Form PTO-1595 (Rev. 03-11) OMB No. 0851-0027 (exp. 03/31/2015)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office
RECORDATION FOR	
PATENTS	ONLY
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(ies):	2. Name and address of receiving party(les)
Third Millennium Engineering, LLC	Name: SpirreCore, Inc.
Additional name(s) of conveying party(les) attached?	Internal Address: 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: 07401
Other	Additional name(s) & address(es) Yes X No attached?
4. Application or patent number(s); A. Patent Application No.(s)	This document is being filed together with a new application. B. Patent No.(a) 7,722,675
Additional numbers attached?	
5. Name and address to whom correspondence concerning document should be malled:	6. Total number of applications and patents involved:
Name: April M. Capati LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Internal Address: Atty. Dkt.:	•
Street Address: 600 South Avenue West	X Authorized to be charged to deposit account Enclosed
	None required (government Interest not affecting title)
City: Westfield	8. Payment Information
State: NJ Zip: 07090	
Phone Number: 908-654-5000	
Fax Number: 908-654-7866	Deposit Account Number 12-1095
Email Address: mcormier@ldlkm.com	Authorized User Name April M. Capati
9. Signature: Signature	1/15/14 Pate
April M. Capati - 54,298	Total number of pages including cover sheet, attachments, and documents:
Name of Person Signing	unwi mayiindita, and desimona.



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, treatics 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 WHERBOF, the parties have executed this Agreement as of the Effective Date set forth above.

M ~ ~

Third Millennium Engineering, LLC

Title: Claus-jun

Date: 1 21

SpineCore, Inc.

By: Joseph P. Ervew, Es

Title: CEO

Date: 1 21 03

Third Millennium Enterprises, LLC

By: Joseph P. Erny Erg

Title: Managar

Date: 12, 03

PATENT REEL: 014344 FRAME: 0946



Schedule of Patents and Patent Applications

Title	Country	Particulars
Artificial Intervertebral Disc	USA	US Application Serial No.
Having Limited Rotation Using		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		mu
Compression Locking Post and		Filed 14-Nov-2002
an Interference Pin		
Artificial Intervertebral Disc	USA	US Application Serial No.
Having Limited Rotation Using		10/294,989
a Captured Ball and Socket		
Joint with a Solid Ball, a		Filed 14-Nov-2002
Compression Locking Post and		F116d 14-NDV-2002
an Interference Ball Bearing		US Application Serial No.
Artificial Intervertebral Disc	USA	10/294,983
Having a Captured Ball and		10/294,563
Socket Joint With a Solid Ball		Filed 14-Nov-2002
and Retaining Cap		US Application Serial No.
Artificial Intervertebral Disc	USA	10/294,982
Having Limited Rotation Using		10/474,70k
a Captured Ball and Socket		Filed 14-Mov-2002
Joint With a Solid Ball and		LITER 14-1/10A-50A5
Retaining Cap	<u> </u>	

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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	USA	US Application Serial No. 10/294,984 Filed14-Nov-2002
Protrusion Artificial Intervertebral Disc Having Limited Rotation Using a Captured Ball and Socket Joint with a Solid Ball, a Retaining Cap, and an	USA	US Application Serial No. 10/294,980 Filed 14-Nov-2002
Interference Pin Artificial Intervertebral Disc Having Limited Rotation Using a Captured Ball and Socket Joint with a Solld 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 Believille Spring	USA	US Application Serial No. 09/968,047 Filed 1-Oct-2001
Intervertebral Spacer Device Utilizing a Belleville Washer Having Radially Extending Grooves	ÜSA	US Application Serial No. 09/968,046 Filed 1-Oqt-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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PATENT



Title	Country	Particulare
Intervertebral Spacer Device Utilizing a Belleville Washer	USA	US Application Serial No. 09/974,154
Having Radially Spaced Concentric Grooves		Filed 11-Фс1-2001
Intervertebral Spacer Device Utilizing a Spirally Slotted Belleville Washer Having Radially Spaced Concentric	USA	US Application Serial No. 09/975,471 Filed 11-Det-2001
Crooves 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 Intervertebral Space	USA	US Application Serial No. 10/151,280 Filed 20 May-2002
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 Filed 21-Jun-2002
Element Intervertebral Spacer Device Having Arch Shaped Spring Elements	USA	US Application Serial No. 09/982,148

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PATENT



Title	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
		Filed 9-Nov-2001
Intervertebral Spacer Device Having a Slotted Partial Circular Domed Arch Strip	USA	US Application Scriel No. 10/035,669
		Filed 9-Nov-2001
Spring Intervertebral Spacer Device Having a Multi-Pronged	USA	US Application Serial No. 10/035,668
Domed Spring		Filed 9-Nov-2001
Artificial Intervertebral Disc Having an Arched Spring Force	PCT	PCT Application Serial No. PCT/US02/19656
Restoring Element		
		Filed 19-Jun-2002
	USA	US Patent No. 6,468,310
Intervertebral Spacer Device Having a Wave Washer Force	OSA	1
Having a Wave Washer Porce		Issued 22-Oct-2002
Restoring Element Intervertebral Spacer Device	USA	US Application Serial No.
Having a Spiral Wave Washer		09/906,118 (Allowed Claims)
Force Restoring Element	-	Filed 16-Jul-2001
Artificial Intervertebral Disc Having a Wave Washer Force	PCT	PCT Application Serial No. PCT/US02/19659
Restoring Element		
		Filed 19-Jun-2002
Artificial Intervertebral Disc Having a Wave Washer Force	USA	US Application Serial No. 10/177,377
Restoring Element		Filed 21-Jun-2002

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tle	Country	Particulars	
	USA	US Application Se	rial No.
aving a Wave Washer Force		10/272,580	
estoring Element		J	•
		Filed 16-Oct-2002	
rtificial Intervertebral Disc	PCT	PCT Application	Serial No.
laving a Spider Spring Force		PCT/US02/19651	
estoring Element			
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		F31 - 4 10 T 1000	•
		Filed 19-Jun-200	
Artificial Intervertebral Disc	USA	US Application S	SCITAL 140.
Having a Spider Spring Force		10/177,378	
Restoring Element		Filed 21-Jun-200	17
		US Application	
Intervertebral Spacer Having a	USA	10/128,619	Scriar 140.
Flexible Wire Mesh Vertebral		10/126,015	
Body Contact Element		Filed 23-Apr-20	02
<u> </u>		US Application	
Artificial Intervertebral Disc	USA	10/140,153	W
Having a Flexible Wire Mesh		10/1/03/20	
Vertebral Body Contact		Filed 7-May-20	02
Element			
	PCT	PCT Application	n Serial No.
Artificial Intervertebral Disc	FCI	PCT/US02/196	57
Having a Deformable Wire	1		
Mesh Vertebral Body Contact	{	Filed 19-Jun-20	002
Element			
116-41-4	USA	US Application	Serial No.
Instrumentation and Methods	USA	10/282,356	
For Use In Implanting an			
Artificial Disc		Filed 29-Oct-2	.002
- In Carlotte Target	USA	US Patent No.	6,447,548
Method of Surgically Treating	USA		
Scoliosis		Issued 10-Sep	-2002
La I Pilandia	USA	US Application	n Serial No.
Trial Intervertebral Distraction	L COZZ	09/906,119	
Spacers			
		Filed 16-Jul-2	1001

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itle	Country	Particulare
sertion Tool For Use With rial Intervertebral Distraction	USA	US Patent No. 6,428,544
pacers		Issued 6-Aug-2002
nsertion Tool For Use With	USA	US Patent No. 6,478,801
apered Trial Intervertebral Distraction Spacers		Issued 12-Nov-2002
orous Intervertebral Distraction Spacers	USA	US Patent No. 6,471,725 Issued 29-Oct-2002
Surgical Method of Treating Scoliosis	USA	US Application Serial No. 09/906,124
		Filed 16-Jul-2001
Method of Distracting Vertebral Bones	USA	US Patent No. 6,436,102
A STROVET DOMES		Issued 20-Aug-2002
Vertebral Bone Distraction Instruments	USA	US Application Serial No. 09/906,125
		Filed 16-Jul-2001
Instruments for Reorienting Vertebral Bones for the	USA	US Application Serial No. 09/906,134
Treatment of Scoliosis		Filed 16-Jul-2001
Insertion Tool For Use With Intervertebral Spacers	USA	US Application Serial No. 09/906,127
		Filed 16-Jul-2001
Insertion Tool For Use With Trial Intervertebral Distraction	USA	US Application Serial No. 10/115,751
Spacers		Filed 3-Apr-2002
Method of Distracting Verteiral Bones	USA	US Application Serial No. 10/222,332
A Made Walle Many pages and a decrease an		Filed 16 Aug-2002
Method of Surgically Treating Scoliosis	USA	US Application Serial No. 10/223,146
<u> </u>		Filed 19-Aug-2002

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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
Insertion Tool For Use With	USA	Filed 4-Oct-2002 US Application Serial No.
Tapered Trial Intervertebral Distraction Spacers	Joh	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
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 Cervical Fixation Surgery	USA	US Application Serial No. 10/001,531 Filed 30-Nov-2001
Femoral Ring Loader	USA	US Application Scrial No. 10/075,688 Filed 13-Feb-2002

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