

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4741558

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
CENTINEL SPINE, LLC	12/19/2017

RECEIVING PARTY DATA

Name:	ATHYRIUM OPPORTUNITIES III ACQUISITION LP
Street Address:	530 FIFTH AVENUE, FLOOR 25
Internal Address:	C/O ATHYRIUM CAPITAL MANAGEMENT, LP
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10036

PROPERTY NUMBERS Total: 68

Property Type	Number
Application Number:	61259391
Application Number:	12941289
Application Number:	14754919
Application Number:	15296429
Application Number:	61259471
Application Number:	12941190
Application Number:	14524924
Application Number:	61259401
Application Number:	12941193
Application Number:	14551858
Application Number:	14870437
Application Number:	61259605
Application Number:	12941213
Application Number:	14798352
Application Number:	11938476
Application Number:	14282315
Application Number:	60798895
Application Number:	11746329
Application Number:	14022354

PATENT

Property Type	Number
Application Number:	61793847
Application Number:	14215718
Application Number:	15428601
Application Number:	62145161
Application Number:	15094868
Application Number:	62525071
Application Number:	10947661
Application Number:	11575790
Application Number:	14643287
Application Number:	15182163
Application Number:	12375071
Application Number:	10018402
Application Number:	10998951
Application Number:	11185781
Application Number:	11766182
Application Number:	13777076
Application Number:	14605055
Application Number:	90009542
Application Number:	90010655
Application Number:	11669273
Application Number:	13347461
Application Number:	14063389
Application Number:	14793130
Application Number:	10318078
Application Number:	15433029
Application Number:	13081541
Application Number:	14470992
Application Number:	15098897
Application Number:	12757443
Application Number:	11337388
Application Number:	10947660
Application Number:	10070823
Application Number:	13960104
Application Number:	11512327
Application Number:	11743992
Application Number:	11744013
Application Number:	14151932
Application Number:	10423879

Property Type	Number
Application Number:	12878101
Application Number:	10622535
Application Number:	14995389
Application Number:	15642463
Application Number:	13679486
Application Number:	12375710
PCT Number:	US2010055825
PCT Number:	US2010055822
PCT Number:	US2010055811
PCT Number:	US2014030251
PCT Number:	US2016026806

CORRESPONDENCE DATA

Fax Number: (704)339-5800
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: 7043311000
Email: damionnenobles@mvalaw.com
Correspondent Name: MOORE & VAN ALLEN PLLC
Address Line 1: 3015 CARRINGTON MILL BLVD., SUITE 400
Address Line 2: POST OFFICE BOX 13706
Address Line 4: RESEARCH TRIANGLE PA, NORTH CAROLINA 27709

ATTORNEY DOCKET NUMBER:	036251-000042 SEC INT
NAME OF SUBMITTER:	PETER B. STEWART
SIGNATURE:	/Peter B. Stewart/
DATE SIGNED:	12/19/2017

Total Attachments: 5
source=Executed-IP-Notice-Patent-Centinel-Spine#page1.tif
source=Executed-IP-Notice-Patent-Centinel-Spine#page2.tif
source=Executed-IP-Notice-Patent-Centinel-Spine#page3.tif
source=Executed-IP-Notice-Patent-Centinel-Spine#page4.tif
source=Executed-IP-Notice-Patent-Centinel-Spine#page5.tif

NOTICE
OF
GRANT OF SECURITY INTEREST
IN
PATENTS

United States Patent and Trademark Office

Ladies and Gentlemen:

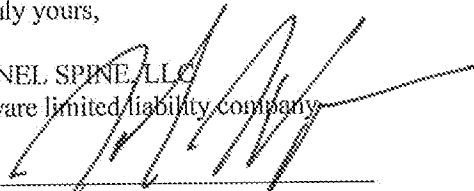
Please be advised that pursuant to the Security Agreement dated as of December 19, 2017 (as the same may be amended, modified, restated or supplemented from time to time, the "Security Agreement") by and among the Grantors party thereto (each a "Grantor" and collectively, the "Grantors") and Athyrium Opportunities III Acquisition LP, as Administrative Agent (the "Administrative Agent") for the Secured Parties referenced therein, the undersigned Grantor has granted a continuing security interest in and continuing lien upon, the patents, patent licenses and patent applications set forth on Schedule 1 attached hereto to the Administrative Agent for the ratable benefit of the Secured Parties.

The undersigned Grantor and the Administrative Agent, on behalf of the Secured Parties, hereby acknowledge and agree that the security interest in the patents, patent licenses and patent applications set forth on Schedule 1 attached hereto (i) may only be terminated in accordance with the terms of the Security Agreement and (ii) is not to be construed as an assignment of any patent, patent license or patent application.

[Signature pages follow]

Very truly yours,

CENTINEL SPINE, LLC
a Delaware limited liability company

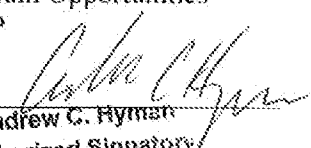
By: 
Name: John J. Viscogliosi
Title: Chief Executive Officer

Acknowledged and Accepted:

ATHYRIUM OPPORTUNITIES III ACQUISITION LP,
a Delaware limited partnership, as Administrative Agent

By: ATHYRIUM OPPORTUNITIES
ASSOCIATES III LP, its General Partner

By: ATHYRIUM OPPORTUNITIES
ASSOCIATES III GP LLC, the General
Partner of Athyrium Opportunities
Associates III LP

By: 
Name: Andrew C. Hyman
Title: Authorized Signatory

Schedule 1
Centinel Spine
U.S. Patents

Territory / Type	Application Number	Filing Date	Patent Number
U.S.	61/259,391	11/9/009	n/a
U.S.	12/941,289	11/8/2010	9,066,815
U.S.	14/754,919	6/30/2015	9,468,534
U.S.	15/296,429	10/18/2016	
PCT	PCT/US2010/055825	11/8/2010	n/a
U.S.	61/259,471	11/9/2009	n/a
U.S.	12/941,190	11/8/2010	8,870,961
U.S.	14/524,924	10/27/2014	
PCT	PCT/US2010/055822	11/8/2010	n/a
U.S.	61/259,401	11/9/2009	n/a
U.S.	12/941,193	11/8/2010	8,894,708
U.S.	14/551,858	11/24/2014	9,233,010
U.S.	14/870,437	9/30/2015	
PCT	PCT/US2010/055811	11/8/2010	n/a
U.S.	61/259,605	11/9/2009	n/a
U.S.	12/941,213	11/8/2010	9,078,701
U.S.	14/798,352	7/13/2015	9,592,081
U.S.	11/938,476	11/12/2007	8,728,165
U.S.	14/282,315	5/20/2014	
U.S.	60/798,895	5/9/2006	n/a
U.S.	11/746,329	5/9/2007	8,529,626
U.S.	14/022,354	9/10/2013	
U.S.	61/793,847	3/15/2013	n/a
U.S.	14/215,718	3/17/2014	9,566,166
U.S.	15/428,601	2/9/2017	
PCT	PCT/US2014/030251	3/17/2014	n/a
U.S.	62/145,161	4/9/2015	n/a
U.S.	15/094,868	4/8/2016	
PCT	PCT/US2016/026806	4/8/2016	
U.S.	62/525,071		n/a
US	10/947,661	9/23/2004	7,763,024
US	11/575,790	11/17/2008	9,216,024
US	14/643,287	3/10/2015	9,387,086
US	15/182,163	6/14/2016	
US	12/375,071	11/20/2009	8,998,990
US	10/018,402	6/12/2002	6,936,071
US	10/998,951	11/30/2004	8,506,634
US	11/185,781	7/21/2005	8,974,530
US	11/766,182	6/21/2007	8,795,371
US	13/777,076	2/26/2013	8,882,839
US	14/605,055	1/26/2015	9,526,624
US	90/009,542	7/24/2009	

Territory / Type	Application Number	Filing Date	Patent Number
US	90/010,655	8/24/2009	
US	11/669,273	1/31/2007	8,105,381
US	13/347,461	1/10/2012	8,579,978
US	14/063,389	10/25/2013	9,084,682
US	14/793,130	7/7/2015	9,585,763
US	10/318,078	12/13/2002	7,204,852
US	15/433,029	2/15/2017	
US	13/081,541	4/7/2011	9,301,853
US	14/470,992	8/28/2014	9,333,088
US	15/098,897	4/14/2016	
US	12/757,443	4/9/2010	8,858,636
US	11/337,388	1/23/2006	7,867,279
US	10/947,660	9/23/2004	7,547,309
US	10/070,823	7/15/2002	7,118,580
US	13/960,104	8/6/2013	8,876,836
US	11/512,327	8/30/2006	8,535,326
US	11/743,992	5/3/2007	8,419,742
US	11/744,013	5/3/2007	8,663,229
US	14/151,932	1/10/2014	
US	10/423,879	4/28/2003	7,491,204
US	12/878,101	9/9/2010	8,349,017
US	10/622,535	7/21/2003	7,803,162
US	14/995,389	1/14/2016	9,717,511
US	15/642,463	7/06/2017	
US	13/679,486	11/16/2012	9,254,139
US	12/375,710	10/2/2009	8,337,500