

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3903464

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
XTANT MEDICAL HOLDINGS, INC.	05/25/2016
BACTERIN INTERNATIONAL, INC.	05/25/2016
X-SPINE SYSTEMS, INC.	05/25/2016
XTANT MEDICAL, INC.	05/25/2016

RECEIVING PARTY DATA

Name:	SILICON VALLEY BANK
Street Address:	504 LAVACA STREET, SUITE #1100
City:	AUSTIN
State/Country:	TEXAS
Postal Code:	78701

PROPERTY NUMBERS Total: 84

Property Type	Number
Patent Number:	7182782
Patent Number:	7655028
Patent Number:	7282065
Patent Number:	8225720
Patent Number:	7641701
Patent Number:	7565346
Patent Number:	7717943
Patent Number:	8066745
Patent Number:	8382806
Patent Number:	8821553
Patent Number:	7922747
Patent Number:	8372152
Patent Number:	8029539
Patent Number:	8480714
Patent Number:	9198691
Patent Number:	8062367
Patent Number:	8734493

PATENT

Property Type	Number
Patent Number:	8241342
Patent Number:	9149297
Patent Number:	7963982
Patent Number:	8728130
Patent Number:	8142436
Patent Number:	8398644
Patent Number:	8690879
Patent Number:	8216316
Patent Number:	7662172
Patent Number:	8142481
Patent Number:	7604655
Patent Number:	8147522
Patent Number:	7686835
Patent Number:	8016866
Patent Number:	8092504
Patent Number:	8012185
Patent Number:	8097025
Application Number:	12557577
Patent Number:	8535356
Patent Number:	8801761
Patent Number:	8262697
Patent Number:	8932333
Application Number:	14456412
Patent Number:	8282682
Patent Number:	8795370
Application Number:	14325925
Patent Number:	8945227
Application Number:	13173660
Patent Number:	8979934
Application Number:	14623238
Patent Number:	8992587
Patent Number:	9078706
Application Number:	14793191
Patent Number:	8945193
Patent Number:	9265540
Patent Number:	8998906
Patent Number:	8986307
Application Number:	13804972

Property Type	Number
Application Number:	14026405
Application Number:	14678129
PCT Number:	US2015024282
Application Number:	15049642
PCT Number:	US2016018932
PCT Number:	US1619115
Application Number:	62180806
Application Number:	62273777
Application Number:	14812777
Application Number:	62186569
Application Number:	62158500
Application Number:	14672763
Application Number:	14672727
Application Number:	14672608
Application Number:	62140761
Application Number:	62098933
Application Number:	14838811
Application Number:	14755783
Application Number:	14755931
Application Number:	14752568
Application Number:	14721932
Application Number:	14268473
Application Number:	14639902
Application Number:	14634577
Application Number:	14186993
Application Number:	14758815
Application Number:	13453818
Application Number:	14456171
Application Number:	15050829

CORRESPONDENCE DATA

Fax Number: (800)494-7512

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 202-370-4750

Email: ipteam@nationalcorp.com

Correspondent Name: JOANNA MCCALL

Address Line 1: 1025 VERMONT AVE NW, SUITE 1130

Address Line 2: NATIONAL CORPORATE RESEARCH, LTD

Address Line 4: WASHINGTON, D.C. 20005

PATENT

REEL: 038884 FRAME: 0065

ATTORNEY DOCKET NUMBER:	F163424
NAME OF SUBMITTER:	LAURA A. KENERSON
SIGNATURE:	/Laura A. Kenerson/
DATE SIGNED:	06/06/2016

Total Attachments: 15

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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement (this "Agreement") is entered into as of May 25, 2016 by and among (i) SILICON VALLEY BANK ("Bank") and (ii) XTANT MEDICAL HOLDINGS, INC., a Delaware corporation ("Holdings"), BACTERIN INTERNATIONAL, INC., a Nevada corporation ("Bacterin"), X-SPINE SYSTEMS, INC., an Ohio corporation ("X-spine"), and XTANT MEDICAL, INC., a Delaware corporation ("Xtant", and together with Holdings, Bacterin and X-spine, individually and collectively, jointly and severally, the "Grantor").

RECITALS

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

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

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

AGREEMENT

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

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

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

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

4. All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "Patents");

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

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

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

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

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

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

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

[Signature page follows.]

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

GRANTOR:

Address of Grantor:

c/o Xtant Medical Holdings, Inc.
600 Cruiser Lane
Belgrade, Montana 59714
Attn: Mr. John Gandolfo, Chief Financial Officer
Fax: (406) 388-0480
Email: jgandolfo@xtanmedical.com

XTANT MEDICAL HOLDINGS, INC.

By: [Signature]
Name: John P. Gandolfo
Title: CEO

MACTERIN INTERNATIONAL, INC.

By: [Signature]
Name: John P. Gandolfo
Title: CEO

X-SPINE SYSTEMS, INC.

By: _____
Name: _____
Title: _____

XTANT MEDICAL, INC.

By: _____
Name: _____
Title: _____

Address of Bank:

Silicon Valley Bank
504 Lavaca Street, Suite #1100
Austin, Texas 78701
Attn: Ms. Priya Iyer
Fax: (512) 794-0825
Email: pIyer@svb.com

BANK:

SILICON VALLEY BANK

By: _____
Name: _____
Title: _____

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

GRANTOR:

Address of Grantor:

c/o Xtant Medical Holdings, Inc.
600 Cruiser Lane
Belgrade, Montana 59714
Attn: Mr. John Gandolfo, Chief Financial Officer
Fax: (406) 388-0480
Email: jgandolfo@xtantmedical.com

XTANT MEDICAL HOLDINGS, INC.

BACTERIN INTERNATIONAL, INC.

By _____
Name: _____
Title: _____

By _____
Name: _____
Title: _____

X-SPINE SYSTEMS, INC.

XTANT MEDICAL, INC.

By Paul G. Goldberger
Name: Paul G. Goldberger
Title: CEO

By Paul G. Goldberger
Name: Paul G. Goldberger
Title: CEO

Address of Bank:

BANK:

SILICON VALLEY BANK

Silicon Valley Bank
504 Lavaca Street, Suite #1100
Austin, Texas 78701
Attn: Ms. Priya Iyer
Fax: (512) 794-0885
Email: piyer@srb.com

By _____
Name: _____
Title: _____

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

GRANTOR:

Address of Grantor:

c/o Xtant Medical Holdings, Inc.
600 Cruiser Lane
Belgrade, Montana 59714
Attn: Mr. John Gandolfo, Chief Financial Officer
Fax: (406) 388-0480
Email: jgandolfo@xtantmedical.com

XTANT MEDICAL HOLDINGS, INC.

By _____
Name: _____
Title: _____

BACTERIN INTERNATIONAL, INC.

By _____
Name: _____
Title: _____

X-SPINE SYSTEMS, INC.

By _____
Name: _____
Title: _____

XTANT MEDICAL, INC.

By _____
Name: _____
Title: _____

Address of Bank:

Silicon Valley Bank
504 Lavaca Street, Suite #1100
Austin, Texas 78701
Attn: Ms. Priya Iyer
Fax: (512) 794-0885
Email: piyer@svb.com

BANK:

SILICON VALLEY BANK


By: 
Name: PRIYA IYER
Title: DIRECTOR

EXHIBIT A

Copyrights

None.

EXHIBIT B

Patents

Description	Registration / Application No.	Registration / Application Date	Registrant
SPINAL FUSION SYSTEM AND METHOD FOR FUSING SPINAL BONES	7,182,782 101675,361	2/27/2007 9/30/2003	X-Spine Systems, Inc.
SPINAL FUSION SYSTEM AND METHOD FOR FUSING SPINAL BONES	1 684 673 04785234.8	9/29/2004 9/29/2004	X-Spine Systems, Inc.
SPINAL FUSION SYSTEM AND METHOD FOR FUSING SPINAL BONES	7,655,028 11/624,341	2/2/2010 1/18/2007	X-Spine Systems, Inc.
SPINAL FUSION SYSTEM AND METHOD FOR FUSING SPINAL BONES	2263615 10168168.2	9/29/2004 7/1/2010	X-Spine Systems, Inc.
SPINAL FUSION SYSTEM AND METHOD FOR FUSING SPINAL BONES	2263616 10168172.4	9/24/2004 7/1/2010	X-Spine Systems, Inc.
DISK AUGMENTATION SYSTEM AND METHOD	7,282,065 10/821,823	10/16/2007 4/9/2004	X-Spine Systems, Inc.
DISK AUGMENTATION SYSTEM	1.732.458 05735305.4	4/7/2005 4/7/2005	X-Spine Systems, Inc.
DISK AUGMENTATION SYSTEM	8,225,720 11/869,009	7/24/2012 10/9/2007	X-Spine Systems, Inc.
SPINAL FUSION SYSTEM AND METHOD FOR USING SPINAL BONES	7,641,701 10/858,629	1/5/2010 6/2/2004	X-Spine Systems, Inc.
SPINAL FUSION SYSTEM AND METHOD FOR FUSING SPINAL BONES	1,758,525 05758376.7	6/2/2005 6/2/2005	X-Spine Systems, Inc.
SPINAL FUSION SYSTEM AND METHOD FOR FUSING SPINAL BONES	2,380,527 11167613.6	6/2/2005 5/26/2011	X-Spine Systems, Inc.
PROSTHETIC IMPLANT AND METHOD	7,565,346 10/976,741	7/28/2009 10/29/2004	X-Spine Systems, Inc.
PROSTHETIC IMPLANT AND METHOD	1,871,305 2005807429.5	10/14/2005 10/14/2005	X-Spine Systems, Inc.
CAPLESS MULTIAXIAL SCREW AND SPINAL FIXATION ASSEMBLY AND METHOD	7,717,943 11/193,523	5/18/2010 7/29/2005	X-Spine Systems, Inc.
CAPLESS MULTIAXIAL SCREW AND SPINAL FIXATION ASSEMBLY AND METHOD	1 909 666 06787589.8	7/17/2006 7/17/2006	X-Spine Systems, Inc.
CAPLESS MULTIAXIAL SCREW AND SPINAL FIXATION ASSEMBLY AND METHOD	8,066,745 12/767,100	11/29/2011 4/26/2010	X-Spine Systems, Inc.
CAPLESS MULTIAXIAL SCREW AND SPINAL FIXATION ASSEMBLY AND METHOD	8,382,806 13/290,358	2/26/2013 11/7/2011	X-Spine Systems, Inc.
SPINAL FUSION SYSTEM UTILIZING AN IMPLANT PLATE HAVING AT LEAST ONE INTEGRAL LOCK	8,821,553 11/379,301	9/2/2014 4/19/2006	X-Spine Systems, Inc.
SPINAL FUSION SYSTEM UTILIZING AN IMPLANT PLATE HAVING AT LEAST ONE INTEGRAL LOCK	1 847 239 20070106439	4/19/2007	X-Spine Systems, Inc.
CROSS CONNECTOR APPARATUS FOR SPINAL FIXATION RODS	7,922,747 11/873,452	4/12/2011 10/17/2007	X-Spine Systems, Inc.
SPINAL FUSION SYSTEM UTILIZING AN IMPLANT PLATE HAVING AT LEAST ONE INTEGRAL LOCK AND RATCHET LOCK	8,372,152 11/778,270	2/12/2013 7/16/2007	X-Spine Systems, Inc.

Description	Registration / Application No.	Registration / Application Date	Registrant
OFFSET MULTIAXIAL OR POLYAXIAL SCREW, SYSTEM AND ASSEMBLY	8,029,539 11/960,119	10/4/2011 12/19/2007	X-Spine Systems, Inc.
OFFSET MULTIAXIAL OR POLYAXIAL SCREW, SYSTEM AND ASSEMBLY	8,480,714 13/214,428	7/9/2013 8/22/2011	X-Spine Systems, Inc.
OFFSET MUL TIAXIAL OR POLYAXIAL SCREW, SYSTEM AND ASSEMBLY	9,198,691 13/935,601	12/1/2015 7/5/2013	X-Spine Systems, Inc.
SCREW LOCKING MECHANISM AND METHOD	8,062,367 11/622,487	11/22/2011 1/12/2007	X-Spine Systems, Inc.
SCREW LOCKING MECHANISM AND METHOD	8,734,493 13/232,185	5/27/2014 9/14/2011	X-Spine Systems, Inc.
FLEXIBLE CRANIAL CLAMP AND METHOD OF ANCHORING TO CRANIUM	8,241,342 12/117,973	8/14/2012 5/9/2008	X-Spine Systems, Inc.
FLEXIBLE CRANIAL CLAMP AND METHOD OF ANCHORING TO CRANIUM	9,149,297 13/493,028	10/6/2015 6/11/2012	X-Spine Systems, Inc.
IMPLANT PLATE SCREW LOCKING SYSTEM AND SCREW HAVING A LOCKING MEMBER	7,963,982 11/178,284	6/21/2011 7/16/2007	X-Spine Systems, Inc.
IMPLANT PLATE SCREW LOCKING SYSTEM AND SCREW HAVING A LOCKING MEMBER	2,175,789 200810826378	7/14/2008 7/14/2008	X-Spine Systems, Inc.
IMPLANT PLATE SCREW LOCKING SYSTEM AND SCREW HAVING A LOCKING MEMBER	8,728,130 13/155,726	5/20/2014 6/8/2011	X-Spine Systems, Inc.
RETRACTION TUBE FOR USE WITH BONE SCREW	8,142,436 12/477,489	3/27/2012 6/3/2009	X-Spine Systems, Inc.
RETRACTION TUBE FOR USE WITH CAPLESS PEDICLE SCREW	2317950 09759382.6 - 2310	6/4/2009 6/4/2009	X-Spine Systems, Inc.
RETRACTION TUBE FOR USE WITH BONE SCREW	8,398,644 13/355,654	3/19/2013 1/23/2012	X-Spine Systems, Inc.
RETRACTION TUBE FOR USE WITH CAPLESS PEDICLE SCREW	8,690,879 13/765,905	4/8/2014 2/13/2013	X-Spine Systems, Inc.
PROSTHETIC IMPLANT WITH BIPLANAR ANGULATION AND COMPOUND ANGLES	8,216,316 12/336,753	7/10/2012 12/17/2008	X-Spine Systems, Inc.
PEDICLE SCREW SYSTEMS AND METHODS OF ASSEMBLING/ INSTALLING THE SAME	7,662,172 11/258,831	2/16/2010 10/25/2005	X-Spine Systems, Inc.
PEDICLE SCREW SYSTEM AND METHOD	2005299617	10/25/2005	X-Spine Systems, Inc.
PEDICLE SCREW SYSTEMS AND METHODS	2007/04266	7/30/2008 10/25/2005	X-Spine Systems, Inc.
PEDICLE SCREW SYSTEMS AND METHODS OF ASSEMBLING/ INSTALLING THE SAME	1,814,473 050815180.4	10/25/2005 10/25/2005	X-Spine Systems, Inc.
PEDICLE SCREW SYSTEMS AND METHODS OF ASSEMBLING/ INSTALLING THE SAME	8,142,481 12/690,953	3/27/2012 1/21/2010	X-Spine Systems, Inc.
BONE FIXATION SYSTEM AND METHOD FOR USING THE SAME	7,604,655 11/327,13	10/20/2009 1/6/2006	X-Spine Systems, Inc.
BONE FIXATION METHOD	8,147,522 12/561,402	4/3/2012 9/17/2009	X-Spine Systems, Inc.
PEDICLE SCREW SYSTEM WITH PROVISIONAL LOCKING ASPECTS	7,686,835 11/543,348	3/30/2010 10/4/2006	X-Spine Systems, Inc.

Description	Registration / Application No.	Registration / Application Date	Registrant
PEDICLE SCREW SYSTEM WITH PROVISIONAL LOCKING ASPECTS	8,016,866 12/709,790	9/13/2011 2/22/2010	X-Spine Systems, Inc.
PEDICLE SCREW SYSTEMS AND METHODS OF ASSEMBLING/ INSTALLING THE SAME	8,092,504 11/942,443	1/10/2012 11/19/2007	X-Spine Systems, Inc.
PEDICLE SCREW SYSTEMS AND METHODS OF ASSEMBLING/ INSTALLING THE SAME	8,012,185 11/999,117	9/6/2011 12/14/2007	X-Spine Systems, Inc.
PEDICLE SCREW SYSTEM CONFIGURED TO RECEIVE A STRAIGHT OR CURVED ROD	8,097,025 12/056,571	1/17/2012 3/27/2008	X-Spine Systems, Inc.
AN IMPLANT AND A SYSTEM AND METHOD FOR PROCESSING, DESIGNING AND MANUFACTURING AN IMPROVED ORTHOPEDIC IMPLANT	Registration Pending 12/557,577	Registration Date Pending 9/11/2009	X-Spine Systems, Inc.
IMPROVED ORTHOPEDIC IMPLANT	2410930 10 710 702	3/10/2010 3/10/2010	X-Spine Systems, Inc.
SCREW IMPLANT AND SYSTEM AND METHOD FOR LOCKING A SCREW IN AN IMPLANT PLATE	8,535,356 12/612,209	9/17/2013 11/4/2009	X-Spine Systems, Inc.
SCREW IMPLANT AND SYSTEM AND METHOD FOR LOCKING A SCREW IN AN IMPLANT PLATE	2,319,438 10186739.5	10/6/2010 10/6/2010	X-Spine Systems, Inc.
Spiral Implant locking Member with Improved Guidance, Tactile & Visual Feedback	8,801,761 12/641,416	8/12/2014 12/18/2009	X-Spine Systems, Inc.
Spiral Implant Locking Member with Improved Guidance, Tactile & Visual Feedback	Registration Pending 14/456,171	Registration Date Pending 8/11/2014	X-Spine Systems, Inc.
MODULAR INTERSPINOUS FIXATION SYSTEM AND METHOD	8,262,697 12/687,168	9/11/2012 11/14/2010	X-Spine Systems, Inc.
MODULAR INTERSPINOUS FIXATION SYSTEM AND METHOD	Registration Pending 10787228.5	Registration Date Pending 11/30/2010	X-Spine Systems, Inc.
MODULAR INTERSPINOUS FIXATION SYSTEM AND METHOD	8,932,333 13/493,033	1/13/2015 6/11/2012	X-Spine Systems, Inc.
MODULAR INTERSPINOUS FIXATION SYSTEM AND METHOD	Registration Pending 14/456,412	Registration Date Pending 8/11/2014	X-Spine Systems, Inc.
FUSION SYSTEM AND METHOD FOR FUSING SPINAL BONES	8,282,682 121640,061	10/9/2012 12/17/2009	X-Spine Systems, Inc.
FUSION SYSTEM AND METHOD FOR FUSING SPINAL BONES	8,795,370 13/568,429	8/5/2014 8/7/2012	X-Spine Systems, Inc.
FUSION SYSTEM AND METHOD FOR FUSING SPINAL BONES	Registration Pending 14/325,925	Registration Date Pending 7/8/2014	X-Spine Systems, Inc.
SPINAL IMPLANT CO-INSERTION SYSTEM AND METHOD	8,945,227 13/017,622	2/3/2015 1/31/2011	X-Spine Systems, Inc.
SPINAL STABILIZATION SYSTEM UTILIZING SCREW AND EXTERNAL FACET AND/OR LAMINA FIXATION	Registration Pending 13/173,660	Registration Date Pending 6/30/2011	X-Spine Systems, Inc.
SPINAL STABILIZATION SYSTEM UTILIZING SCREW AND EXTERNAL FACET AND/OR LAMINA FIXATION	2,590,582 11732538.1	6/30/2011 6/30/2011	X-Spine Systems, Inc.
SPINAL STABILIZATION SYSTEM UTILIZING SCREW AND EXTERNAL FACET AND/OR LAMINA FIXATION	Registration Pending 15188588.6	Registration Date Pending 6/30/2011	X-Spine Systems, Inc.

Description	Registration / Application No.	Registration / Application Date	Registrant
COMPOSITE ORTHOPEDIC IMPLANT HAVING A LOW FRICTION MATERIAL SUBSTRATE WITH PRIMARY FRICTIONAL FEATURES AND SECONDARY FRICTIONAL FEATURES	8,979,934 14/154,577	3/17/2015 1/14/2014	X-Spine Systems, Inc.
COMPOSITE ORTHOPEDIC IMPLANT HAVING A LOW FRICTION MATERIAL SUBSTRATE WITH PRIMARY FRICTIONAL FEATURES AND SECONDARY FRICTIONAL FEATURES	Registration Pending 14/623,238	Registration Date Pending 2/16/2015	X-Spine Systems, Inc.
SPINAL FACET COMPRESSION SCREW WITH VARIABLE PITCH THREAD ZONES AND BUTTRESS HEAD	8,992,587 13/184,862	3/31/2015 7/18/2011	X-Spine Systems, Inc.
SPINAL FACET COMPRESSION SCREW WITH VARIABLE PITCH THREAD ZONES AND BUTTRESS HEAD	Registration Pending 11736253.3	Registration Date Pending 7/18/2011	X-Spine Systems, Inc.
Intervertebral Fusion Device Utilizing Multiple Mobile Uniaxial and Bidirectional Screw Interface Plates	9,078,706 13/409,377	7/14/2015 3/1/2012	X-Spine Systems, Inc.
Intervertebral Fusion Device Utilizing Multiple Mobile Uniaxial and Bidirectional Screw Interface Plates	Registration Pending 13405001.2	Registration Date Pending 1/8/2013	X-Spine Systems, Inc.
Intervertebral Fusion Device Utilizing Multiple Mobile Uniaxial and Bidirectional Screw Interface Plates	Registration Pending 14/793,191	Registration Date Pending 7/7/2015	X-Spine Systems, Inc.
MINIMALLY INVASIVE SPINAL FACET COMPRESSION SCREW AND SYSTEM FOR BONE JOINT FUSION AND FIXATION	8,945,193 13/413,021	2/13/2015 3/6/2012	X-Spine Systems, Inc.
MINIMALLY INVASIVE SPINAL FACET COMPRESSION SCREW AND SYSTEM FOR BONE JOINT FUSION AND FIXATION	Registration Pending 13710163.0	Registration Date Pending 2/25/2013	X-Spine Systems, Inc.
MINIMALLY INVASIVE SPINAL FACET COMPRESSION SCREW AND SYSTEM FOR BONE JOINT FUSION AND FIXATION	9,265,540 14/594,445	2/23/2016 1/12/2015	X-Spine Systems, Inc.
SURGICAL IMPLANT INSERTER COMPRESSOR	8,998,906 13/544,311	4/7/2015 7/9/2012	X-Spine Systems, Inc.
SURGICAL INSTRUMENT WITH PIVOT ABLE IMPLANT HOLDER	8,986,307 13/545,423	3/24/2015 7/10/2012	X-Spine Systems, Inc.
SPINAL IMPLANT AND ASSEMBLY (irix)	Registration Pending 13/804,972	Registration Date Pending 3/14/2013	X-Spine Systems, Inc.
SPINAL IMPLANT AND ASSEMBLY	Registration Pending 14703680.0	Registration Date Pending 1/17/2014	X-Spine Systems, Inc.
SCREW IMPLANT AND SYSTEM AND METHOD FOR LOCKING A SCREW IN AN IMPLANT PLAT	Registration Pending 14/026,405	Registration Date Pending 9/13/2013	X-Spine Systems, Inc.
SCREW IMPLANT AND SYSTEM AND METHOD FOR LOCKING A SCREW IN AN IMPLANT PLATE	Registration Pending 14761738.5	Registration Date Pending 8/20/2014	X-Spine Systems, Inc.
MODULAR MULTI-AXIAL SCREW SYSTEM	Registration Pending 14/678,129	Registration Date Pending 4/3/2015	X-Spine Systems, Inc.
MODULAR MULTI-AXIAL SCREW SYSTEM	Registration Pending PCTIUS2015/024282	Registration Date Pending 4/31/2015	X-Spine Systems, Inc.
BONE PLATING SYSTEM ON MONOLITHIC CARD	Registration Pending 15/049,642	Registration Date Pending 2/22/2016	X-Spine Systems, Inc.

Description	Registration / Application No.	Registration / Application Date	Registrant
BONE PLATING SYSTEM ON MONOLITHIC CARD	Registration Pending PCT/US2016/018932	Registration Date Pending 2/22/2016	X-Spine Systems, Inc.
MODULAR INTERSPINOUS FIXATION SYSTEM WITH THREADED COMPONENT	Registration Pending 151050,829	Registration Date Pending 2/23/2016	X-Spine Systems, Inc.
MODULAR INTERSPINOUS FIXATION SYSTEM WITH THREADED COMPONENT	Registration Pending PCT/US16/019115	Registration Date Pending 2/23/2016	X-Spine Systems, Inc.
AN EXPANDABLE IMPLANT	Registration Pending 62/180,806	Registration Date Pending 6/17/2015	X-Spine Systems, Inc.
BONE MATRIX WITH CHANNELS TO DELIVER A DESIRED AMOUNT OF HYDRATION	Registration Pending 62/273,777	Registration Date Pending 12/31/15	Bacterin International, Inc.
PROCESS FOR DEMINERALIZATION OF BONE MATRIX WITH PRESERVATION OF NATURAL GROWTH FACTORS	Registration Pending 14/812,777	Registration Date Pending 7/29/15	Bacterin International, Inc.
EXPANDABLE BONE GRAFTS AND METHODS OF MANUFACTURE THEREOF	Registration Pending 62/186,569	Registration Date Pending 6/30/15	Bacterin International, Inc.
OXYGEN SCAVENGING TISSUE GRAFT WITH ENHANCED REGENERATIVE CAPACITY AND METHOD OF MANUFACTURE THEREOF	Registration Pending 62/158,500	Registration Date Pending 5/7/15	Bacterin International, Inc.
PROCESS FOR DEMINERALIZATION OF BONE MATRIX WITH PRESERVATION OF NATURAL GROWTH FACTORS	Registration Pending 14/672,763	Registration Date Pending 3/30/15	Bacterin International, Inc.
PROCESS FOR DEMINERALIZATION OF BONE MATRIX WITH PRESERVATION OF NATURAL GROWTH FACTORS	Registration Pending 14/672,727	Registration Date Pending 3/30/15	Bacterin International, Inc.
PROCESS FOR DEMINERALIZATION OF BONE MATRIX WITH PRESERVATION OF NATURAL GROWTH FACTORS	Registration Pending 14/672,608	Registration Date Pending 3/30/15	Bacterin International, Inc.
SHAPED COLLAGEN TISSUE IMPLANT AND METHOD OF MANUFACTURING THEREOF	Registration Pending 62/140,761	Registration Date Pending 3/31/15	Bacterin International, Inc.
CROSSLINKABLE 3D PRINTED BIOMATERIAL-BASED IMPLANTS AND METHOD OF MAKING	Registration Pending 62/098,933	Registration Date Pending 12/31/14	Bacterin International, Inc.
CHONDROITIN SULFATE PROTEOGLYCAN COATED IMPLANTS FOR GUIDED NERVE REGENERATION AND METHOD OF MANUFACTURE THEREOF	Registration Pending 14/838,811	Registration Date Pending 8/28/15	Bacterin International, Inc.
BONE IMPLANT BETWEEN ADJACENT BONE BODIES IN PHALANGES	Registration Pending 14/755,783	Registration Date Pending 6/30/15	Bacterin International, Inc.
MANUFACTURE OF BIOMATERIAL IMPLANTS VIA 3D PRINTING TECHNOLOGY	Registration Pending 14/755,931	Registration Date Pending 6/30/15	Bacterin International, Inc.
APPARATUS FOR CONTROLLED THINNING OF BIOLOGICAL TISSUE AND METHOD OF USE THEREOF	Registration Pending 14/752,568	Registration Date Pending 6/26/15	Bacterin International, Inc.
DETERGENT TREATED BIOLOGICAL TISSUE WITH LOW RESIDUAL DETERGENT AND METHODS OF PRODUCING SAME	Registration Pending 14/721,932	Registration Date Pending 5/26/15	Bacterin International, Inc.

Description	Registration / Application No.	Registration / Application Date	Registrant
ANTIMICROBIAL COATING FOR INHIBITION OF BACTERIAL ADHESION AND BIOFILM FORMATION (DIV)	Registration Pending 14/268,473	Registration Date Pending 5/2/14	Bacterin International, Inc.
SHAPED FIBER-BASED PRODUCTS AND A METHOD OF MANUFACTURE THEREOF	2015/0251361 14/639,902	3/5/15 (Filing Date)	Bacterin International, Inc.
CUTTING ASSEMBLY AND METHOD OF USE	2015/0245925 14/634,577	2/27/15 (Filing Date)	Bacterin International, Inc.
PROCESS FOR DEMINERALIZATION OF BONE MATRIX WITH PRESERVATION OF NATURAL GROWTH FACTORS (DIV-CON)	US 2014/0170232 14/186,993	2/21/14 (Filing Date)	Bacterin International, Inc.
BONE GRAFT SUBSTITUTE CONTAINING A TEMPORARY CONTRAST AGENT AND A METHOD OF GENERATING SUCH A METHOD OF USE THEREOF	PCT/US14/10916 14/758,815	7/1/15 (Filing Date)	Bacterin International, Inc.
PROCESS FOR DEMINERALIZATION OF BONE MATRIX WITH PRESERVATION OF NATURAL GROWTH FACTORS (DIV)	US20120213859 13/453,818	4/23/12 (Filing Date)	Bacterin International, Inc.
PROCESS FOR DEMINERALIZATION OF BONE MATRIX WITH PRESERVATION OF NATURAL GROWTH FACTORS	US 2012-0213859 A1	6/2/08 (Filing Date)	Bacterin International, Inc.
ANTIMICROBIAL COATING FOR INHIBITION OF BACTERIAL ADHESION AND BIOFILM FORMATION	EP1742530	4/28/05 (Filing Date)	Bacterin International, Inc.
ANTIMICROBIAL COATING FOR INHIBITION OF BACTERIAL ADHESION AND BIOFILM FORMATION	CA2564437	4/28/05 (Filing Date)	Bacterin International, Inc.
ANTIMICROBIAL COATING FOR INHIBITION OF BACTERIAL ADHESION AND BIOFILM FORMATION	AU2005240104	4/28/05 (Filing Date)	Bacterin International, Inc.
ANTIMICROBIAL COATING FOR INHIBITION OF BACTERIAL ADHESION AND BIOFILM FORMATION	JP 2007535573 2007-511086	4/28/05 (Filing Date)	Bacterin International, Inc.

EXHIBIT C

Trademarks

Description	Registration / Application No.	Registration / Application Date	Registrant
OsteoLock	3793867 77518307	25-MAY-2010 09-JUL-2008	Bacterin International, Inc.
hMatrix	3886606 77228718	07-DEC-2010 12-JUL-2007	Bacterin International, Inc.
OsteoWrap	3576966 77165553	17-FEB-2009 25-APR-2007	Bacterin International, Inc.
XTANT	Registration Pending 86701171	Registration Date Pending 22-JUL-2015	Bacterin International, Inc.
ArthroFuse	4942839 86606794	19-APR-2016 22-APR-2015	Bacterin International, Inc.
OrbitalWrap	4808124 86523228	08-SEP-2015 03-FEB-2015	Bacterin International, Inc.
CIRCLE OF LIFE	4645294 86295138	25-NOV-2014 29-MAY-2014	Bacterin International, Inc.
3Demin	4765699 86259493	30-JUN-2015 22-APR-2014	Bacterin International, Inc.
OsteoPLF	Registration Pending 86168839	Registration Date Pending 17-JAN-2014	Bacterin International, Inc.
OsteoSTX	4701155 86168841	10-MAR-2015 17-JAN-2014	Bacterin International, Inc.
SportMatrix	4672256 85791006	13-JAN-2015 29-NOV-2012	Bacterin International, Inc.
BACTERINSE	4393612 85639552	27-AUG-2013 31-MAY-2012	Bacterin International, Inc.
BacFast	3794423 77675985	25-MAY-2010 23-FEB-2009	Bacterin International, Inc.
OsteoSelect	3758117 77328137	09-MAR-2010 13-NOV-2007	Bacterin International, Inc.
Elutia	3576967 77165588	17-FEB-2009 25-APR-2007	Bacterin International, Inc.
Quickscrew	3521267 77071492	21-OCT-2008 26-DEC-2006	Bacterin International, Inc.
OsteoSponge	3366646 78564754	08-JAN-2008 10-FEB-2005	Bacterin International, Inc.
ATRIX-C	Registration Pending 86924861	Registration Date Pending 01-MAR-2016	X-Spine Systems, Inc.
ARANAX	Registration Pending 86683945	Registration Date Pending 06-JUL-2015	X-Spine Systems, Inc.
XPRESS	Registration Pending 86361500	Registration Date Pending 08-AUG-2014	X-Spine Systems, Inc.
ZYFIX	Registration Pending 86305253	Registration Date Pending 10-JUN-2014	X-Spine Systems, Inc.


Description	Registration / Application No.	Registration / Application Date	Registrant
SILEX	4645064 86259218	25-NOV-2014 22-APR-2014	X-Spine Systems, Inc.
CAPLESS	4587179 85970421	19-AUG-2014 26-JUN-2013	X-Spine Systems, Inc.
 X-spine	4623255 85897549	21-OCT-2014 08-APR-2013	X-Spine Systems, Inc.
X-SPINE	4619437 85878779	14-OCT-2014 18-MAR-2013	X-Spine Systems, Inc.
CERTEX	4464066 85861707	07-JAN-2014 27-FEB-2013	X-Spine Systems, Inc.
H-GRAFT	4420033 85736106	15-OCT-2013 24-SEP-2012	X-Spine Systems, Inc.
CALIX	4334774 85736447	14-MAY-2013 24-SEP-2012	X-Spine Systems, Inc.
IRIX	4618034 85732565	07-OCT-2014 19-SEP-2012	X-Spine Systems, Inc.
FORMITY	Registration Pending 85732532	Registration Date Pending 19-SEP-2012	X-Spine Systems, Inc.
SPIDER	4110961 85198457	13-MAR-2012 15-DEC-2010	X-Spine Systems, Inc.
X90	3932766 85022681	15-MAR-2011 26-APR-2010	X-Spine Systems, Inc.
HYDRAGRAFT	3853175 77937665	28-SEP-2010 17-FEB-2010	X-Spine Systems, Inc.
AXLE	4016586 77936172	23-AUG-2011 16-FEB-2010	X-Spine Systems, Inc.
FORTEX	3853084 77936177	28-SEP-2010 16-FEB-2010	X-Spine Systems, Inc.
BUTREX	3853085 77936184	28-SEP-2010 16-FEB-2010	X-Spine Systems, Inc.
FIXCET	77935660 3932494	15-FEB-2010 15-MAR-2011	X-Spine Systems, Inc.
Capless	3328122 78725643	30-OCT-2007 03-OCT-2005	X-Spine Systems, Inc.

EXHIBIT D

Mask Works

None.