device, and Related Kits and Methods | European Patent Convention - (EP) | 19198487.1 | 06-02-15 | | |
| 044774.024320 | FILED - (F) | Intraosseous Device Handles, Systems, and Methods | United States - (US) | 14/776,014 | 14-09-15 | | |
| 099599.021508 | INACTIVE - (I) | AN IMPROVED BONE MARROW BIOPSY NEEDLE | Great Britain - (GB) | 9906257.2 | 19-03-99 | | |
| 099599.021509 | INACTIVE - (I) | BIOPSY NEEDLE | Great Britain - (GB) | 9926427.7 | 08-11-99 | | |
| 099599.021520 | INACTIVE - (I) | INTRA-OSSEOUS NEEDLE DRILL | United States - (US) | 08/397,779 | 03-03-95 | 5,554,154 | 10-09-96 |
| 099599.021540 | INACTIVE - (I) | APPARATUS AND METHOD TO PROVIDE ACCESS TO BONE MARROW | United States - (US) | 60/384,756 | 31-05-02 | | |
| 099599.021541 | GRANTED - (G) | APPARATUS AND METHOD TO PROVIDE EMERGENCY ACCESS TO BONE MARROW | United States - (US) | 10/449,503 | 30-05-03 | 7,670,328 | 02-03-10 |
| 099599.021542 | GRANTED - (G) | APPARATUS AND METHOD TO PROVIDE EMERGENCY ACCESS TO BONE MARROW | United States - (US) | 12/331,979 | 10-12-08 | 8,715,287 | 06-05-14 |
| 099599.021543 | GRANTED - (G) | APPARATUS AND METHOD TO PROVIDE EMERGENCY ACCESS TO BONE MARROW | United States - (US) | 14/271,144 | 06-05-14 | 8,992,535 | 31-03-15 |
| 099599.021544 | GRANTED - (G) | APPARATUS AND METHOD TO PROVIDE EMERGENCY ACCESS TO BONE MARROW | United States - (US) | 14/666,391 | 24-03-15 | 9,393,031 | 19-07-16 |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|-----------------------------------|--------------------|-------------|---------------|------------|
| 099599.021545 | INACTIVE - (I) | Apparatus And Method To Access Bone Marrow | Patent Cooperation Treaty - (WO) | PCT/US2003/017203 | 30-05-03 | | |
| 099599.021546 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | European Patent Convention - (EP) | 03731475.4 | 30-05-03 | 1509139 | 15-07-09 |
| 099599.021547 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Switzerland - (CH) | 03731475.4 | 30-05-03 | 1509139 | 15-07-09 |
| 099599.021548 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Germany - (DE) | 03731475.4 | 30-05-03 | 1509139 | 15-07-09 |
| 099599.021549 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Spain - (ES) | 03731475.4 | 30-05-03 | 1509139 | 15-07-09 |
| 099599.021550 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | France - (FR) | 03731475.4 | 30-05-03 | 1509139 | 15-07-09 |
| 099599.021551 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Great Britain - (GB) | 03731475.4 | 30-05-03 | 1509139 | 15-07-09 |
| 099599.021552 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Italy - (IT) | 03731475.4 | 30-05-03 | 1509139 | 15-07-09 |
| 099599.021553 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Netherlands - (NL) | 03731475.4 | 30-05-03 | 1509139 | 15-07-09 |
| 099599.021554 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Sweden - (SE) | 03731475.4 | 30-05-03 | 1509139 | 15-07-09 |
| 099599.021555 | GRANTED - (G) | Apparatus to access bone marrow | European Patent Convention - (EP) | 08021732.6 | 30-05-03 | 2039298 | 25-10-17 |
| 099599.021556 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Australia - (AU) | 2003240970 | 30-05-03 | 2003240970 | 08-09-08 |
| 099599.021557 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Brazil - (BR) | PI0311520.8 | 30-05-03 | | |
| 099599.021558 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Canada - (CA) | 2485910 | 30-05-03 | 2485910 | 03-05-16 |
| 099599.021559 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Canada - (CA) | 2898210 | 30-05-03 | 2898210 | 13-11-18 |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|---|-----------------------------------|--------------------|-------------|---------------|------------|
| 099599.021560 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Israel - (IL) | 165224 | 30-05-03 | | |
| 099599.021561 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Japan - (JP) | 2004-508670 | 30-05-03 | 4938979 | 02-03-12 |
| 099599.021562 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Japan - (JP) | 2009-242693 | 30-05-03 | 5474484 | 14-02-14 |
| 099599.021563 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Japan - (JP) | 2013-000197 | 30-05-03 | 5953238 | 17-06-16 |
| 099599.021564 | GRANTED - (G) | APPARATUS TO ACCESS BONE MARROW | France - (FR) | 08021732.6 | 30-05-03 | 2039298 | 25-10-17 |
| 099599.021565 | GRANTED - (G) | APPARATUS TO ACCESS BONE MARROW | Germany - (DE) | 08021732.6 | 30-05-03 | 2039298 | 25-10-17 |
| 099599.021566 | GRANTED - (G) | APPARATUS TO ACCESS BONE MARROW | Italy - (IT) | 08021732.6 | 30-05-03 | 2039298 | 25-10-17 |
| 099599.021567 | GRANTED - (G) | APPARATUS TO ACCESS BONE MARROW | Great Britain - (GB) | 08021732.6 | 30-05-03 | 2039298 | 25-10-17 |
| 099599.021568 | FILED - (F) | Apparatus and Method to Access Bone Marrow | Canada - (CA) | 3004862 | 30-05-03 | | |
| 099599.021569 | INACTIVE - (I) | Access Bone Marrow | European Patent Convention - (EP) | 17198059.2 | 30-05-03 | | |
| 099599.021580 | GRANTED - (G) | APPARATUS AND METHOD TO INJECT FLUIDS INTO BONE MARROW AND OTHER TARGET SITES | United States - (US) | 11/190,331 | 27-07-05 | 7,811,260 | 12-10-10 |
| 099599.021581 | GRANTED - (G) | APPARATUS AND METHOD TO INJECT FLUIDS INTO BONE MARROW AND OTHER TARGET SITES | United States - (US) | 12/899,696 | 07-10-10 | 8,684,978 | 01-04-14 |
| 099599.021582 | GRANTED - (G) | APPARATUS AND METHOD TO INJECT FLUIDS INTO BONE MARROW AND OTHER TARGET SITES | United States - (US) | 12/347,506 | 31-12-08 | 8,038,664 | 18-10-11 |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|----------------------|--------------------|-------------|---------------|------------|
| 099599.021583 | GRANTED - (G) | Apparatus and Method to Inject Fluids Into Bone Marrow and Other Target Sites | United States - (US) | 13/275,148 | 17-10-11 | 9,717,847 | 01-08-17 |
| 099599.021584 | GRANTED - (G) | CARTRIDGE APPARATUS FOR INJECTING FLUIDS INTO BONE | United States - (US) | 12/718,606 | 05-03-10 | 8,480,632 | 09-07-13 |
| 099599.021585 | GRANTED - (G) | APPARATUS AND METHOD TO INJECT FLUIDS INTO BONE MARROW AND OTHER TARGET SITES | United States - (US) | 12/718,638 | 05-03-10 | 9,295,487 | 29-03-16 |
| 099599.021586 | GRANTED - (G) | BONE PENETRATING NEEDLE WITH ANGLED PORTS | United States - (US) | 12/554,708 | 04-09-09 | 8,308,693 | 13-11-12 |
| 099599.021587 | INACTIVE - (I) | APPARATUS AND METHODS TO INSTALL, SUPPORT AND/OR MONITOR PERFORMANCE OF INTRAOSSEOUS DEVICES | United States - (US) | 11/461,885 | 02-08-06 | | |
| 099599.021588 | GRANTED - (G) | Apparatus and Methods to Install, Support And/or Monitor Performance of Intraosseous Devices | United States - (US) | 12/947,312 | 16-11-10 | 9,439,667 | 13-09-16 |
| 099599.021589 | GRANTED - (G) | Apparatus to Inject Fluids into Bone Marrow and Other Target Sites | United States - (US) | 15/064,272 | 08-03-16 | 10,166,332 | 01-01-19 |
| 099599.021590 | GRANTED - (G) | Apparatus and Methods to Install, Support and/or Monitor Performance of Intraosseous Devices | United States - (US) | 15/262,030 | 12-09-16 | 10,016,217 | 10-07-18 |
| 099599.021591 | FILED - (F) | Apparatus and Methods to Install, Support and/or Monitor Performance of Intraosseous Devices | United States - (US) | 16/030,333 | 09-07-18 | | |
| 099599.021592 | FILED - (F) | Apparatus to Inject Fluids into Bone Marrow and Other Target Sites | United States - (US) | 16/236,031 | 28-12-18 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|----------------------------------|--------------------|-------------|---------------|------------|
| 099599.021600 | GRANTED - (G) | VASCULAR ACCESS KITS AND METHODS | United States - (US) | 11/380,340 | 26-04-06 | 9,072,543 | 07-07-15 |
| 099599.021601 | GRANTED - (G) | Vascular Access Kits and Methods | United States - (US) | 14/791,654 | 06-07-15 | 9,872,703 | 23-01-18 |
| 099599.021602 | FILED - (F) | Vascular Access Kits and Methods | United States - (US) | 15/854,406 | 26-12-17 | | |
| 099599.021698 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Spain - (ES) | 09155111.9 | 30-05-03 | 2064997 | 27-04-11 |
| 099599.021699 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | France - (FR) | 09155111.9 | 30-05-03 | 2064997 | 27-04-11 |
| 099599.021700 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Great Britain - (GB) | 09155111.9 | 30-05-03 | 2064997 | 27-04-11 |
| 099599.021701 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Italy - (IT) | 09155111.9 | 30-05-03 | 2064997 | 27-04-11 |
| 099599.021702 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Netherland - (NL) | 09155111.9 | 30-05-03 | 2064997 | 27-04-11 |
| 099599.021703 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS BONE MARROW | Sweden - (SE) | 09155111.9 | 30-05-03 | 2064997 | 27-04-11 |
| 099599.021720 | INACTIVE - (I) | APPARATUS AND METHOD FOR ACCESSING THE BONE MARROW OF THE STERNUM | United States - (US) | 60/519,462 | 12-11-03 | | |
| 099599.021721 | GRANTED - (G) | APPARATUS AND METHOD FOR ACCESSING THE BONE MARROW OF THE STERNUM | United States - (US) | 10/987,051 | 12-11-04 | 8,142,365 | 27-03-12 |
| 099599.021722 | GRANTED - (G) | Apparatus and Method for Accessing the Bone Marrow | United States - (US) | 11/023,173 | 27-12-04 | 9,314,228 | 19-04-16 |
| 099599.021723 | INACTIVE - (I) | REUSABLE INTRAOSSEOUS DEVICE AND METHOD FOR ACCESSING BONE MARROW IN THE STERNUM | Patent Cooperation Treaty - (WO) | PCT/US2004/037753 | 12-11-04 | | |
| 099599.021724 | INACTIVE - (I) | APPARATUS AND METHOD FOR ACCESSING THE BONE MARROW OF THE STERNUM | Taiwan - (TW) | 093134480 | 11-11-04 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|---|----------------------------------|--------------------|-------------|---------------|------------|
| 099599.021725 | INACTIVE - (I) | INTRAOSSIOUS DEVICE AND METHODS FOR ACCESSING BONE MARROW IN THE STERNUM AND OTHER TARGET AREAS | Taiwan - (TW) | 097100578 | 07-01-08 | | |
| 099599.021726 | FILED - (F) | Apparatus for Accessing Bone Marrow Including Depth Control Mechanism | United States - (US) | 15/084,541 | 30-03-16 | | |
| 099599.021740 | GRANTED - (G) | INTRAOSSIOUS DEVICE AND METHODS FOR ACCESSING BONE MARROW IN THE STERNUM AND OTHER TARGET AREAS | United States - (US) | 11/620,927 | 08-01-07 | 8,998,848 | 07-04-15 |
| 099599.021741 | GRANTED - (G) | INTRAOSSIOUS DEVICE AND METHODS FOR ACCESSING BONE MARROW IN THE STERNUM AND OTHER TARGET AREAS | United States - (US) | 12/554,664 | 04-09-09 | 8,419,683 | 16-04-13 |
| 099599.021742 | INACTIVE - (I) | INTRAOSSIOUS DEVICE AND METHODS FOR ACCESSING BONE MARROW IN THE STERNUM AND OTHER TARGET AREAS | United States - (US) | 14/670,565 | 27-03-15 | | |
| 099599.021760 | INACTIVE - (I) | VASCULAR ACCESS KIT | United States - (US) | 60/675,246 | 27-04-05 | | |
| 099599.021780 | INACTIVE - (I) | APPARATUS AND METHODS TO HARVEST BONE AND BONE MARROW | Patent Cooperation Treaty - (WO) | PCT/US2007/072202 | 27-06-07 | | |
| 099599.021781 | GRANTED - (G) | APPARATUS AND METHODS TO HARVEST BONE AND BONE MARROW | China P. R. - (CN) | 200780000590.6 | 27-06-07 | 101325914 | 15-09-10 |
| 099599.021782 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW FOR ONCOLOGY AND STEM CELL APPLICATIONS | United States - (US) | 10/448,650 | 30-05-03 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|----------------------------------|--------------------|-------------|---------------|------------|
| 099599.021783 | INACTIVE - (I) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW FOR ONCOLOGY AND STEM CELL APPLICATIONS | United States - (US) | 11/389,732 | 27-03-06 | | |
| 099599.021784 | GRANTED - (G) | APPARATUS AND METHODS TO HARVEST BONE AND BONE MARROW | United States - (US) | 11/427,501 | 29-06-06 | 7,951,089 | 31-05-11 |
| 099599.021785 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS THE BONE MARROW | United States - (US) | 12/427,310 | 21-04-09 | 8,690,791 | 08-04-14 |
| 099599.021786 | GRANTED - (G) | APPARATUS AND METHODS TO HARVEST BONE AND BONE MARROW | United States - (US) | 12/259,745 | 28-10-08 | 9,078,637 | 14-07-15 |
| 099599.021787 | GRANTED - (G) | Apparatus and Methods to Harvest Bone and Bone Marrow | United States - (US) | 14/798,182 | 13-07-15 | 10,413,282 | 17-09-19 |
| 099599.021794 | GRANTED - (G) | Bone Marrow Aspiration Devices and Related Methods | United States - (US) | 11/853,691 | 11-09-07 | 9,545,243 | 17-01-17 |
| 099599.021796 | FILED - (F) | Apparatus and Methods to Harvest Bone and Bone Marrow | United States - (US) | 16/571,937 | 16-09-19 | | |
| 099599.021800 | INACTIVE - (I) | MEANS TO ACHIEVE AND MONITOR INTRAOSSEOUS INFUSION | Patent Cooperation Treaty - (WO) | PCT/US2007/072217 | 27-06-07 | | |
| 099599.021801 | INACTIVE - (I) | APPARATUS AND METHODS TO INSTALL, SUPPORT AND/OR MONITOR PERFORMANCE OF INTRAOSSEOUS DEVICES | China P.R. - (CN) | 200780000588.9 | 27-06-07 | | |
| 099599.021820 | INACTIVE - (I) | APPARATUS AND METHOD FOR INJECTIONS INTO MARROW | Patent Cooperation Treaty - (WO) | PCT/US2006/025201 | 27-06-06 | | |
| 099599.021821 | GRANTED - (G) | APPARATUS AND METHOD TO INJECT FLUIDS INTO BONE MARROW AND OTHER TARGET SITES | Canada - (CA) | 2612483 | 27-06-06 | 2612483 | 18-12-18 |

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|---------------|----------------|---|-----------------------------------|--------------------|-------------|----------------|------------|
| 099599.021822 | GRANTED - (G) | APPARATUS AND METHOD TO INJECT FLUIDS INTO BONE MARROW AND OTHER TARGET SITES | China P.R. - (CN) | 200680021872.X | 27-06-06 | 101198367 | 01-12-10 |
| 099599.021823 | INACTIVE - (I) | APPARATUS AND METHOD TO INJECT FLUIDS INTO BONE MARROW AND OTHER TARGET SITES | China P.R. - (CN) | 201010144512.7 | 27-06-06 | | |
| 099599.021824 | INACTIVE - (I) | APPARATUS AND METHOD TO INJECT FLUIDS INTO BONE MARROW AND OTHER TARGET SITES | China P.R. - (CN) | 201010144517.X | 27-06-06 | | |
| 099599.021825 | INACTIVE - (I) | APPARATUS AND METHOD TO INJECT FLUIDS INTO BONE MARROW AND OTHER TARGET SITES | China P.R. - (CN) | 201010144520.1 | 27-06-06 | | |
| 099599.021826 | GRANTED - (G) | APPARATUS TO INJECT FLUIDS INTO BONE MARROW | European Patent Convention - (EP) | 06774203.1 | 27-06-06 | 1919538 | 14-06-17 |
| 099599.021827 | GRANTED - (G) | APPARATUS TO INJECT FLUIDS INTO BONE MARROW | Great Britain - (GB) | 06774203.1 | 27-06-06 | 602006052792.6 | 14-06-17 |
| 099599.021828 | GRANTED - (G) | APPARATUS TO INJECT FLUIDS INTO BONE MARROW | France - (FR) | 06774203.1 | 27-06-06 | 1919538 | 14-06-17 |
| 099599.021829 | GRANTED - (G) | APPARATUS TO INJECT FLUIDS INTO BONE MARROW | Germany - (DE) | 06774203.1 | 27-06-06 | 602006052792.6 | 14-06-17 |
| 099599.021830 | GRANTED - (G) | APPARATUS TO INJECT FLUIDS INTO BONE MARROW | Italy - (IT) | 06774203.1 | 27-06-06 | 1919538 | 14-06-17 |
| 099599.021831 | FILED - (F) | Injecting Fluids into Bone - D1 | European Patent Convention - (EP) | 17169553.9 | 27-06-06 | | |
| 099599.021832 | FILED - (F) | Apparatus and Method to Inject Fluids Into Bone Marrow and Other Target Sites | Canada - (CA) | 3023005 | 27-06-06 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|----------------------------------|--------------------|-------------|---------------|------------|
| 099599.021840 | INACTIVE - (I) | INTRASOSSEOUS DIVICE AND METHODS FOR ACCESSING BONE MARROW IN THE STERNUM AND OTHER TARGET AREAS | Patent Cooperation Treaty - (WO) | PCT/US2008/050346 | 07-01-08 | | |
| 099599.021841 | GRANTED - (G) | INTRASOSSEOUS DIVICE AND METHODS FOR ACCESSING BONE MARROW IN THE STERNUM AND OTHER TARGET AREAS | China P.R. - (CN) | 200880000022.0 | 07-01-08 | 101541370 | 20-11-13 |
| 099599.021860 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | United States - (US) | 60/539,171 | 26-01-04 | | |
| 099599.021861 | INACTIVE - (I) | IMPACT-DRIVEN INTRAOSSEOUS NEEDLE | United States - (US) | 60/547,868 | 26-02-04 | | |
| 099599.021862 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | United States - (US) | 10/449,476 | 30-05-03 | 7,699,850 | 20-04-10 |
| 099599.021863 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | United States - (US) | 11/253,467 | 19-10-05 | 8,876,826 | 04-11-14 |
| 099599.021864 | GRANTED - (G) | Apparatus and Method to Access Bone Marrow | United States - (US) | 14/532,635 | 04-11-14 | 10,456,149 | 29-10-19 |
| 099599.021865 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | United States - (US) | 11/253,959 | 19-10-05 | 8,506,568 | 13-08-13 |
| 099599.021866 | GRANTED - (G) | APPARATUS AND METHOD TO ACCESS BONE MARROW | United States - (US) | 13/966,104 | 13-08-13 | 9,314,270 | 19-04-16 |
| 099599.021867 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Patent Cooperation Treaty - (WO) | PCT/US2005/002484 | 25-01-05 | | |
| 099599.021868 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | Canada - (CA) | 2551724 | 25-01-05 | 2551724 | 17-06-14 |
| 099599.021869 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Canada - (CA) | 2850801 | 25-01-05 | | |
| 099599.021870 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | China P.R. - (CN) | 200580003261.8 | 25-01-05 | 1913833 | 09-06-10 |
| 099599.021871 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | China P.R. - (CN) | 200910006631.3 | 25-01-05 | 101474088 | 14-12-11 |
| 099599.021872 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | China P.R. - (CN) | 200910138130.0 | 25-01-05 | 101536926 | 18-07-12 |
| 099599.021873 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | China P.R. - (CN) | 201210169546.0 | 25-01-05 | 102670265 | 17-08-16 |
| 099599.021874 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Hong Kong - (HK) | 13103415.6 | 25-01-05 | | |

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|---------------|----------------|--------------------------------------|-----------------------------------|--------------------|-------------|---------------|------------|
| 099599.021875 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | European Patent Convention - (EP) | 05712091.7 | 25-01-05 | 1708621 | 18-03-09 |
| 099599.021876 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | Germany - (DE) | 05712091.7 | 25-01-05 | 1708621 | 18-03-09 |
| 099599.021877 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | France - (FR) | 05712091.7 | 25-01-05 | 1708621 | 18-03-09 |
| 099599.021878 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | Great Britain - (GB) | 05712091.7 | 25-01-05 | 1708621 | 18-03-09 |
| 099599.021879 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Ireland - (IE) | 05712091.7 | 25-01-05 | 1708621 | 18-03-09 |
| 099599.021880 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | Italy - (IT) | 05712091.7 | 25-01-05 | 1708621 | 18-03-09 |
| 099599.021881 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | European Patent Convention - (EP) | 08158699.2 | 25-01-05 | 1967142 | 25-08-10 |
| 099599.021882 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | Germany - (DE) | 08158699.2 | 25-01-05 | 1967142 | 25-08-10 |
| 099599.021883 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Spain - (ES) | 08158699.2 | 25-01-05 | 1967142 | 18-03-09 |
| 099599.021884 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | France - (FR) | 08158699.2 | 25-01-05 | 1967142 | 25-08-10 |
| 099599.021885 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | Great Britain - (GB) | 08158699.2 | 25-01-05 | 1967142 | 25-08-10 |
| 099599.021886 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | Italy - (IT) | 08158699.2 | 25-01-05 | 1967142 | 25-08-10 |
| 099599.021887 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Netherlands - (NL) | 08158699.2 | 25-01-05 | 1967142 | 25-08-10 |
| 099599.021888 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE (Div II) | European Patent Convention - (EP) | 09150973.7 | 25-01-05 | 2098181 | 19-10-16 |
| 099599.021889 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | European Patent Convention - (EP) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021890 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Austria - (AT) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021891 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Belgium - (BE) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021892 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Switzerland - (CH) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021893 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | Germany - (DE) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021894 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Denmark - (DK) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021895 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Spain - (ES) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021896 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Finland - (FI) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021897 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | France - (FR) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021898 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | Great Britain - (GB) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021899 | INACTIVE - (I) | MANUAL INTEROSSEIOUS DEVICE | Ireland - (IE) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021900 | GRANTED - (G) | MANUAL INTEROSSEIOUS DEVICE | Italy - (IT) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |

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| 099599.021901 | INACTIVE - (I) | MANUAL INTEROSSEOUS DEVICE | Netherland - (NL) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021902 | INACTIVE - (I) | MANUAL INTEROSSEOUS DEVICE | Poland - (PL) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021903 | INACTIVE - (I) | MANUAL INTEROSSEOUS DEVICE | Sweden - (SE) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021904 | INACTIVE - (I) | MANUAL INTEROSSEOUS DEVICE | Turkey - (TR) | 10153350.3 | 25-01-05 | 2177171 | 22-08-12 |
| 099599.021905 | INACTIVE - (I) | APPARATUS FOR PENETRATING A BONE AND PROVIDING ACCESS TO ASSOCIATED BONE MARROW | Taiwan - (TW) | 94102179 | 25-01-05 | 1341738 | 11-05-11 |
| 099599.021906 | GRANTED - (G) | Manual Interosseous Device | Great Britain - (GB) | 09150973.7 | 25-01-05 | 2098181 | 19-10-16 |
| 099599.021907 | GRANTED - (G) | Manual Interosseous Device | Germany - (DE) | 09150973.7 | 25-01-05 | 602005050501.6 | 19-10-16 |
| 099599.021908 | GRANTED - (G) | Manual Interosseous Device | France - (FR) | 09150973.7 | 25-01-05 | 2098181 | 19-10-16 |
| 099599.021909 | GRANTED - (G) | Manual Interosseous Device | Italy - (IT) | 09150973.7 | 25-01-05 | 2098181 | 19-10-16 |
| 099599.021910 | INACTIVE - (I) | Manual Interosseous Device | Spain - (ES) | 09150973.7 | 25-01-05 | 2098181 | 19-10-16 |
| 099599.021911 | INACTIVE - (I) | Manual Interosseous Device | Netherland - (NL) | 09150973.7 | 25-01-05 | 2098181 | 19-10-16 |
| 099599.021920 | GRANTED - (G) | MANUAL INTRAOSSEOUS DEVICE | United States - (US) | 11/042,912 | 25-01-05 | 8,641,715 | 04-02-14 |
| 099599.021921 | GRANTED - (G) | IMPACT-DRIVEN INTRAOSSEOUS NEEDLE | United States - (US) | 11/064,156 | 23-02-05 | 7,815,642 | 19-10-10 |
| 099599.021922 | GRANTED - (G) | IMPACT-DRIVEN INTRAOSSEOUS NEEDLE | United States - (US) | 12/905,659 | 15-10-10 | 8,870,872 | 28-10-14 |
| 099599.021923 | INACTIVE - (I) | IMPACT-DRIVEN INTRAOSSEOUS NEEDLE | United States - (US) | 14/526,234 | 28-10-14 | | |
| 099599.021924 | GRANTED - (G) | MANUAL INTRAOSSEOUS DEVICE | United States - (US) | 12/787,228 | 25-05-10 | 9,433,400 | 06-09-16 |

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|---------------|----------------|---|-----------------------------------|--------------------|-------------|------------------|------------|
| 099599.021925 | GRANTED - (G) | Penetrator Assembly For Accessing Bone Marrow | United States - (US) | 15/255,938 | 02-09-16 | 10,492,830 | 03-12-19 |
| 099599.021926 | DOCKETED - (D) | Penetrator Assembly For Accessing Bone Marrow | United States - (US) | | | | |
| 099599.021940 | GRANTED - (G) | POWERED DRIVERS, INTRAOSSEOUS DEVICES AND METHODS TO ACCESS BONE MARROW | United States - (US) | 12/061,944 | 03-04-08 | 9,451,968 | 27-09-16 |
| 099599.021942 | GRANTED - (G) | POWERED DRIVER | United States - (US) | 12/025,580 | 04-02-08 | 9,504,477 | 29-11-16 |
| 099599.021943 | GRANTED - (G) | Powered Driver | United States - (US) | 13/609,001 | 10-09-12 | 10,052,111 | 21-08-18 |
| 099599.021944 | FILED - (F) | Powered Drivers, Intraosseous Devices and Methods to Access Bone Marrow | United States - (US) | 15/272,647 | 22-09-16 | | |
| 099599.021945 | FILED - (F) | Powered Driver | United States - (US) | 16/105,541 | 20-08-18 | | |
| 099599.021947 | INACTIVE - (I) | Powered Driver | United States - (US) | 16/105,818 | 20-08-18 | | |
| 099599.021960 | INACTIVE - (I) | POWERED DRIVER | United States - (US) | 60/910,147 | 04-04-07 | | |
| 099599.021961 | INACTIVE - (I) | POWERED DRIVER | Patent Cooperation Treaty - (WO) | PCT/US2008/052943 | 04-02-08 | | |
| 099599.021962 | GRANTED - (G) | POWERED DRIVER | China P. R. - (CN) | 200880000182.5 | 04-02-08 | 101541253 | 23-04-14 |
| 099599.021963 | INACTIVE - (I) | POWERED DRIVER | China P. R. - (CN) | 201410112780.9 | 04-04-08 | Z1201410112780.9 | 18-05-16 |
| 099599.021964 | INACTIVE - (I) | POWERED DRIVER | Hong Kong - (HK) | 15101367.6 | 04-04-07 | | |
| 099599.021965 | GRANTED - (G) | POWERED DRIVER | European Patent Convention - (EP) | 08799753.2 | 04-02-08 | 2131751 | 25-05-16 |
| 099599.021966 | GRANTED - (G) | Powered Driver | Germany - (DE) | 08799753.2 | 04-02-08 | 602008044438.4 | 25-05-16 |
| 099599.021967 | INACTIVE - (I) | Powered Driver | Spain - (ES) | 08799753.2 | 04-02-08 | 2131751 | 25-05-16 |
| 099599.021968 | GRANTED - (G) | Powered Driver | France - (FR) | 08799753.2 | 04-02-08 | 2131751 | 25-05-16 |
| 099599.021969 | GRANTED - (G) | Powered Driver | Great Britain - (GB) | 08799753.2 | 04-02-08 | 2131751 | 25-05-16 |
| 099599.021970 | GRANTED - (G) | Powered Driver | Italy - (IT) | 08799753.2 | 04-02-08 | 2131751 | 25-05-16 |
| 099599.021971 | INACTIVE - (I) | Powered Driver | Netherlands - (NL) | 08799753.2 | 04-02-08 | 2131751 | 25-05-16 |
| 099599.021972 | GRANTED - (G) | Powered Driver | Germany - (DE) | 08799753.2 | 04-02-08 | 2131751 | 25-05-16 |
| 099599.021980 | INACTIVE - (I) | SMART PARAMEDIC | United States - (US) | 60/938,501 | 17-05-07 | | |

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| 099599.021981 | GRANTED - (G) | METHOD AND APPARATUS TO MONITOR PATIENTS AND TREAT WITH INTRAOSSEOUS FLUIDS | United States - (US) | 12/120,992 | 15-05-08 | 7,899,528 | 01-03-11 |
| 099599.021982 | INACTIVE - (I) | METHOD AND APPARATUS TO MONITOR PATIENTS AND TREAT WITH INTRAOSSEOUS FLUIDS | United States - (US) | 13/038,088 | 01-03-11 | 8,812,101 | 19-08-14 |
| 099599.021983 | INACTIVE - (I) | METHOD AND APPARATUS TO MONITOR PATIENTS AND TREAT WITH INTRAOSSEOUS FLUIDS | United States - (US) | 14/463,333 | 19-08-14 | | |
| 099599.021984 | INACTIVE - (I) | METHOD AND APPARATUS TO MONITOR PATIENTS AND TREAT WITH INTRAOSSEOUS FLUIDS | Patent Cooperation Treaty - (WO) | PCT/US2008/063688 | 15-05-08 | | |
| 099599.021985 | INACTIVE - (I) | METHOD AND APPARATUS TO MONITOR PATIENTS AND TREAT WITH INTRAOSSEOUS FLUIDS | China P.R. - (CN) | 200880021465.8 | 15-05-08 | | |
| 099599.021986 | GRANTED - (G) | METHOD AND APPARATUS TO MONITOR PATIENTS AND TREAT WITH INTRAOSSEOUS FLUIDS | European Patent Convention - (EP) | 08769475.8 | 15-05-08 | 2144662 | 14-10-15 |
| 099599.021987 | INACTIVE - (I) | Method and Apparatus to Monitor Patients and Treat with Intraosseous Fluids | European Patent Convention - (EP) | 15189421.9 | 15-05-08 | | |
| 099599.021988 | GRANTED - (G) | Method and Apparatus to Monitor Patients and Treat with Intraosseous Fluids | France - (FR) | 08769475.8 | 15-05-08 | 2144662 | 14-10-15 |
| 099599.021989 | GRANTED - (G) | Method and Apparatus to Monitor Patients and Treat with Intraosseous Fluids | Great Britain - (GB) | 08769475.8 | 15-05-08 | 2144662 | 14-10-15 |
| 099599.021990 | GRANTED - (G) | Method and Apparatus to Monitor Patients and Treat with Intraosseous Fluids | Italy - (IT) | 08769475.8 | 15-05-08 | 2144662 | 14-10-15 |

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| 099599.021991 | GRANTED - (G) | Method and Apparatus to Monitor Patents and Treat with Intraosseous Fluids | Germany - (DE) | 08769475.8 | 15-05-08 | 2144662 | 14-10-15 |
| 099599.022000 | INACTIVE - (I) | HIGH PRESSURE INTRAOSSEOUS BAG AND METHOD | United States - (US) | 12/596,791 | 19-04-10 | | |
| 099599.022001 | INACTIVE - (I) | HIGH PRESSURE INTRAOSSEOUS BAG AND METHOD | United States - (US) | 60/913,680 | 24-04-07 | | |
| 099599.022002 | INACTIVE - (I) | HIGH PRESSURE INTRAOSSEOUS BAG AND METHOD | Patent Cooperation Treaty - (WO) | PCT/US2008/061258 | 23-04-08 | | |
| 099599.022020 | INACTIVE - (I) | POWERED DRIVER INTRAOSSEOUS AND METHODS TO ACCESS BONE MARROW | United States - (US) | 60/910,122 | 04-04-07 | | |
| 099599.022021 | INACTIVE - (I) | POWERED DRIVER INTRAOSSEOUS AND METHODS TO ACCESS BONE MARROW | Patent Cooperation Treaty - (WO) | PCT/US2008/059206 | 03-04-08 | | |
| 099599.022040 | INACTIVE - (I) | APPARATUS AND METHODS TO COMMUNICATE FLUIDS AND/OR SUPPORT INTRAOSSEOUS DEVICES | United States - (US) | 60/863,521 | 30-10-06 | | |
| 099599.022041 | GRANTED - (G) | APPARATUS AND METHODS TO COMMUNICATE FLUIDS AND/OR SUPPORT INTRAOSSEOUS DEVICES | United States - (US) | 11/619,390 | 03-01-07 | 8,974,410 | 10-03-15 |
| 099599.022042 | GRANTED - (G) | Apparatus and Methods to Communicate Fluids and/or Support Intraosseous Devices | United States - (US) | 14/643,839 | 10-03-15 | 10,258,783 | 16-04-19 |
| 099599.022043 | INACTIVE - (I) | INTRAOSSEOUS DEIVE SUPPORTS AND FLUID COMMUNICATION MEANS | Patent Cooperation Treaty - (WO) | PCT/US2007/072209 | 27-06-07 | | |
| 099599.022044 | GRANTED - (G) | Intraosseous Device Supports and Fluid Communication Means | China P.R. - (CN) | 200780000585.5 | 27-06-07 | 101360526 | 17-08-16 |

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|---------------|----------------|--|----------------------------------|--------------------|-------------|---------------|------------|
| 099599.022045 | INACTIVE - (I) | APPARATUS AND METHODS TO COMMUNICATE FLUIDS AND/OR SUPPORT INTRAOSSSEOUS DEVICES | Taiwan - (TW) | 096140082 | 27-06-07 | 1478743 | 01-04-15 |
| 099599.022046 | FILED - (F) | Apparatus and Methods to Communicate Fluids and/or Support Intraosseous Devices | United States - (US) | 16/372,056 | 01-04-19 | | |
| 099599.022140 | INACTIVE - (I) | TISSUE PENETRATING DEVICE AND METHODS FOR USING SAME | United States - (US) | 09/033,105 | 02-03-98 | 6,183,442 | 06-02-01 |
| 099599.022141 | INACTIVE - (I) | TISSUE PENETRATING DEVICE AND METHODS FOR USING SAME | United States - (US) | 09/757,122 | 09-01-01 | 6,527,778 | 04-03-03 |
| 099599.022142 | GRANTED - (G) | TISSUE PENETRATING DEVICE AND METHODS FOR USING SAME | United States - (US) | 10/266,452 | 08-10-02 | 7,226,450 | 05-06-07 |
| 099599.022160 | GRANTED - (G) | INTRAOSSSEOUS-NEEDLE STABILIZER AND METHODS | United States - (US) | 13/576,943 | 24-12-12 | 9,839,740 | 12-12-17 |
| 099599.022161 | INACTIVE - (I) | INTRAOSSSEOUS-NEEDLE STABILIZER AND METHODS | Patent Cooperation Treaty - (WO) | PCT/US2011/023496 | 02-02-11 | | |
| 099599.022162 | FILED - (F) | Intraosseous-Needle Stabilizer And Methods | United States - (US) | 15/824,042 | 28-11-17 | | |
| 099599.022180 | INACTIVE - (I) | STERNAL LOCATORS AND ASSOCIATED SYSTEMS AND METHODS | United States - (US) | 61/506,316 | 11-07-11 | | |
| 099599.022181 | GRANTED - (G) | Sternal Locators and Associated Systems and Methods | United States - (US) | 13/546,894 | 11-07-12 | 9,730,729 | 15-08-17 |
| 099599.022182 | INACTIVE - (I) | STERNAL LOCATORS AND ASSOCIATED SYSTEMS AND METHODS | Patent Cooperation Treaty - (WO) | PCT/US2012/046294 | 11-07-12 | | |
| 099599.022183 | INACTIVE - (I) | STERNAL LOCATORS AND ASSOCIATED SYSTEMS AND METHODS | Brazil - (BR) | BR112014000796-9 | 11-07-12 | | |
| 099599.022184 | GRANTED - (G) | STERNAL LOCATORS AND ASSOCIATED SYSTEMS AND METHODS | China P.R. - (CN) | 201280043008.5 | 11-07-12 | 104080412 | 14-11-17 |

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|---------------|----------------|---|-----------------------------------|--------------------|-------------|----------------|------------|
| 099599.022185 | INACTIVE - (I) | STERNAL LOCATORS AND ASSOCIATED SYSTEMS AND METHODS | Hong Kong - (HK) | 15103311.9 | 11-07-12 | | |
| 099599.022186 | GRANTED - (G) | STERNAL LOCATORS AND ASSOCIATED SYSTEMS AND METHODS | European Patent Convention - (EP) | 12811090.5 | 11-07-12 | 2731521 | 11-07-18 |
| 099599.022187 | INACTIVE - (I) | STERNAL LOCATORS AND ASSOCIATED SYSTEMS AND METHODS | Israel - (IL) | 230410 | 11-07-12 | | |
| 099599.022188 | GRANTED - (G) | STERNAL LOCATORS AND ASSOCIATED SYSTEMS AND METHODS | Japan - (JP) | 2014-520284 | 11-07-12 | 6126091 | 14-04-17 |
| 099599.022189 | INACTIVE - (I) | STERNAL LOCATORS AND ASSOCIATED SYSTEMS AND METHODS | Russian Federation - (RU) | 2014104585 | 11-07-12 | | |
| 099599.022190 | GRANTED - (G) | Sternal Locators and Associated Systems and Methods | Japan - (JP) | 2017-075764 | 11-07-12 | 6417441 | 12-10-18 |
| 099599.022191 | FILED - (F) | Sternal Locators and Associated Systems and Methods | United States - (US) | 15/643,707 | 07-07-17 | | |
| 099599.022192 | FILED - (F) | Sternal Locators and Associated Systems and Methods | China P.R. - (CN) | 201710931617.9 | 11-07-12 | | |
| 099599.022193 | GRANTED - (G) | Sternal Locators And Associated Systems And Methods | Germany - (DE) | 12811090.5 | 11-07-12 | 602012048435.7 | 11-07-18 |
| 099599.022194 | GRANTED - (G) | Sternal Locators And Associated Systems And Methods | Italy - (IT) | 502018000023316 | 11-07-12 | 2731521 | 11-07-18 |
| 099599.022195 | GRANTED - (G) | Sternal Locators And Associated Systems And Methods | France - (FR) | 12811090.5 | 11-07-12 | 2731521 | 11-07-18 |
| 099599.022196 | GRANTED - (G) | Sternal Locators And Associated Systems And Methods | Great Britain - (GB) | 12811090.5 | 11-07-12 | 2731521 | 11-07-18 |
| 099599.022197 | FILED - (F) | Sternal Locators and Associated Systems and Methods | Japan - (JP) | 2018-189623 | 11-07-12 | | |

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|---------------|----------------|---|-----------------------------------|--------------------|-------------|----------------|------------|
| 099599.022240 | GRANTED - (G) | Intraosseous Device Couplers, Drivers, Kits, and Methods | United States - (US) | 13/835,383 | 15-03-13 | 9,883,853 | 06-02-18 |
| 099599.022241 | INACTIVE - (I) | INTRAOSSSEOUS DEVICE COUPLERS, DRIVERS, KITS, AND METHODS | Patent Cooperation Treaty - (WO) | PCT/US2014/028915 | 14-03-14 | | |
| 099599.022242 | GRANTED - (G) | INTRAOSSSEOUS DEVICE COUPLERS, DRIVERS,KITS, AND METHODS | European Patent Convention - (EP) | 14762340.9 | 14-03-14 | 2967650 | 07-08-19 |
| 099599.022243 | INACTIVE - (I) | Intraosseous Device Couplers, Drivers, Kits, and Methods | Canada - (CA) | 2907217 | 14-03-14 | | |
| 099599.022244 | INACTIVE - (I) | Intraosseous Device Couplers, Drivers, Kits, and Methods | Japan - (JP) | 2016-502937 | 14-03-14 | | |
| 099599.022245 | FILED - (F) | Intraosseous Device Couplers, Drivers, Kits, and Methods | United States - (US) | 15/858,786 | 29-12-17 | | |
| 099599.022246 | GRANTED - (G) | Intraosseous Device Couplers, Drivers, Kits and Methods | Germany - (DE) | 14762340.9 | 14-03-14 | 602014051336.0 | 07-08-19 |
| 099599.022247 | GRANTED - (G) | Intraosseous Device Couplers, Drivers, Kits and Methods | France - (FR) | 14762340.9 | 14-03-14 | 2967650 | 07-08-19 |
| 099599.022248 | GRANTED - (G) | Intraosseous Device Couplers, Drivers, Kits and Methods | Great Britain - (GB) | 14762340.9 | 14-03-14 | 2967650 | 07-08-19 |
| 099599.022249 | FILED - (F) | Intraosseous Device Couplers, Drivers, Kits, and Methods | European Patent Convention - (EP) | 19189628.1 | 14-03-14 | | |
| 099599.022260 | GRANTED - (G) | DRIVERS AND DRIVE SYSTEM | United States - (US) | 13/835,624 | 15-03-13 | 9,615,816 | 11-04-17 |
| 099599.022261 | INACTIVE - (I) | Drivers and Drive System | Patent Cooperation Treaty - (WO) | PCT/US2014/028594 | 14-03-14 | | |
| 099599.022262 | FILED - (F) | DRIVERS AND DRIVE SYSTEMS | European Patent Convention - (EP) | 14765433.9 | 14-03-14 | | |
| 099599.022263 | GRANTED - (G) | POWERED DRIVER FOR INTRAOSSSEOUS DEVICES | Canada - (CA) | 2907193 | 14-03-14 | 2907193 | 01-10-19 |
| 099599.022264 | GRANTED - (G) | Drivers and Drive Systems | Japan - (JP) | 2016-502841 | 14-03-14 | 6500007 | 22-03-19 |
| 099599.022265 | FILED - (F) | Drivers and Drive Systems | United States - (US) | 15/466,309 | 22-03-17 | | |
| 099599.022266 | FILED - (F) | Drivers and Drive Systems | Japan - (JP) | 2018-202396 | 14-03-14 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|---|-----------------------------------|--------------------|-------------|---------------|------------|
| 099599.022267 | FILED - (F) | Powered Driver for Intraosseous Devices | Canada - (CA) | 3052556 | 14-03-14 | | |
| 099599.022280 | INACTIVE - (I) | CONTAINMENT ASSEMBLIES, METHODS, AND KITS | United States - (US) | 13/836,019 | 15-03-13 | | |
| 099599.022281 | INACTIVE - (I) | Containment Assemblies. Methods and Kits | Patent Cooperation Treaty - (WO) | PCT/US2014/029299 | 14-03-14 | | |
| 099599.022282 | FILED - (F) | CONTAINMENT ASSEMBLIES, METHODS AND KITS | European Patent Convention - (EP) | 14763134.5 | 14-03-14 | | |
| 099599.022283 | INACTIVE - (I) | Containment Assemblies, Methods, and Kits | Canada - (CA) | 2907205 | 14-03-14 | | |
| 099599.022284 | INACTIVE - (I) | Containment Assemblies. Methods and Kits | Japan - (JP) | 2016-503054 | 14-03-14 | | |
| 099599.022300 | GRANTED - (G) | DRIVER ASSEMBLIES, DRIVERS, INTRAOSSEOUS DEVICES, AND METHODS FOR DETERMINING VOLTAGES AND/OR IMPEDANCES IN BIOLOGICAL MATERIAL | United States - (US) | 13/836,548 | 15-03-13 | 10,064,630 | 04-09-18 |
| 099599.022301 | INACTIVE - (I) | Driver Assemblies, Drivers, Intraosseous Devices, and Methods for Determining Voltages and/or Impedances in Biological Material | Patent Cooperation Treaty - (WO) | PCT/US2014/029356 | 14-03-14 | | |
| 099599.022302 | FILED - (F) | Driver Assemblies, Drivers, Intraosseous Devices, and Methods for Determining Voltages and/or Impedances in Biological Material | European Patent Convention - (EP) | 14763900.9 | 14-03-14 | | |
| 099599.022303 | FILED - (F) | DRIVER ASSEMBLIES, DRIVERS, INTRAOSSEOUS DEVICES, AND METHODS FOR DETERMINING VOLTAGES AND/OR IMPEDANCES IN BIOLOGICAL MATERIAL | Canada - (CA) | 2907252 | 14-03-14 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|---|----------------------------------|--------------------|-------------|---------------|------------|
| 099599.022304 | FILED - (F) | Driver Assemblies, Drivers, Intraosseous Devices, and Methods for Determining Voltages and/or Impedances in Biological Material | Japan - (JP) | 2016-503071 | 14-03-14 | | |
| 099599.022305 | FILED - (F) | Driver Assemblies, Drivers, Intraosseous Devices, And Methods For Determining Voltages And/Or Impedances In Biological Material | United States - (US) | 16/110,623 | 23-08-18 | | |
| 099599.022306 | FILED - (F) | Driver Assemblies, Drivers, Intraosseous Devices, and Methods for Determining Voltages and/or Impedances in Biological Material | Japan - (JP) | 2018-219418 | 14-03-14 | | |
| 099599.022320 | INACTIVE - (I) | POWERED DRIVER ACTUATED BY FORCE ON DRIVESHAFT AND RELATED KITS, COMPONENTS, AND METHODS | United States - (US) | 61/940,741 | 17-02-14 | | |
| 099599.022321 | INACTIVE - (I) | POWERED DRIVER ACTUATED BY FORCE ON DRIVESHAFT AND RELATED KITS, COMPONENTS, AND METHODS | United States - (US) | 61/945,325 | 27-02-14 | | |
| 099599.022322 | GRANTED - (G) | Powered Driver Actuated By Force On Driveshaft And Related Kits, Components, And Methods | United States - (US) | 14/624,219 | 17-02-15 | 10,092,320 | 09-10-18 |
| 099599.022323 | INACTIVE - (I) | POWERED DRIVER ACTUATED BY FORCE ON DRIVESHAFT AND RELATED KITS, COMPONENTS, AND METHODS | Patent Cooperation Treaty - (WO) | PCT/US2015/016119 | 17-02-15 | | |
| 099599.022324 | GRANTED - (G) | Powered Driver Actuated By Force On Driveshaft And Related Kits, Components, And Methods | China P.R. - (CN) | 201580019471.X | 17-02-15 | 106470801 | 12-07-19 |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|-----------------------------------|--------------------|-------------|---------------|------------|
| 099599.022325 | FILED - (F) | Powered Driver Actuated By Force On Driveshaft And Related Kits, Components, And Methods | Japan - (JP) | 2016-552558 | 17-02-15 | | |
| 099599.022326 | GRANTED - (G) | Powered Driver Actuated By Force On Driveshaft And Related Kits, Components, And Methods | European Patent Convention - (EP) | 15748939.4 | 17-02-15 | 3107692 | 21-11-18 |
| 099599.022327 | FILED - (F) | Powered Driver Actuated by Force on Driveshaft and Related Kits, Components, and Methods | United States - (US) | 16/135,161 | 19-09-18 | | |
| 099599.022328 | GRANTED - (G) | Powered Driver Actuated By Force On Driveshaft And Related Kits, Components, And Methods | Germany - (DE) | 15748939.4 | 17-02-15 | 3107692 | 21-11-18 |
| 099599.022329 | GRANTED - (G) | Powered Driver Actuated By Force On Driveshaft And Related Kits, Components, And Methods | France - (FR) | 15748939.4 | 17-02-15 | 3107692 | 21-11-18 |
| 099599.022330 | GRANTED - (G) | Powered Driver Actuated By Force On Driveshaft And Related Kits, Components, And Methods | Italy - (IT) | 15748939.4 | 17-02-15 | 3107692 | 21-11-18 |
| 099599.022331 | GRANTED - (G) | Powered Driver Actuated By Force On Driveshaft And Related Kits, Components, And Methods | Great Britain - (GB) | 15748939.4 | 17-02-15 | 3107692 | 21-11-18 |
| 099599.022332 | FILED - (F) | Powered Driver Actuated By Force On Driveshaft And Related Kits, Components, And Methods | European Patent Convention - (EP) | 18196028.7 | 17-02-15 | | |
| 099599.022334 | FILED - (F) | Powered Driver Actuated By Force On Driveshaft And Related Kits, Components, And Methods | China P.R. - (CN) | 201910527327.7 | 17-02-15 | | |
| 099599.022360 | INACTIVE - (I) | PUMPING APPARATUSES AND METHODS FOR FLUID INFUSION | United States - (US) | 62/042,783 | 27-08-14 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|---|-----------------------------------|--------------------|-------------|---------------|------------|
| 099599.022361 | INACTIVE - (I) | PUMPING APPARATUSES AND METHODS FOR FLUID INFUSION | Patent Cooperation Treaty - (WO) | PCT/US2015/046655 | 25-08-15 | | |
| 099599.022363 | INACTIVE - (I) | Infusing Devices, Systems, And Methods | United States - (US) | 62/232,316 | 24-09-15 | | |
| 099599.022364 | FILED - (F) | Infusing Devices, Systems, And Methods | Patent Cooperation Treaty - (WO) | PCT/US2016/052585 | 20-09-16 | | |
| 099599.022365 | FILED - (F) | Pumping Apparatuses and Methods for Fluid Infusion | United States - (US) | 15/506,491 | 24-02-17 | | |
| 099599.022366 | FILED - (F) | Infusing Devices, Systems, And Methods | United States - (US) | 15/763,041 | 23-03-18 | | |
| 099599.022367 | FILED - (F) | Infusion Devices, Systems, and Methods | European Patent Convention - (EP) | 16849407.8 | 20-09-16 | | |
| 099599.022380 | FILED - (F) | Apparatus to Access Bone Marrow | United States - (US) | 15/064,175 | 08-03-16 | | |
| 099599.022440 | INACTIVE - (I) | Apparatus and Method to Provide Emergency Access to Bone Marrow | United States - (US) | 15/211,008 | 15-07-16 | | |
| 099599.022460 | FILED - (F) | Manual Intraosseous Device (Div 2.1) | European Patent Convention - (EP) | 16187739.4 | 25-01-05 | | |
| 099599.022480 | INACTIVE - (I) | Powered Intraosseous Driver with Protective Member, and Related Kits, Components, and Methods | United States - (US) | 62/556,953 | 11-09-17 | | |
| 099599.022482 | FILED - (F) | Powered Intraosseous Driver With Protective Member, And Related Kits, Components, And Methods | Patent Cooperation Treaty - (WO) | PCT/IB2018/056893 | 10-09-18 | | |
| 099599.022500 | INACTIVE - (I) | Intraosseous Access Device And Method To Access Bone Marrow | United States - (US) | 62/670,691 | 11-05-18 | | |

| Docket Number | Status | Title | Country | Application Number | Filing Date | Patent Number | Grant Date |
|---------------|----------------|--|----------------------------------|--------------------|-------------|---------------|------------|
| 099599.022501 | FILED - (F) | Intraosseous Access Device And Method To Access Bone Marrow | Patent Cooperation Treaty - (WO) | PCT/IB2019/053900 | 10-05-19 | | |
| 099599.022520 | INACTIVE - (I) | Pull Chord Manually Driven Intraosseous Injection Devices And Methods | United States - (US) | 62/772,241 | 28-11-18 | | |
| 099599.022521 | FILED - (F) | Pull Chord Manually Driven Intraosseous Injection Devices And Methods | Patent Cooperation Treaty - (WO) | PCT/IB2019/060250 | 28-11-18 | | |
| 099599.022540 | FILED - (F) | Hand Crank Manually Driven Intraosseous Injection Devices And Methods | United States - (US) | 62/788.226 | 04-01-19 | | |
| 099599.022560 | FILED - (F) | Apparatus and Method to Access Bone Marrow | United States - (US) | 16/664,282 | 25-10-19 | | |
| 044781.26240 | FILED - (F) | Bone-Penetrating Intraosseous Access Device | United States - (US) | 62/865177 | 22-06-19 | | |
| 044781.26260 | FILED - (F) | Intraosseous Access Device and Locator Assembly | United States - (US) | 62/865170 | 22-06-19 | | |
| 044781.26280 | FILED - (F) | Bone-Penetrating Manual Driver and Stabilizer Assembly for Intraosseous Access | United States - (US) | 62/865175 | 22-06-19 | | |

Schedule 3
Vascular Solutions Trademark Portfolio

| 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 | |

| Trademarks | | | | | | |
|------------------------|--|-----------------|------------------|------------|------------|--|
| Mark | Country | Application No. | Registration No. | Reg. Date | Status | |
| 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 | |

**Schedule 4
Vidacare Trademark Portfolio**

| Docket Number | MarkName | Country | Application No | Application Date | Registration No | Registration Date | Status |
|---------------|---|-------------------------------------|-----------------|------------------|-----------------|-------------------|------------------|
| 040792.020221 | EZ-IO | United States - (US) | 87211623 | 21-10-16 | 5269420 | 22-08-17 | REGISTERED - (G) |
| 040792.020222 | EZ-CONNECT | United States - (US) | 87211647 | 21-10-16 | 5213675 | 30-05-17 | REGISTERED - (G) |
| 099599.020001 | EZ-IO | Canada - (CA) | 1251577 | 22-03-05 | TMA669,464 | 09-08-06 | REGISTERED - (G) |
| 099599.020002 | EZ-IO | Canada - (CA) | 1453836 | 01-10-09 | TMA800,460 | 21-06-11 | REGISTERED - (G) |
| 099599.020003 | EZ-IO | China P. R. - (CN) | 5720561 | 13-11-06 | 5720561 | 07-08-09 | REGISTERED - (G) |
| 099599.020004 | EZ-IO | The European Union Trademark - (EM) | 003819083 | 05-05-04 | 003819083 | 08-09-05 | REGISTERED - (G) |
| 099599.020005 | EZ-IO | The European Union Trademark - (EM) | 008341992 | 04-06-09 | 008341992 | 22-02-10 | REGISTERED - (G) |
| 099599.020006 | EZ-IO | South Korea - (KR) | 40-2008-0036291 | 23-07-08 | 40-816591 | 10-03-10 | REGISTERED - (G) |
| 099599.020007 | EZ-IO | Russian Federation - (RU) | 2008723488 | 23-07-08 | 392974 | 23-07-08 | REGISTERED - (G) |
| 099599.020009 | DEFINING THE FIELD OF INTRAOSSEOUS MEDICINE | United States - (US) | 77901307 | 28-12-09 | 4016519 | 23-08-11 | INACTIVE - (I) |
| 099599.020013 | ONCONTROL | Canada - (CA) | 1458633 | 10-11-09 | TMA811,899 | 17-11-11 | REGISTERED - (G) |
| 099599.020014 | ONCONTROL | The European Union Trademark - (EM) | 008341976 | 04-06-09 | 008341976 | 17-12-09 | REGISTERED - (G) |
| 099599.020015 | ONCONTROL | South Korea - (KR) | 40-2008-36530 | 24-07-08 | 40-816592 | 10-03-10 | REGISTERED - (G) |
| 099599.020016 | ONCONTROL | Russian Federation - (RU) | 2008723487 | 23-07-08 | 397726 | 30-12-09 | REGISTERED - (G) |
| 099599.020017 | ONCONTROL | United States - (US) | 77166714 | 26-04-07 | 3822270 | 20-07-10 | REGISTERED - (G) |
| 099599.020021 | VIDACARE | Canada - (CA) | 1453834 | 01-10-09 | TMA800,457 | 21-06-11 | INACTIVE - (I) |

| Docket Number | MarkName | Country | Application No | Application Date | Registration No | Registration Date | Status |
|---------------|---------------------------------|-------------------------------------|----------------|------------------|-----------------|-------------------|------------------|
| 099599.020022 | VIDACARE | China P.R. - (CN) | 6962015 | 19-09-08 | 6962015 | 21-05-10 | INACTIVE - (I) |
| 099599.020023 | VIDACARE | The European Union Trademark - (EM) | 008342016 | 04-06-09 | 008342016 | 23-12-09 | INACTIVE - (I) |
| 099599.020024 | VIDACARE | South Korea - (KR) | 4520080003521 | 18-08-08 | 45-28587 | 13-08-09 | INACTIVE - (I) |
| 099599.020025 | VIDACARE | Russian Federation - (RU) | 2008723486 | 23-07-08 | 400379 | 05-02-10 | INACTIVE - (I) |
| 099599.020026 | VIDACARE | United States - (US) | 78131508 | 28-05-02 | 2921433 | 25-01-05 | INACTIVE - (I) |
| 099599.020027 | VIDACARE | United States - (US) | 77399354 | 18-02-08 | 3825593 | 27-07-10 | INACTIVE - (I) |
| 099599.020028 | VIDACARE | United States - (US) | 77578430 | 25-09-08 | 3825808 | 27-07-10 | INACTIVE - (I) |
| 099599.020029 | VIDACARE | United States - (US) | 77578404 | 25-09-08 | 3822577 | 20-07-10 | INACTIVE - (I) |
| 099599.020030 | VIDACARE | United States - (US) | 85498867 | 19-12-11 | 4229079 | 23-10-12 | INACTIVE - (I) |
| 099599.020032 | EZ-IO T.A.L.O.N. | Canada - (CA) | 1545998 | 30-09-11 | TMA933536 | 04-04-16 | INACTIVE - (I) |
| 099599.020033 | EZ-IO T.A.L.O.N. | The European Union Trademark - (EM) | 010435675 | 22-11-11 | 010435675 | 26-04-12 | INACTIVE - (I) |
| 099599.020035 | T.A.L.O.N. BY VIDACARE & Design | Canada - (CA) | 1582676 | 08-06-12 | TMA921482 | 27-11-15 | INACTIVE - (I) |
| 099599.020036 | T.A.L.O.N. BY VIDACARE & Design | International - (IB) | 1129604 | 08-06-12 | 1129604 | 08-06-12 | INACTIVE - (I) |
| 099599.020037 | T.A.L.O.N. BY VIDACARE & Design | Australia - (AU) | 1518166 | 08-06-12 | 1129604 | 08-06-12 | INACTIVE - (I) |
| 099599.020038 | T.A.L.O.N. BY VIDACARE & Design | The European Union Trademark - (EM) | 1129604 | 08-06-12 | 1129604 | 08-06-12 | INACTIVE - (I) |
| 099599.020039 | T.A.L.O.N. BY VIDACARE & Design | United States - (US) | 85490893 | 08-12-11 | 4429314 | 05-11-13 | INACTIVE - (I) |
| 099599.020041 | Design (Bone Icon) | United States - (US) | 86261687 | 24-04-14 | 4652334 | 09-12-14 | REGISTERED - (G) |
| 099599.020042 | EZ-IO & Design | United States - (US) | 85499983 | 20-12-11 | 4183350 | 31-07-12 | INACTIVE - (I) |
| 099599.020043 | ONCONTROL & Design | United States - (US) | 85499626 | 20-12-11 | 4284970 | 05-02-13 | INACTIVE - (I) |

| Docket Number | MarkName | Country | Application No | Application Date | Registration No | Registration Date | Status |
|---------------|--|-------------------------------------|----------------|------------------|-----------------|-------------------|------------------|
| 099599.020044 | EZ-IO HANDS-ON LAB EXPERIENCE (& Design) | United States - (US) | 85500562 | 21-12-11 | 4281645 | 29-01-13 | INACTIVE - (I) |
| 099599.020045 | IMMEDIATE VASCULAR ACCESS... WHEN YOU NEED IT. | United States - (US) | 85531762 | 02-02-12 | 4281738 | 29-01-13 | INACTIVE - (I) |
| 099599.020046 | EZ-STABILIZER | Canada - (CA) | 1648538 | 18-10-13 | TMA919606 | 06-11-15 | REGISTERED - (G) |
| 099599.020047 | EZ-STABILIZER | International - (IB) | 1206355 | 17-10-13 | 1206355 | 17-10-13 | REGISTERED - (G) |
| 099599.020048 | EZ-STABILIZER | Australia - (AU) | 1206355 | 17-10-13 | 1206355 | 17-10-13 | REGISTERED - (G) |
| 099599.020049 | EZ-STABILIZER | China P.R. - (CN) | 1206355 | 17-10-13 | 1206355 | 17-10-13 | REGISTERED - (G) |
| 099599.020050 | EZ-STABILIZER | The European Union Trademark - (EM) | 1206355 | 17-10-13 | 1206355 | 17-10-13 | REGISTERED - (G) |
| 099599.020051 | EZ-STABILIZER | South Korea - (KR) | 1206355 | 17-10-13 | 1206355 | 17-10-13 | REGISTERED - (G) |
| 099599.020052 | EZ-STABILIZER | Russian Federation - (RU) | 1206355 | 17-10-13 | 1206355 | 17-10-13 | REGISTERED - (G) |
| 099599.020053 | EZ-STABILIZER | United States - (US) | 85907993 | 18-04-13 | 4443522 | 03-12-13 | REGISTERED - (G) |
| 099599.020055 | VIDACARE | China P.R. - (CN) | n/a | 08-10-08 | 6988997 | 07-10-10 | INACTIVE - (I) |
| 099599.020065 | ONCONTROL | China P.R. - (CN) | 37462361 | 12-04-19 | | | FILED - (F) |