IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Matthew Curran et al. Art Unit: 3733

Serial No.: 13/079,645 Examiner: STUART SAMUEL BRAY

Filed : April 4, 2011 Conf. No. : 1151 Title : SYSTEMS AND METHODS FOR SPINAL FUSION

Mail Stop Amendment

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

RESPONSE TO RESTRICTION REQUIREMENT

In response to the restriction requirement made in the action mailed March 21, 2012, Applicant notes that the Preliminary Amendment filed on March 20, 2012 cancels all of the identified claim groups (claims 1-13 and claims 14-26). As such, none of the identified claim groups can be elected for examination on the merits. As shown in the March 20, 2012 Preliminary Amendment, the single claim group of claims 27-54 is currently pending.

Regarding the species restriction, Applicant elects identified Species A (Figures 1-9 and 18-21) is elected for examination. The election is made without traverse. Currently, all pending claims 27-54 read on the elected Species A.

The Applicant respectfully requests prompt consideration and a Notice of Allowance. In the event that no Notice of Allowance will be provided in the next communication,

Applicant requests that the Examiner telephone the undersigned attorney (612-337-2569) prior to the next communication so that prosecution on the merits may be expedited.

Please apply any necessary charges or credits to Deposit Account No. 06-1050, referencing the above attorney docket number.

Customer Number 26191 Fish & Richardson P.C. Telephone: (612) 335-5070

Facsimile: (877) 769-7945 60759700.doc

Electronic Acknowledgement Receipt					
EFS ID:	12364795				
Application Number:	13079645				
International Application Number:					
Confirmation Number:	1151				
Title of Invention:	System and Methods for Spinal Fusion				
First Named Inventor/Applicant Name:	Matthew Curran				
Customer Number:	30328				
Filer:	Michael T. Hawkins/Jodi Budge				
Filer Authorized By:	Michael T. Hawkins				
Attorney Docket Number:	104US2				
Receipt Date:	22-MAR-2012				
Filing Date:	04-APR-2011				
Time Stamp:	10:20:40				
Application Type:	Utility under 35 USC 111(a)				

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Response to Election / Restriction Filed	ResponseRR.pdf	71218	no	1
·	response to Election, restriction ricu	• •	bda2017cf19373e0d2c1c0028969a23cca93 1d89		

Warnings:

Information:

117

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/079,645	04/04/2011	Matthew Curran	104US2	1151
30328 NuVasive	7590 03/23/201	2	EXAM	IINER
c/o CPA Globa			BRAY, STUA	RT SAMUEL
P.O. Box 52050 Minneapolis, M	-		ART UNIT	PAPER NUMBER
•			3733	
			MAIL DATE	DELIVERY MODE
			03/23/2012	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Applicant-Initiated Interview Summary	13/079,645		
	Examiner	Art Unit	
	STUART S. BRAY	3733	
All participants (applicant, applicant's representative, PTO	personnel):		
(1) <u>STUART S. BRAY</u> .	(3) Michael Hawkins.		
(2)	(4)		
Date of Interview: 21 March 2012.			
Type:	applicant's representative]		
Exhibit shown or demonstration conducted:	⊠ No.		
Issues Discussed			
Claim(s) discussed:			
Identification of prior art discussed: <u>N/A</u> .			
Substance of Interview (For each issue discussed, provide a detailed description and indicate if agreemen reference or a portion thereof, claim interpretation, proposed amendments, argum		dentification or clarific	eation of a
Atty Hawkins called to discuss the preliminary amendment a restriction on the prior set of claims was mailed. The exanoting that the new claim set has only one independent claim respond to the species election and whether all the new claims.	miner suggested to respond to im. The Examiner also sugges	the pending res sted that the App	<u>triction</u>
Applicant recordation instructions: The formal written reply to the last 0 section 713.04). If a reply to the last 0 ffice action has already been filed, a thirty days from this interview date, or the mailing date of this interview surinterview	applicant is given a non-extendable pe	riod of the longer of o	one month or
Examiner recordation instructions : Examiners must summarize the subthe substance of an interview should include the items listed in MPEP 713 general thrust of each argument or issue discussed, a general indication of general results or outcome of the interview, to include an indication as to we	.04 for complete and proper recordation of any other pertinent matters discusse	on including the ident d regarding patentab	tification of the bility and the
Attachment			
/STUART S BRAY/ Examiner, Art Unit 3733			

Application No.

Applicant(s)

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by
 attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does
 not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner.
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
 - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

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		DISCLOSU Y APPLIC <i>A</i>		Application Number	13/079,645
SIAI	CIVICIAI D	OT AFFLICE	414 1	Filing Date	April 4, 2011
				First Named Inventor	Matthew Curran
				Art Unit	3733
				Examiner Name	Stuart Samuel Bray
(U	se as many shee	ets as necessary)			
Sheet	1	of	8	Attorney Docket No: 10	94US2

US PATENT DOCUMENTS						
Examiner Initial *	itial * No			Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		2002/0058950	May 16, 2002	Winterbottom, et al.		
		2003/0105528	Jun 5, 2003	Shimp, et al.		
		3,486,505	Dec 30, 1969	Morrison, Gordon M.		
		3,518,993	Jul 7, 1970	Blake, Lawrence W.		
		3,604,487	Sep 14, 1971	Gilbert, Richard S.		
		3,745,995	Jul 17, 1973	Kraus		
		3,848,601	Nov 19, 1974	Ma, et al.		
		3,867,728	Feb 25, 1975	Stubstad, et al.		
		4,026,304	May 31, 1971	Levy		
		4,026,305	May 31, 1971	Brownlee, et al.		
		4,454,374	Oct 8, 1985	Jacobson		
		4,501,269	Feb 26, 1985	Bagby		
		4,646,738	Mar 3, 1987	Trott, Arthur F.		
		4,657,550	Apr 14, 1987	Daher		
		4,743,256	May 10, 1988	Brantigan		
		4,781,591	Nov 1, 1988	Allen		
		4,834,757	May 30, 1989	Brantigan		
		4,877,020	Oct 31, 1989	Vich		
		4,878,915	Nov 7, 1989	Brantigan		
		4,932,975	Jun 12, 1990	Main, et al.		
		4,950,296	Aug 21, 1990	McIntyre, J. L.		
		4,961,740	Oct 9, 1990	Ray, et al.		
		4,962,766	Oct 16, 1990	Herzon, G.D.		
		5,015,247	May 14, 1991	Michelson		
		5,026,373	Jun 25, 1991	Ray, et al.		
		5,047,055	Sep 10, 1991	Bao et al.		
		5,055,104	Oct 8, 1991	Ray		
		5,062,845	Nov 5, 1991	Kuslich, et al.		
		5,071,437	Dec 10, 1991	Steffee		
		5,092,572	Mar 3, 1992	Litwak, et al.		
		5,133,717	Jul 28, 1992	Chopin		
		5,133,755	Jul 28, 1992	Brekke		
		5,171,278	Dec 15, 1992	Pisharodi		
		5,192,327	Mar 9, 1993	Brantigan, John W.		
		5,217,497	Jun 8, 1993	Mehdian		
		5,263,953	Nov 23, 1993	Bagby		
		5,269,785	Dec 14, 1993	Bonutti		

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		DIGG! 00!			Complete if Known
		DISCLOSU Y APPLIC <i>A</i>		Application Number	13/079,645
SIAI	CIVICIAI D	T AFFLICE	AIN I	Filing Date	April 4, 2011
				First Named Inventor	Matthew Curran
				Art Unit	3733
				Examiner Name	Stuart Samuel Bray
(U	se as many shee	ts as necessary)			
Sheet 2 of 8				Attorney Docket No: 10	94US2

US PATENT DOCUMENTS						
Examiner Initial *	Cite No	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		5,284,153	Feb 8, 1994	Raymond, S.A., et al.		
		5,290,494	Mar 1, 1994	Coombes, et al.		
		5,300,076	May 5, 1994	Lerich		
		5,304,210	Apr 19, 1994	Crook		
		5,306,307	Apr 26, 1994	Senter, et al.		
		5,306,309	Apr 26, 1994	Wagner, et al.		
		5,322,505	Jun 21, 1994	Krause, Kenneth W., et al.		
		5,334,205	Aug 2, 1994	Cain		
		5,336,223	Aug 9, 1994	Rogers		
		5,364,400	Nov 15, 1994	Rego, Jr., et al.		
		5,395,372	Mar 7, 1995	Holt, et al.		
		5,397,363	Mar 14, 1995	Gelbard		
		5,397,364	Mar 14, 1995	Kozak		
		5,405,391	Apr 11, 1995	Henderson, et al.		
		5,413,602	May 9, 1995	Metz-Stavenhagen		
		5,425,772	Jun 20, 1995	Brantigan		
		5,431,658	Jul 11, 1995	Moskovich		
		5,443,514	Aug 22, 1995	Steffee		
		5,443,515	Aug 22, 1995	Cohen, et al.		
		5,445,639	Aug 29, 1995	Kuslich, et al.		
		5,454,811	Oct 3, 1995	Huebner		
		5,458,638	Oct 17, 1995	Kuslich, et al.		
		5,484,403	Jan 16, 1996	Yoakum, et al.		
		5,484,437	Jan 16, 1996	Michelson, Gary K.		
		5,489,307	Feb 6, 1996	Kuslich, et al.		
		5,489,308	Feb 6, 1996	Kuslich, et al.		
		5,514,180	May 7, 1996	Heggeness, M.H., et al.		
		5,522,879	Jun 4, 1996	Scopelianos		
		5,522,899	Jun 4, 1996	Michelson		
		5,524,624	Jun 11, 1996	Tepper, et al.		
		5,527,312	Jun 18, 1996	Ray		
		5,534,030	Jul 9, 1996	Navarro, et al.		
		5,540,688	Jul 30, 1996	Navas, Fernand		
		5,545,222	Aug 13,1996	Bonutti		
		5,562,736	Oct 8, 1996	Ray, et al.		
		5,565,005	Oct. 15, 1996	Erickson, et al.		
		5,571,190	Nov 5, 1996	Ulrich		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/079,645
				Filing Date	April 4, 2011
				First Named Inventor	Matthew Curran
				Art Unit	3733
				Examiner Name	Stuart Samuel Bray
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Sheet	Sheet 3 of 8			Attorney Docket No: 10	4US2

US PATENT DOCUMENTS						
Examiner Initial *	Cite No	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		5,571,192	Nov 5, 1996	Schonhoffer	-	
		5,593,409	Jan 14, 1997	Michelson, G. K.		
		5,609,636	Mar 11, 1997	Kohrs, et al.		
		5,611,800	Mar 18, 1997	Davis, et al.		
		5,611,810	Mar 18, 1997	Arnold, et al.		
		5,632,747	May 27, 1997	Scarborough, et al.		
		5,645,598	Jul 8, 1997	Brosnahan, et al.		
		5,653,761	Aug 5, 1997	Pisharodi		
		5,653,762	Aug 5, 1997	Pisharodi		
		5,658,336	Aug 19, 1997	Pisdharodi		
		5,658,337	Aug 19, 1997	Kohrs, et al.		
		5,662,710	Sep 2, 1997	Bonutti		
		5,665,122	Sep 9, 1997	Kambin, Parviz		
		5,669,909	Sep 23, 1997	Zdeblick, et al.		
		5,676,703	Oct 14, 1997	Gelbard		
		5,683,394	Nov 4, 1997	Rinner		
		5,683,400	Nov 4, 1997	McGuire, David A.		
		5,683,464	Nov 4, 1997	Wagner, et al.		
		5,690,629	Nov 25, 1997	Asher, et al.		
		5,700,264	Dec 23, 1997	Zucherman, et al.		
		5,700,291	Dec 23, 1997	Kuslich, et al.		
		5,700,292	Dec 23, 1997	Marguiles		
		5,702,449	Dec 30, 1997	McKay, W. F.		
		5,702,451	Dec 30, 1997	Biedermann, et al.		
		5,702,453	Dec 30, 1997	Rabbe, et al.		
		5,702,454	Dec 30, 1997	Baumgartner		
		5,702,455	Dec 30, 1997	Saggar, R.		
		5,703,451	Dec 30, 1997	Yamamichi, et al.		
		5,707,373	Jan 13, 1998	Sevrain, et al.		
		5,711,957	Jan 27, 1998	Patat, et al.		
		5,716,415	Feb 10, 1998	Steffee		
		5,720,748	Feb 24, 1998	Kuslich, et al.		
		5,720,751	Feb 24, 1998	Jackson		
		5,728,159	Mar 17, 1998	Stroever, B. W., et al.		
		5,741,253	Apr 21, 1998	Michelson, Gary K.		
		5,741,261	Apr 21, 1998	Moskovitz, et al.		
		5,755,797	May 26, 1998	Baumgartner		

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		DISCLOSU		Application Number	13/079,645
STATEMENT BY APPLICANT				Filing Date	April 4, 2011
				First Named Inventor	Matthew Curran
				Art Unit	3733
				Examiner Name	Stuart Samuel Bray
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Sheet	Sheet 4 of 8			Attorney Docket No: 10	4US2

US PATENT DOCUMENTS						
Examiner Initial *	Cite No	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		5,766,252	Jun 16, 1998	Henry, et al.		
		5,772,661	Jun 30, 1998	Michelson		
		5,775,331	Jul 7, 1998	Raymond, S. A., et al.		
		5,779,642	Jul 14, 1998	Nightengale, Christopher		
		5,782,830	Jul 21, 1998	Farris, Robert A.		
		5,782,919	Jul 21, 1998	Zdeblick, et al.		
		5,785,710	Jul 28, 1998	Michelson		
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		5,800,549	Sep 1, 1998	Bao, et al.		
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		5,851,208	Dec 22, 1998	Trott		
		5,860,973	Oct 30, 1996	Michelson, Gary K.		
		5,865,845	Feb 2, 1999	Thalgott, John S.		
		5,865,848	Feb 2, 1999	Baker		
		5,885,299	Mar 23, 1999	Winslow, et al.		
		5,888,219	Mar 30, 1999	Bonutti		
		5,888,224	Mar 30, 1999	Beckers et al.		
		5,893,890	Apr 13, 1999	Pisharodi		
		5,904,719	May 18, 1999	Errico, et al.		
		5,910,315	Jun 8, 1999	Stevenson, et al.		
		5,954,769	Sep 21, 1999	Rosenlicht		
		5,968,098	Oct 19, 1999	Winslow		
		5,993,474	Nov 30, 1999	Ouchi, Teruo		
		6,004,326	Dec 21, 1999	Castro, et al.		
		6,008,433	Dec 28, 1999	Stone, K. R.		
		6,015,436	Jan 18, 2000	Schunhuffer		
		6,033,405	Mar 7, 2000	Winslow, et al.		
		6,039,761	Mar 21, 2000	Li, et al.		
		6,042,582	Mar 28, 2000	Ray		
		6,045,580	Apr 4, 2000	Scarborough, et al.		
		6,048,342	Apr 11, 2000	Zucherman, et al.		
		6,059,829	May 9, 2000	Schlapfer, F., et al.		
		6,063,088	May 16, 2000	Winslow		
		6,083,225	Jul 4, 2000	Winslow, et al.		
		6,096,080	Aug 1, 2000	Nicholson, et al.		
		6,102,948	Aug 15, 2000	Brosnahan, III		

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		I DISCLOSU BY APPLIC <i>A</i>		Application Number	13/079,645
SIAI	LIVILIA I D	OT AFFLICE	414 I	Filing Date	April 4, 2011
				First Named Inventor	Matthew Curran
				Art Unit	3733
				Examiner Name	Stuart Samuel Bray
(U.	(Use as many sheets as necessary)				
Sheet 5 of 8			8	Attorney Docket No: 10	94US2

	US PATENT DOCUMENTS						
Examiner Initial *	Cite No	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		6,120,503	Sep 19, 2000	Michelson, Gary K.			
		6,120,506	Sep 19, 2000	Kohrs, et al.			
		6,132,472	Oct 17, 2000	Bonutti			
		6,159,211	Dec 12, 2000	Boriani, Stefano, et al.			
		6,159,215	Dec 12, 2000	Urbahns, et al.			
		6,193,756	Feb 27, 2001	Studer, et al.			
		6,200,347	Mar 13, 2001	Anderson			
		6,224,607	May 1, 2001	Michelson, Gary K.			
		6,224,631	May 1, 2001	Kohrs			
		6,241,769	Jun 5, 2001	Nicholson, et al.			
		6,241,771	Jun 5, 2001	Gresser, et al.			
		6,251,140	Jun 26, 2001	Marino, et al.			
		6,258,125	Jul 10, 2001	Paul, et al.			
		6,277,149	Aug 21, 2001	Boyle, et al.			
		6,319,257	Nov 20, 2001	Carignan, et al.			
		6,371,989	Apr 16, 2001	Chauvin, et al.			
		6,383,221	May 7, 2002	Scarborough, N. L., et al.			
		6,409,766	Jun 25, 2002	Brett, D. C.			
		6,432,140	Aug 13, 2002	Lin, Chih-I			
		6,440,142	Aug 27, 2002	Ralph, et al.			
		6,442,814	Sep 3, 2002	Landry, et al.			
		6,454,806	Sep 24, 2002	Cohen, et al.			
		6,468,311	Oct 22, 2002	Boyd, L. M., et al.			
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		DISCLOSU		Application Number	13/079,645	
SIAI	STATEMENT BY APPLICANT			Filing Date	April 4, 2011	
				First Named Inventor	Matthew Curran	
				Art Unit	3733	
				Examiner Name	Stuart Samuel Bray	
(Us	(Use as many sheets as necessary)				,	
					17702	
Sheet	6	of	8	Attorney Docket No: 104US2		

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Examiner Initial *	Cite No	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
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Examiner Initials*	Cite No	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²		
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	for form 1449A		,		of midimation diffess it contains a valid ONE control number.	
					Complete if Known	
		DISCLOSU		Application Number	13/079,645	
SIAI	STATEMENT BY APPLICANT			Filing Date	April 4, 2011	
				First Named Inventor	Matthew Curran	
				Art Unit	3733	
				Examiner Name	Stuart Samuel Bray	
(Us	(Use as many sheets as necessary)					
	_				1222	
Sheet	7	of	8	Attorney Docket No: 104US2		

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Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²				
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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute	for form 1449A	/PTO			
					Complete if Known
INFORMATION DISCLOSURE				Application Number	13/079,645
STATEMENT BY APPLICANT				Filing Date	April 4, 2011
				First Named Inventor	Matthew Curran
				Art Unit	3733
				Examiner Name	Stuart Samuel Bray
(Use as many sheets as necessary)					•
Sheet 8 of 8			8	Attorney Docket No: 10)4US2

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Electronic Acknowledgement Receipt				
EFS ID:	12385629			
Application Number:	13079645			
International Application Number:				
Confirmation Number:	1151			
Title of Invention:	System and Methods for Spinal Fusion			
First Named Inventor/Applicant Name:	Matthew Curran			
Customer Number:	30328			
Filer:	Rory A. Schermerhorn/Marjorie Jarvis			
Filer Authorized By:	Rory A. Schermerhorn			
Attorney Docket Number:	104US2			
Receipt Date:	23-MAR-2012			
Filing Date:	04-APR-2011			
Time Stamp:	19:46:25			
Application Type:	Utility under 35 USC 111(a)			

Payment information:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	2012-03-23_IDS_Letter_140US 2.pdf	14637	no	1
			8b4ff		

Warnings:

Information:

130

2	Information Disclosure Statement (IDS)	2012-03-23_IDS_Form1449_10	98285	no	8	
2	Form (SB08)	4US2.pdf	7d45d92d75bce2af3c089155aa48f0ed45b 5bbc4			
Warnings:	Warnings:					
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

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If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Attorney Docket No. 104US2 Page 1 of 1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Matthew Curran et al. Art Unit: 3733

Serial No.: 13/079,645 Examiner: Stuart Samuel Bray

Filing Date: April 4, 2011 Conf. No: 1151
Title: SYSTEMS AND METHODS FOR SPINAL FUSION

Mail Stop Amendment Commissioner for Patents PO Box 1450 Alexandria VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Please consider the references listed on the enclosed PTO-1449 form. All other non-patent literature documents and foreign references cited herein were previously submitted to the USPTO in an information disclosure statement complying with paragraphs (a)-(c) of 37 CFR 1.98 in connection with US Patent Application 11/093,409 which this application relies on for an earlier filing date under 35 USC 120. As such, submission of copies of these non-patent literature and foreign references is not believed necessary, pursuant to 37 CFR 1.98(d). Cited U.S. patents, patent application publications, and the above referenced non-patent literature and foreign references will be provided upon request.

This statement is being filed before a first Office Action on the merits; accordingly, no fee or separate requirements are believed required. However, please apply any other charges or credits to Deposit Account 50-2040, referencing Attorney Docket No. 140US2.

Respectfully submitted,

Date: March 23, 2012 /Rory Schermerhorn/

Rory Schermerhorn, Esq. Registration No. 58,148

Customer Number 30,328 NuVasive c/o CPA Global P.O. Box 52050 Minneapolis, MN 55402

Telephone: (858) 909-1845



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APPLICATION NUMBER FILING OR 371(C) DATE FIRST NAMED APPLICANT ATTY. DOCKET NO./TITLE 13/079,645 04/04/2011 Matthew Curran 104US2

26191 FISH & RICHARDSON P.C. (TC) PO BOX 1022 **MINNEAPOLIS, MN 55440-1022**

CONFIRMATION NO. 1151 POA ACCEPTANCE LETTER



Date Mailed: 03/28/2012

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 03/21/2012.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/hgray/			
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Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Matthew Curran et al. Art Unit: 3733

Serial No.: 13/079,645 Examiner: STUART SAMUEL BRAY

Filed : April 4, 2011 Conf. No. : 1151 Title : SYSTEMS AND METHODS FOR SPINAL FUSION

MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

<u>INFORMATION DISCLOSURE STATEMENT</u>

Please consider the references listed on the enclosed PTO-1449 form. Non-patent literature is enclosed; cited U.S. patents and patent application publications will be provided on request.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office Action on the merits. Please apply any necessary charges or credits to Deposit Account 06-1050, referencing the above attorney docket number.

Respectfully submitted,

Date: March 29, 2012 /Michael T. Hawkins/

Michael T. Hawkins Reg. No. 57,867

Customer Number 26191 Fish & Richardson P.C.

Telephone: (612) 335-5070 Facsimile: (877) 769-7945

60761381.doc

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 13958-0099001	Application No. 13/079,645	
Information Disclosure Statement by Applicant		Applicant Matthew Curran et al.		
(Use several she	ets if necessary)	Filing Date	Group Art Unit	
(37 CFR §1.98(b))		April 4, 2011	3733	

	U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate	
	1	5,775,797	7/7/1998	Henstra				
	2	5,942,698	8/24/1999	Stevens				
	3	6,003,426	12/21/1999	Kobayashi et al.				
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Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or			Translation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes No

	Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig. ID	Document
	12	CoRoent TM Marketing Brochure (9004001 A.0), <u>NuVasive</u> , <u>Inc.</u> , 2004, 2 pages
	13	CoRoent TM Marketing Brochure (9004001 C.0), <u>NuVasive</u> , <u>Inc.</u> , 2005, 2 pages
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	17	CoRoent® XL Marketing Brochure (9500039 A.0), NuVasive, Inc., 2006, 8 pages

Examiner Signature	Date Considered
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Electronic Acknowledgement Receipt				
EFS ID:	12423102			
Application Number:	13079645			
International Application Number:				
Confirmation Number:	1151			
Title of Invention:	System and Methods for Spinal Fusion			
First Named Inventor/Applicant Name:	Matthew Curran			
Customer Number:	26191			
Filer:	Michael T. Hawkins/Beth Bauer			
Filer Authorized By:	Michael T. Hawkins			
Attorney Docket Number:	104US2			
Receipt Date:	29-MAR-2012			
Filing Date:	04-APR-2011			
Time Stamp:	13:56:16			
Application Type:	Utility under 35 USC 111(a)			

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS)	099ids.pdf	158717	no	,
1	Form (SB08)	0331a3.pa1	b1d4611fd8ccb6a4d6a113bacf76e25db15 590a6	110	

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			174434		
2	Non Patent Literature	BR1.pdf	6b46ba8d96b86b5e93c2c01fb90d561a53f	no	2
		I	ba4d1		
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3	Non Patent Literature	BR2.pdf	229290	no	2
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4	Non Patent Literature	BR3.pdf	e78ba2264a3af54101f3b8749a5f539d5810 f35f	no	2
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			349916		
5	Non Patent Literature	BR4.pdf	f3462467c8efbf4c1f74dc4898eb6aaff0783	no	2
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Warnings:					
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6	Non Patent Literature	BR5.pdf	2617599	no	2
		2.00, p.00	68899ba4b7826795ad283bdee02067c91ff e12ad		
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_			2195450		
7	Non Patent Literature	BR6.pdf	da8868d1130c5a0f7c322ce28adaf4c041dc	no	8
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Matthew Curran et al. Art Unit: 3733

Serial No.: 13/079,645 Examiner: STUART SAMUEL BRAY

Filed : April 4, 2011 Conf. No. : 1151 Title : SYSTEMS AND METHODS FOR SPINAL FUSION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Prior to examination, please amend the application as indicated on the following pages.

CERTIFICATE OF (A) MAILING BY FIRST CLASS MAIL OR (B) TRANSMISSION

I hereby certify under 37 CFR §1.8(a) that this correspondence is either (A) addressed as set out in 37 CFR §1.1(a) and being deposited with the United States Postal Service as first class mail with sufficient postage, or (B) being transmitted by facsimile in accordance with 37 CFR § 1.6(d) or via the Office electronic filing system in accordance with 37 CFR § 1.6(a)(4), on the date indicated below.

April 4, 2012

Date of Deposit or Transmission

/Anne Roy?

Signature

Anne ROy

Typed or Printed Name of Person Signing Certificate

Attorney's Docket No.: 13958-0099001 / 104US2 Applicant: Matthew Curran et al.

Serial No.: 13/079,645 Filed : April 4, 2011

Page : 2 of 16

Amendments to the Specification:

Please replace the paragraph beginning at page 4, line 13 with the following amended paragraph:

The spinal fusion implant of the present invention may be provided in any number of suitable shapes and sizes depending upon the particular surgical procedure or need. The spinal fusion implant of the present invention may be dimensioned for use in the cervical and/or lumbar spine without departing from the scope of the present invention. For lumbar fusion, the spinal fusion implant of the present invention may be dimensioned, by way of example only, having a width length-ranging between 9 and 18 mm, a height ranging between 8 and 16 mm, and a length width ranging between 25 and 45 mm. For cervical fusion, the spinal fusion implant of the present invention may be dimensioned, by way of example only, having a width length about 11 mm, a height ranging between 5 and 12 mm, and a length width about 14 mm.

Please replace the paragraph beginning at page 5, line 1 with the following amended paragraph:

The spinal fusion implant of the present invention may be provided with any number of additional features for promoting fusion, such as apertures extending between the upper and lower vertebral bodies which allow a boney bridge to form through the spinal fusion implant of the present invention. Such fusion-promoting apertures may be dimensioned to receive any number of suitable osteoinductive agents, including but not limited to bone morphogenic protein (BMP) and bio-resorbable polymers, including but not limited to any of a variety of poly (D,Llactide-co-glycolide) based polymers, such as disclosed in U.S. Patent No. 6,013,853. The spinal fusion implant of the present invention is preferably equipped with one or more lateral openings which aid it provides in visualization at the time of implantation and at subsequent clinical evaluations.

Please add the following new paragraph after the paragraph ending at page 5, line 19:

The spinal fusion implant of the present invention may be provided with any number of features for enhancing the visualization of the implant during and/or after implantation into a

Applicant: Matthew Curran et al.

Serial No.: 13/079,645 Filed: April 4, 2011 Page: 3 of 16

spinal target site. According to one aspect of the present invention, such visualization enhancement features may take the form of the spike elements used for anti-migration, which may be manufactured from any of a variety of suitable materials, including but not limited to a metal, ceramic, and/or polymer material, preferably having radiopaque characteristics. The spike elements may also take any of a variety of suitable shapes, including but not limited to a generally elongated element disposed within the implant such that the ends thereof extend generally perpendicularly from the upper and/or lower surfaces of the implant. The spike elements may each comprise a unitary element extending through upper and lower surfaces or, alternatively, each spike element may comprise a shorter element which only extends through a single surface (that is, does not extend through the entire height of the implant). In any event, when the spike elements are provided having radiodense characteristics and the implant is manufactured from a radiolucent material (such as, by way of example only, PEEK and/or PEKK), the spike elements will be readily observable under X-ray or fluoroscopy such that a surgeon may track the progress of the implant during implantation and/or the placement of the implant after implantation.

Please add the following new paragraphs after the paragraph ending at page 9, line 13:

Figures 18 and 19 are perspective and side views, respectively, illustrating the "enhanced visualization" feature of the present invention as employed within a lumbar fusion implant according to one embodiment of the present invention;

Figures 20 and 21 are perspective and side views, respectively, illustrating the "enhanced visualization" feature of the present invention as employed within a lumbar fusion implant according to one embodiment of the present invention; and

Figures 22 and 23 are perspective and side views, respectively, illustrating the "enhanced visualization" feature of the present invention as employed within a cervical fusion implant according to one embodiment of the present invention.

Serial No.: 13/079,645 Filed: April 4, 2011 Page: 4 of 16

Please replace the paragraph beginning at page 10, line 4 with the following amended paragraph:

FIG. 1 illustrates, by way of example only, a spinal fusion system 5 for performing spinal fusion between adjacent lumbar vertebrae, including an exemplary spinal fusion implant 10 and an exemplary insertion instrument 20 provided in accordance with the present invention. The spinal fusion implant 10 may be comprised of any suitable non-bone composition having suitable radiolucent characteristics, including but not limited to polymer compositions (e.g. poly-ether-ether-ketone (PEEK) and/or poly-ether-ketone-ketone (PEKK)) or any combination of PEEK and PEKK. The spinal fusion implant 10 of the present invention may be dimensioned, by way of example only, having a width length ranging between 9 and 18 mm, a height ranging between 8 and 16 mm, and a length width-ranging between 25 and 45 mm.

Please replace the paragraph beginning at page 10, line 14 with the following amended paragraph:

As will be described in detail below, the insertion instrument 20 is configured to releasably maintain the exemplary spinal fusion implant 10 in the proper orientation during insertion into a lumbar disc space and thereafter release to deposit the implant 10. The exemplary spinal fusion implant 10, having been deposited in the disc space, facilitates spinal fusion over time by maintaining a restored disc height as natural bone growth occurs through and/or past the implant 10, resulting in the formation of a boney bridge extending between the adjacent vertebral bodies. The implant 10 is particularly suited for introduction into the disc space via a lateral (trans-psoas) approach to the spine, but may be introduced in any of a variety of approaches, such as posterior, anterior, antero-lateral, and postero-lateral, without departing from the scope of the present invention (depending upon the sizing of the implant 10).

Please replace the paragraph beginning at page 10, line 22 with the following amended paragraph:

The spinal fusion implant 10 of the present invention may be provided with any number of additional features for promoting fusion, such as apertures 2 extending between the upper and

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lower vertebral bodies which allow a boney bridge to form through the spinal fusion implant 10. According to a still further aspect of the present invention, this fusion may be facilitated or augmented by introducing or positioning various osteoinductive materials within the apertures 2 and/or adjacent to the spinal fusion implant 10. Such osteoinductive materials may be introduced before, during, or after the insertion of the exemplary spinal fusion implant 10, and may include (but are not necessarily limited to) autologous bone harvested from the patient receiving the spinal fusion implant 10, bone allograft, bone xenograft, any number of non-bone implants (e.g. ceramic, metallic, polymer), bone morphogenic protein, and bio-resorbable compositions, including but not limited to any of a variety of poly (D,L-lactide-co-glycolide) based polymers, such as disclosed in U.S. Patent No. 6,013,853.

Please replace the paragraph beginning at page 12, line 1 with the following amended paragraph:

FIGS. 2-5 depict various embodiments of the exemplary spinal fusion implant 10. Some common attributes are shared among the various embodiments. More specifically, each spinal fusion implant 10 has a top surface 31, a bottom surface 33, lateral sides 14, a proximal side 22, and a distal side 16. In one embodiment, the top and bottom surfaces 31, 33 are generally parallel. It can be appreciated by one skilled in the art that although the surfaces 31, 33 are generally parallel to one another, they may be provided in any number of suitable shapes, including but not limited to concave and/or convex. When provided as convex shapes, the top and bottom surfaces 31, 33 may better match the natural contours of the vertebral end plates. Although not shown, it will be appreciated that the top and bottom surfaces 31, 33 may be angled relative to one another to better match the natural lordosis of the lumbar and cervical spine or the natural kyphosis of the thoracic spine

Please replace the paragraph beginning at page 12, line 10 with the following amended paragraph:

The exemplary spinal fusion implant 10 also preferably includes anti-migration features designed to increase the friction between the spinal fusion implant 10 and the adjacent contacting

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surfaces of the vertebral bodies so as to prohibit migration of the spinal fusion implant 10 after implantation. Such anti-migration features may include ridges 6 provided along the top surface 31 and/or bottom surface 33. Additional anti-migration features may also include a pair of spike elements 7 disposed within the proximal region of the implant 10, a pair of spike elements 8 disposed within the distal region of the implant 10, and a pair of spike elements 9 disposed within the central region of the implant 10. Spike elements 7, 8, 9 may extend from the top surface 31 and/or bottom surface 33 within the respective proximal, distal and central regions of the implant 10. The spike elements 7, 8, 9 may be manufactured from any of a variety of suitable materials, including but not limited to a metal, ceramic, and/or polymer material, preferably having radiopaque characteristics. The spike elements 7, 8, 9 may also take any of a variety of suitable shapes, including but not limited to a generally elongated element disposed within the implant 10 such that the ends thereof extend generally perpendicularly from the upper and/or lower surfaces 31, 33 of the implant 10. As best appreciated in FIG. 4, the spike elements 7, 8, 9 may each comprise a unitary element extending through upper and lower surfaces 31, 33. Alternatively, each spike element 7, 8, 9 may comprise a shorter element which only extends through a single surface 31, 33 (that is, does not extend through the entire height of the implant 10). In any event, when the spike elements 7, 8, 9 are provided having radiodense characteristics and the implant 10 is manufactured from a radiolucent material (such as, by way of example only, PEEK and/or PEKK), the spike elements 7, 8, 9 will be readily observable under X-ray or fluoroscopy such that a surgeon may track the progress of the implant 10 during implantation and/or the placement of the implant 10 after implantation.

Please replace the paragraph beginning at page 14, line 13 with the following amended paragraph:

FIGS. 6-9 detail the exemplary insertion instrument 20 according to one embodiment of the invention. The exemplary insertion instrument 20 includes an elongate tubular element 28 and an inserter shaft 44. The elongate tubular element 28 is constructed with a distal head 26 at its distal end, a-distal head ridges 62, 63 slot 62 at its on the distal end of the distal head 26, a thumbwheel housing 38 at its proximal end and a handle 42 at its proximal end. The elongate

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tubular element 28 is generally cylindrical and of a length sufficient to allow the device to span from the surgical target site to a location sufficiently outside the patient's body so the handle 42 and thumbwheel housing 38 can be easily accessed by a clinician or a complimentary controlling device.

Please replace the paragraph beginning at page 15, line 18 with the following amended paragraph:

FIG. 6 details the distal head <u>ridge slot</u> of the exemplary insertion instrument 20 coupled to the spinal fusion implant 10 through the purchase regions 60, 61. The distal head slots 62, 63 are dimensioned to fit slidably into the purchase regions 60, 61 with low friction to allow accurate engagement of the threaded connector 24 to the receiving aperture 12 of the spinal fusion implant 10. In the presented embodiment, the outer dimension of the threaded connector 24 is smaller than the largest outer dimension of the distal head 26 and elongate tubular element 28. Alternatively, other methods of creating a gripping surface are contemplated including but not limited to knurling or facets.

Please replace the paragraph beginning at page 16, line 16 with the following amended paragraph:

A clinician can utilize the secured system in either an open or minimally invasive spinal fusion procedure. In either type of procedure, a working channel would be is created in a patient that reaches the targeted spinal level. After the creation of that channel, the intervertebral space would may be prepared via any number of well known preparation tools, including but not limited to kerrisons, rongeurs, pituitaries, and rasps. After preparation, the insertion instrument 20 the secured device is used to place a spinal fusion implant 10 into the prepared intervertebral space. Once the implant 10 is inserted into the prepared space, the implant 10 is released from the insertion instrument 20 by rotating the thumbwheel 34 to disengage the threaded connector 24 from the receiving aperture 12. That motion removes the compressive force on the purchase regions 60, 61 between the distal head 26 and the distal head ridges slots 62, 63 of the spinal fusion implant 10 and allows the insertion instrument to be slidably removed from the implant

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10. After the threaded connector 24 is disengaged from the implant 10, the insertion instrument 20 is removed from the working channel and the channel is closed. As previously mentioned, additional materials may be included in the procedure before, during or after the insertion of the spinal fusion implant 10 to aid the natural fusion of the targeted spinal level.

Please replace the paragraph beginning at page 19, line 8 with the following amended paragraph:

The exemplary cervical fusion implant 110 also preferably includes anti-migration features such as anti-migration teeth 6 along the top surface 31 and bottom surface 33. Additional anti-migration features may include a plurality of proximal anti-migration spikes 68 and/or distal anti-migration spikes 70 integrated vertically through the cervical fusion implant 110. The anti-migration features increase the friction between the cervical fusion implant 110 and the adjacent contacting surfaces of the vertebral bodies. That friction prohibits migration of the cervical fusion implant 110 during the propagation of natural bony fusion. It should be appreciated by one skilled in the art that such anti-migration teeth 6 can be oriented in a any manner other than generally vertically (as shown) without departing from the scope of the present invention. Moreover, as described above, the spikes 68, 70 may be constructed from any of a variety of radiopaque materials, including but not limited to a metal, ceramic, and/or polymer material. When the spike elements 68, 70 are provided having such radiodense characteristics, and the implant 110 is manufactured from a radiolucent material (such as, by way of example only, PEEK and/or PEKK), the spike elements 68, 70 will be readily observable under X-ray or fluoroscopy such that a surgeon may track the progress of the implant 110 during implantation and/or the placement of the implant 110 after implantation particular direction which will stabilize the cervical fusion implant 110 in several degrees of rotation during placement.

Please replace the paragraph beginning at page 21, line 1 with the following amended paragraph:

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A clinician can utilize the secured system in either an open or minimally invasive spinal fusion procedure. In either type of procedure, a working channel is would be created in a patient that reaches the targeted spinal level. After the creation of that channel, the intervertebral space would be prepared (via known instruments as described above). After preparation, the insertion instrument 120 the secured device is used to place a cervical fusion implant 110 into the prepared intervertebral space. Once the cervical fusion implant 110 is inserted into the prepared space, the implant 110 is released from the cervical insertion instrument 120 by retracting the tubular lock member 21 from the elongate fork member 11 by rotating the tubular lock member 21 with respect to the elongate fork member 11 in the opposite direction from that used to initially secure the implant 110. That motion removes the compressive force on the purchase region 39 between the apertures 12 of the cervical fusion implant 110 and allows the engagement features 17 to be slidably removed from the apertures 12. After the engagement features 17 are disengaged from the cervical fusion implant 110, the cervical inserter instrument 120 is removed from the working channel and the channel is closed. As previously mentioned, additional materials may be included in the procedure before, during or after the insertion of the cervical fusion implant 110 to aid the natural fusion of the targeted spinal level.

Please add the following new paragraph after the paragraph ending at page 22, line 22:

The enhanced visualization features of the implants 10, 110 are explained in greater detail with reference to FIGS. 18-23. FIG. 18 illustrates an implant 10 dimensioned particularly for use in a posterior approach (PLIF) having (by way of example only) a width ranging between 9 and 11 mm, a height ranging between 8 and 14 mm, and a length ranging between 25 and 30 mm. FIG. 19 illustrates the implant 10 of FIG. 18 from a side perspective via as taken via X-ray or fluoroscopy techniques, clearly showing the location of the spike elements 7 and 8 (there is no central spike element 9 as with FIG. 1) relative to the implant 10 and visualization apertures 4. FIG. 20 illustrates an implant 10 dimensioned particularly for use in a lateral approach (XLIFTM by NuVasive) having (by way of example only) a width of approximately 18 mm, a height ranging between 8 and 16 mm, and a length ranging between 40 and 45 mm. FIG. 21 illustrates the implant 10 of FIG. 20 from a side perspective via as taken via X-ray or fluoroscopy

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techniques, clearly showing the location of the spike elements 7, 8, 9 relative to the implant 10 and visualization apertures 4. FIG. 22 illustrates an implant 110 dimensioned particularly for use in the cervical spine having (by way of example only) a width of approximately 11 mm, a height ranging between 5 and 12 mm, and a length of approximately 14 mm. FIG. 23 illustrates the implant 110 of FIG. 22 from a side perspective via as taken via X-ray or fluoroscopy techniques, clearly showing the location of the spike elements 66 relative to the implant 110 and visualization apertures 4. In this fashion, a surgeon may easily track the progress of the implant 10, 110 during implantation and/or after implantation by visualizing the spike elements 7,8,9 and 66, respectively, under X-ray and/or fluoroscopy according to the present invention.

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1.-26. (Cancelled)

27. (Currently Amended) A spinal fusion implant of non-bone construction positionable via a lateral trans-psoas surgical approach to the spine into a position within an interbody space between a first vertebra and a second vertebra, said interbody space being at least partially defined by a posterior aspect, an anterior aspect, and opposing lateral aspects, said implant comprising:

an upper surface including anti-migration elements to contact said first vertebra when said implant is positioned within the interbody space, a lower surface including anti-migration elements to contact said second vertebra when said implant is positioned within the interbody space, a distal wall, a proximal wall, a first sidewall to face said anterior aspect of said disc space when said implant is positioned within the interbody space and a second sidewall to face said posterior aspect of said disc space when said implant is positioned within the interbody space, said distal wall, proximal wall, first sidewall, and second sidewall comprising a radiolucent material;

wherein said implant has a longitudinal length extending from a proximal end of said proximal wall to a distal end of said distal wall;

wherein a central region of said implant includes portions of the first and second sidewalls positioned generally centrally between the proximal wall and the distal wall, at least a portion of the central region defining a maximum lateral width of said implant extending from said first sidewall to said second sidewall, wherein said longitudinal length is at least two and half times greater than said maximum lateral width;

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at least a first fusion aperture extending through said upper surface and lower surface and configured to permit bone growth between the first vertebra and the second vertebra when said implant is positioned within the interbody space, said first fusion aperture having: a longitudinal aperture length extending generally parallel to the longitudinal length of said implant, and a lateral aperture width extending between said first sidewall to said second sidewall, wherein the longitudinal aperture length is greater than the lateral aperture width; and

at least three radiopaque markers; wherein a first of the at least three radiopaque markers is at least partially positioned in said distal wall, a second of said at least three radiopaque markers is at least partially positioned in said proximal wall, and a third of said at least three radiopaque markers is at least partially positioned in said central region.

- 28. (Previously Presented) The spinal fusion implant of claim 27, further comprising a fourth radiopaque marker situated within said implant, said fourth radiopaque marker positioned in said central region at a position spaced apart from said third radiopaque marker.
- 29. (Previously Presented) The spinal fusion implant of claim 27, wherein said first radiopaque marker has an elongate body oriented generally perpendicular to said longitudinal length and extending entirely through a height of said distal wall, and wherein said second radiopaque marker has an elongate body oriented generally perpendicular to said longitudinal length and entirely through a height of said proximal wall.
- 30. (Previously Presented) The spinal fusion implant of claim 27, further including at least one receiving aperture position is said proximal wall.
- 31. (Previously Presented) The spinal fusion implant of claim 30, wherein said receiving aperture is configured to releasably mate with an inserter tool.

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32. (Previously Presented) The spinal fusion implant of claim 31, wherein said receiving aperture comprises a threaded receiving aperture extending into said proximal wall and having a central axis generally parallel to said longitudinal length of said implant.

33. (Previously Presented) The spinal fusion implant of claim 32, further comprising a pair of lateral grooves positioned in said proximal wall and extending laterally of said threaded receiving aperture.

34. (Previously Presented) The spinal fusion implant of claim 27, wherein said maximum lateral width of said implant is approximately 18 mm.

35. (Previously Presented) The spinal fusion implant of claim 27, wherein said radiolucent material comprises PEEK.

36. (Previously Presented) The spinal fusion implant of claim 27, wherein said implant includes at least one visualization aperture extending through at least one of said first sidewall and said second sidewall.

37. (Previously Presented) The spinal fusion implant of claim 27, wherein said upper and lower surfaces are generally parallel to one another.

38. (Previously Presented) The spinal fusion implant of claim 27, wherein said upper and lower surfaces are generally angled relative to one another to approximately correspond to lordosis of a lumbar spine when said implant is positioned within the interbody space.

39. (Previously Presented) The spinal fusion implant of claim 27, wherein said first fusion aperture is one of generally rectangular and generally oblong in shape.

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40. (Previously Presented) The spinal fusion implant of claim 27, further comprising a medial support extending between the first and second sidewalls

41. (Previously Presented) The spinal fusion implant of claim 40, wherein said medial support is positioned along said central region.

- 42. (Previously Presented) The spinal fusion implant of claim 27, further including a second fusion aperture extending through said upper surface and lower surface and configured to permit bone growth between the first vertebra and the second vertebra when said implant is positioned within the interbody space.
- 43. (Previously Presented) The spinal fusion implant of claim 42, wherein said second fusion aperture is separated from said first fusion aperture by a medial support.
- 44. (Previously Presented) The spinal fusion implant of claim 27, wherein said anti-migration elements of said upper surface comprise a plurality of ridges.
- 45. (Previously Presented) The spinal fusion implant of claim 44, wherein said plurality of ridges extend generally perpendicular to said longitudinal length.
- 46. (Previously Presented) The spinal fusion implant of claim 27, wherein said anti-migration elements of said upper surface comprise spike elements.
- 47. (Previously Presented) The spinal fusion implant of claim 46, wherein said spike elements protrude to pointed tips configured to engage said first vertebra.
- 48. (Previously Presented) The spinal fusion implant of claim 27, wherein said maximum lateral width of said implant is greater than a lateral width of the distal end of said distal wall and is greater than a lateral width of the proximal end of said proximal wall.

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49. (Previously Presented) The spinal fusion implant of claim 27, wherein said implant has a height extending from said upper surface to said lower surface, wherein said maximum lateral

width is greater than said height.

50. (Previously Presented) The spinal fusion implant of claim 27, wherein said central region

includes a maximum height of said implant extending from said upper surface to said lower

surface, wherein said maximum height is greater than a height of said distal wall and is greater

than a height of said proximal wall.

51. (Previously Presented) The spinal fusion implant of claim 27, wherein the lateral aperture

width of said first fusion aperture is more than two time greater than a lateral thickness of said

first sidewall and is more than two time greater than a lateral thickness of said second sidewall.

52. (Previously Presented) The spinal fusion implant of claim 27, wherein at least one of said

three radiopaque markers comprises an elongate body extending generally perpendicular to said

longitudinal length.

53. (Previously Presented) The spinal fusion implant of claim 52, wherein aid elongate body of

at least one of said three radiopaque markers is shorter than a height extending from said upper

surface to said lower surface.

54. (Previously Presented) The spinal fusion implant of claim 54, further comprising an

osteoinductive material positioned with said first fusion aperture.

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REMARKS

The specification has been amended so as to bring the present specification into conformity with that of related application no. 11/093,409 (now patent no. 7,918,891), which was expressly incorporated by reference into the present application as indicated on page 2, lines 4-8 of the original specification. Accordingly, no new matter has been added.

Also, independent claim 27 has been amended to remove a number of functional recitations. No new matter has been added.

Applicant asks that all claims be examined in view of the amendment to the claims.

No fee is believed to be due at this time. If necessary, please apply any charges or credits to Deposit Account 06-1050, referencing the above attorney docket number.

Respectfully submitted,

Date: April 4, 2012 /Michael T. Hawkins/

Michael T. Hawkins Reg. No. 57,867

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Electronic Ack	knowledgement Receipt
EFS ID:	12471514
Application Number:	13079645
International Application Number:	
Confirmation Number:	1151
Title of Invention:	System and Methods for Spinal Fusion
First Named Inventor/Applicant Name:	Matthew Curran
Customer Number:	26191
Filer:	Michael T. Hawkins/Anne Roy
Filer Authorized By:	Michael T. Hawkins
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Time Stamp:	18:08:12
Application Type:	Utility under 35 USC 111(a)

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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·		133300033001pa.pai	180547cd47662ede102a50014578811bcd7 62501	,	10

	Multipart Description/PDF files in .zip description								
	Document Description	Start	End						
	Preliminary Amendment	1	1						
	Specification	2	10						
	Claims	11	15						
	Applicant Arguments/Remarks Made in an Amendment	16	16						
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If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

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	Under the Pa	perwork Reductio	n Act of 19	95 no persons are	required to respon			nd Trademark Off	ice; U.S	S. DĔPARTME	PTO/SB/06 (07-06) 007. OMB 0651-0032 ENT OF COMMERCE OMB control number.
P	ATENT APPL		E DETI	ERMINATION			Application or	Docket Number 79,645	Fil	ing Date 04/2011	To be Mailed
	APPLICATION AS FILED – PART I (Column 1) (Column 2)						SMALL	ENTITY	OR		HER THAN ALL ENTITY
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	BASIC FEE (37 CFR 1.16(a), (b),	or (c))	N/A		N/A		N/A		1	N/A	
	SEARCH FEE (37 CFR 1.16(k), (i), (or (m))	N/A		N/A		N/A			N/A	
	EXAMINATION FE (37 CFR 1.16(o), (p),		N/A		N/A		N/A			N/A	
	ΓAL CLAIMS CFR 1.16(i))		mir	nus 20 = *]	X \$ =		OR	X \$ =	
IND	EPENDENT CLAIM CFR 1.16(h))	S	m	inus 3 = *		1	X \$ =			X \$ =	
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	MULTIPLE DEPEN										
* If t	he difference in colu	ımn 1 is less than	zero, ente	r "0" in column 2.			TOTAL			TOTAL	
	APPI 	LICATION AS (Column 1)	AMEND	DED — PART II (Column 2)	(Column 3)	_	SMAL	L ENTITY	OR		ER THAN ALL ENTITY
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AMENDMENT	Total (37 CFR 1.16(i))	* 28	Minus	** 28	= 0]	X \$ =		OR	X \$60=	0
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This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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BRAY, STUART SAMUEL

PAPER NUMBER

ART UNIT

DATE MAILED: 04/17/2012

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/079,645	04/04/2011	Matthew Curran	104US2	1151

TITLE OF INVENTION: SYSTEM AND METHODS FOR SPINAL FUSION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1740	\$300	\$0	\$2040	07/17/2012

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u> SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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APPLICATION NO.	FILING DATE			FIRST NAMED INVENT	OR		ATTOR	RNEY DOCKET NO.	CONFIRM	MATION NO.
13/079,645	04/04/2011			Matthew Curran		<u> </u>		104US2		1151
APPLN, TYPE	SMALL ENTITY	ISS	SUE FEE DUE	PUBLICATION FEE DU	TE PRE	EV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	Т п	ATE DUE
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EXAM			ART UNIT	CLASS-SUBCLASS						
BRAY, STUA	RT SAMUEL		3733	623-017160						
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
13/079,645	13/079,645 04/04/2011 Matthew Curran			1151	
26191 75	90 04/17/2012		EXAM	INER	
	RDSON P.C. (TC)		BRAY, STUA	RT SAMUEL	
PO BOX 1022 MINNEAPOLIS, N	MN 55440-1022		ART UNIT	PAPER NUMBER	
			3733		

DATE MAILED: 04/17/2012

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)	
A1	13/079,645	CURRAN ET AL.	
Notice of Allowability	Examiner	Art Unit	
	STUART S. BRAY	3733	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED i or other appropriate comm GHTS. This application is	n this application. If not included unication will be mailed in due course.	
1. \blacksquare This communication is responsive to <u>Amendment 4/4/2012</u> .			
 An election was made by the applicant in response to a rest the restriction requirement and election have been incorporate 		during the interview on;	
3. ☑ The allowed claim(s) is/are <u>27-54</u> .			
 4. ☐ Acknowledgment is made of a claim for foreign priority unde a) ☐ All b) ☐ Some* c) ☐ None of the: 	r 35 U.S.C. § 119(a)-(d) or	(f).	
 Certified copies of the priority documents have 	been received.		
2. Certified copies of the priority documents have	been received in Application	on No	
3. Copies of the certified copies of the priority doc	cuments have been receive	d in this national stage application from	the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requiremen	its
5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give			F
6. CORRECTED DRAWINGS (as "replacement sheets") must	be submitted.		
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Revie	w (PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment o	r in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the			
7. DEPOSIT OF and/or INFORMATION about the deposit of B attached Examiner's comment regarding REQUIREMENT FC			
Attachment(s)			
1. Notice of References Cited (PTO-892)	5. 🗌 Notice of Ir	nformal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)		ummary (PTO-413),	
3. ☑ Information Disclosure Statements (PTO/SB/08),		/Mail Date <u>20120405</u> . Amendment/Comment	
Paper No./Mail Date <u>3/23/2012 3/29/2012</u>	7. Z Examinore	7 Milona Monda Gommone	
 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	8. 🛛 Examiner's	Statement of Reasons for Allowance	
of Biological Material	9. 🗌 Other		
/STUART S BRAY/	/EDUARDO C	. ROBERT/	
Examiner, Art Unit 3733	Supervisory Pa	tent Examiner, Art Unit 3733	
	1		

13/079,645 CURRAN ET AL. Examiner-Initiated Interview Summary Examiner Art Unit STUART S. BRAY 3733 All participants (applicant, applicant's representative, PTO personnel): (1) STUART S. BRAY. (3) Michael Hawkins. (2) _____. (4)_____. Date of Interview: 05 April 2012. Type: Personal [copy given to: applicant applicant's representative Exhibit shown or demonstration conducted: \(\pi\) Yes M No. If Yes, brief description: _____. Issues Discussed □101 □112 □102 □103 ☑Others (For each of the checked box(es) above, please describe below the issue and detailed description of the discussion) Claim(s) discussed: <u>54</u>. Identification of prior art discussed: parent application 11/093409 now patent 7,918,891. Substance of Interview (For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...) Examiner contacted Applicant's representative to discuss differences between the present claims and the allowed claims in the parent application. Atty Hawkins identified several structural differences in claim 27, regarding the length and width of the central portion and the longitudinal length of the aperture that are not claimed in the parent application. Examiner also pointed out a dependency problem with claim 54. Atty Hawkins agreed to an Examiner's Amendment changing the dependency of claim 54 in order to place the application in condition for allowance. Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview. Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised. ☐ Attachment /STUART S BRAY/ Examiner, Art Unit 3733

Application No.

Applicant(s)

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

,

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Michael Hawkins on 4/5/2012.

In claim 27,

Line 14, -- greater than 40mm -- is **inserted** between "a longitudinal

length" and "extending from a proximal end".

In claim 54.

Line 1, "claim 54" is replaced with - - claim 27 - -.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: the claims in

the instant application have not been rejected using prior art because no reference or

reasonable combination thereof could be found which disclose or suggest a spinal

fusion implant comprising upper and lower surfaces with anti-migration elements, distal,

proximal, and side walls comprising radiolucent materials, a first fusion aperture with a

longitudinal length extending parallel to the longitudinal length of the implant, the central

164

Application/Control Number: 13/079,645 Page 3

Art Unit: 3733

portion defines a maximum lateral width between first and second sidewall, and at least three radiopaque markers, as set forth in claim 27.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STUART S. BRAY whose telephone number is (571)270-7648. The examiner can normally be reached on Mon-Thurs 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, *please contact* the examiner's supervisor, Eduardo C. Robert, *at* 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If there are any inquiries that are not being addressed by first contacting the Examiner or the Supervisor, you may send an email inquiry to TC3700_Workgroup_D_Inquiries@uspto.gov.

Application/Control Number: 13/079,645 Page 4

Art Unit: 3733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/STUART S BRAY/ Examiner, Art Unit 3733

/EDUARDO C. ROBERT/

Supervisory Patent Examiner, Art Unit 3733

Notice of References Cited Application/Control No. 13/079,645 Examiner STUART S. BRAY Applicant(s)/Patent Under Reexamination CURRAN ET AL. Page 1 of 1

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*	Α	US-2002/0116008	08-2002	Lin et al.	606/99
*	В	US-4,349,921	09-1982	Kuntz, J. David	623/17.16
*	O	US-5,797,917	08-1998	Boyd et al.	606/99
*	D	US-6,830,570	12-2004	Frey et al.	623/17.16
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*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

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		DISCLOSI Y APPLICA		Application Number	13/079,645	
SIAII	CIVICIAI D	T AFFLICA	AIN I	Filing Date	April 4, 2011	
				First Named Inventor	Matthew Curran	
				Art Unit	3733	
				Examiner Name	Stuart Samuel Bray	
(Us	(Use as many sheets as necessary)					
Sheet	1	of	8	Attorney Docket No: 104US2		

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Examiner Initial *	Cite No	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
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				First Named Inventor	Matthew Curran
				Art Unit	3733
				Examiner Name	Stuart Samuel Bray
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Sheet	2	of	8	Attorney Docket No: 10	4US2

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PTO/SB/08a (01-08)

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		DISCLOSU Y APPLIC <i>A</i>		Application Number	13/079,645	
SIAII	CIVICIAI D	T AFFLICE	AIN I	Filing Date	April 4, 2011	
				First Named Inventor	Matthew Curran	
				Art Unit	3733	
				Examiner Name	Stuart Samuel Bray	
(Us	(Use as many sheets as necessary)					
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Sheet	3	of	8	Attorney Docket No: 104US2		

US PATENT DOCUMENTS							
Examiner Initial *	Cite No	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
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				First Named Inventor	Matthew Curran
				Art Unit	3733
				Examiner Name	Stuart Samuel Bray
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				Art Unit	3733		
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				First Named Inventor	Matthew Curran			
				Art Unit	3733			
				Examiner Name	Stuart Samuel Bray			
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				First Named Inventor	Matthew Curran
				Art Unit	3733
				Examiner Name	Stuart Samuel Bray
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		DISCLOSU Y APPLIC <i>A</i>		Application Number	13/079,645				
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				First Named Inventor	Matthew Curran				
				Art Unit	3733				
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CONFIRMATION NO. 1151

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Attorney Docket No.: 13958-0099001 / 104US2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Matthew Curran et al. Art Unit: 3733

Serial No.: 13/079,645 Examiner: STUART SAMUEL BRAY

Filed : April 4, 2011 Conf. No. : 1151 Title : SYSTEMS AND METHODS FOR SPINAL FUSION

MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

<u>INFORMATION DISCLOSURE STATEMENT</u>

Please consider the references listed on the enclosed PTO-1449 form. Non-patent literature is enclosed; cited U.S. patents and patent application publications will be provided on request.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office Action on the merits. Please apply any necessary charges or credits to Deposit Account 06-1050, referencing the above attorney docket number.

Respectfully submitted,

Date: March 29, 2012 /Michael T. Hawkins/

Michael T. Hawkins Reg. No. 57,867

Customer Number 26191 Fish & Richardson P.C.

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Sheet <u>1</u> of <u>1</u>

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Issue Classification



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13079645	CURRAN ET AL.
Examiner	Art Unit
STUART S BRAY	3733

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/STUART S BRAY/ Examiner.Art Unit 3733	04/05/2012	Total Clain	ns Allowed:
(Assistant Examiner)	(Date)	-	
/EDUARDO C ROBERT/ Supervisory Patent Examiner.Art Unit 3733	04/06/2012	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	27	2

Applicant(s)/Patent Under Reexamination Application/Control No. Index of Claims 13079645 CURRAN ET AL. Examiner Art Unit STUART S BRAY 3733

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U.S. Patent and Trademark Office

	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13079645	CURRAN ET AL.
	Examiner	Art Unit
	STUART S BRAY	3733

✓	Rejected		- Cancelled N		Non-Elected	Α	Appeal
=	= Allowed		÷ Restricted I		Interference	0	Objected
	Claims renumbered in	the same o	rder as presented by ap	plicant	☐ CPA	П т.	.D. 🗆 R.1.47
	CLAIM				DATE		

☐ Claims	renumbered	in the same	order as pre	esented by	applicant		☐ CPA	□ т.с	D. 🗆	R.1.47		
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Search Notes

Application/Control No.	Applicant(s)/Patent Under Reexamination
13079645	CURRAN ET AL.
Examiner	Art Unit
STUART S BRAY	3733

SEARCHED					
Class	Subclass	Date	Examiner		
623	17.11-17.16	4/5/2012	SSB		

SEARCH NOTES							
Search Notes	Date	Examiner					
reviewed office actions of allowed parent case 11/093409	4/5/2012	SSB					
reviewed allowed claims for double patenting	4/5/2012	SSB					

INTERFERENCE SEARCH							
Class	Subclass	Date	Examiner				
	Interference search printout	4/5/2012	SSB				

/STUART S BRAY/ Examiner.Art Unit 3733	

EAST Search History

EAST Search History (Prior Art)

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EAST Search History (Interference)

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L8		(implant and upper and lower and surface and radiopaque and length and central).clm.	US- PGPUB	OR	OFF	2012/04/05 13:52

4/5/2012 1:55:26 PM

C:\ Users\ sbray1\ Documents\ EAST\ Workspaces\ 13079645.wsp

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571) 273-2885

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26191	7590	04/17/2012	2	accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
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FISH & RICHARI P.O. Box 1022	DSON P.C.			in an envelope addre or being facsimile tra	ssed to the Mail Stop ISSUI ansmitted to the USPTO, on	E FEE address above.		
Minneapolis, MN 5	55440-1022			below.		(Depositor's name)		
						(Signature)		
						(Date)		
APPLICATION NO.	FILING DATE		FIRST NAME	D INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
13/079,645	04/04/2011		Matthew	v Curran	13958-0099001	1151		
TITLE OF INVENTION: SY	YSTEMS AND METHODS FOR	SPINAL FUSI	ON					
APPLN. TYPE	SMALL ENTITY	ISSU	E FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE		
nonprovisional	NO	\$17	740	\$300	\$2040	07/17/2012		
EXAMINER			UNIT	CLASS-SUBCLASS	7			
BRAY, STUART SAMUEL 3733				623-017160	_			
CFR 1.363).	nce address or indication of "Fee	`	names of up	ng on the patent front page, list to 3 registered patent attorneys Iternatively, (2) the name of a	s or 1. <u>Fish & Ric</u>	chardson P.C.		
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PLEASE NOTE: Unless	the USPTO or is being submitted	no assignee dat l under separate	ta will appear of e cover. Comple	n the patent. Inclusion of assig		n an assignment has been		
NuVasive, Inc.		Sa	n Diego, CA					
Please check the appropria	te assignee category or categorie	s (will not be p	rinted on the pa	ntent): [] individual [X]	corporation or other private group	entity [] government		
[X] Issue Fee [X] Publication Fee (No	4a. The following fee(s) are enclosed: [X] Issue Fee [X] Publication Fee (No small entity discount permitted) [] Advance Order - # of Copies							
	s (from status indicated above) SMALL ENTITY status. See 37	CFR 1.27.	[]b. App	olicant is no longer claiming S	MALL ENTITY status. See 37 C	CFR 1.27(g)(2).		
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(Authorized Signature)	/Michael T. Hawkins/			(Date)April 18, 2012				
Typed or Printed Name	Michael T. Hawkins			Registration No.	57,867			

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMIT THIS FORM WITH FEE(S)

Electronic Patent A	pp	olication Fee	Transm	ittal			
Application Number:	130	079645					
Filing Date:	04-	-Apr-2011					
Title of Invention:	SYSTEM AND METHODS FOR SPINAL FUSION						
First Named Inventor/Applicant Name:	Matthew Curran						
Filer:	Michael T. Hawkins/Kayla Olson						
Attorney Docket Number:	104US2						
Filed as Large Entity							
Utility under 35 USC 111(a) Filing Fees							
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)		
Basic Filing:							
Pages:							
Claims:							
Miscellaneous-Filing:							
Petition:							
Patent-Appeals-and-Interference:							
Post-Allowance-and-Post-Issuance:							
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Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
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	Tot	al in USD	(\$)	2040

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Application Number:	13079645			
International Application Number:				
Confirmation Number:	1151			
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First Named Inventor/Applicant Name:	Matthew Curran			
Customer Number:	26191			
Filer:	Michael T. Hawkins/Elizabeth Doherty			
Filer Authorized By:	Michael T. Hawkins			
Attorney Docket Number:	104US2			
Receipt Date:	18-APR-2012			
Filing Date:	04-APR-2011			
Time Stamp:	12:30:02			
Application Type:	Utility under 35 USC 111(a)			
Payment information:				

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$2040
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Authorized User	

File Listing:

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Matthew Curran et al. Art Unit: 3733

Serial No.: 13/079,645 Examiner: STUART SAMUEL BRAY

Filed: April 4, 2011 Confirmation No.:1151

Notice of Allowance Date: April 17, 2012

Title : SYSTEMS AND METHODS FOR SPINAL FUSION

MAIL STOP ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

RESPONSE TO NOTICE OF ALLOWANCE

In response to the Notice of Allowance mailed April 17, 2012, enclosed is a completed issue fee transmittal form PTOL-85b. Applicant recognizes that in accordance with M.P.E.P. § 1302.14, the Examiner's reasons for allowance need not set forth all of the details as to why the claims are allowed. In the above-referenced application, Applicant does not concede that the Examiner's stated reasons for allowance are the only reasons for which the claims are allowable. Applicant agrees that the particular combination of claim elements identified in the Examiner's reasons for allowance are not disclosed or suggested by the prior art of record, yet the claims are patentable for other reasons—including the inventive combination of all of the recited claim elements.

The issue fee and publication fees in the amount of \$2040 are being paid concurrently herewith. In addition, please apply any other necessary charges or credits to Deposit Account 06-1050, referencing the above attorney docket number.

Date: April 18, 2012	/Michael T. Hawkins/	
-	Michael T. Hawkins	
	Reg. No. 57,867	

Respectfully submitted,

Customer Number 26191 Fish & Richardson P.C. Telephone: (612) 335-5070 Facsimile: (877) 769-7945

60765819.doc

Issue Classification



Application/Control No.	Applicant(s)/Patent Under Reexamination
13079645	CURRAN ET AL.
Examiner	Art Unit
STUART S BRAY	3733

ORIGINAL						INTERNATIONAL CLASSIFICATION							N		
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623			17.16			Α	6	1	F	2 / 44 (2006.01.01)					
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	Claims renumbered in the same order as presented by applicant								СР	'A [] T.D.	[R.1.	47	
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/STUART S BRAY/ Examiner.Art Unit 3733	04/05/2012	Total Claims Allowed: 28		
(Assistant Examiner)	(Date)			
/EDUARDO C ROBERT/ Supervisory Patent Examiner.Art Unit 3733	04/06/2012	O.G. Print Claim(s)	O.G. Print Figure	
(Primary Examiner)	(Date)	27	2	

Index of Claims 13079645 Examiner STUART S BRAY Applicant(s)/Patent Under Reexamination CURRAN ET AL. Art Unit 3733

✓	Rejected	-	Cancelled
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U.S. Patent and Trademark Office

	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13079645	CURRAN ET AL.
	Examiner	Art Unit
	STUART S BRAY	3733

✓	✓ Rejected		-	Can	celled		N	Non-E	Elected	A	Ар	peal
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Issue Classification



	Application/Control No.	Applicant(s)/Patent Under Reexamination
!	13079645	CURRAN ET AL.
	Examiner	Art Unit
	STUART S BRAY	3733

		ORIGI	NAL			INTERNATIONAL CLASSIFICATION									
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☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47															
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/STUART S BRAY/ Examiner.Art Unit 3733	04/05/2012	Total Claims Allowed: 28				
(Assistant Examiner)	(Date)	-				
/EDUARDO C ROBERT/ Supervisory Patent Examiner.Art Unit 3733	04/06/2012	O.G. Print Claim(s)	O.G. Print Figure			
(Primary Examiner)	(Date)	27	2			

Index of Claims 13079645 Examiner STUART S BRAY Applicant(s)/Patent Under Reexamination CURRAN ET AL. Art Unit 3733

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Final	Original	03/13/2012	04/05/2012							
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18	34		=							
19	35		=							
20	36		=							

U.S. Patent and Trademark Office

	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13079645	CURRAN ET AL.
	Examiner	Art Unit
	STUART S BRAY	3733

✓	Rejected	-	Cancelled	N	Non-Elected		Α	Appeal		
=	Allowed	÷ Restricted		I	Interference		0	Objected		
	Claims renumbered in the same order as presented by applicant									

☐ Claims	renumbered	in the same	order as pre	esented by	applicant		□ СРА	□ т.п	D. 🗆	R.1.47						
CLA	MIA					DATE				R.1.47						
Final	Original	03/13/2012	04/05/2012													
21	37		=													
22	38		=													
23	39		=													
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11	45		=													
12	46		=													
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14	52		=													
15	53		=													
28	54		=													

U.S. Patent and Trademark Office Part of Paper No.: 20120423

Receipt date: 03/23/2012 13079645 - GAU: 3733

PTO/SB/08a (01-08)

Approved for use through 05/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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INIEGE				Complete if Known			
INFORMATION DISCLOSURE				Application Number	13/079,645		
SIAII	STATEMENT BY APPLICANT			Filing Date April 4, 2011 First Named Inventor Matthew Curran			
				Art Unit 3733			
				Examiner Name	Stuart Samuel Bray		
(Us	(Use as many sheets as necessary)						
Sheet	2	of	8	Attorney Docket No: 104US2			

			_	US PATENT D		
	Examiner Initial *	Cite No	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appea
			5,284,153	Feb 8, 1994	Raymond, S.A., et al.	
			5,290,494	Mar 1, 1994	Coombes, et al.	
-	1 1		5,300,076 Apr.	May 5, 1994	Leriche	
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/26/2012			5,334,205	Aug 2, 1994	Cain	
			5,336,223	Aug 9, 1994	Rogers	
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			5,395,372	Mar 7, 1995	Holt, et al.	
			5,397,363	Mar 14, 1995	Gelbard	
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			5,484,403	Jan 16, 1996	Yoakum, et al.	
			5,484,437	Jan 16, 1996	Michelson, Gary K.	
			5,489,307	Feb 6, 1996	Kuslich, et al.	
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			5,522,879	Jun 4, 1996	Scopelianos	
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			5,527,312	Jun 18, 1996	Ray	
			5,534,030	Jul 9, 1996	Navarro, et al.	
			5,540,688	Jul 30, 1996	Navas, Fernand	
-			5,545,222	Aug 13,1996	Bonutti	
			5,562,736	Oct 8, 1996	Ray, et al.	
			5,565,005	Oct. 15, 1996	Erickson, et al.	
			5,571,190	Nov 5, 1996	Ulrich	

EXAMINER DATE CONSIDERED Receipt date: 03/23/2012 13079645 - GAU: 3733

PTO/SB/08a (01-08)

Approved for use through 05/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

01 101111 144570	PTO											
			Complete if Known									
STATEMENT BY APPLICANT			Application Number	13/079,645								
			Filing Date April 4, 2011 First Named Inventor Matthew Curran Art Unit 3733									
									Examiner Name	Stuart Samuel Bray		
						(Use as many sheets as necessary)						
1	of	8	Attorney Docket No: 104US2									
	MENT B	MENT BY APPLICA	as many sheets as necessary)	MENT BY APPLICANT Filing Date First Named Inventor Art Unit Examiner Name								

	US PATENT DOCUMENTS						
	Examiner Initial *	Cite No	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
			2002/0058950	May 16, 2002	Winterbottom, et al.		
			2003/0105528	Jun 5, 2003	Shimp, et al.		
			3,486,505	Dec 30, 1969	Morrison, Gordon M.		
			3,518,993	Jul 7, 1970	Blake, Lawrence W.		
			3,604,487	Sep 14, 1971	Gilbert, Richard S.		
			3,745,995	Jul 17, 1973	Kraus		
			3,848,601	Nov 19, 1974	Ma, et al.		
			3,867,728	Feb 25, 1975	Stubstad, et al.		
C1	1- 1		4,026,304	May 31, 197 <i>≱ 7</i>	Levy		
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to documen	t,		4,454,374	Oct 8, 1985	Jacobson	4545374	
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			4,646,738	Mar 3, 1987	Trott, Arthur F.		
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			5,192,327	Mar 9, 1993	Brantigan, John W.		
			5,217,497	Jun 8, 1993	Mehdian		
			5,263,953	Nov 23, 1993	Bagby		
			5,269,785	Dec 14, 1993	Bonutti		

EXAMINER DATE CONSIDERED



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	APPLICATION NO. I ISSUE DATE I PATENT NO.		ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/079,645	05/29/2012	8187334	104US2	1151

26191

7590

05/09/2012

FISH & RICHARDSON P.C. (TC) PO BOX 1022 MINNEAPOLIS, MN 55440-1022

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Matthew Curran, Carlsbad, CA; Mark Peterson, Medford, OR;

IR103 (Rev. 10/09) 199

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Matthew Curran et al. Art Unit: 3733

Patent No.: 8,187,334 Examiner: STUART SAMUEL BRAY

Issue Date: May 29, 2012 Conf. No.: 1151

Serial No.: 13/079,645 Filed: April 4, 2011

Title : SYSTEMS AND METHODS FOR SPINAL FUSION

Attn.: Certificate of Corrections Branch

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

TRANSMITTAL OF REQUEST FOR CERTIFICATE OF CORRECTION

Applicant hereby requests that a certificate of correction be issued for the above patent in accordance with the attached request.

One or more of the errors sought to be corrected were made by applicant. The fees in the amount of \$100 are being paid concurrently herewith.

Please apply any other necessary charges or credits to Deposit Account 06- 1050, referencing the above attorney docket number.

Respectfully submitted,

Date: June 18, 2012 /Michael T. Hawkins/

Michael T. Hawkins Reg. No. 57,867

Customer Number 26191

Fish & Richardson P.C.

Telephone: (612) 335-5070 Facsimile: (877) 769-7945

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page <u>1</u> of <u>1</u>

PATENT NO. .: 8,187,334

APPLICATION NO .: 13/079,645

DATED .: MAY 29, 2012

INVENTOR(S) .: MATTHEW CURRAN AND MARK PETERSON

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 13, Line 46 (Claim 15), delete "aid" and insert - - said - -, therefor.

MAILING ADDRESS OF SENDER:

Michael T. Hawkins Fish & Richardson P.C. P.O. Box 1022 Minneapolis, Minnesota 55440-1022

Electronic Patent	Electronic Patent Application Fee Transmittal							
Application Number:		079645						
Filing Date:	04	-Apr-2011						
Title of Invention:	SYSTEM AND METHODS FOR SPINAL FUSION							
First Named Inventor/Applicant Name:	Matthew Curran							
Filer:	Michael T. Hawkins/Kayla Olson							
Attorney Docket Number:	10-	4US2						
Filed as Large Entity								
Utility under 35 USC 111(a) Filing Fees								
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)			
Basic Filing:								
Pages:								
Claims:								
Miscellaneous-Filing:								
Petition:								
Patent-Appeals-and-Interference:								
Post-Allowance-and-Post-Issuance:	Post-Allowance-and-Post-Issuance:							
Certificate of correction		1811	1	100	100			
Extension-of-Time:	_	202						

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
	Total in USD (\$)			

Electronic Acknowledgement Receipt				
EFS ID:	13037898			
Application Number:	13079645			
International Application Number:				
Confirmation Number:	1151			
Title of Invention:	SYSTEM AND METHODS FOR SPINAL FUSION			
First Named Inventor/Applicant Name:	Matthew Curran			
Customer Number:	26191			
Filer:	Michael T. Hawkins/Kayla Olson			
Filer Authorized By:	Michael T. Hawkins			
Attorney Docket Number:	104US2			
Receipt Date:	18-JUN-2012			
Filing Date:	04-APR-2011			
Time Stamp:	14:09:19			
Application Type:	Utility under 35 USC 111(a)			
Payment information:	ayment information:			

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$100
RAM confirmation Number	365
Deposit Account	061050
Authorized User	
1	

File Listing:

Document Document Description	204 Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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1	Request for Certificate of Correction	TransCOC.pdf	109283	20	2	
'	nequestroi certificate of correction	Hariscoc.pui	85f277e27e62a832eada7675bff25b99cf77 e560	no		
Warnings:						
Information						
2	Fee Worksheet (SB06)	fee-info.pdf	30180	no	2	
_	rec volumes (obse)	, cc illiopal	03a5eb4bb425207b4e731a74adea344b46 92e103			
Warnings:						
Information	}					
	Total Files Size (in bytes)			139463		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 8,187,334 B2 Page 1 of 1

APPLICATION NO. : 13/079645 DATED : May 29, 2012

INVENTOR(S) : Matthew Curran and Mark Peterson

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 13, Line 46 (Claim 15), delete "aid" and insert -- said --, therefor.

Signed and Sealed this Seventh Day of August, 2012

David J. Kappos

Director of the United States Patent and Trademark Office

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Matthew Curran et al. Art Unit: 3733

Patent No.: 8,187,334 Examiner: Stuart Samuel Bray

Issue Date: May 29, 2012 Conf. No.: 1151

Serial No.: 13/079,645 Filed: April 4, 2011

Title : SYSTEMS AND METHODS FOR SPINAL FUSION

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

PETITION TO CORRECT INVENTORSHIP UNDER 37 C.F.R. § 1.324(a)

Applicant requests correction of inventorship for the above-captioned issued patent by the addition of the following inventor:

LUIZ PIMENTA

Applicant submits herewith the following:

- 1) Inventor's Declaration to Correct Inventorship by LUIZ PIMENTA;
- 2) Declarations by current named Inventors: MATTHEW CURRAN and MARK
- PETERSON;
- 3) Consent of Assignee to Correct Inventorship;
- 4) Certificate Under 37 C.F.R. §3.73(b); and
- 5) Certificate of Correction.

Please apply the \$230 (\$130 in payment for the petition fee of \$1.20(b), \$100 in payment for the Certificate of Correction fee of \$1.20(a)) and any other charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 13958-0099001.

Date: April 17, 2013

/Michael T. Hawkins/
Michael T. Hawkins

Reg. No. 57,867

Customer Number 26191 Fish & Richardson P.C.

Telephone: (612) 335-5070 Facsimile: (877) 769-7945

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: NuVasive, Inc. Art Unit: 3733

Patent No.: 8,187,334 Examiner: Stuart Samuel Bray

Issue Date: May 29, 2012 Conf. No.: 1151

Serial No.: 13/079,645 Filed: April 4, 2011

Title : SYSTEMS AND METHODS FOR SPINAL FUSION

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

CONSENT OF ASSIGNEE TO CORRECT INVENTORSHIP

As an officer of the concern to which the noted application has been assigned, I hereby consent to the correction of inventorship of this issued patent from the naming of MATTHEW CURRAN and MARK PETERSON to the naming of MATTHEW CURRAN, MARK PETERSON, and LUIZ PIMENTA.

Date: 4/16/13

Respectfully submitted;

Jonathan, Spangler, Esq.

Vice President and Chief Patent Counsel

NuVasive,\inc.

7475 Lusk Boulevard

San Diego, CA 9212T

Customer Number 26191 Fish & Richardson P.C.

Telephone: (612) 335-5070 Facsimile: (877) 769-7945

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Matthew Curran et al. Art Unit: 3733

Patent No.: 8,187,334 Examiner: STUART SAMUEL BRAY

Issue Date: May 29, 2012 Conf. No.: 1151

Serial No.: 13/079,645 Filed: April 4, 2011

Title : SYSTEMS AND METHODS FOR SPINAL FUSION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

CERTIFICATE UNDER 37 CFR §3.73(b)

Under 37 CFR §3.73(b) NUVASIVE, INC., a corporation, certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of assignments from the inventors of the patent application identified above. The assignments were recorded in the Patent and Trademark Office at

Reel <u>028056</u>, Frame <u>0268</u> on <u>April 17, 2012</u>; and

Reel 030212, Frame 0928 on April 15, 2013.

The undersigned, whose title is supplied below, is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief and believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Date: 4/16/13

Jonathan Spangler, Esq.

Respectfully_submitted

Vice President and Chief Patent Counsel of

NuVasive, Inc.

Customer Number 26191 Fish & Richardson P.C. Telephone: (612) 335-5070

Facsimile: (877) 769-7945

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: NuVasive, Inc. Art Unit: 3733

Patent No.: 8,187,334 Examiner: Stuart Samuel Bray

Issue Date: May 29, 2012 Conf. No.: 1151

Serial No.: 13/079,645 Filed: April 4, 2011

Title : SYSTEMS AND METHODS FOR SPINAL FUSION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INVENTOR'S DECLARATION TO CORRECT INVENTORSHIP

I, MARK PETERSON declare:

- 1. That I am an original named inventor of the noted patent application.
- 2. That through error, without any deceptive intention on my part or that of any actual inventor, the above-captioned application was filed naming MATTHEW CURRAN and MARK PETERSON, rather than MATTHEW CURRAN, MARK PETERSON and LUIZ PIMENTA. This error was discovered after the application was filed.
- 3. That I hereby consent to the correction of inventorship to include LUIZ PIMENTA, as described in paragraph 2, hereinabove.
- 4. That all statements made herein of my own knowledge and true and that all statements made on information and belief are believed to be true and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 4/7/3

MARK PETERSON 840 Royal Avenue, Suite #1 Medford, OR 97504

United States

Fish & Richardson P.C. 3200 RBC Plaza 60 South Sixth Street Minneapolis, Minnesota 55402

Telephone: (612) 335-5070 Facsimile: (612) 288-9696

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: NuVasive, Inc.

Art Unit : 3733

Patent No.: 8,187,334

Examiner: Stuart Samuel Bray

Issue Date: May 29, 2012

Conf. No.: 1151

Serial No.: 13/079,645

Filed

: April 4, 2011

Title

: SYSTEMS AND METHODS FOR SPINAL FUSION

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

INVENTOR'S DECLARATION TO CORRECT INVENTORSHIP

I, MATTHEW CURRAN hereby declare:

- 1. That I am an original named inventor of the noted patent application.
- 2. That through error, without any deceptive intention on my part or that of any actual inventor, the above-captioned application was filed naming MATTHEW CURRAN and MARK PETERSON, rather than MATTHEW CURRAN, MARK PETERSON and LUIZ PIMENTA. This error was discovered after the application was filed.
- 3. That I hereby consent to the correction of inventorship to include LUIZ PIMENTA, as described in paragraph 2, hereinabove.
- 4. That all statements made herein of my own knowledge and true and that all statements made on information and belief are believed to be true and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 1/27/13

MATTHEW EURRAN 3218 Rancho Quartillo Carlsbad, CA 92009 United States

Fish & Richardson P.C. 3200 RBC Plaza 60 South Sixth Street Minneapolis, Minnesota 55402 Telephone: (612) 335-5070

Facsimile: (612) 288-9696

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: NuVasive, Inc. Art Unit: 3733

Patent No.: 8,187,334 Examiner: Stuart Samuel Bray

Issue Date: May 29, 2012 Conf. No.: 1151

Serial No.: 13/079,645 Filed: April 4, 2011

Title : SYSTEMS AND METHODS FOR SPINAL FUSION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INVENTOR'S DECLARATION TO CORRECT INVENTORSHIP

I, LUIZ PIMENTA hereby declare:

- 1. That I am an original named inventor of the noted patent application.
- 2. That through error, without any deceptive intention on my part or that of any actual inventor, the above-captioned application was filed naming MATTHEW CURRAN and MARK PETERSON, rather than MATTHEW CURRAN, MARK PETERSON and LUIZ PIMENTA. This error was discovered after the application was filed.
- 3. That all statements made herein of my own knowledge and true and that all statements made on information and belief are believed to be true and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any

patent issuing thereon.

LUIZPIMENTA

Rua Vergueiro,1.421 – Top Towers Offices Torre Sul – Sala 305 | Paraíso, 04101-000

São Paulo/Brasil

Fish & Richardson P.C. 3200 RBC Plaza 60 South Sixth Street

Minneapolis, Minnesota 55402 Telephone: (612) 335-5070

Facsimile: (612) 288-9696

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Matthew Curran et al. Art Unit: 3733

Patent No.: 8,187,334 Examiner: STUART SAMUEL BRAY

Issue Date: May 29, 2012 Conf. No.: 1151

Serial No.: 13/079,645 Filed: April 4, 2011

Title : SYSTEMS AND METHODS FOR SPINAL FUSION

Attn.: Certificate of Corrections Branch Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

TRANSMITTAL OF REQUEST FOR CERTIFICATE OF CORRECTION

Applicant hereby requests that a certificate of correction be issued for the above patent in accordance with the attached request.

One or more of the errors sought to be corrected were made by Applicants, therefore please apply the \$100 required fee of 37 CFR \$1.20(a) together with any other charges or credits to Deposit Account 06-1050, referencing the above attorney docket number.

Respectfully submitted,

Date: April 17, 2013 /Michael T. Hawkins/

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(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page <u>1</u> of <u>1</u>

PATENT NO. : 8,187,334

APPLICATION NO.: 13/079,645

ISSUE DATE: : May 29, 2012

INVENTOR(S) : Matthew Curran

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title Page, Inventors, please insert -- Luiz Pimenta, Sao Paulo, Brasil --

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Minneapolis Minneapolis, Minnesota 55402

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

American LegalNet, Inc. www.FormsWorkflow.com

Electronic Patent Application Fee Transmittal								
Application Number:	13	079645						
Filing Date:	04-Apr-2011							
Title of Invention:	SYSTEM AND METHODS FOR SPINAL FUSION							
First Named Inventor/Applicant Name:	Matthew Curran							
Filer:	Michael T. Hawkins/Beth Bauer							
Attorney Docket Number:	10	4US2						
Filed as Large Entity								
Utility under 35 USC 111(a) Filing Fees								
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)			
Basic Filing:								
Pages:								
Claims:								
Miscellaneous-Filing:								
Petition:								
Patent-Appeals-and-Interference:								
Post-Allowance-and-Post-Issuance:								
Certificate of Correction		1811	1	100	100			
Processing Fee Correcting Inventorship		1816	1	130	130			

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
	Total in USD (\$)		230	

Electronic Acknowledgement Receipt				
EFS ID:	15543814			
Application Number:	13079645			
International Application Number:				
Confirmation Number:	1151			
Title of Invention:	SYSTEM AND METHODS FOR SPINAL FUSION			
First Named Inventor/Applicant Name:	Matthew Curran			
Customer Number:	26191			
Filer:	Michael T. Hawkins/Beth Bauer			
Filer Authorized By:	Michael T. Hawkins			
Attorney Docket Number:	104US2			
Receipt Date:	17-APR-2013			
Filing Date:	04-APR-2011			
Time Stamp:	16:06:27			
Application Type:	Utility under 35 USC 111(a)			
Payment information:				

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$230
RAM confirmation Number	3050
Deposit Account	061050
Authorized User	

File Listing:

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7	Request for Certificate of Correction	reqcoc.pdf	126004	no	2
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6	Assignee showing of ownership per 37 CFR 3.73.	099001cert2.pdf	76028 03953fcb8dbdbccd6c9f1ba2c0ad11435be b3024	no	1
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Warnings:					
5	Request under Rule 48 correcting inventorship	099001 Assignee 2.pdf	b2e8686f7ac3c00a544ce8a5c100cd1c2637	no	1
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2	Oath or Declaration filed	0099001Pimentadec2.pdf	2cb2c9bc7c654a24b18173fcb0f233da5628 5d6d	no	1
			79436		
Information:					
Warnings:			10b45		
1	Request under Rule 48 correcting inventorship	099001pet.pdf	62456 5430c9e2f630888b8205bdaca405e102d2b	no	1

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Document code: WFEE

United States Patent and Trademark Office Sales Receipt for Accounting Date: 05/22/2013

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01 FC: 1053 140.00 DA

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United States Patent and Trademark Office Sales Receipt for Accounting Date: 05/22/2013

ADJ #00000016 Mailroom Dt: 04/17/2013 ABALINAN

Seq No: 3050 Sales Acctg Dt: 04/18/2013 061050 13079645 02 FC: 1816 130.00 CR



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

DATE:

May 23, 2013

TO:

Certificates of Correction Branch

FRÓM:

EDUARDO C. ROBERT

SPE, Art Unit 3733

SUBJECT: REQUEST FOR CERTIFICATE OF CORRECTION

Please issue a Certificate of Correction in U. S. Letters Patent No. 8,187,334 as specified on the attached Certificate.

/Eduardo C. Robert/

EDUARDO C. ROBERT, SPE Art Unit 3733

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE

Patent No. 8,187,334 Patented: May 29, 2012

On petition requesting issuance of a certificate for correction of inventorship pursuant to 35 U.S.C. 256, it has been found that the above identified patent, through error and without deceptive intent, improperly sets forth the inventorship. Accordingly, it is hereby certified that the correct inventorship of this patent is:

Matthew Curran, Carlsbad, CA; Mark Peterson, Medford, OR; Luiz Pimenta, Sao Paulo, Brasil

/Eduardo C. Robert/

EDUARDO C. ROBERT Supervisory Patent Examiner Art Unit 3733



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UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

In re Patent No. 8,187,334 CURRAN ET AL.

Issue Date: May 29, 2012 Appl No.: 13/079,645 Filed: April 04, 2011

For: SYSTEM AND METHODS FOR SPINAL FUSION

DECISION GRANTING

PETITION *37 CFR 1.324*

This is a decision on the petition filed April 17, 2013 to correct inventorship under 37 CFR 1.324.

The petition is granted.

The patented file is being forwarded to Certificate of Corrections Branch for issuance of a certificate naming only the actual inventor or inventors.

/Eduardo C. Robert/

EDUARDO C. ROBERT Supervisory Patent Examiner Art Unit 3733 Technology Center ***

FISH & RICHARDSON P.C. (TC) PO BOX 1022 MINNEAPOLIS, MN 55440-1022

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION N		
13/079,645	04/04/2011	Matthew Curran	104US2	1151	
	7590 05/29/201 ARDSON P.C. (TC)	3	EXAMINER		
PO BOX 1022	, ,		BRAY, STUART SAMUEL		
MINNEAPOLIS, MN 55440-1022			ART UNIT	PAPER NUMBER	
			3733		
			NOTIFICATION DATE	DELIVERY MODE	
			05/29/2013	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

UNITED STATES PATENT AND TRADEMARK OFFICE

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Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

In re Patent No. 8,187,334 CURRAN ET AL.

Issue Date: May 29, 2012 Appl No.: 13/079,645

Filed: April 04, 2011

For: SYSTEM AND METHODS FOR SPINAL FUSION

DECISION GRANTING

PETITION

37 CFR 1.324

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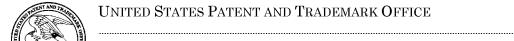
The petition is granted.

The patented file is being forwarded to Certificate of Corrections Branch for issuance of a certificate naming only the actual inventor or inventors.

/Eduardo C. Robert/

EDUARDO C. ROBERT Supervisory Patent Examiner Art Unit 3733 Technology Center ***

FISH & RICHARDSON P.C. (TC) PO BOX 1022 MINNEAPOLIS, MN 55440-1022



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

DATE: May 22, 2013

TO: Certificates of Correction Branch

FROM: EDUARDO C. ROBERT

SPE, Art Unit 3733

SUBJECT: REQUEST FOR CERTIFICATE OF CORRECTION

Please issue a Certificate of Correction in U. S. Letters Patent No. 8,187,334 as specified on the attached Certificate.

/Eduardo C. Robert/

EDUARDO C. ROBERT, SPE Art Unit 3733

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE

Patent No. 8,187,334 Patented: May 29, 2012

On petition requesting issuance of a certificate for correction of inventorship pursuant to 35 U.S.C. 256, it has been found that the above identified patent, through error and without deceptive intent, improperly sets forth the inventorship. Accordingly, it is hereby certified that the correct inventorship of this patent is:

Matthew Curran, Carlsbad, CA; Mark Peterson, Medford, OR; Luiz Pimenta, Sao Paulo, Brasil

/Eduardo C. Robert/

EDUARDO C. ROBERT Supervisory Patent Examiner Art Unit 3733



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1	APPLICATION	FILING or	GRP ART				
	NUMBER	371(c) DATE	UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
•	13/079.645	04/04/2011	3733	2140	104US2	26	2.

26191 FISH & RICHARDSON P.C. (TC) PO BOX 1022 MINNEAPOLIS, MN 55440-1022 CONFIRMATION NO. 1151
CORRECTED FILING RECEIPT



Date Mailed: 06/03/2013

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Inventor(s)

Matthew Curran, Carlsbad, CA; Mark Peterson, Medford, OR; Luiz Pimenta, Sao Paulo, BRAZIL;

Applicant(s)

Matthew Curran, Carlsbad, CA; Mark Peterson, Medford, OR; Luiz Pimenta, Sao Paulo, BRAZIL;

Power of Attorney: The patent practitioners associated with Customer Number 26191

Domestic Priority data as claimed by applicant

This application is a CON of 11/093,409 03/29/2005 PAT 7918891 which claims benefit of 60/557,536 03/29/2004

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None. Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

If Required, Foreign Filing License Granted: 04/13/2011

The country code and number of your priority application, to be used for filing abroad under the Paris Convention,

is **US 13/079,645**

Projected Publication Date: Not Applicable

Non-Publication Request: No Early Publication Request: No

page 1 of 3

Title

SYSTEM AND METHODS FOR SPINAL FUSION

Preliminary Class

623

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications:

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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UNITED STATES PATENT AND TRADEMARK OFFICE Certificate

Patent No. 8,187,334 B2

Patented: May 29, 2012

On petition requesting issuance of a certificate for correction of inventorship pursuant to 35 U.S.C. 256, it has been found that the above identified patent, through error and without any deceptive intent, improperly sets forth the inventorship.

Accordingly, it is hereby certified that the correct inventorship of this patent is: Matthew Curran, Carlsbad, CA (US); Mark Peterson, Medford, OR (US); and Luiz Pimenta, Sao Paulo (BR).

Signed and Sealed this Eighteenth Day of June 2013.

EDUARDO C. ROBERT Supervisory Patent Examiner Art Unit 3733 Technology Center 3700