

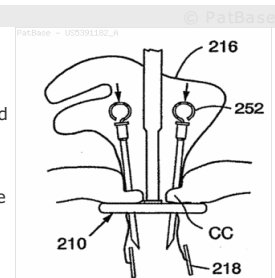
1) Family number: 11792510 (US5391182 A)

APPARATUS AND METHOD FOR CLOSING PUNCTURE WOUNDS

Abstract: Source: US5391182 A An apparatus for suturing fascial tissue for deep puncture wounds utilizes a flexible membrane inserted into a body cavity through a trocar sheath positioned in a wound. A suture to be applied to the wound has anchors attached to each of its ends. A pair of suture-carrying needles each carry an end of the suture and its corresponding anchor. The suture-carrying needles are passed through the fascial layer surrounding the wound and are subsequently passed through the flexible membrane. The suture ends and corresponding anchor means are released from the needles. A lifting force is applied to the flexible member via a cord or shaft which extends out of the wound. The anchors are engaged by the flexible membrane as it is withdrawn out of the wound, pulling the ends of the suture out of the wound to close the opening in the fascial tissue.

Probable Assignee: COVIDIEN AG

Earliest Publication Date: 19950221



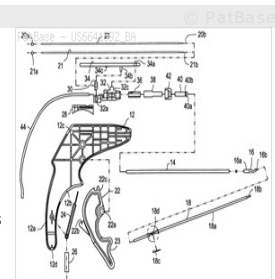
2) Family number: 15369966 (US6641592 BA)

SYSTEM FOR WOUND CLOSURE

Abstract: Source: US6641592 BA A system is provided for closure of a wound in a patient, such as a puncture hole in a blood vessel, with a suture having a first apparatus for applying a suture capable of closing the wound and a second apparatus for securing a sleeve member over the suture to secure the wound closed. The first apparatus includes a housing, a shaft having first and second ends in which the first end is coupled to the housing, a tissue engaging section coupled to the second end of the shaft, and first and second needles which extend from the housing through the shaft into the tissue engaging section. The tissue engaging section is directed through the wound, and has first and second gaps in which each gap has opposing surfaces into which different sides of the wound can be received. The first needle is extendable into a holder through the first gap to capture one of the two ends of a suture material or thread, and is retractable with the captured suture. The second needle is extendable into another holder through the second gap to capture the opposite end of the suture material, and is retractable with the captured suture. A selecting mechanism enables the selection of the first or second needles. The user operates an actuator member to drive and retract each of the selected needles to retrieve each end of the suture material through the tissue about the wound. After removal of the first apparatus, the suture material is left across the wound, and the second apparatus secures a sleeve member over the two ends of the suture material in proximity of the wound to maintain the wound closed and then cuts the suture material exiting the sleeve member.

Probable Assignee: CARDIVA MEDICAL INC

Earliest Publication Date: 20010525



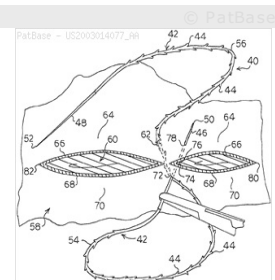
3) Family number: 27909824 (US2003014077 AA)

SUTURE METHOD

Abstract: Source: US2003014077 AA A method is provided for joining and holding closed a wound in bodily tissue using a barbed suture including sharp pointed ends. The pointed end of the suture is inserted on a first side of the wound and pushed through the faces of the wound to an exit point on the second side of the wound that is longitudinally spaced in a first direction from the insertion point in the first side of the wound. The first end of the suture is pulled out of the tissue for drawing the first portion of the suture through the tissue while bringing the two sides of the wound together to a closed position along the first portion of the suture in the tissue. The second pointed end of the suture is inserted into the tissue at one side of the wound and pushed through the faces of the wound to an exit point on the other side of the wound longitudinally spaced in a second direction from the point of insertion of the second end of the suture at the one side of the wound. The second end is pulled out of the tissue for drawing the second portion of the suture through the tissue while bringing the sides of the wound together to the closed position along the second portion of the suture in the tissue.

Probable Assignee: ETHICON INC

Earliest Publication Date: 20030109

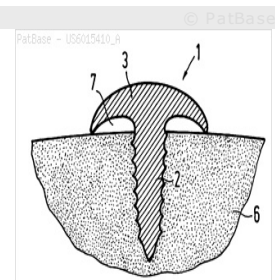


4) Family number: 11384578 (US6015410 A)

BIOABSORBABLE SURGICAL IMPLANTS FOR ENDOSCOPIC SOFT TISSUE SUSPENSION PROCEDURE

Abstract: Source: US6015410 A A bioabsorbable surgical implant for use in supporting soft tissue in a superior position in the body is described. The surgical implant includes a shaft that connects the implant to a bone or hard tissue and a head secured to the shaft. The head of the implant has a concave lower surface so that a suture (or sutures) can easily be wound around the shaft below the head and locked to this position by tightening the head against bone or hard tissue and by pushing or turning the shaft into the bone or hard tissue. The connected shaft and head are formed from a resorbable polymer, copolymer, polymer alloy or composite, which maintains a specified strength for a period of time at least equal to a healing period for the patient. Thereafter, the surgical implant is substantially resorbed by the body over a period of time needed for healing. The surgical implant is particularly adapted for use in endoscopic face and/or brow lift surgery and other endoscopic cosmetic, plastic and reconstructive surgical procedures, where sutures are applied for tissue lifting.

Probable Assignee: BIONX IMPLANTS OY



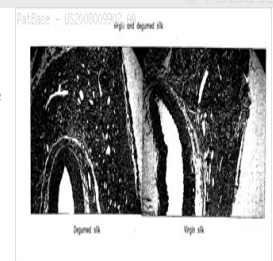
5) Family number: 34972725 (US2008009902 AA)

SUTURES AND FIBROSING AGENTS

Abstract: Source: US2008009902 AA Sutures are used in combination with fibrosing agents to induce or stimulate fibrosis that between the sutures and the host tissues into which the sutures are inserted. Compositions and methods are described for use in lifting tissue, closing wound, and other applications.

Probable Assignee: ANGIOTECH PHARMACEUTICALS INC

Earliest Publication Date: 20070809



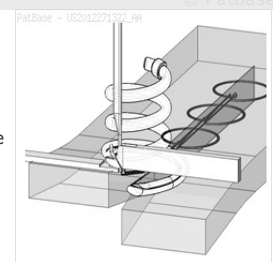
6) Family number: 51635989 (US2012271322 AA)

DEVICES AND METHODS FOR CONTINUOUS SURGICAL SUTURING

Abstract: Source: US2012271322 AA A machine constructed and configured for automatic continuous suturing for reduced or minimized scarring and reduced suturing time, including methods of using the same. A device for continuous suturing. A variety of needles designed and constructed for suturing, and more particularly for use with a machine operable for continuous suturing for reduced or minimized scarring and reducing the suturing time. Suture stitches by the same device. A device, method and suture for subcuticular suturing.

Probable Assignee: ISUTURING LLC

Earliest Publication Date: 20120802



7) Family number: 60462000 (US2017182208 AA)

ABSORBABLE FIBRIN MICROTHREAD SUTURES FOR REDUCED INFLAMMATION AND SCARRING IN TISSUE LIGATION

Abstract: Source: US2017182208 AA In part, the invention described herein relates generally to sutures and uses thereof in surgical procedures, including fibrin microthread sutures for surgical procedures that provide one or more of lower inflammation, reduced fibrosis, reduced scarring, and fast absorption in the host tissue.

Probable Assignee: VITA THREADS LLC

Earliest Publication Date: 20151001



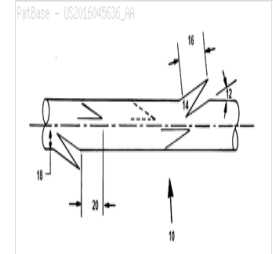
8) Family number: 61688703 (US2016045636 AA)

SELF-RETAINING SUTURES OF POLY-4-HYDROXYBUTYRATE AND COPOLYMERS THEREOF

Abstract: Source: US2016045636 AA Absorbable monofilament fibers and self-retaining sutures with high tensile strengths have been developed. The straight pull tensile strengths of the absorbable self-retaining sutures closely approximate, equal or exceed the average minimum knot-pull tensile standards set by the United States Pharmacopeia (USP). These higher strength absorbable self-retaining sutures can therefore be used either without needing to oversize the suture for a given procedure, or by oversizing the self-retaining suture by no more than 0.1 mm in diameter. In one embodiment, the absorbable self-retaining sutures are made from poly-4-hydroxybutyrate or copolymers thereof. Methods for producing absorbable self-retaining sutures that have high tensile strengths and pronounced sheath-core structures wherein the sheath is harder than the core are also provided. The self-retaining sutures may be made by spinning and orienting a monofilament fiber of poly-4-hydroxybutyrate or copolymer thereof and inserting retainers in monofilament fibers.

Probable Assignee: TEPHA INC

Earliest Publication Date: 20160218



9) Family number: 62649660 (US2016166727 AA)

METHODS OF ORIENTING MULTIFILAMENT YARN AND MONOFILAMENTS OF POLY-4-HYDROXYBUTYRATE AND COPOLYMERS THEREOF

Abstract: Source: US2016166727 AA Resorbable multifilament yarns and monofilament fibers including poly-4-hydroxybutyrate and copolymers thereof with high tenacity or high tensile strength have been developed. The yarns and fibers are produced by cold drawing the multifilament yarns and monofilament fibers before hot drawing the yarns and fibers under tension at temperatures above the melt temperature of the polymer or copolymer. These yarns and fibers have prolonged strength retention in vivo making them suitable for soft tissue repairs where high strength and strength retention is required. The multifilament yarns have tenacities higher than 8.1 grams per denier, and in vivo, retain at least 65 percent of their initial strength at 2 weeks. The monofilament fibers retain at least 50 percent of their initial strength at 4 weeks in vivo. The monofilament fibers have tensile strengths higher than 500 MPa. These yarns and fibers may be used to make various medical devices for various applications.

Probable Assignee: TEPHA INC

Earliest Publication Date: 20160616



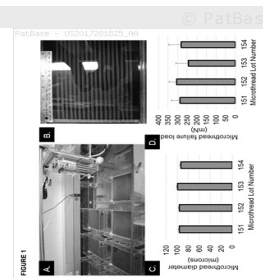
10) Family number: 67135216 (US2017281825 AA)

COMPOSITIONS AND METHODS FOR WOUND HEALING

Abstract: Source: US2017281825 AA The present invention relates, in part, to sutures which promote wound closure and/or healing. In particular, the present invention provides fibrin microthread sutures that mimic the mechanical behavior of a target tissue thereby reducing, for example, scarring, inflammation, and cell death at the ligature site, including monofilament sutures.

Probable Assignee: WORCESTER POLYTECH INST

Earliest Publication Date: 20171005



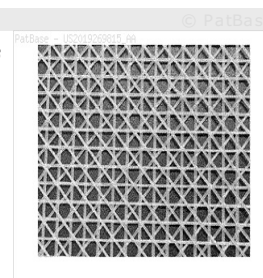
11) Family number: 75752356 (US2019269815 AA)

YARNS AND FIBERS OF POLY(BUTYLENE SUCCINATE) AND COPOLYMERS THEREOF, AND METHODS OF USE THEROF

Abstract: Source: US2019269815 AA Resorbable implants comprising poly(butylene succinate) and copolymers thereof have been developed. The implants are preferably sterilized, and contain less than 20 endotoxin units per device as determined by the limulus amoebocyte lysate (LAL) assay, and are particularly suitable for use in procedures where prolonged strength retention is necessary, and can include one or more bioactive agents. The implants may be made from fibers and meshes of poly(butylene succinate) and copolymers thereof, or by 3d printing, and the fibers may be oriented. Coverings and receptacles made from forms of poly(butylene succinate) and copolymers thereof have also been developed for use with cardiac rhythm management devices and other implantable devices. These coverings and receptacles may be used to hold, or partially/fully cover, devices such as pacemakers and neurostimulators. The coverings and receptacles are made from meshes, webs, lattices, non-wovens, films, fibers, and foams, and contain antibiotics such as rifampin and minocycline.

Probable Assignee: TEPHA INC

Earliest Publication Date: 20190905



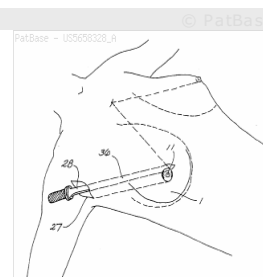
12) Family number: 13187536 (US5658328 A)

ENDOSCOPIC ASSISTED MASTOPEXY

Abstract: Source: US5658328 A An endoscopic assisted mastopexy, with or without augmentation, or an endoscopic assisted reduction mammoplasty is disclosed in which an incision is made at a point on the body remote from the breast which is not ordinarily visible, such as in a preexisting scar, under an armpit or elsewhere accessible to the upper hemisphere of the breast. In the mastopexy with augmentation, dissection is carried up to the fascia of the pectoralis muscle and above the fascia and with the scope for visualization, an endotube is inserted from the incision over the pectoral fascia. A tissue expander is inserted and inflated to dissect the fascia away from the muscle to form a posterior pocket and then removed. With blind dissection, with external palpation, using scissors, from the incision, the skin is undermined in the upper quadrant. The pocket is then connected from the subcutaneous position and the breast tissue is released by cutting loose to yield a direct communication from the subcutaneous pocket around to the postglandular pocket. The soft tissue of the breast is elevated away from the pectoralis muscle and fascia going up above the second rib and just below the clavicle to lift and position the nipple areolar complex. The upper pole of the breast is sutured into the prepectoral fascia. An implant is placed into the pocket and then inflated with saline as in an endoscopic augmentation. The initial incision is closed and the patient is dressed and provided with support during recuperation and healing. Nipple reduction, if necessary, is accomplished by undermining the areolar border and placing a permanent circum-areolar suture through stab wounds which allows a reduction in nipple size by the purse-string suture without any scars around the nipple. In the mastopexy without augmentation, the implant is omitted. In the reduction mammoplasty, breast tissue is removed and the breast repositioned and reshaped.

Probable Assignee: DAVIS LANA LEA

Earliest Publication Date: 19970819



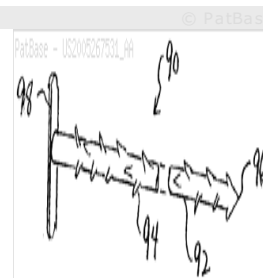
13) Family number: 32452025 (US2005267531 AA)

SUTURE METHODS AND DEVICES

Abstract: Source: US2005267531 AA A barbed suture including a body with barbs on the periphery, a pointed end, and an anchor at one end to resist movement of the suture in the direction of the pointed end is provided. One or more limbs on the anchor may be provided, which may be arcuate, of varying lengths, and of varying distribution about the periphery of the suture body. Other anchor designs are provided. Methods of placing single-directional and bi-directional barbed sutures to approximate the tissue on each side of a wound and to position and support tissue in the absence of a wound, as in cosmetic surgery, are provided, and may include terminal J-stitches or S-stitches. Methods of placement may be made with sharp, pointed ends, which may be needles, or insertion devices. Sinusoidal patterns of sutures that have amplitudes generally perpendicular to the resultant holding force of the suture are provided.

Probable Assignee: ETHICON INC

Earliest Publication Date: 20051201



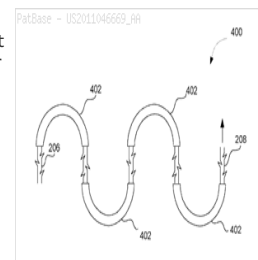
14) Family number: 43648804 (US2011046669 AA)

METHOD AND APPARATUS FOR ELEVATING RETAINERS ON SELF-RETAINING SUTURES

Abstract: Source: US2011046669 AA A method and device to elevate retainers on a suture thread to a desired angle such that the retainers can retain the desired elevation. The retainers can be elevated using an apparatus having at least one roller and at least one bending bar, wherein the bending bar contacts the retainers adjacent to the at least one roller to apply a force to the retainers. The retainers can also be elevated using a tube-shaped apparatus which allows the retainers on a suture thread to be bent by the inner surface of the tube-shaped apparatus. In various embodiments of the invention, a suture can be made up of an inner core and a coating that upon a stimuli increases the protrusion of the retainers away from the suture core thereby ensuring that the suture is held securely in place, preventing wound separation and dehiscence. In an embodiment of the invention, the application of the coating to the outer face of the retainer and attractive forces between the coating at different points results in the distension of the retainers away from the suture core. In an alternative embodiment of the invention, the coating inserts into the cut associated with the retainer and repulsive or expansive forces result in a pushing out of the cut and thereby the distending of the retainers away from the suture core.

Probable Assignee: ANGIOTECH PHARMACEUTICALS INC

Earliest Publication Date: 20090827



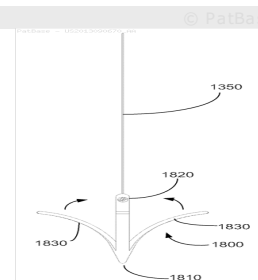
15) Family number: 48382546 (US2013090670 AA)

SUTURE DELIVERY SYSTEM

Abstract: Source: US2013090670 AA A suture delivery system is described. The system includes an anchor and a cooperating driver, the driver facilitating a delivery of the anchor into the abdominal cavity. The system allows for the deployment of a suture internally into an abdominal wall.

Probable Assignee: SHARP FLUIDICS LLC

Earliest Publication Date: 20111020



16) Family number: 49661393 (US2012053689 AA)

COATINGS FOR THE MANUFACTURE AND APPLICATION OF POLYHYDROXYALKANOATE MEDICAL DEVICES

Abstract: Source: US2012053689 AA Biocompatible coatings and spin finishes that can be applied to polyhydroxyalkanoate (PHA) polymers, and medical devices made from PHA polymers, have been developed. The coatings impart good lubricity to PHA polymers, particularly to fibers and braids made from these materials, making the coatings ideal for use on medical devices such as PHA braided sutures. The spin finishes can be applied to PHA fibers to facilitate their manufacture, and also for their conversion to other products, including medical textiles. The spin finishes serve to protect multifilament fiber bundles, and keep them intact following extrusion, and also to impart lubricity to the fiber bundles and monofilament fibers so that they are not damaged in subsequent processing steps particularly in textile processing. The coating reduces tissue drag of, for example, braided sutures.

Probable Assignee: TEPHA INC

Earliest Publication Date: 20110929

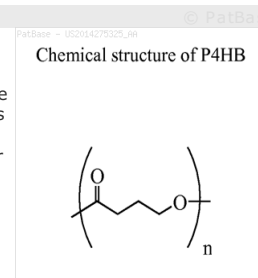
17) Family number: 57414360 (US2014275325 AA)

COMPOSITIONS AND DEVICES OF POLY-4-HYDROXYBUTYRATE

Abstract: Source: US2014275325 AA Compositions of P4HB with high purity have been developed. The compositions are prepared by washing P4HB biomass prior to solvent extraction, and precipitating P4HB from solution. The same solvent is preferably used to wash the P4HB biomass, and as a non-solvent to precipitate the polymer from a P4HB solvent solution. The highly pure P4HB compositions are suitable for preparing implants. The implants may be used for the repair of soft and hard tissues.

Probable Assignee: TEPHA INC

Earliest Publication Date: 20140918



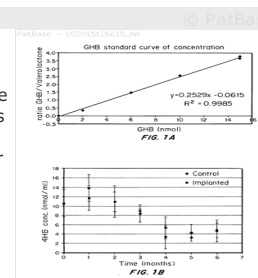
18) Family number: 59140472 (US2015126615 AA)

COMPOSITIONS AND DEVICES OF POLY-4-HYDROXYBUTYRATE

Abstract: Source: US2015126615 AA Compositions of P4HB with high purity have been developed. The compositions are prepared by washing P4HB biomass prior to solvent extraction, and precipitating P4HB from solution. The same solvent is preferably used to wash the P4HB biomass, and as a non-solvent to precipitate the polymer from a P4HB solvent solution. The highly pure P4HB compositions are suitable for preparing implants. The implants may be used for the repair of soft and hard tissues.

Probable Assignee: TEPHA INC

Earliest Publication Date: 20150507



19) Family number: 43215248 (MD3858 G2)

METHOD FOR NIPPLE PLASTY

Abstract: Source: MD3858 G2 The invention refers to medicine, particularly to the oncology of mammary gland. Summary of the method for nipple plasty consists in removing the nipple with tumor in block, then there are made incisions in the form of two triangles with the bases situated on the lateral margins of the wound with excision of the skin and of the subcutaneous tissue, it is applied a mattress continuous suture at the fundus of the wound with the inlet and outlet places situated in the middle of the bases of the mentioned triangles. Afterwards, to the fundus of the wound it is sutured a gauze tampon, with the help of which the fundus of wound is lifted upwards with the formation of nipple from glandular tissue, then there are applied simple surgical sutures coaptating the triangle sides, afterwards there are applied three continuous blanket sutures through the subcutaneous tissue, one being applied on the external margin of areola, the other on its internal margin and the third in the middle of the distance between the first and the second suture.

Probable Assignee: MEREUTA ION

Earliest Publication Date: 20090331

20) Family number: 50352963 (RU2434588 C1)

PatBase

METHOD OF SURGICAL REMOVAL OF HAIR IN AXILLARY CREASES

Abstract: Source: RU2434588 C1 FIELD: medicine. SUBSTANCE: invention relates to medicine and can be applied for surgical removal of hair in axillary creases. 2.5-3 cm long cut is made on line of natural crease. Subcutaneous fatty cellular tissue is separated to the depth of hair bulb growth. Hemostasis is performed. Zone of separation is lifted and turned out. Coagulation is performed under optic magnification. Hemostasis control is carried out. Wound is sewn layer-by-layer from periphery to the centre, separated flap is fixed to wound bottom with separate interrupted suture in chessboard order at distance of 1 cm. 2-3 subcutaneous interrupted sutures are applied on wound edges, wound is covered with uninterrupted intracutaneous suture with application of bandage. EFFECT: method makes it possible to remove hair in radical way, solve problem of hyperhydrosis. 4 cl, 1 ex

Probable Assignee: OOO MOLDING MASK

Earliest Publication Date: 20111127

21) Family number: 61906194 (US2016082160 AA)

PatBase

ORIENTED P4HB IMPLANTS CONTAINING ANTIMICROBIAL AGENTS

Abstract: Source: US2016082160 AA Oriented resorbable implants made from poly-4-hydroxybutyrate (P4HB) and copolymers thereof, have been developed that contain one or more antimicrobial agents to prevent colonization of the implants, and reduce or prevent the occurrence of infection following implantation in a patient. These oriented implants are particularly suitable for use in procedures where prolonged strength retention is necessary and there is a risk of infection. Coverings and receptacles made from poly-4-hydroxybutyrate and copolymers thereof, containing antimicrobial agents, have also been developed for use with implantable devices to prevent colonization of these devices, and to reduce or prevent the occurrence of infection following implantation of these devices in a patient. These coverings and receptacles may be used to hold, or partially or fully cover, devices such as pacemakers and neurostimulators. Preferably, the coverings and receptacles are made from meshes, non-wovens, films, fibers, and foams, and contain rifampin and minocycline.

Probable Assignee: TEPHA INC

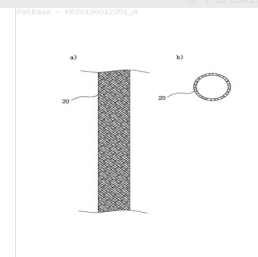
Earliest Publication Date: 20160324

22) Family number: 73136013 (KR20190012351 A)

PatBase

MEDICAL SUTURE AND PRODUCING METHOD FOR THE SAME

Abstract: Source: KR20190012351 A The present invention relates to a medical suture and a manufacturing method therefor. The medical suture manufacturing method comprises: a first step of winding two raw material sutures, which are bioabsorbable medical polymer composed of one or two selected from polydioxanone, a polylactic acid, and copolymers thereof, to be intersected on a guide rod of a cylindrical shape on which a release agent is coated; a second step of performing thermocompression bonding of the guide rod wound by the two raw material sutures by a molding groove of 150-200 degrees centigrade for 2-10 seconds; a third step of separating the guide rod wound by the raw material sutures from the molding groove, and naturally cooling the same; and a fourth step of separating the raw material sutures from the guide rod. When two hollow sutures are inserted into a human tissue, the present invention prevents lumps of the sutures by maximizing an area touched to the human tissue to uniformly disassemble the sutures in a human body. An uneven surface generated in a process of performing the thermocompression bonding of the two sutures can improve fixed force. A natural lifting effect can be provided since the hollow sutures have excellent flexibility for human body movement, and time and processes for manufacturing the medical suture can be minimized.



Probable Assignee: REGEN BIOCHARM CO LTD

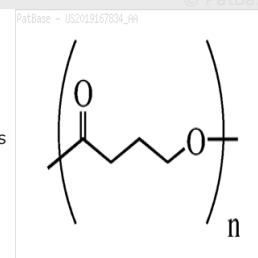
Earliest Publication Date: 20190211

23) Family number: 74603642 (US2019167834 AA)

PatBase

VACUUM MEMBRANE THERMOFORMED POLY-4-HYDROXYBUTYRATE MEDICAL IMPLANTS

Abstract: Source: US2019167834 AA Methods to produce thermoformed implants comprising poly-4-hydroxybutyrate homopolymer, copolymer, or blend thereof, including surgical meshes, have been developed. These thermoforms are preferably produced from porous substrates of poly-4-hydroxybutyrate homopolymer or copolymer thereof, such as surgical meshes, by vacuum membrane thermoforming. The porous thermoformed implant is formed by placing a porous substrate of poly-4-hydroxybutyrate homopolymer or copolymer thereof over a mold, covering the substrate and mold with a membrane, applying a vacuum to the membrane so that the membrane and substrate are drawn down on the mold and tension is applied to the substrate, and heating the substrate while it is under tension to form the thermoform. The method is particularly useful in forming medical implants of poly-4-hydroxybutyrate and copolymers thereof, including hernia meshes, mastopexy devices, breast reconstruction devices, and implants for plastic surgery, without exposing the resorbable implants to water and without shrinking the porous substrate during molding.



Probable Assignee: TEPHA INC

Earliest Publication Date: 20190606

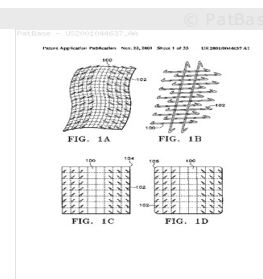
24) Family number: 28161077 (US2001044637 AA)

MULTI-POINT TENSION DISTRIBUTION DEVICE, A BROW AND FACE LIFT VARIATION, AND A METHOD OF TISSUE APPROXIMATION USING THE DEVICE

Abstract: Source: US2001044637 AA A tissue approximation device and processes for using the device are provided. The device is an implantable, biodegradable construct (except for hernia repairs) that has attachment points emanating from a supportive backing. The device improves the mechanical phase of wound healing and evenly distributes tension over the contact area between the device and tissue. Processes for using the device include wound closure, vascular anastomoses, soft tissue attachment and soft tissue to bone attachment. Several variations are particularly applicable to facilitating tissue approximation in surgical cosmetic applications, particularly brow lifts. Generally, scalp tissue to be lifted may be set on a brow lift device via attachment points, and the device may then be secured to a patient's cranium. Variations of the device are described along with a method of installing the brow lift device. Also described is a tool particularly useful for installing a brow lift device.

Probable Assignee: MICROAIRE SURGICAL INSTRUMENTS LLC

Earliest Publication Date: 20011122



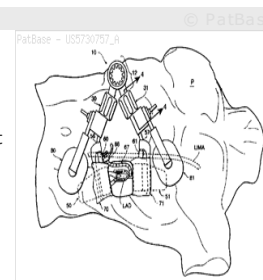
25) Family number: 30131772 (US5730757 A)

ACCESS PLATFORM FOR INTERNAL MAMMARY DISSECTION

Abstract: Source: US5730757 A An access platform having a first and a second blade interconnected to a spreader member that laterally drives the blades apart or together and support pads interconnected to the first blade. A torsional member is operably interconnected to the first blade and the spreader member and is used to vertically displace the first blade in either direction and, thus, increase a surgeon's working space and visual access for the dissection of an internal mammary artery. A tissue retractor interconnected to the blades is used to draw the soft tissue around an incision away from the surgeon's working area.

Probable Assignee: MAQUET CARDIOVASCULAR LLC

Earliest Publication Date: 19970821



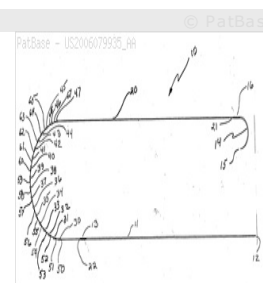
26) Family number: 32818633 (US2006079935 AA)

SUTURE FOR WOUND CLOSURE, TISSUE APPROXIMATION, TISSUE SUPPORT, SUSPENSION AND/OR FIXATION

Abstract: Source: US2006079935 AA A suture assembly includes an elongated flexible body supporting a plurality of frusto-conically shaped tissue-engaging elements in a generally spaced arrangement thereon. A curved body having a sharp point is joined to one end of the flexible body while a straight pointed body is joined to the remaining end of the flexible body. In alternate embodiments, the tissue-engaging elements are elliptical or polygonal in cross-section. In a still further alternate embodiment, the tissue-engaging elements are divided into first and second oppositely facing sets to provide a bidirectional suture.

Probable Assignee: SILHOUETTE LIFT SOCIETAD LIMITADA

Earliest Publication Date: 20060413



27) Family number: 43631268 (CO4790090 A1)

A DEVICE FOR USE DISPOSABLE SURGICAL ATRAUMATIC SUTURE ATRAUMATIC SUTURE METHOD IMPLEMENTED WITH THE DEVICE (MACHINE TRANSLATION)

Abstract: Source: CO4790090 A1 1. A device for atraumatic use disposable surgical suture, of the type comprising a suture needle, wherein said suture needle is attached to a needle holder body having a distal portion, including said needle through the through- same and said needle is tubular and has a thread-pass duct extending along the same and in which passes a suture having a projecting end of a needle tip and another end that leads to a average body portion of the needle holder.

Probable Assignee: HOFFMANN LA ROCHE PRODUCTS LTD

Earliest Publication Date: 19990531

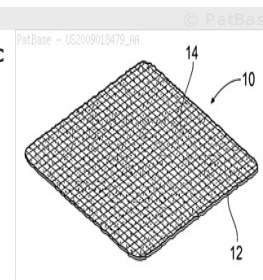
28) Family number: 43959105 (US2009018479 AA)

ABSORBABLE TISSUE DRESSING ASSEMBLIES, SYSTEMS, AND METHODS FORMED FROM HYDROPHILIC POLYMER SPONGE STRUCTURES SUCH AS CHITOSAN

Abstract: Source: US2009018479 AA Absorbable tissue dressing assemblies are formed from hydrophilic polymer sponge structures, such as chitosan.

Probable Assignee: TRICOL BIOMEDICAL INC

Earliest Publication Date: 20090115



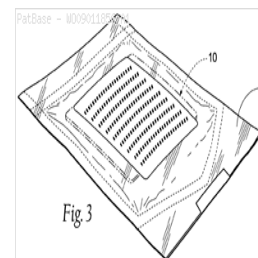
29) Family number: 43959108 (WO09011856 A1)

ABSORBABLE TISSUE DRESSING ASSEMBLIES, SYSTEMS, AND METHODS FORMED FROM HYDROPHILIC POLYMER SPONGE STRUCTURES SUCH AS CHITOSAN

Abstract: Source: WO09011856 A1 Absorbable tissue dressing assemblies are formed from hydrophilic polymer sponge structures, such as chitosan.

Probable Assignee: HEMCON MEDICAL TECHNOLOGIES IN

Earliest Publication Date: 20090122



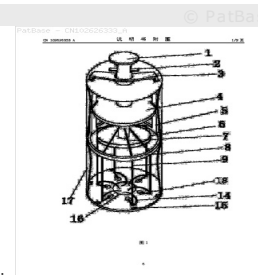
30) Family number: 51726837 (CN102626333 A)

NEEDLE-WITHDRAWING AND LINE-LEADING SUTURE INSTRUMENT

Abstract: Source: CN102626333 A The invention discloses a needle-withdrawing and line-leading suture instrument, which comprises a suture instrument shell, lifting and pulling connecting rod mechanisms, annular needles and line-leading locking mechanisms, wherein the suture instrument shell is in a cylinder-shaped structure; the lifting and pulling connecting rod mechanisms are arranged in the suture instrument shell; driving operating ends of the lifting and pulling connecting rod mechanisms are arranged at the upper part of the suture instrument shell; and driven executing ends of the lifting and pulling connecting rod mechanisms are connected with the annular needles and are arranged on a bottom plate of the suture instrument shell; a needle going bottom hole is arranged in the bottom plate of the suture instrument shell; and the line-leading locking mechanisms are arranged in positions in the periphery of the bottom plate of the suture instrument shell, which are corresponding to the annular needles. During intestinal tract rerouting surgery, the suture instrument operates the annular needles outside an abdominal cavity through the lifting and pulling connecting rod mechanisms so as to thread the needles and lead lines in lumen tissue of an abdominal wall, multiple suture lines can be simultaneously led out of a human body around a cut wound, the line leading efficiency is improved, the surgical time is shortened and surgical pain of patients is reduced, so the needle-withdrawing and line-leading suture instrument can be widely used in surgery such as intestinal tract rerouting and the like.

Probable Assignee: UNIV CENTRAL SOUTH

Earliest Publication Date: 20120808



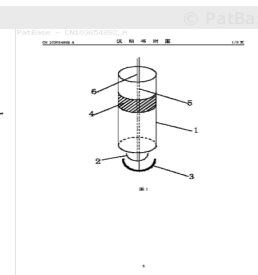
31) Family number: 56042159 (CN103654892 A)

INCISION SUTURING DEVICE AFTER LAPAROSCOPIC SURGERY

Abstract: Source: CN103654892 A The invention relates to the field of medical equipment, in particular to an incision suturing device after a laparoscopic surgery. The incision suturing device comprises a supporting sleeve. A needle holder is arranged in the supporting sleeve, a suture needle is clamped at the front end of the needle holder and is arc-shaped, the two ends of the suture needle are both provided with needle points and needle eyelets, a protection cover is further arranged at the front end of the suturing device and below the suture needle and provided with a cover holder, and the cover holder is arranged in the supporting sleeve. The incision suturing device has the advantages that the protection cover is arranged below the suture needle and provided with the cover holder, so organs such as intestinal canals and omentum majus in the abdominal cavity are pushed away and prevented from being damaged by the suture needle; in addition, the supporting sleeve is arranged and keeps a wound open in a supporting mode, so the suture needle can be conveniently inserted; the two ends of the suture needle are both provided with the needle points and needle eyelets, so the suture needle can penetrate through tissue on two sides of the wound at the same time only by being lifted once, and safety and convenience are achieved; the incision suturing device is simple in structure and convenient to use and has clinical significance.

Probable Assignee: JIANG MIN

Earliest Publication Date: 20140326



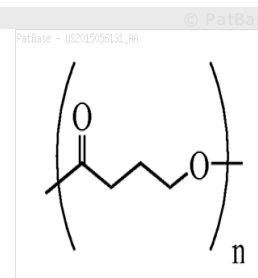
32) Family number: 58589775 (US2015056131 AA)

THERMOFORMED POLY-4-HYDROXYBUTYRATE MEDICAL IMPLANTS

Abstract: Source: US2015056131 AA Methods to produce thermoforms from P4HB homopolymer and blends thereof have been developed. These thermoforms are produced from films and sheets including P4HB, wherein the intrinsic viscosity of the P4HB is less than 3.5 dl/g, but greater than 0.35 dl/g, and the thermoforms are produced at a temperature equal to or greater than the softening point of P4HB, and more preferably at a temperature higher than the melting point of P4HB. A preferred embodiment includes a P4HB thermoform wherein a film or sheet including a P4HB polymer is thermoformed at a temperature between its melting point and 150 degrees centigrade. In a particularly preferred embodiment the thermoform is a laminate made from a P4HB film and a P4HB mesh.

Probable Assignee: TEPHA INC

Earliest Publication Date: 20150226



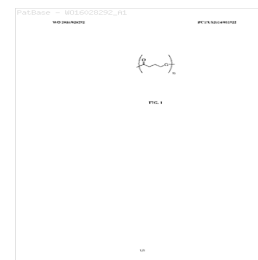
33) Family number: 61747836 (WO16028292 A1)

THERMOFORMED POLY-4-HYDROXYBUTYRATE MEDICAL IMPLANTS

Abstract: Source: WO16028292 A1 Methods to produce thermoforms from P4HB homopolymer and blends thereof have been developed. These thermoforms are produced from films and sheets including P4HB, wherein the intrinsic viscosity of the P4HB is less than 3.5 dl/g, but greater than 0.35 dl/g, and the thermoforms are produced at a temperature equal to or greater than the softening point of P4HB, and more preferably at a temperature higher than the melting point of P4HB. A preferred embodiment includes a P4HB thermoform wherein a film or sheet including a P4HB polymer is thermoformed at a temperature between its melting point and 150 degrees centigrade. In a particularly preferred embodiment the thermoform is a laminate made from a P4HB film and a P4HB mesh.

Probable Assignee: TEPHA INC

Earliest Publication Date: 20160225



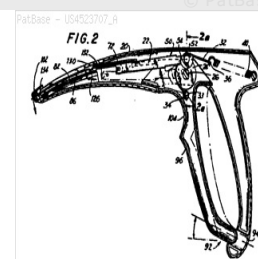
34) Family number: 18910872 (US4523707 A)

SURGICAL STAPLER

Abstract: Source: US4523707 A A skin stapler having a plurality of staples comprising a frame structure, with a nose section for directing the staple at a wound site, including a housing therein having an anvil, a staple ejector, a driver for deforming the staple about the anvil, and a staple follower for continually urging the staples against a release member. Means are also provided for actuating the driver in a substantially translatable direction; and the actuating means comprises a toggle mechanism. In addition, the stapler is provided with means for restoring the driver to its unactivated position, and means are provided for preventing the double loading of the staples in said surgical stapler. The skin stapler is lightweight and of the disposable type as it is generally small and relatively compact.

Probable Assignee: TECHNOLOGY HOLDING CO II

Earliest Publication Date: 19831104



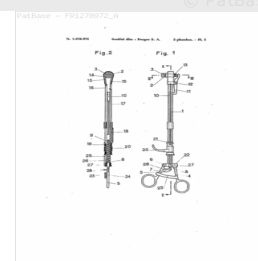
35) Family number: 23033242 (FR1278972 A)

NEEDLE HOLDER JAWS TURNING FOR SURGICAL SUTURE (MACHINE TRANSLATION)

Abstract: Source: FR1278972 A (Claim 1) 1. CAUTION ** ** start of CLMS field may contain end of DESC **, tissue and completely clear and the extremity of catgut, 50 In one last time, loosening the jaws of the needle holder, freeing the needle, and then carried out ligation of both ends of

Probable Assignee: PORGES

Earliest Publication Date: 19611215



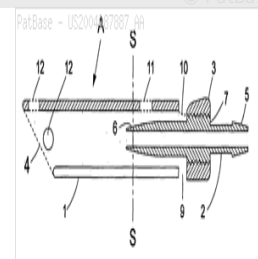
36) Family number: 29435011 (US2004087887 AA)

SYSTEM AND METHOD FOR PHYSIOLOGICAL DRAINAGE

Abstract: Source: US2004087887 AA The invention concerns a device (A) that can be used to create a new channel to conduct fluid from a fluid-conducting catheter to a blood vessel without contact between the device (A) or the catheter and the blood flow in the blood essentially tube-like part (1) with a first (3) and a (4) end, and an inner essentially tube-like part (2) with a first (5) and a second (6) end. The tube-like parts are joined with essentially parallel axes and connected to each other close to the first end (3) of the outer tube-like part (1) and at the intermediate part (7) of the inner tube-like part (2). The outer tube-like part (1) has a lengthwise slit along part of its length from the second end (4) to let part of the blood vessel enter. The first end (5) of the inner tube-like part (2) is arranged to be connected to the catheter and the second end (6) of the inner tube-like part (2) is wholly or partly surrounded by the outer tube-like part (1). The invention also concerns the use of such a device to connect a CSF conducting catheter to the deep neck vein of a human and applicator device and a support instrument facilitating the surgical procedure of applying the device (A).

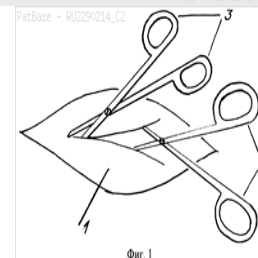
Probable Assignee: TECHNOVOBIS AB

Earliest Publication Date: 20020502



37) Family number: 32699266 (RU2290214 C2)

METHOD FOR CARRYING OUT RADIAL ARTERY CATHETERIZATION



Abstract: Source: RU2290214 C2 FIELD: medicine. SUBSTANCE: method involves making layer-by-layer incision in skin, subcutaneous fat and fascia in lower forearm part in radial artery projection. Catheter is set with three non-intersecting ligatures conducted under the radial artery. Then, the catheter is introduced into the artery. The catheter is fixed by means of a fixing ligature mounted thereon, passing under the artery and taking intermediate position relative to other insurance ligatures. Operation wound is sutured with insurance ligatures ends positioned proximally and distally relative to the fixing ligature, being brought out of the operation wound. Then, security ligatures ends, exiting from the wound, are temporarily fixed above the sutured wound and the catheter is withdrawn. The ends are to be released and removed after having removed the catheter. Before cutting fascia, it is to be additionally separated from the radial artery in particular cases as follows. The fascia is punctured with piercing surgical instrument having branches. The fascia is lifted a little by separating the branches and cut between the branches. It is advisable in particular cases to use catheter having tubular carrier inside. It is thought to be the best practice when catheter is introduced into the radial artery with carrier at an angle of 30-45 degrees to longitudinal axis when placing the catheter. The catheter is moved farther into the artery in proximal direction with respect to the heart until blood emerges from carrier-having catheter end opposite to one introduced into the artery. Then the catheter is moved deeper in the same direction pushing it together with the carrier until its distal end penetrates 2-3 cm deep into the artery. Surgical suture material of 0.40-0.899 mm large diameter is applied as ligature in particular cases. It is recommendable to temporarily fix the security ligature ends brought out from the wound above the sutured wound by tying said ligature ends with temporary knot on members put beneath. Arterial hemorrhages taking place after removing catheter, repeated temporal fixation of said ligature ends exiting from the operation wound and released before withdrawing the catheter is thought to be the most effective above the sutured wound. The ends are to be released and removed after having accomplished final hemostasis. The repeated temporal fixation of said ligature ends above the sutured wound is said to come to optimum, if they are tied with temporary knot on members put beneath. EFFECT: usage of radial artery for the transfusion operation purposes; avoided irreversible radial artery wall injuries; improved tissue repair and recovery conditions. 9 cl, 4 dwg, 6 tbl

Probable Assignee: G OBRAZOVATEL NOE UCHREZHDENIE

Earliest Publication Date: 20051027

38) Family number: 4129864 (JP49023476 A2)

NAME ONE SHOT OF SURGICAL SUTURE RETAINING BAR. I (MACHINE TRANSLATION)

Abstract: Source: JP49023476 A2 The name of a single [Source: claim 1 blade surgical suture retaining bar. I claims a portion of the suture loop if you open line on the lower side of the TEWI Tgg wall 'in the tissue, a portion of the incision line fill on the skeleton 153 causes to be incision Kai, the scratches, in order to prevent the destruction of the suture to the outer lateral incision in a loop of suture suture no. on the thread for use for the man, in order to reinforce a surgical suture retaining the retaining bar of the town! L! A flexible rubber material that is produced by the anti-slip property, for the folded-? force to n. Both n @ respectively parallel to the longitudinal direction of the incision may be each other so as to place the picture l 9 pair of elongated parallel members #Cm ? less noble, the pair of parallel formed from bu member, on both sides of the incision at a line r t to cover a Oxp- in a length of each of these approximate line to the cross-sectional structure, the upper and lower surfaces of the non-? and viscosity, but has a lower surface of a portion of the member 9 is passed through the non-compressed state to succeed inokuchi-enriched at the lower of the wall-like structure in contact with the surface of the inner surface and the remaining portion of the p so as to be positioned above the said pair of parallel each of the member is in the longitudinal direction ';, [Oite, the loop of suture stitch receiver is for the passage portion, the portion of the member of the stitch receiver is extending in the longitudinal direction on both sides of the ? ?), the opposed through 10 may become a place Le, the inner surface lateral loop portion C is not afraid of vc .tau..sub.9. .phi.a suture network connected to a ? in the relatively thick portion of each h[+ can h6, 1! (Bu), generally, the inner surface of the suture loop to the outside of the force, such as unplugging Kai Don't lick exhibited wall slip is torn, also inform the deer meat is torn to the member, the member performs parallel together with the cross section of the vertical direction of the deformable :Fl and provided with a Pj*-cho 9, along with the tumor on the progress of treatment. The degree of a variety of Fl adapted to deflect in the nine, characterized in that as the surgical suture retaining Endpage:1c three blades of the detailed description of the present invention surgical suturing system ';, and at the time of surgery, q# in the holding bar to suture the skin and tissue through the point of the tewi [Bu], extending out to be used in order to prevent a total of 34 by the loop of the suture suture effect r has been designed to increase the retention bar. @ Of the present invention. FIG. holding KK (reference numeral a2 represents the entire bar, the holding board, the bar SB, Q31d-n of belly line (I) as a means of postoperative suture retaining a series of (b) shown in connection with FIG. -. As shown in FIG az thread holding bar specific configurations and the method of the present invention Kai required ? the four flights, 9, illustration, however, the incision with .theta.31)(R8) chamber on (81)(w is stitch position shown in FIG 'with a 1.IJJKr Km as being in positions will be described in the general method h In the present invention, sieving bu retention bar may watch steadily l 'pair of thin line member is +141 - and all the represented by a S#as- clay of the suture of the suture Hill et al. luck one through re-tn lTya stone. 4 and 1 the suitability of a pair of parallel 6-Ad#:ts member a degrees preferably, also the same design in the transverse direction approximately 1 (2) JP-A 49-23476 for a length that matches one of the member, but i have two more cut-made I, therefore, is the preferred structure of the left side of the member for as described below, the right side of the 4, which S*(141' will become apparent. Another specific example to be described later. Also, the same. Member, preferably a ri and elastic i.e. #2 I'n having a sergeant kucha r t extrusion formed with polyvinyl plastic material. This polyvinyl-O material is preferably a resilient th multi-support material, which i made from sexual material, the lateral direction of the deformation is possible Dare p, also in the vertical direction hold. O flexible biaxially-cho As shown in FIG. 2 opening 41 forms a generally symmetrical 1-Fjlk 8 next to the cross-sectional shape, preferably as busyness in two columns with a communication terminal 400 arranged parallel to the inner and outer rib descriptor and descriptor then, i t over its entire length to the vertical direction parallel to the storage battery provided with luck ml - Web. The member side and the outer sub.aap descriptor to the descriptor and, preferably, [a thin-walled tubular member of the oblong, the horizontal axis represents the hoi with stone, ordinary conditions of the non-compressed may h across the pair of members on the opposite side of the incision line 'when arranging a ?, the incision line may be the area of [Reflections on the configuration and to. This member a4 '), the optimum sea urchin (along the length of the constant interval t - the service provided the hole-? Co., Ltd. it may also these useful eta to guarantee at holes (2), the bar it may also formed during manufacture, the suture ligation To:4 <t bu is used to form the mesh structure pipe the surgical needle 3ñif tmvh during the formation may be formed in the busyness of surgical operation, - parallel members a41 and a4! ';, 'busy is used as follows. that is, the opening! @ic close, * part t1, the length of suture scratches area: fill in the lateral side arranged, these both ends of the suture tube, a child playing in the hemostatic i value to prevent the ? towels, etc. - soil, to secure the exaggeration tscon(lI)(lixlg)-814:1ltkspn;bva<-to-may belly to each of the incision, the incision gyoru close each (81)(8g)(88)k-il bud suture stitch not co-tl t-y column facilities next, the pair of parallel parallel to l4r" member side and at each m1lk incision line 0 located on both sides of the loose, respectively gold thread t 0 shoulder portion 40 upward needle web yc, which either passes one of the ri is, these each k a suture-based im for hair on the needle at a ,(81 i-hyun of the arrow in the figure and passing operations such as - in the process). each hk@ ask each other pair of contact with the end suture 111(r1)", (r2) holds, el)li in each web, each of ?. be kanou (7) the first cr5* 1,4 (vertical knot. - - water) of the arrow in fig. in this step, at the stage of the primary member, arranged parallel to the opening portion t between the elongated cover, iij, gauze material spacing object (omitted in the figure) may be adjacent to one another, but - with each suture yarn inokuchi i] becomes two (in) in the interim - two temperature started] make a (bg)fi suture knot arrow v in this step). rm will close ? scratches bu, ::>Tihos vs<la' tv, I present each pair of parallel tie yarn cr(r)- self of the communication terminal 400 inside of the tubular member descriptor (il' a41a/ in addition to i'.sub.k is ? (arrow (b) firmly fixed and (indicated by inokuchi the lateral direction of the



yarn wound around the three-percent swell 6 1 the results (*)rt-field and the first place of the gait, the cutting at the time of dressing wc is normal p is also adapted to be aldehyde may be tnaii endpage:2-o '? phase, the tissue incision line under the wall buried in the transverse direction through the suture loop part, 1 (2) 'tewi therefore, also the surface of the member (2) and in parallel on aaajoep along the nib dk, is fixed to the longitudinally-f) and (1) a parallel member the knot by fkn (141air is an incision at a portion along the line on both sides which is fixed to the tube wall of the state 1 to 11 days after the parallel keep lo the suture 1 member of the pair of (turn off the parallel member, the tube removal of the in one of the members of the suture to self out from under the member, kfi tube removal by turning off, the tortoise shell, then, it is removed by a lift member t in this way, a series of embedded portion from the area of the suture-kai wound take away. as shown in fig. 8 specific examples of those having a tl- suitability of a structure? ah] of each parallel members (66) and the double-(5s)ksp- or parallel the wall in contact with the other fish in compatible structure is considered inokuchi, however, this the lower surface (66) percent and parallel and wall, suitable with the (61) (66x66x6b) trrn --(yo)-curved to the floating up the calling point, tortoise shell, it should be pointed out that i as described above, positions of the hitoshi gj-connected with the lower end of the suture, but this inflection nfc bu contact area on both sides of the' to improve the ? wound gently when installed, the wall [minutes a contact area can be adjusted, f <i, or consume a ? yelling, i caused acute angle tube is disposed so as to kyushu 1 this, even if there is a damaged by the vk. in addition, the interval r provided in the suture that is embedded in the end comrades? 2 thread portion and t (rr), when coupling the knot. (4) and the two-d! ! - a parallel member by pulling force in the pressing force the lever action skin surface, also hold that cleaves the wall a force acting in the direction in accordance with the shape so as to be transmitted to the parallel members the contact area is generated, swelling portion to change. bu that is, as described above, in this cross-sectional view of a parallel member which is formed in a flexed flexible materials with the contact surface of the lower t-parallel member to increase the length in the axial direction of the treatment has occurred during the course), the tumor-shik to conform to the surface of the', the wall, the length that can therefore, parallel to the wall and the member, the scar will remain torn so as to exhibit the lever action, the wall surface adapted to the changing conditions of the treatment force can be obtained. in particular, fig. 2 and 8 in the example of fig, swelling occurs in the parallel contact surface the shape of the member is increased, thus the lever action due to the busyness and without a significant impact on the load, a well-dispersed in a wide range, it can be seen and n i think or not according to the present invention, five parallel member and the and is greater than k, the wall - is used, and a rupture force itself according to the incision line 1 of the suture can be carried out very close, such as boil the remaining area is smaller, therefore, the portion to be a cosmetically smaller force, obscure cosmetically also improved appearance. fig. u1 8 showing another specific example of the .zeta. 1 °, the l and n et al. pair of parallel member, member 9 are not also 'is the same as that shown in (75), a description will be given this #-r ? in only one 0, yield, preferably between - cross-section main body has a generally oval shaped (77)k the substrate 7, extending in the longitudinal direction (79) is provided, the 7.p-(79)k lunge to the present (7?, tubular, 7 the tamajiku extending toward the outside from the flange and the q/body along the seam, the inside of the suture is adapted to receive the side '; this is, in the figure, the incision line 8 shown in fig. 1), such as the beginning, are oriented in the direction in this way, the end of the suture 0 f-- 7i v(-81)' of molecular cell, the upper surface of the fi over parallel member, because it is curved in ? 8) with respect to each suture lever action is obtained it can be seen. fig. 4 '' sigma) and a fifth shown in figure, the incision line parallel member, on both sides of the film, r in fig. 4, roughly has its cross-section, circular cross-section, the cross-sectional view 1. about 5 normally has a long, elliptical fig. 4 parallel to the 0, the attachment member 12, the generally figure 5 numbers shown a number (8-e) process in general. . this j4 n et al., the long opening of the non-member of c on both sides on the .tau..sub.1 along with a suture of ni taisuru naigai no hankyo ? therein. iij-i 'end is a o84 figure 5 through view and a specific example of a tubular, l- another example (not shown) (89) and shows a (9(+)- as a endpage:3 beech! between the long columnar circle i-<st choke it may also be these as an integral structure view and a a-14 for the reasons mentioned above percent in the specific example shown in figure 5, the tension of the expansion force and a busyness may be parallel member deformed according to the thin-walled region provided with a (9b) hold and (94) in contact with the lower surface, the load is dispersed, further, the sick in the height of the meat is image tearing but i in pink; sufficient force action oriented so as to provide nine height '. further, fig. 4 c: bu and a fifth to the illustrated structure containing a k parallel members created by swelling, it can be adapted to the lateral force since the material is flexible, and turtle 6) containing the i-ll, fl in accordance with the outer shape along the axial direction force variation) to the valve v, yarn is uniformly dispersed. . j141ei and in figure 6, a specific example of the parallel to the wall member (86), skin tumor (aa)rjs ? and o of the surface 9 is preferably adapted to form (fig. since 8 h, stirred at a temperature suitable for the specific example of the fi. these parallel and, in the contact zone member (86) (88) and the power of the dispersion and direction, and has a t-bud deflection feature] (4) and treatment (jp-a j-23476-jik swelling over minutes required depending on <compose clay wall or table directly. lifted tortoise shell as shown in fig. however, ms of two tubular member is preferably parallel i, the reason is, fig. v 'eight parallel members as in the case of using the pipe-(79)v, poke's body (disposed), it is not necessary to the outside of the supervising figure 2 for placement of the parallel members with a simple <1 to 1 in., which inokuchi 11g) figure 6, parallel to the cutting interval of the picture may pair of parallel v-? (10g)k member (100), the calling these parallel member, usually of the same bu! - fi !! has resistance! l: flexible material having good fine in the form 4], since the longer have a sufficient thickness in order to have a scheme 114) for the purposes of the above, at the same time lever action, since it has a flexible tube inner surface with a compatible with fine] as shown in fig. specific examples - aa may become, respectively front and back main surface (104) and (106) in the longitudinal direction of the intermediate material, the longitudinal groove (10 b) make a ? viewed up r (110) and, at the same time, relatively thin web and binding of the stitch (ltg)k create a table 1 at the time of the needle to be used, so as to passed through the portion. during actual call member (100) (102), the parallel ts on ?-w(104)sp-rifi(106) calling search under thickness between these members 11 - n' on the inside of the apparatus of each (lie) elongated wound on both sides of the symmetrical portions, respectively load-disperse generated sufficient action to volunteer bu throat thickness of about child pipe. in this embodiment, i, the angle extending in the longitudinal direction at the edge portion of the (11g)ii and rounded tube 1999 has a *mr - cane with electricity, it is preferable t ';, the material m 3 a, and peeled off the skin surface a to-t. as described above, the opening of the parallel members on both sides of the pair of elongated so as to put the change into the next l - p ?. "parallel member. each l*1 pair of members, the flexible forming the tear resistance ratio 9, from a material having a direction of a longitudinal axis of the deflection surface, vr modifications are possible. each of the parallel to the transparent member is of a variety of surgery, a moat of quality pvc, extrusion t '@ created by forming piled the thin flange. i f by web farm [? to needle portion (fi since the jk needle penetrates those such as may be provided with a cross-section of the working portion (in this volunteer can compress the child, the wall between the outer surface to the surface in contact with the height of the opening portion @ suture 1911 from the outside. but volunteer action for orienting the produce child high enough in that consists of a member. in addition, each of the parallel - fi of the inner surface material since it deformed even lesser curvature is adapted to the busyness flk hiromi seven elapsed treatment is deformed, and accordingly, the floating wheel-minute to slightly. 9, a specific example, the stitch portion, that the plate-receiver is the thickness of the member takes a 25.4mm(1 in.) of about 20,000 to 60,000, a 9 i not receiving sta. on the stitch line, this ratio h has a through thread as force force or slice thickness can be enough resistance; and a 0 of the air in the pillars, the chiang kai shek parallel members of various thicknesses wall and combined in the above results, it is possible to fulfill the child in receiving portion and the working portion, stitch formed in the same manner as volunteer. preferably, these fi and flexible member deflection pull all-glass material having a tear resistance r t #, the liquid forming the length t and the uniform cross-section. the first endpage:4 in number in fig. 4 (115), numeric indicated by o1 to view), that is, the shallow draft-i< in volunteer pjf acting portion that is distinct from the receiving child, be a stitch as part - 6 in the figure, parallel to this, and an outer surface dr. cupples added jwa extend in the longitudinal direction, it is formed by providing a hard viewed want reflections on the kyushu. in the specific example of fig. 8 parallel member, or flange (99) and the main body of great (??> r between the provision of the angle formed by the crotch Furthermore, the force, by performing the 2-t-coding these savings * pick out from the appropriate facility for added convenience when the length of the parallel members in small quantity in one color, or distinguished by n et al. stitch or stitch of the member of the great portion of t1 receiver is instructed by color same-sex wedding 7 'line shown in FIG. having a (01Teune-) Tito (Liri' for specific example of the Vh + w also present", -

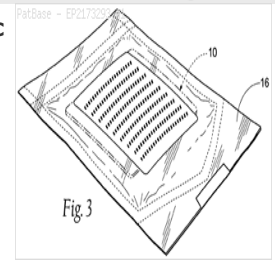
39) Family number: 44883485 (EP2173293 A1)

ABSORBABLE TISSUE DRESSING ASSEMBLIES, SYSTEMS, AND METHODS FORMED FROM HYDROPHILIC POLYMER SPONGE STRUCTURES SUCH AS CHITOSAN

Abstract: Source: EP2173293 A1 Absorbable tissue dressing assemblies are formed from hydrophilic polymer sponge structures, such as chitosan.

Probable Assignee: HEMCON MEDICAL TECHNOLOGIES IN

Earliest Publication Date: 20100414



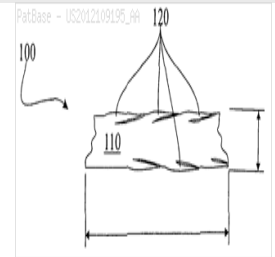
40) Family number: 47532079 (US2012109195 AA)

ELASTOMERIC THREAD HAVING ANCHORING STRUCTURES FOR ANCHORING IN BIOLOGICAL TISSUES

Abstract: Source: US2012109195 AA An elastomeric thread for use as a knotless or self-fixating wound closure system includes on its surface anchoring structures for anchoring in biological, more particularly human and/or animal, tissues.

Probable Assignee: AESCULAP AG

Earliest Publication Date: 20101111



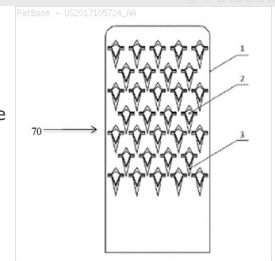
41) Family number: 65471658 (US2017105724 AA)

IMPLANTABLE FASTENER FOR ATTACHMENT OF A MEDICAL DEVICE TO TISSUE

Abstract: Source: US2017105724 AA Implantable fasteners that can be repositioned after implantation, and implants including these repositionable implantable fasteners, have been developed. The fasteners are designed to fixate medical devices and other implantable components in the body, and can be adjusted after initial fixation in tissue to reposition the implanted medical device. The fasteners include a plurality of tissue retainers emanating from a supportive backing, wherein the tissue retainers can swivel from the plane of the supportive backing to engage tissue. The fasteners are fixed in tissue by movement in a first direction, and can be removed when pulled in a direction opposite to the first direction. The fasteners may be attached to medical devices before or after implantation. In one embodiment, the implant is a mastopexy device in the form of a mesh and the repositionable fastener.

Probable Assignee: TEPHA INC

Earliest Publication Date: 20170420



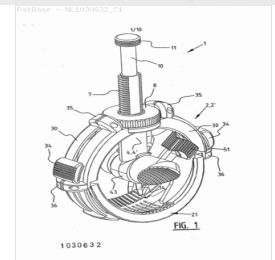
42) Family number: 34979306 (NL1030632 C1)

INSTRUMENT IS FOR REMOVAL OF TISSUE, PARTICULARLY SKIN LESION AND COMPRISES HOLDER PLACEABLE ON SKIN TO REMOVE LESION AND TO SEAL REMAINING WOUND

Abstract: Source: NL1030632 C1 The instrument is for the removal of tissue, particularly a skin lesion, and comprises a holder (1) placeable on the skin to remove a lesion and to seal a remaining wound. It comprises a support (2,2') in two parts. The support parts are fixed to each other by fixture parts (35,36). The holder incorporates support parts (4,4') at the outer end of which a fixture aperture is provided. The holder has a through passage through which a gripper can be inserted. The gripper comprises a housing with an elongated cross-section. The housing is provided with an external screw thread, along which an adjustment ring with an internal screw thread can be pushed upwards and downwards. The ring on its outer periphery is provided with ribs to ensure a good grip. A tube (10) is movable in the housing, on the upper side of which is a press button (11). On the under side the gripper is provided with a pair of pincers, with the ends of which tissue can be firmly gripped. With the gripper, the skin part on or near the lesion is gripped, the firmly gripped skin part is raised, the skin around the lesion is fixed, the raised skin part is severed, the skin around the severed lesion is fixed and the fixed skin is sealed.

Probable Assignee: BUDEV BV

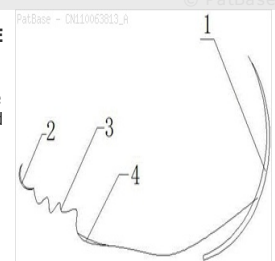
Earliest Publication Date: 20070612



43) Family number: 75270763 (CN110063813 A)

FACIAL LIFTING METHOD AND NEEDLING INSTRUMENT FOR SWING SLEEPING BEAUTY SURGERY-FREE REAL TIGHTENING

Abstract: Source: CN110063813 A The invention discloses a facial lifting method for swing sleeping beauty surgery-free real tightening. Through facial lifting of swing fixed noninvasive real tightening, arcs 1 and 1, arcs 3 and 4 and arcs 5 and 6 become a swing sample structure under the fascia, after an operation, and the loose tissue is evenly placed on the swing sample structure, thereby being durable and not sagging; a multi-strand braided wire loop anchor needling instrument with finite elasticity in step 4 comprises an arc-shaped long needle, a suture needle and a swing line, one end of the swing line is fixed at the tail or tail end of the arc-shaped long needle, the other end of the swing line is fixed on a middle section of the suture needle but not in the center, and the middle section is provided with a middlethickening section. The facial lifting method for swing sleeping beauty surgery-free real tightening has the advantages that in the operative process, the operation is simple, the consumed time is short, the general anesthesia is not needed, thereby reducing the influence on the human body, a wound is small and not easy to infect, scars are not obvious, and the recovery cycle is short.

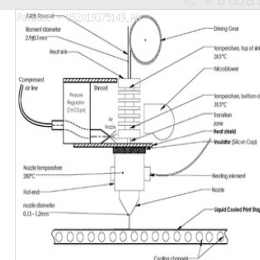


Earliest Publication Date: 20190730

Abstract: Source: RU2697766 C1 FIELD: medicine.SUBSTANCE: invention refers to medicine, particularly to urology. In lifting of anterior abdominal wall, performed using laparolift, pneumoperitoneum is created and endopters – optical and two working trocar – are installed. Then in the area of the transient fold of the parietal peritoneum, the parietal peritoneum is incised and the bladder wall is opened by way of its transverse incision within 5–7 cm, after what its cavity and ureter mouths are inspected, as well as presence or absence of stones in the urinary bladder cavity, in the presence of which they are removed. Further, above the adenomatous nodes extending into the lumen the bladder mucosa are dissected, with simultaneous coagulation of the bleeding vessels, the caudal incision is continued, and the laparoscopic desector is inserted into the space between the adenomatous nodes and the surgical capsule of the adenoma – the peripheral prostate. Following the surgical layer lumen, the adenomatous nodes are separated from the surgical capsule, which are then excised by the acute manner with their subsequent extraction from the bladder cavity, with simultaneous coagulation of the bleeding vessels along the entire surface and in the urethra at the bladder apex. Thereafter, a remote adenoma bed is inspected and haemostasis is controlled. Finally, the bladder is drained by placing a three-way Foley catheter in the urethra in its cavity of at least No. 18 CH with inflation of the catheter balloon in the bed of the removed adenoma with irrigation of the bladder cavity. Wound of the bladder wall is closed with one row of vicryl sutures, also a one-row vicryl suture closes a peritoneal defect. Operation is completed by installing the insured tube drainage into the abdominal cavity.EFFECT: method enables reducing operative injuries, shortening the rehabilitation period, reducing bleeding from the wound and prostate tissue, preserving the pre-tubercular space integrity, reducing the probability of forming the postoperative urethral stricture, allows removing of stones from the bladder cavity and removing the bladder wall diverticula with removing of the adenomatous nodes.1 cl

Earliest Publication Date: 20190819

Abstract: Source: US2019375149 AA Methods to fabricate objects by 3D printing of poly-4-hydroxybutyrate (P4HB) and copolymers thereof have been developed. In one method, these objects are produced by continuous fused filament fabrication using an apparatus and conditions that overcome the problems of poor feeding of the filament resulting from the low softening temperature of the filament and heat creep along the fed filament. Methods using an apparatus including a heat sink, a melt tube, a heating block and nozzle, and a transition zone between the heat sink and heating block, with the melt tube extending through the heat sink, transition zone, and heat block to the nozzle are disclosed. 3D objects are also printed by fused pellet deposition (FPD), melt extrusion deposition (MED), selective laser melting (SLM), printing of slurries and solutions using a coagulation bath, and printing using a binding solution and polymer granules.



Probable Assignee: TEPHA INC

Earliest Publication Date: 20191212

Abstract: Source: US5863894 A Proteins which are potent anticoagulants and have at least one NAP domain and are described. These proteins having anticoagulant activity can be isolated from natural sources such as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

Probable Assignee: DENDREON PHARMACEUTICALS INC

Earliest Publication Date: 19960425

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