PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5465609

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
SPINESMITH HOLDINGS, LLC	03/29/2019

RECEIVING PARTY DATA

Name:	BLUEARC MEZZANINE PARTNERS I, LP
Street Address:	ONE BUCKHEAD PLAZA SUITE 225
Internal Address:	3060 PEACHTREE ROAD
City:	ATLANTA
State/Country:	GEORGIA
Postal Code:	30305

PROPERTY NUMBERS Total: 52

Property Type	Number
Patent Number:	9254186
Patent Number:	9289310
Patent Number:	9358121
Patent Number:	7204810
Patent Number:	8622953
Patent Number:	9463069
Patent Number:	9033994
Patent Number:	9289553
Patent Number:	10137227
Patent Number:	9248027
Patent Number:	10058434
Patent Number:	8926699
Patent Number:	9623148
Patent Number:	8936766
Patent Number:	9456904
Patent Number:	9011684
Patent Number:	10086128
Patent Number:	D632801
Patent Number:	D660975

PATENT REEL: 048839 FRAME: 0655

505418818

Property Type	Number
Patent Number:	7354515
Patent Number:	7740760
Patent Number:	7803279
Patent Number:	8012351
Patent Number:	8696905
Patent Number:	D655814
Patent Number:	D663024
Patent Number:	D671208
Patent Number:	D671639
Patent Number:	8551068
Patent Number:	9907728
Patent Number:	9241810
Patent Number:	9295564
Patent Number:	9693873
Patent Number:	8273127
Patent Number:	8597353
Patent Number:	9161841
Patent Number:	10034764
Patent Number:	9913732
Patent Number:	9114023
Patent Number:	8795373
Patent Number:	10166115
Patent Number:	10035118
Patent Number:	8882813
Patent Number:	9622880
Patent Number:	9358255
Patent Number:	9375830
Patent Number:	10232096
Patent Number:	10183095
Application Number:	15147623
Application Number:	62724725
Application Number:	11684611
Application Number:	14942853

CORRESPONDENCE DATA

Fax Number: (816)531-7545

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: 816-460-2400

PATENT

REEL: 048839 FRAME: 0656

Email: trademarks.us@dentons.com

Correspondent Name: DENTONS US LLP Address Line 1: P.O. BOX 061080

Address Line 4: CHICAGO, ILLINOIS 60606-1080

ATTORNEY DOCKET NUMBER:	15259245.000002
NAME OF SUBMITTER:	BRIAN R. MCGINLEY
SIGNATURE:	/brm/
DATE SIGNED:	04/09/2019

Total Attachments: 11

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AMENDED AND RESTATED INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Amended and Restated Intellectual Property Security Agreement (this "<u>Agreement</u>") dated as of March 29, 2019 is between BLUEARC MEZZANINE PARTNERS I, LP, as agent for itself and the Lenders (together with its successors and assigns in such capacity, "<u>Agent</u>") and SPINESMITH HOLDINGS, LLC, a Delaware limited liability company ("<u>Grantor</u>").

RECITALS

- A. Grantor, the lenders which are now or which hereafter become a party thereto (collectively, "Lenders" and each a "Lender") and Agent are party to that certain Loan and Security Agreement dated as of March 15, 2017 (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"; capitalized terms used herein and not otherwise defined shall have the meanings ascribed to such terms in the Loan Agreement), pursuant to which Grantor has granted Agent, for the benefit of Agent and Lenders, a security interest in all of its right, title and interest, presently existing or later acquired to all of the Collateral.
- B. Grantor and Agent are party to that certain Intellectual Property Security Agreement dated as of March 15, 2017 (as amended prior to the date hereof, the "Original Intellectual Property Security Agreement").
- C. Pursuant to that certain Second Amendment to Loan and Security Agreement dated as of the date hereof (the "Second Amendment") among Grantor, Agent and Lenders, the parties have agreed to amend the Loan Agreement on the terms and conditions set forth therein.
- D. In order to induce Agent and Lenders to enter into the Second Amendment and consummate the financial accommodations and other transactions described therein, Grantor has agreed to ratify and reaffirm the grant to Agent, for its benefit and the benefit of Lenders, of the continuing security interest in and to all of Grantor's Intellectual Property Collateral (as defined in the Original Intellectual Property Security Agreement).

AGREEMENT

Grantor hereby (a) ratifies, restates, and confirms the continuing security interest granted in favor of the Agent, for the benefit of Agent and Lenders, pursuant to the Original Intellectual Property Security Agreement and (b) grants to Agent, for the benefit of Agent and Lenders, to secure the Obligations, a continuing security interest in all of Grantor's right, title, and interest in and to all of Grantor's Copyrights, Trademarks, Patents, and Mask Works and other intellectual property, whether now owned or hereafter acquired or arising and wherever located (the "Intellectual Property Collateral"), including the Intellectual Property Collateral set forth on Schedules A, B, C and D hereto, and all proceeds thereof (including without limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringement rights throughout the world and all reissues, divisions, continuations, renewals, extensions and continuations-in-part.

This security interest is granted in conjunction with the security interest granted under the Loan Agreement. Agent's rights and remedies in the security interest granted herein are in addition to those in the Loan Agreement and the other Loan Documents, and those available in law or equity. Agent's rights, powers and interests are cumulative with every right, power or remedy provided herein. Agent's exercise of its rights, powers or remedies pursuant to this Agreement, the Loan Agreement or any other Loan

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Document, does not preclude the simultaneous or later exercise of any or all other right, power or remedy provided herein or therein.

This Agreement shall be construed in accordance with and governed by the laws of the State of Delaware, without regard to the conflict of laws principles thereof, except to the extent that the validity or perfection of the security interest hereunder, or remedies hereunder, in respect of any particular Intellectual Property Collateral are governed by the laws of a jurisdiction other than the State of Delaware.

This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such separate counterparts shall together constitute but one and the same instrument. In proving this Agreement in any judicial proceedings, it shall not be necessary to produce or account for more than one such counterpart signed by the party against whom such enforcement is sought. Any signatures delivered by a party by electronic transmission shall be deemed an original signature hereto.

This Agreement is an amendment and restatement of the Original Intellectual Property Security Agreement. This Agreement is in no way intended to constitute a novation of the Original Intellectual Property Security Agreement or the Obligations. Grantor hereby ratifies and reaffirms the grant of security contained in the Original Intellectual Property Security Agreement and confirms that such liens and security interests secure and continue under this Agreement, to secure the payment in full of the Obligations under the Loan Agreement, and shall not in any event be terminated, extinguished or annulled, but shall hereafter be governed by this Agreement (including, without limitation, the schedules hereto) and the other Loan Documents. From and after the date hereof, the provisions of this Agreement shall prevail in the event of any conflict or inconsistency between such provisions and those of the Original Intellectual Property Security Agreement.

[Remainder of page intentionally left blank.]

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IN WITNESS WHEREOF, the undersigned parties hereto have executed this Agreement by and through their duly authorized officers, as of the day and year first above written.

GRANTOR:

SPINESMITH-HOLDINGS, LLA

By:

Name: Kevin Dunworth

Title: Chief Executive Officer

AGENT:

BLUEARC MEZZANINE PARTNERS I, LP. as

Agent

By: BlueArc Mezzanine GP, LLC,

its General Partner

By;

Name: O. Scott Barfield

Title: Manager

IN WITNESS WHEREOF, the undersigned parties hereto have executed this Agreement by and through their duly authorized officers, as of the day and year first above written.

GRANTOR:

SPINESMITH HOLDINGS, LI

By:
Name: Kevin Dunworth
Title: Chief Executive Officer

AGENT:

BLUEARC MEZZANINE PARTNERS I, LP, as Agent

By: BlueArc Mezzanine GP, LLC, its General Partner

Name: O. Scott Barfield

Title: Manager

EXHIBIT A

Copyrights

Registration/Application
Description Number

Registration/Application Date

None

EXHIBIT B

Patents

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COUNTRY	REFERENCE #	TYPE	FILED	SERIAL#	issued	PATENT #	STATUS		
ANCHOR FOR BONE AND SOFT TISSUE									
UNITED STATES	50592-P038US	FOA	23 Oct 2013	14/961585	09 Feb 2016	9254186	ISSUED		
ARTIFICIAL DISC W	TH POST AND MODU	LAR COL	LAR						
UNITED STATES	50692-P003US	отн	10 Mar 2007	11/684610	22 Mar 2016	9289310	ISSUED		
ARTIFICIAL DISC WI	ARTIFICIAL DISC WITH UNIQUE ARTICULATING GEOMETRY AND ASSOCIATED								
UNITED STATES	50592-P002US	отн	10 Mar 2007	11/684608	67 Jun 2016	9368121	ISSUED		
AUTOGENOUS BON	E COLLECTION AND	DELIVER	Y SYSTEM						
UNITED STATES	50692-P058US	FCA	62 Jan 2003	10/335662	17 Apr 2007	7204810	ISSUED		
UNITED STATES	50692-P05801	CON	15 Apr 2007	11/735659	97 Jan 2014	8622953	ISSUED		
AUTOMATED DEVIC	E FOR POINT-OF-CAP	RE CELL	PROCESSIN	G					
UNITED STATES	60692-P038US	FCA	23 Oct 2013	14/061823			PUBLISHED		
AUTOMATED WORK	STATION FOR POINT	-OF-CA	RE CELL AN	o Biorodic	AL FLUID				
UNITED STATES	50592-P036US	FCA	23 Oct 2013	14/061597	11 Oct 2018	9463069	ISSUED		
BONE GRAFT DELIV	ERY DEVICE								
UNITED STATES	60592-P025US	FOA	01 Nov 2012	13/666701	19 May 2015	9033984	ISSUED		
BONE MARROW AS	PIRATION DEVICE								
UNITED STATES	50592-P040US	FCA	23 Oct 2013	14/061635	22 Mar 2016	9289553	ISSUED		
BONE MARROW AS	PIRATION DEVICE								
UNITED STATES	5059Z-P044US	FCA	09 Mar 2015	14/642296	27 Nov 2018	10137227	ISSUED		
CERVICAL IMPLANT	WITH EXTERIOR FAC	E PLAT	E						
UNITED STATES	50592-P032US	CIP	16 Oct 2013	14/066730	02 Feb 2016	9248027	KSUED		
COLLAPSIBLE TWO	-PIECE OLIF IMPLANT	Γ.							
UNITED STATES	50692-P045US	FCA	11 Mar 2015	14/845272	28 Aug 2018	10058434	ISSUED		
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÷	IND DRAIN AND SUBS				MC (HUU		2.12.1.		
UNITED STATES	50592-P054US	OTH	05 May 2016	15/147823			PUBLISHED		

Exhibit B to Intellectual Property Security Agreement $_{110561705 \backslash V\text{-}2}$

COUNTRY	REFERENCE #	TYPE	FILED	SERIAL #	ISSUED	PATENT#	STATUS		
COMPOSITE BONE GR	AFT KIT								
UNITED STATES	50592-P017US	FCA	28 Jan 2012	13/380694	05 Jan 2015	8926699	SSUED		
UNITED STATES	50592-P017P1	CIP	05 Jan 2015	14/599779	18 Apr 2017	9623148	ISSUED		
DEVICE AND METHOD FOR DELIVERING MECHANICALLY RELEASED CELLS FROM LIPOSUCTION ASPIRATES									
UNITED STATES	50592-P015US	FCA	04 Oct 2011	13/200819	20 Jan 2015	8936768	ISSUED		
FACET FIXATION DEVI	CE								
UNITED STATES	50592-P834US	FCA	23 Oct 2013	14/061570	04 Oct 2016	9458904	ISSUED		
FLUID CONCENTRATO	R WITH REMOVABLE	CART	RIDGE						
UNITED STATES	50592-P051US	отн	07 Mar 2011	13/041952	21 Apr 2015	9011684	ISSUED		
FLUID CONCENTRATO THEREOF	R, AUTOLOGOUS CO	NCEN	TRATED BO	DY FLUIDS, AND I	USES				
CHINA	50592-P049WOCN	DCA	20 Jun 2008	2008801017182	19 Nov 2014	2008801017182	ISSUED		
HONG KONG	50592-P049WOHK	CEQ	20 Jun 2008	11100326.2	02 Oct 2015	1145899	ISSUED		
UNITED STATES	5059Z-P049V/USC1	CON	02 Jul 2014	14/322735	02 Oct 2018	10086128	ISSUED		
FLUID CONCENTRATO	R			***************************************	••••		***************************************		
UNITED STATES	5059Z-D050US	OTH	22 May 2009	29/337513	15 Feb 2011	D632801	ISSUED		
EUROPEAN UNION (EUTM	5059Z-D050EP	CEQ	19 Nov 2009	001638321-0001	22 Jan 2010	001638321-0001	ISSUED		
JAPAN	50592-D0503P	CEO	24 Nov 2009	2009027359	23 Apr 2010	1388691	ISSUED		
UNITED STATES	50592-D050C1	CON	14 Feb 2011	29/385434	29 May 2012	D680975	ISSUED		
FLUID CONCENTRATO	R:								
UNITED STATES	50592-P048US	FCA	22 Feb 2005	11/083142	38 Apr 2008	7054515	ISSUED		
EUROPEAN PATENT CON	50592-P048VVOEP	DCA.	20 Apr 2005	08888823.7			PENDING		
UNITED STATES	\$0592-P048C1	MCO	31 Oct 2007	11/932128	22 Jun 2018	7740760	ISSUED		
UNITED STATES	50592-P048D1	VKQ	31 Oct 2007	11/932182	28 Sep 2010	7803279	ISSUED		
UNITED STATES	50592-P048Cl2	CON	17 Jun 2010	12/817734	06 Sep 2011	8012351	ISSUED		
UNITED STATES	50592-P048C3	CON	26 Aug 2011	13/219193	15 Apr 2014	8696905	ISSUED		
FLUID MANAGEMENT	CONNECTOR								
UNITED STATES	50592-D052US	отн	21 Aug 2009	29/316085	13 Mar 2012	D685814	ISSUED		
UNITED STATES	50592-D052D1	DIV	26 Jan 2012	29/411787	03 Jul 2012	D683024	ISSUED		
UNITED STATES	50592-D052D2	DIV	28 Jan 2012	29/411790	20 Nov 2912	D671208	ISSUED		
UNITED STATES	50592-005203	DIV	26 Jan 2012	29/411791	27 Nov 2012	D671639	ISSUED		

EXHIBIT B TO INTELLECTUAL PROPERTY SECURITY AGREEMENT $_{110561705\mbox{\scriptsize (V-2)}}$

COUNTRY	reference #	TYPE	FILED	SERIAL #	ISSUED	PATENT#	STATUS
FLUID MANAGEMENT CONNEC			·····				
FLUID MANAGEMENT	DEVICES AND METH	ops					
CHINA	50592-P947WOCN	DCA	21 Aug 2009	200980138840,1	09 Jul 2014	200980138840.1	ISSUED
JAPAN	50592-P047WOJP	DOA	21 Aug 2009	2011-523825	QS Sep 2014	5607623	ISSUED
UNITED STATES	5059Z-P047WOUS	DCA	21 Aug 2009	13/080135	98 Oct 2013	8551068	ISSUED
UNITED STATES	50592-P047WUSC1	OTH	20 Sep 2013	14/032489	96 Mar 2018	9907728	ISSUED
				. // **********************************			
FUSION DEVICE AND A	ASSOCIATED METHO	បទ					
UNITED STATES	50592-P014US	FCA	12 Jul 2011	13/135676	26 Jan 2016	9241810	ISSUED
FUSION METHODS US	ING AUTOLOGOUS S	TEM C	ELLS				
UNITED STATES	50592-P009US	NEW	22 Oct 2007	11/876749	29 Mar 2016	9295564	ISSUED
GRANULAR GRAFT HY	'DRATION AND DELI\	/ERY S	SYSTEM				
UNITED STATES	50592-P058V1	NEW	30 Áug 2018	52/724725			PENDING
IN WITEN BOOKING		(E5:17)	·				
IN VITRO PRODUCTION				2002 (000		0000000	(XA) (MM
UNITED STATES	50592-P024US	FCA	26 Aug 2012	13/594835	94 Jul 2017	9693873	ISSUED
INTERBODY FUSION D	EVICE AND ASSOCIA	TED N	TETHODS	·			
UNITED STATES	50592-P005US	OTH	06 Jun 2007	11/759219	25 Sep 2012	8273127	ISSUED
INTERBODY FUSION D	EVICE AND ASSOCIA	TED N	METHODS				
UNITED STATES	50592-P016US	отн	54 Oct 2011	13/200911	03 Dec 2013	8597353	ISSUED
INTERBODY FUSION D	EVICE AND ASSOCIA	TEU 8	IETHONS				
UNITED STATES	50692-P023US	OTH	***************************************	14/020374	20 Oct 2015	9161841	ISSUED
						=-0.004	
METHODS	EASTER THE TEN	~ (#) <u>C.</u> (MOD MODULINIEL			
UNITED STATES	50592-P019US	FCA	27 Apr 2012	13/506566	31 Jul 2018	10034764	ISSUED
INTERBODY FUSION D LATERAL APPROACH				OMPONENT FOR			
UNITED STATES	5059Z-P021US	FCA	02 Nov 2012	13/668037	13 Mar 2018	9913732	ISSUED
INTERBODY FUSION D	EVICE WITH SNAP O	N ANT	ERIOR PLAT	E AND ASSOCIAT	ED		
UNITED STATES	50592-P020US	CIP	27 Apr 2012	13/509585	25 Aug 2015	9114023	ISSUED
INTERBODY FUSION D	EVICE, INTEGRAL RE	TENT	ION DEVICE,	AND ASSOCIATE	D.		
UNITED STATES	5059Z-P051US	FCA	23 Jan 2008	12/018703	08 Aug 2014	8795373	ISSUED

COUNTRY	REFERENCE #	TYPE	FILED	SERIAL#	ISSUED	PATENT #	STATUS		
INTERBODY FUSION DEVICE									
UNITED STATES	50592-P033US	CIP	16 Oct 2013	14/055736	01 Jan 2019	10186115	ISSUED		
LIPOASPIRATE ST	JPOASPIRATE STEM CELL SEPARATION SYSTEM AND METHODS THEREOF								
UNITED STATES	50592-P018US	FCÁ	30 Apr 2012	13/506590	31 Jul 2018	10008118	ISSUED		
LOCKING MECHAN	ISMS AND ASSOCIAT	ED METH	ops						
UNITED STATES	50592-P007US	FCA	07 Mar 2008	12/044188	11 Nov 2014	8882813	ISSUED		
MESENCHYMAL CE REPLACEMENT	ELL-BASED SOFT FUS	IION AS A	BIOLOGICA	L INTERVERT	EBRAL DISC				
UNITED STATES	50592-P037US	FCA	23 Oct 2013	14/061617	18 Apr 2017	9622880	ISSUED		
METHODS AND DE THERAPY	VICES FOR OBTAININ	IG AND PI	ROVIDING C	OMBINATION (CELL				
UNITED STATES	50592-P028US	FCA	08 Oct 2013	14/049026	07 Jun 2016	9368255	ISSUED		
SCREW RETENTIO	N MECHANISM FOR S	CREW DE	UVERS						
UNITED STATES	50592-P041US	FOA	15 Mer 2014	14/214845	28 Jun 2016	9375830	ISSUED		
SURGICAL IMPLAN	T SECURED BY PEGS	S AND AS	SOCIATED N	METHODS					
UNITED STATES	50592-P004US	OTH	10 Mar 2007	11/684611			ALLOWED		
SYSTEM AND MET	OD OF TREATMENT	OF BONE	LESIONS						
UNITED STATES	50592-P053US	ОТН	16 Nov 2015	14/942853			PUBLISHED		
TISSUE COLLECTI	ON AND DIVERTIBLE	SUCTION	VALVE						
UNITED STATES	50592-P055US	отн	05 May 2016	16/147603	19 Mar 2019	19232096	ISSUED		
TREATMENT OF SKELETAL VOIDS WITH IMPLANTABLE SUBSTRATE HYDRATED WITH BONE MARROW CONCENTRATE									
	ONCENTRATE								
, , , , , , , , , , , , , , , , , , , ,	E0592-P048US	OTH	23 Oct 2015	14/921826	22 Jan 2019	10183095	IESUED		

EXHIBIT C

Trademarks

COUNTRY	reference #	F8.E0 APPUCATION #	REGISTERED REGISTRATION #	status Classes
CELLING				
UNITED STATES	50592/K091US	25 Feb 2009 77/678216	10 Jul 2012 4171994	REGISTERED 044
CELLING TECHNO	LOGIES			
UNITED STATES	50592/K003US	25 Feb 2009 77/878190	02 Nov 2010 3871106	REGISTERED 044
CIMPLICITY				
UNITED STATES	50592/K004US	03 Jun 2008 77/486283	23 Jun 2015 4760458	REGISTERED 010
UNITED STATES	50892/K098U\$	27 Jun 2007 77/216762	16 Jul 2013 4368746	REGISTERED 010
DISCTORATION				
UNITED STATES	56592/K010US	22 Jan 2813 85/928887	16 Aug 2016 6022797	REGISTERED 044
FUSIONARY				
UNITED STATES	50592/K014US	09 Oct 2007 77/289690	12 Jan 2010 3737480	REGISTERED 044
SOLUMIV				
UNITED STATES	50592/K007US	22 Jan 2013 85/828832	09 Dec 2014 4653453	REGISTERED 010
SPINE SMITH (and	Design)			
UNITED STATES	50592/K012US	12 0d 2005 78/731817	19 Sep 2006 3145269	REGISTERED 010
SPINESMITH				
UNITED STATES	50592/K011US	17 Sep 2012 85/730884	07 May 2013 4332016	REGISTERED 010
VISUALIF				
UNITED STATES	50592/K013US	G€ Nov 2009 77/867378	87 Dec 2019 3887762	REGISTERED 010

EXHIBIT D

Mask Works

Registration/Application
Description Number

Registration/Application Date

None

EXHIBIT D TO INTELLECTUAL PROPERTY SECURITY AGREEMENT $_{110561705\mbox{\scriptsize ,}V-2}$

RECORDED: 04/09/2019