PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3882108

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
ALPHATEC SPINE, INC.	06/07/2012
ALPHATEC HOLDINGS, INC.	06/07/2012
ALPHATEC INTERNATIONAL LLC	06/07/2012
ALPHATEC PACIFIC, INC.	06/07/2012

RECEIVING PARTY DATA

Name:	MIDCAP FINANCIAL, LLC, AS AGENT
Street Address:	7255 WOODMONT AVENUE, SUITE 200
City:	BETHESDA
State/Country:	MARYLAND
Postal Code:	20814

PROPERTY NUMBERS Total: 17

Property Type	Number
Application Number:	14184967
Application Number:	14331579
Application Number:	14336918
Application Number:	14713826
Application Number:	14798749
Application Number:	14068416
Application Number:	14634073
Application Number:	14663508
Application Number:	14673918
Application Number:	14305254
Application Number:	14877587
Application Number:	14715337
PCT Number:	US1518270
PCT Number:	US1419591
PCT Number:	US1433763
PCT Number:	US1450688
PCT Number:	US1336806

PATENT REEL: 038654 FRAME: 0945

503835460

CORRESPONDENCE DATA

Fax Number: (703)610-6200

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: 7036106100

Email: boxip@hoganlovells.com

Correspondent Name: VALERIE BRENNAN, HOGAN LOVELLS US LLP
Address Line 1: 7930 JONES BRANCH DRIVE, 9TH FLOOR
Address Line 2: ATTN: BOX INTELLECTUAL PROPERTY

Address Line 4: MCLEAN, VIRGINIA 22102

NAME OF SUBMITTER:	VALERIE BRENNAN	
SIGNATURE:	/vb/	
DATE SIGNED:	05/20/2016	

Total Attachments: 13

PATENT REEL: 038654 FRAME: 0946

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement (this "<u>IP Security Agreement</u>") is entered into as of the 7 day of June, 2012 by and between MIDCAP FINANCIAL, LLC, a Delaware limited liability company ("<u>Agent</u>"), each of ALPHATEC HOLDINGS, INC., a Delaware corporation, ALPHATEC SPINE, INC., a California corporation, ALPHATEC INTERNATIONAL LLC, a Delaware limited liability company, ALPHATEC PACIFIC, INC., a Japanese company (collectively, the "Grantor").

RECITALS

- A. The Lenders have agreed to make certain advances of money and to extend certain financial accommodations to Grantor and certain of its affiliates (the "Loans") in the amounts and manner set forth in that certain Credit, Security and Guaranty Agreement by and between Agent, the Lenders, the Borrowers and the other Credit Parties party thereto, dated the date hereof (as the same may be amended, modified or supplemented from time to time, the "Loan Agreement"; capitalized terms used herein are used as defined in the Loan Agreement). The Lenders are willing to make the Loans to Borrowers, but only upon the condition, among others, that each Borrower shall grant to Agent, for the ratable benefit of the Lenders, a security interest in certain Copyrights, Trademarks, Patents, and Mask Works (as each term is described below) to secure the obligations of the Grantors under the Loan Agreement.
- B. Pursuant to the terms of the Loan Agreement, the Grantor has granted to Agent, for the ratable benefit of the Lenders, 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, the Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

- 1. To secure its obligations under the Loan Agreement, Grantor grants and pledges to Agent, for the ratable benefit of the Lenders, 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 "<u>Intellectual Property Collateral</u>"), including, without limitation, the following:
- (a) 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");
- (b) 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;
- (c) Any and all design rights that may be available to Grantor now or hereafter existing, created, acquired or held;

 $\begin{array}{l} Intellectual\ Property\ Security\ Agreement\\ DC-039759.0002-3413549 \end{array}$

- (d) 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");
- (e) 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");
- (f) 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");
- (g) 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;
- (h) 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;
- (i) All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and
- (j) 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.
- 2. This security interest is granted in conjunction with the security interest granted to Agent, for the ratable benefit of the Lenders, under the Loan Agreement. The rights and remedies of Agent with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Financing Documents, and those which are now or hereafter available to Agent as a matter of law or equity. Each right, power and remedy of Agent provided for herein or in the Loan Agreement or any of the Financing 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 Agent of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Loan Agreement or any of the other Financing Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Agent, of any or all other rights, powers or remedies.
- 3. This IP Security Agreement is a Financing Document. This IP Security Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same IP Security Agreement. Delivery of an executed counterpart of this IP Security Agreement by telefacsimile or other electronic method of transmission shall be equally as effective as delivery of an original executed counterpart of this IP Security Agreement. Any party delivering an executed counterpart of this IP Security Agreement by telefacsimile or other electronic method of transmission also shall deliver an original executed counterpart of this IP Security Agreement but the failure to deliver an original executed counterpart shall not affect the validity, enforceability, and binding effect of this IP Security Agreement.

4. THIS IP SECURITY AGREEMENT SHALL BE SUBJECT TO THE PROVISIONS REGARDING CHOICE OF LAW AND VENUE, JURY TRIAL WAIVER, AND JUDICIAL REFERENCE SET FORTH IN <u>SECTIONS 12.8</u> AND <u>12.9</u> OF THE LOAN AGREEMENT, AND SUCH PROVISIONS ARE INCORPORATED HEREIN BY THIS REFERENCE

[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:

ALPHATEC HOLDINGS, INC.,

a Delaware corporation

Name: Michara

Grantor Contact Information:

5818 El Camino Real Carlsbad, CA 92008

Attn: Michael O'Neill, Chief Financial Officer

Facsimile: 760-431-9083

E-Mail: moneill@alphatecspine.com

[Signatures Continue on Following Page]

ALPHATEC SPINE, INC.,

a California corporation

Name:___

Title:__

Grantor Contact Information:

5818 El Camino Real Carlsbad, CA 92008

Attn: Michael O'Neill, Chief Financial Officer

Facsimile: 760-431-9083

E-Mail: moneill@alphatecspine.com

[Signatures Continue on Following Page]

ALPHATEC INTERNATIONAL LLC,

a Delaware corporation

By: Com Com

Name: The Other Good Sup Alpha Hat

Title: GFO GC and SUP Alphatec Holdes Internal D

GFO GF Fliphetec Holders Internal Contact Information:

5818 El Camino Real Carlsbad, CA 92008

Attn: Michael O'Neill, Chief Financial Officer

Facsimile: 760-431-9083

E-Mail: moneill@alphatecspine.com

[Signatures Continue on Following Page]

Intellectual Property Security Agreement DC - 039759.000002 - 3413549

ALPHATEC PACIFIC, INC., a Japanese company

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Name:

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Grantor Contact Information:

5818 El Camino Real Carlsbad, CA 92008

Attn: Michael O'Neill, Chief Financial Officer

Facsimile: 760-431-9083

E-Mail: moneill@alphatecspine.com

[Signatures Continue on Following Page]

Intellectual Property Security Agreement DC = 039759.000002 - 3413549

AGENT:

MIDCAP FINANCIAL, LLC

Name: Brett Robinson
Title: Managing Director

Address:

7255 Woodmont Avenue, Suite 200 Bethesda, Maryland 20814

Attn: Account Manager for Alphatec Transaction

Facsimile: 301-941-1450

[End of Signature Pages]

EXHIBIT A

Copyrights

None.

EXHIBIT B

Patents

See attached.

TITLE	APPLICATION NO.	PATENT OR PUB NO.	STATUS	CURRENT ASSIGNEE
INTERSPINOUS PROCESS SPACER APPARATUS AND METHODS OF USE	14184967	2015-0230835	PENDING	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD, CALIFORNIA 92008
SYSTEMS AND METHODS FOR CORRECTING SPINAL DEFORMITY	14331579	2016-0015427	PENDING	ALPHATEC SPINE, INC. CARLSBAD CA
EXPANDABLE INTERBODY SPACER	14336918	2016-0015529	PENDING	ALPHATEC SPINE, INC. CARLSBAD CA
SCREW ASSEMBLY WITH DEFORMABLE BUSHING	14713826	2015-0289907	PENDING	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD, CALIFORNIA 92008
APPARATUS AND METHOD FOR CONNECTING SURGICAL RODS	14798749	2015-0327890	PENDING	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD, CALIFORNIA 92008
INSTRUMENT AND METHOD FOR IN SITU ROD ADJUSTMENT	14068416	2014-0128930	PENDING	ALPHATEC SPINE, INC. CARLSBAD CA
SPINAL IMPLANTS AND INSERTION INSTRUMENTS	14634073	2015-0238327	PENDING	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD, CALIFORNIA 92008
INSTRUMENT FOR IMPLANTING IMPLANT DEVIVCE	14663508	2015-0265321	PENDING	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD, CALIFORNIA 92008
PUNCH INSTRUMENT	14673918	2015-0272650	PENDING	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD, CALIFORNIA 92008
SINGLE ACTION LOCKING PEDICLE SCREWDRIVER	14305254	2015-0359572	PENDING	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD, CALIFORNIA 92008
OSTEOTOMY INSTRUMENT	14877587	2016-0095634	PENDING	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD, CALIFORNIA 92008
PLATING SYSTEMS FOR BONE FIXATION	14715337	2015-0245855	PENDING	ALPHATEC SPINE, INC. CARLSBAD CA
SOFT TISSUE RETRACTOR WITH AUTO BLADE TOEING MECHANISM	US15/18270	WO 2015/134367	PUBLISHED	ALPHATEC SPINE INC
SPINAL DEFORMITY CORRECTION INSTRUMENTS AND METHODS	US1419591	WO 2014/134534	PUBLISHED	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD CA 92008
UNIPLANAR SCREW ASSEMBLY AND METHODS OF USE	US1433763	WO 2014/169189	PUBLISHED	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD CA 92008
BLADE ATTACHMENT AND ADJUSTMENT MECHANISM FOR TISSUE RETRACTION	US1450688	WO 2015/023651	PUBLISHED	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD CA 92008
INSTRUMENT AND METHOD FOR SPINAL COMPRESSION AND DISTRACTION	US1336806	WO 2013/158660	PUBLISHED	ALPHATEC SPINE, INC. 5818 EL CAMINO REAL CARLSBAD CA 92008

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EXHIBIT C

Trademarks

See attached.

EX	Н	IΒ	IT	D

Mask Works

None.

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RECORDED: 05/20/2016

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