

1) Family number: 69562902 (US2018117289A)

© PatBase

Title: IMPLANTABLE VALVE ASSEMBLY WITH EXTENDED LIFESPAN

Abstract: An implantable valve assembly including a drainage catheter having a central lumen transitioning into a plurality of distinct branch lumens made of a shape memory material. A bioabsorbable dip coating secures the distal end of the plural distinct branch lumen together in physical contact with one another. Each branch lumen has an outer perimeter comprising at least one of a first outer surface section and a second outer surface section. In a secured state with the plural distinct branch lumen held together by the dip coating fluid is prohibited from passing through the holes defined in the first outer surface section. Bioabsorbable blocking members disposed about the outer perimeter of the assembled branch lumen mask holes defined in the second outer surface section prohibiting fluid from entering therein. In a time staggered fashion, the bioabsorbable elements absorb exposing new holes through which the fluid drains.

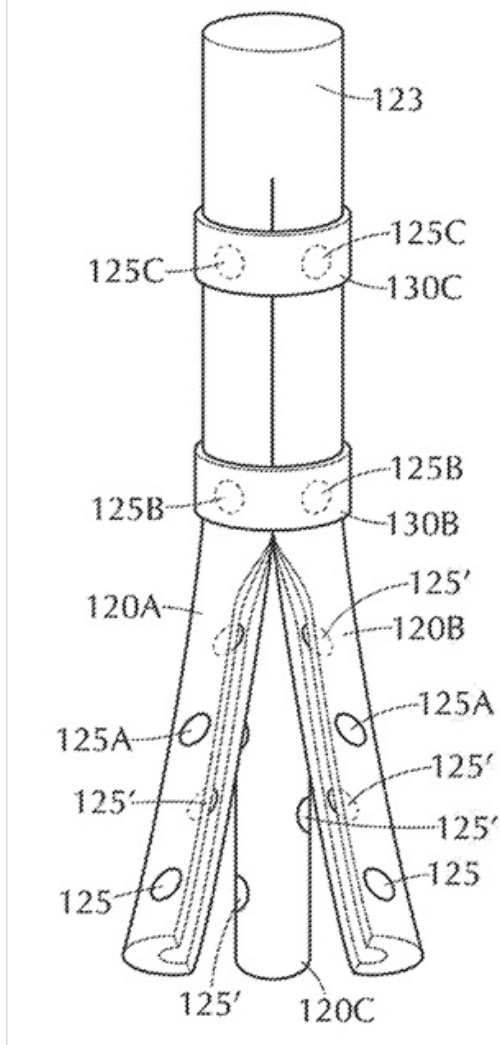
Classifications:

International (IPC 8-9): A61F2/00 A61F2/24 A61M1/00 A61M25/00 A61M25/01 A61M25/14 A61M27/00 A61M39/24 (Advanced/Invention)

CPC: A61M25/007 A61M25/0071 A61M27/006

US: 1/1 604/9

PatBase - US2018117289_AA

**Family:**

Publication number	Publication date	Application number	Application date
AU2017236018 AA	20180517	AU20170236018	20170929
CA2984229 AA	20180428	CA20172984229	20171027
CO20170010832 A1	20190430	CO20170010832	20171025
EP3315162 A1	20180502	EP20170199000	20171027
JP2018069070 A2	20180510	JP20170207907	20171027
US2018117289 AA	20180503	US20160337827	20161028
US10518069 BB	20191231	US20160337827	20161028

Priority:

US20160337827 20161028 JP20170207907 20171027

Probable Assignee: INTEGRA LIFESCIENCES SWITZERLAND SARL

Assignee(s): (std): DEPUY SYNTHES PRODUCTS LLC ; INTEGRA LIFESCIENCES SWITZERLAND SARL

Assignee(s): DEXTRADEUR ALAN J ; BODEN THOMAS JR ; DEPUY SYNTHES PRODUCTS INC

Inventor(s): (std): BODEN THOMAS ; DEXTRADEUR ALAN J ; BODEN JR THOMAS ; ALAN J DEXTRADEUR ; DEXTRADEUR ALAN

Inventor(s): BODEN JR ; BODEN THOMAS JR

Agent(s): FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON; NORTON ROSE FULBRIGHT CANADA LLP
SENCRL SRL; SMALL GARY JAMES; COHEN AND HILDEBRAND PLLC

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO
PL PT RO RS SE SI SK SM TR

2) Family number: 10627253 (US5514112A)

© PatBase

Title: Drainage catheter and method of use

Abstract: A drainage catheter for draining fluids from an internal body part and a process of using the catheter wherein the catheter is subject to development of encrustations of the fluids being drained. The catheter comprises an outer flexible tubular member with a drainage lumen disposed therein. An inner flexible tubular member is slidably disposed within the outer tubular member. The inner tubular member is positioned in the outer tubular member in a predetermined location relative to the outer tubular member whereby withdrawal of the inner tubular member can cause encrustations to be broken up and removed without withdrawing the catheter from the body part being drained.

Classifications:

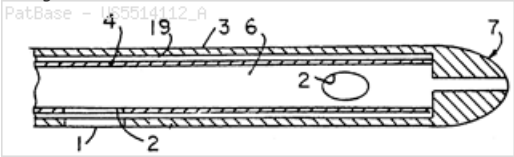
International (IPC 8-9): A61M27/00 (Advanced/Invention);
A61M27/00 (Core/Invention)

International (IPC 1-7): A61M25/00 A61M25/04 A61M27/00

CPC: A61M27/00

European: A61M27/00

US: 604/265 604/267 604/280 604/540



Family:

Publication number	Publication date	Application number	Application date
DE69332172 D1	20020905	DE19936032172	19930929
DE69332172 T2	20021205	DE19936032172T	19930929
EP0680353 A1	19951108	EP19930923154	19930929
EP0680353 A4	19950808	EP19930923154	19930929
EP0680353 B1	20020731	EP19930923154	19930929
US5514112 A	19960507	US19920955700	19921002
WO9407558 A1	19940414	WO1993US09247	19930929

Priority:

US19920955700 19921002 WO1993US09247 19930929

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): BOSTON SCIENTIFIC CORP ; BOSTON SCIENT LTD

Assignee(s): BOSTON SCIENTIFIC CORP ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC LTD ST MICHAEL ; SCIMED LIFE SYSTEMS INC ; BOSTON SCIENTIFIC SCIMED INC ; BOSTON SCIENTIFIC TECHNOLOGY INC

Inventor(s): (std): CHU S ; MOORE J ; MOORE DANIEL J ; CHU MICHAEL S H

Inventor(s): CHU MICHAEL S

Designated states: AT BE CA CH DE DK ES FR GB GR IE IT JP LU MC NL PT SE

3) Family number: 28705178 (US2003135148A)

© PatBase

Title: MULTI-CATHETER INSERTION DEVICE AND METHOD

Abstract: An implantable shunt device having a primary catheter and at least two secondary catheters extending from the primary catheter is provided. The primary catheter includes a connecting end, an open end, and an inner lumen extending therebetween. Each of the secondary catheters extend from the connecting end of the primary catheter and include a fluid passageway formed therein in fluid communication with the inner lumen of the primary catheter. Each secondary catheter also includes at least one fluid entry port in fluid communication with the fluid passageway. In an exemplary embodiment, the fluid entry ports are disposed on an inwardly facing portion of each of the secondary catheters. The shunt device can be used for a variety of diagnostic and therapeutic procedures, including for the removal or introduction of fluid to a treatment site.

Classifications:

International (IPC 8-9): A61M1/00 A61M25/00 A61M25/06
A61M25/088 A61M25/14 A61M27/00 A61M37/00 (Advanced/Invention)

International (IPC 1-7): A61M1/00 A61M25/00 A61M25/088

A61M25/14 A61M27/00 A61M5/00

CPC: A61M25/0662 A61M27/002 A61M27/006 A61M2025/0042

A61M2025/0681 A61M2210/0693

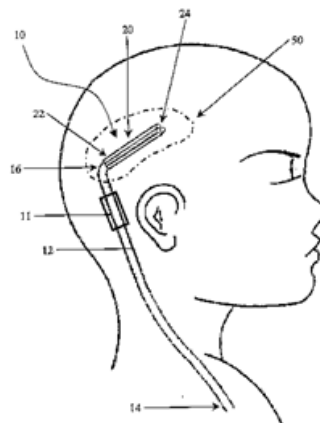
European: A61M25/06H A61M27/00C A61M27/00C2 K61M210/06H

K61M25/00R3 K61M25/06H2

US: 604/4.01 604/5.01 604/6.1 604/6.16 604/61.6 604/616 604/8

604/8P 604/9

Figure 1

**Family:**

Publication number	Publication date	Application number	Application date
CA2416333 AA	20030714	CA20032416333	20030114
CA2416333 C	20110524	CA20032416333	20030114
DE60304112 D1	20060511	DE20036004112	20030113
DE60304112 D1	20060511	DE20036004112T	20030113
DE60304112 T2	20070329	DE20036004112T	20030113
DE60327114 D1	20090520	DE20036027114	20030113
EP1327460 A2	20030716	EP20030250185	20030113
EP1327460 A3	20040107	EP20030250185	20030113
EP1327460 B1	20060322	EP20030250185	20030113
EP1712252 A1	20061018	EP20050077723	20030113
EP1712252 B1	20090408	EP20050077723	20030113
JP2003235987 A2	20030826	JP20030004944	20030110
JP4447221 B2	20100407	JP20030004944	20030110
US2003135148 AA	20030717	US20020047204	20020114
US2005159697 AA	20050721	US20050081577	20050316
US6913589 BB	20050705	US20020047204	20020114
US7699800 BB	20100420	US20050081577	20050316

Priority:

US20020047204 20020114 EP20030250185 20030113 CA20032416333 20030114
 US20050081577 20050316

Probable Assignee: INTEGRA LIFESCIENCES SWITZERLAND SARL**Assignee(s):** (std): CODMAN AND SHURTLEFF ; CODMAN AND SHURTLEFF INC**Assignee(s):** DEPUY SPINE LLC ; DEPUY SYNTHES PRODUCTS INC ; DEPUY SYNTHES PRODUCTS LLC ; DEXTRADEUR ALAN J ; MAGRAM GARY ; HAND INNOVATIONS LLC ; INTEGRA LIFESCIENCES SWITZERLAND SARL**Inventor(s):** (std): MAGRAM GARY ; DEXTRADEUR ALAN J**Inventor(s):** DEXTRADEUR ALAN**Agent(s):** OGILVY RENAULT LLP SENCRL SRL; NORTON ROSE CANADA SENCRL SRL LLP; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; MERCER CHRISTOPHER PAUL ET AL; NUTTER MCCLENNEN AND FISH LLP; NUTTER MCCLENNEN AND FISH LLP**Designated states:** AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR**4) Family number: 29771530 (US2003216710A)**

© PatBase

Title: CATHETER

Abstract: An improved drainage catheter having one or more inlet holes along the length of the catheter is described whereby the cross-sectional areas of the successive inlet holes decreases, the decrease first occurring at the inlet hole immediately following the most proximal inlet hole. This change in cross-sectional area alters the typical inflow of fluid into the catheter such that a disproportionately high volume of fluid no longer enters the most proximal inlet hole. This decrease in inflow at the most proximal inlet hole results in less deposition of debris within the catheter at that position. With less deposition of debris at this location, the likelihood of complete catheter failure is reduced. A preferred embodiment is described wherein the change in cross-sectional area results in approximately uniform inflow into all inlet holes.

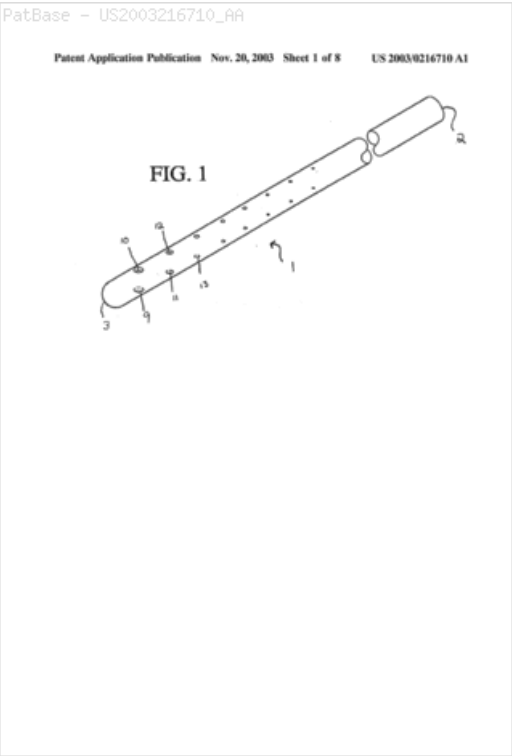
Classifications:**International (IPC 8-9):** A61M1/00 A61M25/00 A61M25/14

A61M27/00 A61M31/00 (Advanced/Invention);

A61M25/00 A61M25/14 A61M31/00 (Core/Invention)

International (IPC 1-7): A61M25/00

CPC: A61M27/006 A61M25/007 A61M2025/0073
European: A61M25/00T10C A61M25/00T3 A61M27/00C2
K61M25/00T10G K61M27/00C2
US: 604/508 604/508P 604/523 604/523P 604/537 604/537S 604/9
604/9P



Family:

Publication number	Publication date	Application number	Application date
US2003216710 AA	20031120	US20030400363	20030326
US2007142817 AA	20070621	US20060546886	20061012
US2011282264 AA	20111117	US20110022809	20110208
US9694166 BB	20170704	US20110022809	20110208

Priority:

US20020367565P 20020326 US20030400363 20030326 US20060546886 20061012
US20110022809 20110208

Probable Assignee: MEDTRONIC INC

Assignee(s): (std): HURT ROBERT F ; MEDTRONIC INC ; MEDTRONIC PS MEDICAL INC ; MEDTRONICS PS MEDICAL INC

Assignee(s): ALLSARA CORP

Inventor(s): (std): HURT ROBERT F

Inventor(s): HURT ROBERT

Agent(s): SHUMAKER AND SIEFFERT P A; DICKE BILLIG AND CZAJA PLLC

5) Family number: 30868801 (US2004220510A) © PatBase

Title: OCCLUSION RESISTANT HYDROCEPHALIC SHUNT

Abstract: An occlusion resistant medical shunt, particularly a hydrocephalic shunt, is provided for implantation into a mammal. The shunt has an elongate wall structure configured as a tube having a lumen therethrough and a proximal end for receipt of bodily fluids. The bodily fluids, such as cerebrospinal fluid, flows through the shunt to a distal end for discharge of the bodily fluids. The wall structure of the shunt generally includes a biocompatible medical device material. The shunts of the present invention further include one or more occlusion resistant materials to resist occlusion of the luminal passage in the shunt.

Classifications:

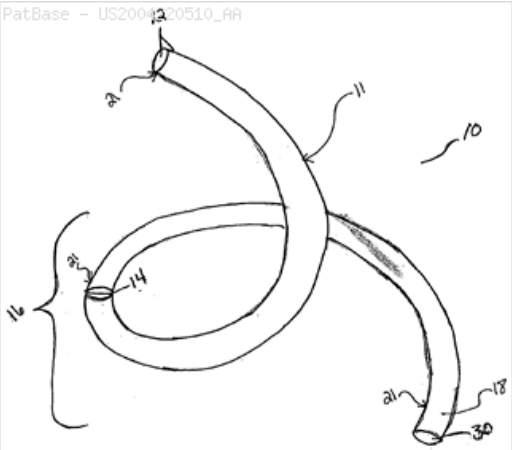
International (IPC 8-9): A61K9/50 A61L27/00 A61L31/00 A61L31/06
A61L31/16 A61M1/00 A61M27/00 A61M29/00
A61M5/00 (Advanced/Invention);
A61F2/06 (Advanced/Non-invention);
A61K9/50 A61M27/00 A61M29/00 A61M5/00 (Core/Invention);
A61M (Subclass/Invention)

International (IPC 1-7): A61K9/50 A61L31/16 A61M29/00 A61M5/00

CPC: A61L31/06 A61L31/16 A61L2300/00 A61M1/3655 A61M27/006

European: A61L31/06 A61L31/16 A61M27/00C2 K61L300/00
K61M1/36C7A

US: 424/423 424/423P 604/264 604/8 604/8P 604/9 623/1.42



Family:

Publication number	Publication date	Application number	Application date
AT422164 E	20090215	AT20040712407T	20040218

AU2004213021 AA	20040902	AU20040213021	20040218
AU2004213021 BB	20101209	AU20040213021	20040218
CA2516175 AA	20050815	CA20042516175	20040218
DE602004019328 D1	20090319	DE200460019328T	20040218
EP1596895 A2	20051123	EP20040712407	20040218
EP1596895 B1	20090204	EP20040712407	20040218
JP2006517850 T2	20060803	JP20060503712T	20040218
US2004220510 AA	20041104	US20040781568	20040218
US2005079199 AA	20050414	US20040933734	20040903
US7582068 BB	20090901	US20040781568	20040218
WO04073768 A2	20040902	WO2004US04925	20040218
WO04073768 A3	20050421	WO2004US04925	20040218

Priority:

US20030447989P 20030218 US20040781568 20040218 WO2004US04925 20040218
US20040933734 20040903

Probable Assignee: MEDTRONIC INC

Assignee(s): (std): BERTRAND WILLIAM ; BERTRAND WILLIAM J ; HENDRIKS MARC ; KOULLICK EDOUARD ; MEDTRONIC INC

Inventor(s): (std): KOULLICK EDOUARD ; HENDRIKS MARC ; BERTRAND WILLIAM J ; BERTRAND WILLIAM ; HERUTH KENNETH T ; LENT MARK S ; MARC HENDRIKS ; WILLIAM J BERTRAND ; EDOUARD KOULLICK

Inventor(s): LENT MARK ; HERUTH KENNETH

Agent(s): FB RICE PTY LTD ; FB RICE ; SMART AND BIGGAR ; HUGHES ANDREA MICHELLE ; MASUI CHUJI ; OKIMOTO KAZUAKI ; SHAMOTO ICHIO ; KOBAYASHI YASUSHI ; TOMITA HIROYUKI ; CHIBA AKIO ; MEDTRONIC INC ; KENNETH

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

6) Family number: 32803449 (US2006074388A)

© PatBase

Title: FLUID MANAGEMENT FLOW IMPLANTS OF IMPROVED OCCLUSION RESISTANCE

Abstract: This invention relates to achieving or improving uniform distribution of fluid flow in medical devices such as when combined with antibiotics impregnated in a catheter and/or with a drug-eluting catheter to further inhibit the catheter from becoming occluded by debris in the CSF or by bacterial biofilm formation or tissue proliferation in the catheter.

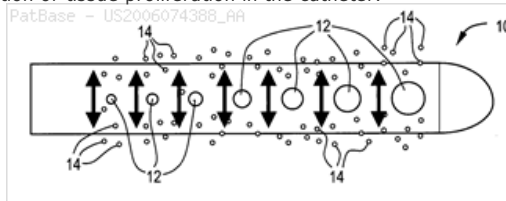
Classifications:

International (IPC 8-9): A61F2/06 A61L29/00 A61L29/08 A61L29/16 A61L31/16 A61M1/00 A61M25/00 A61M27/00 A61M31/00 A61M5/00 A61M5/32 (Advanced/Invention); A61F2/06 A61L29/00 A61M1/00 A61M25/00 A61M27/00 A61M31/00 (Core/Invention)

CPC: A61L29/16 A61L31/16 A61L2300/404 A61M25/007 A61M27/006 A61M2025/0056 A61M2025/0057 A61M2025/0073

European: A61L29/16 A61L31/16 A61M25/00T10C A61M25/00T3 K61L300/404 K61M25/00S4 K61M25/00S5 K61M25/00T10G K61M27/00C2

US: 424/422 424/422S 604/264 604/265 604/265P 604/500 604/500S 604/523 604/523S 604/540 604/8 604/8P



Family:

Publication number	Publication date	Application number	Application date
AT485846 E	20101115	AT20050256107T	20050929
AU2005204329 AA	20060413	AU20050204329	20050829
AU2005204329 BB	20110721	AU20050204329	20050829
CA2521884 AA	20060330	CA20052521884	20050929
CA2521884 C	20150113	CA20052521884	20050929
DE602005024352 D1	20101209	DE200560024352T	20050929
EP1649880 A2	20060426	EP20050256107	20050929
EP1649880 A3	20070926	EP20050256107	20050929
EP1649880 B1	20101027	EP20050256107	20050929
ES2353221 T3	20110228	ES20050256107T	20050929
JP2006110339 A2	20060427	JP20050284791	20050929
JP5701469 B2	20150415	JP20050284791	20050929
US2006074388 AA	20060406	US20040955776	20040930
US2008214982 AA	20080904	US20070931024	20071031
US7976517 BB	20110712	US20040955776	20040930
US8221392 BB	20120717	US20070931024	20071031

Priority:

US20040955776 20040930 CA20052521884 20050929 US20070931024 20071031

Probable Assignee: INTEGRA LIFESCIENCES SWITZERLAND SARL

Assignee(s): (std): CODMAN AND SHURTLEFF ; CODMAN AND SHURTLEFF INC ; DEXTRADEUR ALAN ; MAUGE CHRISTOPHE

Assignee(s): HAND INNOVATIONS LLC ; INTEGRA LIFESCIENCES SWITZERLAND SARL ; CODMAN AND SHURTLEFF INC 325 PARAMOUNT DR. RAYNHAMMA02767-0350US ; DEPUY SPINE LLC ; DEPUY SYNTHES PRODUCTS INC ; DEPUY SYNTHES PRODUCTS LLC

Inventor(s): (std): MAUGE CHRISTOPHE ; DEXTRADEUR ALAN

Inventor(s): DEXTRADEUR ALANUS ; MAUGE CHRISTOPHEUS ; ALAN DEXTRADEUR ; CHRISTOPHE MAUGE

Agent(s): FISHER ADAMS KELLY CALLINANS ; SPRUSON AND FERGUSON ; CALLINANS ; OGILVY RENAULT LLP SENCRL SRL ; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL ; JAMES ANTHONY CHRISTOPHER W

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR YU

7) Family number: 54514335 (US2013204208A)

© PatBase

Title: DEVICE FOR IMPLANTING MEDICAL CATHETERS

Abstract: A stylet for use with a medical catheter has a lumen blocking portion and a shaft, where the shaft has a smaller effective diameter than the lumen blocking portion. The lumen blocking portion has an outer surface that is approximately flush with the catheter lumen in a working area of the catheter. The lumen blocking portion has a length capable of covering at least one side hole of the catheter.

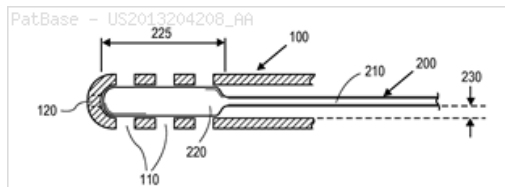
Classifications:

International (IPC 8-9): A61M25/00 A61M25/01 A61M25/14

A61M27/00 A61M5/178 (Advanced/Invention)

CPC: A61M25/007 A61M25/0102 A61M27/006 A61M2025/0018

US: 604/167.06 604/170.02 604/267 604/268



Family:

Publication number	Publication date	Application number	Application date
US2013204208 AA	20130808	US20120469660	20120511
US8852156 BB	20141007	US20120469660	20120511
WO13119425 A1	20130815	WO2013US23696	20130130

Priority:

US20120596476P 20120208 US20120469660 20120511

Probable Assignee: WINDROSE MEDICAL LLC

Assignee(s): (std): DUNBAR JONATHAN ; MENON JAYANT ; OLSON KATHRYN ; WINDROSE MEDICAL ; WINDROSE MEDICAL LLC

Inventor(s): (std): DUNBAR JONATHAN ; MENON JAYANT ; OLSON KATHRYN

Agent(s): MUELLER LAW OFFICE PC; MUELLER HEATHER ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

8) Family number: 55709148 (US2015202406A)

© PatBase

Title: MICROINJECTION CATHETER

Abstract: An insertion device for delivering media inside a patient includes an outer guide tube having a side port. An inner guide tube is nested within the outer guide tube and movable axially within the outer guide tube. The inner guide tube includes a deflector at an end within the outer guide tube. The device also includes a catheter nested within the inner guide tube and movable axially within the inner guide tube. The deflector of the inner guide tube is positionable such that it deflects the dispensing end of the catheter outward through the opening in the outer guide tube when the catheter is advanced axially within the inner guide tube. A therapeutic delivery cannula may be nested within the catheter, such that the deflected end of the catheter determines the direction of travel of the therapeutic delivery cannula into patient tissue when the cannula emerges from the catheter.

Classifications:

International (IPC 8-9): A61M25/00 A61M25/06 A61M25/088

A61M25/09 (Advanced/Invention);

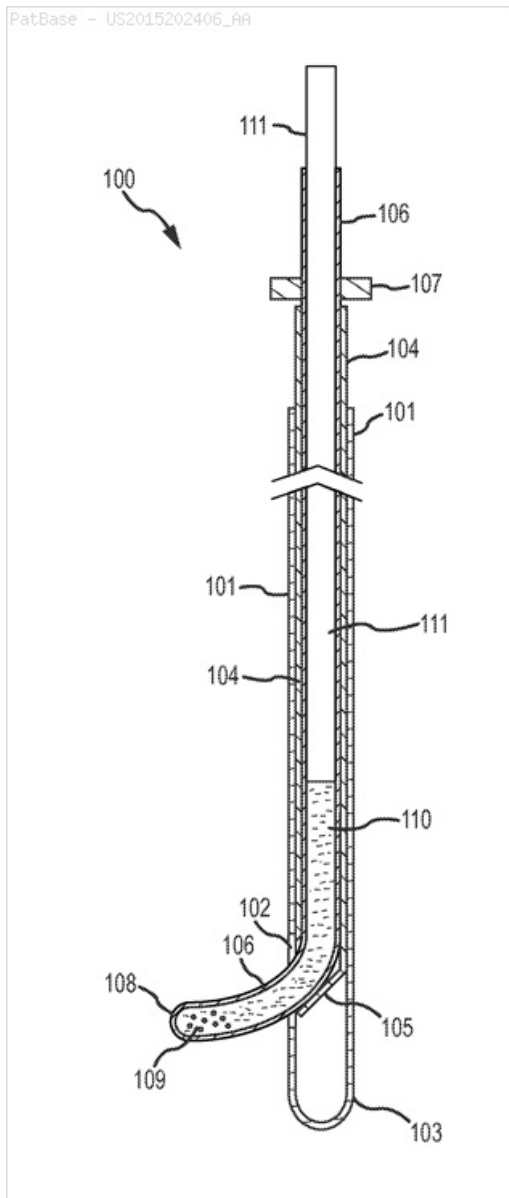
A61B18/14 A61M25/01 (Advanced/Non-invention)

CPC: A61M25/007 A61M25/0662 A61M2025/018 A61M2025/0681

A61M2210/0693 A61M2025/0175 A61B18/1492 A61M25/0041

A61M2025/0004

US: 1/1 604/528

**Family:**

Publication number	Publication date	Application number	Application date
CA2878510 AA	20150106	CA20132878510	20130726
CN104487128 A	20150401	CN201380038788	20130726
CN104487128 B	20190618	CN201380038788	20130726
EP2877228 A1	20150603	EP20130823525	20130726
EP2877228 A4	20160713	EP20130823525	20130726
JP2015523172 T2	20150813	JP20150524469T	20130726
US2015202406 AA	20150723	US20130417460	20130726
US2019030281 AA	20190131	US20180148935	20181001
US10099034 BB	20181016	US20130417460	20130726
WO14018871 A1	20140130	WO2013US52301	20130726

Priority:

US20120676767P 20120727 US20130417460 20130726 WO2013US52301 20130726
 US20150417460 20150126 US20180148935 20181001

Probable Assignee: THE UNIV OF CALIFORNIA

Assignee(s): (std): UNIV CALIFORNIA ; THE UNIV OF CALIFORNIA UCSF

Assignee(s): DESAI TEJAL ; LIM DANIEL A ; SILVESTRINI MATTHEW ; THE UNIV OF CALIFORNIA

Inventor(s): (std): DESAI TEJAL ; LIM DANIEL A ; SILVESTRINI MATTHEW

Agent(s): SMART AND BIGGAR; HGF LTD; SUZUKI MAMORU; KATO SHINJI; MORITA KOJI; OHNO SEIJI; MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO PC; BOYD DAVID W ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Abstract: Systems and methods are provided herein that generally involve shunting fluid, e.g., shunting cerebrospinal fluid in the treatment of hydrocephalus. Self-cleaning catheters are provided which include split tips configured such that pulsatile flow of fluid in a cavity in which the catheter is inserted can cause the tips to strike one another and thereby clear obstructions. Catheters with built-in flow indicators are also provided. Exemplary flow indicators include projections that extend radially inward from the interior surface of the catheter and which include imageable portions (e.g., portions which are visible under magnetic resonance imaging (MRI)). Movement of the flow indicators caused by fluid flowing through the catheter can be detected using MRI, thereby providing a reliable indication as to whether the catheter is partially or completely blocked. Systems and methods for flushing a shunt system are also disclosed herein, as are various systems and methods for opening auxiliary fluid pathways through a shunt system.

Classifications:

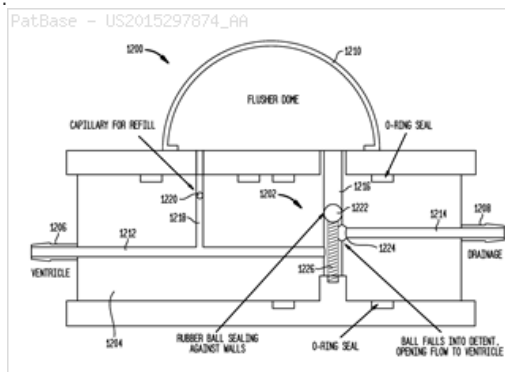
International (IPC 8-9): A61M25/00 A61M27/00 A61M39/22

A61M39/24 A61M5/00 (Advanced/Invention);

A61M39/00 (Advanced/Non-invention)

CPC: A61M27/006 A61M39/225 A61M2039/0018 A61M2027/004

US: 1/1 604/9



Family:

Publication number	Publication date	Application number	Application date
AU2015247353 AA	20161027	AU20150247353	20150418
CA2945492 AA	20161011	CA20152945492	20150418
CN106687169 A	20170517	CN201580032245	20150418
EP3131617 A1	20170222	EP20150779584	20150418
EP3131617 A4	20171108	EP20150779584	20150418
EP3131617 B1	20191211	EP20150779584	20150418
JP2017511229 T2	20170420	JP20160563078T	20150418
JP6608391 B2	20191120	JP20160563078T	20150418
US2015297874 AA	20151022	US20150690389	20150418
US2015367110 AA	20151224	US20150740478	20150616
US2018064919 AA	20180308	US20170654749	20170720
US9433764 BB	20160906	US20150740478	20150616
US9744338 BB	20170829	US20150690389	20150418
US10493249 BB	20191203	US20170654749	20170720
WO15161306 A1	20151022	WO2015US26555	20150418

Priority:

US20140981699P 20140418 US20150690389 20150418 WO2015US26555 20150418
US20150740478 20150616 US20170654749 20170720

Probable Assignee: ANUNCIA INC

Assignee(s): (std): ANUNCIA INC ; ALCYONE LIFESCIENCES INC

Assignee(s): ANAND PJ ; ATTAR MATTHEW ; BROPHY MORGAN ; DEGON ROBERT ; FALLON TIMOTHY ; WALLER ALLISON ; EAST ANDREW ; SINGH DEEP ARJUN

Inventor(s): (std): DEGON ROBERT ; ANAND PJ ; FALLON TIMOTHY ; WALLER ALLISON ; ATTAR MATTHEW ; EAST ANDREW ; BROPHY MORGAN ; SINGH DEEP ARJUN ; ANAND P J

Agent(s): FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON; RICHES MCKENZIE AND HERBERT LLP; HARDING ANDREW PHILIP; NAGATA YUTAKA; NUTTER MCCLENNEN AND FISH LLP; POWSNER DAVID J; VISCONTI MICHAEL P ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

10) Family number: 50506232 (CN102319474A)

© PatBase

Title: DEGRADABLE ANTI-BLOCKAGE VENTRICLE FLOW DIVISION TUBE FOR TREATING HYDROCEPHALUS

Abstract: The invention relates to the field of hydrocephalus treatment, in particular to a degradable anti-blockage ventricle flow division tube for treating hydrocephalus, which comprises a flow division tube body, wherein a water outlet hole is arranged at the side wall of the front end of the flow division tube body. The degradable anti-blockage ventricle flow division tube for treating the hydrocephalus is characterized in that a degrading end part is connected with the front end of the flow division tube body in a split type, and the degrading end part is made of biodegradable materials. The degradable anti-blockage ventricle flow division tube for treating the hydrocephalus has the advantages that the structure is simple, the flow division tube blockage occurrence rate can be effectively reduced, or the flow division tube blockage period is prolonged, the risk of cerebral hemorrhage or cerebral injury caused by frequent replacement of the flow division tube is avoided, the treatment on patients is favorably carried out, and great clinic popularization value is realized.

Classifications:

International (IPC 8-9): A61M25/00 A61M39/02 (Advanced/Invention)

CPC: A61M27/006 A61M25/007

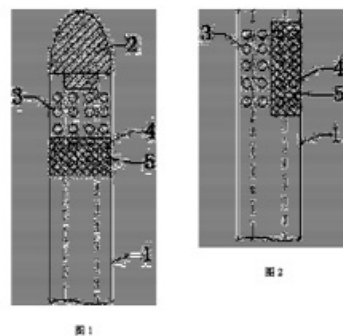


图 1

图 2

5

Family:

Publication number	Publication date	Application number	Application date
CN102319474 A	20120118	CN201110240957	20110822
CN102319474 B	20130522	CN201110240957	20110822
CN202191577 U	20120418	CN201120305722U	20110822

Priority:

CN201110240957 20110822

CN201120305722U 20110822

Probable Assignee:

KONG JIANXIN

Assignee(s): (std):

JIANXIN KONG ; KONG JIANXIN

Inventor(s): (std):

KONG JIANXIN ; JIANXIN KONG

11) Family number: 32486216 (US2005277862A)

© PatBase

Title: SPLITABLE TIP CATHETER WITH BIORESORBABLE ADHESIVE

Abstract: Splitable-tip catheters are disclosed with bioresorbable adhesive to provide spatial separation of distal tip elements during use. The invention can be particularly useful in hemodialysis applications where it is desirable to separate blood extraction and return lumens. The adhesive facilitates insertion of the distal end of the catheter as an assembly, e.g., into a blood vessel using a single guidewire, while the bioresorbable nature of the adhesive allows the tip elements to separate in vivo.

Classifications:

International (IPC 8-9): A61M1/14 A61M1/28 A61M1/36 A61M25/00 A61M25/14 A61M37/00 (Advanced/Invention); A61M25/01 (Advanced/Non-invention); A61M1/14 A61M25/00 A61M37/00 (Core/Invention)

International (IPC 1-7): A61M37/00

CPC: A61M1/285 A61M25/0032 A61M25/007 A61M25/0074

A61M25/008 A61M2025/0031 A61M2025/0034 A61M1/3661

A61M25/0026 A61M25/003 A61M25/0068 A61M25/0071

A61M2025/0188

European: A61M25/00T10 K61M25/00R1M10 K61M25/00R1M6H

K61M25/00R1M8 K61M25/00T10C K61M25/00T20 K61M25/00T30

US: 1/1 604/173 604/265 604/284 604/4.01 604/4.010P 604/5.01

604/6.16 604/6.160P

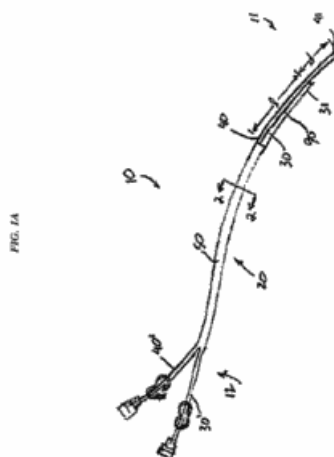


FIG. 1A

Family:

Publication number	Publication date	Application number	Application date
US2005277862 AA	20051215	US20040874298	20040609
US2008214980 AA	20080904	US20080048871	20080314
US2015335810 AA	20151126	US20150675236	20150331
US8992454 BB	20150331	US20040874298	20040609
US9669149 BB	20170606	US20080048871	20080314
US9782535 BB	20171010	US20150675236	20150331

Priority:

US20040874298 20040609 US20080048871 20080314 US20150675236 20150331

Probable Assignee: SPIRE CORP

Assignee(s): (std): ANAND PARAMJITH ; ANAND PJ ; BARD ACCESS SYSTEMS INC ; SPIRE CORP

Inventor(s): (std): ANAND PJ ; ANAND PARAMJITH

Agent(s): NUTTER MCLENNEN AND FISH LLP; RUTAN AND TUCKER LLP

12) Family number: 29087279 (US2002052576A)

© PatBase

Title: METHOD OF FLUID DELIVERY AND CATHETERS FOR USE WITH SAME

Abstract: A pain management system for the infusion of drug to a wound site includes a pump connected to medical tubing which is connected to an improved infusion catheter for providing uniform delivery of fluid throughout an anatomical region. The infusion catheter is inserted into the body of a patient at a pierce site, spaced from an incision site, and extended to the wound site. The pump causes the drug to flow through the medical tubing, through the infusion catheter and to the wound site. One method by which the infusion catheter is advanced to the wound site includes a guide needle that is placed within an introducer tubing. The needle is pierced through the patient's skin, after which the guide needle is withdrawn and discarded, leaving the introducer tubing in place partially under the patient's skin. The infusion catheter is then threaded through the introducer tubing and advanced to the wound site. The introducer tubing is then withdrawn and the infusion catheter remains in place to provide drug to the wound site. The introducer tubing is preferably peeled off of the infusion catheter and discarded. In accordance with one embodiment of the catheter, the catheter comprises an elongated tube with a plurality of exit holes along an infusion section of the catheter, and an elongated flexible porous member residing within the tube and forming an annular space between the tube and the member. In accordance with other embodiments, the catheter includes a tube having a plurality of exit holes in a side wall of the tube. The exit holes may combine to form a flow-restricting orifice of the catheter. Advantageously, fluid within the catheter flows through all of the exit holes, resulting in uniform distribution of fluid within an anatomical region.

Classifications:

International (IPC 8-9): A61B17/00 A61B17/04 A61L A61L17/00 A61L17/06 A61L27/54 A61L29/00 A61L29/02 A61L29/08 A61L29/10 A61L29/12 A61L29/16 A61M A61M25/00 A61M25/01 A61M25/098 A61M25/10 A61M25/14 A61M25/16 A61M29/00 A61M31/00 A61M39/08 A61M5/00 A61M5/14 A61M5/178 B29C63/10 B29C65/00 (Advanced/Invention);

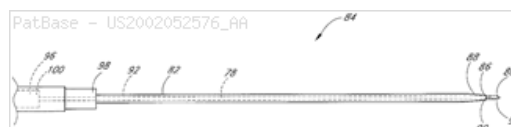
A61F2/958 A61L29/02 A61L29/10 A61M25/00 A61M25/01 A61M25/10 A61M25/16 A61M31/00 (Advanced/Non-invention); A61L29/00 A61M25/00 A61M25/01 A61M25/14 A61M25/16 A61M31/00 A61M39/00 A61M5/00 A61M5/178 (Core/Invention); A61L A61M (Subclass/Invention)

International (IPC 1-7): A61M2/500 A61M25/00 A61M25/16 A61M31/00 A61M5/178

CPC: Y10T156/1028 A61L27/54 A61L29/16 A61L2300/104 A61L2300/404 A61M25/0045 A61M25/0071 A61M2025/0056 A61M25/003 A61M25/0032 A61M25/10 A61M29/00 A61M2025/0036 A61M2025/105 A61M25/00 A61M25/0023 A61M25/0043 A61M25/0068 A61M25/0069 A61M25/007 A61M25/0074 A61M2025/0037 A61M2025/0039 A61M2025/0057 A61M2025/0073

European: A61L27/54 A61L29/16 A61M25/00R1M6 A61M25/00R1M8 A61M25/00S A61M25/00S1 A61M25/00T1 A61M25/00T10A A61M25/00T10C A61M25/00T20 A61M25/00T3 A61M29/00 K61L300/104 K61L300/404 K61M25/00 K61M25/00R1 K61M25/00R1M14 K61M25/00S4 K61M25/00S5 K61M25/00T10 K61M25/00T10A K61M25/00T10E K61M25/00T10G K61M25/10 K61M25/10Z3

US: 1/1 156/187 156/212 156/293 264/154 604/160 604/164.01 604/164.010P 604/164.010S 604/164.02 604/164.05 604/164.050S 604/247 604/247P 604/264 604/264P 604/264S 604/4 604/4.01 604/48 604/48P 604/500 604/500P 604/502 604/506 604/506P 604/508 604/523 604/523P 604/524 604/523S 604/533 604/533S 604/537 604/537P 604/65 604/65S 604/93.01 604/93.010S 604/96 604/96.01 606/230 606/230S

**Family:**

Publication number	Publication date	Application number	Application date
AT411826 E	20081115	AT20040760976T	20040511
AT449626 E	20091215	AT20000948809T	20000719
AU200062251 A1	20010205	AU20000062251	20000719
AU200062251 A5	20010205	AU20000062251	20000719
AU2004238338 AA	20041125	AU20040238338	20040511
AU2004238338 BB	20100722	AU20040238338	20040511
AU2004238338 CA	20110120	AU20040238338	20040511
AU2005200254 AA	20050217	AU20050200254	20050121
AU2005200254 BB	20081211	AU20050200254	20050121
AU2006285077 AA	20070308	AU20060285077	20060828
AU2006285077 BB	20120830	AU20060285077	20060828
AU2009200964 AA	20090402	AU20090200964	20090311
AU2009200964 BB	20110929	AU20090200964	20090311
AU2012247017 AA	20121129	AU20120247017	20121107
AU2012247017 BB	20140403	AU20120247017	20121107
AU2012247018 AA	20121129	AU20120247018	20121107
AU2012247018 AH	20140327	AU20120247018	20121107
AU2012247018 BB	20140605	AU20120247018	20121107
AU2014200711 AA	20140306	AU20140200711	20140211
AU2014200711 AH	20140320	AU20140200711	20140211
AU2014200711 BB	20150212	AU20140200711	20140211
AU777560 B2	20041021	AU20000062251	20000719
BRPI0012686 A	20020521	BR2000PI12686	20000719
BRPI0012686 B1	20090505	BR2000PI12686	20000719
BRPI0410351 A	20060704	BR2004PI10351	20040511

BRPI0615022 A2	20110426	BR2006PI15022	20060828
CA2375930 AA	20020118	CA20002375930	20000719
CA2375930 C	20090512	CA20002375930	20000719
CA2525649 AA	20051114	CA20042525649	20040511
CA2525649 C	20120110	CA20042525649	20040511
CA2564281 AA	20010125	CA20002564281	20000719
CA2564281 C	20100615	CA20002564281	20000719
CA2618644 AA	20080208	CA20062618644	20060828
CA2618644 C	20131112	CA20062618644	20060828
CA2825217 AA	20070308	CA20062825217	20060828
CA2825217 C	20160223	CA20062825217	20060828
CA2825224 AA	20070308	CA20062825224	20060828
CA2825224 C	20150922	CA20062825224	20060828
CA2825233 AA	20070308	CA20062825233	20060828
CA2825233 C	20160510	CA20062825233	20060828
CN101374566 A	20090225	CN200680032028	20060828
CN101374566 B	20120718	CN200680032028	20060828
CN104056338 A	20140924	CN201410287481	20040511
CN104056338 B	20160525	CN201410287481	20040511
CN1295001 C	20070117	CN20008012710	20000719
CN1373679 A	20021009	CN20008012710	20000719
CN1816366 A	20060809	CN200480019207	20040511
CN1951516 A	20070425	CN200610146452	20000719
CN1951516 B	20110810	CN200610146452	20000719
CN1951517 A	20070425	CN200610146453	20000719
CN1951517 B	20101013	CN200610146453	20000719
CZ20020215 A3	20020911	CZ20020000215	20000719
CZ2002215 A3	20020911	CZ20020000215	20000719
DE60043389 D1	20100107	DE20006043389	20000719
DE60048449 D1	20140410	DE20006048449	20000719
DE602004017311 D1	20081204	DE200460017311T	20040511
DE602004048696 D1	20160407	DE200460048696T	20040511
DK1644068 T3	20090126	DK20040760976T	20040511
DK2135633 T3	20140512	DK20000171251T	20000719
ECSP056209 A	20061017	EC2005SP06209	20051209
ECSP088331 A	20080428	EC2008SP08331	20080328
EP1202768 A2	20020508	EP20000948809	20000719
EP1202768 B1	20091125	EP20000948809	20000719
EP1644068 A2	20060412	EP20040760976	20040511
EP1644068 B1	20081022	EP20040760976	20040511
EP1928531 A2	20080611	EP20060813797	20060828
EP1932560 A2	20080618	EP20080004804	20040511
EP1932560 A3	20080625	EP20080004804	20040511
EP1932560 B1	20160224	EP20080004804	20040511
EP2135633 A1	20091223	EP20090171251	20000719
EP2135633 B1	20140226	EP20090171251	20000719
EP2623150 A1	20130807	EP20130165846	20060828
EP2810678 A2	20141210	EP20140174453	20060828
EP2810678 A3	20150415	EP20140174453	20060828
EP2810679 A2	20141210	EP20140174467	20060828
EP2810679 A3	20150415	EP20140174467	20060828
ES2313044 T3	20090301	ES20040760976T	20040511
ES2450369 T3	20140324	ES20090171251T	20000719
HK1046507 A1	20100416	HK20020108044	20021105
HK1046507 B	20100416	HK20020108044	20021105
HK1092395 A1	20070209	HK20060113205	20061130
HK1092395 A3	20070209	HK20060113205	20061130
HK1106167 A1	20080307	HK20070111475	20071024
HK1106167 A3	20080307	HK20070111475	20071024
HK1122515 A1	20090522	HK20080113699	20081217
HK1122515 A3	20090522	HK20080113699	20081217
HK1123003 A1	20090605	HK20080113495	20081211
HK1123003 A3	20090605	HK20080113495	20081211
HK1205013 A1	20151211	HK20150105510	20150610
HU0202294 AB	20021128	HU20020002294	20000719
HU226403 B1	20081128	HU20020002294	20000719
IL147713 A0	20020814	IL20000147713	20000719
IL147713 A1	20060221	IL20000147713	20000719
IL171580 A1	20101031	IL20000171580	20000719
IL171911 A0	20060410	IL20050171911	20051113
IL171911 A1	20100429	IL20040171911	20040511
IL189291 A0	20080605	IL20060189291	20060828
IL198993 A1	20101031	IL20000198993	20000719
IN01135DN2008 A	20080704	IN2008DN01135	20080208
IN03339DN2009 A	20100416	IN2009DN03339	20090522
IN05551DN2005 A	20071123	IN2005DN05551	20051130
IN235304 B	20090731	IN2005DN05551	20051130
IN296705 B	20180518	IN2009DN03339	20090522
IN309997 B	20190329	IN2008DN01135	20080208
JP2003504132 T2	20030204	JP20010510290T	20000719
JP2006528906 T2	20061228	JP20060532940T	20040511

JP2009219894 A2	20091001	JP20090128003	20090527
JP2009505792 T2	20090212	JP20080529140T	20060828
JP2010148906 A2	20100708	JP20100044534	20100301
JP2010227643 A2	20101014	JP20100161765	20100716
JP4387626 B2	20091216	JP20010510290T	20000719
JP4755271 B2	20110824	JP20090128003	20090527
JP4881737 B2	20120222	JP20060532940T	20040511
JP5073771 B2	20121114	JP20100044534	20100301
JP5208743 B2	20130612	JP20080529140T	20060828
JP5248556 B2	20130731	JP20100161765	20100716
KR100938131 B1	20100122	KR20080085587	20080830
KR100946166 B1	20100311	KR20080085588	20080830
KR101164383 B1	20120709	KR20117018997	20040511
KR101166336 B1	20120719	KR20057021604	20040511
KR101351141 B1	20140114	KR20087007736	20060828
KR20020035104 A	20020509	KR20027000827	20000719
KR20050122285 A	20051228	KR20057021604	20040511
KR20080052624 A	20080611	KR20087007736	20060828
KR20080082593 A	20080911	KR20080085587	20080830
KR20080082594 A	20080911	KR20080085588	20080830
KR20110106443 A	20110928	KR20117018997	20040511
MX2008002472 A1	20080407	MX20080002472	20060828
MX346289 B	20170314	MX20140011026	20060828
MX346413 B	20170317	MX20140011027	20060828
MXPA02000637 A1	20020917	MX2002PA00637	20000719
MXPA05012238 A1	20060208	MX2005PA12238	20040511
NO20020284 A	20020228	NO20020000284	20020118
NO20020284 A0	20020118	NO20020000284	20020118
NO20020284 L	20020228	NO20020000284	20020118
NO20055871 A	20060209	NO20050005871	20051212
NO20055871 L	20060209	NO20050005871	20051212
NO20081594 A	20080515	NO20080001594	20080331
NO20081594 L	20080515	NO20080001594	20080331
NZ516785 A	20031128	NZ20000516785	20000719
NZ527985 A	20050624	NZ20000527985	20000719
NZ543860 A	20080731	NZ20040543860	20040511
NZ568103 A	20090531	NZ20040568103	20040511
PL1644068 T3	20090430	PL20040760976T	20040511
PL203274 B1	20090930	PL20000353880	20000719
PL203349 B1	20090930	PL20000384173	20000719
PL353880 A1	20031201	PL20000353880	20000719
PT1644068 T	20081117	PT20040760976T	20040511
PT2135633 T	20140411	PT20090171251T	20000719
RU2002103736 A	20031010	RU20020103736	20000719
RU2005138170 A	20070620	RU20050138170	20040511
RU2008111693 A	20091010	RU20080111693	20060828
RU2303468 C2	20070727	RU20020103736	20000719
RU2366465 C2	20090910	RU20050138170	20040511
TR0200373 T2	20020621	TR20020000373T	20000719
TR0202574 T2	20030121	TR20020002574T	20000719
TR200200373 T2	20020621	TR20020000373T	20000719
TR200202574 T2	20030121	TR20020002574T	20000719
UA74552 C2	20020415	UA20020010625	20000719
US2002052576 AA	20020502	US20010815888	20010323
US2002082547 AA	20020627	US20020085169	20020225
US2002133142 AA	20020919	US20020118535	20020408
US2003158538 AA	20030821	US20030420133	20030418
US2003181887 AA	20030925	US20020104171	20020321
US2004054351 AA	20040318	US20030435946	20030512
US2004064129 AA	20040401	US20030436457	20030512
US2004116896 AA	20040617	US20030675589	20030930
US2004199144 AA	20041007	US20040828923	20040421
US2006135941 AA	20060622	US20050216534	20050831
US2006149192 AA	20060706	US20060364767	20060228
US2009076478 AA	20090319	US20080272748	20081117
US2009093790 AA	20090409	US20080335473	20081215
US2009182304 AA	20090716	US20090414529	20090330
US2009187152 AA	20090723	US20090415304	20090331
US2010000666 AA	20100107	US20090534764	20090803
US2011190731 AA	20110804	US20110074375	20110329
US2012089124 AA	20120412	US20110238497	20110921
US6350253 BA	20020226	US19990363228	19990719
US6626885 BB	20030930	US20010815888	20010323
US7004923 BB	20060228	US20020104171	20020321
US7438711 BB	20081021	US20060364767	20060228
US7452353 BB	20081118	US20030436457	20030512
US7465291 BB	20081216	US20030675589	20030930
US7510550 BB	20090331	US20030435946	20030512
US7527609 BB	20090505	US20020118535	20020408
US7547302 BB	20090616	US20050216534	20050831
US7569045 BB	20090804	US20040828923	20040421

US7384938 BA	20100924	US20080071948	20080719
US7959623 BB	20110614	US20080335473	20081215
US8043465 BB	20111025	US20030420133	20030418
US8048057 BB	20111101	US20090414529	20090330
US8328771 BB	20121211	US20110074375	20110329
US8343135 BB	20130101	US20090415304	20090331
US8628633 BB	20140114	US20090534764	20090803
US9084870 BB	20150721	US20110238497	20110921
WO0105210 A2	20010125	WO2000US19746	20000719
WO0105210 A3	20010719	WO2000US19746	20000719
WO04101052 A2	20041125	WO2004US14664	20040511
WO04101052 A3	20050616	WO2004US14664	20040511
WO07027545 A2	20070308	WO2006US33375	20060828
WO07027545 A3	20080529	WO2006US33375	20060828
ZA200509831 A	20061025	ZA20050009831	20051205
ZA200802664 A	20090325	ZA20080002664	20080326

Priority:

US19990363228	19990719	AU20000062251	20000719	CA20002375930	20000719
CA20002564281	20000719	EP20000948809	20000719	JP20010510290	20000719
JP20090128003	20000719	EP20090171251	20000719	US20000031913	20000719
WO2000US19746	20000719	US20010815888	20010323	US20020085169	20020225
US20020104171	20020321	US20020118535	20020408	US20020031913	20020521
WO2000US19746	20020521	US20030420133	20030418	US20030436457	20030512
US20030435946	20030512	US20030675589	20030930	US20040828923	20040421
EP20040760976	20040511	CN200480019207	20040511	NZ20040543860	20040511
JP20060532940	20040511	EP20080004804	20040511	WO2004US14664	20040511
AU20050200254	20050121	US20050216534	20050831	US20060364767	20060228
AU20060285077	20060828	EP20060813797	20060828	CA20062825233	20060828
CA20062618644	20060828	CA20062825217	20060828	CA20062825224	20060828
WO2006US33375	20060828	CA20062375930	20061116	US20080272748	20081117
US20080335473	20081215	AU20090200964	20090311	US20090414529	20090330
US20090415304	20090331	US20090534764	20090803	US20110074375	20110329
US20110238497	20110921	AU20120247017	20121107	AU20120247018	20121107
CA20132618644	20130911	CA20132618644	20130918	CA20132618644	20130919
AU20140200711	20140211				

Probable Assignee: AVENT INC

Assignee(s): (std): I FLOW CORP ; DENIEGA JOSE CASTILLO ; DAL PORTO JAMES ; DENIEGA JOSE C ; FORREST KEVIN ; FLOW CORP ; FLOW CORP L ; FLOW I ; FOREST KEVIN ; MASSENGALE ROGER DILLARD ; MASSENGALE ROGER ; RAKE KENNETH W ; PORTO JAMES D ; SIMINUK MARK ; RAKE LOIS ; PORTO JAMES DAL ; IFLOW CORP ; AVENT INC ; KIMBERLY CLARK WORLDWIDE INC ; KIMBERLY CLARK CO ; RAKE LEGAL REPRESENTATIVE LOIS ; MASSENGALE ROGER ; AJ FLOU CORP ; KIMBERLY CLARK CORP

Assignee(s): AJ FLOU KORPOREJSHN ; KIMBERLEY CLARK WORLDWIDE INC2300 WINCHESTER ROADNEENAHWI54956US ; KIMBERLY CLARK WORLDWIDE INC2300 WINCHESTER ROADNEENAHWI54956US ; MORGAN STANLEY SENIOR FUNDING INC ; RAKE KENNETH W DECEASED ; KIMBERLEY CLARK WORLDWIDE INC ; AVENT INC ALPHARETTA ; CASTILLO DENIEGA JOSE ; CITIBANK NA ; L FLOW CORP ; I FLOW

Inventor(s): (std): MASSENGALE ROGER DILLARD ; DENIEGA J C ; MASSENGALE R ; RAKE K W ; K W RAKE ; J C DENIEGA ; DENINEGA JOSE CASTILLO ; FOREST KEVIN ; RAKE KENNETH WAYNE ; PORTO JAMES DAL ; RAKE LEGAL REPRESENTATIVE LOIS ; JOSE CASTILLO DENIEGA ; JAMES DAL PORTO ; R MASSENGALE ; KENNETH W RAKE ; ROGER MASSENGALE ; KW RAKE ; JC DENIEGA ; DENIEGA JOSE CASTILLO MASSENGA ; KENNETH W RAKE FINADO ; MASSENGALE ROGER ; J C DENIEG ; PORTO JAMES ; RAKE KENNETH W ; MASSENGALE ROGER ; CASTILLO DENIEGA JOSE ; DENIEGA DZHOZE KASTILLO ; DAL PORTO DZHEJMS ; MEHJSSSENDZHEJL RODZHER ; KEVIN FORREST ; MARK SIMINUK ; RAKE KENETH W ; REHJK KENNET V ; DENIEGA DZHOZE KASTIL O ; MASSENGEJL RODZHER ; DAL PORTO JAMES ; ROKE LOIS ; CASTILLO RAKE KENNETH W MASSEN ; RAKE LOIS ; SIMINUK MARK ; FORREST KEVIN ; DENIEGA JOSE C ; PORTO JAMES D ; DENIEGA JOSE CASTILLO ; DENIEGA JOSE ; RAKE KENNETH ; RAKE J C DENIEGA R MASSENGALE

Inventor(s): JC DENIEGA R MASSENGALE KW RAKE ; RAKE KENNETH W MASSENGALE ROGER DENIEGA JOSE CASTI ; SIMINUK MARKUS ; RAKE KENNETH W DECEASEDUS ; PORTO JAMES DALUS ; MASSENGALE ROGERUS ; FORREST KEVINUS ; DENIEGA JOSE CASTILLOUS ; DENIEGA DZHOZE KASTIL'O ; DENIEGA JOSE CASTILLO MASSENGALE ROGER RAKE... ; J C DENIEGA R MASSENGALE K W RAKE ; KENNETH W RAKE FALECIDO ; KENNETH RAKE ; DENIEGA JOSE CASTILLO MASSENGALE ROGER RAKE KENNET ; DENIEGA JOSE CASTILLO LAKE FOREST ; RAKE KENNETH W LAGUNA NIGUEL ; MASSENGALE ROGER MISSION VIEJO ; DAL PORTO JAMES LAKE FOREST ; JC DENIEG ; DENIEGA JOSE CASTILLO MASSENGALE ROGER RAKE KENNETH W ; RAKE KENNETH W DECEASED ; JOSE CASTILLO DENINEGA

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SIM AND MCBURNEY; BORDEN LADNER GERVAIS LLP; ZIMMERMANN AND PARTNER PATENTANWALTE MBB; DEHNS; VOSSIUS AND PARTNER; DAVIES CHRISTOPHER ROBERT; DURAN LUIS ALFONSO; CHINA PATENT AGENT HK LTD; REINHOLD COHN AND PARTNERS; LEE HAN YOUNG; KNOBBE MARTENS OLSON AND BEAR LLP; DORITY AND MANNING PA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

13) Family number: 56959316 (US2014207043A)

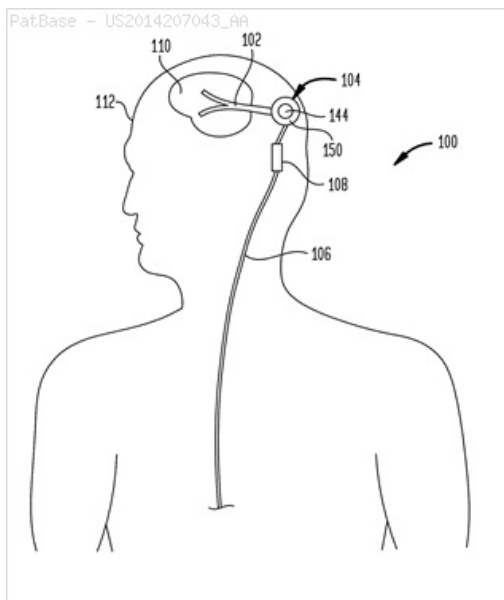
© PatBase

Title: SYSTEMS AND METHODS FOR SHUNTING FLUID

Abstract: Systems and methods are provided herein that generally involve shunting fluid, e.g., shunting cerebrospinal fluid in the treatment of hydrocephalus. Self-cleaning catheters are provided which include split tips configured such that pulsatile flow of fluid in a cavity in which the catheter is inserted can cause the tips to strike one another and thereby clear obstructions. Catheters with built-in flow indicators are also provided. Exemplary flow indicators include projections that extend radially inward from the interior surface of the catheter and which include imageable portions (e.g., portions which are visible under magnetic resonance imaging (MRI)). Movement of the flow indicators caused by fluid flowing through the catheter can be detected using MRI, thereby providing a reliable indication as to whether the catheter is partially or completely blocked.

Classifications:

International (IPC 8-9): A61B17/22 A61B18/24 A61M1/00
A61M25/00 A61M25/01 A61M25/06 A61M25/098 A61M25/14
A61M27/00 A61M39/00 A61M39/22 A61M39/24
A61M5/00 (Advanced/Invention);
A61M25/00 A61M39/00 (Advanced/Non-invention)
CPC: A61M25/0108 A61M25/0127 A61M27/006 A61M39/225
A61M2025/0019 A61M2039/0018 A61M2205/32 A61M2205/3344
A61M2205/0205 A61M2230/20
US: 1/1 604/8 604/9



Family:

Publication number	Publication date	Application number	Application date
AU2014209548 AA	20150910	AU20140209548	20140122
AU2014209548 BB	20180823	AU20140209548	20140122
AU2018256474 AA	20181122	AU20180256474	20181029
CA2898881 AA	20150721	CA20142898881	20140122
CN105358207 A	20160224	CN201480017492	20140122
CN105358207 B	20181228	CN201480017492	20140122
CN109893747 A	20190618	CN201811553487	20140122
DE602014036480 D1	20181220	DE201460036480T	20140122
EP2948209 A1	20151202	EP20140743442	20140122
EP2948209 A4	20160629	EP20140743442	20140122
EP2948209 B1	20181121	EP20140743442	20140122
EP3453420 A1	20190313	EP20180199510	20140122
ES2713558 T3	20190522	ES20140743442T	20140122
JP2016508393 T2	20160322	JP20150555226T	20140122
JP2019130326 A2	20190808	JP20190045655	20190313
JP6498613 B2	20190410	JP20150555226T	20140122
US2014207043 AA	20140724	US20140160695	20140122
US2014207045 AA	20140724	US20140160768	20140122
US2017189656 AA	20170706	US20170462599	20170317
US9629987 BB	20170425	US20140160768	20140122
WO14116640 A1	20140731	WO2014US12449	20140122

Priority:

US20130755018P	20130122	AU20140209548	20140122	EP20140743442	20140122
CN201480017492	20140122	JP20150555226T	20140122	US20140160695	20140122
US20140160768	20140122	WO2014US12449	20140122	US20170462599	20170317
AU20180256474	20181029	JP20190045655	20190313		

Probable Assignee: ANUNCIA INC

Assignee(s): (std): ANUNCIA INC ; ALCOYNE LIFESCIENCES INC ; ALCYONE LIFESCIENCES INC

Assignee(s): ANAND PJ ; DEGON ROBERT ; MCINTYRE JON T ; ATTAR MATTHEW ; FALLON TIMOTHY ; EAST ANDREW ; BROPHY MORGAN ; SINGH DEEP ARJUN ; ANUNCIA INC LOWELL ; WONG ANTHONY ; WALLER ALLISON

Inventor(s): (std): PJ ANAND ; DEEP ARJUN SINGH ; MORGAN BROPHY ; TIMOTHY FALLON ; ROBERT DEGON ; ANTHONY WONG ; JON T MCINTYRE ; ANAND P J ; MCINTYRE JON T ; WALLER ALLISON ; ATTAR MATTHEW ; DEGON ROBERT ; EAST ANDREW ; FALLON TIMOTHY ; BROPHY MORGAN ; WONG ANTHONY ; ANAND PJ ; SINGH DEEP ARJUN ; WANG ANTHONY ; SINGH DEEP ; MCINTYRE JON

Inventor(s): ANAND PJ LOWELL ; SINGH DEEP ARJUN ALLSTON ; BROPHY MORGAN SOMERVILLE ; FALLON TIMOTHY DOVER ; DEGON ROBERT BELLINGHAM ; ATTAR MATTHEW SEEKONK ; WONG ANTHONY FRANKLIN ; WALLER ALLISON BLACKSTONE ; EAST ANDREW ARLINGTON ; MCINTYRE JON T NEWTON

Agent(s): CALLINANS ; FISHER ADAMS KELLY CALLINANS ; SPRUSON AND FERGUSON ; RICHES MCKENZIE AND HERBERT LLP ; BOEHMERT AND BOEHMERT ANWALTSPARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE ; HARDING ANDREW PHILIP ; UNGRIA JAVIER ; NAGATA YUTAKA ; NUTTER MCLENNEN AND FISH LLP ; VISCONTI MICHAEL P ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

14) Family number: 32541247 (US2006009801A)

© PatBase

Title: PLEURAL EFFUSION TREATMENT DEVICE, METHOD AND MATERIAL

Abstract: The invention discloses a method of treating a patient for pleural effusion comprising percutaneously delivering an adhesive material to a pleural space of the patient. Suitable adhesive materials for performing any of the embodiments of

the methods of the invention can be selected from the group consisting of hydrogels, collagen, poly(lactic acid), poly(glycolide), cyanoacrylates, glutaraldehyde, PEG, protein, and polysaccharide and derivatives thereof. The invention also discloses a pleural effusion treatment apparatus comprising an adhesive material adapted to adhere pleural membranes defining a pleural space and a pleural space access member adapted to deliver the adhesive material to the pleural space.

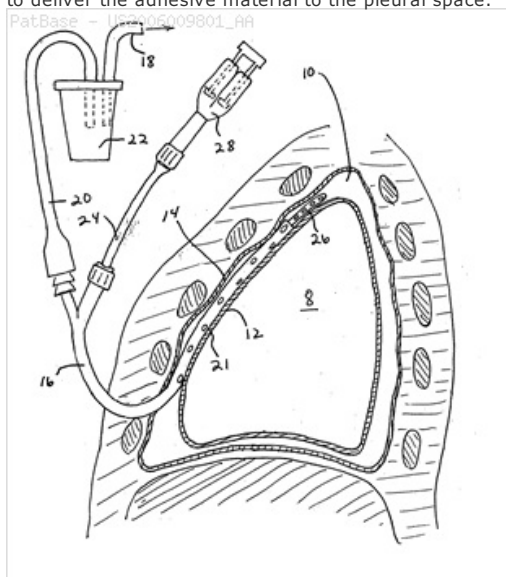
Classifications:

International (IPC 8-9): A61B17/00 A61B17/08 A61F2/82 A61K38/00 A61L26/00 A61M25/00 A61M31/00 (Advanced/Invention); A61L26/00 (Advanced/Non-invention); A61B17/00 A61B17/03 A61F2/82 A61K38/00 A61M25/00 A61M31/00 (Core/Invention); A61L26/00 (Core/Non-invention)

CPC: A61B17/00491 A61B2017/00495 A61M25/0041 A61M25/0068 A61M25/007 A61M25/0074 A61M31/00 A61M2025/0073

European: A61B17/00L A61M25/00T10 A61M31/00 K61B17/00L2 K61M25/00R2 K61M25/00T10C K61M25/00T10G K61M25/00T20

US: 530/350 606/214 606/214P



Family:

Publication number	Publication date	Application number	Application date
CA2570261 AA	20061213	CA20052570261	20050708
CA2570261 C	20140610	CA20052570261	20050708
EP1781182 A2	20070509	EP20050770075	20050708
EP1781182 A4	20110824	EP20050770075	20050708
EP1781182 B1	20191113	EP20050770075	20050708
JP2008509711 T2	20080403	JP20070520516T	20050708
JP5113519 B2	20130109	JP20070520516T	20050708
US2006009801 AA	20060112	US20050177926	20050708
US7766938 BB	20100803	US20050177926	20050708
WO06014567 A2	20060209	WO2005US24172	20050708
WO06014567 A3	20090430	WO2005US24172	20050708

Priority:

US20040586887P 20040708 US20050177926 20050708 WO2005US24172 20050708

Probable Assignee: PNEUMRX INC

Assignee(s): (std): GONG GLEN ; MCGURK ERIN ; PNEUMRX INC ; BALCETA JOBERT ; DIECK RONALD ; WARTCHOW CHARLES

Assignee(s): EKOS LLC ; PNEUMRX LLC

Inventor(s): (std): MCGURK ERIN ; DIECK RONALD ; WARTCHOW CHARLES ; GONG GLEN ; BALCETA JOBERT

Agent(s): FETHERSTONHAUGH AND CO; WYNNE JONES IP LTD; ONO SHINJIRO; KOBAYASHI YASUSHI; TOMITA HIROYUKI; CHIBA AKIO; SAKUMA SHIGERU; WILSON SONSINI GOODRICH AND ROSATI; TOWNSEND AND TOWNSEND AND CREW LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

15) Family number: 70160803 (US2018169394A)

© PatBase

Title: SELF-OFFSETTING IMPLANTABLE CATHETER SYSTEM

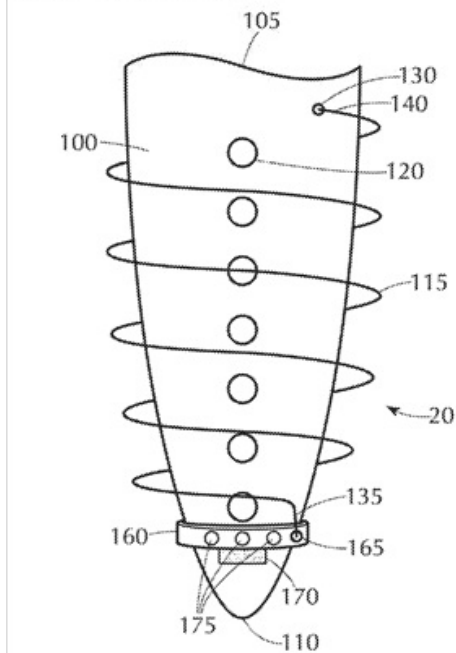
Abstract: A self-offsetting implantable valve system including a catheter having an outer perimeter, a free terminating end and an opposite second end. A plurality of holes are defined proximate the free terminating end of the catheter. The system further including a self-offsetting memory component disposed radially about the outer perimeter of a portion of the catheter proximate the free terminating end of the catheter. This self-offsetting memory component is transitionable between a first state subject to application of an externally applied force and a second state free from the externally applied force. While in the first state at least a portion of the self-offsetting memory component having a diameter smaller than that same portion of the self-offsetting memory component while in the second state.

Classifications:

International (IPC 8-9): A61M25/00 A61M27/00 (Advanced/Invention)

CPC: A61M27/006 A61M25/007 A61M25/04

US: 1/1 604/9

**Family:**

Publication number	Publication date	Application number	Application date
US2018169394 AA	20180621	US20160386848	20161221

Priority:

US20160386848 20161221

Probable Assignee: INTEGRA LIFESCIENCES SWITZERLAND SARL**Assignee(s):** (std): DEPUY SYNTHES PRODUCTS LLC**Assignee(s):** INTEGRA LIFESCIENCES SWITZERLAND SARL ; DEPUY SYNTHES PRODUCTS INC**Inventor(s):** (std): BODEN JR THOMAS ; DEXTRADEUR ALAN J**Inventor(s):** BODEN JR**16) Family number: 59937600 (US2015209550A)**

© PatBase

Title: CATHETER HAVING DISSOLVABLE PORTIONS AND RELATED METHODS

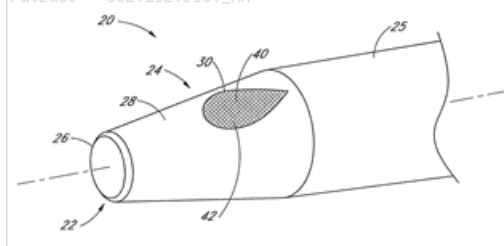
Abstract: A catheter has a distal tip having a primary opening formed as the distal opening formed along the axis of the catheter. One or more secondary openings are formed through a side wall of the catheter proximal of the distal opening. A dissolvable portion made up of a resorbable material is disposed within the one or more secondary openings and aligned with the outer surface of the catheter so that the outer surface of the catheter and outer surface of the dissolvable portion combine to present a substantially smooth outer surface. When the catheter distal tip is arranged in a patient's blood vessel, the resorbable material dissolves, so that the fluid delivered by the catheter can exit the catheter through the primary and secondary openings. In some embodiments the secondary openings can be contiguous with the primary opening.

Classifications:**International (IPC 8-9):** A61L29/14 A61M25/00 (Advanced/Invention)**CPC:** A61M25/0074 A61M25/001 A61L29/148 A61M25/0069

A61M2025/0079 Y10T29/49826

US: 29/428 604/523

PatBase - US2015209550_AA

**Family:**

Publication number	Publication date	Application number	Application date
US2015209550 AA	20150730	US20150605859	20150126

Priority:

US20140932390P 20140128

US20150605859 20150126

Probable Assignee: B BRAUN MELSUNGEN AG**Assignee(s):** (std): BRAUN MELSUNGEN AG**Assignee(s):** B BRAUN MEDICAL IND SDN BHD ; B BRAUN MELSUNGEN AG**Inventor(s):** (std): TEH E JEN ; TEOH HUI KUUN