Form PTO-1595 (Rev. 03-11) OMB No. 0851-0027 (exp. 03/31/2012)	U.S. DEPARTMENT OF COMMERCE United States Petent and Trademark Office
RECORDATION FOR	
PATENTS	5 UNLT
To the Director of the U.S. Patent and Trademark Office: Please	record the attached documents or the new address(es) below.
Name of conveying party(les):	2. Name and address of receiving party(les)
Third Millennlum Engineering, LLC (01/21/2003) and Third Millennium Enterprises, LLC	Name: SpineCore, Inc.
(01/21/2003)	Internal Address:
Additional name(a) of conveying party(les) attached? Yes X No	Street Address:
3. Nature of conveyance/Execution Date(s):	
Execution Date(s): in parentheses after inventor name	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: 07401
Olher	Additional name(s) & address(es) Yes X No attached?
A. Patent Application No.(s) 11/711,305	This document is being filed together with a new application.  8. Patent No.(s)  7,217,292
Additional numbers attached  5. Name and address to whom correspondence	A Tank sumbar of smallestland and
concerning document should be mailed:	patents involved:
Name: Ryan L. Bergeron LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 80.00
Internal Address: Atty. Dkl.: SPINE 3.0-437 CON and SPINE 3.0-437 CON CON	
Street Address: 600 South Avenue West	Authorized to be charged to deposit account     Enclosed     None required (government interest not affecting title)
City: Westfleld	8. Payment Information
State: NJ Zip: 07090	
Phone Number: 908-654-5000	
Fax Number: 908-654-7866	Deposit Account Number 12-1095
Email Address: ataylor@idlkm.com	Authorized User Name Ryan L. Bergeron
9. Signature:  Signature  Signature	April 2, 2012  Date
Ryan L. Bergeron - 66,377	Total number of pages including cover sheet, attachments, and documents:
Name of Person Signing	ander, attachments, and decements,

1666197 1.DOC



#### 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: 0946



### Απ<br/>achment A (Short Form Assignment and Assumption Agreement)<br/> $p_{\rm egs}$ 2

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

SpineCore, Inc.

By: Joseph P. Errino, Erg.

By: Joseph P. Errino, Erg.

Title: Cf o

Date: 1/21/03

Date: 1/21/03

Third Millennium Enterprises, LLC

Third Millennium Engineering, LLC

By: Joseph P. Emin Erg.

Title: Maurager

Date: 121/23

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#### Schedule of Patents and Patent Applications

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

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Title	Country	Particulars
Artificial Interventebral 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 Rotaining 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	USA	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

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**REEL: 027986 FRAME: 0189** 



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	USA	US Application Serial No. 09/975,471
Belleville Washer Having		VXX15,471
Radially Spaced Concentric Grooves		Filed 11-Oct-2001
Intervertebral Spacer Device	USA	US Application Serial No. 10/040,801
Utilizing a Spirally Slotted Belleville Washer and a		10/040,801
Rotational Mounting		Filed 7-Jan-2002
Tension Bearing Artificial Disc	USA	US Application Serial No.
Providing a Centroid of Motion Centrally Located Within an		10/151,280
Intervertebral Space		Filed 20-May-2002
Artificial Intervertebral Disc Utilizing a Ball Joint Coupling	USA	US Application Serial No. 10/175,417
Omizing a pan Joint Coupling		
	w.cm	Filed 19-Jun-2002 PCT Application Serial No.
Artificial Intervertebral Disc Having a Slotted Belleville Washer Force Restoring	PCT	PCT/US02/19660
Element		Filed 19-Jun-2002
Artificial Intervertebral Disc Having a Grooved Belleville Washer Force Restoring Element	ving a Grooved Belleville	PCT Application Serial No. PCT/US02/19654
		Filed 19-Jun-2002
Artificial Intervertebral Disc Having a Slotted Belleville	USA	US Application Serial No. 10/177,013
Washer Force Restoring Element		FiJed 21-Jun-2002
Intervertebral Spacer Device Having Arch Shaped Spring Elements	ÙSA	US Application Serial No. 09/982,148

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Nitte	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	USA	Filed 9-Nov-2001 US Application Serial No. 10/035,669 Filed 9-Nov-2001
Spring 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
		Filed 19-Jun-2002
Artificial Intervertebral Disc Having a Wave Washer Force Restoring Element	USA	US Application Serial No. 10/177,377
Vesimina commen		Filed 21-Jun-2002

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litte	Country	Particulars
ntervertebral 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 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
Artificial Intervertebral Disc Having a Deformable Wire Mesh Vertebral Body Contact Element	PCT	PCT Application Serial No. PCT/US02/19657 Filed 19-Jun-2002
Instrumentation and Methods For Use In Implanting an Artificial Disc	USA	US Application Serial No. 10/282,356 Filed 29-Oct-2002
Method of Surgically Treating Scoliosis	USA	US Patent No. 6,447,548  Issued 10-Sep-2002
Trial Intervertebral Distraction Spacers	USA	US Application Serial No. 09/906,119
		Filed 16-Jul-2001

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Title	Country	Particulars
Insertion Tool For Use With	USA	US Patent No. 6,428,544
Trial Intervertebral Distraction		
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		09/906,124
		PD-4 16 T-1 2001
	USA	Filed 16-Jul-2001 US Patent No. 6,436,102
Method of Distracting Vertebral Bones	USA	US FRIEM 140. 6,430,102
4 effectal ponos		Issued 20-Aug-2002
Vertebral Bone Distraction	USA	US Application Serial No.
Instruments		09/906,126
1		
		Filed 16-Jul-2001
Instruments for Reorienting	USA	US Application Serial No. 09/906,134
Vertebral Bones for the Treatment of Scoliosis		09/900,134
Treatment of Sconosis		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	OSA	10/222,332
A street which they have an an an		
		Filed 16-Aug-2002
Method of Surgically Treating	USA	US Application Serial No.
Scoliosis		10/223,146
		Filed 19-Aug-2002
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Title	Country	Particulars
Porous Intervertebral Distraction Spacers	USA	US Application Scriel No. 10/223,148
		Filed 4-Oct-2002
Insertion Tool For Use With Tapered Trial Intervertebral Distraction Spacers	USA	US Application Serial No. 10/223,147
·		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
		Filed 30-Nov-2001
Spacer Device and Insertion Instrument for use in Anterior Corvical Fixation Surgery	USA	US Application Serial No. 10/001,531
Cot Alers 1, tympon on Park		Filed 30-Nov-2001
Femoral Ring Loader USA	USA	US Application Serial No. 10/075,688
		Filed 13-Feb-2002

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**RECORDED: 04/02/2012**