

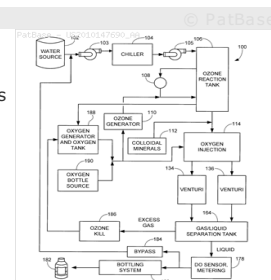
1) Family number: 45441455 (US2010147690A)

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: OXY SOLUTIONS AS

Earliest Publication Date: 20100617



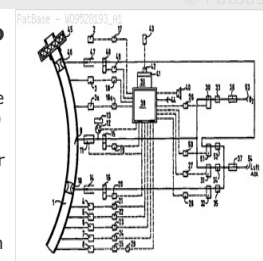
2) Family number: 17177289 (WO9528193A1)

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



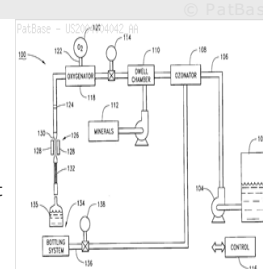
3) Family number: 29924572 (US2004004042A)

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



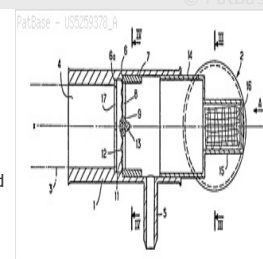
4) Family number: 9445927 (US5259378A)

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



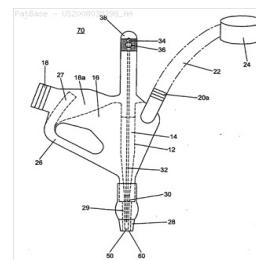
5) Family number: 32838961 (US2008038298A)

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: MEDDROPT TECHNOLOGY AG

Earliest Publication Date: 20060420



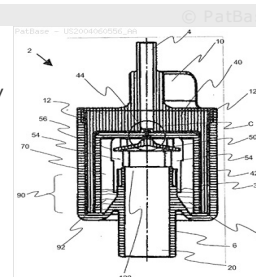
6) Family number: 30420090 (US2004060556A)

DOWNDRAFT NEBULIZER

Abstract: Source: US2004060556A Disclosed is a nebulizer having a downwardly facing aerosol outlet that is structurally configured so as to produce aerosol mist in a downward direction and that delivers a downwardly directed flow of medicated aerosol mist for a period of time. That is to say, a downdraft nebulizer.

Probable Assignee: BABY S BREATH LTD

Earliest Publication Date: 20040331



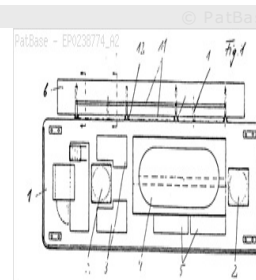
7) Family number: 17171328 (EP0238774A2)

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



8) Family number: 12840550 (FR2715324A)

MICRO-IONISATION PROCESS FOR SATURATING GASEOUS FLOW WITH LIQ. VAPOUR

Abstract: Process for supersaturating a gaseous flow with vapour from a liquid by micro-ionisation of the liquid in the gas, using the following stages:- (a) Establishment of a regular flow of the gas; (b) Expansion of the gas upstream of a micro-ioniser; (c) Continuous micro-ionisation of the liquid in the gas flow at a flow greater than that allowing the saturation of the gas; (d) Condensation and concentration of the excess micro-ionised liquid relative to that evaporated to achieve the saturation of the gas; (e) Filtration of the saturated gas to recover excess droplets entrained in the flow; (f) Evacuation of the saturated gas with recovery of condensates; (g) Collection of the condensed excess liquid recovered in stages (d) to (f); (h) Recycling of the liquid collected during filtration if necessary. Device to carry out the above process comprising a pipe (10) of constant section enclosing a ventilator (11) to establish and maintain the flow of gas to a diverger (20) to expand the gas and then to a micro-ioniser fixed in the centre of the divergers outlet; a chamber (30) with inclined base connected to the diverger and containing the parallel perforated inclined plates on which the excess liquid condenses; a semicircular valve (40) to ensure that gas flows from the chamber to a filter (51) mounted vertically in the outlet of the valve and thence to a chimney (50) and a sump to collect the excess liquid.

Probable Assignee: MAT

Earliest Publication Date: 19950728

