

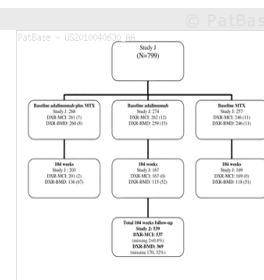
1) Family number: 43787753 (US2010040630A)

## METHODS AND COMPOSITIONS FOR TREATING BONE LOSS

**Abstract:** Source: US2010040630A The invention provides methods and compositions for treating, e.g., reducing, bone loss, e.g., cortical bone loss, comprising administering a TNFa inhibitor, such as a human TNFa antibody, or antigen-binding portion thereof.

**Probable Assignee:** ABBVIE BIOTECHNOLOGY LTD

**Earliest Publication Date:** 20091001



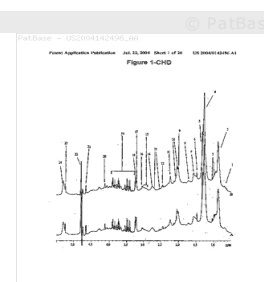
2) Family number: 15819107 (US2004142496A)

## METHODS FOR ANALYSIS OF SPECTRAL DATA AND THEIR APPLICATIONS: ATHEROSCLEROSIS/CORONARY HEART DISEASE

**Abstract:** Source: US2004142496A This invention pertains to chemometric methods for the analysis of chemical, biochemical, and biological data, for example, spectral data, for example, nuclear magnetic resonance (NMR) spectra, and their applications, including, e.g., classification, diagnosis, prognosis, etc., especially in the context of atherosclerosis/coronary heart disease.

**Probable Assignee:** TCP INNOVATIONS LTD

**Earliest Publication Date:** 20021031



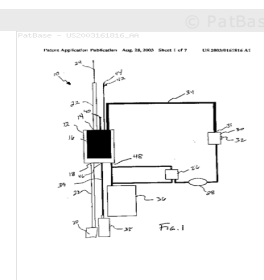
3) Family number: 31830023 (US2003161816A)

## SYSTEMS AND METHODS FOR TREATING PATIENTS WITH PROCESSED LIPOASPIRATE CELLS

**Abstract:** Source: US2003161816A Cells present in processed lipoaspirate tissue are used to treat patients. Methods of treating patients include processing adipose tissue to deliver a concentrated amount of stem cells obtained from the adipose tissue to a patient. The methods may be practiced in a closed system so that the stem cells are not exposed to an external environment prior to being administered to a patient. Compositions that are administered to a patient include a mixture of adipose tissue and stem cells so that the composition has a higher concentration of stem cells than when the adipose tissue was removed from the patient.

**Probable Assignee:** CYTORI THERAPEUTICS INC

**Earliest Publication Date:** 20030703



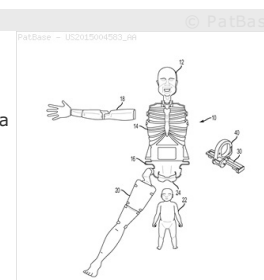
4) Family number: 58174251 (US2015004583A)

## SYSTEM FOR MOVING AN ANATOMICAL MODEL OF A FETUS INSIDE A MANNEQUIN HAVING A BIRTH CANAL AND A CHILDBIRTH SIMULATOR

**Abstract:** Source: US2015004583A The present disclosure relates to a system for moving an anatomical model of a fetus inside a mannequin having a birth canal. The system comprises a descent mechanism and a rotation mechanism. The descent mechanism is integrated in the mannequin and can move an anatomical model of a fetus longitudinally towards the birth canal of the mannequin. The rotation mechanism is mounted to the descent mechanism and can rotate the anatomical model of the fetus. The model of the fetus is inserted in the rotation mechanism. Also provided is a childbirth simulator comprising a mannequin with a birth canal, and the aforementioned system integrated in the mannequin for moving an anatomical model of a fetus inside the mannequin.

**Probable Assignee:** CAE HEALTHCARE CANADA

**Earliest Publication Date:** 20141231



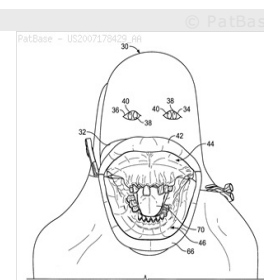
5) Family number: 34957598 (US2007178429A)

## DENTAL PATIENT MODELS

**Abstract:** Source: US2007178429A A model head including a jaw insert having layers of varying materials replicating the anatomical features of a human jaw. The jaw may include a mock nerve system that provides a signal to indicate the condition of the nerve. The jaw also may include a circulatory system including vessels that simulate the bleeding that occurs when a vessel in a human has been damaged.

**Probable Assignee:** ZIMMER DENTAL INC

**Earliest Publication Date:** 20070802



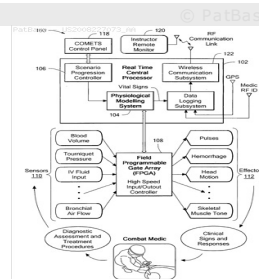
**6) Family number: 41473186** (US2008227073A)

## METHODS AND APPARATUS FOR AUTONOMOUS CASUALTY SIMULATION

**Abstract:** Source: US2008227073A Method and apparatus to provide simulation of a human casualty. In one embodiment an autonomous casualty simulator includes a processing module having a scenario progression controller and a physiological modeling system to receive sensor input and to control effectors. The autonomous casualty simulator can be contained in a nominal human mannequin form.

**Probable Assignee:** GENERAL HOSPITAL CORP

**Earliest Publication Date:** 20080214



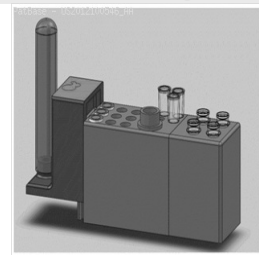
**7) Family number: 50961597** (US2012100546A)

## NMR SYSTEMS AND METHODS FOR THE RAPID DETECTION OF ANALYTES

**Abstract:** Source: US2012100546A This invention features systems and methods for the detection of analytes, and their use in the treatment and diagnosis of disease.

**Probable Assignee:** T2 BIOSYSTEMS INC

**Earliest Publication Date:** 20120426



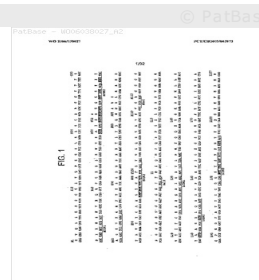
**8) Family number: 43158668** (WO06038027A2)

## ANTAGONISTS AND METHODS OF USE THEREFOR

**Abstract:** The invention provides methods for treating inflammatory diseases (e.g., chronic inflammatory diseases) comprising administering an antagonist of Tumor Necrosis Factor Receptor 1. The invention also provides ligands that contain an immunoglobulin single variable domain (domain antibody, dAb) monomer that binds Tumor Necrosis Factor Receptor 1, and methods of using the ligands. Also provided are nucleic acids encoding the ligands, recombinant host cells and methods for preparing the ligands.

**Probable Assignee:** DOMANTIS LTD

**Earliest Publication Date:** 20060413



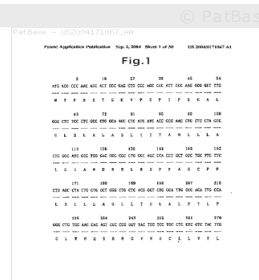
**9) Family number: 24115254** (US2004171067A)

## SCREENING METHOD

**Abstract:** Source: US2004171067A The present invention intends to provide a screening of agonist/antagonist and the like. Specifically, the invention provides a method of screening a compound or its salt that alters the binding property between a novel G protein-coupled receptor protein or its salt, and a substance relating to cholesterol metabolism, which comprises using the receptor protein or its salt, which contains the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 14 or SEQ ID NO: 16, and the substance relating to cholesterol metabolism.

**Probable Assignee:** TAKEDA PHARMACEUTICAL CO LTD

**Earliest Publication Date:** 20021024



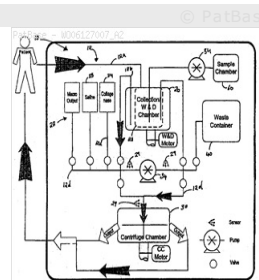
**10) Family number: 33902006** (WO06127007A2)

## METHODS OF USING ADIPOSE TISSUE-DERIVED CELLS IN THE TREATMENT OF CARDIOVASCULAR CONDITIONS

**Abstract:** Adipose derived regenerative cells are used to treat patients, including patients with cardiovascular conditions, diseases or disorders. Methods of treating patients include processing adipose tissue to deliver a concentrated amount of regenerative cells, e.g., stem and/or progenitor cells, obtained from the adipose tissue to a patient. The methods may be practiced in a closed system so that the stem cells are not exposed to an external environment prior to being administered to a patient. Accordingly, in a preferred method, adipose derived regenerative cells are placed directly into a recipient along with such additives necessary to promote, engender or support a therapeutic cardiovascular benefit.

**Probable Assignee:** CYTORI THERAPEUTICS INC

**Earliest Publication Date:** 20061130



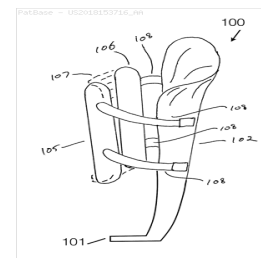
**11) Family number: 69991292** (US2018153716A)

## METHOD OF FITTING A PROSTHETIC INTERFACE SYSTEM USING COMPLIANT MEMBERS

**Abstract:** Source: US2018153716A A prosthetic or orthotic device using at least one of measurements of residual limb length or circumference to define a prosthetic socket assembly configuration, comprising modular socket components fitted to the individual user's residual limb having a mounting point for an attachment, at least one compliant member attached to at least one stabilizing unit, and at least one second compliant member attached to at least one stabilizing unit wherein the first compliant member and the second compliant member work in cooperation with the stabilizing unit(s) to control bone position and support the limb within the interface.

**Probable Assignee:** MARTIN JAMES JAY

**Earliest Publication Date:** 20180607



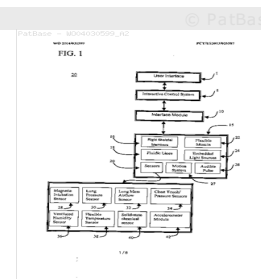
**12) Family number:** 30468256 (WO04030599A2)

## ROBOTIC MANNEQUIN TRAINING SIMULATOR SYSTEM

**Abstract:** The present invention provides an interactive APGAR training simulator system employing a life-like robotic mannequin. The robotic mannequin has a plurality of sensors, a rigid motion effecting device, a flexible motion-effecting device, an audible heartbeat simulator, and a plurality of internally embedded light sources. An interface module is provided to establish a communication link between the elements of the robotic mannequin and an interactive control system. The interactive control system of the present invention includes a mechanism for physically simulating life-like activity of the robotic mannequin, and a mechanism responsive to the plurality of sensors within the robotic mannequin. As such, the intelligent, interactive simulator and method of the present invention provide a trainee with a life-like training experience in APGAR scoring and resuscitation.

**Probable Assignee:** UNIV SOUTH FLORIDA

**Earliest Publication Date:** 20040415



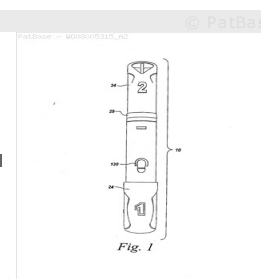
**13) Family number:** 59271726 (WO08005315A2)

## AUTOMATIC INJECTION DEVICE

**Abstract:** The invention provides an automatic injection device for providing a subcutaneous injection of a substance into a user, comprising: a housing having an open first end and a second end; a syringe movably disposed in the housing, the syringe including a barrel portion for holding the substance, a hollow needle in fluid communication with the barrel portion for ejecting the substance from the syringe, and a bung for sealing the barrel portion and selectively applying pressure to the substance to force the substance through the hollow needle; a plunger for first moving the syringe towards the first end such that the needle projects from the first end and subsequently applying pressure to the bung, the plunger including a rod connected at a first end to the bung, a compressible expanded central portion and a flange between a second end of the rod and the compressible expanded central portion; and a biasing mechanism for biasing the plunger towards the first open end of the housing, the biasing mechanism disposed about the second end of the rod between the flange and the second end of the housing. The present invention also provides methods and kits for using an automatic injection device, and methods and kits for promoting an automatic injection device comprising a medication based on advantageous properties of the device as compared to a pre-filled syringe. The invention also provides methods and kits for training a recipient on use of the automatic injection device.

**Probable Assignee:** ABBVIE BIOTECHNOLOGY LTD

**Earliest Publication Date:** 20080110



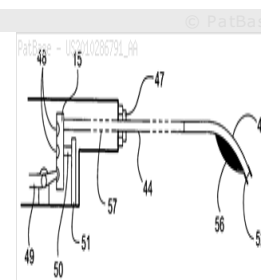
**14) Family number:** 47547452 (US2010286791A)

## INTEGRATED SYSTEM FOR THE BALLISTIC AND NONBALLISTIC INFIXION AND RETRIEVAL OF IMPLANTS

**Abstract:** Source: US2010286791A Provided are methods and apparatus for the use of magnetic traction to maintain the patency of a tubular anatomical structure, whether a vessel, duct, the trachea, bronchus, bile duct, ureter, vas deferens, fallopian tube, or portions of the digestive tract, as to constitute means for extraluminal stenting. An extraluminal stent consists of a perimedial or medial intravascular and an extravascular component. The intravascular component consists of ferromagnetic spherules implanted aeroballistically or stays implanted by means of a special hand tool, while the extravascular component consists of a pliant jacket or mantle that has magnets mounted about its outer surface. A catheter adapted for use as the barrel of a gas-operated implant insertion gun is so devised that it can be used independently to perform an angioplasty and thereafter have its free or extracorporeal end inserted into the airgun to initiate implantation of the intravascular component without the need for withdrawal and reinsertion through the introducer sheath. When the implants must be spaced too closely together to be controlled by hand, a positional control system is used to effect discharge automatically. Spherules that consist entirely of medication or that have a radiation emitting seed as the core can be implanted with the same apparatus. A glossary of terms follows the specification.

**Probable Assignee:** GOLDSMITH DAVID S

**Earliest Publication Date:** 20101111



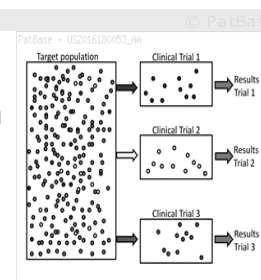
**15) Family number:** 62729965 (US2016180053A)

## SYSTEM AND METHOD OF CONDUCTING IN SILICO CLINICAL TRIALS

**Abstract:** Source: US2016180053A Described herein are computer systems and methods for generating, in silico, one or more virtual patients. The one or more virtual patients can be used, for example, to conduct a virtual clinical trial, such as to determine an efficacy of a therapy or medical device. The one or more virtual patients mathematically represent a physiological system in an actual patient for a health condition. Also, the one or more virtual patients can be used, for example, to determine an adverse effect from a therapy or any other deviation from a therapy, or compliance of a patient suffering from a health condition on a therapeutic protocol.

**Probable Assignee:** FRESENIUS SE AND CO KGAA

**Earliest Publication Date:** 20160623



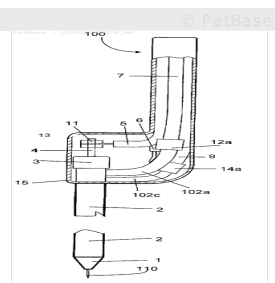
**16) Family number: 23636855** (US2003069576A)

## QUANTUM ENERGY SURGICAL DEVICE AND METHOD

**Abstract:** Source: US2003069576A A plasma tool adapted to emit high quantum energy inert gas atoms in a stream for cutting, liquefying, or evaporating material such as human tissue during surgical procedures. The apparatus comprises a source of inert gas, a plasma cell in communication with the inert gas source for imparting energy to the inert gas atoms and defined in part by a positive electrode and a negative electrode, at least one power supply electrically connected between the positive and negative electrodes, and means for directing the high quantum energy inert gas atoms at a target. The power supply initially provides an ionization voltage between the negative and positive electrodes to initiate a plasma from the inert gas in the plasma cell, and subsequently provides a pulsed voltage curve to sustain the plasma at a predetermined energy level. Methods for using the tool, including for performing surgical procedures, are also described.

**Probable Assignee:** TANRISEVER NAIM

**Earliest Publication Date:** 20020418



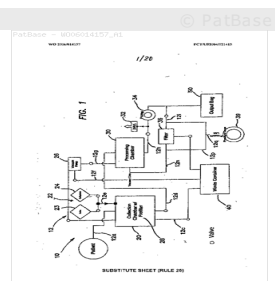
**17) Family number: 32609428** (WO06014157A1)

## METHODS OF USING REGENERATIVE CELLS TO PROMOTE WOUND HEALING

**Abstract:** Cells present in adipose tissue are used to promote wound healing in a patient. Methods of treating patients include processing adipose tissue to deliver a concentrated amount of regenerative cells obtained from the adipose tissue to a patient. The methods may be practiced in a closed system so that the regenerative cells are not exposed to an external environment prior to being administered to a patient. Accordingly, in a preferred method, cells present in adipose tissue are placed directly into a recipient along with such additives necessary to promote, engender or support a therapeutic benefit.

**Probable Assignee:** CYTORI THERAPEUTICS INC

**Earliest Publication Date:** 20060209



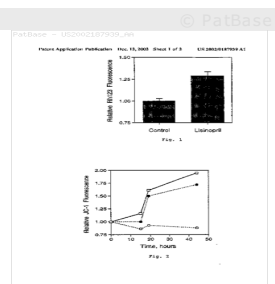
**18) Family number: 30116351** (US2002187939A)

## USE OF INHIBITORS OF THE RENIN-ANGIOTENSIN SYSTEM

**Abstract:** Source: US2002187939A It has been found that inhibitors of the renin-angiotensin system are useful for the treatment or prevention of conditions associated with hypoxia or impaired metabolic function or efficiency. In particular, they may be used in connection with therapy of stroke or its recurrence, the acute treatment of myocardial infarction, and the treatment or prevention of wasting or cachexia, and are thus useful in treatment of the symptoms and signs of aging. These inhibitors may also be used to enhance function in healthy subjects.

**Probable Assignee:** HEALTH SCIENCE FUNDING LLC

**Earliest Publication Date:** 19990429



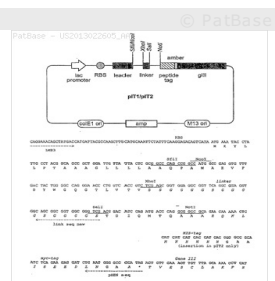
**19) Family number: 52826066** (US2013022605A)

## ANTAGONISTS AGAINST TNFR1 AND METHODS OF USE THEREFOR

**Abstract:** Source: US2013022605A The invention provides methods for treating inflammatory diseases (e.g., chronic inflammatory diseases) comprising administering an antagonist of Tumor Necrosis Factor Receptor 1. The invention also provides ligands that contain an immunoglobulin single variable domain (domain antibody, dAb) monomer that binds Tumor Necrosis Factor Receptor 1, and methods of using the ligands. Also provided are nucleic acids encoding the ligands, recombinant host cells and methods for preparing the ligands.

**Probable Assignee:** DOMANTIS LTD

**Earliest Publication Date:** 20130124



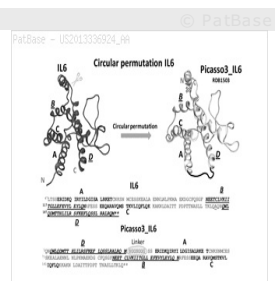
**20) Family number: 55352820** (US2013336924A)

## LIGANDS MODIFIED BY CIRCULAR PERMUTATION AS AGONISTS AND ANTAGONISTS

**Abstract:** Source: US2013336924A The present invention provides fusion polypeptides comprising polypeptide ligands that are modified by circular permutation and fused to at least one polypeptide fusion partner wherein such fusion polypeptides have new, improved or enhanced biological functions or activities. Such improvements include, but are not limited to, increased binding affinity, increased activity, increased agonist activity (super agonist), antagonist activity, increased accessibility, increased flexibility of the active site, increased stability, broader and/or changed substrate specificity, and combinations thereof.

**Probable Assignee:** ALKERMES INC

**Earliest Publication Date:** 20131212



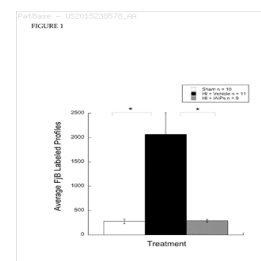
**21) Family number: 55977507** (US2015238578A)

## TREATMENT OF DISEASE USING INTER-ALPHA INHIBITOR PROTEINS

**Abstract:** Source: US2015238578A The invention relates to methods of treatment of medical conditions (e.g., diseases and injuries) in a mammal (e.g., a human), such as hypoxia/ischemia, burns, and viral infections (e.g., influenza, West Nile virus, and Dengue fever), in adults and in children (e.g., neonates) by administering a composition that includes an IAIP.

**Probable Assignee:** PROTHERA BIOLOGICS INC

**Earliest Publication Date:** 20140313



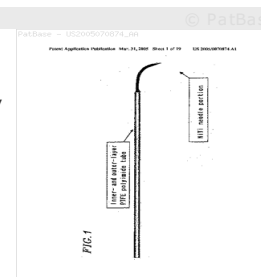
**22) Family number:** 31781239 (US2005070874A)

### SYSTEM AND METHOD FOR INJECTING LIQUID DRUG CONTAINING BIOLOGICAL MATERIAL

**Abstract:** Source: US2005070874A A method for injecting a liquid drug containing a biological material is provided, which comprises the step of injecting the liquid drug containing the biological material contained in an injector into a subject at a predetermined range of velocity.

**Probable Assignee:** ASASHI INTECC CO LTD

**Earliest Publication Date:** 20050331



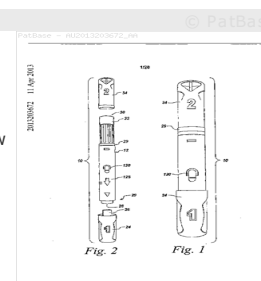
**23) Family number:** 59271738 (AU2013203670A)

### AUTOMATIC INJECTION DEVICE

**Abstract:** Source: AU2013203670A AUTOMATIC INJECTION DEVICE The invention provides an automatic injection device (10) for providing a subcutaneous injection of a substance into a user, comprising a housing (12); a syringe (50) movably disposed in the housing, the syringe including a barrel portion (53) for holding the substance; a hollow needle (55); a bung (54); a plunger (70) for moving the syringe such that the needle projects from the housing and for subsequently applying pressure to the bung; a compressible expanded central portion (76); a flange; and a biasing mechanism. The present invention also provides methods and kits for using an automatic injection device, and methods and kits for promoting an automatic injection device comprising a medication based on advantageous properties of the device as compared to a pre-filled syringe. The invention also provides methods and kits for training a recipient on use of the automatic injection device.

**Probable Assignee:** ABBOTT BIOTECH LTD

**Earliest Publication Date:** 20130502



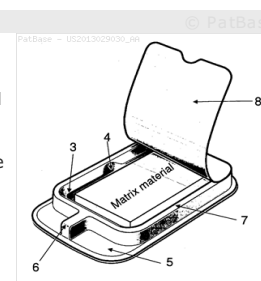
**24) Family number:** 49604369 (US2013029030A)

### METHOD FOR PROMOTION OF HEMOSTASIS AND/OR WOUND HEALING

**Abstract:** Source: US2013029030A The present invention relates to a matrix material comprising a pharmaceutical composition such as a matrix material with a pharmaceutical composition applied by ultrasonic spray technology on the surface. In one embodiment the pharmaceutical composition comprises thrombin. The invention further describes a method for making the matrix material which has a pharmaceutical composition coated onto the surface of the matrix material using ultrasonic spray technology. In one specific embodiment the invention also relates to the use of said matrix material for promotion of hemostasis and/or wound healing. The invention also relates to a kit-of-parts comprising a matrix with a pharmaceutical composition and a container with a peelable lid.

**Probable Assignee:** FERROSAN MEDICAL DEVICES A S

**Earliest Publication Date:** 20110922



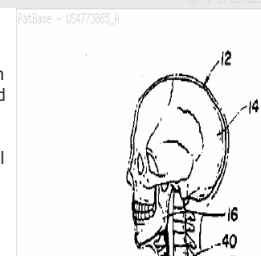
**25) Family number:** 10320819 (US4773865A)

### TRAINING MANNEQUIN

**Abstract:** Source: US4773865A A training mannequin which exhibits many of the tactile sensations of a real human body to a student. The mannequin includes an anatomically correct human skeleton including a skull, a jawbone and a spinal column which together define a throat cavity. An anatomically correct larynx and its associated trachea are disposed in the throat cavity. A plastic skin covers the mannequin and a plastic packing material is utilized between the skin covering and the skeleton. An inflatable member is disposed in a chest cavity defined by ribs and the spinal column of the skeleton. The inflatable member substantially fills the chest cavity when inflated. An air pump is in fluid communication with the inflatable member to inflate the inflatable member. A student can insert a sharp instrument, such as a needle, through the skin and into the larynx, or between the ribs and into the inflatable member to deflate the member. A source of simulated blood is fluidly connected to the femoral veins as well as to the external jugular vein adjacent to the larynx so that a student can insert a needle in one of the veins. Preferably, a bulb syringe is fluidly connected to the femoral arteries so that upon manual actuation of the syringe the student can feel a pulse therein.

**Probable Assignee:** BALDWIN JERE F

**Earliest Publication Date:** 19880927



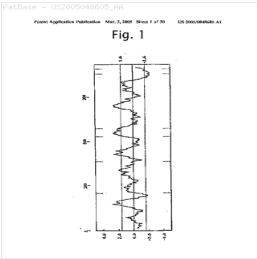
**26) Family number:** 28439068 (US2005048605A)

### NOVEL POLYPEPTIDE DNA THEREOF AND USE OF THE SAME

**Abstract:** Source: US2005048605A The present invention aims at providing a novel polypeptide, a receptor, a DNA thereof, and the like. Specifically, the present invention provides a polypeptide having a binding ability to the protein represented by SEQ ID NO: 1 or SEQ ID NO: 3, or its amide, its ester or its salt, a polynucleotide encoding the polypeptide, an antisense polynucleotide or an antibody to the polypeptide, a screening of agent for prevention and/or treatment of cancer, obesity, etc., which comprises using the above, and the like. The polypeptide, receptor, polynucleotide, antisense polynucleotide, antibody and the like are useful for an agent of prevention and/or treatment of cancer, obesity and the like. Further, they are useful for a screening of an agent for prevention and/or treatment of cancer, obesity and the like.

**Probable Assignee:** TAKEDA PHARMACEUTICAL CO LTD

**Earliest Publication Date:** 20030327



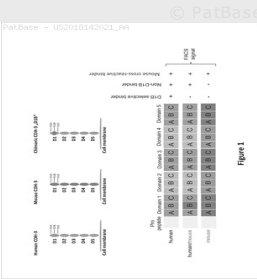
**27) Family number:** 63841277 (US2018142021A)

**BISPECIFIC ANTIBODY CONSTRUCTS FOR CDH3 AND CD3**

**Abstract:** Source: US2018142021A The present invention relates to a bispecific antibody construct comprising a first human binding domain which binds to human CDH3 on the surface of a target cell and a second binding domain which binds to human CDS on the surface of a T cell. Moreover, the invention provides a polynucleotide encoding the antibody construct, a vector comprising said polynucleotide and a host cell transformed or transfected with said polynucleotide or vector. Furthermore, the invention provides a process for the production of the antibody construct of the invention, a medical use of said antibody construct and a kit comprising said antibody construct.

**Probable Assignee:** AMGEN RESEARCH MUNICH GMBH

**Earliest Publication Date:** 20161020



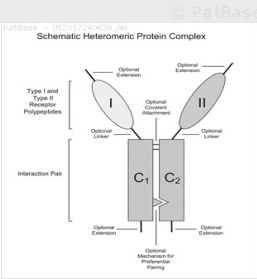
**28) Family number:** 66712933 (US2017240639A)

**ACTRII ANTAGONISTS FOR USE IN INCREASING IMMUNE ACTIVITY**

**Abstract:** Source: US2017240639A Disclosed herein are ActRII antagonists and methods for increasing immune responses and/or activity in patients in need thereof including, for example, cancer patients. In some embodiments, the disclosure relates to methods for treating cancer and/or tumors in a patient comprising administration of an ActRII antagonists and a PD1-PDL1 antagonist.

**Probable Assignee:** ACCELERON PHARMA INC

**Earliest Publication Date:** 20170824



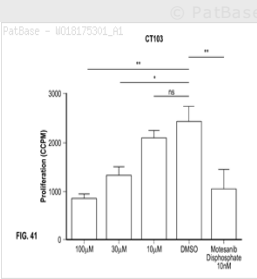
**29) Family number:** 71313273 (WO18175301A1)

**POLYMER CONJUGATE OF MONTESANIB WITH REDUCED EXPOSURE**

**Abstract:** Disclosed herein are polymer conjugates, such as SNA-103, comprising an active agent linked to a polymer, wherein the active agent comprises an inhibitor, antagonist, or inverse agonist of a vascular endothelial growth factor receptor (VEGFR), such as montesanib. The disclosed polymer conjugates reduce exposure of the active agent at non-target sites.

**Probable Assignee:** SIENNA BIOPHARMACEUTICALS INC

**Earliest Publication Date:** 20180927



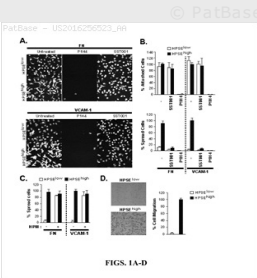
**30) Family number:** 63468760 (US2016256523A)

**SYNDECAN PEPTIDES AND POLYPEPTIDES AS INHIBITORS OF VEGFR2 AND VLA-4**

**Abstract:** Source: US2016256523A The disclosure provides for peptides from syndecan 1 and methods of use therefor. These peptides can inhibit VLA-4 interaction with VEGFR2, thereby preventing tumor cell growth and tissue invasion.

**Probable Assignee:** WISCONSIN ALUMNI RESEARCH FOUNDATION

**Earliest Publication Date:** 20160908



**31) Family number:** 23627748 (US2003113726A)

**HUMAN SINGLE NUCLEOTIDE POLYMORPHISMS**

Front Application Performance Jan 15, 2020 Sheet of 10 170 266648113756 4.1

Page No.

|   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 45 |
|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|

**Earliest Publication Date:** 20020808

[illegible]

**Earliest Publication Date:** 20040715

[illegible]

**Earliest Publication Date:** 20080110

[illegible]

**Earliest Publication Date:** 20080502

**Earliest Publication Date:** 20070727

**Probable Assignee:** K FORCE GOVERNMENT SOLUTIONS

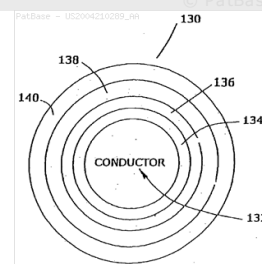
**Earliest Publication Date:** 20110113  
**37) Family number:** 43458525 (US2004210289A)

#### NOVEL NANOMAGNETIC PARTICLES

**Abstract:** Source: US2004210289A A composition containing nanomagnetic particles. The, nanomagnetic particles have an average particle size of less than about 100 nanometers, a saturation magnetization of from about 2 to about 2,000 electromagnetic units per cubic centimeter, a phase transition temperature of from about 40 to about 200 degrees Celsius, and a squareness of from about 0.05 to about 1.0; the average coherence length between adjacent nanomagnetic particles is less than about 100 nanometers; and the nanomagnetic particles are at least triatomic.

**Probable Assignee:** BIOPHAN TECHNOLOGIES INC

**Earliest Publication Date:** 20041021



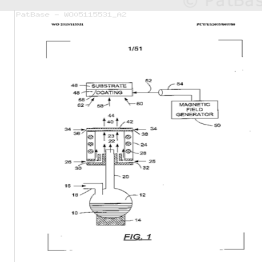
**38) Family number:** 43458622 (WO05115531A2)

#### NOVEL NANOMAGNETIC PARTICLES

**Abstract:** A composition containing nanomagnetic particles. The nanomagnetic particles have an average particle size of less than about 100 nanometers, a saturation magnetization of from about 2 to about 2,000 electromagnetic units per cubic centimeter, a phase transition temperature of from about 40 to about 200 degrees Celsius, and a squareness of from about 0.05 to about 1.0; the average coherence length between adjacent nanomagnetic particles is less than about 100 nanometers; and the nanomagnetic particles are at least triatomic.

**Probable Assignee:** NANOSET LLC

**Earliest Publication Date:** 20051208



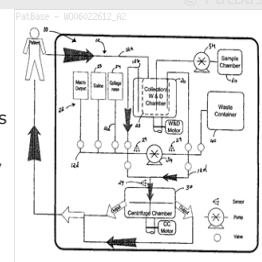
**39) Family number:** 32653578 (WO06022612A2)

#### METHODS OF USING REGENERATIVE CELLS IN THE TREATMENT OF STROKE AND RELATED DISEASES AND DISORDERS

**Abstract:** Cells present in adipose tissue are used to stroke and stroke related diseases and disorders in a patient. Methods of treating patients include processing adipose tissue to deliver a concentrated amount of regenerative cells obtained from the adipose tissue to a patient. The methods may be practiced in a closed system so that the regenerative cells are not exposed to an external environment prior to being administered to a patient. Accordingly, in a preferred method, cells present in adipose tissue are placed directly into a recipient along with such additives necessary to promote, engender or support a therapeutic benefit.

**Probable Assignee:** MACROPORÉ BIOSURGERY INC

**Earliest Publication Date:** 20060302



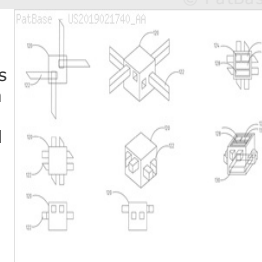
**40) Family number:** 62403634 (US2019021740A)

#### DEVICE AND SYSTEM FOR RESTRICTING FLUID FLOW IN PHYSIOLOGICAL VESSELS

**Abstract:** Source: US2019021740A Provided is a device and system for restricting fluid flow in physiological vessels of humans or animals, the device being configurable in a first mode to be passively propellable by fluid flow within a physiological vessel and in a second mode to at least partially occlude a physiological vessel, the device having a first cross-sectional size in the first mode and a second cross-sectional size in the second mode, wherein the second cross-sectional size is greater than the first cross-sectional size. The system comprises: a plurality of the devices described above, a power source for powering the devices; and a controller comprising one or more processors for controlling the devices.

**Probable Assignee:** ELBE VALLEY MEDICAL LTD

**Earliest Publication Date:** 20170914



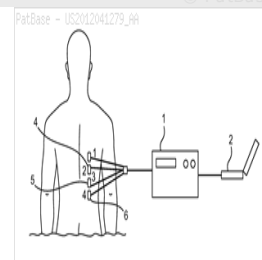
**41) Family number:** 50642915 (US2012041279A)

#### DEVICES AND METHODS FOR RESPIRATORY VARIATION MONITORING BY MEASUREMENT OF RESPIRATORY VOLUMES, MOTION AND VARIABILITY

**Abstract:** Source: US2012041279A This invention is directed to devices and methods for assessing a patient. The devices have at least one impedance measuring element functionally connected to a programmable element, programmed to analyze an impedance measurement, and to provide an assessment of at least one respiratory parameter of the patient. Preferably the device includes electronics which aid in calibration, signal acquisition, conditioning, and filtering.

**Probable Assignee:** RESPIRATORY MOTION INC

**Earliest Publication Date:** 20120216



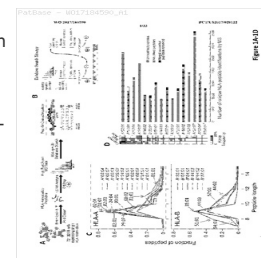
**42) Family number:** 67326340 (WO17184590A8)

#### IMPROVED HLA EPITOPE PREDICTION

**Abstract:** Adaptive immune responses rely on the ability of cytotoxic T cells to identify and eliminate cells displaying disease-specific antigens on human leukocyte antigen (HLA) class I molecules. Investigations into antigen processing and display have immense implications in human health, disease and therapy. To extend understanding of the rules governing antigen processing and presentation, immunopurified peptides from B cells, each expressing a single HLA class I allele, were profiled using accurate mass, high-resolution liquid chromatography- mass spectrometry (LC-MS/MS). A resource dataset containing thousands of peptides bound to 28 distinct class I HLA-A, -B, and -C alleles was generated by implementing a novel allele-specific database search strategy. Applicants discovered new binding motifs, established the role of gene expression in peptide presentation and improved prediction of HLA-peptide binding by using these data to train machine-learning models. These streamlined experimental and analytic workflows enable direct identification and analysis of endogenously processed and presented antigens.

**Probable Assignee:** MASSACHUSETTS INST TECHNOLOGY

**Earliest Publication Date:** 20171026



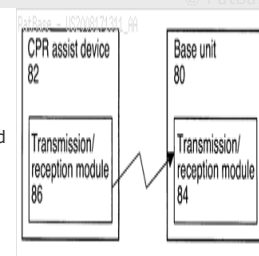
**43) Family number: 42023998** (US2008171311A)

### WEARABLE CPR ASSIST, TRAINING AND TESTING DEVICE

**Abstract:** Source: US2008171311A A wearable cardiopulmonary resuscitation assist device or system including: a wearable article to be worn by a cardiopulmonary resuscitation performer or a patient, for assisting administration of cardiopulmonary resuscitation by the performer; at least one sensor for measuring at least one parameter to assist in cardiopulmonary resuscitation; at least one feedback component for conveying feedback information based on the parameter to the performer for assisting the performer in performing cardiopulmonary resuscitation; and a processing unit, the processing unit being configured to receive the at least one parameter from the at least one sensor and to send information based on the parameter to the at least one feedback component. Also a method for training or improving cardiopulmonary resuscitation procedures using the device.

**Probable Assignee:** PHYSIO CONTROL CANADA SALES LTD

**Earliest Publication Date:** 20080717



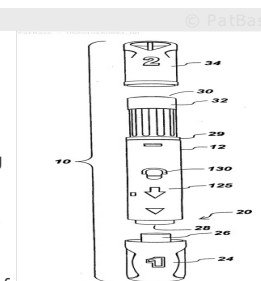
**44) Family number: 59271769** (US2010160894A)

### AUTOMATIC INJECTION DEVICE

**Abstract:** Source: US2010160894A The invention provides an automatic injection device for providing a subcutaneous injection of a substance into a user, comprising: a housing having an open first end and a second end; a syringe movably disposed in the housing, the syringe including a barrel portion for holding the substance, a hollow needle in fluid communication with the barrel portion for ejecting the substance from the syringe, and a bung for sealing the barrel portion and selectively applying pressure to the substance to force the substance through the hollow needle; a plunger for first moving the syringe towards the first end such that the needle projects from the first end and subsequently applying pressure to the bung, the plunger including a rod connected at a first end to the bung, a compressible expanded central portion and a flange between a second end of the rod and the compressible expanded central portion; and a biasing mechanism for biasing the plunger towards the first open end of the housing, the biasing mechanism disposed about the second end of the rod between the flange and the second end of the housing. The present invention also provides methods and kits for using an automatic injection device, and methods and kits for promoting an automatic injection device comprising a medication based on advantageous properties of the device as compared to a pre-filled syringe. The invention also provides methods and kits for training a recipient on use of the automatic injection device.

**Probable Assignee:** ABBVIE BIOTECHNOLOGY LTD

**Earliest Publication Date:** 20100624



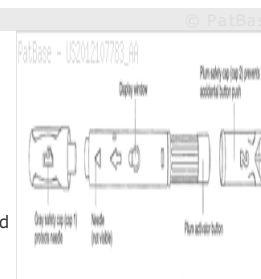
**45) Family number: 59271771** (US2012107783A)

### AUTOMATIC INJECTION DEVICE

**Abstract:** Source: US2012107783A An automatic injection device for providing a subcutaneous injection is disclosed. The device includes a syringe movably disposed in a housing and including a barrel portion, a needle and a bung for sealing the barrel portion. The device includes a plunger for moving the syringe towards a first open end of the housing such that the needle projects from the first end, and for subsequently applying pressure to the bung. The plunger includes a rod connected at a first end to the bung, a compressible expanded central portion, and a flange between a second end of the rod and the central portion. The device also includes a biasing mechanism for biasing the plunger towards the first open end of the housing, the biasing mechanism disposed about the second end of the rod between the flange and a second end of the housing.

**Probable Assignee:** ABBVIE BIOTECHNOLOGY LTD

**Earliest Publication Date:** 20120503



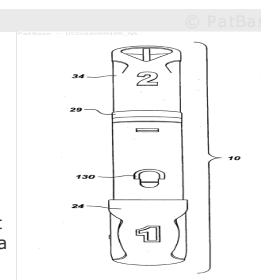
**46) Family number: 61996493** (US2016089495A)

### AUTOMATIC INJECTION DEVICE

**Abstract:** Source: US2016089495A A method for treating a disorder using an automatic injection device is disclosed. The device includes a syringe movably disposed in a housing and including a barrel portion, a needle and a bung for sealing the barrel portion. The device includes a syringe actuation component for moving the syringe towards a first open end of the housing such that the needle projects from the first end, and for subsequently applying pressure to the bung. The syringe actuation component includes a pressurizer, a rod comprising a compressible portion projecting therefrom, and a flange between a second end of the rod and the compressible portion. The device also includes a biasing mechanism for biasing the syringe actuation component towards the first open end of the housing, the biasing mechanism disposed about the second end of the rod between the flange and a second end of the housing.

**Probable Assignee:** ABBVIE BIOTECHNOLOGY LTD

**Earliest Publication Date:** 20160331



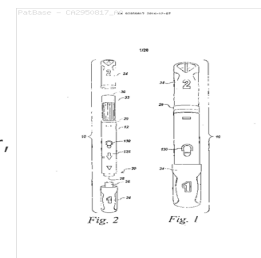
**47) Family number: 64617827** (CA2950817C)

### AUTOMATIC INJECTION DEVICE

**Abstract:** Source: CA2950817C The invention provides an automatic injection device for providing a subcutaneous injection of a substance into a user. The automatic injection device comprises a housing, a syringe movably disposed in the housing, and a syringe actuation component. The syringe includes a plunger for first moving the syringe such that the needle projects from a first end of the housing, and subsequently applying pressure to the bung. The plunger includes a rod having a compressible central portion and a flange between a second end of the rod and the compressible central portion. The device further comprises a biasing mechanism for biasing the plunger, the biasing mechanism is disposed about the second end of the rod between the flange and the second end of the housing. The automatic injection device offers safety advantages, is less painful and includes a hidden needle.

**Probable Assignee:** ABBVIE BIOTECHNOLOGY LTD

**Earliest Publication Date:** 20080110



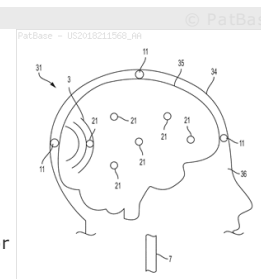
**48) Family number: 70563565 (US2018211568A)**

#### SYSTEM, METHOD AND COMPUTER READABLE MEDIUM FOR QUANTIFYING ANATOMICAL DEVICE DEFORMATION UNDER LOAD

**Abstract:** Source: US2018211568A An automated method and system of determining movement and/or deformation of an anthropomorphic test device (ATD). The method and system includes an acoustic transmitter device located on a first region of the ATD and an acoustic receiver device located on a second region of the ATD. An electric field is provided in communication with the acoustic transmitter to activate the acoustic transmitter for generating mechanical waves to be received by the acoustic receiver. Relative locations of the acoustic transmitter device and the acoustic receiver device are determined by the time of flight of the generated mechanical wave traveling from the acoustic transmitter device to the acoustic receiver device while the first region of the ATD and/or the second region of the ATD are subjected to movement and/or deformation; and determining movement and/or deformation data of the second region of the ATD. Information may be transmitted that represents the movement and/or deformation data of the second region, or information may be presented that represent the movement and/or deformation data of the second region on a display.

**Probable Assignee:** OF VIRGINIA PATENT FOUNDATION UNIV

**Earliest Publication Date:** 20180726



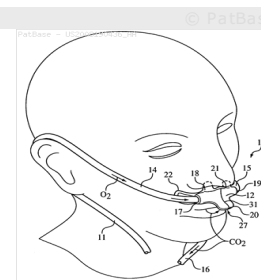
**49) Family number: 41470152 (US2008190436A)**

#### NASAL AND ORAL PATIENT INTERFACE

**Abstract:** Source: US2008190436A A patient interface for communicating fluids to and/or from a patient's nasal cavity and/or oral cavity is disclosed. In addition, a patient interface for fluid and physiological function monitoring proximate to the patient's nasal cavity and/or oral cavity is disclosed. An apnea monitor and a method for monitoring apnea are also disclosed.

**Probable Assignee:** RIC INVESTMENTS LLC

**Earliest Publication Date:** 20080214



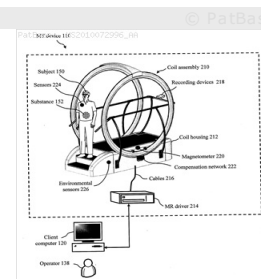
**50) Family number: 44451988 (US2010072996A)**

#### METHODS AND SYSTEMS FOR MAGNETICALLY RESONATING BOTH A SUBJECT AND A SUBSTANCE ADMINISTERED TO THE SUBJECT

**Abstract:** Source: US2010072996A Embodiments of the current invention include a magnetic resonance system including a magnetic resonance device and a substance to be introduced to a subject in accordance with a treatment. Further embodiments of the current invention include a method of using a magnetic resonance system including administering a substance to a subject and providing magnetic resonance to the subject.

**Probable Assignee:** APPLIED MAGNETICS LLC

**Earliest Publication Date:** 20100304



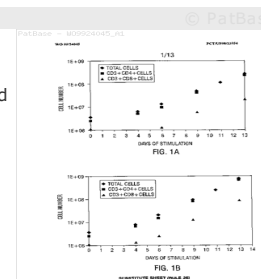
**51) Family number: 11354536 (WO9924045A1)**

#### METHODS FOR TREATMENT OF TUMORS AND TUMOR CELLS USING EX VIVO ACTIVATED T CELLS

**Abstract:** Novels methods for the modulation of an immune response using treatment with T cells which are treated ex vivo are provided. The invention provides a solution to the problems of treating various diseases, especially those diseases that are of a malignant nature. The invention also provides methods of treating diseases on a non-malignant nature, by modulating a mammal's immune response.

**Probable Assignee:** ARCH DEV CORP

**Earliest Publication Date:** 19990520



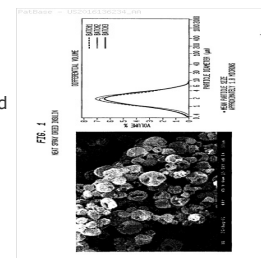
**52) Family number: 62400222 (US2016136234A)**

#### COMPOSITIONS AND METHODS FOR PREVENTING OR TREATING DISEASES, CONDITIONS, OR PROCESSES CHARACTERIZED BY ABERRANT FIBROBLAST PROLIFERATION AND EXTRACELLULAR MATRIX DEPOSITION

**Abstract:** Source: US2016136234A The described invention provides compositions and methods for reducing progression of a fibrosis in a tissue of a subject selected from liver, kidney or vascular fibrosis, the progression of the fibrosis being characterized by aberrant fibroblast proliferation and extracellular matrix deposition in the tissue. The method includes administering a therapeutic amount of a pharmaceutical composition containing a polypeptide having the amino acid sequence YARAAARQARAKALARQLGVAA (SEQ ID NO: 1) or functional equivalent thereof, and a pharmaceutically acceptable carrier, wherein the therapeutic amount of the polypeptide is effective to reduce progression of the fibrosis, to treat remodeling of the tissue, or a combination thereof.

**Probable Assignee:** MOERAE MATRIX INC

**Earliest Publication Date:** 20160519



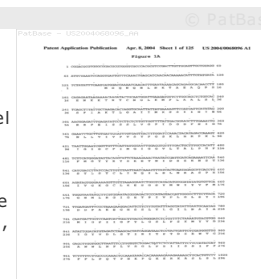
### 53) Family number: 30460359 (US2004068096A)

#### HUMAN SINGLE NUCLEOTIDE POLYMORPHISMS IN ORGANIC ANION TRANSPORT AND MULTI-DRUG RESISTANT PROTEINS

**Abstract:** Source: US2004068096A The invention provides polynucleotides and polypeptides corresponding to novel gene sequences associated with the incidence of liver disease, and resistance to statin drugs, particularly pravastatin. The invention also provides polynucleotide fragments corresponding to the genomic and/or coding regions of these genes which comprise at least one polymorphic site per fragment. Allele-specific primers and probes which hybridize to these regions, and/or which comprise at least one polymorphic site are also provided. The polynucleotides, primers, and probes of the present invention are useful in phenotype correlations, paternity testing, medicine, and genetic analysis. Also provided are vectors, host cells, antibodies, and recombinant and synthetic methods for producing said polypeptides. The invention further relates to diagnostic and therapeutic methods for applying these novel polypeptides to the diagnosis, treatment, and/or prevention of various, diseases and/or disorders, particularly hepatic and cardiovascular diseases related to these polypeptides, such as liver disease and high cholesterol. The invention further relates to screening methods for identifying agonists and antagonists of the polynucleotides and polypeptides of the present invention.

**Probable Assignee:** BRISTOL MYERS SQUIBB CO

**Earliest Publication Date:** 20040408



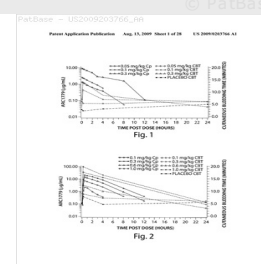
### 54) Family number: 42649843 (US2009203766A)

#### VWF APTAMER FORMULATIONS AND METHODS FOR USE

**Abstract:** Source: US2009203766A The invention relates to the formulation, dosing, administration and use of an aptamer antagonist therapeutic that binds to von Willebrand Factor.

**Probable Assignee:** ARCHEMIX CORP

**Earliest Publication Date:** 20081211



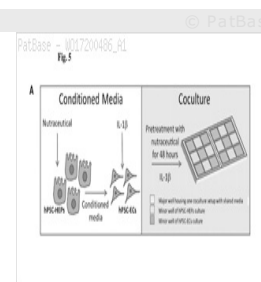
### 55) Family number: 67563604 (WO17200486A1)

#### HUMAN STEM CELL DERIVED ENDOTHELIAL CELLS, ENDOTHELIAL- HEPATOCYTE CO-CULTURE SYSTEM AND USES THEREOF

**Abstract:** The present disclosure provides a method of deriving endothelial cells, comprising (a) culturing lateral plate mesoderm cells under oxygen-deprived condition to obtain endothelial lineage cells; and (b) culturing endothelial cells from (a) on an extracellular matrix to maintain and expand the endothelial lineage cells. Also disclosed herein is a cell co-culture system comprising an endothelial cell culture and a hepatocyte cell culture, as well as a microfluidic-based system comprising said cell co-culture system. Also disclosed herein is a method of disease modelling or drug testing using said cell co-culture system or said microfluidic-based system.

**Probable Assignee:** AGENCY SCIENCE TECH AND RES

**Earliest Publication Date:** 20171123



### 56) Family number: 70158278 (CO20160000647A)

#### MANIQUI SIMULADOR PARA PROCEDIMIENTO DE ACCESO CENTRAL VENOSO MANIKIN SIMULATOR FOR CENTRAL VENOUS ACCESS PROCEDURE (MACHINE TRANSLATION)

**Abstract:** Source: CO20160000647A La presente invencion corresponde a un simulador para acceso central venoso en neonatos para entrenamiento de personal. El simulador comprende un maniqui de neonato, un sensor de posicion que se dispone en la mano del personal en entrenamiento y un procesador. El maniqui se conforma por una estructura osea con servomotores dispuestos en las articulaciones humero con omoplatos y articulaciones de femur con la cadera, y la cabeza se conecta al torso mediante una rotula. El maniqui tambien tiene al menos tres dispositivos de rastreo en cabeza, torso y piernas. Una capa de silicona platino cubre la estructura osea. El maniqui tiene un sistema circulatorio conformado por tubos de grado medico conectados a una bomba, la bomba se conecta a un deposito donde se dispone un liquido. Una placa se fija debajo del esternon, la placa se conecta a una cremallera mecanica, la cremallera mecanica a una leva y la leva a un motor. Y el procesador se conecta al sensor de posicion, a los dispositivos de rastreo, a los servomotores, al motor y la bomba. The present invention relates to a simulator for central venous access in neonates for training of personnel. The simulator further comprises a dummy neonate, a position sensor which is arranged in the hand of the staff in training and a processor. The manikin is formed by a bone structure with servomotors arranged in the joints of the humerus with shoulder blade and joints of femur with the hip, and the head is connected to the torso by a ball joint. The manikin also has at least three tracking devices in head, torso and legs. A layer of Platinum silicone covers the bone structure. The dummy has a circulatory system consisting of medical grade tubes connected to a pump, the pump is connected to a reservoir where a liquid. A plate is fixed below the sternum, the plate is connected to a rack, the rack mechanical linkage to a mechanical cam and cam to a motor. And the processor is connected to the position sensor, the tracking devices, to the servo motors, the motor and the pump.

**Probable Assignee:** UNIV MILITAR NUEVA GRANADA

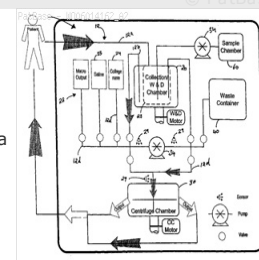
**57) Family number: 32609433** (WO06014162A2)

## METHODS OF USING REGENERATIVE CELLS IN THE TREATMENT OF RENAL DISEASES AND DISORDERS

**Abstract:** Cells present in processed lipoaspirate tissue are used to treat patients, including patients with renal conditions, diseases or disorders. Methods of treating patients include processing adipose tissue to deliver a concentrated amount of stem cells obtained from the adipose tissue to a patient. The methods may be practiced in a closed system so that the stem cells are not exposed to an external environment prior to being administered to a patient. Accordingly, in a preferred method, cells present in processed lipoaspirate are placed directly into a recipient along with such additives necessary to promote, engender or support a therapeutic renal benefit.

**Probable Assignee:** CYTORI THERAPEUTICS INC

**Earliest Publication Date:** 20060209



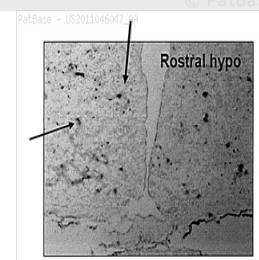
**58) Family number: 48343755** (US2011046047A)

## BONE MORPHOGENETIC PROTEINS FOR APPETITE CONTROL

**Abstract:** Source: US2011046047A Methods of decreasing appetite for food intake by administering bone morphogenetic proteins (BMPs), e.g., BMP7, or agonists/peptidomimetics thereof.

**Probable Assignee:** JOSLIN DIABETS CT INC

**Earliest Publication Date:** 20110224



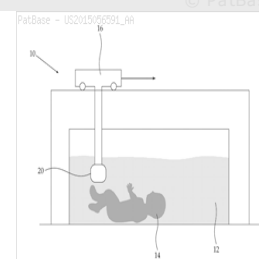
**59) Family number: 54948939** (US2015056591A)

## DEVICE FOR TRAINING USERS OF AN ULTRASOUND IMAGING DEVICE

**Abstract:** Source: US2015056591A Disclosed are methods and devices for simulating ultrasound procedures and for training ultrasound users. Additionally disclosed are methods and devices for simulating needle insertion procedures, such as amniocentesis procedures, and for training physicians to perform such needle insertion procedures.

**Probable Assignee:** ARIEL UNIV RESEARCH AND DEVELOPMENT CO LTD

**Earliest Publication Date:** 20131010



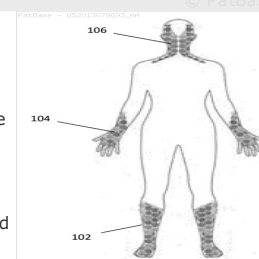
**60) Family number: 53294109** (US2013079693A)

## CUSTOMIZABLE EMBEDDED SENSORS

**Abstract:** Source: US2013079693A A method of constructing a sensor includes depositing a first material in a predetermined arrangement to form a structure. The depositing results in at least one void occurring within the structure. The method further includes depositing a second material within the voids. The second material may have electrical properties that vary according to deformation of the second material. The method also includes providing electrical access to the second material to enable observation of the one or more electrical properties. A sensor includes a structure that has one or more voids distributed within the structure. The sensor also includes a material deposited within the one or more voids. The material may be characterized by one or more electrical properties such as piezoresistivity. The sensor includes a first contact electrically coupled to a first location on the material, and a second contact electrically coupled to a second location on the material.

**Probable Assignee:** NORTHEASTERN UNIV

**Earliest Publication Date:** 20130328



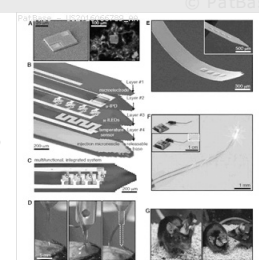
**61) Family number: 57226570** (US2016066789A)

## INJECTABLE AND IMPLANTABLE CELLULAR-SCALE ELECTRONIC DEVICES

**Abstract:** Source: US2016066789A Provided are implantable or surface mounted biomedical devices and related methods for interfacing with a target tissue. The devices have a substrate and device component supported by the substrate. The components of the device are specially configured and packaged to be ultra-thin and mechanically compliant. In particular, device thicknesses are less than 1 mm and have lateral dimensions between about 1 microm and 10 mm, depending on the application. Delivery substrates may be incorporated to assist with device implantation and handling. The devices can be shaped to provide injection in a minimally invasive manner, thereby avoiding unnecessary tissue damage and providing a platform for long-term implantation for interfacing with biological tissue.

**Probable Assignee:** BOARD OF TRUSTEES OF UNIV OF ILLINOIS

**Earliest Publication Date:** 20140821



**62) Family number: 28197440** (US2002055680A)

## METHOD AND APPARATUS FOR THE NONINVASIVE ASSESSMENT OF HEMODYNAMIC PARAMETERS INCLUDING BLOOD VESSEL LOCATION

```

graph TD
    302[Preliminary Frequency Threshold] --> 304[Frequency Threshold]
    304 --> 306[Command Activation, Setup & Frequency Measurement]
    306 --> 308[Command Frequency Threshold]
    308 --> 310[Frequency Threshold]
    310 --> 312[Frequency Frequency Shift]
    312 --> 314[Frequency Frequency Shift]
    314 --> 316[Frequency Frequency Shift]
    316 --> 318[Frequency Frequency Shift]
  
```

Flowchart illustrating a method for determining a frequency threshold for a radio access network (RAN) node:

- 302: Preliminary Frequency Threshold
- 304: Frequency Threshold
- 306: Command Activation, Setup & Frequency Measurement
- 308: Command Frequency Threshold
- 310: Frequency Threshold
- 312: Frequency Frequency Shift
- 314: Frequency Frequency Shift
- 316: Frequency Frequency Shift
- 318: Frequency Frequency Shift

**Earliest Publication Date:** 20010104

FIG. 10

Exploded View of Present Invention

Legend: Explosion Control Member

[illegible]

```

graph TD
    301[Collect historical data from the client forecasting department and next year] --> 302[Fully develop and test the cost forecasting models]
    302 --> 303[Review information client's software work flows]
    303 --> 304[Integrate software for actual pricing of the client's ERP system data, using the data, and adjust for cost trends]
    304 --> 305[Collect updated data after 3-6 months and retest the cost forecasting models]
    305 --> 306[Ongoing practical instruction to managing groups]
    306 --> 307[ ]
  
```

Overview of 7th module: when installing software, for cost forecasting and pricing, into the clients operating system

- 301 Collect historical data from the client forecasting department and next year
- 302 Fully develop and test the cost forecasting models
- 303 Review information client's software work flows
- 304 Integrate software for actual pricing of the client's ERP system data, using the data, and adjust for cost trends
- 305 Collect updated data after 3-6 months and retest the cost forecasting models
- 306 Ongoing practical instruction to managing groups

FIG. 1

FIG. 2

FIG. 3

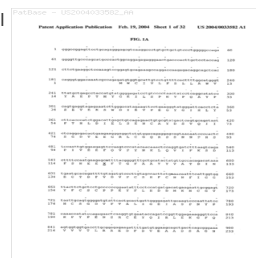
FIG. 4

PatBase PDF Export - Page: 13 27/02/2019

**Abstract:** Source: US2004033582A The invention provides polynucleotides and polypeptides corresponding to novel gene sequences associated with the incidence of cardiovascular disorders. The invention also provides polynucleotide fragments corresponding to the genomic and/or coding regions of these genes which comprise at least one polymorphic site per fragment. Allele-specific primers and probes which hybridize to these regions, and/or which comprise at least one polymorphic site are also provided. The polynucleotides, primers, and probes of the present invention are useful in phenotype correlations, paternity testing, medicine, and genetic analysis. Also provided are vectors, host cells, antibodies, and recombinant and synthetic methods for producing said polypeptides. The invention further relates to diagnostic and therapeutic methods for applying these novel polypeptides to the diagnosis, treatment, and/or prevention of various diseases and/or disorders, particularly cardiovascular diseases related to these polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of the polynucleotides and polypeptides of the present invention.

**Probable Assignee:** BRISTOL MYERS SQUIBB CO

**Earliest Publication Date:** 20040219



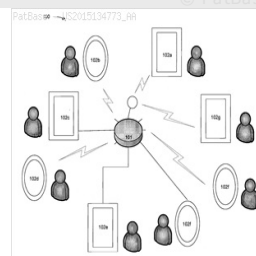
**68) Family number: 59226816 (US2015134773A)**

#### METHOD AND APPARATUS FOR ENHANCED PERSONAL CARE

**Abstract:** Source: US2015134773A A method and apparatus for enhancing a user's lifestyle and personal care is provided. The design includes a device having a display/mirror and a plurality of connection ports each configured to receive a personal care module configured to facilitate the personal care of a user and a remote device arrangement. The device is configured to provide user personal care communications to and receive user personal care communications from the remote device arrangement, and wherein the device is configured for the user to freely substitute personal care modules.

**Probable Assignee:** MORES INC

**Earliest Publication Date:** 20150514



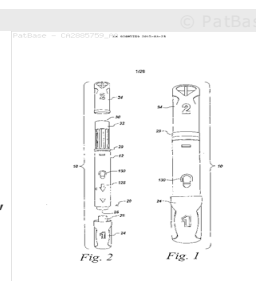
**69) Family number: 59271740 (CA2885759A)**

#### AUTOMATIC INJECTION DEVICE

**Abstract:** Source: CA2885759A The invention provides an automatic injection device for providing a subcutaneous injection of a substance into a user. The automatic injection device comprises a housing, a syringe movably disposed in the housing, and a syringe actuation component. The syringe includes a plunger for first moving the syringe such that the needle projects from a first end of the housing, and subsequently applying pressure to the bung. The plunger includes a rod having a compressible central portion and a flange between a second end of the rod and the compressible central portion. The device further comprises a biasing mechanism for biasing the plunger, the biasing mechanism is disposed about the second end of the rod between the flange and the second end of the housing. The automatic injection device offers safety advantages, is less painful and includes a hidden needle.

**Probable Assignee:** ABBVIE BIOTECHNOLOGY LTD

**Earliest Publication Date:** 20080110



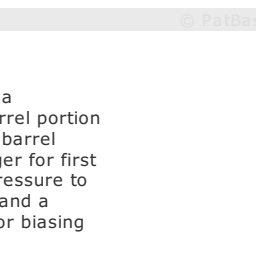
**70) Family number: 59271745 (IN09978DN2008A)**

#### AUTOMATIC INJECTION DEVICE

**Abstract:** Source: IN09978DN2008A The invention provides an automatic injection device for providing injection of a substance into a user, comprising: a housing; a syringe movably disposed in the housing, the syringe including a barrel portion for holding the substance, a hollow needle in fluid communication with the barrel portion, and a bung for sealing the barrel portion and selectively applying pressure to the substance to force the substance through the hollow needle; a plunger for first moving the syringe towards a first end such that the needle projects from the first end and subsequently applying pressure to the bung, the plunger including a rod connected at a first end to the bung, a compressible expanded central portion and a flange between a second end of the rod and the compressible expanded central portion; and a biasing mechanism for biasing the plunger towards the first open end of the housing.

**Probable Assignee:** ABBOTT BIOTECHNOLOGY LTD

**Earliest Publication Date:** 20090320



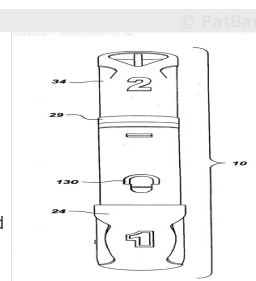
**71) Family number: 59271784 (US2015037772A)**

#### AUTOMATIC INJECTION DEVICE

**Abstract:** Source: US2015037772A An automatic injection device for providing a subcutaneous injection is disclosed. The device includes a syringe movably disposed in a housing and including a barrel portion, a needle and a bung for sealing the barrel portion. The device includes a plunger for moving the syringe towards a first open end of the housing such that the needle projects from the first end, and for subsequently applying pressure to the bung. The plunger includes a rod connected at a first end to the bung, a compressible expanded central portion, and a flange between a second end of the rod and the central portion. The device also includes a biasing mechanism for biasing the plunger towards the first open end of the housing, the biasing mechanism disposed about the second end of the rod between the flange and a second end of the housing.

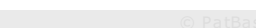
**Probable Assignee:** ABBVIE BIOTECHNOLOGY LTD

**Earliest Publication Date:** 20150205



**72) Family number: 66397512 (US2017203041A)**

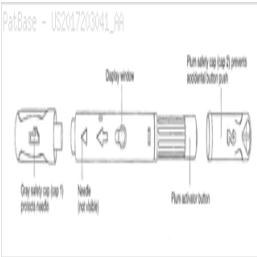
#### AUTOMATIC INJECTION DEVICE



**Abstract:** Source: US2017203041A An automatic injection device for providing an injection is disclosed. The device includes a housing having a distal end operable by a user and an open proximal end for placement at an injection site. The device includes a syringe movably disposed in the housing. The syringe includes a needle and substance for injection. The device also includes a plunger that has a continuous length from a first end to a second end and includes an anchoring portion initially engaged with the distal end of the housing in a latched position. The device also includes a biasing mechanism to apply pressure to the plunger when activated and move the plunger towards the proximal end of the housing, and a firing mechanism assembly operable by the user to release the anchoring portion.

**Probable Assignee:** ABBVIE BIOTECHNOLOGY LTD

**Earliest Publication Date:** 20170720



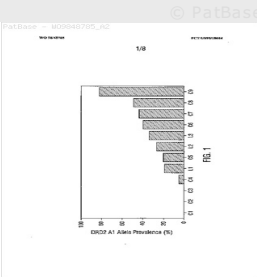
**73) Family number:** 20697505 (WO9848785A2)

**ALLELIC POLYGENE DIAGNOSIS OF REWARD DEFICIENCY SYNDROME AND TREATMENT**

**Abstract:** Enhancement of attentional processing is attained by administration of an endorphinase inhibitor or enkephalinase inhibitor and optionally, a dopamine precursor, or a serotonin precursor, a GABA precursor, or an endorphin or enkephalinase releaser, or certain herbal compounds including Rhodiola rosea extract (Pharmaline) and/or Huperzine. These components promote restoration of normal neurotransmitter function and the components combined enhance the release of dopamine at the nucleus accumbens and are non-addictive. Use of the dopamine precursors L-phenylalanine, or L-Tyrosine, the enkephalinase inhibitor D-phenylalanine, and/or the serotonin precursor -hydroxytryptophan and a natural acetylcholinesterase inhibitor and chromium salts (i.e. picolinate, nicotinate, etc.) is especially preferred, but not limited to assist in relieving symptoms associated with brain phenylalanine deficiency.

**Probable Assignee:** CITY OF HOPE NATIONAL MEDICAL CENTER

**Earliest Publication Date:** 19981105



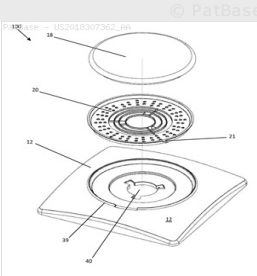
**74) Family number:** 71615076 (US2018307362A)

**TOUCH MEASUREMENT APPARATUS AND METHOD OF USE**

**Abstract:** Source: US2018307362A An apparatus and method for measuring a manual force that uses a pad that simulates human or animal body tissue and a sensor configured to receive the force. The pad can have the shape of a body part and can have different materials that have different hardnesses. The apparatus can have interchangeable pads and identify individual users for training purposes, such as for training massage therapists. The apparatus can indicate whether an applied force is within a predetermined range. Also a method of defining a standard or protocol for training and/or performing touch manipulations by applying a range force to one or more persons with an algometer and establishing a protocol based on data obtained from biosensors attached to the person in order to determine which forces produce a desired effect, such as a reflexive, mechanical, or relaxation effect. The apparatus can then be used to train a provider on how to follow the standard or protocol. Also a method of controlling environmental conditions using data from one or more biosensors attached to a person to adjust an environmental condition such as room temperature or lighting in order to achieve a desired effect in the person. Also a method and apparatus of training a person to perform an activity that requires producing a force in a certain way, such as performing bicycle tricks or kneading dough. The apparatus can be shaped to simulate an object related to the activity.

**Probable Assignee:** MENDOLOGY INC

**Earliest Publication Date:** 20181025



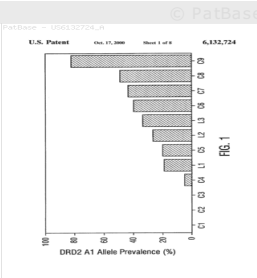
**75) Family number:** 12606435 (US6132724A)

**ALLELIC POLYGENE DIAGNOSIS OF REWARD DEFICIENCY SYNDROME AND TREATMENT**

**Abstract:** Source: US6132724A Enhancement of attentional processing is attained by administration of an endorphinase inhibitor or enkephalinase inhibitor and optionally, a dopamine precursor, or a serotonin precursor, a GABA precursor, or an endorphin or enkephalinase releaser, or certain herbal compounds including Rhodiola rosea extract (Pharmaline) and/or Huperzine. These components promote restoration of normal neurotransmitter function and the components combined enhance the release of dopamine at the nucleus accumbens and are non-addictive. Use of the dopamine precursors L-phenylalanine, or L-Tyrosine, the enkephalinase inhibitor D-phenylalanine, and/or the serotonin precursor -hydroxytryptophan and a natural acetylcholinesterase inhibitor and chromium salts (i.e. picolinate, nicotinate, etc.) is especially preferred, but not limited to assist in relieving symptoms associated with brain phenylalanine deficiency.

**Probable Assignee:** SYNAPTAMINE INC

**Earliest Publication Date:** 20001017



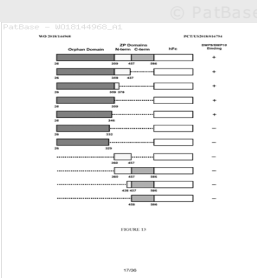
**76) Family number:** 70718129 (WO18144968A1)

**COMPOSITIONS AND METHODS FOR TREATING HEART FAILURE**

**Abstract:** In certain aspects, the present disclosure relates to methods of treating, preventing, and reducing the severity or progression of heart failure or one or more complications of heart failure. For example, the disclosure provides various BMP antagonists, such as ActRIIA polypeptides, ActRIIB polypeptides, BMPRII polypeptides, ALK1 polypeptides, endoglin polypeptides, BMP 10 propeptide proteins and Fc fusion proteins thereof as well as anti-BMP9 antibodies, for treating, preventing and reducing the severity or progression of heart failure or one or more complications of heart failure.

**Probable Assignee:** ACCELERON PHARMA INC

**Earliest Publication Date:** 20180809



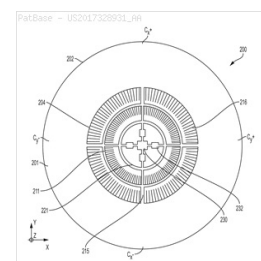
**77) Family number:** 66334880 (US2017328931A)

**3-AXIS ANGULAR ACCELEROMETER**

**Abstract:** Source: US2017328931A Angular accelerometers are described, as are systems employing such accelerometers. The angular accelerometers may include a proof mass and rotational acceleration detection beams directed toward the center of the proof mass. The angular accelerometers may include sensing capabilities for angular acceleration about three orthogonal axes. The sensing regions for angular acceleration about one of the three axes may be positioned radially closer to the center of the proof mass than the sensing regions for angular acceleration about the other two axes. The proof mass may be connected to the substrate through one or more anchors.

**Probable Assignee:** ANALOG DEVICES INC

**Earliest Publication Date:** 20170712



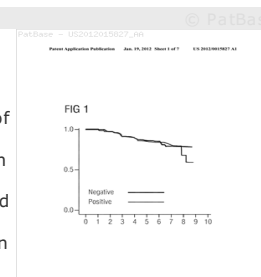
**78) Family number: 43337242 (US2012015827A)**

# METHOD FOR THERAPY PREDICTION IN TUMORS HAVING IRREGULARITIES IN THE EXPRESSION OF AT LEAST ONE VEGF LIGAND AND/OR AT LEAST ONE ERBB-RECEPTOR

**Abstract:** Source: US2012015827A The present invention is related to a method for predicting a clinical response of a patient suffering from or at risk of developing a neoplastic disease towards a given mode of treatment, said method comprising the steps of: a) obtaining a biological sample from said patient; b) determining, on a non protein basis, the expression level of at least one gene encoding for a ligand from the Vascular endothelial growth factor (VEGF) family and of at least one gene encoding for a receptor from the ErbB-family, or a gene co-expressed therewith, in said sample, c) comparing the pattern of expression levels determined in (b) with one or several reference pattern (s) of expression levels; and d) predicting therapeutic success for said given mode of treatment in said patient or implementing therapeutic regimen targeting the signalling pathway of said ligand and/or receptor is related to in said patient from the outcome of the comparison in step (c).

**Probable Assignee:** SIEMENS HEALTHCARE DIAGNOSTICS

**Earliest Publication Date:** 20090603



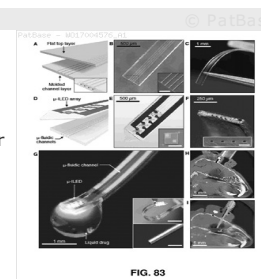
**79) Family number: 64551235 (WO17004576A1)**

# WIRELESS OPTOFLUIDIC SYSTEMS FOR PROGRAMMABLE IN VIVO PHARMACOLOGY AND OPTOGENETICS

**Abstract:** Provided are implantable, injectable and/ or surface mounted biomedical devices and related methods for interfacing with a target tissue. The devices have a substrate, one or more microfluidic channels embedded in or supported by the substrate and a fluid actuator in operational communication with one or more reservoirs and responsive to a wireless control signal. The components of the device are specially configured and packaged to be ultra-thin and mechanically compliant. In some embodiments, the devices are self-powered and fully implantable. The devices can be shaped to provide injection in a minimally invasive manner, thereby avoiding unnecessary tissue damage and providing a platform for long-term implantation for interfacing with biological tissue.

**Probable Assignee:** WASHINGTON UNIV IN ST LOUIS

**Earliest Publication Date:** 20170105



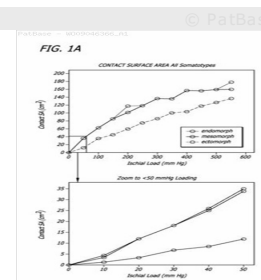
**80) Family number: 43123137 (WO09046366A1)**

# METHOD AND APPARATUS FOR PRESSURE ULCER PREVENTION AND TREATMENT

**Abstract:** Disclosed are methods and system of using wireless neuromuscular electrical stimulation of appropriate muscles to shift immobile patients from any posture. The methods and apparatus are extended to any immobile person, be it due to spinal cord injury, stroke, dementia, or from any other cause. Accordingly, generated pressure ulcers can be avoided or treated in any anatomic locations of the body based on the electrical stimulations of effective muscles relative to said location. Neuromuscular electrical stimulations of muscles would enable the immobile persons to shift their weight. Full body pressure ulcer prevention protocols using plurality of microstimulators that are implanted at plurality of target locations within the patient's body i.e. locations that are particularly at risk.

**Probable Assignee:** ALFRED E MANN INST BIOMED ENG

**Earliest Publication Date:** 20090409



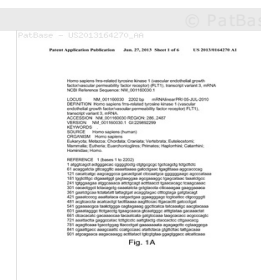
**81) Family number: 48239387 (US2013164270A)**

# POLYNUCLEOTIDES AND CONSTRUCTS ENCODING SFLT1-14 AND METHOD FOR EFFICIENT PROPAGATION AND EXPRESSION THEREOF

**Abstract:** Source: US2013164270A The present invention relates to engineered polynucleotides and constructs comprising nucleic acid sequences encoding a specific splice-variant (sFLT1-14) of the VEGFR family Flt-1, methods for efficient propagation and expression thereof and compositions and uses thereof. More particularly, the invention relates to isolated polynucleotides comprising a nucleic acid sequence coding for sFlt1-14 or any fragment thereof comprising the serine-rich C-terminus region of said sFlt1-14, wherein at least one of the TCA serine coding codons in said serine-rich C-terminus region of sFlt1-14 as encoded by the nucleic acid sequence of SEQ ID NO. 1, is replaced by any one of TCT, TCC, TCG, AGT, AGC. The invention further provides compositions and method of treating VEGF-associated medical conditions using the polynucleotides of the invention.

**Probable Assignee:** YISSUM RES DEVELOPEMENT CO OF HEBREW UNIV OF JERUSALEM LTD

**Earliest Publication Date:** 20110203



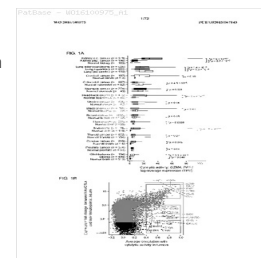
**82) Family number: 62740458 (WO16100975A8)**

# MOLECULAR BIOMARKERS FOR CANCER IMMUNOTHERAPY

**Abstract:** In one aspect, provided herein is a method comprising: (a) (i) determining cytolytic activity in a tumor from the subject; and/or (ii) determining genetic alterations associated with cytolytic activity in the tumor; and (b) administering an immunotherapeutic agent to the subject if (i) cytolytic activity is detected in the tumor and/or (ii) a genetic alteration associated with induction of cytolytic activity, tumor resistance to cytolytic activity and/or suppression of cytolytic activity is detected in the tumor.

**Probable Assignee:** GEN HOSPITAL CORP

**Earliest Publication Date:** 20160623



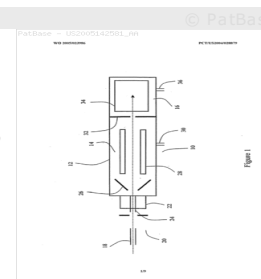
**83) Family number: 31747185 (US2005142581A)**

### MICRORNA AS LIGANDS AND TARGET MOLECULES

**Abstract:** Source: US2005142581A The present invention provides methods for the identification of target molecules that bind to ligands, particularly microRNA ligands and mimics thereof and/or microRNA target molecules and mimics thereof, with as little as millimolar (mM) affinity using mass spectrometry. The methods may be used to determine the mode of binding interaction between two or more of these target molecules to the ligand as well as their relative affinities. Also provided are methods for designing compounds having greater affinity to a ligand by identifying two or more target molecules using mass spectrometry methods of the invention and linking the target molecules together to form a novel compound.

**Probable Assignee:** ISIS PHARMACEUTICALS INC

**Earliest Publication Date:** 20050317



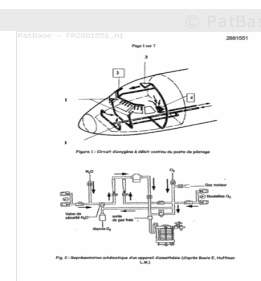
**84) Family number: 33200239 (FR2881551A)**

### ANESTHETIC INHALATION NARCOSIS ADMINISTERING AND ANESTHETIC AND OXYGEN CONTENT MEASURING DEVICE FOR E.G. CIVIL TRANSPORT AIRCRAFT, HAS OUTLET NOZZLES FOR CONDITIONED AIR, OXYGEN AND ANESTHETICS AND COLD AIR NOZZLES FOR CREW MEMBERS

**Abstract:** The device has rows of nozzles for outlet of the conditioned air, oxygen and anesthetics. A steering terminal air ventilation system has air-conditioned air inlets at a ceiling (3) and in a region of pedals (2), hot air inlets in de-icer of windscreen (1) and orientable cold air nozzles at the level of face and chest of crew members. A waste air evacuation system (4) and a carbon dioxide absorption system constitute an assembly of anesthesia device.

**Probable Assignee:** MWANZA CHABUNDA CHRISTOPHE

**Earliest Publication Date:** 20060804



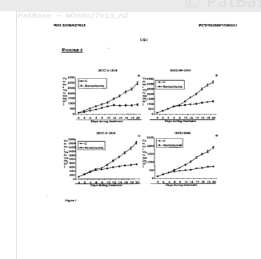
**85) Family number: 41574913 (WO08027013A2)**

### COMPOSITION AND METHOD

**Abstract:** We provide a composition comprising a first agent which is an antagonist of mTOR activity, together with a second agent comprising an angiogenesis inhibitor. The first agent may comprise rapamycin, and the second agent may comprise an inhibitor of VEGF activity such as Bevacizumab (Avastin). Such a composition may be used for preventing the growth or proliferation, or both, of a cell or tissue. The composition may also be used to treat or prevent cancer, such as hepatocellular carcinoma (HCC).

**Probable Assignee:** NAT CANCER CT

**Earliest Publication Date:** 20080306



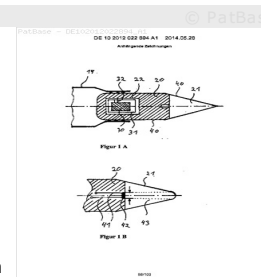
**86) Family number: 56529037 (DE102012022894A1)**

### VERFAHREN UND SYSTEM ZUR PERSONALISIERUNG UND ENERGIEVERSORGUNG VON GESCHOSSE UND GESCHOSSABGABESYSTEME SYSTEM FOR IDENTIFICATION, VERIFICATION AND/OR AUTHENTICATION OF PROJECTILE E.G. RAILGUN PROJECTILE, HAS SENSOR, COMMUNICATION UNIT, PROCESSING UNIT AND POWER SUPPLY OR POWER GENERATION UNIT WHICH ARE ARRANGED IN HOUSING OF PROJECTILE

**Abstract:** Source: DE102012022894A1 Die Erfindung betrifft eine Geschossanordnung, insbesondere ein Flintenlaufgeschoss, mit einem stofflichen Kopf, Geschoss oder Projektil und einem System zur sicheren Auslösen der Geschossanordnung. Der Erfindung liegt die Aufgabe zugrunde, ein Geschoss der Eingangs erwähnten Art anzugeben, dass Geschoss kostengünstig und sicher einem System zuzuordnen. Diese Aufgaben wird dadurch gelöst, dass das Geschoss derart ausgestattet ist, beispielhaft mit einer funktionalen Oberfläche, dass ein System zum Energieerzeugung und Energieübertragung und zur eindeutigen Kennung im Körper des Geschosses enthaelt, zum Beispiel zur aktuelle Lokalisation, Zeit, Geschossabgabesystem, Schutze, beispielhaft Mittels mindestens eines personalisierten Speichereinheit und/oder SIM-Karte und/oder Transponder und/oder Resonanz-System und/oder RFID-Chip. Dabei kann die Information beispielhaft mindestens eine elektrische, magnetische, kapazitive, elektromagnetische, akustische sein und Mittels eines externen Lese-Systems zum Beispiel mindestens eines RFID Transponder-Lese-System ausgelesen und/oder eingelesen werden. Hierdurch erfolgt in einer vorteilhaften Ausführungsform neben der Personalisierung des Geschosses ebenso die Personalisierung des Geschossabgabesystem. The system has a sensor, an input unit, a communication unit, a memory unit, a processing unit, an output unit and power supply or power generation unit which are arranged in housing of projectile (20). The functional surface (40) of projectile is formed from different materials including non-conductive material and nano-particle ceramic material, by three dimensional (3D) printing process, inkjet printing process, sintering process, screen printing process, injection molding process, dipping process and/or spraying process. An independent claim is included for method for identification, verification and/or authentication of projectile.

**Probable Assignee:** TRINKEL GABRIELE LISA

**Earliest Publication Date:** 20140528



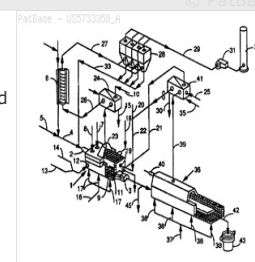
**87) Family number: 29258965** (US5733358A)

## PROCESS AND APPARATUS FOR THE MANUFACTURE OF STEEL FROM IRON CARBIDE

**Abstract:** Source: US5733358A A two stage reaction for the production of steel from iron carbide is carried out in two separate but interrelated reactors. In the first reactor, iron carbide, with slag formers, is fed into a feed end and the reaction is well-mixed by the vessel geometry, the stirring action below-surface injection of oxygen and iron carbide feed, and the evolution of gases from the liquid metal bath. The product, containing about 0.5-2 percent carbon, is fed into the second reactor where it is refined with subsurface-injected oxygen. The second reaction is autogenous, and the evolved carbon monoxide is fed to the first reactor where it is burned with oxygen in a foamy slag, which, with post-combustion burning in the slag of CO evolved in the first reactor, and with iron carbide preheating with the sensible heat of the off-gas from the first reaction, makes that reaction also essentially autogenous.

**Probable Assignee:** PRAXAIR TECHNOLOGY INC

**Earliest Publication Date:** 19960618



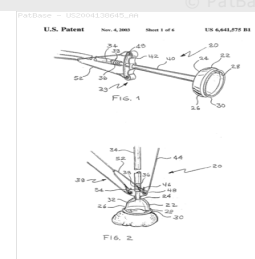
**88) Family number: 29539612** (US2004138645A)

## VACUUM INSTRUMENT FOR SLOWING OR ARRESTING THE FLOW OF BLOOD

**Abstract:** Source: US2004138645A The invention provides a surgical vacuum device including a vacuum cup sized for attachment to and manipulation of a target tissue. The device further includes a vacuum hose for applying a vacuum to the interior of the cup, and structure for applying a tensioning force to the cup once it has been placed and a vacuum applied. The vacuum device may be utilized with minimal or no trauma to the target tissue or surrounding tissues.

**Probable Assignee:** MEDITECH DEVELOPMENT INC

**Earliest Publication Date:** 20031104



**89) Family number: 73173884** (WO19030706A1)

## ANTI-THROMBIN ANTIBODY MOLECULES AND METHODS FOR USE IN ORTHOPEDIC SURGERY

**Abstract:** The present invention relates to isolated anti-thrombin antibodies that recognize the exosite 1 epitope of thrombin and selectively inhibit thrombin without promoting bleeding. These antibody molecules may be useful in the treatment and prevention of thrombosis, embolism and other conditions mediated by thrombin. In particular, the present invention relates to the clinically proven safe and clinically proven effective use of the anti-thrombin antibody molecules in patients undergoing orthopedic surgery, including total knee replacement (TKR) surgery and total hip replacement (THR) surgery.

**Probable Assignee:** JANSSEN PHARMACEUTICA NV

**Earliest Publication Date:** 20190214

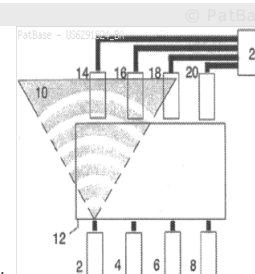
**90) Family number: 15672196** (US6291824B)

## APPARATUS AND METHOD FOR HIGH-BANDWIDTH OPTICAL TOMOGRAPHY

**Abstract:** Source: US6291824B An apparatus and method for dramatically increasing the imaging rate of optical tomography are disclosed. The novel technique is based on precise, time-resolved measurements. Measurements may optionally be taken at different wavelengths more-or-less simultaneously with a single device. A stationary array of emitters and a stationary array of detectors are located around the sample. High bandwidth is achieved by rapidly delivering light signals (single pulses or bursts of periodic pulses) in sequence from discrete, stationary emitters positioned around the sample, and rapidly detecting signals transmitted through the sample by discrete, stationary detectors. Bandwidths on the order of megahertz are possible in imaging biological sample. By selecting appropriate illuminating wavelengths, the system may be used, for example, to rapidly image the state of, and changes in, such characteristics as blood volume, blood flow, oxygen saturation, cellular depolarization, cellular repolarization, and tissue redox state. In addition to eliminating any requirement for mechanical scanning, the novel system allows the position of the fiber arrays to be chosen to fit the contour of the sample.

**Probable Assignee:** CENTENARY COLLEGE OF LOUISIANA

**Earliest Publication Date:** 20010918



**91) Family number: 23521460** (WO03102229A1)

## HEMATOLOGIC AND RENAL OR CARDIOVASCULAR PHENOTYPES IN RELATION TO THE POLYMORPHISM IN THE BETA-ADDUCIN GENE

**Abstract:** The present invention demonstrates that the polymorphism in the beta-adducin gene, and more specifically the C1797T polymorphism (SNP number: rs4984), is associated with a predisposition for specific health problems. Indeed, it was observed that said SNP polymorphism is associated with both hematologic and renal or cardiovascular conditions. These findings are important given that the lifetime exposure to a genetic effect, albeit mild, can in the long-term cause health problems. Typical health problems associated with an individual's hematologic condition are, for instance, anemia, gallstones and acute or chronic cholecystitis or cholangitis. On the other hand, hypertension often reflects renal or cardiovascular imbalances. Therefore, a first object of the present invention relates to a method to determine the predisposition of an individual to a hematologic condition and/or a renal or cardiovascular condition, wherein said method comprises the analysing of the DNA sequence of the beta-adducin gene in a tissue sample isolated from said individual and determining the polymorphism pattern for the C1797T polymorphic position in the beta-adducin gene. In a more preferred embodiment of the invention the determination of the polymorphism pattern for the C1797T polymorphic position in the beta-adducin gene is used to assess an individual's predisposition to develop anemia and/or hypertension.

**Probable Assignee:** LEUVEN K U RES AND DEV

**Earliest Publication Date:** 20031211

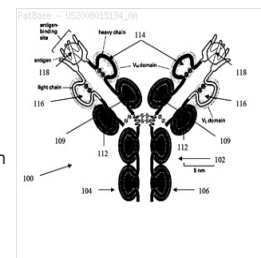
**92) Family number: 34966341** (US2008015194A)

## METHODS AND COMPOSITIONS OF TARGETED DRUG DEVELOPMENT

**Abstract:** Source: US2008015194A The present invention is directed to methods for developing one or more drugs for one or more targeted therapies and compositions derived therefrom. In accordance with one aspect of the present invention, combinatorial chemistry techniques for use with high throughput screening techniques for identifying small molecule affinity and/or activity interactions are avoided by instead utilizing the natural mechanisms of antigen response to effect a massively parallel screening of naturally occurring molecules against an antigen. Other aspects of the invention provide compositions derived therefrom as well as therapeutic methods of use for the compounds.

**Probable Assignee:** ERRICO JOSEPH PETER

**Earliest Publication Date:** 20070802



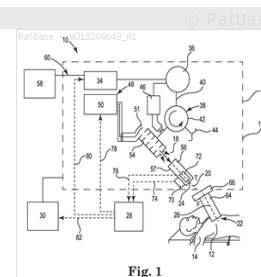
**93) Family number: 71793425 (WO18204649A1)**

## MACHINE VISION ALIGNMENT AND POSITIONING SYSTEM FOR ELECTRON BEAM TREATMENT SYSTEMS

**Abstract:** The present invention provides improved methods and apparatus that use machine vision techniques to rapidly and automatically guide objects into desired docking configurations. The present invention is based at least in part upon using multi-depth, rotationally symmetric targets that are observed from two or more observation perspectives. By taking advantage of parallax effects associated with the multi-depth topography of the target, the apparent positions of target features in captured image information encodes position and angular alignment of the objects relative to each other in three dimensional space. The practice of the present invention provides a fast, accurate, reliable and automatic approach to achieve hard or soft docking configurations in the electron beam therapies as well as to implement real-time gating and tracking during the course of a treatment.

**Probable Assignee:** INTRAOP MEDICAL CORP

**Earliest Publication Date:** 20181108



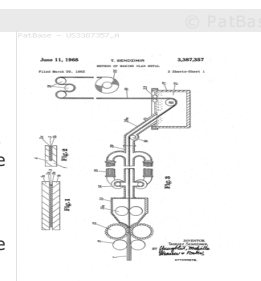
**94) Family number: 826236 (US3387357A)**

## METHOD OF MAKING CLAD METAL

**Abstract:** Source: US3387357A (Claim 1) 1. A process of producing clad structures from a base metal and a cladding metal which does not readily weld with the base metal, which process comprises the steps of forming a composite structure consisting, in the order named, of a first body of the base metal, a first layer of cladding metal, a layer of welding Separator, a second layer of cladding metal and a second body of base metal, the said composite structure constituting a slab, heating the said slab to a hot rolling temperature in non-oxidizing conditions and passing the said slab through a planetary mill and effecting therein a reduction of the order of at least about 20:1 whereby temperature conditions at the mid-section of said slab during the said reduction are maintained at least substantially isothermic and high enough to weld the cladding metal to the base metal, and thereafter separating the rolled composite into two single clad strips.

**Probable Assignee:** SENDZIMIR INC T

**Earliest Publication Date:** 19680611



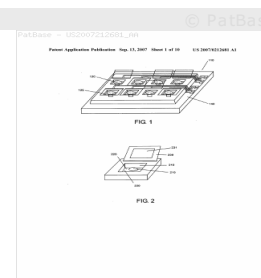
**95) Family number: 36057513 (US2007212681A)**

## CELL CANARIES FOR BIOCHEMICAL PATHOGEN DETECTION

**Abstract:** Source: US2007212681A Methods and compositions for the reliable detection of pathogens are presented. The invention uses cells as novel pathogen detection agents, exploiting pathogen-specific pathways and apoptosis.

**Probable Assignee:** UNITED STATES AIR FORCE

**Earliest Publication Date:** 20070913



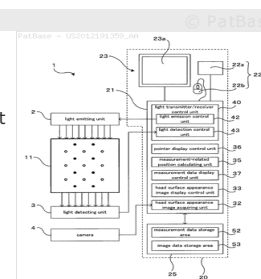
**96) Family number: 48201552 (US2012191359A)**

## ORGANISM OPTICAL MEASUREMENT DEVICE

**Abstract:** Source: US2012191359A An organism optical measurement device having a light transmitter/receiver control unit for obtaining measurement data concerning brain activities and a measurement data display control unit for displaying the measurement data. The organism optical measurement device is further provided with a head surface appearance image acquiring unit for acquiring a head surface appearance image of a subject, a head surface appearance image display control unit for displaying the head surface appearance image, and a measurement-related position calculating unit for calculating the measurement-related position in the head surface appearance image from which the measurement data is obtained when an input device specifies the positions in the head surface appearance image corresponding to the positions of a light transmitting probe and a light receiving probe disposed on the head surface of the subject. The measurement data display control unit displays the measurement data in the measurement-related position in the head surface appearance image.

**Probable Assignee:** SHIMADZU CORP

**Earliest Publication Date:** 20110127



**97) Family number: 65134335 (WO17037323A1)**

## CLINICAL CADAVER SIMULATOR

**Abstract:** The invention relates to a composition comprising a humectant, a first antiseptic, a fixer, a thickener, a colorant and water. The invention also relates to a cadaver comprising a composition according to the invention and/or at least one tag designed to communicate by radiofrequency and to transmit clinical information contained in the tag to a device, as well as to the methods of production and to the uses thereof for medical training, learning or assessment. The invention further relates to simulators and to the uses thereof for medical training, learning or assessment.

**Probable Assignee:** UNIV MURCIA

**Earliest Publication Date:** 20170309

