

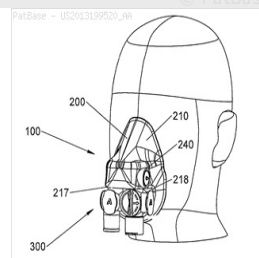
1) Family number: 54419004 (US2013199520A)

MODULAR PULMONARY TREATMENT SYSTEM

Abstract: Source: US2013199520A A patient interface system for delivering a gas to a patient includes a patient interface device that includes at least one inhalation valve and at least one exhalation valve. The system also includes a venturi device that has at least one port for connection to a gas source. The venturi device has at least one primary air entrainment window and at least one secondary air entrainment window which is downstream of the at least one primary air entrainment window. The inhalation valve is disposed between: (1) the main body and (2) the primary and secondary air entrainment windows of the venturi device. At least one of the primary air entrainment window and secondary air entrainment window includes a means for closing the respective window, thereby changing a degree at which the respective window is open and changing a flow rate of the air flowing through the respective window.

Probable Assignee: AEON RESEARCH AND TECHNOLOGY LLC

Earliest Publication Date: 20130801



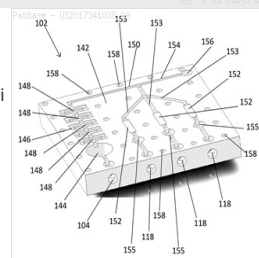
2) Family number: 58288660 (US2017341038A)

APPARATUS FOR DISSOLVING GAS INTO A LIQUID

Abstract: Source: US2017341038A An apparatus (2) for dissolving a gas into a liquid includes a liquid inlet (4) for supplying liquid into the apparatus, a gas inlet (6) for supplying gas into the liquid within the apparatus and a venturi (52) arranged to dissolve the gas into the liquid passing through the venturi. The apparatus also includes an outlet (18) for the liquid and dissolved gas downstream of the venturi. At least part of the liquid inlet, at least part of the gas inlet, at least part of the venturi and at least part of the outlet are formed in an integrally formed piece of material (42).

Probable Assignee: OXY SOLUTIONS AS

Earliest Publication Date: 20160512



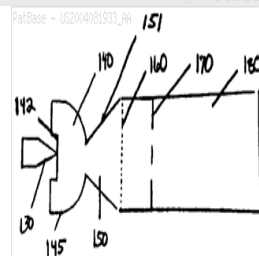
3) Family number: 30516484 (US2004081933A)

GAS MICRO BURNER

Abstract: Source: US2004081933A A micro gas burner is provided that generates a stable, pre-mixed flame that produces little to no soot or unburned hydrocarbons. The gas burner includes a fuel inlet, nozzle, oxygenation chamber with at least one air inlet, a mixing chamber having a frustoconical inner wall, at least one permeable barrier and a flame holder. The gas burner thoroughly mixes fuel and entrained air to form a nearly stoichiometric mixture prior to combustion. The gas burner mixes the fuel and air so thoroughly that it requires a lower fuel flow rate than would otherwise be necessary to produce a stable, pre-mixed flame. The gas burner may include an optional flame tube in which a flame is contained and sequestered from diffusing air.

Probable Assignee: RJ REYNOLDS TOBACCO CO

Earliest Publication Date: 20040429



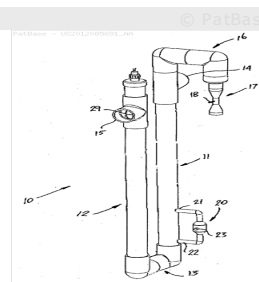
4) Family number: 47808052 (US2012085691A)

FLUID TREATMENT APPARATUS

Abstract: Source: US2012085691A Fluid purification or treatment apparatus (10) for treating or purifying contaminated liquids such as water which includes at least one upright elongated primary treatment chamber (11) having an inlet (14) for fluid to be treated at an upper end of the chamber (11) such that fluid flows downwardly through the chamber (11) and means (20 or 24) for introducing a sterilizing agent such as ozone or ozone enriched air into a lower end of the chamber (11) for bubbling upwardly through liquid flowing downwardly through the chamber (11), means (16) at the upper end of the chamber (11) for removing waste and an ultraviolet lamp (29) for UV treatment of the liquid, the ultraviolet lamp (29) being located in a separate chamber (12) connected to the primary treatment chamber (11) or within the primary treatment chamber (11). A plurality of chambers (11) and (12) may be provided for multiple treatment of the liquid.

Probable Assignee: BOBBAWOBBA LTD

Earliest Publication Date: 20101209

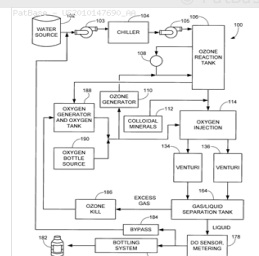


5) Family number: 45441455 (US2010147690A)

OXYGENATION OF A FLUID

Abstract: Source: US2010147690A Method and apparatus for producing an oxygenated fluid. In accordance with various embodiments, a flow of pressurized fluid is established. A flow of oxygen is injected into the flow of pressurized fluid to provide a fluid/oxygen mixture. The mixture is passed through a venturi assembly in the presence of a magnetic field established by an adjacent magnetic assembly. The mixture is next flowed from the venturi assembly to a gas/liquid separation tank, where a liquid component of the mixture is passed downstream with a selected dissolved oxygen content and a gas component is directed back for injection into the pressurized fluid flow.

Probable Assignee: GEIR CORP



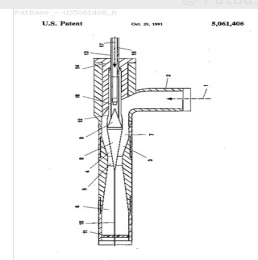
Earliest Publication Date: 20100617
6) Family number: 3256301 (US5061406A)

IN-LINE GAS/LIQUID DISPERSION

Abstract: Source: US5061406A The dispersion of a gas in a liquid is enhanced by the use of an adjustable conical mixer to control the flow of a gas/liquid mixture to a venturi device used to accelerate the mixture to a supersonic velocity with subsequent deacceleration to subsonic velocity to produce sonic shock waves in the mixture.

Probable Assignee: PRAXAIR TECHNOLOGY INC

Earliest Publication Date: 19911029



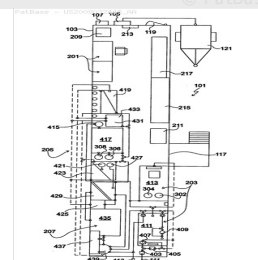
7) Family number: 42901434 (US2009032446A)

MOBILE STATION AND METHODS FOR DIAGNOSING AND MODELING SITE SPECIFIC EFFLUENT TREATMENT FACILITY REQUIREMENTS

Abstract: Source: US2009032446A A mobile station and methods are disclosed for diagnosing and modeling site specific effluent treatment facility requirements to arrive at a treatment regimen and/or proposed commercial plant model idealized for the particular water/site requirements. The station includes a mobile platform having power intake, effluent intake and fluid outflow facilities and first and second suites of selectably actuatable effluent pre-treatment apparatus. An effluent polishing treatment array is housed at the station and includes at least one of nanofiltration, reverse osmosis and ion-exchange stages. A suite of selectively actuatable post-treatment apparatus are housed at the station. Controls are connected at the station for process control, monitoring and data accumulation. A plurality of improved water treatment technologies are also disclosed.

Probable Assignee: ROCKWATER RESOURCE LLC

Earliest Publication Date: 20090205



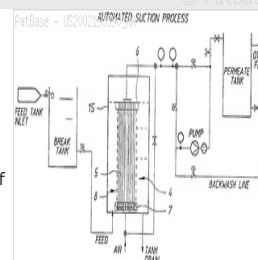
8) Family number: 10932551 (US2002195390A)

SCOURING METHOD

Abstract: Source: US2002195390A A method and apparatus for removing fouling materials from the surface of a plurality of porous membranes (9) arranged in a membrane module (4) by providing, from within the module, by means (10) other than gas passing through the pores of said membranes, gas bubbles in a uniform distribution relative to the porous membrane array such that the bubbles move past the surfaces of the membranes (9) to dislodge fouling materials therefrom. The membranes (9) are arranged in close proximity to one another and mounted to prevent excessive movement therebetween. The bubbles also produce vibration and rubbing together of the membranes to further assist removal of fouling materials.

Probable Assignee: EVOQUA WATER TECHNOLOGIES LLC

Earliest Publication Date: 19980702



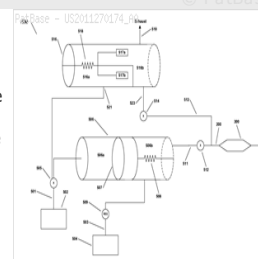
9) Family number: 49889045 (US2011270174A)

REPERFUSION BALLOON INFLATION DEVICE

Abstract: Source: US2011270174A An ischemic postconditioning system and related method comprising a catheter including a plurality of lumens and at least one expandable member with at least one chamber including a moveable plunger and a return mechanism operatively engaged with the plunger. The moveable plunger divides the at least one chamber into first and second volumes. A first pressure source is provided having a first fluid at a first pressure and is disposed in fluid communication with the first volume of the chamber. Further, a second pressure source is provided having a second fluid at a second pressure and is disposed in fluid communication with the second volume of the chamber. Similarly, the at least one expandable member is disposed in fluid communication with the second volume of the chamber. The first fluid supplied by the first pressure source displaces the plunger in a first direction delivering at least a portion of the second fluid into the at least one expandable member. Also, the return mechanism displaces the plunger in a second direction delivering the second fluid from the second pressure source to the second volume of the chamber.

Probable Assignee: ABBOTT CARDIOVASCULAR SYSTEMS INC

Earliest Publication Date: 20111103



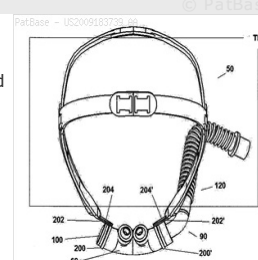
10) Family number: 43541203 (US2009183739A)

METHODS AND DEVICES FOR IMPROVING EFFICACY OF NON-INVASIVE VENTILATION

Abstract: Source: US2009183739A A nasal ventilation interface including a manifold a nasal cushions. The manifold is configured with compound arcuate curves for optimizing fit and performance. The ventilation gas supply hose is attached to only one side of the manifold at any given time, thereby freeing up the opposite side of the user's face to enhance comfort and tolerance while sleeping.

Probable Assignee: BREATHE TECHNOLOGIES INC

Earliest Publication Date: 20090723



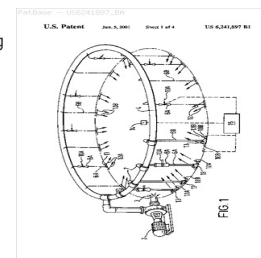
11) Family number: 11547617 (US6241897B)

DISSOLUTION OF GAS

Abstract: Source: US6241897B Liquid in which oxygen-containing gas is to be dissolved is pumped through a main and distributed into faster-moving subsidiary streams. Each subsidiary stream passes through a turbulence-inducing means and air or oxygen is introduced into the turbulent region of alternate streams. The relative proportions of air to oxygen introduction are varied so as economically and efficiently to oxygenate the liquid. The gas-containing liquid passes through nozzles back into the volume of the liquid at sufficient velocity to cause further turbulence, making gas bubbles shear into smaller bubbles and also agitating the body of liquid.

Probable Assignee: LINDE AG

Earliest Publication Date: 20000519



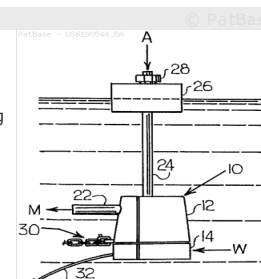
12) Family number: 20684708 (US6190544B)

AERATOR WITH FLOAT CHAMBER AND TURNABLE INLET

Abstract: Source: US6190544B Described is an aerator (10) that includes a venturi chamber (18), a pump for drawing liquid into the venturi chamber from a liquid inlet, an air inlet connected to the venturi chamber for aerating the liquid drawn through the venturi chamber, and an outlet for discharging the aerated liquid. A float chamber (26) is provided for supporting the aerator in a liquid medium, e.g. a fishing lake. Preferably, the liquid inlet and the outlet are on substantially parallel axes, wherein the liquid inlet is turnable between two positions: one position where the liquid inlet takes in liquid in an opposite direction to the outlet flow and the other position where the liquid is drawn in and discharged in the same direction. A control means responsive to sensors for determining biological oxygen demand and chemical oxygen demand is also provided for controlling the speed of the pump.

Probable Assignee: FLUCON HOLDING LTD

Earliest Publication Date: 19981014



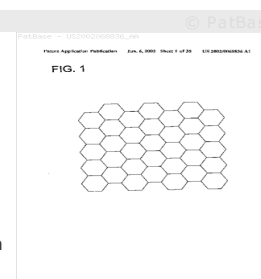
13) Family number: 29993376 (US2002068836A)

REACTION SYSTEMS FOR MAKING N- (PHOSPHONOMETHYL) GLYCINE COMPOUNDS

Abstract: Source: US2002068836A This invention generally relates to liquid phase oxidation processes for making N-(phosphonomethyl)glycine (also known in the agricultural chemical industry as glyphosate) and related compounds. This invention, for example, particularly relates to processes wherein an N-(phosphonomethyl)iminodiacetic acid (NPMIDA) substrate (i.e., N-(phosphonomethyl)iminodiacetic acid, a salt of N-(phosphonomethyl)iminodiacetic acid, or an ester of N-(phosphonomethyl)iminodiacetic acid) is continuously oxidized to form an N-(phosphonomethyl)glycine product (i.e., N-(phosphonomethyl)glycine, a salt of N-(phosphonomethyl)glycine, or an ester of N-(phosphonomethyl)glycine). This invention also, for example, particularly relates to processes wherein an N-(phosphonomethyl)iminodiacetic acid substrate is oxidized to form an N-(phosphonomethyl)glycine product, which, in turn, is crystallized (at least in part) in an adiabatic crystallizer.

Probable Assignee: MONSANTO TECHNOLOGY LLC

Earliest Publication Date: 20011206



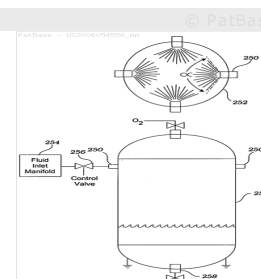
14) Family number: 16058114 (US2006054554A)

METHOD FOR OXYGENATING WASTEWATER

Abstract: Source: US2006054554A A method and apparatus creates gas-enriched fluid that is used to treat wastewater. In one embodiment, the wastewater is withdrawn from a supply of wastewater to be treated, and the wastewater is delivered in an atomized manner to a vessel pressurized with gas to form gas-enriched wastewater. The gas-enriched wastewater is then delivered to the supply of wastewater to be treated.

Probable Assignee: NEXTEC ENVIRONMENTAL INC

Earliest Publication Date: 20020214



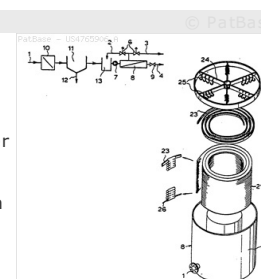
15) Family number: 18914670 (US4765906A)

CROSS-FLOW FILTRATION

Abstract: Source: US4765906A The filter has a spiral of, or parallel, spaced lengths of, double-ply material whose plies are seamed together along spaced, longitudinal seams to provide an array of side-by-side tubes. The filter support material is highly flexible and has a thickness not greater than 1 mm. Due to the tubular formation, the filter support has an uninterrupted filter zone of substantial area relative to the total area of the filter support; during filtration (when the filter support is under the pressure of the feed) the tube walls bulge out and the filter zone is restrained solely by tensile forces in the filter support itself. Substantial movement of the filter support is possible in the direction at right angles to its face when the pressures on either side of the filter support are equal. The filter support has many applications, but one application is when the filter is connected downstream of an aeration vessel with no intervening vessel, the concentrate outlet of the filter being connected to the aeration vessel for sludge return.

Probable Assignee: BBV EPOC LTD

Earliest Publication Date: 19860401



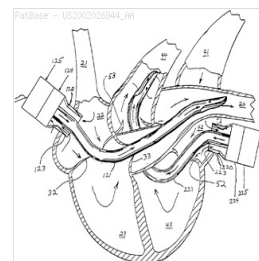
16) Family number: 29382452 (US2002026944A)

PULMONARY AND CIRCULATORY BLOOD FLOW SUPPORT DEVICES AND METHODS FOR HEART SURGERY PROCEDURES

Abstract: Source: US2002026944A Pump and cannula systems inserted through the right side and/or left side of the heart provide protection against collapse of the heart chambers and veins and arteries and provide supplemental blood flow through same to enable beating heart bypass surgery on all vessels of the heart, including lateral and posterior vessels. The invention eliminates the use of cardiopulmonary bypass (CPB) machines. The invention further provides stents adapted for protecting from vein, artery, atrium and/or ventricle collapse during beating heart bypass surgery.

Probable Assignee: MAQUET CARDIOVASCULAR LLC A DELAWARE CORP

Earliest Publication Date: 19990121



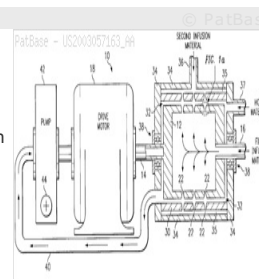
17) Family number: 30303472 (US2003057163A)

DIFFUSER/EMULSIFIER FOR AQUACULTURE APPLICATIONS

Abstract: Source: US2003057163A A method of treatment of water in an aquatic environment. Water is first pumped from a reservoir to a first mixing station. An inert gas is introduced into the pumped water at the first mixing station to provide inert gas saturated water, which inert gas saturated water will displace undesired gasses in the water in the reservoir. The inert gas saturated water is then pumped to a sparging column such that the inert gas and undesired gasses will be released from the inert gas saturated water to provide depleted water. The depleted water is then pumped to a second mixing station, wherein oxygen is introduced into the depleted water to provide oxygen enriched water. The oxygen enriched water is then returned to reservoir.

Probable Assignee: REVALESIO CORP

Earliest Publication Date: 20020514



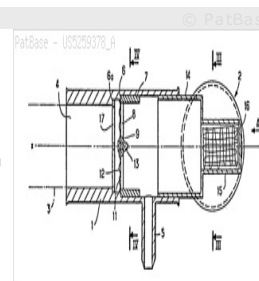
18) Family number: 9445927 (US5259378A)

PHONATION DEVICE FOR TRACHEOTOMY PATIENTS INCLUDING A CHECK VALVE AND FILTERING MEANS

Abstract: Source: US5259378A PCT No. PCT/FR90/00382 Sec. 371 Date Apr. 5, 1991 Sec. 102(e) Date Apr. 5, 1991 PCT Filed Jun. 1, 1990 PCT Pub. No. WO90/14854 PCT Pub. Date Dec. 13, 1990.A phonation and respiratory aid device for a tracheotomy patient comprising a tracheotomy cannula, a non-return valve for permitting inhalation flow only, the valve being distorted both axially and radially due to inhalation, a connecting means for connection to a source of fluid from a forced oxygenation device, the connecting means being upstream of the valve in the inhalation flow direction, and two filtering elements also upstream of the valve, the filtering elements including a Venturi tube.

Probable Assignee: FINECOR

Earliest Publication Date: 19901207



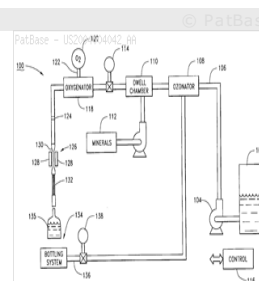
19) Family number: 29924572 (US2004004042A)

APPARATUS AND METHOD FOR INCREASING OXYGEN LEVELS IN A LIQUID

Abstract: Source: US2004004042A Apparatus and method for increasing dissolved oxygen levels in a liquid. An oxygenation system (100) includes a liquid source (102) from which liquid is introduced into a piping network (106) by a pump (104). Colloidal minerals are injected into the liquid in a dwell chamber (110). The mixture of liquid and minerals flows into an oxygenator (118) where gaseous oxygen is injected into the liquid. The resulting two-phase flow stream is accelerated to supersonic speeds through a linear flow accelerator (126) comprising a flat Venturi (130) and electromagnets (128) positioned adjacent the flat Venturi. The electromagnets generate an electromagnetic field to exert a force on the two-phase mixture in the direction of the flow. The flow stream then passes through a laminar flow grid (132) to remove turbulence, after which the oxygenated liquid is bottled at a bottling system (134).

Probable Assignee: OXY SOLUTIONS AS

Earliest Publication Date: 20020404



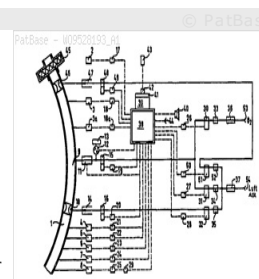
20) Family number: 17177289 (WO9528193A1)

RESPIRATOR, IN PARTICULAR FOR THE TREATMENT OF RESPIRATORY INSUFFICIENCY, AND A METHOD OF OPERATING SAID RESPIRATOR

Abstract: The proposed respirator comprises a respiration channel (1) which can connect with the patient, high-pressure gas inlet points (53, 54) for respiration gases, a control unit (38) for setting respiration parameters and a device (15, 19) for regulating the desired dose of the respiration gases. The proposed respirator is characterised by the fact that the respiration channel (1) of a Venturi tube has a region (10) of variable cross section or a variable nozzle below an injector nozzle (9). The Venturi tube (1) is bent in such a way that the inner cylinder of the variable nozzle (10) is substantially parallel to the outflow direction of the injector nozzle (9). The variable nozzle (10) is provided with a control unit for adjusting the nozzle cross section. A device in the form of a variable cross section screen (46) is mounted above the injector nozzle (9) to restrict the volume of ambient air drawn in. A sensor (5) for measuring the oxygen concentration in the expiratory gases is provided in the Venturi tube for oxygenation monitoring. The proportion of oxygen in the respiration gases is regulated by means of the screen (46) and by the relative opening times of two solenoid valves (30, 31). The respirator can be used for a variety of flow patterns and respirator techniques and combinations thereof.

Probable Assignee: BAUER HERIBERT

Earliest Publication Date: 19951026



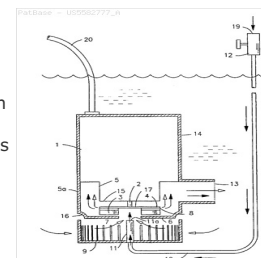
21) Family number: 8732929 (US5582777A)

LIVE WELL AERATOR AND METHOD FOR AERATION

Abstract: Source: US5582777A An aerator designed for aeration of a live bait well and comprising a centrifugal type pump comprising an impeller and an impeller casing having an inlet and an outlet, wherein the inlet is in communication with water from the bait well and also with air via an air conduit. The air conduit is provided with metering means for metering the amount of air entering the impeller and for optimizing the mincing of air in the fluid (which is a different technical phenomena from simply pumping an air/water mixture). The bubbles produced in accordance with the present invention are so fine as to give the water a fogged appearance. The unusually high level of oxygenation makes it possible for the first time to pack two to four times as many bait fish into a live well as had previously been considered possible.

Probable Assignee: KEEPALIVE INC

Earliest Publication Date: 19961107



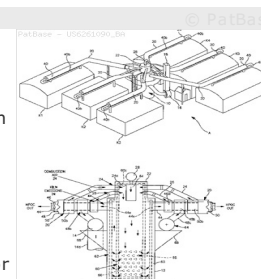
22) Family number: 44015087 (US6261090B)

GAS COMBUSTOR AND COMBUSTOR SYSTEM FOR COMBUSTION OF SMOKE, OFF GASES AND OTHER EMISSIONS

Abstract: Source: US6261090B A combustor system provides high temperature, high-dwell combustion of emission products, as from charcoal kilns, with inner and outer combustion chambers. Multiple inlets receive emission products from multiple heat exchangers omnidirectionally extending for continuous heat exchange connection between the combustor and emission sources. Hot products of combustion are delivered to each heat exchanger, each with multiple ducts in mutual heat exchange relationship including at least a hot products of combustion duct for receiving at the proximal end hot products of combustion from an outlet of the outer chamber, and conveying the hot products of combustion to the distal end at a respective emission source, an emissions inlet duct for receiving emission products at the distal end from the emission source, and a return products of combustion duct for receiving at the distal end the hot products of combustion and returning them to the combustor. The heat exchanger arrangement is such that the hot products of combustion duct and the return products of combustion duct cause heating of the emission products by the heat exchange relationship. A combustion air intake passage provides intake of combustion air for each heat exchanger, which mixes in the combustion chamber with the emission products. Combustion products pass cyclonically from the inner chamber and then by reversal of direction, i.e., from downward to upward, through a concentric outer chamber, to create hot products of combustion which exit into the heat exchangers.

Probable Assignee: INDEPENDENT STAVE CO

Earliest Publication Date: 20010208



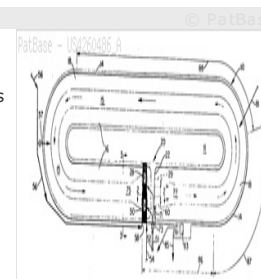
23) Family number: 28851425 (US4260486A)

FLOW-CONTROL APPARATUS AND PROCESS FOR AN OXIDATION DITCH

Abstract: Source: US4260486A This flow-control apparatus for an oxidation ditch comprises a barrier which divides a channel of an oxidation ditch into an intake channel and a discharge channel, at least one submerged turbine which pumps mixed liquor from the intake channel, and at least one discharge duct which connects each turbine to the discharge channel and passes beneath the barrier. Compressed air is supplied to each turbine and/or to each discharge duct. Activated sludge is fed to the anoxic portion of the ditch and/or to each turbine which provides complete mix and propels the mixed liquor in plug-type flow through the channels of the oxidation ditch. By selectively and independently controlling turbine speed and amount and/or feed location of compressed air, the timed aerobic/anoxic ratio for the ditch can be controlled in accordance with independent parameters, such as seasonal temperatures.

Probable Assignee: REID J H

Earliest Publication Date: 19790517



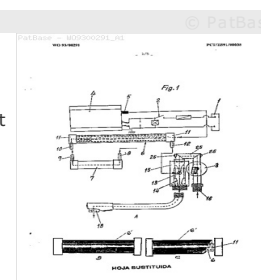
24) Family number: 29530640 (WO9300291A1)

OZONIZED WATER GENERATOR FOR STERILIZATION AND OZONOTHERAPY

Abstract: The ozonized water generator for sterilization and ozonotherapy is comprised of a generator, a high voltage current tap, a transformer, the generator being mounted between two caps (11), one of them with a conduit for the entry of air for the dryer (7), the ozone gas coming out of the conduit at the opposite cap, the ozone being conducted to the inlet point through the ventury accelerator, which receives the water from the conduit, with pressure controller, of automatic actuation or manually actuated electrovalve of the switch, passing through the bridge conduit, in order to obtain the water-ozone mixture, within the accelerator, the latter being protected by a filled external tube in order to maintain its permeability, a triatomic mixture of water and ozone being produced within the accelerator, breaking molecularly the water in order to obtain its homogeneous fusion. The generator is housed in the cylindrical receptacle in order to avoid contacting the high voltage connections.

Probable Assignee: SAITRA S A

Earliest Publication Date: 19930107



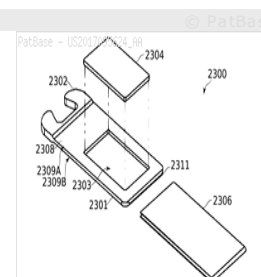
25) Family number: 61321689 (US2017095624A)

DRUG DOSE CARTRIDGE FOR AN INHALER DEVICE

Abstract: Source: US2017095624A Devices and methods are described for preparing, managing, and/or administering metered doses of substances for vaporized administration. In some embodiments, dose cartridges comprising at least one botanical substance include a heating element integrated into the cartridge in close contact with the botanical substance. In some embodiments, cartridge-mounted doses are stored in a magazine, optionally in carousel form, before use. Transport of a cartridge from a magazine to an electrically operated vaporizing chamber which activates the heating element is provided by a mechanical pickup means.

Probable Assignee: SYQE MEDICAL LTD

Earliest Publication Date: 20160107



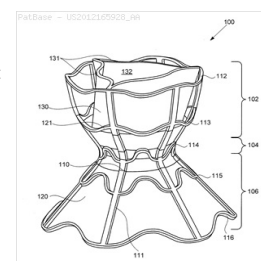
26) Family number: 51342419 (US2012165928A)

DEVICES FOR REDUCING LEFT ATRIAL PRESSURE, AND METHODS OF MAKING AND USING SAME

Abstract: Source: US2012165928A A device for regulating blood pressure between a patient's left atrium and right atrium comprises an hourglass-shaped stent comprising a neck region and first and second flared end regions, the neck region disposed between the first and second end regions and configured to engage the fossa ovalis of the patient's atrial septum; and a one-way tissue valve coupled to the first flared end region and configured to shunt blood from the left atrium to the right atrium when blood pressure in the left atrium exceeds blood pressure in the right atrium. The inventive devices may reduce left atrial pressure and left ventricular end diastolic pressure, and may increase cardiac output, increase ejection fraction, relieve pulmonary congestion, and lower pulmonary artery pressure, among other benefits. The inventive devices may be used, for example, to treat subjects having heart failure, pulmonary congestion, or myocardial infarction, among other pathologies.

Probable Assignee: V WAVE LTD

Earliest Publication Date: 20120628



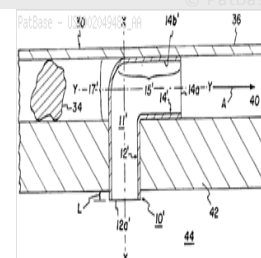
27) Family number: 28234152 (US2002049486A)

METHOD AND APPARATUS FOR PERFORMING CORONARY ARTERY BYPASS SURGERY

Abstract: Source: US2002049486A A method and apparatus for performing coronary artery bypass surgery establishes a channel leading directly from a chamber of a heart into a coronary artery with said channel retained open during both diastole and systole. The coronary artery bypass procedure may be performed with or without cardiopulmonary bypass.

Probable Assignee: HORIZON TECHNOLOGY FUNDING CO LLC

Earliest Publication Date: 19980219



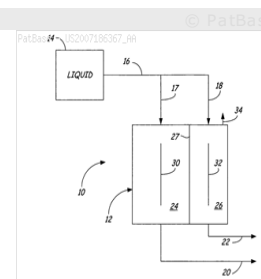
28) Family number: 35071794 (US2007186367A)

MOBILE SURFACE CLEANER HAVING A SPARGING DEVICE

Abstract: Source: US2007186367A A mobile surface cleaner is provided, which includes a mobile body configured to travel over a surface, a source of a liquid, a liquid dispenser, a flow path from the liquid source to the liquid dispenser, and an electrolyzing sparging device in fluid communication with the flow path.

Probable Assignee: TENNANT CO

Earliest Publication Date: 20070816



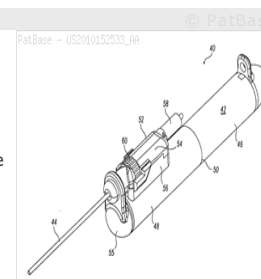
29) Family number: 45443432 (US2010152533A)

TISSUE REMOVAL DEVICE FOR USE WITH IMAGING DEVICES IN NEUROSURGICAL AND SPINAL SURGERY APPLICATIONS

Abstract: Source: US2010152533A A tissue cutting device that is especially suited for neurosurgical applications is disclosed and described. The device includes a handpiece and an outer cannula in which a reciprocating inner cannula is disposed. The inner cannula includes a hinge between a body section and a cutting section that allows the cutting section to pivot when the inner cannula reciprocates within the outer cannula. A tissue collector is also provided and is in fluid communication with the lumen of the inner cannula. The tissue cutting device may be used with imaging device such as microscopes and endoscopes during neurosurgery procedures.

Probable Assignee: NICO CORP

Earliest Publication Date: 20100617



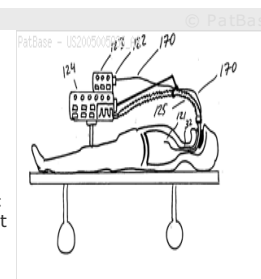
30) Family number: 31459502 (US2005005936A)

METHODS, SYSTEMS AND DEVICES FOR IMPROVING VENTILATION IN A LUNG AREA

Abstract: Source: US2005005936A Methods, systems and devices are described for new modes of ventilation in which specific lung areas are ventilated with an indwelling trans-tracheobronchial catheter for the purpose of improving ventilation and reducing hyperinflation in that specific lung area, and for redistributing inspired air to other healthier lung areas, for treating respiratory disorders such as COPD, ARDS, SARS, CF, and TB. Trans-Tracheobronchial Segmental Ventilation (TTSV) is performed on either a naturally breathing or a mechanical ventilated patient by placing a uniquely configured indwelling catheter into a bronchus of a poorly ventilated specific lung area and providing direct ventilation to that area. The catheter can be left in place for extended periods without clinician attendance or vigilance. Ventilation includes delivery of respiratory gases, therapeutic gases or agents and evacuation of stagnant gases, mixed gases or waste fluids. Typically the catheter's distal tip is anchored without occluding the bronchus but optionally may intermittently or continuously occlude the bronchus. TTSV is optionally performed by insufflation only of the area, or by application of vacuum to the area, can include elevating or reducing the pressure in the targeted area to facilitate stagnant gas removal, or can include blocking the area to divert inspired gas to better functioning areas.

Probable Assignee: BREATHE TECHNOLOGIES INC

Earliest Publication Date: 20050113



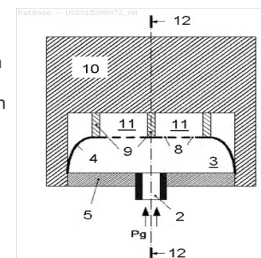
31) Family number: 55760720 (US2015298072A)

DEVICE AND METHOD FOR CROSS-FLOW BUBBLE GENERATION

Abstract: Source: US2015298072A Device and method for cross-flow bubble generation comprising a first conduit for the admission of liquids (1) through which an impulsion liquid is supplied at a pressure PO and a second supply conduit for the fluid to be dispersed in the form of drops or bubbles (2), which supplies the fluid to be dispersed at a pressure PG in a pressure chamber (3) and where, between the first conduit for liquid supply (1) and the pressure chamber (3), a diaphragm (4) is placed having injection orifices (8) for interconnecting the fluid to be dispersed with the liquid flowing along the first conduit (1).

Probable Assignee: UNIVERSIDAD DE SEVILLA

Earliest Publication Date: 20140213



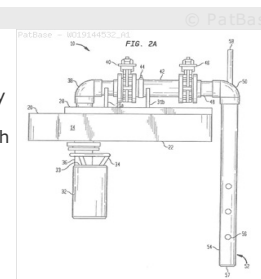
32) Family number: 75294417 (WO19144532A1)

OXYGEN DISSOLVING APPARATUS FOR PONDS

Abstract: An apparatus for oxygenating a body of water includes a venturi tube supported along a path at the body of water, the venturi tube receiving pure oxygen for mixing with water from the body of water for providing an oxygenated mixture; a pump for delivering the water to the venturi tube; and a manifold in fluid communication with the venturi tube and extending into the body of water for delivering the oxygenated mixture as a propelling force into the body of water. A related method is also provided.

Probable Assignee: LINDE AG

Earliest Publication Date: 20190801



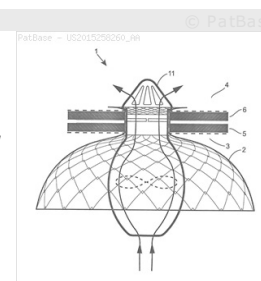
33) Family number: 57221002 (US2015258260A)

PERCUTANEOUS SYSTEM, DEVICES AND METHODS

Abstract: Source: US2015258260A A percutaneous system, method and related devices are provided. More particularly, a percutaneous system comprises one or more of an intracorporeal connector for fluid communication between two anatomical compartments, through an anatomical wall, an intracorporeal device for regulating the flow of fluid between the two anatomical compartments, and a percutaneous insertion device.

Probable Assignee: NUHEART AS

Earliest Publication Date: 20150917



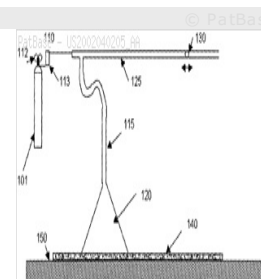
34) Family number: 30047766 (US2002040205A)

METHOD AND APPARATUS FOR TRANSCUTANEOUS INFUSION OF CARBON DIOXIDE FOR LOCAL RELIEF OF PAIN AND OTHER AILMENTS

Abstract: Source: US2002040205A The invention relates to methods and devices for transcutaneous and transmucosal application of carbon dioxide in the form of a gas and in the form of a capnic solution (such as carbonated water) for the relief of pain, including musculoskeletal disorders, neuralgias, rhinitis and other ailments. Gaseous carbon dioxide is applied to the skin for at least three minutes, and the capnic solution may be held on the skin for at least three minutes, which provides relief of symptoms. The capnic solution may also be sprayed onto mucous membranes such as the nose for relief of symptoms such as allergic rhinitis.

Probable Assignee: CAPNIA INC

Earliest Publication Date: 20010118



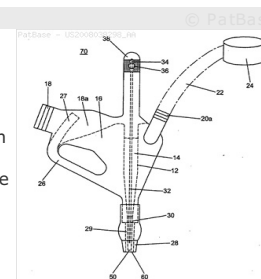
35) Family number: 32838961 (US2008038298A)

MEDICAMENT AND SYSTEM FOR THE PERCUTANEOUS PREPARATION OF MEDICAMENTS

Abstract: Source: US2008038298A The invention relates to an application system provided with a micro emulsion (14) containing a medication, said micro emulsion being contained in a medicament reservoir (12), a first gas connection (18) to which oxygen can be guided, a nozzle head (28) comprising recesses (29) which are arranged on the end of the medicament reservoir (12) and an atomising nozzle (30) which is arranged in the nozzle head (28). Pressure exerted on the microemulsion for atomising as well as the microemulsion emerging therefrom atomises the oxygen into drops by means of a Venturi arrangement in the atomising nozzle (30).

Probable Assignee: MEDDROP TECHNOLOGY AG

Earliest Publication Date: 20060420



36) Family number: 31799076 (US2005075587A)

METHOD AND DEVICE FOR SUBAQUEOUS ULTRASONIC IRRADIATION OF LIVING TISSUE

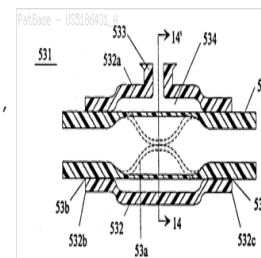
[illegible]

Earliest Publication Date: 20050407

Abstract: Source: US5186431A The invention is a pressure sensitive valve that in different forms can be used to provide: an adjustable resistance to flow, adjustable positive or negative pressure relief, negative pressure isolation, isolation of pressure sensitive devices (e.g. pressure monitors) from blood and controlled recirculation between the inlet and outlet of pumps, particularly extracorporeal circulation. The construction of the valve is especially advantageous for extracorporeal circuits because the valve is made from one continuous length of tubing, thereby providing a valve that is more reliable, safer, and has fewer parts. A simple, compact and disposable system to adjust, regulate, and indicate negative or positive pressure applied to the valve is also described.

Probable Assignee: TAMARI YEHUDA

Earliest Publication Date: 19930216



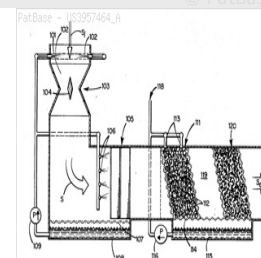
42) Family number: 1324402 (US3957464A)

PROCESS FOR REMOVING PARTICULATES FROM A GAS

Abstract: Source: US3957464A An essentially adiabatic process for the crossflow scrubbing of particulate material from a gas is disclosed in which the scrubbing liquid is recirculated without cooling. By a combination of a minimum gas temperature of about 150 DEG F., saturation conditions, and a certain amount of turbulence, it has been found possible to achieve particulate nucleation prior to passage of the gas through the scrubber units which, in turn, makes it possible to recycle the scrubbing liquid while maintaining it at a substantially constant temperature.

Probable Assignee: TELLER ENVIRONMENTAL SYSTEMS

Earliest Publication Date: 19751026



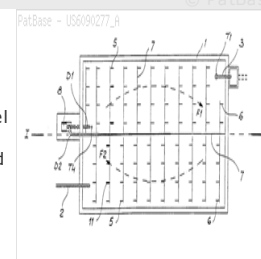
43) Family number: 30151781 (US6090277A)

REACTOR FOR THE DEPURATION OF POLLUTED WASTE WATERS

Abstract: Source: US6090277A PCT No. PCT/EP97/02309 Sec. 371 Date Jan. 20, 1999 Sec. 102(e) Date Jan. 20, 1999 PCT Filed May 6, 1997 PCT Pub. No. WO97/49640 PCT Pub. Date Dec. 31, 1997 Polluted waste waters are introduced into a tank (1, 100) in which a number of cavitation oxygenizers (5, 6, 11) are installed close and parallel to the bottom of the tank and divided into three types, one (5) that expels re-circulated water and air, a second (6) that expels water, air and sludge and foam sucked in from the upper region of the tank, both these two types suited to causing turbulence (F1, F2-F3, F4) of the polluted water within the tank, and a third (11) suited to cause a further turbulent motion of the polluted water.

Probable Assignee: GB ODOBEZ SRL

Earliest Publication Date: 19971229



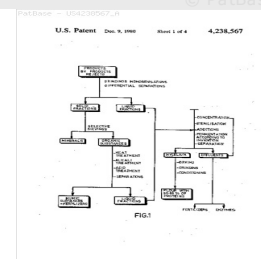
44) Family number: 4198144 (US4238567A)

PROCESS FOR PRODUCING FOOD PROTEINS FROM TRICHODERMA ALBUM

Abstract: Source: US4238567A The process consists of cultivating, at a temperature below 28 DEG C., the fungus Trichoderma Album in liquid nutrient media, the pH of said media being kept at a value comprised between about 3.7 and 4.8, the dissolved oxygen content being from about 6 to 10 mg/l. The cultivation is carried out with non-traumatizing, efficient stirring and under conditions such that multiplication is practically nil.

Probable Assignee: AGRONOMIQUE INST NAT RECH

Earliest Publication Date: 19781205



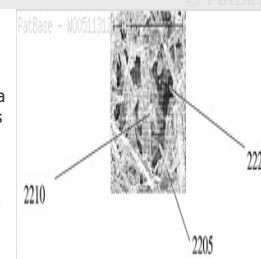
45) Family number: 32453159 (WO05113126A1)

NONWOVEN COMPOSITES AND RELATED PRODUCTS AND METHODS

Abstract: The present invention in certain embodiments is directed to a catalytic substrate suitable for use in a number of applications, including as a substrate in a catalytic converter. Another aspect of the present invention is a filtering substrate suitable for use in a number of applications, including as a substrate in a particulate filter, such as a diesel particulate filter (DPF), or diesel particulate trap (DPT). The invention also provides an improved substrate for removing and/or eliminating pollutants from the exhaust of combustion engines. The catalytic substrate and filtering substrate provide, in certain embodiments, improvements in removing pollutants from an exhaust gas. The improvements include one or more of the following: faster light-off period, depth filtration of PM, less backpressure, lower probability of clogging, ability to be placed in multiple locations in the exhaust system including the manifold or the head itself, high probability of catalytic reaction, high conversion ratios of NOx, HC, and CO, a faster burnoff of PM, minimization of catalyst material use, and the like.

Probable Assignee: GEO2 TECHNOLOGIES INC

Earliest Publication Date: 20051201



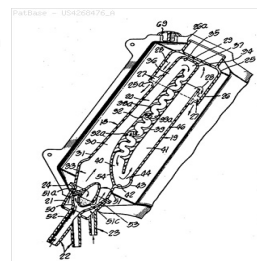
46) Family number: 4226271 (US4268476A)

BLOOD OXYGENATOR

Abstract: Source: US4268476A There is disclosed a blood oxygenating device having an oxygenating chamber and a heat exchange chamber. The oxygenating chamber consists of a bubbler chamber and a mixing chamber. Oxygen is introduced into the bubbler chamber through a porous diffusion means situated near the inlet of the bubbler chamber. Bubbles pass from the bubbler chamber into a mixing chamber which is provided with a plurality of secondary flow-producing deflectors to promote secondary flow of blood bubbles passing therethrough. The secondary flow results in a highly efficient oxygen-carbon dioxide transfer. The blood bubbles are then passed through a heat exchange chamber and a defoaming means prior to exiting the oxygenating device.

Probable Assignee: BAXTER INT INC

Earliest Publication Date: 19761216



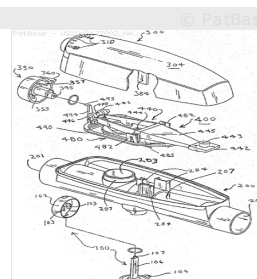
47) Family number: 13345682 (US2003127092A)

POSITIVE EXPIRATORY PRESSURE DEVICE WITH BYPASS

Abstract: Source: US2003127092A An oscillatory positive expiratory pressure respiratory therapy device which may be incorporated into the expiratory limb of a ventilator circuit. Accordingly, this device allows a patient on a ventilator to be subjected to positive expiratory pressure (PEP) therapy combined with airway oscillation and intermittent air flow acceleration while allowing the oscillatory PEP respiratory therapy treatment to be bypassed without interrupting the integrity of the ventilating circuit once the device has been installed in the ventilator circuit. In this manner, all expiratory air in the ventilator circuit is accounted for, the expiratory air volume may be accurately monitored and the ventilator circuit does not have to be broken for insertion or removal of the device.

Probable Assignee: DHD HEALTHCARE CORP

Earliest Publication Date: 20010530



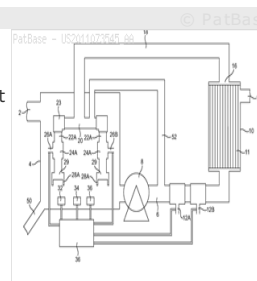
48) Family number: 33179986 (US2011073545A)

TREATMENT OF AQUEOUS LIQUID

Abstract: Source: US2011073545A Aqueous liquid having an oxygen demand flows into a treatment vessel where it is treated by suspended aerobic bacterial solids in the presence of dissolved oxygen. A pressurised flow of the treated liquid passes to a clarifying membrane separator effective to separate the flow into a discharge stream of clear liquid and a pressurised recycle stream concentrated in the aerobic bacterial solids. A first oxidic gas is employed to scour the membranes and is conveyed away from the membrane separator in the pressurised recycle stream. The pressurised recycle stream is returned to under the surface of the liquid in the treatment vessel. A second oxidic gas is introduced either into the pressurised recycle stream or into a further pressurised stream of aqueous liquid flowing into the same volume. The rate of introduction of the oxidic gases is controlled with reference to the pH and dissolved oxygen concentration of the liquid in the vessel.

Probable Assignee: LINDE AG

Earliest Publication Date: 20071206



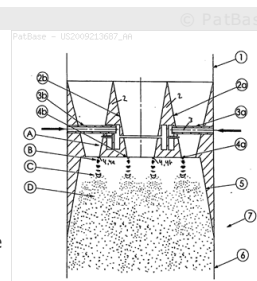
49) Family number: 32811326 (US2009213687A)

MULTI FLUID INJECTION MIXER

Abstract: Source: US2009213687A Multi Fluid Injection Mixer for injecting gas and/or liquid as admixture fluid to gas and/or liquid flowing through a pipe, and homogeneously mixing the admixture fluids and pipe fluids, said injection mixer constituting a section of the pipe, distinguished in that the injection mixer is comprising: at least one contacting element having at least one contacting surface facing and deflecting some of the pipe fluid flow, forming a constriction to the internal cross-section of the pipe, such that the pipe fluid flow is accelerated and fluid flowing in the vicinity of said surface is deflected to flow along the surface until the surface end over a sharp edge at the point of maximum constriction and flow velocity, at least one injection element arranged with a fluid connection to said surface of the contacting element, such that admixture fluid can be injected onto said surface and along said surface be entrained by the flowing pipe fluid over the sharp edge, but for a contacting element formed as a contracting pipe section at least two injection elements are provided.

Probable Assignee: PRODUCED WATER ABSORBENTS INC

Earliest Publication Date: 20060403



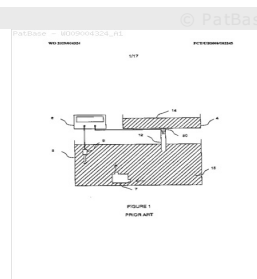
50) Family number: 36003222 (WO09004324A1)

IMPROVEMENTS RELATING TO THE METERED DISPENSATION OF FLUID

Abstract: A system for metered dispensation of fluid, comprising: a conduit for receiving fluid from a reservoir, the conduit having a downstream section for dispensing fluid through a downstream end of the conduit; an airflow inlet upstream of the downstream section of the conduit; and an airflow controller for controlling airflow through the airflow inlet, wherein the airflow controller is arranged to admit air to the conduit through the airflow inlet, the admitted air defining an upstream end of a slug of fluid created in use in the downstream section of the conduit.

Probable Assignee: GOKAS PHILIP

Earliest Publication Date: 20081231



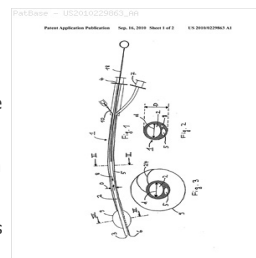
51) Family number: 42154379 (US2010229863A)

JET VENTILATION CATHETER, IN PARTICULAR FOR VENTILATING A PATIENT

Abstract: Source: US2010229863A The present invention relates to a catheter for ventilating a patient, with a ventilation channel for alternately delivering and removing air and/or oxygen to and from the patient's airways, the catheter having a maximum external diameter of at most 6 mm, mm, and the ventilation channel having an open end, and a connector end for connection to a gas flow reversing element. According to the invention, the catheter is provided with means or elements for measuring the pressure outside the ventilation channel near the open end. The catheter preferably has a pressure measurement channel, with an open measurement end near the open end of the ventilation channel, and a measurement connector piece for connecting a pressure display device. Of particular advantage is a catheter with an expansion body (cuff) that is fluidically connected to a supply channel through which the expansion body can be increased or reduced in size by means of a fluid. The jet ventilation catheter according to the invention permits a novel ventilation principle that can be regarded as a bridge between classical jet ventilation and conventional controlled ventilation and that opens up possibilities for new and improved interventions in the airways.

Probable Assignee: DOLPHYS TECHNOLOGIES BV

Earliest Publication Date: 20080918



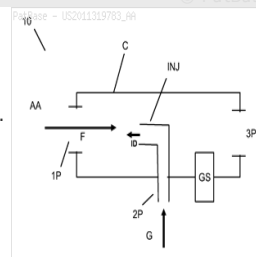
52) Family number: 42780094 (US2011319783A)

GAS MIXING DEVICE FOR AN AIR-WAY MANAGEMENT SYSTEM

Abstract: Source: US2011319783A The invention relates to a gas mixing device (10) for an air-way management system. The device has an elongated chamber (C) with a first gas inlet port (1P) being arranged for intake of atmospheric air (AA) into the chamber, the first inlet port being positioned at an end section of the internal chamber. Further, a second gas inlet port (2P) is arranged for intake of a gas (G) into the chamber (C), the second gas inlet port having an injector (INJ) from which the gas can exit into the chamber with an injection direction (ID), the injection direction having a projection (ID_proj) being oppositely directed relative to an in-flow direction (F) of the first gas inlet port (1P) so as to provide mixing of the atmospheric air and the gas. Opposite the first gas inlet port (1P) there is a breathing port (3P) for allowing an individual to breathe through the gas mixing device. The device is beneficial in that the breathing resistance is relatively low while the device simultaneously provides a sufficient gas mixing of the gasses to be mixed. Additionally, the invention provides a relatively compact gas mixing device which facilitates easy integration into e.g. a respiration mask for measurements of respiratory parameter of an individual e.g. a patient.

Probable Assignee: MERMAID CARE A S

Earliest Publication Date: 20090108



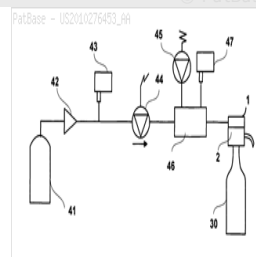
53) Family number: 43354568 (US2010276453A)

APPARATUS FOR SERVING WINE OR OTHER OXYGEN-AFFECTED LIQUID FROM A BOTTLE

Abstract: Source: US2010276453A A serving apparatus without oxygen, from an open bottle, of a liquid that can be affected by oxygen, in particular wine, by insufflating inert pressurized gas in said bottle, comprising a fixed engagement member (1) and a releasable fastening member (2) fixed to a bottle (30). A pressurized gas supply without oxygen is provided, for example nitrogen or argon, having for example a cylinder (41) connected to a gas supply machine (40). By the gas supply machine (40) the pressurized gas can be distributed and supplied in the bottles (30), flowing through a pressure reducing valve (42), a pressure switch (43) for indication of the lack of gas in the cylinder (41), a solenoid valve (44) adapted to delivery gas on driving the pressure switch (47), a safety valve (45) adapted to avoid that a maximum threshold value is exceeded, a gas tank (46) that prevents a solenoid valve (44) from opening continuously, a pressure switch (47) adapted to keep the pressure in the bottle (30) fixed.

Probable Assignee: WINEFIT SRL

Earliest Publication Date: 20090604



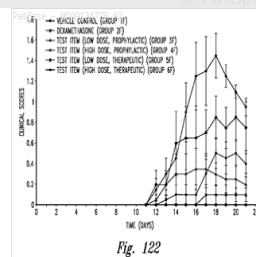
54) Family number: 61376724 (WO09134728A2)

COMPOSITIONS AND METHODS FOR TREATING MULTIPLE SCLEROSIS

Abstract: Provided are electrokinetically-altered fluids (gas-enriched electrokinetic fluids) comprising an ionic aqueous solution of charge-stabilized oxygen-containing nanostructures in an amount sufficient to provide modulation of at least one of cellular membrane potential and cellular membrane conductivity, and therapeutic compositions and methods for use in treating inflammatory neurodegenerative condition or disease or at least one symptom thereof. The electrokinetically-altered fluids or therapeutic compositions and methods include electrokinetically-altered ionic aqueous fluids optionally in combination with other therapeutic agents. Particular aspects provide for regulating or modulating intracellular signal transduction associated with said inflammatory responses by modulation of at least one of cellular membranes, membrane potential, membrane proteins such as membrane receptors, including but not limited to G-Protein Coupled Receptors (GPCR), and intercellular junctions (e.g., tight junctions, gap junctions, zona adherens and desmosomes). Other embodiments include particular routes of administration or formulations for the electrokinetically-altered fluids (e.g., electrokinetically-altered gas-enriched fluids and solutions) and therapeutic compositions.

Probable Assignee: REVALESIO CORP

Earliest Publication Date: 20091105



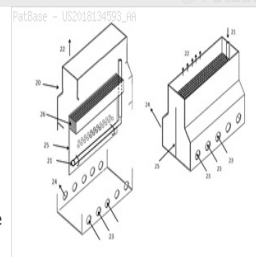
55) Family number: 63916101 (US2018134593A)

EQUIPMENT AND PROCESS FOR MASSIVE DISSOLUTION OF GASES IN LIQUIDS

Abstract: Source: US2018134593A Equipment for massive dissolution of gases in liquids via the formation of thin liquid films and the exchange of gases with said films. The equipment provides movement of liquids over great distances via the upward movement of bubbles therein. The equipment can alter the direction of the flow of water, said aspect being useful for the recovery of liquid bodies. In addition to providing a high rate of dissolution of gases in liquids, the equipment is very energy-efficient and has a very large volumetric capacity, thereby being useful for the preservation and/or recovery of liquid bodies, being able, in certain applications, to operate in an energy-autonomous manner. The equipment can be used in situations where energy-efficient dissolution of gases in liquids is desired, such as the preservation and/or recovery of liquid bodies; processes for preserving and/or improving the productivity of aquaculture systems; wastewater treatment systems; and the fixation of gases.

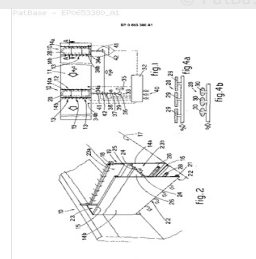
Probable Assignee: BIOTECAM ASSESSORIA E DESENVOLVIMENTO DE TECNOLOGIA AMBIENTAL LTDA

Earliest Publication Date: 20161103



OXYGENATION DEVICE FOR WATER TREATMENT PLANTS.

Abstract: Source: EP0653380A1 Oxygenation device for water treatment plants, which cooperates with, and within, aeration tanks (11) and is positioned substantially vertically and comprises a first upper chamber (23a) and at least one second lower chamber (23b), the first chamber (23a) and second chamber (23b) being separated by partition means (24-26) which define an acceleration cleft (25), the first upper chamber (23a) comprising at its upper upstream end an adjustable weir (18) and at its upper downstream end a deviation wall (15), the second lower chamber (23b) comprising at its lower upstream side a closure wall (14a) and at its lower downstream end at least one passage-way (22), the lower part of the second lower chamber (23b) including means to deliver and diffuse air/oxygen (28). System to operate and control a water treatment plant, which comprises an operating, controlling and programming assembly that governs at least the means controlling the delivery of oxygen.

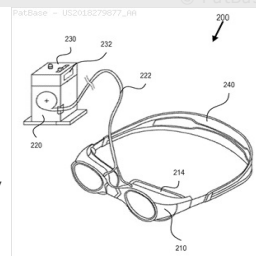


Probable Assignee: BATTIGELLI LUCILLA

Earliest Publication Date: 19950513

EYE-RELATED INTRABODY PRESSURE IDENTIFICATION AND MODIFICATION

Abstract: Source: US2018279877A An apparatus for at least one of diagnosing or treating an eye condition can include a goggle enclosure, sized and shaped to be seated on an eye socket of an eye to provide one or more cavities within the enclosure that extend about an entire exposed anterior portion of the eye, a pump, in fluidic communication with the one or more cavities to apply a fluid pressure to the one or more cavities, the pump configured to adjust a fluid pressure within the one or more cavities of the goggle enclosure, and a control circuit, including a data interface to receive data directly or indirectly indicating at least one of an intraorbital pressure, ICP, IOP, or a relationship between ICP and IOP, and based on processing the received data as a feedback control variable, controlling the pump to adjust the fluid pressure within the one or more cavities, the controlling including using further monitoring of the received data to control the pump.

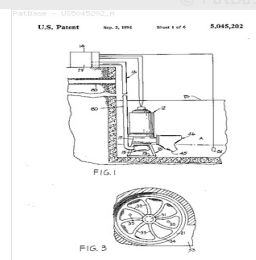


Probable Assignee: EQUINOX OPHTHALMIC INC

Earliest Publication Date: 20170302

CENTRIFUGAL OXYGENATOR FOR TREATMENT OF WASTE WATER AND SYSTEM

Abstract: Source: US5045202A Apparatus and system for increasing the efficiency of absorption of oxygen by biodegradable waste and particle break-up thereof, by introducing waste and gas, which may be air, into a collector under a highly agitated state, and agitating the air and waste under pressure in the collector by the impeller of a centrifugal pump as back pressure is provided in the collector. The collector is mismatched relative to the impeller to increase the retention and mixing time of the air and waste in the collector. The collector within the impeller forms a pump designed to operate close to its shut-off condition for increased retention time in the collector.

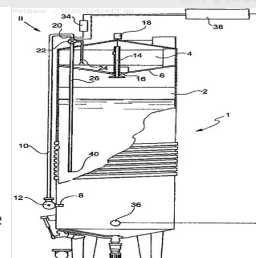


Probable Assignee: PEC RESEARCH INC

Earliest Publication Date: 19870521

FERMENTATION VAT

Abstract: Source: US2001042443A An automatically operating fermentation vat for wine-making establishments includes a main vat (2), an upper vat (4) over the main vat, an uplift pipe (8, 12, 10, 24, 26) for feeding the fermenting liquid from the bottom of the main vat to the upper vat, means (16, 14, 18) for discharging this liquid from the upper vat into the main vat so as to spray the layer of marc floating in the main vat and injector means (20, 32) associated with the uplift pipe for injecting an oxygen-containing gas into the liquid flowing through the said pipe, characterized in that the uplift pipe has a first outlet aperture (24) directing liquid into the upper vat (4) and a second outlet aperture (40) which directs the liquid into the mass of liquid in the main vat, valve means (22) being associated with the uplift pipe for selectively directing the liquid into the upper vat or into the main vat or both at the same time though the two outlet apertures.

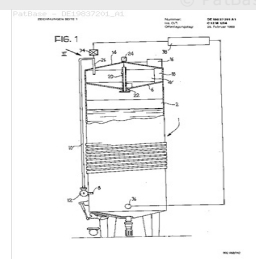


Probable Assignee: GIMAR TECNO SRL

Earliest Publication Date: 20010913

AUTOMATIC FERMENTING VESSEL FOR WINE MANUFACTURE

Abstract: Source: DE19837201A1 Fermentation vessel with automatic operation, for wine production, comprises a main vessel (9) to hold the must; an upper vessel (10) above the main container; a device (14, 15, 16) which periodically feeds some of the liquid from the base of the main vessel to the upper vessel (10); and a device (17, 18) to empty the upper vessel by spraying it onto the layer of marc floating on the top of the must in the main vessel, using a bottom valve (17, 19, 20) operated by a control device (21) which varies the width of the opening cyclically in accordance with a predetermined relationship, during the transfer of the liquid from the upper vessel. Preferably, the valve has a closure member (17) which can be moved between a closed position against a vessel orifice (18) and an open position in which it defines an annular opening



Probable Assignee: GIMAR TECNO SPA

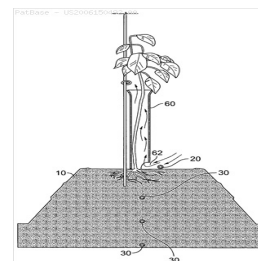
Earliest Publication Date: 19980520

METHOD OF CULTIVATION AND COMPONENTS FOR USE THEREWITH

Abstract: Source: US2006150492A A method and components for cultivation of plant materials. The components include enhanced berms, a confined irrigation/fertigation system, field and plant sensors, a plant support system, overcovering structure and a protective collar. Each of these components used singularly or in combination with each other enhances the growth and yield of plant material decreases the associated costs of cultivation, and decreases adverse environmental impacts.

Probable Assignee: KAPRIELIAN CRAIG L

Earliest Publication Date: 20060629



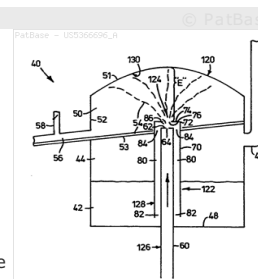
62) Family number: 12982423 (US5366696A)

OXYGENATION APPARATUS FOR OXYGENATING A CARRIER LIQUID BY SPRAYING

Abstract: Source: US5366696A An oxygenation apparatus for introducing a flow of oxygen gas molecules into a carrier liquid in a one-pass operation comprises a receiving chamber for receiving carrier liquid, a contacting chamber for allowing the oxygen gas molecules to thoroughly contact the carrier liquid, and a separating partition located between the receiving chamber and the contacting chamber so as to preclude the return of oxygenated carrier liquid from the contacting chamber to the receiving chamber. There is an inlet for introducing oxygen gas molecules at a pressure slightly above the ambient surrounding air pressure into the apparatus, which terminates in an end portion having a gas introduction orifice. The gas introduction orifice is located in fluid communication with the receiving chamber, and causes a jet of oxygen gas molecules to be emitted therefrom. There is a spray orifice located in the separating partition, positioned to allow carrier liquid to be sprayed into the contacting chamber by the jet of oxygen gas molecules. A passageway has is located so the carrier liquid can pass from the receiving chamber to the space between the gas introduction orifice and the spray orifice, allowing oxygenated carrier liquid to exit from the contacting chamber. The oxygen gas includes molecules in the diatomic form (O_2), and molecules in at least one of either the triatomic form (O_3) and the monatomic form ($1O_2$). When the oxygen gas molecules are introduced into the apparatus, they force the carrier liquid in the space between the gas introduction orifice and the spray orifice to be sprayed through the spray orifice into the contacting chamber so that no bubbles are formed.

Probable Assignee: LIFETECH CORP

Earliest Publication Date: 19940721



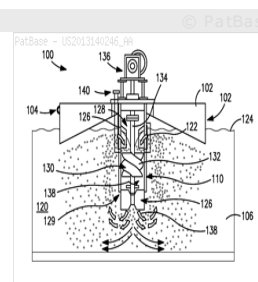
63) Family number: 53976322 (US2013140246A)

METHOD AND SYSTEM FOR ENHANCING MASS TRANSFER IN AERATION/OXYGENATION SYSTEMS

Abstract: Source: US2013140246A A means for obtaining high mass transfer efficiencies in surfactant laden wastewater treatment or process systems is disclosed. The present system employs ultrafine bubbles delivered into a high shear region such as in the draft tube or other containment volume of a mechanically agitated contacting system within which an impeller is placed, or in the venturi or divergent-convergent of a pumped loop within which gas-liquid contacting is carried out.

Probable Assignee: PRAXAIR TECHNOLOGY INC

Earliest Publication Date: 20130606



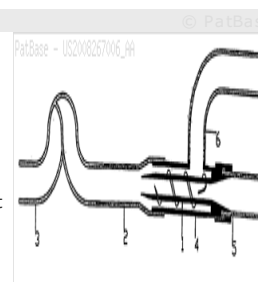
64) Family number: 32609393 (US2008267006A)

DEVICE FOR MIXING FLUIDS

Abstract: Source: US2008267006A The present invention relates to a device for mixing fluids. It is a hydraulic or pneumatic apparatus, depending on the fluid used for transportation. It is static and has the characteristics of both an extractor and a fluid mixer. Extraction is effected by dragging the suction elements, by means of the circulation of a transporting fluid injected at low pressure. The injection inlets (5 or 6) and suction inlets (6 or 5) are interchangeable and lead to a single outlet (3). The injection tube (1) formed by a helical spiral on the outside surrounded by the sheath (4) increases the pressure in the transporting fluid and creates outward helical movement with centrifugal force in all the fluid that circulates on the outside.

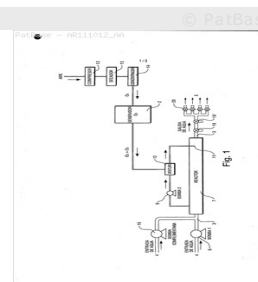
Probable Assignee: ECOFUR LDA

Earliest Publication Date: 20060209



65) Family number: 74688260 (AR111012A)

EMBARCACION QUE COMPRENDE UNIDADES DE OXIGENACION Y OZONIZACION PARA TRATAR AGUAS CIRCUNDANTES CONTAMINADAS VESSEL COMPRISING UNITS OF OXYGENATION AND OZONATION TO TREAT SURROUNDING WATERS CONTAMINATED (MACHINE TRANSLATION)



Abstract: Source: AR111012A Embarcacion que comprende unidades de oxigenacion y ozonizacion para tratar aguas circundantes contaminadas, comprendiendo: al menos un generador de gas ozono que provee un flujo de gas comprendiendo oxigeno y ozono; al menos un canal de tratamiento montado a bordo a lo largo de dicha embarcacion teniendo una entrada y una salida; al menos una primera bomba montada en comunicacion de fluido con la entrada del canal para impulsar un flujo de agua a tratar primario a traves del canal; y al menos un reactor de tratamiento montado en comunicacion de fluido con dicho canal entre la entrada y la salida del mismo, comprendiendo una toma anterior de derivacion en paralelo de un flujo de agua a tratar secundario, dicha toma conectada en comunicacion de fluido con dicho reactor a traves de una segunda bomba que impulsa el flujo de agua a tratar secundario a traves de un inyector de gas comprendiendo oxigeno, ozono y aire, que se encuentra conectado en comunicacion de fluido con al menos dos inyectores laterales posteriores que devuelven el flujo de agua secundaria una vez tratada al flujo de agua primario, donde el gas comprendiendo oxigeno, ozono y aire se inyecta a presion en el flujo de agua a tratar secundario; donde, al inyectarse el flujo de agua secundario una vez tratado al flujo de agua a tratar primario el gas comprendiendo oxigeno, ozono y aire disuelto en dicho flujo de agua secundario se difunde y mezcla con el flujo de agua a tratar primario. Vessel comprising units of oxygenation and ozonation to treat surrounding waters contaminated, comprising: at least one ozone gas generator that provides a gas flow comprising oxygen and ozone; at least one treatment channel mounted on board along said vessel having an inlet and an outlet; at least one first pump mounted in fluid communication with the inlet of the primary channel to drive a flow of water to be treated through the channel; and at least one mounted treatment reactor in fluid communication with said channel between the inlet and the outlet thereof, comprising an bypass in parallel of a flow of water prior to treating secondary, said Connected socket in fluid communication with said reactor through a second secondary pump that drives the flow of water to be treated through a gas injector comprising oxygen, ozone and air, which is connected in fluid communication with at least two lateral injectors that return the flow of secondary water once treated primary water flow, where the gas comprising oxygen, ozone and air is injected under pressure in the flow of water to be treated; wherein, the injected water flow secondary secondary once treated to the flow of water to be treated primary gas comprising oxygen, ozone and air dissolved in said secondary flow of water diffuses And mixing with the flow of water to be treated.

Probable Assignee: LINEAS MARITIMAS RICCITELLI S A

Earliest Publication Date: 20190529

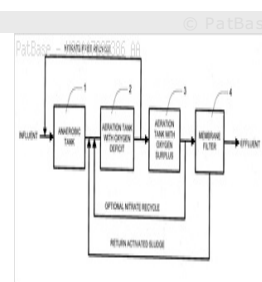
66) Family number: 39334734 (US2007235386A)

PROCESS TO IMPROVE THE EFFICIENCY OF A MEMBRANE FILTER ACTIVATED SLUDGE SYSTEM

Abstract: Source: US2007235386A A process for treating BOD, nitrogen and phosphorus containing wastewater, wherein the process includes providing wastewater influent into an anaerobic zone having activated sludge and mixing the wastewater influent with the activated sludge in the anaerobic zone to form a mixed liquor. The process further includes providing the mixed liquor into an oxygen-deficit aeration zone and recycling denitrified mixed liquor from the oxygen-deficit aeration zone to the anaerobic zone for mixing therein with wastewater. In addition, the process includes transferring the mixed liquor from the oxygen-deficit aeration zone to an oxygen-surplus aeration zone and transferring a portion of the mixed liquor from the oxygen-surplus aeration zone to a membrane filter wherein a filtrate is separated from sludge. The process also includes recycling at least a portion of the sludge to the oxygen-deficit aeration zone as recycled activated sludge.

Probable Assignee: EVOQUA WATER TECHNOLOGIES LLC

Earliest Publication Date: 20071011



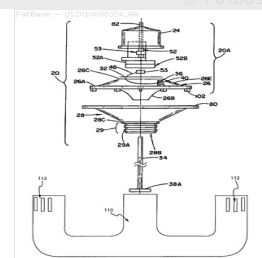
67) Family number: 44927690 (US2010096324A)

SYSTEM AND METHOD FOR REDUCING POLLUTION IN A BODY OF WATER

Abstract: Source: US2010096324A A system and method reducing pollution in a body of water using biological processes is provided. The system includes a hydraulic dam generated by an induced downwelling of effluent water from a plurality of water circulating devices. A series of linearly arranged treatment sub-systems are disposed upstream of the hydraulic dam. The treatment sub-systems include a water sterilization sub-system for neutralizing harmful and undesirable micro-organisms using an ultrasonic energy generating unit. The ultrasonic energy generated, is of a frequency that disrupts cellular structures in targeted micro-organisms.

Probable Assignee: ABSOLUTE AERATION

Earliest Publication Date: 20100422



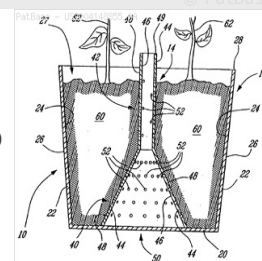
68) Family number: 27152565 (US2004148855A)

PLANT-GROWING SYSTEM HAVING AN AERATOR

Abstract: Source: US2004148855A A container (12) for aeration of a substrate (60) supporting a plant (62) with the substrate (60) being received in a cavity (27) of the container (12) so as to bury a device (14) positioned in the cavity (27) such that gas can be supplied from the device (14) to the substrate (60). The device (14) comprises a body (40, 42) having a peripheral wall (44) defining an inner cavity (50). The peripheral wall (44) has a portion (52) permeable to gas such that a gas can flow therethrough from the inner cavity (50) of the body (40, 42) to an exterior of the device (14). A gas permeability of the body (40, 42) decreases as a function of a vertical orientation of the body (40, 42). The body (40, 42) has an inlet (49, 71) adapted to receive a gas to fill the inner cavity (50). The device (14) is buried in a predetermined position with respect to the vertical orientation, such that greater amounts of gas can be supplied to the substrate (60) relatively to a depth of the device (14).

Probable Assignee: LAVAL UNIV

Earliest Publication Date: 20021227



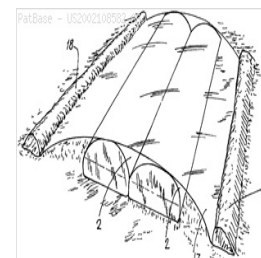
69) Family number: 28901903 (US2002108582A)

AQUACULTURE

Abstract: Source: US2002108582A Aquaculture apparatus comprises an elongate tube (2) of flexible translucent plastic material which extends longitudinally along level ground. The tube (2) is inflated and air supported. At least the lower section of the tube defines a water course. The tube (2) is closed at both ends to form a water enclosure. A number of such tubes are arranged in side-by-side relation and are covered by a plastic sheet cover layer (17). The cover (17) provides an air gap (19) to insulate the inner tubes (2) and restrict heat loss. The tubes (2) are used to form at least some of the modules of an aquaculture system for rearing fish and/or for effluent, waste or water treatment.

Probable Assignee: MICHAEL CONNOLLY

Earliest Publication Date: 20010418



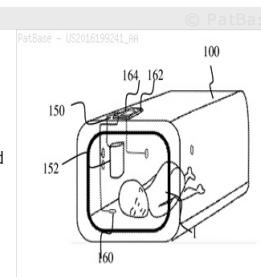
70) Family number: 55625917 (US2016199241A)

INCUBATOR WITH A NOISE MUFLING MECHANISM AND METHOD THEREOF

Abstract: Source: US2016199241A A noise-attenuating neonate incubator (NANI) comprising sound attenuating module (SAM) configured to decrease the ratio, (AmpRatt_i), of the sound's amplitude at a time, t_i , to a reference amplitude, to a critical amplitude ratio value of said sound measured over a predetermined time, At , (AmpRQVDELTAt) or less. The SAM comprises passive noise attenuating, active noise attenuating or both. A method for sound attenuating a neonate incubator, characterized by: (a) obtaining a noise-attenuating neonate incubator (NANI) comprising sound attenuating module (SAM) configured to decrease AmpRatt_i to AmpRQVDELTAt or less; (b) accommodating said neonate in said NANI; and, (c) attenuating said noise by said at least one SAM, thereby changing the sound signature.

Probable Assignee: ASPECT IMAGING LTD

Earliest Publication Date: 20140123



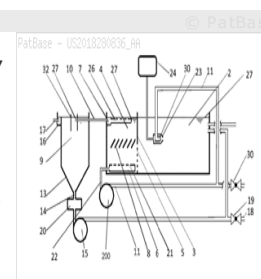
71) Family number: 65173427 (US2018280836A)

BIOLOGICAL AEROBIC ACTIVATED SLUDGE PROCESS WITH HYDRODYNAMIC SOLID SEPARATION, AND HYDRODYNAMIC SEPARATOR FOR USE IN AN EFFLUENT TREATMENT STATION

Abstract: Source: US2018280836A A method and device used for treating effluents by the biological aerobic activated sludge process with hydrodynamic separation, sludge collection, internal sludge recirculation and atmospheric air or oxygen dissolution functions implemented by a device that accumulates the functions of solids retention and gas dissolution in the biological reactor, increasing the hydraulic load capacity of the secondary settler, as well as the load absorption capacity of the biological reactor, thus almost doubling the treatment capacity in relation to a conventional activated sludge process.

Probable Assignee: RONALDO LEITE ALMEIDA JUNIOR

Earliest Publication Date: 20170316



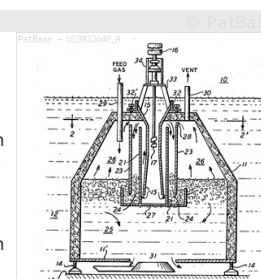
72) Family number: 31046406 (US3933640A)

METHODS AND APPARATUS FOR TREATING WASTEWATER

Abstract: Source: US3933640A Methods and apparatus for treating wastewater, such as municipal sewage, are provided in which an oxygen enriched feed gas is supplied to an oxygenation chamber wherein oxygen is efficiently dissolved in wastewater (mixed liquor) by means of a static mixing device. The chamber is preferably submerged in a large body of wastewater being treated, such as is commonly found in the secondary stage of an activated sludge wastewater treatment system with the chamber being adapted to receive such wastewater from a location slightly below the surface thereof. Oxygenated wastewater is discharged from the chamber in either a radial or multi-directional pattern at a sufficient velocity to effect a thorough mixing of the oxygenated wastewater and the large body of wastewater contained in the secondary stage treatment tank. The overall concentration of dissolved oxygen in the wastewater is maintained throughout the tank to a level sufficient to sustain microbial digestion of organic waste while providing the requisite stirring necessary to preclude settling of solids from the wastewater.

Probable Assignee: CIBA GEIGY CORP

Earliest Publication Date: 19750425



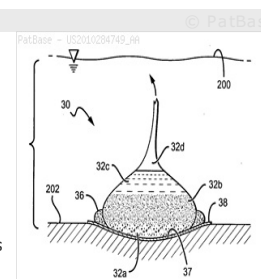
73) Family number: 47547006 (US2010284749A)

SYSTEMS AND METHODS FOR OFF-SHORE ENERGY PRODUCTION AND CARBON DIOXIDE SEQUESTRATION

Abstract: Source: US2010284749A The present invention is directed to aquatic systems and methods for off-shore energy production, particularly to systems and methods for generating large amounts of methane via anaerobic digestion, purifying the methane produced, and sequestering environmentally deleterious by-products such as carbon dioxide. The energy production systems contain one or more flexible, inflatable containers supported by water, at least one of which is an anaerobic digester containing bacteria which can produce energy sources such as methane or hydrogen from aquatic plants or animals. Off-shore energy production facilities supported by water bodies offer many advantages over land-based digesters, including the use of large, available open water bodies as an alternative means of support and the potential for locating the facilities at sites that already contain, or can be easily modified to generate, sufficient amounts of feedstock onsite. In addition, the containers of the present invention can be large enough to provide adequate amounts of energy to support off-shore activities and relatively easy to manufacture and ship to remote production sites. The systems can also be readily adapted to sequester carbon dioxide or replenish feedstocks growing nutrients on site.

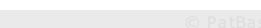
Probable Assignee: PODENERGY INC

Earliest Publication Date: 20101111



74) Family number: 2483657 (US3947359A)

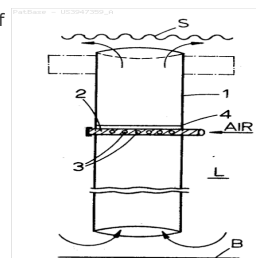
AERATION AND MIXING OF LIQUIDS



Abstract: Source: US3947359A This invention relates to the mixing of gases with liquids and particularly aeration of predominantly water based liquids. The invention provides an apparatus for promoting gas/liquid exchange in a liquid impoundment in which a riser tube is disposed vertically in the liquid. Flow of the liquid up the riser tube is promoted by introducing gas bubbles into the liquid inside the riser tube. The riser tube has a baffle or restrictor giving rise to a region of fast flowing liquid in the riser tube and the bubbles of gas are introduced in the region of fast flowing liquid, the arrangement is such that the baffle or restrictor causes an abrupt change of velocity and hence turbulence as the liquid flows upwardly in the riser tube past the said baffle or restrictor.

Probable Assignee: LAURIE A H

Earliest Publication Date: 19740919



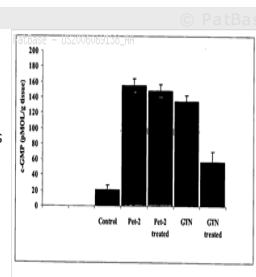
75) Family number: 32387042 (US2006069138A)

THIAZOLE-BASED NITRIC OXIDE DONORS HAVING ALKYL SUBSTUENT(S) AND USES THEREOF

Abstract: Source: US2006069138A Disclosed are novel NO-donating compounds, designed such that when NO is released from the compound a residue which is a naturally occurring metabolite is formed, and thus a development of tolerance to the compounds upon repetitive administration is prevented or decreased. Also disclosed are methods of preparing such NO-donating compounds, pharmaceutical compositions and medical devices containing such compounds and methods utilizing such compounds in the treatment of various medical conditions.

Probable Assignee: RENOPHARM LTD

Earliest Publication Date: 20051110



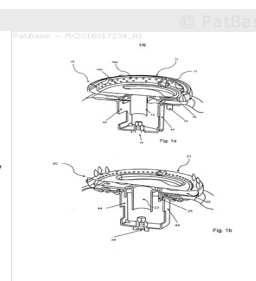
76) Family number: 71127484 (MX2016017234A)

GAS FIRED BURNER PRE-MIXED WITH CENTRAL INJECTION VENTURI WITH A CONFIGURATION OF DIRECT INTERNAL OR VERTICAL FLAMES OF HIGH-EFFICIENCY.

Abstract: The present invention relates to high-efficiency gas burners for kitchen appliances comprising a central venturi configuration, providing semi-horizontal and/or semi-vertical flames, according to its arrangement and geometry, thereby allowing a uniform heating of any container placed on the burner, fuel saving, facility of cleaning, as well as other benefits. The burners also comprise poka-yoke pieces to prevent assembly of the burner upon assembly or disassembly thereof. Said burners allow its manufacturing in different scales, thereby adapting them according to the different necessities of the customers.

Probable Assignee: COM ACROS WHIRLPOOL S A DE C V

Earliest Publication Date: 20180619



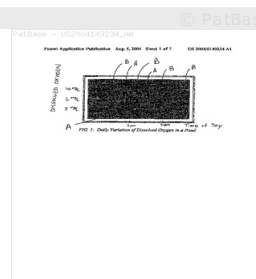
77) Family number: 30647369 (US2004149234A)

DECENTRALIZED OXYGEN SUPPLY SYSTEM FOR AQUACULTURE

Abstract: Source: US2004149234A Disclosed herein is a system and method comprising same to supply oxygen having a purity of 30 percent or greater into containment vessels for the aquaculture of marine animals such as shrimp. In one embodiment of the present invention, the system comprises a plurality of oxygen generators in fluid communication with a plurality of oxygen injectors to supply the containment vessels having an aqueous medium and marine animals contained therein with oxygen to maintain the dissolved oxygen content above a certain level.

Probable Assignee: AIR PRODUCTS AND CHEMICALS INC

Earliest Publication Date: 20040609



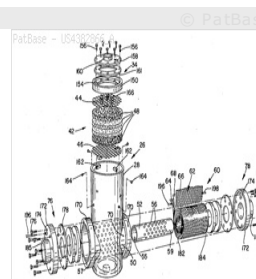
78) Family number: 1962508 (US4382866A)

ELECTRO-CHEMICAL SYSTEM FOR LIQUID FILTRATION

Abstract: Source: US4382866A An electro-chemical system for liquid filtration for effecting removal of dissolved and suspended solids, undesirable ions, etc, therefrom, and decontaminating same, involving a basic electro-chemical filter device that comprises a canister of cylindrical form that in mounted position is vertically disposed and that defines a bore extending longitudinally of same, with the canister at its upper end being connectable to the source of liquid filtrant and being closed off at its lower end. The canister adjacent its lower end is equipped with a cross tube extending therethrough and across the canister bore and having a width that is on the order of seventy-five percent of the width of the canister bore, with the cross tube having a tubular mandrel disposed in same and extending substantially coextensively thereof, and with the portions of the cross tube and mandrel disposed within the canister each being formed to define multiple liquid passing apertures thereabout. Convolute about the mandrel and in tight fitting relation between the mandrel and cross tube is an elongate composite filter sheeting, of which the sheeting is a pair of foraminous electrically conductive sheets separated by a sheet of fibrous material defining pore spaces approximating one-five microns in size. Disposed in the canister bore between its upper end and the cross tube is a second coarser filter unit of composite disc form disposed crosswise of the canister bore and comprising a pair of foraminous electrically conductive sheets separated by one or more layers of fibrous material defining porous space openings on the order of fifteen-twenty-five microns in size. The foraminous sheets in the two filter units involved are charged anode-cathode fashion by electrical connection to a 12 volt 50 amp D.C

Probable Assignee: FREDERICK WILLIAM M JR AND HEIDRICH WILLIAM P

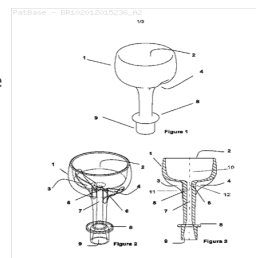
Earliest Publication Date: 19820624



79) Family number: 57310749 (BR102012015236A)

DISPOSITIVO PARA AERACAO INSTANTANEA DE VINHOS E BEBIDAS AFINS DEVICE FOR INSTANT AIRING OF WINES AND BEVERAGES LIKE (MACHINE TRANSLATION)

Abstract: Source: BR102012015236A 1 RESUMO "DISPOSITIVO PARA AERACAO INSTANTANEA DE VINHOS E BEBIDAS AFINS" 5 O presente pedido de patente de invencao refere-se a dispositivo para aeracao instantanea de vinhos e bebidas afins (1), que tem, dentre outras, a funcao de oxigena-los para que suas caracteristicas olfativas e gustativas sejam ampliadas apos escoarem verticalmente atraves do seu interior, dispensando a utilizacao do Decanter, igualmente, do mesmo modo de 10 cuidados especiais no manuseio e tambem de um suporte para descanso apos o uso. Esse dispositivo (1) se baseia no Efeito e no Tubo de Venturi que foram modificados e aperfeicoados para esse proposito. E constituída pela secão de entrada ampla (2), que e ligada a secão cilíndrica tubular longa (7), ligada a dois canais de entrada de ar curtos e 15 horizontais (5 e 6), duas calhas quadradas dispostas verticalmente (3 e 4), ligadas a saída conica curta (9) e disco de suporte limitador (8). O dispositivo (1) vem sanar as deficiências identificadas e descritas relativas ao Estado da Técnica. Uma delas e possuir calhas de protecao contra bloqueio manual acidental das aberturas dos canais de entrada de ar, ter 20 canais de entrada de ar com extensoes bem reduzidas e em niveis diferentes que neutralizam vazamentos e refluxo, permitindo o funcionamento simultaneo, baixando os custos e facilitando a fabricacao. 1 SUMMARY "DEVICE FOR INSTANT AERATION WINES AND RELATED DRINKS" 5 This application for an invention patent relates to device for instant aeration of wines and related drinks (1), which has, among others, the function of oxygenation them so that your smell and taste characteristics are magnified after escoarem vertically through the inside, eliminating the utilization of Decanter, also, just as 10 special care in handling and also a support to rest after use. This device (1) is based on the effect and the Venturi tube that have been modified and improved for this purpose. is formed by the wide input section (2), which is connected to long section tubular cylindrical (7) connected the two short air inlet 15 and horizontal channels (5 and 6), two vertically arranged rails square (3, 4) connected to short conical outlet (9) and limiting the support disc (8). The device (1) comes remedy the deficiencies identified and described on the status of Técnica. One and possess trunking protection against accidental manual unlocking of the openings of the air inlet channels have 20 air inlet channels with well-reduced extensions and different levels which counteract leakage and flow, allowing to run simultaneously, lowering costs, and facilitating manufacturing.



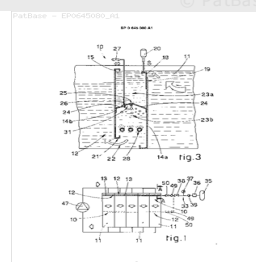
Probable Assignee: OLIVEIRA LUIZ FERNANDO COSSE DE

Earliest Publication Date: 20140812

80) Family number: 10347185 (EP0645080A1)

DEVICE TO OXYGENATE FISH BREEDING PLANTS.

Abstract: Source: EP0645080A1 Device to oxygenate fish breeding plants, and relative system to manage and control a fish breeding plant, in cooperation with fish breeding tanks and within those tanks, the device (10) being positioned substantially vertically and comprising a first upper chamber (23a) and a second lower chamber (23b), the first upper and second lower chambers (23a-23b) being separated by partition baffle means (24-26) defining an acceleration slit (25), the first upper chamber (23a) having at its upper upstream end an adjustable weir (18) and in its upper downstream portion a shut-off wall (15), the second lower chamber (23b) having in its lower upstream portion a closure wall (14a) and in its lower downstream portion at least one transit gap (22), delivery means (28) to diffuse oxygen being included in the lower portion of the second lower chamber (23b).



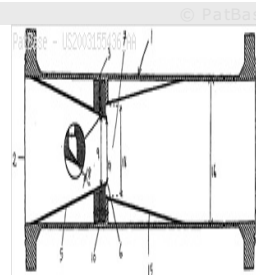
Probable Assignee: BATTIGELLI LUCILLA

Earliest Publication Date: 19950325

81) Family number: 14607460 (US2003155436A)

METHOD FOR MIXING FLUIDS

Abstract: Source: US2003155436A The use of a turbulent contactor to absorb a selected gas component from a gas stream. The invention particularly applies to a method of distributing a liquid into a gas stream which comprises providing a liquid to an annulus at the periphery of a pipe in which a gas stream is flowing, the gas flow drawing the liquid into a film along the inner surface of the pipe to a sharp edge at the end of the pipe at which point the liquid breaks off the surface of the pipe and mixes intimately with the gas.



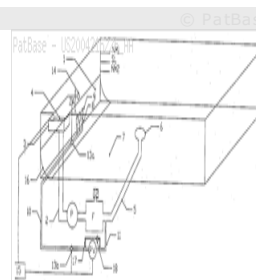
Probable Assignee: PROPURE AS

Earliest Publication Date: 20020103

82) Family number: 31195848 (US2004216226A)

SYSTEM FOR CREATING WAVES OR MOVEMENT OF THE SURFACE OF A LIQUID

Abstract: Source: US2004216226A A system for creating waves at the surface of a liquid contained in a pool, this system comprising: several injectors linked to a source of fluid under pressure, a device controlling the speed and/or pressure control of the fluid ejected from the injectors and/or the direction of the injectors. and in which the control device ideally contains a means of detecting one or more states of at least a part of the surface of the liquid and a means of adapting the speed and/or pressure of the fluid output from the or injectors, and/or the direction of the injectors in relation to the surface state of the liquid.



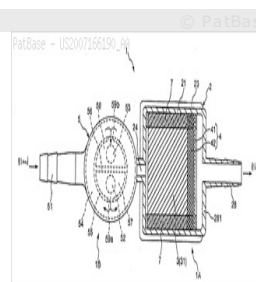
Probable Assignee: WOW CO SA

Earliest Publication Date: 20041104

83) Family number: 34890401 (US2007166190A)

OXYGENATOR

Abstract: Source: US2007166190A An oxygenator which helps avoid bubbles in the blood from being discharged through the blood outlet port of the oxygenator includes a housing, a hollow fiber membrane bundle in the housing and formed by a multiplicity of hollow fiber membranes serving for gas exchange, gas-inlet and gas-outlet ports communicating with gas passages of the hollow fiber membranes, and a blood-inlet and blood-outlet ports. A filter member is provided on a side closer to the blood outlet port of the hollow fiber membrane bundle and serves to catch bubbles in blood. The blood outlet port projects from the housing and a passage enlargement is provided in a vicinity of the end of the blood outlet port closer to the housing and having an increased passage cross-sectional area. The blood passed the filter member is allowed to reach the blood outlet port by being decelerated in the passage enlargement.



Probable Assignee: TERUMO CORP

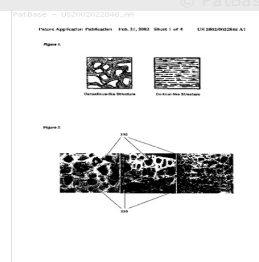
Earliest Publication Date: 20070719
84) Family number: 30182342 (US2002022846A)

METHOD FOR FUSING BONE DURING ENDOSCOPY PROCEDURES

Abstract: Source: US2002022846A A method of fusing or welding bone in vivo and in a fluid medium, comprising: harvesting a piece of autologous implant bone; treating the implant bone and/or a receiving bone to expose organic component; treating the implant bone and/or the receiving bone by de-fatting; combining the implant bone with other compounds to create an interfacing agent; adding the interfacing agent between receiving bone segments to be fused or welded; and fusing or welding in vivo, in a fluid medium, utilizing electromagnetic energy.

Probable Assignee: NUORTHO SURGICAL INC

Earliest Publication Date: 20020221



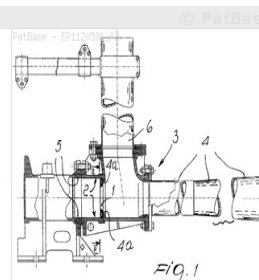
85) Family number: 17769521 (EP1120591A2)

DIAPHRAGM FOR ADJUSTING THE USEFUL PASSAGE AREA IN SUBMERSED DEVICES FOR OXYGENATING TANKS FOR COLLECTING STORM SEWAGE AND WASTEWATER

Abstract: Source: EP1120591A2 A diaphragm (1) for adjusting the useful passage area in submersed devices for oxygenating tanks for collecting storm sewage and wastewater, said devices comprising a water feed pipe (4) which is coupled to the delivery (5) of a pumping element and a branch pipe (6) for feeding air which is inserted downstream of a narrower Venturi tube section, comprising a contoured plate (7) which is crossed by a port (8) with a calibrated diameter which is smaller than the diameter of the feed pipe (4) and can be hermetically inserted in a drawer-like fashion in a corresponding slot (4a) formed transversely in the water feed pipe (4) directly upstream of the insertion point of the branch pipe (6).

Probable Assignee: ZENIT SPA

Earliest Publication Date: 20010727



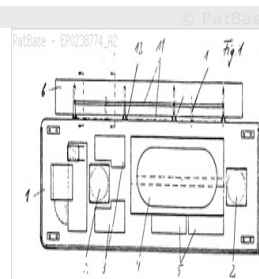
86) Family number: 17171328 (EP0238774A2)

APPARATUS FOR WATER OXYGENATION.

Abstract: There is described a mobile device for enriching oxygen-deficient water of a watercourse with oxygen gas or with a gas containing oxygen. The gas is contained in a tank (4) in compressed form. The arrangement is located on a float (1). The gas is passed from the tank to a diffuser (6) via evaporators (5). The diffuser is arranged on a broad side of the float and can be shifted in the vertical direction in such a way that it is either above or below the water level. The diffuser preferably has at least one Venturi tube.

Probable Assignee: DOMKE GMBH AND CO VORM ROBERT ZIMMER NACHF KG

Earliest Publication Date: 19860507



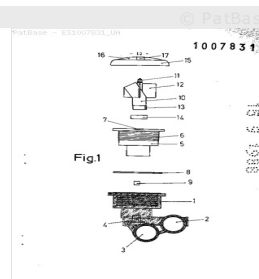
87) Family number: 17195678 (ES1007831Y)

BOQUILLA PARA HIDROTERAPIA PERFECCIONADA.

Abstract: Source: ES1007831U BOQUILLA PARA HIDROTERAPIA PERFECCIONADA, DEL TIPO QUE SE INCORPORAN EN LOS LATERALES O FONDO DE BANERAS DE HIDROMASAJE O SIMILARES, CARACTERIZADA PORQUE SE CONSTITUYE EN UN CUERPO MONOPIEZA QUE INCORPORANDO LAS CONEXIONES PARA AGUA Y AIRE DEFINE EN EL INTERIOR DE SU FORMA CILINDRICA ESCALONADA UNA TOBERA VENTURI CENTRAL PARA AGUA Y UN ESPACIO ANULAR ALREDEDOR DE ELLA PARA AIRE, DE MANERA QUE IMPULSA HACIA UN CONDUCTO SUPERIOR DEFINIDO POR UNA PIEZA ACODADA LIGERAMENTE O ROTOR SITUADO, CON LIBERTAD DE GIRO ENTRE UN ESTATOR Y UNA TAPA SUPERIOR, UNA EMULSION DE AGUA Y AIRE QUE SALIENDO POR DICHO ROTOR DESCENTRADO PROVOCA EL GIRO DE ESTE Y EL BATIDO POR EL CHORRO DE EMULSION DE UNA AMPLIA ZONA. Nozzle for hydrotherapy perfected, OF THE TYPE THAT ARE INCORPORATED ON THE SIDES OR BOTTOM OF HOT TUBS OR THE LIKE, characterized in that it constitutes a one-piece body INCORPORATING THE CONNECTIONS FOR WATER AND AIR INSIDE THE STEPPED cylindrical shape DEFINES A CENTRAL VENTURI NOZZLE FOR WATER AND AN ANNULAR space around it for air, SO THAT DRIVES TOWARD AN UPPER DUCT DEFINED BY A BENT PIECE SLIGHTLY OR ROTOR located, with freedom of rotation between a stator AND A TOP COVER, AN EMULSION OF WATER AND AIR LEAVING SAID ROTOR OFFSET CAUSES ROTATION OF THE LATTER AND THE BEATEN BY THE JET OF EMULSION OF A WIDE AREA.

Probable Assignee: BARLAX HIDROMASAJE S A

Earliest Publication Date: 19890301



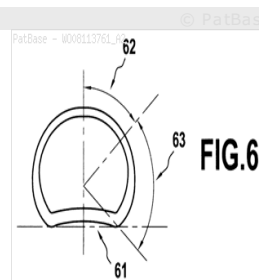
88) Family number: 42174144 (WO08113761A2)

DEVICE AND METHOD FOR OFF GROUND CULTIVATION

Abstract: The invention relates to a device and a method for off-ground cultivation, and to a device including a radiation source. In one embodiment, the invention relates to an off-ground cultivation substrate including perforations for introducing plants to be cultivated, and a bottom substantially opposed to the perforations for introducing the plants, said bottom substantially including a means for urging an irrigation liquid of the plants to be cultivated, such as a nutrient solution, to be localised outside the root centre of the plants to be cultivated when the irrigation is stopped. According to an embodiment, the invention relates to a device that comprises a radiation source, in particular for disinfecting a fluid.

Probable Assignee: SCIENOVATIONS INC

Earliest Publication Date: 20080919



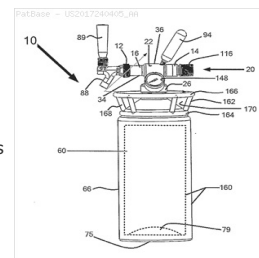
89) Family number: 66712875 (US2017240405A)

FLUID PRESSURIZATION AND DISPENSING SYSTEM

Abstract: Source: US2017240405A A fluid pressurization and dispensing system, including a coupler releasably attached to a vessel via an attachment means for securing a vacuum seal between the coupler and the vessel for maintaining pressure within the vessel, refreshing the gas composition within the vessel, and dispensing of a fluid contents externally from within the vessel without disturbing the vacuum seal. The coupler has a rigid single body unit having a tap head, a shank, and a cap which are contiguous thereof the coupler including a plurality of channels each integrally machined within an interior portion of the coupler. The system regulates a flow of gas from a pressurized gas cartridge via a gas pressure regulator, enables venting excess gas via a gas pressure relief valve, enables measurement of gas pressure within the vessel via a gas pressure gauge. Another embodiment of the system includes a coupler including a bi-level tap head.

Probable Assignee: GIBSON JOHN DELANO

Earliest Publication Date: 20170824



90) Family number: 11715462 (US5492537A)

SURGICAL FLUID MONITOR

Abstract: Source: US5492537A A monitor to provide substantially real-time estimates of fluid absorbed by a patient during an endoscopic surgical procedure. The monitor weighs fluid administered to the patient intravenously, as well as that introduced through the endoscope for irrigation purposes. In addition, fluid recovered from the patient, the endoscope, the surgical drapes, and the floor is weighed. The total weight of fluid administered, reduced by automatically subtracting the total weight of fluid recovered, comprises the calculated fluid absorbed. Through manual entries and/or switch settings, totals of fluid administered and fluid collected are computed and maintained even as fluid sources are replaced and the fluid collector is emptied.

Probable Assignee: VANCAILLIE THIERRY G

Earliest Publication Date: 19960220

