

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5404400

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT		
NATURE OF CONVEYANCE:	Corrective Assignment to correct the CORRECT ERROR IN PREVIOUSLY RECORDED ASSIGNMENT THAT AFFECT US PATENT NO. 8795167 previously recorded on Reel 044343 Frame 0094. Assignor(s) hereby confirms the CORRECTIVE ASSIGNMENT.		
CONVEYING PARTY DATA			
Name		Execution Date	
CHOICE SPINE, LLC		11/16/2018	
RECEIVING PARTY DATA			
Name:	CHOICE SPINE, LLC		
Street Address:	400 ERIN DRIVE		
City:	KNOXVILLE		
State/Country:	TENNESSEE		
Postal Code:	37919		
PROPERTY NUMBERS Total: 1			
Property Type	Number		
Patent Number:	8795167		
CORRESPONDENCE DATA			
Fax Number:	(865)523-4478		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>			
Phone:	8655464305		
Email:	MEVANS@LUEDEKA.COM		
Correspondent Name:	LUEDEKA NEELY GROUP, PC		
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Address Line 4:	KNOXVILLE, TENNESSEE 37901		
ATTORNEY DOCKET NUMBER:	70451.US		
NAME OF SUBMITTER:	ROBERT O. FOX		
SIGNATURE:	/robertofox/		
DATE SIGNED:	03/05/2019		
Total Attachments: 30			
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

U.S. Patent No.: 8,795,167
Issue Date: August 5, 2014
Title: SPINAL THERAPY LATERAL APPROACH ACCESS INSTRUMENTS

DECLARATION OF STEPHEN AINSWORTH

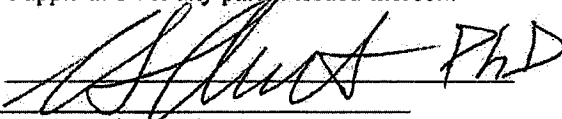
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

I Stephen Ainsworth, PhD, declare that:

1. I am over 21 years of age and I am a citizen of the United States. I am Executive Vice President of Choice Spine, LLC. I provide this declaration in support of the corrected cover sheet filed herewith with the Assignment Services Division because another party has improperly recorded an assignment against US Patent No. 8,795,167, issued August 5, 2014, and entitled SPINAL THERAPY LATERAL APPROACH ACCESS INSTRUMENTS.
2. Choice Spine, LLC is the correct owner of US Patent No. 8,795,167
3. The improperly recorded assignment was submitted with erroneous information, namely, the inclusion of US Patent No. 8,795,167. This assignment was recorded on October 18, 2017, at Reel/Frame 044343/0094. This assignment is from Quandary Medical LLC (Assignor) to MIS IP Holdings LLC.
4. A summary of the true chain of title of US Patent No. 8,795,167 is as follows: (a) from the inventors (Stephen D. Ainsworth et al.) to Trans1 Inc. (Reel/Frame 029494/0028); (b) from Trans1 Inc. to Baxano Surgical, Inc. (Reel/Frame 031621/0682); and (c) from Baxano Surgical, Inc. to Choice Spine, L.P. (Reel/Frame 034982/0532); and (d) from Choice Spine, L.P. to Choice Spine, LLC (Reel/Frame 048147/0243).
5. The foregoing true chain of title is provided to make it clear that the chain of title for US Patent No. 8,795,167 should not be considered altered by the improper assignment. Choice Spine, LLC is and continues to be, the owner of US Patent No. 8,795,167.
6. I hereby declare that all statements made herein of my own knowledge are 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 issued thereon.

Dated: 3/5/19, 2019



Stephen Ainsworth, PhD
Executive Vice-President - Choice Spine, LLC

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4645996

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
Name		Execution Date
QUANDARY MEDICAL LLC		08/17/2017
RECEIVING PARTY DATA		
Name:	MIS IP HOLDINGS LLC	
Street Address:	1518 BLAKE ST.	
City:	DENVER	
State/Country:	COLORADO	
Postal Code:	80202	
PROPERTY NUMBERS Total: 93		
Property Type	Number	
Patent Number:	6575979	
Patent Number:	6558386	
Patent Number:	6740090	
Patent Number:	6790210	
Patent Number:	6558390	
Patent Number:	6899716	
Patent Number:	6921403	
Patent Number:	7014833	
Patent Number:	7087058	
Patent Number:	7309338	
Patent Number:	7329259	
Patent Number:	7473256	
Patent Number:	7500977	
Patent Number:	7530993	
Patent Number:	7547317	
Patent Number:	7569056	
Patent Number:	7588574	
Patent Number:	7608077	
Patent Number:	7641657	
Patent Number:	7740633	

Property Type	Number
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Patent Number:	7727263
Patent Number:	7744599
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Patent Number:	7799032
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Patent Number:	7914535
Patent Number:	8034055
Patent Number:	8052613
Patent Number:	8105365
Patent Number:	8292928
Patent Number:	8308777
Patent Number:	8317867
Patent Number:	7491236
Patent Number:	7547324
Patent Number:	7601171
Patent Number:	7632274
Patent Number:	7662173
Patent Number:	7717919
Patent Number:	7717958
Patent Number:	7776042
Patent Number:	7776068
Patent Number:	7905905
Patent Number:	7905908
Patent Number:	7938836
Patent Number:	8038680
Patent Number:	8088147
Patent Number:	8167947
Patent Number:	8328846
Patent Number:	8328847
Patent Number:	8523918
Patent Number:	8696572
Patent Number:	8709087
Patent Number:	8747472
Patent Number:	8795167
Patent Number:	7738968
Patent Number:	7555343
Patent Number:	7918849

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Patent Number:	7553307
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Patent Number:	8430881
Patent Number:	7938830
Patent Number:	8048080
Patent Number:	7578819
Patent Number:	8062300
Patent Number:	8062298
Patent Number:	8192436
Patent Number:	7887538
Patent Number:	7857813
Patent Number:	8257356
Patent Number:	7959577
Patent Number:	8303516
Patent Number:	8092456
Patent Number:	8366712
Patent Number:	8394102
Patent Number:	8409206
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Patent Number:	8617163
Patent Number:	8613745
Patent Number:	8647346
Patent Number:	8663228
Patent Number:	8801626
Patent Number:	8845637
Patent Number:	8845639

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Email: jschell@rockymountainpatent.com
Correspondent Name: JEFFREY SCHELL
Address Line 1: 1518 BLAKE ST.
Address Line 4: DENVER, COLORADO 80211

NAME OF SUBMITTER:	JEFFREY R SCHELL
SIGNATURE:	/JEFFREY R SCHELL/
DATE SIGNED:	10/18/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 25

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ASSIGNMENT OF PATENTS

THIS ASSIGNMENT made as of the 17th day of August, 2017 by QUANDARY MEDICAL, LLC, a Delaware Limited Liability Company located at 2629 W. 32nd Ave, Denver, CO 80211 ("Assignor") to MIS IP HOLDINGS LLC, a Colorado Limited Liability Company having a registered address of 1518 Blake Street, Denver, CO 80202 ("Assignee").

WHEREAS, Assignor owns all of the right, title and interest in and to the patents, patent applications and patent disclosures listed on Schedule A attached hereto, together with all continuations (in whole or in part), divisionals, extensions, reissues, revisions, applications claiming priority to applications listed herein, and re-examinations thereof (collectively, the "Patents").

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns, transfers and sets over to Assignee the entire right, title and interest of Assignor in and to the Patents and the inventions claimed therein (collectively, the "Patent Rights"), for the United States and for all foreign countries, including, without limitation, any applications and registrations therefor, any renewals and extensions of the registrations, and all other corresponding rights that are or may be secured under the laws of the United States or any foreign country, now or hereafter in effect, for Assignee's own use and enjoyment, and for the use and enjoyment of Assignee's successors, assigns or other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment had not been made, together with all income, royalties or payments due or payable as of the date hereof or thereafter, including, without limitation, all claims for damages by reason of past, present or future infringement or other unauthorized use of the Patent Rights, with right to sue for, and collect the same for Assignee's own use and enjoyment and for the use and enjoyment of its successors, assigns or other legal representatives.

Assignor hereby requests the Commissioner for Patents record Assignee as the assignee and owner of the Patents and Patent Rights.

IN WITNESS WHEREOF, Assignor has executed this instrument.

QUANDARY MEDICAL, LLC

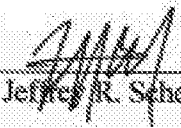
By: 

Walker Wells, its Exec. VP & General Counsel

ACCEPTANCE OF ASSIGNMENT

The Assignee hereby accepts the foregoing assignment.

MIS IP HOLDINGS LLC

By: 

Jeffrey R. Schell

Its: Member and Authorized Representative

SCHEDULE A

Patents and Pending Patent Applications Assigned by Quandary Medical LLC to MIS IP Holdings LLC

Patent: Method and apparatus for providing posterior or anterior trans-sacral access to spinal vertebrae

Patent No.: 6575979

Patent Appl. No.: 09/640222

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 08/16/2000

Date of Patent: 06/10/2003

Patent: Axial spinal implant and method and apparatus for implanting an axial spinal implant within the vertebrae of the spine

Patent No.: 6558386

Patent Appl. No.: 09/684820

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 10/10/2000

Date of Patent: 05/06/2003

Patent: Methods and apparatus for forming shaped axial bores through spinal vertebrae

Patent No.: 6740090

Patent Appl. No.: 09/710369

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 11/10/2000

Date of Patent: 05/25/2004

Patent: Methods and apparatus for forming shaped axial bores through spinal vertebrae

Patent No.: 6790210

Patent Appl. No.: 09/709105

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 11/10/2000

Date of Patent: 09/14/2004

Patent: Methods and apparatus for performing therapeutic procedures in the spine

Patent No.: 6558390

Patent Appl. No.: 09/782583

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 02/13/2001

Date of Patent: 05/06/2003

Patent: Method and apparatus for spinal augmentation

Patent No.: 6899716

Patent Appl. No.: 10/125771

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 04/18/2002

Date of Patent: 05/31/2005

Patent: Method and apparatus for spinal distraction and fusion

Patent No.: 6921403

Patent Appl. No.: 10/309416

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 12/03/2002

Date of Patent: 07/26/2005

Patent: Methods of performing procedures in the spine

Patent No.: 7014833

Patent Appl. No.: 09/848556

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 05/03/2001

Date of Patent: 03/21/2006

Patent: Method and apparatus for providing posterior or anterior trans-sacral access to spinal vertebrae

Patent No.: 7087058

Patent Appl. No.: 10/459149

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 06/10/2003

Date of Patent: 08/08/2006

Patent: Methods and apparatus for performing therapeutic procedures in the spine

Patent No.: 7309338

Patent Appl. No.: 10/430841

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 05/06/2003

Date of Patent: 12/18/2007

Patent: Articulating Spinal Implant

Patent No.: 7329259

Patent Appl. No.: 10/990705

Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 11/17/2004
Date of Patent: 02/12/2008

Patent: Methods and apparatus for spinal distraction
Patent No.: 7473256
Patent Appl. No.: 10/971765
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/22/2004
Date of Patent: 01/09/2009

Patent: Methods and apparatus for manipulating material in the spine
Patent No.: 7500977
Patent Appl. No.: 10/972044
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/22/2004
Date of Patent: 05/12/2009

Patent: Method of Spinal Fixation
Patent No.: 7530993
Patent Appl. No.: 10/971779
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/22/2004
Date of Patent: 05/12/2009

Patent: Methods of performing procedures in the spine
Patent No.: 7547317
Patent Appl. No.: 11/386451
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 03/21/2006
Date of Patent: 05/16/2009

Patent: Methods and apparatus for forming shaped axial bores through spinal vertebrae
Patent No.: 7569056
Patent Appl. No.: 10/853476
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 05/25/2004
Date of Patent: 08/04/2009

Patent: Kits for enabling axial access and procedures in the spine

Patent No.: 7588574

Patent Appl. No.: 10/971780

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 10/22/2004

Date of Patent: 09/15/2009

Patent: Method and apparatus for spinal distraction and fusion

Patent No.: 7608077

Patent Appl. No.: 11/189943

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 07/26/2005

Date of Patent: 10/27/2009

Patent: Method and apparatus for providing posterior or anterior trans-sacral access to spinal vertebrae

Patent No.: 7641657

Patent Appl. No.: 11/462934

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 08/07/2006

Date of Patent: 01/05/2010

Patent: Guide pin for guiding instrumentation along a soft tissue tract to a point on the spine

Patent No.: 7740633

Patent Appl. No.: 10/971781

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 10/22/2004

Date of Patent: 06/22/2010

Patent: Spinal fusion kit for guiding instrumentation through soft tissue to a point on the spine

Patent No.: 7763025

Patent Appl. No.: 11/940208

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 11/14/2007

Date of Patent: 07/27/2010

Patent: Articulating Spinal Implant

Patent No.: 7727263
Patent Appl. No.: 11/762646
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 06/13/2007
Date of Patent: 06/01/2010

Patent: Articulating Spinal Implant
Patent No.: 7744599
Patent Appl. No.: 11/762669
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 06/13/2007
Date of Patent: 06/29/2010

Patent: Methods and apparatus for performing therapeutic procedures in the spine
Patent No.: 7794463
Patent Appl. No.: 11/956236
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 12/13/2007
Date of Patent: 09/14/2010

Patent: Guide pin introducer for guiding instrumentation through soft tissue to a point on the spine
Patent No.: 7799032
Patent Appl. No.: 11/940265
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 11/14/2007
Date of Patent: 09/21/2010

Patent: Access kits for enabling axial access and procedures in the spine
Patent No.: 7799033
Patent Appl. No.: 11/942488
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 11/19/2007
Date of Patent: 09/21/2010

Patent: Method and apparatus for manipulating material in the spine
Patent No.: 7914535
Patent Appl. No.: 12/367397
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 02/06/2009

Date of Patent: 03/29/2011

Patent: Method And Apparatus For Providing Access To A Presacral Space

Patent No.: 8034055

Patent Appl. No.: 12/473999

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 05/28/2009

Date of Patent: 10/11/2011

Patent: Spinal nucleus extraction tool

Patent No.: 8052613

Patent Appl. No.: 10/971731

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 10/22/2004

Date of Patent: 11/08/2011

Patent: Methods And Apparatus For Performing Therapeutic Procedures In The Spine

Patent No.: 8105365

Patent Appl. No.: 10/971731

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 08/13/2010

Date of Patent: 01/31/2012

Patent: Method and apparatus for spinal distraction and fusion

Patent No.: 8292928

Patent Appl. No.: 12/561192

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 09/16/2009

Date of Patent: 10/23/2012

Patent: Method and apparatus for removable spinal implant extending between at least two adjacent vertebral bodies

Patent No.: 8308777

Patent Appl. No.: 12/870000

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 08/27/2010

Date of Patent: 11/13/2012

Patent: Methods And Apparatus For Performing Therapeutic Procedures In The Spine

Patent No.: 8317867

Patent Appl. No.: 13/342868

Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 01/03/2012
Date of Patent: 11/27/2012

Patent: Dual Anchor Prosthetic Nucleus Apparatus
Patent No.: 7491236
Patent Appl. No.: 10/972039
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 2/17/2009
Date of Patent:

Patent: Spinal Mobility Preservation Apparatus Having An Expandable Membrane
Patent No.: 7547324
Patent Appl. No.: 10/972176
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 6/16/2009
Date of Patent:

Patent: Spinal Motion Preservation Assemblies
Patent No.: 7601171
Patent Appl. No.: 11/256810
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/24/2005
Date of Patent: 10/13/2009

Patent: Thin Cutter Blades With Retaining Film For Preparing Intervertebral Disc Spaces
Patent No.: 7632274
Patent Appl. No.: 11/712241
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 02/28/2007
Date of Patent: 12/15/2009

Patent: Spinal Mobility Preservation Apparatus
Patent No.: 7662173
Patent Appl. No.: 10/972040
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 02/16/2010
Date of Patent:

Patent: Application of Therapy Aligned to an Internal Target

Patent No.: 7717919
Patent Appl. No.: 11/593445
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 11/06/2006
Date of Patent: 05/18/2010

Patent: Prosthetic Nucleus Apparatus
Patent No.: 7717958
Patent Appl. No.: 10/972184
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 05/16/2010
Date of Patent:

Patent: Methods and Apparatus for Provision of Therapy to Adjacent Motion Segments
Patent No.: 7776042
Patent Appl. No.: 11/202655
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 06/13/2005
Date of Patent: 08/17/2010

Patent: Spinal Motion Preservation Assemblies
Patent No.: 7776068
Patent Appl. No.: 11/586338
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/24/2006
Date of Patent: 08/17/2010

Patent: Spinal Mobility Preservation Apparatus
Patent No.: 7905905
Patent Appl. No.: 11/981413
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 03/15/2011
Date of Patent:

Patent: Spinal Mobility Preservation Method
Patent No.: 7905908
Patent Appl. No.: 11/981331
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 03/15/2011
Date of Patent:

Patent: Driver Assembly for Simultaneous Axial Delivery of Spinal Implants

Patent No.: 7938836

Patent Appl. No.: 11/259614

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 10/26/2005

Date of Patent: 05/10/2011

Patent: Drivers for Inserts to Bone Anchors

Patent No.: 8038680

Patent Appl. No.: 11/586486

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 10/24/2006

Date of Patent: 10/18/2011

Patent: Multi-Membrane Prosthetic Nucleus

Patent No.: 8088147

Patent Appl. No.: 12/061556

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 04/02/2008

Date of Patent: 01/03/2012

Patent: Methods for Push Distraction and for Provision of Therapy to Adjacent Motion Segments

Patent No.: 8167947

Patent Appl. No.: 12/821286

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 06/23/2010

Date of Patent: 05/01/2012

Patent: Prosthetic Nucleus with a Preformed Membrane

Patent No.: 8328846

Patent Appl. No.: 12/648758

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 12/29/2009

Date of Patent: 12/11/2012

Patent: Assemblies for Provision of Therapy to Motion Segments

Patent No.: 8328847

Patent Appl. No.: 12/851713

Country: USA

Owner/Assignee: Quandary Medical LLC
Date Filed: 08/06/2010
Date of Patent: 12/11/2012

Patent: Therapy to Adjacent Motion Segments
Patent No.: 8523918
Patent Appl. No.: 13/617030
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 09/14/2012
Date of Patent: 09/14/2013

Patent: Abrading Tool for Preparing Intervertebral Disc Spaces
Patent No.: 8696572
Patent Appl. No.: 12/692159
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 1/22/2010
Date of Patent: 4/15/2014

Patent: Methods And Apparatus For Performing Therapeutic Procedures In The Spine
Patent No.: 8709087
Patent Appl. No.: 13/612573
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 09/12/2012
Date of Patent: 4/29/2014

Patent: Spinal Therapy Device with Fixated Distraction Distance
Patent No.: 8747472
Patent Appl. No.: 12/541785
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 08/14/2009
Date of Patent: 6/10/2014

Patent: Spinal Therapy Lateral Approach Access Instruments and Implants
Patent No.: 8795167
Patent Appl. No.: 13/658426
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/23/2012
Date of Patent: 08/06/2014

Patent: DEVICES AND METHODS FOR SELECTIVE SURGICAL REMOVAL OF TISSUE

Patent No.: 7738968
Patent Appl. No.: 11/250332
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/15/2005
Date of Patent: 6/15/2010

Patent: DEVICES AND METHODS FOR SELECTIVE SURGICAL REMOVAL OF TISSUE

Patent No.: 7555343
Patent Appl. No.: 11/250369
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/15/2005
Date of Patent: 6/30/2009

Patent: DEVICES AND METHODS FOR TISSUE ACCESS

Patent No.: 7918849
Patent Appl. No.: 11/251205
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/15/2005
Date of Patent: 4/5/2011

Patent: DEVICES AND METHODS FOR TISSUE ACCESS

Patent No.: 7963915
Patent Appl. No.: 11/251186
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/15/2005
Date of Patent: 6/21/2011

Patent: DEVICES AND METHODS FOR TISSUE MODIFICATION

Patent No.: 7553307
Patent Appl. No.: 11/251165
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/15/2005
Date of Patent: 6/30/2009

Patent: DEVICES AND METHODS FOR TISSUE MODIFICATION

Patent No.: 7740631
Patent Appl. No.: 11/251204
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/15/2005

Date of Patent: 6/22/2010

Patent: DEVICES AND METHODS FOR TISSUE MODIFICATION

Patent No.: 8192435

Patent Appl. No.: 11/251199

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 10/15/2005

Date of Patent: 6/5/2012

Patent: DEVICES AND METHODS FOR TISSUE MODIFICATION

Patent No.: 8221397

Patent Appl. No.: 12/428369

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 4/22/2009

Date of Patent: 7/17/2012

Patent: DEVICES AND METHODS FOR TISSUE MODIFICATION

Patent No.: 8579902

Patent Appl. No.: 13/430500

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 3/26/2012

Date of Patent: 11/12/2013

Patent: DEVICES AND METHODS FOR SELECTIVE SURGICAL REMOVAL OF
TISSUE

Patent No.: 7738969

Patent Appl. No.: 12/357289

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 1/21/2009

Date of Patent: 6/15/2010

Patent: SPINAL ACCESS AND NEURAL LOCALIZATION

Patent No.: 8419653

Patent Appl. No.: 12/504545

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 7/16/2009

Date of Patent: 4/16/2013

Patent: MECHANICAL TISSUE MODIFICATION DEVICES AND METHODS

Patent No.: 8430881

Patent Appl. No.: 11/405848

Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 4/17/2006
Date of Patent: 4/30/2013

Patent: POWERED TISSUE MODIFICATION DEVICES AND METHODS
Patent No.: 7938830
Patent Appl. No.: 11/406486
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 4/17/2006
Date of Patent: 5/10/2011

Patent: FLEXIBLE TISSUE RASP
Patent No.: 8048080
Patent Appl. No.: 11/429377
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 5/4/2006
Date of Patent: 11/1/2011

Patent: SPINAL ACCESS AND NEURAL LOCALIZATION
Patent No.: 7578819
Patent Appl. No.: 11/457416
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 7/13/2006
Date of Patent: 8/25/2009

Patent: TISSUE REMOVAL WITH AT LEAST PARTIALLY FLEXIBLE DEVICES
Patent No.: 8062300
Patent Appl. No.: 11/687548
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 3/16/2007
Date of Patent: 11/22/2011

Patent: FLEXIBLE TISSUE REMOVAL DEVICES AND METHODS
Patent No.: 8062298
Patent Appl. No.: 11/687558
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 3/16/2007
Date of Patent: 11/22/2011

Patent: TISSUE MODIFICATION DEVICES
Patent No.: 8192436
Patent Appl. No.: 12/324147
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 11/26/2008
Date of Patent: 6/5/2012

Patent: METHODS AND APPARATUS FOR TISSUE MODIFICATION
Patent No.: 7887538
Patent Appl. No.: 11/375265
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 3/13/2006
Date of Patent: 2/15/2011

Patent: TISSUE ACCESS GUIDEWIRE SYSTEM AND METHOD
Patent No.: 7857813
Patent Appl. No.: 11/468247
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 8/29/2006
Date of Patent: 12/28/2010

Patent: GUIDEWIRE EXCHANGE SYSTEMS TO TREAT SPINAL STENOSIS
Patent No.: 8257356
Patent Appl. No.: 12/127535
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 5/27/2008
Date of Patent: 9/4/2012

Patent: METHOD SYSTEM AND APPARATUS FOR NEURAL LOCALIZATION
Patent No.: 7959577
Patent Appl. No.: 12/060229
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 3/31/2008
Date of Patent: 6/14/2011

Patent: METHOD SYSTEM AND APPARATUS FOR NEURAL LOCALIZATION
Patent No.: 8303516
Patent Appl. No.: 13/090944
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 4/20/2011

Date of Patent: 11/6/2012

Patent: MULTIPLE PATHWAYS FOR SPINAL NERVE ROOT DECOMPRESSION
FROM A SINGLE ACCESS POINT

Patent No.: 8092456

Patent Appl. No.: 12/351978

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 1/13/2009

Date of Patent: 1/10/2011

Patent: MULTIPLE PATHWAYS FOR SPINAL NERVE ROOT DECOMPRESSION
FROM A SINGLE ACCESS POINT

Patent No.: 8366712

Patent Appl. No.: 13/311272

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 12/6/2011

Date of Patent: 2/5/2013

Patent: SURGICAL TOOLS FOR TREATMENT OF SPINAL STENOSIS

Patent No.: 8394102

Patent Appl. No.: 12/824043

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 6/25/2010

Date of Patent: 3/12/2013

Patent: TISSUE MODIFICATION DEVICES AND METHODS

Patent No.: 8409206

Patent Appl. No.: 12/773595

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 5/4/2010

Date of Patent: 4/2/2013

Patent: TISSUE MODIFICATION DEVICES AND METHODS

Patent No.: 8398641

Patent Appl. No.: 13/338103

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 12/27/2011

Date of Patent: 3/19/2013

Patent: TISSUE ACCESS GUIDEWIRE SYSTEM AND METHOD

Patent No.: 8551097

Patent Appl. No.: 12/917253
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 11/1/2010
Date of Patent: 10/8/2013

Patent: ACCESS AND TISSUE MODIFICATION SYSTEMS AND METHODS
Patent No.: 8568416
Patent Appl. No.: 13/588969
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 8/17/2012
Date of Patent: 10/29/2013

Patent: DEVICES AND METHODS FOR TISSUE MODIFICATION
Patent No.: 8579902
Patent Appl. No.: 13/430500
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 3/26/2012
Date of Patent: 11/12/2013

Patent: FLEXIBLE TISSUE REMOVAL DEVICES AND METHODS
Patent No.: 8585704
Patent Appl. No.: 13/267683
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 10/6/2011
Date of Patent: 11/19/2013

Patent: METHODS SYSTEMS AND DEVICES FOR CARPAL TUNNEL RELEASE
Patent No.: 8617163
Patent Appl. No.: 13/112886
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 5/20/2011
Date of Patent: 12/31/2013

Patent: METHODS SYSTEMS AND DEVICES FOR CARPAL TUNNEL RELEASE
Patent No.: 8613745
Patent Appl. No.: 13/112918
Country: USA
Owner/Assignee: Quandary Medical LLC
Date Filed: 5/20/2011
Date of Patent: 12/24/2013

Patent: DEVICES AND METHODS FOR TISSUE MODIFICATION

Patent No.: 8647346

Patent Appl. No.: 13/484744

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 5/31/2012

Date of Patent: 02/11/2014

Patent: FLEXIBLE TISSUE RASP

Patent No.: 8652138

Patent Appl. No.: 13/243095

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 9/23/2011

Date of Patent: 2/18/2014

Patent: TISSUE MODIFICATION DEVICES

Patent No.: 8663228

Patent Appl. No.: 13/232882

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 9/14/2011

Date of Patent: 3/4/2014

Patent: FLEXIBLE NEURAL LOCALIZATION DEVICES AND METHODS

Patent No.: 8801626

Patent Appl. No.: 13/340363

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 12/29/2011

Date of Patent: 8/12/2014

Patent: TISSUE ACCESS GUIDEWIRE SYSTEM AND METHOD

Patent No.: 8845637

Patent Appl. No.: 14/023893

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 9/11/2013

Date of Patent: 9/30/2014

Patent: TISSUE MODIFICATION DEVICES

Patent No.: 8,845,639

Patent Appl. No.: 13/007381

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 1/14/2011

Date of Patent: 9/30/2014

Patent: IMPLANTS FOR SPINAL THERAPY

Patent No.: US20140128979

Patent Appl. No.: 14/152883

Country: USA

Owner/Assignee: Quandary Medical LLC

Date Filed: 1/10/2014

Patent: DEVICES AND METHODS FOR TREATING TISSUE

Patent No.: US 2011-0060314 A1

Patent: DEVICES AND METHODS FOR TISSUE ACCESS

Patent No.: US 2011-0160731 A1

Patent: DEVICES AND METHODS FOR TREATING TISSUE

Patent No.: US 2011-0060314 A1

Patent: FLEXIBLE NEURAL LOCALIZATION DEVICES AND METHODS

Patent No.: US 2012-0191003 A1

Patent: MULTIPLE PATHWAYS FOR SPINAL NERVE ROOT DECOMPRESSION
FROM A SINGLE ACCESS POINT

Patent No.: US 2013-0150855 A1

Patent: TISSUE MODIFICATION DEVICES AND METHODS

Patent No.: US 2013-0150856 A1

PENDING APPLICATIONS:

Patent Application: FLEXIBLE TISSUE RASP

Patent Appl. No.: 14/180221

Country: USA

Current Assignee of Record: Quandary Medical LLC

Date Filed: 02/13/2014

Patent Application: FLEXIBLE TISSUE REMOVAL DEVICES AND METHODS

Patent Appl. No.: 14/082052

Country: USA

Current Assignee of Record: Quandary Medical LLC

Date Filed: 11/15/2013

Patent Application: SYSTEMS AND METHODS FOR PERFORMING SPINAL
FUSION

Patent Appl. No.: 13/783135

Country: USA
Current Assignee of Record: Quandary Medical LLC
Date Filed: 3/1/2013

Patent Application: Pedicle Screw and Rod Implantation System (in situ measurement)
Patent Appl. No.: 61/997846
Country: USA
Current Assignee of Record: Quandary Medical LLC
Date Filed: 6/11/2014

Patent Appl. No.: 14/875,460
Country: USA
Current Assignee of Record: Quandary Medical LLC
Date Filed: 10/05/2015

Patent Appl. No.: 62059892
Country: USA
Current Assignee of Record: Quandary Medical LLC
Date Filed: 10/04/2014

Patent Appl. No.: 62105045
Country: USA
Current Assignee of Record: Quandary Medical LLC
Date Filed: 01/19/2015

Patent Appl. No.: 15/416,983
Country: USA
Current Assignee of Record: Quandary Medical LLC
Date Filed: 01/26/2017

Patent Appl. No.: 14/210,065
Country: USA
Current Assignee of Record: Quandary Medical LLC
Date Filed: 03/13/2014

Patent Appl. No.: 15/612,781
Country: USA
Current Assignee of Record: Quandary Medical LLC
Date Filed: 06/02/2017

Patent Appl. No.: 62/345,667
Country: USA
Current Assignee of Record: Quandary Medical LLC
Date Filed: 06/03/2016

Patent Appl. No.: 62/411,639
Country: USA

Current Assignee of Record: Quandary Medical LLC
Date Filed: 10/23/2016

Patent Appl. No.: 62/411,637

Country: USA

Current Assignee of Record: Quandary Medical LLC

Date Filed: 10/23/2016

Patent Appl. No.: 62/442,356

Country: USA

Current Assignee of Record: Quandary Medical LLC

Date Filed: 01/04/2017

Patent Appl. No.: 62/427,374

Country: USA

Current Assignee of Record: Quandary Medical LLC

Date Filed: 11/29/2016

Patent Appl. No.: 62/483,974

Country: USA

Current Assignee of Record: Quandary Medical LLC

Date Filed: 04/11/2017

Patent Appl. No.: 62/487,640

Country: USA

Current Assignee of Record: Quandary Medical LLC

Date Filed: 04/20/2017

Without exclusion of assignable material otherwise definable, the patents assigned may otherwise described by the following United States Patent Numbers:

Patent Number: 6575979
Patent Number: 6558386
Patent Number: 6740090
Patent Number: 6790210
Patent Number: 6558390
Patent Number: 6899716
Patent Number: 6921403
Patent Number: 7014833
Patent Number: 7087058
Patent Number: 7309338
Patent Number: 7329259
Patent Number: 7473256
Patent Number: 7500977
Patent Number: 7530993
Patent Number: 7547317
Patent Number: 7569056
Patent Number: 7588574
Patent Number: 7608077
Patent Number: 7641657
Patent Number: 7740633
Patent Number: 7763025
Patent Number: 7727263
Patent Number: 7744599
Patent Number: 7794463
Patent Number: 7799032
Patent Number: 7799033
Patent Number: 7914535
Patent Number: 8034055
Patent Number: 8052613
Patent Number: 8105365
Patent Number: 8292928
Patent Number: 8308777
Patent Number: 8317867
Patent Number: 7491236
Patent Number: 7547324
Patent Number: 7601171
Patent Number: 7632274
Patent Number: 7662173
Patent Number: 7717919
Patent Number: 7717958
Patent Number: 7776042
Patent Number: 7776068
Patent Number: 7905905

Patent Number: 7905908
Patent Number: 7938836
Patent Number: 8038680
Patent Number: 8088147
Patent Number: 8167947
Patent Number: 8328846
Patent Number: 8328847
Patent Number: 8523918
Patent Number: 8696572
Patent Number: 8709087
Patent Number: 8747472
Patent Number: 8795167
Patent Number: 7738968
Patent Number: 7555343
Patent Number: 7918849
Patent Number: 7963915
Patent Number: 7553307
Patent Number: 7740631
Patent Number: 8192435
Patent Number: 8221397
Patent Number: 7738969
Patent Number: 8419653
Patent Number: 8430881
Patent Number: 7938830
Patent Number: 8048080
Patent Number: 7578819
Patent Number: 8062300
Patent Number: 8062298
Patent Number: 8192436
Patent Number: 7887538
Patent Number: 7857813
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Patent Number: 8303516
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Patent Number: 8366712
Patent Number: 8394102
Patent Number: 8409206
Patent Number: 8398641
Patent Number: 8551097
Patent Number: 8568416
Patent Number: 8579902
Patent Number: 8585704
Patent Number: 8617163
Patent Number: 8613745
Patent Number: 8647346

Patent Number: 8663228
Patent Number: 8801626
Patent Number: 8845637
Patent Number: 8845639