Form PTO-1595 (Rev. 03-11) OMB No. 0651-0027 (exp. 03/31/2012)	U.S. DEPARTMENT OF CO United States Palent and Tradem	
RECORDATION FORM COVER SHEET		
PATENTS	ONLY	
To the Director of the U.S. Patent and Trademark Office: Please	record the attached documents or the new address(es) t	below.
Name of conveying party(ies):	2. Name and address of receiving party(les)	
Third Millennium Engineering, LLC	Name: SpineCore, Inc.	
	Internal Address:	
Addillonal name(s) of conveying party(ies) attached? Yes X No	Street Address:	
3. Nature of conveyance/Execution Date(s):		
Execution Date(s): January 21, 2003	2 Pearl Court	
x Assignment Merger Change of Name		
Security Agreement Joint Research Agreement	City: Allendale	
Government Interest Assignment	State: New Jersey	
Executive Order 9424, Confirmatory License	Country: United States of America Zip: 0740	
Other		No
Other	attached?	
4. Application or patent number(s): A. Palent Application No.(s) 11/453,129 13/402,328	This document is being filed logether with a new applicat B. Patent No.(s)	ion.
Additional numbers attached?		
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:	
Name: Brent L. Farese LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$80.00)
Internal Address: Atty. Dkt.: SPINE 3.0-453		
Street Address: 600 South Avenue West	Authorized to be charged to deposit account Enclosed None required (government Interest not affect	ling titie)
City: Westfield	8. Payment Information	
State: NJ Zip; 07090		
Phone Number: 908-654-5000		
Fax Number: 908-654-7866	Deposit Account Number 12-1095 Authorized User Name Brent L. Farese	
Email Address; ataylor@ldlkm.com	Additionaged Oser Marine Digital C. Parese	
9. Signature:		_
Signature	February 28, 2012	<u> </u>
Brent L. Farese - 63,617	Total number of pages including cover	
Name of Person Signing	sheet, attachments, and documents:	10

1616490

PATENT REEL: 027779 FRAME: 0833

700481077



ASSIGNMENT AND ASSUMPTION AGREEMENT

This Assignment and Assumption Agreement (the "Agreement") is effective January 21, 2003 (the "Effective Date") and is among Third Millennium Engineering, LLC., a Delaware limited liability company of Summit, New Jersey ("Millennium"), Third Millennium Enterprises, LLC ("Enterprises") and SpineCore, Inc., a Delaware corporation of Summit New Jersey (the "Company").

Millennium or Enterprises owns or controls certain inventions which are embodied by or encompassed in certain issued patents and pending patent applications, as identified in attached Schedule (collectively, the "Inventions").

For good and sufficient consideration, Millennium and Enterprises hereby irrevocably sells and assigns to the Company, and the Company hereby assumes, Millennium's and Enterprises' entire right, title, and interest in the Inventions throughout the world, and in and to all applications for patent and patents for the Inventions, in all countries of the world, including all divisions, reissues, continuations, substitutions and extensions thereof, and all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property, including rights of priority, resulting from the filing of any of said applications.

PATENT REEL: 014344 FRAME: 0945



IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date set forth above.

By: Joseph P. Errin Erg

Third Millennium Engineering, LLC

Title: Clanage

Date: 1 7.1 05

SpineCore, Inc.

By: Joseph P. Ervin Erg.

Title: CEO

Date: 1/21 03

Third Millennium Enterprises, LLC

By: Joseph P. Erny

Title: Manager

Date: 12103

PATENT REEL: 014344 FRAME: 0946



Schodule of Patents and Patent Applications

Title	Country	Particulars
Artificial Intervertebral Disc Having Limited Rotation Using a Captured Ball and Socket	USA	US Application Serial No. 10/256,160
Joint With a Solid Ball and Compression Locking Post		Filed 26-Sep-2002
Artificial Intervertebral Disc Having a Captured Ball and Socket Joint With a Solid Ball and Compression Locking Post	USA	US Application Serial No. 10/294,981 Filed 14-Nov-2002
Artificial Intervertebral Disc Having Limited Rotation Using a Captured Ball and Socket Joint With a Compression Locking Post and a Solid Ball Having a Protrusion	USA	US Application Serial No. 10/294,985 Filed 14-Nov-2002
Artificial Intervertebral Disc Having Limited Rotation Using a Captured Ball and Socket Joint with a Solid Ball, a Compression Locking Post and an Interference Pin	USA	US Application Serial No. 10/294,986 Filed 14-Nov-2002
Artificial Intervertebral Disc Having Limited Rotation Using a Captured Ball and Socket Joint with a Solid Ball, a Compression Locking Post and an Interference Ball Bearing	USA .	US Application Serial No. 10/294,989 Filed 14-Nov-2002
Artificial Intervertebral Disc Having a Captured Ball and Socket Joint With a Solid Ball and Retaining Cap	USA	US Application Serial No. 10/294,983 Filed 14-Nov-2002
Artificial Intervertebral Disc Having Limited Rotation Using a Captured Ball and Socket Joint With a Solid Ball and Retaining Cap	USA	US Application Serial No. 10/294,982 Filed 14-Nov-2002

PATENT REEL: 014344 FRAME: 0938



Title	Country	Particulars
Artificial Intervertebral Disc Having Limited Rotation Using a Captured Ball and Socket Joint With a Retaining Cap and a Solid Ball Having a Protrusion	USA	US Application Serial No. 10/294,984 Filed14-Nov-2002
Artificial Intervertebral Disc Having Limited Rotation Using a Captured Ball and Socket Joint with a Solid Ball, a Retaining Cap, and an Interference Pin	USA	US Application Serial No. 10/294,980 Filed 14-Nov-2002
Artificial Intervertebral Disc Having Limited Rotation Using a Captured Ball and Socket Joint with a Solid Ball, a Retaining Cap, and an Interference Ball Bearing	USA	US Application Serial No. 10/294,988 Filed 14-Nov-2002
Intervertebral Spacer Device	ÜŠA	United States Patent No. 5,989,291 Issued 23-Nov-1999
Intervertebral Spacer Device Having a Radially Thinning Belleville Spring	USA	US Application Serial No. 09/968,047 Filed 1-Oct-2001
Intervertebral Spacer Device Utilizing a Belleville Washer Having Radially Extending Grooves	USA	US Application Serial No. 09/968,046 Filed 1-Oct-2001
Intervertebral Spacer Device Having a Radially Thinning Slotted Belleville Spring	USA	US Application Serial No. 09/968,045 Filed 1-Oct-2001
Intervertebral Spacer Device Utilizing a Spirally Slotted Belleville Washer Having Radially Extending Grooves	USA	US Application Serial No. 09/970,479 Filed 4-Oct-2001

PATENT REEL: 014344 FRAME: 0939



Attachment A (Short Form Assignment and Assumption Agreement)

Page 5

Title	Country	Particulars
Intervertebral Spacer Device Utilizing a Belleville Washer Having Radielly Spaced	USA	US Application Serial No. 09/974,154
Concentric Grooves		Filed 11-Oct-2001
Intervertebral Spacer Device Utilizing a Spirally Slotted Belleville Washer Having Radially Spaced Concentric	USA	US Application Scriel No. 09/975,471 Filed 11-Oct-2001
Intervertebral Spacer Device Utilizing a Spirally Slotted Belleville Washer and a Rotational Mounting	USA	US Application Serial No. 10/040,801 Filed 7-Jan-2002
Tension Bearing Artificial Disc Providing a Centroid of Motion Centrally Located Within an	USA	US Application Serial No. 10/151,280 Filed 20-May-2002
Intervertebral Space Artificial Intervertebral Disc Utilizing a Ball Joint Coupling	USA	US Application Serial No. 10/175,417 Filed 19-Jun-2002
Artificial Intervertebral Disc Having a Slotted Belleville Washer Force Restoring Element	PCT	PCT Application Serial No. PCT/US02/19660 Filed 19-Jun-2002
Artificial Intervertebral Disc Having a Grooved Belleville Washer Force Restoring Element	PCT	PCT Application Serial No. PCT/US02/19654
		Filed 19-Jun-2002
Artificial Intervertebral Disc Having a Slotted Belleville Washer Force Restoring	USA	US Application Serial No. 10/177,013
Element Intervertebral Spacer Device Having Arch Shaped Spring Elements	USA	Filed 21-Jun-2002 US Application Serial No. 09/982,148

PATENT REEL: 014344 FRAME: 0940



l'itte	Country	Particulars
		Filed 18-Oct-2001
Intervertebral Spacer Device Having a Domed Arch Shaped	USA	US Application Serial No. 10/035,640
		Filed 9-Nov-2001
Intervertebral Spacer Device Having a Slotted Domed Arch Strip Spring	USA	US Application Serial No. 10/035,614
Intervertebral Spacer Device Having a Slotted Partial Circular Domed Arch Strip Spring	USA	Filed 9-Nov-2001 US Application Serial No. 10/035,669 Filed 9-Nov-2001
Intervertebral Spacer Device Having a Multi-Pronged Domed Spring	USA	US Application Serial No. 10/035,668 Filed 9-Nov-2001
Artificial Intervertebral Disc Having an Arched Spring Force Restoring Element	PCT	PCT Application Serial No. PCT/US02/19656 Filed 19-Jun-2002
Intervertebral Spacer Device Having a Wave Washer Force Restoring Element	USA	US Patent No. 6,468,310 Issued 22-Oct-2002
Intervertebral Spacer Device Having a Spiral Wave Washer Force Restoring Element	USA .	US Application Serial No. 09/906,118 (Allowed Claims) Filed 16-Jul-2001
Artificial Intervertebral Disc Having a Wave Washer Force Restoring Element	PCT	PCT Application Serial No. PCT/US02/19659
Artificial Intervertebral Disc Having a Wave Washer Force Restoring Element	USA	Filed 19-Jun-2002 US Application Serial No. 10/177,377 Filed 21-Jun-2002

PATENT REEL: 014344 FRAME: 0941



Title	Country	Particulars
Intervertebral Spacer Device Having a Wave Washer Force Restoring Element	USA	US Application Serial No. 10/272,580
		Filed 16-Oct-2002
Artificial Intervertebral Disc Having a Spider Spring Force Restoring Element	PCT	PCT Application Serial No. PCT/US02/19651
		Filed 19-Jun-2002
Artificial Intervertebral Disc Having a Spider Spring Force Restoring Element	USA	US Application Serial No. 10/177,378
		Filed 21-Jun-2002
Intervertebral Spacer Having a Flexible Wire Mesh Vertebral Body Contact Element	USA	US Application Serial No. 10/128,619
Body Contact Dicinosis		Filed 23-Apr-2002
Artificial Intervertebral Disc Having a Flexible Wire Mesh Vertebral Body Contact Element	USA	US Application Serial No. 10/140,153 Filed 7-May-2002
	\ <u>\</u>	DOT A lighting Serial No.
Artificial Intervertebral Disc Having a Deformable Wire	PCT	PCT Application Serial No. PCT/US02/19657
Mesh Vertebral Body Contact Element		Filed 19-Jun-2002
Instrumentation and Methods For Use In Implanting an	USA	US Application Serial No. 10/282,356
Artificial Disc		Filed 29-Oct-2002
Method of Surgically Treating Scoliosis	USA	US Patent No. 6,447,548
SCOTIONS		Issued 10-Sep-2002
Trial Intervertebral Distraction Spacers	USA	US Application Serial No. 09/906,119
		Filed 16-Jul-2001

PATENT REEL: 014344 FRAME: 0942



Title	Country	Particulars
Insertion Tool For Use With Trial Intervertebral Distraction	USA	US Patent No. 6,428,544
Spacers		Issued 6-Aug-2002
Insertion Tool For Use With	USA	US Patent No. 6,478,801
Tapered Trial Intervertebral		
Distraction Spacers		Issued 12-Nov-2002
Porous Intervertebral	USA	US Patent No. 6,471,725
Distraction Spacers		Issued 29-Oct-2002
Surgical Method of Treating	USA	US Application Serial No.
Scoliosis	0011	09/906.124
m www. was		
		Filed 16-Jul-2001
Method of Distracting	USA	US Patent No. 6,436,102
Vertebral Bones		Issued 20-Aug-2002
Vertebral Bone Distraction	USA	US Application Serial No.
Instruments		09/906,126
		Direct 6 T-1 0005
S. Davidson	USA	Filed 16-Jul-2001 US Application Serial No.
Instruments for Reorienting Vertebral Bones for the	U.S.A.	09/906,134
Treatment of Scoliosis		
		Filed 16-Jul-2001
Insertion Tool For Use With	USA	US Application Serial No.
Intervertebral Spacers		09/906,127
		Filed 16-Jul-2001
Insertion Tool For Use With	USA	US Application Serial No.
Trial Intervertebral Distraction		10/115,751
Spacers		Filed 3-Apr-2002
Method of Distracting	USA	US Application Serial No.
Vertebral Bones		10/222,332
		Filed 16-Aug-2002
Method of Surgically Treating	USA	US Application Serial No.
Scoliosis		10/223,146
		Filed 10, Avg. 2002
		Filed 19-Aug-2002

PATENT REEL: 014344 FRAME: 0943



Attachment A (Short Form Assignment and Assumption Agreement)

Page 9

Title	Country	Particulars
Porous Intervertebral Distraction Spacers	USA	US Application Serial No. 10/223,148
		Filed 4-Oct-2002
Insertion Tool For Use With Tapered Trial Intervertebral Distraction Spacers	ÛŠA	US Application Serial No. 10/223,147
All has been been as the a supervisor of		Filed 19-Aug-2002
Static Trials and Related Instruments and Methods for Use in Implanting an Artificial	USA	US Application Serial No. 10/309,585
Intervertebral Disc		Filed 4-Dec-2002
Femoral Ring Loader	USA	US Patent No. 6,440,142
		Issued 27-Aug-2002
Distraction Instrument for use in Anterior Cervical Fixation Surgery	USA	US Application Serial No. 10/003,000
Surgery		Filed 30-Nov-2001
Spacer Device and Insertion Instrument for use in Anterior Cervical Fixation Surgery	USA	US Application Serial No. 10/001,531
CEIVICE FIXEDON SUIGON		Filed 30-Nov-2001
Femoral Ring Loader	USA	US Application Serial No. 10/075,688
		Filed 13-Feb-2002

PATENT REEL: 014344 FRAME: 0944

PATENT REEL: 027779 FRAME: 0842

RECORDED: 02/29/2012