

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Angiotech Pharmaceuticals, Inc.	04/04/2012
Surgical Specialties Puerto Rico, Inc.	04/04/2012
Quill Medical, Inc.	04/04/2012

RECEIVING PARTY DATA	
Name:	Ethicon, Inc.
Street Address:	Route 22 West
Internal Address:	P.O. Box 151
City:	Somerville
State/Country:	NEW JERSEY
Postal Code:	08876
Name:	Ethicon, LLC
Street Address:	475 Calle C
Internal Address:	Suite 401, Los Frailes Industrial Park
City:	Guaynabo
State/Country:	PUERTO RICO
Postal Code:	00969

PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	13796762

CORRESPONDENCE DATA	
Fax Number:	7325242808
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	732-524-3967
Email:	jnjuspatent@corus.jnj.com
Correspondent Name:	Philip S. Johnson

CH \$40.00 13796762

Address Line 1:	One Johnson & Johnson Plaza
Address Line 4:	New Brunswick, NEW JERSEY 08933

ATTORNEY DOCKET NUMBER:	ETH5676USCNT2
-------------------------	---------------

NAME OF SUBMITTER:	Julie Chan-Moroney
--------------------	--------------------

Signature:	/Julie Chan-Moroney/
------------	----------------------

Date:	07/29/2013
-------	------------

Total Attachments: 64

source=CORRECTEDFinalBillOfSalewExhibits#page1.tif

source=CORRECTEDFinalBillOfSalewExhibits#page2.tif

source=CORRECTEDFinalBillOfSalewExhibits#page3.tif

source=CORRECTEDFinalBillOfSalewExhibits#page4.tif

source=CORRECTEDFinalBillOfSalewExhibits#page5.tif

source=CORRECTEDFinalBillOfSalewExhibits#page6.tif

source=CORRECTEDFinalBillOfSalewExhibits#page7.tif

source=CORRECTEDFinalBillOfSalewExhibits#page8.tif

source=CORRECTEDFinalBillOfSalewExhibits#page9.tif

source=CORRECTEDFinalBillOfSalewExhibits#page10.tif

source=CORRECTEDFinalBillOfSalewExhibits#page11.tif

source=CORRECTEDFinalBillOfSalewExhibits#page12.tif

source=CORRECTEDFinalBillOfSalewExhibits#page13.tif

source=CORRECTEDFinalBillOfSalewExhibits#page14.tif

source=CORRECTEDFinalBillOfSalewExhibits#page15.tif

source=CORRECTEDFinalBillOfSalewExhibits#page16.tif

source=CORRECTEDFinalBillOfSalewExhibits#page17.tif

source=CORRECTEDFinalBillOfSalewExhibits#page18.tif

source=CORRECTEDFinalBillOfSalewExhibits#page19.tif

source=CORRECTEDFinalBillOfSalewExhibits#page20.tif

source=CORRECTEDFinalBillOfSalewExhibits#page21.tif

source=CORRECTEDFinalBillOfSalewExhibits#page22.tif

source=CORRECTEDFinalBillOfSalewExhibits#page23.tif

source=CORRECTEDFinalBillOfSalewExhibits#page24.tif

source=CORRECTEDFinalBillOfSalewExhibits#page25.tif

source=CORRECTEDFinalBillOfSalewExhibits#page26.tif

source=CORRECTEDFinalBillOfSalewExhibits#page27.tif

source=CORRECTEDFinalBillOfSalewExhibits#page28.tif

source=CORRECTEDFinalBillOfSalewExhibits#page29.tif

source=CORRECTEDFinalBillOfSalewExhibits#page30.tif

source=CORRECTEDFinalBillOfSalewExhibits#page31.tif

source=CORRECTEDFinalBillOfSalewExhibits#page32.tif

source=CORRECTEDFinalBillOfSalewExhibits#page33.tif

source=CORRECTEDFinalBillOfSalewExhibits#page34.tif

source=CORRECTEDFinalBillOfSalewExhibits#page35.tif

source=CORRECTEDFinalBillOfSalewExhibits#page36.tif

source=CORRECTEDFinalBillOfSalewExhibits#page37.tif

source=CORRECTEDFinalBillOfSalewExhibits#page38.tif

source=CORRECTEDFinalBillOfSalewExhibits#page39.tif

source=CORRECTEDFinalBillOfSalewExhibits#page40.tif

source=CORRECTEDFinalBillOfSalewExhibits#page41.tif

source=CORRECTEDFinalBillOfSalewExhibits#page42.tif

source=CORRECTEDFinalBillofSalewExhibits#page43.tif
source=CORRECTEDFinalBillofSalewExhibits#page44.tif
source=CORRECTEDFinalBillofSalewExhibits#page45.tif
source=CORRECTEDFinalBillofSalewExhibits#page46.tif
source=CORRECTEDFinalBillofSalewExhibits#page47.tif
source=CORRECTEDFinalBillofSalewExhibits#page48.tif
source=CORRECTEDFinalBillofSalewExhibits#page49.tif
source=CORRECTEDFinalBillofSalewExhibits#page50.tif
source=CORRECTEDFinalBillofSalewExhibits#page51.tif
source=CORRECTEDFinalBillofSalewExhibits#page52.tif
source=CORRECTEDFinalBillofSalewExhibits#page53.tif
source=CORRECTEDFinalBillofSalewExhibits#page54.tif
source=CORRECTEDFinalBillofSalewExhibits#page55.tif
source=CORRECTEDFinalBillofSalewExhibits#page56.tif
source=CORRECTEDFinalBillofSalewExhibits#page57.tif
source=CORRECTEDFinalBillofSalewExhibits#page58.tif
source=CORRECTEDFinalBillofSalewExhibits#page59.tif
source=CORRECTEDFinalBillofSalewExhibits#page60.tif
source=CORRECTEDFinalBillofSalewExhibits#page61.tif
source=CORRECTEDFinalBillofSalewExhibits#page62.tif
source=CORRECTEDFinalBillofSalewExhibits#page63.tif
source=CORRECTEDFinalBillofSalewExhibits#page64.tif

BILL OF SALE AND ASSIGNMENT AGREEMENT

This Bill of Sale and Assignment Agreement, dated and effective as of 12:01 a.m., New York City time, on the Closing Date (this "Agreement"), is made by and among Angiotech Pharmaceuticals, Inc., a corporation formed under the Laws of British Columbia with offices at 1618 Station Street, Vancouver, B.C., Canada, V6A 1B6 (the "Company"), Surgical Specialties Puerto Rico, Inc., a Puerto Rico corporation with offices at RD. 459 KM 0.6, Montana Industrial Park, Aguadilla, Puerto Rico ("Subsidiary 1") and Quill Medical, Inc., a Delaware corporation with offices at 1633 Westlake Avenue North, Suite 400, Seattle, WA, 98109-6227 ("Subsidiary 2", and collectively, with the Company and Subsidiary 1, "Assignor", each of them is severally referred to as a "Assignor Party"), and Ethicon, Inc., a New Jersey corporation with offices at Route 22 West, P.O. Box 151, Somerville, NJ. 08876 ("Assignee 1") and Ethicon, LLC, a Delaware limited liability company with offices at 475 Calle C Suite 401, Los Frailes Industrial Park, Guaynabo, PR. 00969 ("Assignee 2" and collectively, with Assignee 1, "Assignee", each of them is severally referred to as an "Assignee Party", and Assignor and Assignee, the "Parties"). All capitalized terms used in this Agreement and not otherwise defined herein shall have the respective meanings ascribed to them in the Asset Sale and Purchase Agreement, dated as of April 4, 2012 (as it may be amended, the "Transaction Agreement"), by and between the Parties.

WHEREAS, pursuant to the Transaction Agreement, Assignor desires to transfer to Assignee and Assignee desires to acquire all of Assignor's right, title and interest in, to and under the Acquired Assets;

WHEREAS, the Assignor Parties are the sole and exclusive owners of their respective patents and patent applications listed in Schedule A attached hereto (the "Assigned Patents");

NOW, THEREFORE, in consideration of the foregoing premises and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Acquired Assets. Assignor does hereby sell, assign, transfer, convey and deliver to Assignee according to the allocation of Acquired Assets set forth on Schedule B attached hereto, and its successors and assigns, forever, to have and to hold, free and clear of all Liens, all of its rights, title and interests in, to and under, including the right to sue and recover damages for past, present and future infringement, the Acquired Assets; provided, further, that Assignor does sell, assign, transfer, and set over, unto Assignee, its successors, legal representatives and assigns, each Assignor Party's entire right, title and interest in and to the Assigned Patents, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of the applications included in the Assigned Patents, and any and all letters patents in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said letters patent, and all rights under the International Convention for the Protection of Industrial Property with respect to the Assigned Patents, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by each Assignor Party, had the transactions contemplated by the Transaction Agreement not been made.

2. Assignment of Letters Patent. Assignor hereby requests the Commissioner of Patent and Trademarks to issue said letters patent of the United States to Assignee, as Assignee of said letters patent.

3. Recordation. Assignor hereby grants the individuals on Schedule C the power to insert on this Agreement any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

4. No Waiver or Modification. Notwithstanding any other provision of this Agreement, this Agreement shall not amend, alter, modify, extend or limit in any manner the rights and obligations of Assignor or Assignee under the Transaction Agreement; provided, further, that in the event that there are any conflicts or inconsistencies between the terms and provisions of this Agreement and the Transaction Agreement, the terms and provisions of the Transaction Agreement shall control and remain in full force and effect.

5. Further Assurances. From time to time or after the effective time and date of this Agreement, each of the Parties shall cooperate to take, or cause to be taken, any actions (including executing and delivering any assignment documents or other instruments of transfer) necessary to give effect to this Agreement.

6. No Third Party Beneficiaries. This Agreement is for the sole benefit of the Parties hereto and their successors and assigns, and nothing herein, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

7. Governing Law. This Assignment shall be governed by and construed in accordance with the Laws of the State of New York (pursuant to Section 5-1401 of the New York General Obligations Law, to the extent such Laws would otherwise not apply).

8. Headings. The headings contained in this Agreement are inserted for convenience only and shall not be considered in interpreting or construing any of the provisions contained in this Agreement.

9. Counterparts. This Agreement may be executed or delivered (including by facsimile transmission) in any number of counterparts, each of which when executed, shall be deemed to be an original and all of which together shall be deemed to be one and the same instrument binding upon all of the Parties notwithstanding the fact that all Parties are not signatory to the original or the same counterpart.

10. Severability. If any provision of this Agreement or the application of any such provision is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement or invalidate or render unenforceable such provision in any other jurisdiction. To the extent permitted under applicable Law, the Parties waive any provision under applicable Law that renders any provision of this Agreement invalid, illegal or unenforceable in any respect. The Parties shall, to the extent lawful and practicable, use their reasonable best efforts to

enter into arrangements to reinstate the intended benefits, net of the intended burdens, of any such provision held invalid, illegal or unenforceable.

[The remainder of this page has been intentionally left blank. Signature pages follow.]

PATENT
REEL: 030896 FRAME: 0907

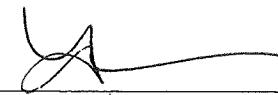
IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the date and year first written above.

**ANGIOTECH PHARMACEUTICALS,
INC.**

By: 

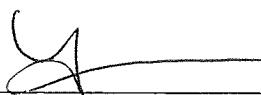
Name: TAMMY NESKE
Title: CHIEF BUSINESS OFFICER

SURGICAL SPECIALTIES PUERTO RICO, INC.

By: 

Name: TAMMY NESKE
Title: AUTHORIZED SIGNATORY

QUILL MEDICAL, INC.

By: 

Name: TAMMY NESKE
Title: AUTHORIZED SIGNATORY

(
PATENT
REEL: 030896 FRAME: 0909

ETHICON, INC.

By: 

Name: THOMAS GRANEY
Title: Ww VP FINANCE

ETHICON, LLC

By: 

Name: Francisco J Gonzalez
Title: Ethicon, LLC

PATENT
REEL: 030896 FRAME: 0911

SCHEDULE A

PATENTS AND PATENT APPLICATIONS

**PATENT
REEL: 030896 FRAME: 0912**

PATENT
REEL: 030896 FRAME: 0913

Schedule A

Patents and Patent Applications

See attached for Schedule A.

PATENT
REEL: 030896 FRAME: 0915

Owner	Title	Country	Application No.	Filing Date	Publication No.	Issue Date	Patent No.	Expires
AngioTech Pharmaceuticals, Inc.	SUTURES AND FIBROSING AGENTS	Canada	2632871	1/30/2007				
AngioTech Pharmaceuticals, Inc.	SUTURES AND FIBROSING AGENTS	United States	13/085140	4/12/2011	US20110264139A1	10/27/2011		
AngioTech Pharmaceuticals, Inc.	SUTURE PACKAGING	of America	P10812131-1	5/27/2008				
AngioTech Pharmaceuticals, Inc.	SUTURE PACKAGING	Brazil						
AngioTech Pharmaceuticals, Inc.	SUTURE PACKAGING	Canada	2688833	5/27/2008				
AngioTech Pharmaceuticals, Inc.	SUTURE PACKAGING	European Patent Convention	08756330.0	5/27/2008	2168957	3/31/2010		
AngioTech Pharmaceuticals, Inc.	SUTURE PACKAGING	Hong Kong	10109271.9	5/27/2008	1142791A	12/17/2010		
AngioTech Pharmaceuticals, Inc.	SUTURE PACKAGING	United States	12/601000	6/1/2010	US20100230300A1	9/16/2010		
AngioTech Pharmaceuticals, Inc.	MINIMALLY-INVASIVE MASTOPLASTY PROCEDURE	of America	11/829550	27-Jul-07	US2008027486A1	31-Jan-08	7871425	18-Jan-11 25-Mar-29
AngioTech Pharmaceuticals, Inc.	APPARATUS AND METHOD FOR FORMING BARBED SUTURES	United States	12/363582	30-Jan-09				
AngioTech Pharmaceuticals, Inc.	APPARATUS AND METHOD FOR FORMING BARBED SUTURES	of America	09705682.4	30-Jan-09	2242430	27-Oct-10		
AngioTech Pharmaceuticals, Inc.	APPARATUS AND METHOD FOR FORMING BARBED SUTURES	European Patent Convention						
AngioTech Pharmaceuticals, Inc.	APPARATUS AND METHOD FOR FORMING BARBED SUTURES	United States	12/865290	19-Nov-10	US20110106152A1	05-May-11		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS FOR SURGICAL PROCEDURES	of America						
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS FOR SURGICAL PROCEDURES	Canada	2683819	11-Apr-08		23-Oct-08		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS FOR SURGICAL PROCEDURES	European Patent Convention	08745687.7	11-Apr-08	2146646	27-Jan-10		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS FOR SURGICAL PROCEDURES	Hong Kong	1010711.7	11-Apr-08	1140662A	22-Oct-10		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS FOR SURGICAL PROCEDURES	India	7260/DE/NP/2009	11-Apr-08		25-Jun-10		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS FOR SURGICAL PROCEDURES	Japan	2010-503254	11-Apr-08	2010-523288	15-Jul-10		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS FOR SURGICAL PROCEDURES							

Owner	Title	Country	Application No.	Filed Date	Publication No.	PUB Date	Patent No.	Issue Date	Expires
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS FOR SURGICAL PROCEDURES	Korea, Republic of	10-2008-7023593	11-Apr-08					
Angiotech Pharmaceuticals, Inc.	SURGICAL PROCEDURES	United States	12/062214	03-Apr-08	US20080255611A1	16-Oct-08			
Angiotech Pharmaceuticals, Inc.	SURGICAL PROCEDURES	United States	12/062256	03-Apr-08	US20080255612A1	16-Oct-08			
Angiotech Pharmaceuticals, Inc.	SURGICAL PROCEDURES	United States	12/101885	11-Apr-08	US20090012560A1	08-Jan-09			
Angiotech Pharmaceuticals, Inc.	SURGICAL PROCEDURES	United States	08830510.7	10-Sep-08	2205163	14-Jul-10			
Angiotech Pharmaceuticals, Inc.	SUTURE PACKAGING AND METHODS RELATED THERETO	European Patent Convention	12/677505	19-Nov-10	US20110056859A1	10-Mar-11			
Angiotech Pharmaceuticals, Inc.	SUTURE PACKAGING AND METHODS RELATED THERETO	United States	08833263.0	26-Sep-08	2197501	23-Jun-10			
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES INCLUDING TISSUE RETAINERS HAVING IMPROVED STRENGTH	European Patent Convention	10111547.3	10-Dec-10	1145016A	25-Mar-11			
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES INCLUDING TISSUE RETAINERS HAVING IMPROVED STRENGTH	United States	12/680176	12-Oct-10	US20110166597A1	07-Jul-11			
Angiotech Pharmaceuticals, Inc.	RECOMBINANT EXPRESSED BIOABSORBABLE POLYHYDROXYALKONATE MONOFILAMENT AND MULTIFILAMENTS SELF-RETAINING SUTURES	United States	12/263119	31-Oct-08	US20090112259A1	30-Apr-09			
Angiotech Pharmaceuticals, Inc.	COMBINING SYNTHETIC, NATURAL POLYMERS AND RECOMBINANT POLYMERS TO FORM MONOFILAMENT AND MULTIFILAMENT SELF-RETAINING SUTURES	European Patent Convention	08845744.5	31-Oct-08	2217289	18-Aug-10			

Owner	Title	Country	Application No.	Filing Date	Publication No.	Filing Date	Issue Date	Expiry
AngioTech Pharmaceuticals, Inc.	COMBINING SYNTHETIC, NATURAL POLYMERS AND RECOMBINANT POLYMERS TO FORM MONOFILAMENT AND MULTIFILAMENT SELF-RETAINING SUTURES	United States of America	12/740960	18-Oct-10	US20110022086A1	27-Jan-11		
AngioTech Pharmaceuticals, Inc.	COATINGS FOR MODIFYING MONOFILAMENT AND MULTIFILAMENT SELF-RETAINING SUTURES	United States of America	13/1414545	07-Mar-12				
AngioTech Pharmaceuticals, Inc.	METHOD OF MANUFACTURING AND TESTING MONOFILAMENT AND MULTIFILAMENTS SELF-RETAINING SUTURES	United States of America	12/262953	31-Oct-08	US20090107965A1	30-Apr-09		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH HEAT-CONTACT-MEDIATED RETAINERS	Brazil	PI0820129-3	19-Dec-08				
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH HEAT-CONTACT MEDIATED RETAINERS	Canada	2709328	19-Dec-08			09-Jul-09	
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH HEAT-CONTACT MEDIATED RETAINERS	China (People's Republic)	200880122049.7	19-Dec-08	CN101902974A	01-Dec-10		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH HEAT-CONTACT MEDIATED RETAINERS	European Patent Convention	08866535.1	19-Dec-08	2222233	01-Sep-10		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH HEAT-CONTACT MEDIATED RETAINERS	Japan	2010-539899	19-Dec-08	2011-507634	10-Mar-11		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH HEAT-CONTACT MEDIATED RETAINERS	United States of America	12/808081	09-Nov-10	US20110046668A1	24-Feb-11		
AngioTech Pharmaceuticals, Inc.	COMPOSITE SELF-RETAINING SUTURES AND METHOD	United States of America	12/340530	19-Dec-08			8118834	21-Feb-12 25-May-30
AngioTech Pharmaceuticals, Inc.	COMPOSITE SELF-RETAINING SUTURES AND METHOD	United States of America	13/349231	12-Jan-12				

PATENT

REEL: 030896 FRAME: 0918

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pub. Dt.	Patent No.	Issue Dt.	Expires
Angiotech Pharmaceuticals, Inc.	LOOPED AND MULTIPLE STRAND SELF-RETAINING SUTURES	United States of America	12/340581	19-Dec-08					
Angiotech Pharmaceuticals, Inc.	LOOPED AND MULTIPLE STRAND SELF-RETAINING SUTURES	United States of America	13/168227	24-Jun-11					
Angiotech Pharmaceuticals, Inc.	LOOPED SELF-RETAINING SUTURES	United States of America	12/340609	19-Dec-08					
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH RETAINERS FORMED FROM MOLTEN MATERIAL	United States of America	12/340444	19-Dec-08					
Angiotech Pharmaceuticals, Inc.	METHOD AND APPARATUS FOR ELEVATING RETAINERS ON SELF-RETAINING SUTURES	Brazil	PI09077871	20-Feb-09					
Angiotech Pharmaceuticals, Inc.	METHOD AND APPARATUS FOR ELEVATING RETAINERS ON SELF-RETAINING SUTURES	European Patent Convention	09713378.9	20-Feb-09	2249712	17-Nov-10			
Angiotech Pharmaceuticals, Inc.	METHOD AND APPARATUS FOR ELEVATING RETAINERS ON SELF-RETAINING SUTURES	United States of America	12/866027	08-Nov-10	US20110046669A1	24-Feb-11			
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH PREFORMED RETAINERS	United States of America	12/390276	20-Feb-09					
Angiotech Pharmaceuticals, Inc.	ALTERNATIVE GEOMETRY SELF-RETAINING SUTURE SYSTEM	United States of America	12/392939	25-Feb-09					
Angiotech Pharmaceuticals, Inc.	SELF-RETAINERS WITH SUPPORTING STRUCTURES ON A SUTURE	United States of America	12/392945	25-Feb-09					
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURE WITH VARIABLE DIMENSION FILAMENT AND METHOD	United States of America	12/392955	25-Feb-09					
Angiotech Pharmaceuticals, Inc.	SHAPE-MEMORY SELF-RETAINING SUTURES, METHODS OF MANUFACTURE, AND METHODS OF USE	Australia	2009240477	24-Apr-09	29-Oct-09				

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pending Date	Patent No.	Issue Date	Expires
Angiotech Pharmaceuticals, Inc.	SHAPE-MEMORY SELF-RETAINING SUTURES, METHODS OF MANUFACTURE, AND METHODS OF USE	Brazil	PI0911446-7	24-Apr-09					
Angiotech Pharmaceuticals, Inc.	SHAPE-MEMORY SELF-RETAINING SUTURES, METHODS OF MANUFACTURE, AND METHODS OF USE	Canada	2722455	24-Apr-09				29-Oct-09	
Angiotech Pharmaceuticals, Inc.	SHAPE-MEMORY SELF-RETAINING SUTURES, METHODS OF MANUFACTURE, AND METHODS OF USE	China (People's Republic)	200980121782.1	24-Apr-09	CN102065913A	18-May-11			
Angiotech Pharmaceuticals, Inc.	SHAPE-MEMORY SELF-RETAINING SUTURES, METHODS OF MANUFACTURE, AND METHODS OF USE	European Patent Convention	09735127.4	24-Apr-09	2279013	02-Feb-11			
Angiotech Pharmaceuticals, Inc.	SHAPE-MEMORY SELF-RETAINING SUTURES, METHODS OF MANUFACTURE, AND METHODS OF USE	Mexico	MX/a/2010/011645	24-Apr-09					
Angiotech Pharmaceuticals, Inc.	SHAPE-MEMORY SELF-RETAINING SUTURES, METHODS OF MANUFACTURE, AND METHODS OF USE	United States of America	12/988841	08-Feb-11	US20110125188A1	26-May-11			
Angiotech Pharmaceuticals, Inc.	SHAPE-MEMORY SELF-RETAINING SUTURES, METHODS OF MANUFACTURE, AND METHODS OF USE	Australia	2009236330	14-Apr-09				22-Oct-09	
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNI-DIRECTIONAL RETAINERS	Brazil	PI0911132-8	14-Apr-09					
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNI-DIRECTIONAL RETAINERS	Canada	2720847	14-Apr-09				22-Oct-09	

Owner	Title	Country	Application No.	Filing Date	PCT Date	Patent No.	Issue Date	Expires
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNIDIRECTIONAL RETAINERS	China (People's Republic)	200980120634.6	14-Apr-09	CN102056552A	11-May-11		
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNIDIRECTIONAL RETAINERS	European Patent Convention	09732480.0	14-Apr-09	2282681	16-Feb-11		
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNIDIRECTIONAL RETAINERS	India	2141/MJMN/P/2010	14-Apr-09				
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNIDIRECTIONAL RETAINERS	Japan	2011-505141	14-Apr-09	2011-518588	30-Jun-11		
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNIDIRECTIONAL RETAINERS	Korea, Republic of	10-2010-7025408	14-Apr-09				
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNIDIRECTIONAL RETAINERS	Mexico	MX/a/2010/011160	14-Apr-09				
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNIDIRECTIONAL RETAINERS	Singapore	20100745-7	14-Apr-09				
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNIDIRECTIONAL RETAINERS	United States of America	12/937776	01-Mar-11	US20010288563A1	24-Nov-11		
Angiotech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	Australia	2009257866	16-May-09		17-Dec-09		
Angiotech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	Brazil	PI0911987-6	16-May-09				

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication No.	Issue Date	Patent No.	Expires
Angiotech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	Canada	2724663	16-May-09		17-Dec-09		
Angiotech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	China (People's Republic)	200980124755-X	16-May-09	CN102076269A	25-May-11		
Angiotech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	European Patent Convention	09763167.5	16-May-09	2296558	23-Mar-11		
Angiotech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	India	2542/MJMN/P/2010	16-May-09				
Angiotech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	Japan	2011-509786	16-May-09	2011-520529	21-Jul-11		
Angiotech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	Korea, Republic of	10-2010-7028176	16-May-09				
Angiotech Pharmaceuticals, Inc.	SUTURES AND METHODS	Mexico	Mx/a/2010/012388	16-May-09				
Angiotech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	Singapore	201008411-9	16-May-09				
Angiotech Pharmaceuticals, Inc.	SUTURES AND METHODS	United States	12/0992453	09-May-11	US20110264138A1	27-Oct-11		
Angiotech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	United States	12/970872	16-Dec-10	US20110319932A1	29-Dec-11		
Angiotech Pharmaceuticals, Inc.	SUTURES AND METHODS	United States	2009319965	03-Nov-09		03-Jun-10		
Angiotech Pharmaceuticals, Inc.	LENGTH OF BARB SUTURE AND METHOD OF DEVICE FOR USING THE SAME	Australia						
Angiotech Pharmaceuticals, Inc.	LENGTH OF BARB SUTURE AND METHOD OF DEVICE FOR USING THE SAME	Brazil	P109218106	03-Nov-09				
Angiotech Pharmaceuticals, Inc.	LENGTH OF BARB SUTURE AND METHOD OF DEVICE FOR USING THE SAME	Canada	2742506	03-Nov-09		03-Jun-10		
Angiotech Pharmaceuticals, Inc.	LENGTH OF BARB SUTURE AND METHOD OF DEVICE FOR USING THE SAME	European Patent Convention	09829674.2	03-Nov-09	2352440	10-Aug-11		

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pub. Date	Patent No.	Issue Date	Expires
Angiotech Pharmaceuticals, Inc.	LENGTH OF BARB SUTURE AND METHOD OF DEVICE FOR USING THE SAME	India	3740/CHEN2011	03-Nov-09					
Angiotech Pharmaceuticals, Inc.	LENGTH OF BARB SUTURE AND METHOD OF DEVICE FOR USING THE SAME	Mexico	MX/a/2011/004688	03-Nov-09					
Angiotech Pharmaceuticals, Inc.	LENGTH OF BARB SUTURE AND METHOD OF DEVICE FOR USING THE SAME	Singapore	201103117-6	03-Nov-09					
Angiotech Pharmaceuticals, Inc.	LENGTH OF BARB SUTURE AND METHOD OF DEVICE FOR USING THE SAME	United States	13/127220	20-Dec-11					
Angiotech Pharmaceuticals, Inc.	BRAIDED SELF-RETAINING SUTURES AND METHODS	United States	PCT/US10/56898	16-Nov-10	WO2011/060446	19-May-11			
Angiotech Pharmaceuticals, Inc.	BIDIRECTIONAL SELF-RETAINING SUTURES WITH LASER-MARKED AND/OR NON-LASER MARKED INDICA AND METHODS	United States	PCT/US2010/060889	16-Dec-10	WO2011/090628	28-Jul-11			
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES HAVING UNELEVATED RETAINERS AND METHODS OF IN SITU ELEVATION	United States	13/164438	20-Jun-11					
Angiotech Pharmaceuticals, Inc.	SUTURE DELIVERY TOOLS FOR ENDOSCOPIC AND ROBOT-ASSISTED SURGERY AND METHODS	United States	PCT/US2011/040014	10-Jun-11	WO2011/156733	15-Dec-11			
Angiotech Pharmaceuticals, Inc.	SYSTEM AND METHOD FOR MAKING RETAINERS ON SUTURES	Patent Cooperation Treaty	PCT/US2011/034660	29-Apr-11	WO2011/39916	10-Nov-11			
Angiotech Pharmaceuticals, Inc.	SELF RETAINING SUTURES WITH LASER CUT BARBS (draft)	Patent Cooperation Treaty	PCT/US2011/035270	04-May-11	WO2011/140282	10-Nov-11			

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pub. Date	Patent No.	Issue Date	Expiry
Angiotech Pharmaceuticals, Inc.	SURFACE TEXTURE RECONFIGURATION FOR SELF-RETAINING SUTURES AND METHODS FOR FORMING SAME	Patent Cooperation Treaty	PCT/US2011/035431	05-May-11	WO2011/140400	10-Nov-11			
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS HAVING LASER-CUT RETAINERS	Patent Cooperation Treaty	PCT/US2011/035271	04-May-11	WO2011/140283	10-Nov-11			
Angiotech Pharmaceuticals, Inc.	EMERGENCY SELF-RETAINING SUTURES AND METHODS	Patent Cooperation Treaty	PCT/US2011/060069	09-Nov-11					
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING VARIABLE LOOP SUTURES	United States	13/429150	23-Mar-12					
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING VARIABLE LOOP SUTURES	Patent Cooperation Treaty	PCT/US2012/030441	23-Mar-12					
Angiotech Pharmaceuticals, Inc.	METHODS AND DEVICES FOR SOFT PALATE TISSUE ELEVATION PROCEDURES	United States	61/493941	06-Jun-11					06-Jun-12
Angiotech Pharmaceuticals, Inc./TissueGen, Inc.	DRUG ELUTING SELF-RETAINING SUTURES AND METHOD	Patent Cooperation Treaty	PCT/US2011/059238	03-Nov-11					
Quill Medical, Inc.	BARBED SUTURES	United States	10/420119	21-Apr-03	US20040093028A1	13-May-04	7226468	05-Jun-07	03-May-13
Quill Medical, Inc.	BARBED SUTURES	United States	11/968494	02-Jan-08	US20080221617A1	11-Sep-08	7806908	05-Oct-10	03-May-13
Quill Medical, Inc.	BARBED SUTURES	United States	12/849946	04-Aug-10	US20100298869A1	25-Nov-10			
Quill Medical, Inc.	BARBED SUTURES	United States	08/324529	18-Oct-94			6241747	05-Jun-01	05-Jun-18
Quill Medical, Inc.	INSERTING DEVICE FOR A BARBED TISSUE CONNECTOR	Japan	508682/96	29-Aug-94			3739791	11-Nov-05	29-Aug-14
Quill Medical, Inc.	INSERTING DEVICE FOR A BARBED TISSUE CONNECTOR	United States	08/055870	03-May-93			5342376	30-Aug-94	03-May-13
Quill Medical, Inc.	SURGICAL METHODS USING ONE WAY SUTURE	Australia	98/75900	21-May-98			743056	02-May-02	21-May-18

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pub Date	Patent No.	Issue Date	Expires
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Australia	31406/02	21-May-98			769895	20-May-04	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Australia	2004200650	21-May-98			2004200650	29-Feb-08	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Australia	2008200738	21-May-98			2008200738	03-Mar-11	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Austria	2011200704	21-May-98					
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Austria	98923664.1	21-May-98	E377385		0991359	07-Nov-07	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Canada	2290533	21-May-98			2290533	15-Sep-09	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Canada	2677923	21-May-98			26-Nov-98		
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Denmark	98923664.1	21-May-98	0991359	12-Apr-00	0991359	07-Nov-07	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	European Patent Convention	10000486.0	21-May-98	2196156	16-Jun-10			
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	European Patent Convention	10011869.4	21-May-98	2294987	16-Mar-11			
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Finland	98923664.1	21-May-98	0991359	12-Apr-00	0991359	07-Nov-07	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	France	98923664.1	21-May-98	0991359	12-Apr-00	0991359	07-Nov-07	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	France	05025816.9	21-May-98	1656890	17-May-06	1656890	10-Dec-08	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	France	07016222.7	21-May-98	1891903	27-Feb-08	1891903	20-Jan-10	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Germany	98923664.1	21-May-98	69838674.4		0991359	07-Nov-07	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Germany	05025816.9	21-May-98	69840351.7		1656890	10-Dec-08	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Germany	07016222.7	21-May-98	69841470.5		1891903	20-Jan-10	21-May-18

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Patent No.	Patent Date	Issue Date	Expires
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Ireland	98923666.1	21-May-98	0991359	12-Apr-00	0991359	07-Nov-07 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Ireland	05025816.9	21-May-98	1656890	17-May-06	1656890	10-Dec-08 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Ireland	07016222.7	21-May-98	1891903	27-Feb-08	1891903	20-Jan-10 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Italy	98923664.1	21-May-98	67466BE/2008		0991359	07-Nov-07 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Italy	07016222.7	21-May-98	1891903	27-Feb-08	1891903	20-Jan-10 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Mexico	PA/a/1999/010692	21-May-98		273560		22-Jan-10 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Mexico	PA/a/2005/003459	21-May-98		249587		27-Sep-07 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Mexico	PA/a/2005/010826	21-May-98		254790		15-Feb-08 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Mexico	MX/a/2007/007700	21-May-98		261675		27-Oct-08 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Mexico	MX/a/2010/000891	21-May-98				
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Netherlands	98923664.1	21-May-98	0991359	12-Apr-00	0991359	07-Nov-07 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Netherlands	07016222.7	21-May-98	1891903	27-Feb-08	1891903	20-Jan-10 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	New Zealand	501224	21-May-98		501224		10-Jun-02 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	New Zealand	515820	21-May-98		515820		09-Mar-04 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	New Zealand	526233	21-May-98		526233		07-Jul-05 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Sweden	98923664.1	21-May-98	0991359	12-Apr-00	0991359	07-Nov-07 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Sweden	07016222.7	21-May-98	1891903	27-Feb-08	1891903	20-Jan-10 21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Switzerland	98923664.1	21-May-98	0991359	12-Apr-00	0991359	07-Nov-07 21-May-18

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication No.	Publ. No.	Patent No.	Issued Date	Expires
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Switzerland	05025816.9	21-May-98	1656890	17-May-06	1656890	10-Dec-08	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Switzerland	07016222.7	21-May-98	1891903	27-Feb-08	1891903	20-Jan-10	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	United Kingdom	98923664.1	21-May-98	0991359	12-Apr-00	0991359	07-Nov-07	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	United Kingdom	05025816.9	21-May-98			1656890	10-Dec-08	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	United Kingdom	07016222.7	21-May-98	1891903	27-Feb-08	1891903	20-Jan-10	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	United States	08/859887	21-May-97			5931855	03-Aug-99	21-May-17
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	United States	11/440621	25-May-06					
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	United States	09/919750	31-Jul-01					
Quill Medical, Inc.	SUTURE METHOD	Australia	2002345953	28-Jun-02	2002345953	11-Oct-07	2002345953	24-Jan-08	28-Jun-22
Quill Medical, Inc.	SUTURE METHOD	Russian Federation	2004102518	28-Jun-02	2004102518	10-Mar-05	2318458	10-Mar-08	28-Jun-22
Quill Medical, Inc.	SUTURE METHOD	Russian Federation	2005113280	26-Sep-03			2355333	20-May-09	26-Sep-23
Quill Medical, Inc.	SUTURE METHOD	United States	09/896455	29-Jun-01	US20030014077A1	16-Jan-03	6599310	29-Jul-03	12-Jan-22
Quill Medical, Inc.	SUTURE METHOD	United States	11/747707	11-May-07	US20072008377A1	06-Sep-07	7857829	26-Dec-10	16-Dec-23
Quill Medical, Inc.	SUTURE METHOD	United States	12/850186	04-Aug-10	US20100298848A1	25-Nov-10			
Quill Medical, Inc.	SUTURE METHOD	United States	12/850230	04-Aug-10	US20100318123A1	16-Dec-10			
Quill Medical, Inc.	SUTURE METHOD	United States	12/850263	04-Aug-10	US20100298639A1	25-Nov-10			
Quill Medical, Inc.	SUTURE METHOD	United States	12/850289	04-Aug-10	US20100305407A1	02-Dec-10			
Quill Medical, Inc.	SUTURE METHOD	United States	12/850336	04-Aug-10	US20100318124A1	16-Dec-10			

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication Date	Issued Date	Expires
Quill Medical, Inc.	SUTURE METHOD	United States of America	12/850362	04-Aug-10	US20100298880A1	25-Nov-10	
Quill Medical, Inc.	SUTURE METHOD	United States of America	11/307520	10-Feb-06	US20060111734A1	25-May-06	
Quill Medical, Inc.	SUTURE METHOD	United States of America	10/063256	30-Sep-02	US20030074023A1	17-Apr-03	07/056331
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Australia	2002356136	29-Aug-02		10-Aug-03	2002356136
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Australia	2009201345	29-Aug-02		23-Apr-09	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Australia	Not Yet Assigned	29-Aug-02		2009201345	01-Dec-11
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Austria	02796449.3	29-Aug-02	E357876	1429664	28-Mar-07
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Belgium	02796449.3	29-Aug-02		1429664	28-Mar-07
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Brazil	P10212050-0	29-Aug-02			29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Canada	2457384	29-Aug-02		06-Mar-03	2457384
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Canada	2632145	29-Aug-02		06-Mar-03	18-Nov-08
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	China (People's Republic)	02816778.3	29-Aug-02			27-Jun-07
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	China (People's Republic)	200710141094.4	29-Aug-02	CN101125096A	20-Feb-08	ZL200710141094.4 08-Jun-11
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	China (People's Republic)					29-Aug-22

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication No.	PCT ID	Patent No.	Issued Date	Expires
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	China (People's Republic)	2010102070745.1	29-Aug-02	CN101933826A	05-Jan-11			
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Costa Rica	7260	29-Aug-02		22-Jun-05			
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Denmark	02796449.3	29-Aug-02			1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	European Patent Convention	10000629.5	29-Aug-02	2177168	21-Apr-10			
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	European Patent Convention	10011868.6	29-Aug-02	2314228	27-Apr-11			
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Finland	02796449.3	29-Aug-02			1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	France	02796449.3	29-Aug-02			1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Germany	02796449.3	29-Aug-02	DE602191181				
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Hong Kong	10109930.2	20-Oct-10	1143298A	31-Dec-10			
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	India	00336/DE1NP/2004	29-Aug-02					
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Ireland	02796449.3	29-Aug-02			1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Israel	160496	29-Aug-02			160496	30-Dec-10	31-Mar-11

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pub Date	Patent No.	Issue Date	Expires
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Italy	02796449.3	29-Aug-02			1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Japan	5223772003	29-Aug-02					
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Japan	Not Yet Assigned	29-Aug-02					
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Korea, Republic of	2004-7003142	29-Aug-02			10-0926085	03-Nov-09	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Mexico	PA/AI/2004/001717	29-Aug-02			256030	11-Feb-08	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Mexico	MX/AI/2007/009022	29-Aug-02			277353	15-Jul-10	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Netherlands	02796449.3	29-Aug-02			1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	New Zealand	531262	29-Aug-02			531262	06-Apr-06	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	New Zealand	543927	29-Aug-02			543927	10-Jan-08	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	New Zealand	560667	29-Aug-02	1556	27-Feb-09	560667	11-Jun-09	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Portugal	02796449.3	29-Aug-02			1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Russian Federation	2004105594	29-Aug-02			2294162	27-Feb-07	29-Aug-22

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pub Date	Patent No.	Issue Date	Expires
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Spain	02796449.3	29-Aug-02			1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Sweden	02796449.3	29-Aug-02			1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Switzerland	02796449.3	29-Aug-02			1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United Kingdom	02796449.3	29-Aug-02			1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States	091943733	31-Aug-01	US20030041426A1	06-Mar-03	6848152	01-Feb-05	03-Jan-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States	116911845	27-Mar-07	US20070187861A1	16-Aug-07	7913365	29-Mar-11	31-Dec-24
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States	12972802	20-Dec-10	US20110093010A1	21-Apr-11			
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States	121850397	04-Aug-10	US20100294103A1	25-Nov-10	7996967	16-Aug-11	31-Aug-21
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States	121850433	04-Aug-10	US20100294107A1	25-Nov-10	8015678	13-Sep-11	31-Aug-21
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States	121850447	04-Aug-10	US20100294104A1	25-Nov-10	7996968	16-Aug-11	31-Aug-21
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States	121850455	04-Aug-10	US20100294105A1	25-Nov-10	8011072	06-Sep-11	31-Aug-21
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States	121850467	04-Aug-10	US20100294106A1	25-Nov-10	8028387	04-Oct-11	31-Aug-21

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filed	Publishing No.	Patent No.	Issue Date	Expires
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States of America	12/850480	04-Aug-10	US20100313723A1	16-Dec-10	8028388	04-Oct-11 31-Aug-21
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States of America	12/850498	04-Aug-10	US20100313730A1	16-Dec-10	8020263	20-Sep-11 31-Aug-21
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States of America	10/486123	02-Jul-04	US20040237736A1	02-Dec-04	7225512	05-Jun-07 26-Aug-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD FOR PERFORMING SAME	Brazil	P10305764-0	08-Aug-03				
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	Canada	2494905	08-Aug-03			19-Feb-04 2494905	20-Sep-11 08-Aug-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	European Patent Convention	10186592.1	08-Aug-03	2311382	20-Apr-11		
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	France	03785177.1	08-Aug-03	1551311	13-Jul-05	1551311	06-Oct-10 08-Aug-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	Germany	03785177.1	08-Aug-03	60334473.9-08		1551311	06-Oct-10 08-Aug-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	Ireland	03785177.1	08-Aug-03	1551311	13-Jul-05	1551311	06-Oct-10 08-Aug-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	Italy	03785177.1	08-Aug-03	67045BE/2001		1551311	06-Oct-10 08-Aug-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	Netherlands	03785177.1	08-Aug-03	1551311	13-Jul-05	1551311	06-Oct-10 08-Aug-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	Spain	03785177.1	08-Aug-03	ES2354069T3		1551311	06-Oct-10 08-Aug-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	Sweden	03785177.1	08-Aug-03	1551311	13-Jul-05	1551311	06-Oct-10 08-Aug-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	Switzerland	03785177.1	08-Aug-03	1551311	13-Jul-05	1551311	06-Oct-10 08-Aug-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	United Kingdom	03785177.1	08-Aug-03	1551311	13-Jul-05	1551311	06-Oct-10 08-Aug-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	United States of America	10/216516	09-Aug-02	US20040030354A1	12-Feb-04	6773450	10-Aug-04 02-Sep-22

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application Filing Date	Ent. Date	Publication No.	PUB. Dt.	Patent No.	ISSUED Dt.	Expires
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	United States of America	12/849960	04-Aug-10	US20100238878A1	25-Nov-10			
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	United States of America	12/849969	04-Aug-10	US2011000902A1	13-Jan-11			
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	United States of America	12/849977	04-Aug-10	US20100238879A1	25-Nov-10			
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	United States of America	12/849983	04-Aug-10	US20100318122A1	16-Dec-10			
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	United States of America	10/914755	09-Aug-04	US20050033367A1	10-Feb-05	7371253	13-May-08	01-Nov-23
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	United States of America	12/1119749	13-May-08	US20080234731A1	25-Sep-08	8083770	27-Dec-11	02-Sep-22
Quill Medical, Inc.	BARBED SUTURES	Australia	2003270916	29-Sep-03			2003270916	27-May-10	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Austria	03752630.8	29-Sep-03	E369949		1560683	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Belgium	03752630.8	29-Sep-03			1560683	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Belgium	07015905.8	29-Sep-03	1857236	21-Nov-07	1857236	25-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Belgium	09014651.5	29-Sep-03	2168733	31-Mar-10	2168733	28-Dec-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Brazil	P10306508-1	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURES	Canada	2500381	29-Sep-03			15-Apr-04	2500381	30-Aug-11
Quill Medical, Inc.	BARBED SUTURES	China (People's Republic)	03825269.4	29-Sep-03	101027168	29-Aug-07	ZL03825269.4	08-Dec-10	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	China (People's Republic)	201010513744.5	29-Sep-03	CN102008335	13-Apr-11			
Quill Medical, Inc.	BARBED SUTURES	Costa Rica	7772	29-Sep-03			24-Jul-07		
Quill Medical, Inc.	BARBED SUTURES	Denmark	07015905.8	29-Sep-03	1857236	21-Nov-07	1857236	25-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	European Patent Convention	10011871.0	29-Sep-03	2272641	12-Jan-11			
Quill Medical, Inc.	BARBED SUTURES	European Patent Convention	10184766.3	29-Sep-03	2335889	22-Jun-11			
Quill Medical, Inc.	BARBED SUTURES	France	03752630.8	29-Sep-03			1560683	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	France	07015905.8	29-Sep-03	1857236	21-Nov-07	1857236	25-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	France	09014651.5	29-Sep-03	2168733	31-Mar-10	2168733	28-Dec-11	29-Sep-23

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication No.	Patent No.	Patent Date	Issue Date	Expiry Date
Quill Medical, Inc.	BARBED SUTURES	Germany	03752630.8	29-Sep-03	60315696.7	1560683	15-Aug-07	29-Sep-23	
Quill Medical, Inc.	BARBED SUTURES	Germany	07015905.8	29-Sep-03	60330282.3	1857236	25-Nov-09	29-Sep-23	
Quill Medical, Inc.	BARBED SUTURES	Germany	09014651.5	29-Sep-03	2168733	31-Mar-10	2168733	28-Dec-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Germany	06101372.0	29-Sep-03	1081484A	19-May-06	1081484	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Hong Kong	08105320.2	29-Sep-03	1110833A	25-Jul-08	1110833	28-May-10	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Hong Kong	10109419.2	29-Sep-03	1142848A	17-Dec-10			
Quill Medical, Inc.	BARBED SUTURES	India	1013DELNP/2005	29-Sep-03		242071		09-Aug-10	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Ireland	03752630.8	29-Sep-03		1560683		15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Ireland	07015905.8	29-Sep-03	1857236	21-Nov-07	1857236	25-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Ireland	09014651.5	29-Sep-03	2168733	31-Mar-10	2168733	28-Dec-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Israel	167580	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURES	Italy	03752630.8	29-Sep-03		1560683		15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Italy	07015905.8	29-Sep-03	1857236	21-Nov-07	1857236	25-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Italy	09014651.5	29-Sep-03	2168733	31-Mar-10	2168733	28-Dec-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Japan	2004-541835	29-Sep-03	2006-511113	20-Jul-06	4493501	16-Apr-10	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Korea, Republic of	2005-7005524	29-Sep-03		10-1073980		10-Oct-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Mexico	PA/al/2005/002876	29-Sep-03		257014		09-May-08	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Mexico	MX/al/2008/002226	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURES	Netherlands	03752630.8	29-Sep-03		1560683		15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Netherlands	07015905.8	29-Sep-03	1857236	21-Nov-07	1857236	25-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Netherlands	09014651.5	29-Sep-03	2168733	31-Mar-10	2168733	28-Dec-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	New Zealand	538771	29-Sep-03	1543	31-Jan-08	538771	15-May-08	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	New Zealand	5522640	29-Sep-03		552640		26-Sep-08	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	New Zealand	5522641	29-Sep-03		552641		11-Sep-08	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	New Zealand	5522642	29-Sep-03		552642		12-Feb-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Singapore	200702524-8	29-Sep-03	152062	29-May-09	152062	15-Nov-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Singapore	200702623-0	29-Sep-03	150386	30-Mar-09	150386	30-Nov-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Singapore	200702622-2	29-Sep-03	151104	30-Apr-09			
Quill Medical, Inc.	BARBED SUTURES	Singapore	201107300-4	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURES	Spain	03752630.8	29-Sep-03		1560683		15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Spain	07015905.8	29-Sep-03	ES2337406T3	23-Apr-10	1857236	25-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Spain	09014651.5	29-Sep-03	2168733	31-Mar-10	2168733	28-Dec-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Sweden	07015905.8	29-Sep-03	1857236	21-Nov-07	1857236	25-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Sweden	09014651.5	29-Sep-03	2168733	31-Mar-10	2168733	28-Dec-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Switzerland	03752630.8	29-Sep-03		1560683		15-Aug-07	29-Sep-23

Owner	Title	Country	Application No.	Filing Date	Publication No.	PUB.Off.	Patent No.	Issued Date	Expires
Quill Medical, Inc.	BARBED SUTURES	Switzerland	07015905.8	29-Sep-03	1857236	21-Nov-07	1857236	25-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Switzerland	09014651.5	29-Sep-03	2168733	31-Mar-10	2168733	28-Dec-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Turkey	03752630.8	29-Sep-03	200707582	24-Dec-07	1560683	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	United Kingdom	03752630.8	29-Sep-03			1560683	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	United Kingdom	07015905.8	29-Sep-03	1857236	21-Nov-07	1857236	25-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	United Kingdom	09014651.5	29-Sep-03	2168733	31-Mar-10	2168733	28-Dec-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	United States	12/849991	04-Aug-10	US20100298874A1	25-Nov-10			
Quill Medical, Inc.	BARBED SUTURES	United States	12/850035	04-Aug-10	US20100298875A1	25-Nov-10			
Quill Medical, Inc.	BARBED SUTURES	United States	12/850063	04-Aug-10	US20100298876A1	25-Nov-10			
Quill Medical, Inc.	BARBED SUTURES	United States	10/065280	30-Sep-02	US20040060410A1	01-Apr-04			
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Australia	2003272764	29-Sep-03			203272764	11-Feb-10	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Australia	2010200108	29-Sep-03					
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Austria	03754965.6	29-Sep-03	372728		1555946	12-Sep-07	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Belgium	03754965.6	29-Sep-03			1555946	12-Sep-07	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Brazil	PI 0306509-0	29-Sep-03					
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Canada	2500394	29-Sep-03		15-Apr-04	2500394	30-Aug-11	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	China (People's Republic)	03825272.4	29-Sep-03	1925795	07-Mar-07	ZL03825272.4	28-Apr-10	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	China (People's Republic)	201010135411.3	29-Sep-03	101773402	14-Jul-10			

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pending	Issued	Expires
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	China (People's Republic)	201010135380.1	29-Sep-03	10179770	11-Aug-10		
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Costa Rica	7774	29-Sep-03		24-Jul-07		
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Denmark	03754965.6	29-Sep-03			1555946	12-Sep-07 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	European Patent Convention	10004453.6	29-Sep-03	2218408	18-Aug-10		
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	European Patent Convention	10011872.8	29-Sep-03	2338421	29-Jun-11		
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Finland	03754965.6	29-Sep-03			1555946	12-Sep-07 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	France	03754965.6	29-Sep-03			1555946	12-Sep-07 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	France	07017663.1	29-Sep-03	1867288	19-Dec-07	1867288	28-Apr-10 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Germany	03754965.6	29-Sep-03			1555946	12-Sep-07 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Germany	07017663.1	29-Sep-03	60332401.0-08	19-Dec-07	1867288	28-Apr-10 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Hong Kong	06101370.2	29-Sep-03		19-May-06	HK1081419	12-Sep-07 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Hong Kong	08105871.5	29-Sep-03	1111874	22-Aug-08	HK1111874	22-Oct-10 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Hong Kong	11100267.3	12-Jan-11	1146462A	10-Jun-11		
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	India	1011/DELNP/2005	29-Sep-03			243696	01-Nov-10 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	India	10122/DELNP/2007	29-Sep-03		04-Apr-08		
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Ireland	03754965.6	29-Sep-03			1555946	12-Sep-07 29-Sep-23

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pub Date	Patent No.	Issue Date	Expires
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Ireland	07017663.1	29-Sep-03	1867288	19-Dec-07	1867288	28-Apr-10	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Israel	167424	29-Sep-03					
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Italy	03754965.6	29-Sep-03			1555946	12-Sep-07	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Italy	07017663.1	29-Sep-03	1867288	19-Dec-07	1867288	28-Apr-10	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Japan	2010-003775	29-Sep-09	2010-184109	26-Aug-10			
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Korea, Republic of	10-2005-7005523	29-Sep-03					
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Korea, Republic of	2011-7028561	29-Sep-03					
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Netherlands	03754965.6	29-Sep-03			1555946	12-Sep-07	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Netherlands	07017663.1	29-Sep-03	1867288	19-Dec-07	1867288	28-Apr-10	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	New Zealand	538748	29-Sep-03			538748	03-Apr-08	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	New Zealand	553411	29-Sep-03	1550	29-Aug-08	553411	11-Dec-08	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	New Zealand	553412	29-Sep-03	1550	29-Aug-08	553412	11-Dec-08	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	New Zealand	553413	29-Sep-03			553413	11-Dec-08	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	New Zealand	553414	29-Sep-03	1550	29-Aug-08	553414	11-Dec-08	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	New Zealand	553415	29-Sep-03	1550	29-Aug-08	553415	11-Dec-08	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	New Zealand	553416	29-Sep-03	1550	29-Aug-08	553416	11-Dec-08	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Russian Federation	2005113296	29-Sep-03			2372100	12-May-09	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Singapore	2005019427	29-Sep-03			110933	29-Jun-07	29-Sep-23

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	PCT No.	Patenting Date	Issue Date	Entered Date
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Singapore	200702350-0	29-Sep-03	148858	29-Jan-09	148858	30-Sep-11 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Singapore	201106620-6	29-Sep-03				
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Spain	03754965.6	29-Sep-03		1555946	12-Sep-07	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Spain	07017663.1	29-Sep-03	ES2345160T3	1867288	28-Apr-10	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Sweden	03754965.6	29-Sep-03		1555946	12-Sep-07	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Sweden	07017663.1	29-Sep-03	1867288	19-Dec-07	1867288	28-Apr-10 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Switzerland	03754965.6	29-Sep-03		1555946	12-Sep-07	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Switzerland	07017663.1	29-Sep-03	1867288	19-Dec-07	1867288	28-Apr-10 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Turkey	03754965.6	29-Sep-03	200707836	21-Jan-08	1555946	12-Sep-07 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	United Kingdom	03754965.6	29-Sep-03		1555946	12-Sep-07	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	United Kingdom	07017663.1	29-Sep-03	1867288	19-Dec-07	1867288	28-Apr-10 29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	United States of America	10/065279	30-Sep-02	US20040060409A1	01-Apr-04	8100940	24-Jan-12 30-Sep-22
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	United States of America	13/335220	22-Dec-11				
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Australia	2003279048	29-Sep-03		2003279048	24-Dec-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Australia	2009245844	29-Sep-03				
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Austria	03770556.3	29-Sep-03	E370610	1559266	15-Aug-07	29-Sep-23

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pub Date	Patent No.	Issue Date	Expires
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Belgium	03770556.3	29-Sep-03			1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Belgium	07015906.6	29-Sep-03	1858243	21-Nov-07	1858243	18-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Brazil	P1 0306510-3	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Canada	2500404	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	China (People's Republic)	03825277.6	29-Sep-03	1830200	06-Sep-06	03825271.6	26-May-10	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	China (People's Republic)	201010143170.7	29-Sep-03	CN102008334	13-Apr-11			
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Costa Rica	7775	29-Sep-03		03-Sep-07			
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Denmark	03770556.3	29-Sep-03			1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Denmark	07015906.6	29-Sep-03	1858243	21-Nov-07	1858243	18-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Finland	03770556.3	29-Sep-03			1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	France	03770556.3	29-Sep-03			1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	France	07015906.6	29-Sep-03	1858243	21-Nov-07	1858243	18-Nov-09	29-Sep-23

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pub Date	Patent No.	Issue Date	Expires
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Germany	03770556.3	29-Sep-03	60315694.0		1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Germany	07015906.6	29-Sep-03	60330200.9		1858243	18-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Hong Kong	06101371.1	29-Sep-03		19-May-06	HK1081772	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Hong Kong	08105319.5	29-Sep-03	1111024A	25-Jul-08	1111024	28-May-10	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	India	1009/DELNP/2005	29-Sep-03			241544	12-Jul-10	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	India	9901/DELNP/2007	29-Sep-03		09-May-08			
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Ireland	03770556.3	29-Sep-03			1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Ireland	07015906.6	29-Sep-03	1858243	21-Nov-07	1858243	18-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Israel	167394	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Italy	03770556.3	29-Sep-03			1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Italy	07015906.6	29-Sep-03	1858243	21-Nov-07	1858243	18-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Japan	2004-541829	29-Sep-03	2006-516302	13-Jul-06			

Owner	Title	Country	Application No.	Filing Date	Publication No.	Pub Date	Patent No.	Issue Date	Expires
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Japan	2010-165813	29-Sep-03	2010-284536	24-Dec-10			
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Korea, Republic of	10-2005-7005522	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Mexico	PA/a/2005/002877	29-Sep-03			257015	09-May-08	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Mexico	MX/a/2008/002335	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Netherlands	03770556.3	29-Sep-03			1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Netherlands	07015906.6	29-Sep-03	1858243	21-Nov-07	1858243	18-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	New Zealand	538747	29-Sep-03			538747	13-Dec-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Singapore	200501961-7	29-Sep-03			110940	31-Jul-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Spain	03770556.3	29-Sep-03			1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Spain	07015906.6	29-Sep-03	E62336957T3		1858243	18-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Sweden	03770556.3	29-Sep-03			1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Sweden	07015906.6	29-Sep-03	1858243	21-Nov-07	1858243	18-Nov-09	29-Sep-23

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	Publication Date	Priority Date	Patenting Date	Issue Date	Expires
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Switzerland	03770556.3	29-Sep-03			1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Switzerland	07015906.6	29-Sep-03	1858243	21-Nov-07	1858243	18-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Turkey	03770556.3	29-Sep-03	200707583	24-Dec-07	1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	United Kingdom	03770556.3	29-Sep-03			1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	United Kingdom	07015906.6	29-Sep-03	1858243	21-Nov-07	1858243	18-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	United States	12495497	30-Jun-09	US20100087855A1	08-Apr-10			
Quill Medical, Inc.	APPARATUS FOR FORMING BARBS ON A SUTURE	Australia	2004238371	13-May-04		25-Nov-04	2004238371	02-Feb-12	13-May-24
Quill Medical, Inc.	APPARATUS FOR FORMING BARBS ON A SUTURE	Australia	2011265557	13-May-04					
Quill Medical, Inc.	APPARATUS FOR FORMING BARBS ON A SUTURE	Canada	2525579	13-May-04		25-Nov-04			
Quill Medical, Inc.	APPARATUS FOR FORMING BARBS ON A SUTURE	European Patent Convention	04752088.7	13-May-04	1622518	08-Feb-06	1622518	16-Nov-11	13-May-24
Quill Medical, Inc.	APPARATUS FOR FORMING BARBS ON A SUTURE	France	04752088.7	13-May-04	1622518	08-Feb-06	1622518	16-Nov-11	13-May-24
Quill Medical, Inc.	APPARATUS FOR FORMING BARBS ON A SUTURE	Ireland	04752088.7	13-May-04	1622518	08-Feb-06	1622518	16-Nov-11	13-May-24
Quill Medical, Inc.	APPARATUS FOR FORMING BARBS ON A SUTURE	United Kingdom	04752088.7	13-May-04	1622518	08-Feb-06	1622518	16-Nov-11	13-May-24
Quill Medical, Inc.	APPARATUS FOR FORMING BARBS ON A SUTURE	United States	10437144	13-May-03	US20040226427A1	18-Nov-04	7624487	01-Dec-09	17-Aug-23

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filed Date	Publication No.	PUB Date	Patent No.	Issue Date	Expires
Quill Medical, Inc.	APPARATUS FOR FORMING BARBS ON A SUTURE	United States	10/556419	09-Aug-06	US2007005663A1	22-Mar-07	8032996	11-Oct-11	13-Feb-28
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Australia	2005244886	16-May-05		01-Dec-05			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Australia	2005244886	16-May-05		01-Dec-05			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Australia	2012201433	16-May-05		01-Dec-05			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Brazil	P10510975-2	16-May-05		01-Dec-05			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Canada	2566438	16-May-05	CN101431947	13-May-09			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	China (People's Republic)	200580023753.3	16-May-05		01-Dec-05			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Colombia	06-124857	16-May-05	956	18-Dec-07	06-124857	16-Jan-11	16-May-25
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Costa Rica	8781	16-May-06		21-Oct-08			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	European Patent Convention	05750101.7	16-May-05	1761176	14-Mar-07			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Hong Kong	07109271.4	16-May-05	1101118A	10-Feb-06			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Hong Kong	09110578.0	16-May-05	1132642A	05-Mar-10			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	India	6741/DENP/2006	16-May-05		31-Aug-07			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Israel	179153	16-May-05					
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Japan	2007-513452	16-May-05	2007-537017	20-Dec-07			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Japan	2011-223686	16-May-05					
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Korea, Republic of	2006-7023828	16-May-05					

Sorted by Owner/Family
Last Update 29-March-2012

Angiotech - Confidential
QUILL Patent Portfolio

Owner	Title	Country	Application No.	Filing Date	PCT Filing Date	Publication No.	Pub. Date	Patent No.	Issued Date	Expires
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Mexico	PA/a/2006/013177	16-May-05				273561	22-Jan-10	16-May-25
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	New Zealand	588140	16-May-05						
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	New Zealand	598970	16-May-05						
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Russian Federation	2006144439	16-May-05				2404717	27-Nov-10	16-May-25
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Singapore	2006078034	16-May-05				127304	31-Aug-10	16-May-25
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Singapore	2010052181	16-May-05	164370	29-Sep-10				
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	South Africa	200609428	16-May-05				2006/9428	30-Apr-08	16-May-25
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	United States	10/908539	16-May-05	US20050267531A1	01-Dec-05				
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	United States	12849936	04-Aug-10	US20100298871A1	25-Nov-10				
Quill Medical, Inc.	MATRIX MATERIAL	United States	12/043391	06-Mar-08	US20080228021A1	10-Sep-09				

PATENT
REEL: 030896 FRAME: 0945

Owner	Title	Country	Status	Application No.	Filing Date	Publication No.	Issue Date	Patent No.	Expires
AngioTech Pharmaceuticals, Inc.	SUTURES AND FIBROSING AGENTS	Patent Cooperation Treaty	Converted	PCT/US2007/002588	30-Jan-07	WO2007/089864	09-Aug-07		
AngioTech Pharmaceuticals, Inc.	SUTURES AND FIBROSING AGENTS	United States of America	Abandoned	11/669097	30-Jan-07	20080009902 A1	10-Jan-08		
AngioTech Pharmaceuticals, Inc.	SUTURES AND FIBROSING AGENTS	United States of America	Expired	60/763682	30-Jan-06				30-Jan-07
AngioTech Pharmaceuticals, Inc.	SUTURE PACKAGING	Patent Cooperation Treaty	Converted	PCT/US2008/064921	27-May-08	WO2008/150773	11-Dec-08		
AngioTech Pharmaceuticals, Inc.	SUTURE PACKAGING	United States of America	Expired	60/940625	29-May-07				29-May-08
AngioTech Pharmaceuticals, Inc.	MINIMALLY-INVASIVE MASTOPLASTY PROCEDURE	Patent Cooperation Treaty	Abandoned	PCT/US2007/074658	27-Jul-07	WO2008/014491	31-Jan-08		
AngioTech Pharmaceuticals, Inc.	MINIMALLY-INVASIVE MASTOPLASTY PROCEDURE	United States of America	Expired	60/833999	28-Jul-06				28-Jul-07
AngioTech Pharmaceuticals, Inc.	MINIMALLY-INVASIVE MASTOPLASTY PROCEDURE	United States of America	Abandoned	11/829423	27-Jul-07	20080082129	03-Apr-08		
AngioTech Pharmaceuticals, Inc.	MINIMALLY-INVASIVE MASTOPLASTY PROCEDURE	United States of America	Abandoned	11/829563	27-Jul-07	20080086170	10-Apr-08		
AngioTech Pharmaceuticals, Inc.	MINIMALLY-INVASIVE MASTOPLASTY PROCEDURE	United States of America	Abandoned	11/829539	27-Jul-07	20080086169	10-Apr-08		
AngioTech Pharmaceuticals, Inc.	MINIMALLY-INVASIVE MASTOPLASTY PROCEDURE	United States of America	Abandoned	11/829535	27-Jul-07	20080077181	27-Mar-08		
AngioTech Pharmaceuticals, Inc.	APPARATUS AND METHOD FOR FORMING BARBED SUTURES	United States of America	Expired	61/006773	30-Jan-08				30-Jan-09
AngioTech Pharmaceuticals, Inc.	APPARATUS AND METHOD FOR FORMING BARBED SUTURES	Patent Cooperation Treaty	Converted	PCT/US2009/032693	30-Jan-09	WO2009/097556	06-Aug-09		
AngioTech Pharmaceuticals, Inc.	APPARATUS AND METHOD FOR FORMING BARBED SUTURES	United States of America	Expired	61/006777	30-Jan-08				30-Jan-09
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS FOR SURGICAL PROCEDURES	United States of America	Patent Cooperation Treaty	PCT/US2008/060127	11-Apr-08	WO2008/128113	23-Oct-08		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS FOR SURGICAL PROCEDURES RELATED THERETO	United States of America	Expired	60/911814	13-Apr-07				13-Apr-08
AngioTech Pharmaceuticals, Inc.	SUTURE PACKAGING AND METHODS RELATED THERETO	United States of America	Converted	PCT/US2008/075849	10-Sep-08	WO2009/036060	19-Mar-09		
AngioTech Pharmaceuticals, Inc.	SUTURE PACKAGING AND METHODS RELATED THERETO	United States of America	Expired	60/971135	10-Sep-07				10-Sep-08

Owner	Title	Country	Status	Application No.	Filing Date	Publication No.	Filing Date	Patent No.	Issue Date	Expires
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES INCLUDING TISSUE RETAINERS HAVING IMPROVED STRENGTH	Patent Cooperation Treaty	Converted	PCT/US2008077813	26-Sep-08	WO2009/042841	02-Apr-09			
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES INCLUDING TISSUE RETAINERS HAVING IMPROVED STRENGTH	United States of America	Expired	60/975758	27-Sep-07					27-Sep-08
AngioTech Pharmaceuticals, Inc.	RECOMBINANT EXPRESSED BIOADSORBABLE POLYHYDROXYALKONATE MONOFILAMENT AND MULTIFILAMENTS SELF-RETAINING SUTURES	United States of America	Abandoned	13/171250	28-Jun-11					
AngioTech Pharmaceuticals, Inc.	RECOMBINANT EXPRESSED BIOADSORBABLE POLYHYDROXYALKONATE MONOFILAMENT AND MULTIFILAMENTS SELF-RETAINING SUTURES	United States of America	Expired	60/984318	31-Oct-07					31-Oct-08
AngioTech Pharmaceuticals, Inc.	COMBINING SYNTHETIC, NATURAL POLYMERS AND RECOMBINANT POLYMERS TO FORM MONOFILAMENT AND MULTIFILAMENT SELF-RETAINING SUTURES	Patent Cooperation Treaty	Converted	PCT/US2008082009	31-Oct-08	WO2009/059147	17-May-09			
AngioTech Pharmaceuticals, Inc.	COMBINING SYNTHETIC, NATURAL POLYMERS AND RECOMBINANT POLYMERS TO FORM MONOFILAMENT AND MULTIFILAMENT SELF-RETAINING SUTURES	United States of America	Expired	60/984322	31-Oct-07					31-Oct-08
AngioTech Pharmaceuticals, Inc.	COATINGS FOR MODIFYING MONOFILAMENT AND MULTIFILAMENTS SELF-RETAINING SUTURES	United States of America	Abandoned	12/263083	31-Oct-08	US20090143819A1	04-Jun-09			
AngioTech Pharmaceuticals, Inc.	COATINGS FOR MODIFYING MONOFILAMENT AND MULTIFILAMENTS SELF-RETAINING SUTURES	United States of America	Expired	60/984329	31-Oct-07					31-Oct-08
AngioTech Pharmaceuticals, Inc.	METHOD OF MANUFACTURING AND TESTING MONOFILAMENT AND MULTI-FILAMENTS SELF-RETAINING SUTURES	United States of America	Expired	60/984331	31-Oct-07					31-Oct-08

Owner	Title	Country	Status	Application No.	Filing Date	Publication No.	Issue Date	Expires
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH HEAT-CONTACT MEDIATED RETAINERS	Patent Cooperation Treaty	Converted	PCT/US2008/087788	19-Dec-08	WO2009/086172	09-Jul-09	
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH HEAT-CONTACT MEDIATED RETAINERS	United States of America	Expired	61/015143	19-Dec-07			19-Dec-08
AngioTech Pharmaceuticals, Inc.	COMPOSITE SELF-RETAINING SUTURES AND METHOD LOOPED AND MULTIPLE STRAND	United States of America	Expired	61/015489	20-Dec-07			20-Dec-08
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES LOOPED SELF-RETAINING SUTURES	United States of America	Expired	61/015561	20-Dec-07			20-Dec-08
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH RETAINERS FORMED FROM MOLTEN MATERIAL	United States of America	Expired	61/015156	19-Dec-07			19-Dec-08
AngioTech Pharmaceuticals, Inc.	A TISSUE REACTIVE SUTURE SYSTEM AND METHOD OF USE	United States of America	Abandoned	61/031624	26-Feb-08			26-Feb-09
AngioTech Pharmaceuticals, Inc.	ADHESIVE SUTURE SYSTEM AND METHOD OF USE	United States of America	Abandoned	61/031284	25-Feb-08			25-Feb-09
AngioTech Pharmaceuticals, Inc.	METHOD AND APPARATUS FOR ELEVATING RETAINERS ON SELF-RETAINING SUTURES	Patent Cooperation Treaty	Converted	PCT/US2009/034703	20-Feb-09			
AngioTech Pharmaceuticals, Inc.	METHOD AND APPARATUS FOR ELEVATING RETAINERS ON SELF-RETAINING SUTURES	United States of America	Expired	61/030423	21-Feb-08			21-Feb-09
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH RETAINERS LIFTED USING ELECTROSTATIC FORCE	United States of America	Expired	61/030391	21-Feb-08			21-Feb-09
AngioTech Pharmaceuticals, Inc.	REFORMED RETAINERS	United States of America	Expired	61/030396	21-Feb-08			21-Feb-09
AngioTech Pharmaceuticals, Inc.	ALTERNATIVE GEOMETRY SELF-RETAINING SUTURE SYSTEM	United States of America	Expired	61/031259	25-Feb-08			25-Feb-09
AngioTech Pharmaceuticals, Inc.	SELF-RETAINERS WITH SUPPORTING STRUCTURES ON A SUTURE	United States of America	Expired	61/031274	25-Feb-08			25-Feb-09
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURE WITH VARIABLE DIMENSION FILAMENT AND METHOD	United States of America	Expired	61/031579	26-Feb-08			26-Feb-09
AngioTech Pharmaceuticals, Inc.	SHAPE-MEMORY SELF-RETAINING SUTURES, METHODS OF MANUFACTURE, AND METHODS OF USE	Patent Cooperation Treaty	Converted	PCT/US2009/041685	24-Apr-09	WO2009/132284	29-Oct-09	

Owner	Title	Country	Status	Application No.	Filing Date	Publication No.	Pub Date	Patent No.	Issue Date	Expires
AngioTech Pharmaceuticals, Inc.	SHAPE-MEMORY SELF-RETAINING SUTURES, METHODS OF MANUFACTURE, AND METHODS OF USE	United States of America	Expired	61/047682	24-Apr-08					24-Apr-09
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURE WITH ADHERENT RETAINER SURFACES AND METHODS	United States of America	Abandoned	61/043535	09-Apr-08					09-Apr-09
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNI-DIRECTIONAL RETAINERS	United States of America	Patent Cooperation Treaty	Converted	PCT/US2009/040545	14-Apr-09	WO2009/129251	22-Oct-09		
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES WITH BI-DIRECTIONAL RETAINERS AND UNI-DIRECTIONAL RETAINERS	United States of America	Expired	61/045075	15-Apr-08					15-Apr-09
AngioTech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	United States of America	Patent Cooperation Treaty	Converted	PCT/US2009/044274	16-May-09	WO2009/151876	17-Dec-09		
AngioTech Pharmaceuticals, Inc.	CODED HETEROFUNCTIONAL SUTURES AND METHODS	United States of America	Expired	61/053912	16-May-08					16-May-09
AngioTech Pharmaceuticals, Inc.	LENGTH OF BARB SUTURE AND METHOD OF DEVICE FOR USING THE SAME	United States of America	Patent Cooperation Treaty	Converted	PCT/US2009/063081	03-Nov-09	WO2010/062743	03-Jun-10		
AngioTech Pharmaceuticals, Inc.	METHOD OF DEVICE FOR USING THE SAME	United States of America	Expired	61/110952	03-Nov-08					03-Nov-09
AngioTech Pharmaceuticals, Inc.	BRAIDED SELF-RETAINING SUTURES AND METHODS	United States of America	Expired	61/261660	16-Nov-09					16-Nov-10
AngioTech Pharmaceuticals, Inc.	DRUG ELUTING SELF-RETAINING SUTURES AND METHOD	United States of America	Expired	61/256300	29-Oct-09					29-Oct-10
AngioTech Pharmaceuticals, Inc.	DRUG ELUTING SELF-RETAINING SUTURES AND METHOD	United States of America	Expired	61/257233	02-Nov-09					02-Nov-10
AngioTech Pharmaceuticals, Inc.	DRUG ELUTING SELF-RETAINING SUTURES AND METHOD	United States of America	Expired	61/409731	03-Nov-10					03-Nov-11
AngioTech Pharmaceuticals, Inc.	BIDIRECTIONAL SELF-RETAINING SUTURES WITH LASER-MARKED AND/OR NON-LASER MARKED INDICIA AND METHODS	United States of America	Expired	61/296721	20-Jan-10					20-Jan-11
AngioTech Pharmaceuticals, Inc.	SELF-RETAINING SUTURES HAVING UNELEVATED RETAINERS AND METHODS OF IN SITU ELEVATION	United States of America	Expired	61/357018	21-Jun-10					21-Jun-11
AngioTech Pharmaceuticals, Inc.	SUTURE DELIVERY TOOLS FOR ENDOSCOPIC AND ROBOT-ASSISTED SURGERY AND METHODS	United States of America	Expired	61/354009	11-Jun-10					11-Jun-11

Owner	Title	Country	Status	Application No.	Filing Date	Publication No.	PUB. Date	Patent No.	Issue Date	Expires
Angiotech Pharmaceuticals, Inc.	SYSTEM AND METHOD FOR MAKING RETAINERS ON SUTURES	United States of America	Expired	61/329436	29-Apr-10				20-Apr-11	
Angiotech Pharmaceuticals, Inc.	SELF RETAINING SUTURES WITH LASER CUT BARBS (draft)	United States of America	Expired	61/331294	04-May-10				04-May-11	
Angiotech Pharmaceuticals, Inc.	SURFACE TEXTURE CONFIGURATION FOR SELF-RETAINING SUTURES AND METHODS FOR FORMING SAME	United States of America	Expired	61/331629	05-May-10				05-May-11	
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING SYSTEMS HAVING LASER-CUT RETAINERS	United States of America	Expired	61/331302	04-May-10				04-May-11	
Angiotech Pharmaceuticals, Inc.	EMERGENCY SELF-RETAINING SUTURES AND METHODS	United States of America	Expired	61/411918	09-Nov-10				09-Nov-11	
Angiotech Pharmaceuticals, Inc.	EMERGENCY SELF-RETAINING SUTURES AND METHODS	United States of America	Expired	61/412389	10-Nov-10				10-Nov-11	
Angiotech Pharmaceuticals, Inc.	SELF-RETAINING VARIABLE LOOP SUTURES	United States of America	Expired	61/466924	23-Mar-11				23-Mar-12	
Quill Medical, Inc.	BARBED SUTURES	United States of America	Abandoned	08/055989	03-May-93					
Quill Medical, Inc.	BARBED SUTURES	United States of America	Abandoned	09/629428	31-Jul-00					
Quill Medical, Inc.	BARBED SUTURES	United States of America	Abandoned	11/774705	10-May-07	20070208355	06-Sep-07			
Quill Medical, Inc.	BARBED SUTURES	United States of America	Abandoned	12/849884	04-Aug-10	20100298867	25-Nov-10			
Quill Medical, Inc.	BARBED SUTURES	United States of America	Abandoned	12/849895	04-Aug-10	20100298637	25-Nov-10			
Quill Medical, Inc.	BARBED SUTURES	United States of America	Abandoned	12/849901	04-Aug-10	US20100298868A1	25-Nov-10			
Quill Medical, Inc.	BARBED SUTURES	United States of America	Abandoned	11/968496	02-Jan-08	20090018577	15-Jan-09			
Quill Medical, Inc.	INSERTING DEVICE FOR A BARBED TISSUE CONNECTOR	European Patent Convention	Abandoned	94932165.7	29-Aug-94	0783268	16-Jul-97			
Quill Medical, Inc.	INSERTING DEVICE FOR A BARBED TISSUE CONNECTOR	Patent Cooperation Treaty	Converted	PCT/US94/09631	29-Aug-94	WO1996/06565	07-Mar-96			
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	European Patent Convention	Validated	98923664.1	21-May-98	0991359	12-Apr-00	0991359	07-Nov-07	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	European Patent Convention	Validated	05025816.9	21-May-98	1656890	17-May-06	1656890	10-Dec-08	21-May-18

Owner	Title	Country	Status	Application No.	Filing Date	Publication No.	Pub Date	Patent No.	Issue Date	Expires
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	European Patent Convention	Validated	07016222.7	21-May-98	1891903	27-Feb-08	1891903	20-Jan-10	21-May-18
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Hong Kong	Abandoned	06108688.4	21-May-98	1088201	03-Nov-06			
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Mexico	Abandoned	MX/a/2007/007698	21-May-98					
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	Mexico	Abandoned	MX/a/2007/007699	21-May-98					
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	United States of America	Patent Cooperation Treaty	Converted	PCT/US98/10478	21-May-98	WO1998/52473	26-Nov-98		
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	United States of America	Abandoned	10/941347	15-Sep-04					
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	United States of America	Abandoned	11/154230	16-Jun-05					
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	United States of America	Abandoned	11/154863	16-Jun-05					
Quill Medical, Inc.	SURGICAL METHODS USING ONE-WAY SUTURE	United States of America	Abandoned	11/440631	25-May-06					
Quill Medical, Inc.	SUTURE METHOD	Australia	Abandoned	2003/278981	26-Sep-03					
Quill Medical, Inc.	SUTURE METHOD	India	Abandoned	1181/MUMNP/2003	28-Jun-02					
Quill Medical, Inc.	SUTURE METHOD	New Zealand	Abandoned	530627	28-Jun-02					
Quill Medical, Inc.	SUTURE METHOD	Patent Cooperation Treaty	Converted	PCT/US02/20449	28-Jun-02	WO2003/001979	09-Jan-03			
Quill Medical, Inc.	SUTURE METHOD	United States of America	Patent Cooperation Treaty	Converted	PCT/US2003/030424	26-Sep-03	WO2004/030517	15-Apr-04		
Quill Medical, Inc.	SUTURE METHOD	United States of America	Abandoned	11/307521	10-Feb-06	20060111742	25-May-06			
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	European Patent Convention	Validated	02796449.3	29-Aug-02	1429664	23-Jun-04	1429664	28-Mar-07	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	European Patent Convention	Abandoned	07006258.3	29-Aug-02	1803405	04-Jul-07			
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	European Patent Convention	Abandoned	10185410.7	29-Aug-02					
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Hong Kong	Abandoned	05102787.8	29-Aug-02	1069968	10-Jun-05			

Owner	Title	Country	Status	Application No.	Filing Date	Publication No.	Publ. Date	Patent No.	Issue Date	Expires
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Hong Kong	Abandoned	08104172.4	28-Aug-02	1113993A	24-Oct-08			
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Macau	Abandoned	J000156	29-Aug-02			J000156	28-Feb-08	29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	Russian Federation	Converted	PCT/US02/27525	29-Aug-02	WO2003/017850	06-Mar-03			
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	United States of America	Abandoned	2006137125	29-Aug-02				2423082	10-Jul-11 29-Aug-22
Quill Medical, Inc.	METHOD OF FORMING BARBS ON A SUTURE AND APPARATUS FOR PERFORMING SAME	European Patent Convention	Validated	03785177.1	04-Aug-10	20100313729	16-Dec-10			
Quill Medical, Inc.	SUTURE ANCHOR AND METHOD	European Patent Cooperation Treaty	Converted	PCT/US2003/025088	08-Aug-03	1551311	13-Jul-05	1551311	06-Oct-10	08-Aug-23
Quill Medical, Inc.	BARBED SUTURES	European Patent Convention	Validated	03752630.8	29-Sep-03	1560683	10-May-05	1560683	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	European Patent Convention	Validated	07015905.8	29-Sep-03	1857236	21-Nov-07	1857236	25-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	European Patent Convention	Validated	09014651.5	29-Sep-03	2168733	31-Mar-10	2168733	28-Dec-11	29-Sep-23
Quill Medical, Inc.	BARBED SUTURES	Hong Kong	Abandoned	08102179.1	29-Sep-03	1112211A	29-Aug-08			
Quill Medical, Inc.	BARBED SUTURES	Patent Cooperation Treaty	Converted	PCT/US2003/030674	29-Sep-03	WO2004/036020	15-Apr-04			
Quill Medical, Inc.	BARBED SUTURES	Russian Federation	Abandoned	2005113248	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURES	Singapore	Abandoned	200501429-5	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURES	Singapore	Abandoned	200702625-5	29-Sep-03	148859	29-Jan-09			
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	European Patent Convention	Validated	03754965.6	29-Sep-03	1555946	15-Apr-04	1555946	12-Sep-07	29-Sep-23
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	European Patent Convention	Validated	07017663.1	29-Sep-03	1867288	19-Dec-07	1867288	28-Apr-10	29-Sep-23

Owner	Title	Country	Status	Application No.	Filing Date	Publication No.	Publ. Date	Patent No.	Issue Date	Expires
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Japan	Abandoned	2004-541827	29-Sep-03	2006-517112	20-Jul-06			
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Mexico	Abandoned	PA/a/2005/002875	29-Sep-03					
Quill Medical, Inc.	BARB CONFIGURATIONS FOR BARBED SUTURES	Patent Cooperation Treaty	Converted	PCT/US2003/030664	29-Sep-03	WO2004030704				
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	European Patent Convention	Validated	03770556.3	29-Sep-03	1559266	03-Aug-05	1559266	15-Aug-07	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	European Patent Convention	Validated	07015906.6	29-Sep-03	1858243	21-Nov-07	1858243	18-Nov-09	29-Sep-23
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Patent Cooperation Treaty	Converted	PCT/US2003/030666	29-Sep-03	WO2004/030705				
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Russian Federation	Abandoned	2005113295	29-Sep-03					
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	Singapore	Abandoned	200703688-2	29-Sep-03	148865	29-Jan-09			
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	United States of America	Abandoned	10/065278	30-Sep-02	20040088003	06-May-04			
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	United States of America	Abandoned	11/307901	27-Feb-06	20060135995	22-Jun-06			
Quill Medical, Inc.	BARBED SUTURE IN COMBINATION WITH SURGICAL NEEDLE	United States of America	Abandoned	11/307900	27-Feb-06	20060135994	22-Jun-06			
Quill Medical, Inc.	APPARATUS FOR FORMING BARBS ON A SUTURE	European Patent Convention	Abandoned	10012437.9	13-May-04	2335604	22-Jun-11			
Quill Medical, Inc.	APPARATUS FOR FORMING BARBS ON A SUTURE	Patent Cooperation Treaty	Converted	PCT/US2004/014962	13-May-04					
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	New Zealand	Abandoned	551421	16-May-05					
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	Patent Cooperation Treaty	Converted	PCT/US2005/017028	16-May-05	WO2005/112787	01-Dec-05			
Quill Medical, Inc.	SUTURE METHODS AND DEVICES	United States of America	Expired	60/521528	14-May-04				14-May-05	
Quill Medical, Inc.	BIDIRECTIONAL SELF-RETAINING SUTURES WITH LASER-MARKED AND/OR NON-LASER-MARKED INDICIA AND METHODS	United States of America	Expired	61/290750	29-Dec-09				29-Dec-10	

AngioTech - Confidential
QUILL IDF List

Inventors	Title	Date of Submission
Angela Wentling; Bruce Buckwalter	Suture with spiral barbed thread	8/9/2007
Dr. Greg Ruff	Ideas submitted to Mike Johnston: breast reduction; brow furrow removal; skin tension meter; spreader graft for breathing improvement through nose; barbed coronary stent	10/26/2007
Alex Goraltchouk; Robert Hermann; (Gerald Cummings)	A tissue reactive suture system	10/30/2007*
Alex Goraltchouk; Robert Hermann; (Gerald Cummings)	Adhesive Suture	10/30/2007*
multiple	Ideas from barbed suture braining storming	11/27/2007
Lev Dribetsky; Alex Goraltchouk	Methods and devices for approximating and/or fixating tissues	12/21/2007
Bob Waldowski	Bidirectional suture with a different needle at each end	3/25/2008
Alex Goraltchouk, Robert Hermann	Barbed meshes, methods of manufacturing, and use	4/24/2008
Angela Wentling	Suture with Expanding Diameter	5/29/2008
Rui Avelar	Marked Needles	6/3/2008
Matt Merkel	New design for barbed suture products	8/4/2008
Rui Avelar	A helical needle for deployment of barbed suture into soft tissue	10/28/2008
Ron Bowser, Matt Merkel	Barbed ribbon suture	12/16/2008
Hieu Nguyen	A parabolic suture container/housing/packaging for sutures	4/2/2010
Rui Avelar Avelar	The use of a barbed device to fix a rotator cuff tear Configuration and density of barbs on a barbed device that sets a maximum hold (or has a maximum capacitance) for holding specialized structures and tissues in order to prevent ischemic damage to a structure	4/7/2010 4/7/2010
Rui Avelar	Configuration and density of barbs on a barbed device that sets a maximum hold (or has a maximum capacitance) for holding specialized structures and tissues in order to prevent damage to a structure	4/7/2010
Rui Avelar	The invention improves the engagement of barbed devices at a transition point while deploying the device.	4/7/2010
Rui Avelar	Some tissue can be difficult to approximate due to its nature and inability to hold sutures efficiently. This can be problematic when trying to establish fixation of tissue across and interface in order to establish either hemostasis or a reconstruction	4/7/2010
Rui Avelar	A deployment device that delivers a barbed device in a non-linear fashion	5/18/2010
Lev Dribetsky; Patricia Hreich	Suture with improved holding ability	5/12/2010
Lev Dribetsky; Patricia Hreich	Manufacturing process for small diameter sutures by material removal	5/12/2010
Ron Bowser; Matt Merkel; Hieu Nguyen; Angela Wentling	Center gap marker for QUILL SRS barbed medical device	10/4/2010
Craig Kolyer; Matt Merkel; Angela Wentling; Ron Bowser	QUILL Large wrapping card	2/15/2011

Angiotech - Confidential
QUILL IDF List

Inventors	Title	Date of Submission
Craig Kolyer; Matt Merkel; Angela Wentling; Ron Bowser	QUILL Large dispensing card	3/10/2011
Lev Drubetsky; William L. D'Agostino; Tom Weber; Kenneth Bruce Thurmond II; Chris Barbosa; Carlos Gonzalez Resendiz	Process for improving ultrasonic weld in biodegradable self-retaining sutures	8/19/2011
Jeffrey M. Gross	Mitral and tricuspic annuloplasty barbed suture	8/22/2011

* A provisional application was prepared and filed but allowed to expire without further filing in US or OUS.

SCHEDULE B

ALLOCATION OF ACQUIRED ASSETS

PATENT
REEL: 030896 FRAME: 0957

Schedule B

Allocation of Acquired Assets

Ethicon, Inc. shall be the sole Assignee Party for all (i) United States Patents and United States pending patent applications of the Assigned Patents, (ii) all invention disclosures documented on an invention disclosure form submitted to any of Seller Party or its Affiliates with respect to any invention not covered by the Patents and Patent applications disclosed pursuant to all of the Assigned Patents, that, in each case, are owned by or licensed to such Seller Party or its Affiliates, that (A) relate to, directly or indirectly, the field of knotless tissue closure devices and methods of use, including but not limited to barbed sutures, and the development, Commercialization and Manufacturing thereof or that (B) relate in any way to Quill™ and (iii) all Quill Know-How.

Ethicon, LLC shall be the sole Assignee Party for all (i) non-US patents and patent applications of the Assigned Patents, and (ii) Equipment.

(
PATENT
REEL: 030896 FRAME: 0959

SCHEDULE C

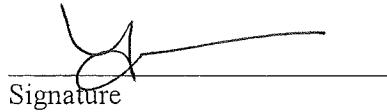
NOTARIZED INDIVIDUALS

PATENT
REEL: 030896 FRAME: 0961

Schedule C

For ANGIOTECH PHARMACEUTICALS, INC.

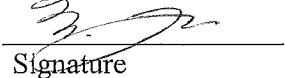
Date: APRIL 4, 2012



Signature

Tammy NESKE
Typed Name

CHIEF BUSINESS OFFICER
Title

Witnessed by: 
Signature

Monica Major
Printed Name

Witnessed by: 
Signature

Edrita Kumar
Printed Name

Canada)
Province of BRITISH COLUMBIA ss.:

On this 4th day of APRIL, 2012, before me, personally came Tammy Neske, to
me known to be the individual described in and who executed the foregoing instrument, and
acknowledged execution of the same.


Notary Public

(

(

(

PATENT
REEL: 030896 FRAME: 0963

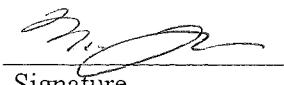
For SURGICAL SPECIALTIES PUERTO RICO, INC.

Date: APRIL 4, 2012

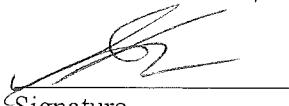

Signature

Tammy Neske
Typed Name

AUTHORIZED SIGNATORY
Title

Witnessed by: 
Signature

Monica Major
Printed Name

Witnessed by: 
Signature

Edrita Kumar
Printed Name

Canada)
Province of ~~BRITISH COLUMBIA~~)ss.:

On this 4th day of APRIL, 2012, before me, personally came Tammy Neske, to
me known to be the individual described in and who executed the foregoing instrument, and
acknowledged execution of the same.


Notary Public

NOORDIN NANJI
BARRISTER AND SOLICITOR
TIKEMAN ELLIOTT LLP
SUITE 1700 PARK PLACE 666 BURRARD STREET
VANCOUVER, BRITISH COLUMBIA, CANADA
V6C 2X8 (604) 631-1300

(
()

PATENT
REEL: 030896 FRAME: 0965

For QUILL MEDICAL, INC.

Date: APRIL 4, 2012



Signature

TAMMY NESKE
Typed Name

AUTHORIZED SIGNATORY
Title

Witnessed by: 

Signature

Monica Major
Printed Name

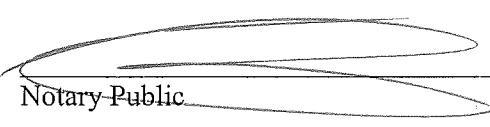
Witnessed by: 

Signature

Edrita Kumar
Printed Name

Canada)
Province of BRITISH COLUMBIA)
ss.:

On this 4th day of APRIL, 2012, before me, personally came Tammy Neske, to
me known to be the individual described in and who executed the foregoing instrument, and
acknowledged execution of the same.


Notary Public

NOORDIN NANJI
BARRISTER AND SOLICITOR
STIKEMAN ELLIOTT LLP
SUITE 1700 PARK PLACE 666 BURRARD STREET
VANCOUVER, BRITISH COLUMBIA, CANADA
V6C 2X8 (604) 631-1300

RECORDED: 07/29/2013

PATENT
REEL: 030896 FRAME: 0967