

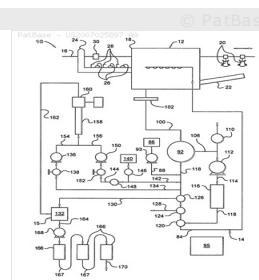
1) Family number: 30584303 (US2007025897 AA)

APPLICATION SYSTEM WITH RECYCLE AND RELATED USE OF ANTIMICROBIAL QUATERNARY AMMONIUM COMPOUND

Abstract: Source: US2007025897 AA An antimicrobial application system is disclosed, comprising an antimicrobial application unit and a recycle unit. An initial, dilute antimicrobial composition is prepared. The composition is provided to the antimicrobial application unit and applied to work pieces, such as raw poultry. After application to the work pieces, the composition is returned to the recycle tank. The concentration of the antimicrobial in the recycle tank is monitored, and additional antimicrobial is automatically added if the concentration of the antimicrobial in the composition falls below a desired amount. The composition is periodically diverted to a capture tank, and the antimicrobial is selectively removed from the composition. The removed antimicrobial and remaining composition are then disposed of in appropriate manners. The antimicrobial is preferably a quaternary ammonium compound, is more preferably an alkylpyridinium chloride, and is most preferably cetylpyridinium chloride.

Probable Assignee: SAFE FOODS CORP

Earliest Publication Date: 20040527



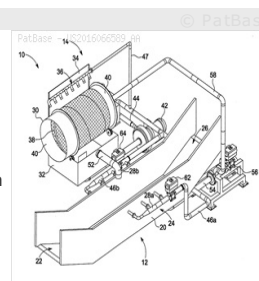
2) Family number: 61841651 (US2016066589 AA)

ANTI-MICROBIAL APPLICATION EQUIPMENT WITH CONTROLS

Abstract: Source: US2016066589 AA A control system for monitoring an antimicrobial application system may include a controller having a monitoring program including an operations unit and an interface unit. The operations unit may include a sensor module operatively coupled to a plurality of sensors positioned to detect operation data associated with the application system in real-time. An adjustment module may adjust the operation of the application system. An analysis module may analyze real-time operation data and initiate a specified response when the analysis indicates that a trigger event has occurred. The response may include issuing a notification to a notification device or initiating the adjustment module to perform a control operation to modify the operation of the antimicrobial application system. A remote monitoring center may control multiple and remote application systems. Mobile devices and a control panel may be operable to interface with operations of the antimicrobial application system via the control system.

Probable Assignee: SAFE FOODS CORP

Earliest Publication Date: 20160310



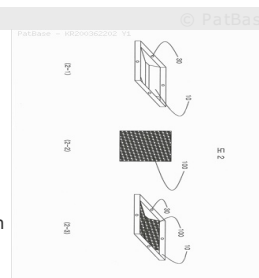
3) Family number: 46740942 (KR200362202 Y1)

ANTIBACTERIAL PHOTOCATALYTIC FILTER TRASH (MACHINE TRANSLATION)

Abstract: Source: KR200362202 Y1 The devise is to attach an antibacterial filter on the inside of the currently used trash (food bins) lid (cover), which, coated with the antibacterial filter surface with titanium dioxide photocatalyst (Tio2) using meta titanate, and trash (food bins) lid (cover) in the to form an ultraviolet lamp (UV LED) on one side by irradiating ultraviolet light to the antimicrobial filter, antibacterial, deodorizing action of the antimicrobial filter itself, as well as the optical response of the titanium dioxide photocatalyst (Tio2) using the meta-titanic acid in and attached to organic matter oxidative decomposition, antibacterial and deodorizing functions photocatalytic filter trash (food bins) as antibacterial filter on the inside cover (cover) in general, the trash (food bins) is being used on which to perform under this coating the antimicrobial filter surface of the titanium dioxide photocatalyst (Tio2) using the meta-titanic acid, and trash (food garbage can) the lid (cover) one side of the ultraviolet lamp of by irradiation with ultraviolet rays in the antimicrobial filter to form the (UV LED) antimicrobial filter itself antibacterial, deodorizing action, of course, the light reaction (Tio2 hv -gt; Tio2 e- (h)) of the titanium dioxide photocatalyst (Tio2) using the meta-titanic acid to perform the oxidation by the organic matter decomposition, antibacterial and deodorizing functions It relates to a photocatalytic filter trash (food bins). In accordance with the present design is trash (food bins) attaching an antibacterial filter on the inside of the lid (cover), and coated with the antibacterial filter surface with titanium dioxide photocatalyst (Tio2) using meta titanate, and trash (food waste bins) it is formed by Sikkim form a UV lamp (UV LED) on one side of the lid (cover). The devise is designed to enhance the functionality of one person is 05 May 17, 2004, it filed a utility model patent application 10-2004-0034750 and 20-2004-0013553. Antibacterial filter, photocatalyst, Tio2, meta-titanic acid, photo-reaction, recycle bin, lid, oxidation, reduction

Probable Assignee: KIM YONG HO

Earliest Publication Date: 20040916



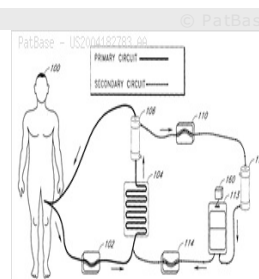
4) Family number: 30975445 (US2004182783 AA)

FILTER AND CONCENTRATOR DEVICE FOR TREATMENT OF BLOOD

Abstract: Source: US2004182783 AA A method and apparatus for preventing and treating septicemia in patient blood is provided. The extracorporeal system includes an antimicrobial device to inactivate at least 99 percent of bloodborne microorganisms, a hemoconcentrator/filtration unit to remove approximately 50-75 percent of target molecules from the patient blood and a filter unit to remove target molecules from patient blood from the sieved plasma filtrate. Target molecules are produced by microorganisms, as well as by the patient's cells. These molecules include endotoxins from Gram negative bacteria, exotoxins from Gram negative and Gram positive bacteria, as well as RAP protein mediator from Staphylococcus aureus, and cell mediators such as tumor necrosis factor-alpha, and interleukin 1-beta, interleukin 6, complement proteins C3a and C5a, and bradykinin.

Probable Assignee: HEMAVATION LLC

Earliest Publication Date: 20040923



OIL RECOVERY AND ENVIRONMENTAL CLEANUP COMPOSITIONS

Abstract: Source: US2005104028 AA This invention relates to improvements in products and processes for cleaning up oil, chemical, or other hydrocarbon spills, and cleaning up the environment where such spills have occurred. In one aspect of the invention, there is provided an adsorbent polymeric composition which is oleophilic and capable of adsorption of other chemicals and hydrocarbons from both land and water, the adsorbent composition including polyethylene/vinyl acetate copolymer, catalyst, cross-linking agent, lubricant, blowing agent and a bulking agent. In a second aspect of the invention there is provided a method of manufacture of an adsorbent composition for use in retrieving and recycling oil, chemicals and hydrocarbons from land or water environments.

Probable Assignee: ROBINSON D C

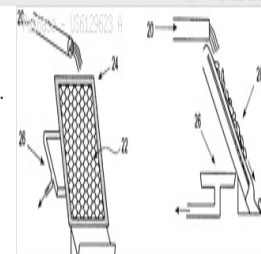
Earliest Publication Date: 20031023

METHOD AND SYSTEM FOR DEHAIRING ANIMALS

Abstract: Source: US6129623 A Disclosed is a novel method and system for dehairing an animal, providing a system for recycling and safely disposing of chemical and biological wastes produced during such dehairing method. Included in such method are processes for handling sodium production in waste materials, reducing and handling production of H₂S, removing sulfides from animal hides, safely disposing of sulfide waste, removing solids from the waste materials, and reducing water and reagent use and disposal.

Probable Assignee: SWIFT BEEF CO

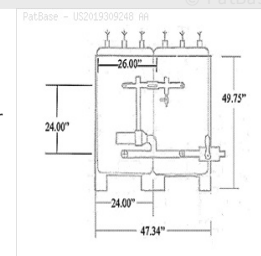
Earliest Publication Date: 19990826

**NOVEL FERMENTATION SYSTEMS AND METHODS**

Abstract: Source: US2019309248 AA The subject invention provides systems and apparatuses for producing microbe-based compositions that can be used in the oil and gas industry, environmental cleanup, as well as for other applications. More specifically, the present invention includes biological reactors, equipment, and materials for fermenting microbe-based compositions.

Probable Assignee: LOCUS SOLUTIONS LLC

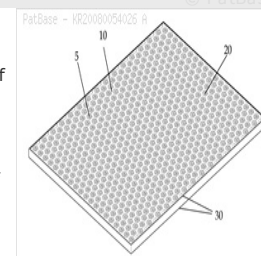
Earliest Publication Date: 20180712

**FUNCTIONAL FILTER AND AIR CIRCULATION DEVICE INCLUDING THE SAME**

Abstract: Source: KR20080054026 A A functional filter is provided to prevent environmental pollution due to use of an adhesive, omit an adhesive coating process in the manufacturing process, remove a functional material easily, recycle the filter easily, minimize a pressure loss of the filter, maximize the air contact amount of the filter, and improve durability of the filter by even adhesion, and an air circulation device including the functional filter is provided. A functional filter comprises: a resin frame(10) which is formed from a thermal bonding resin, and which has a plurality of through holes(5) formed therein such that the through holes pass through top and bottom faces of the resin frame; a granular functional material(20) filled in all or some of the respective through holes of the resin frame; and a finishing layer(30) which is made of a nonwoven fabric consisting of the same thermal bonding resin as the resin frame, and which is thermally bonded to the entire top and bottom faces of the resin frame. The thermal bonding resin is a polypropylene- or polyethylene-based resin, and the functional material is at least one selected from the group consisting of a deodorizer, an antimicrobial agent, an adsorbent, a catalyst, and titanium dioxide. The resin frame is formed in a structure with a cross sectional shape corresponding to that of a honeycomb structure.

Probable Assignee: KIM JEONG WOO

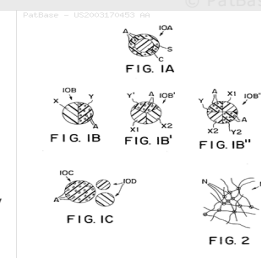
Earliest Publication Date: 20080617

**ANTI-MICROBIAL FIBER AND FIBROUS PRODUCTS**

Abstract: Source: US2003170453 AA An anti-microbial and/or anti-fungal synthetic fiber and various products made partially or wholly therefrom. The fiber comprises various thermoplastic polymers and additives in a mono-component form or a bi-component form in either a core-sheath or side-by-side configurations. The anti-microbial synthetic fibers comprise inorganic anti-microbial additives, distributed in certain areas to reduce the amount of the anti-microbial agents being used, and therefore the cost of such fibers. The fibers can incorporate anti-microbial additives so that they are not removed by repeated washing in boiling water and in dry clean cycles and become ineffective and conversely enhance access to the additives by washing or the like. The fibers comprise high tenacity polymers (e.g. PET) in one portion and hydrolysis resistance polymers (e.g. PCT) in another portion with the additives. The fibers can further be blended with non-anti-microbial fibers such as cotton, wool, polyester, acrylic, nylon etc. to provide anti-microbial finished fabrics. In one embodiment, binder fibers are used which are mixed with other fibers.

Probable Assignee: FOSS MFG CO LLC

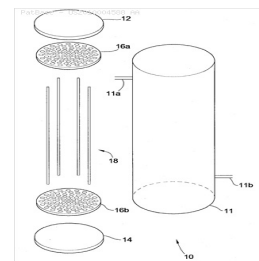
Earliest Publication Date: 20001207

**NANOCLAY SORBENTS FOR DIALYSIS**

Abstract: Source: US2010004588 AA Dialysis is enhanced by using nanoclay sorbents to better absorb body wastes in a flow-through system. Nanoclay sorbents, using montmorillonite, bentonite, and other clays, absorb significantly more ammonium, phosphate, and creatinine, and the like, than conventional sorbents. The clays may be used in wearable systems, such as a wearable peritoneal dialysis system, in which the dialysis fluid is circulated through a filter with nanoclay sorbents. Waste products are absorbed by the nanoclays and the dialysis fluid is recycled to the patient's peritoneum. Using the ion-exchange capability of the nanoclays, waste ions in the dialysis fluid are replaced with desirable ions, such as calcium, magnesium, and bicarbonate. The nanoclay sorbents are also useful for refreshing dialysis fluid used in hemodialysis and thus reducing the quantity of dialysis fluid needed for hemodialysis.

Probable Assignee: BAXTER HEALTHCARE SA

Earliest Publication Date: 20100107



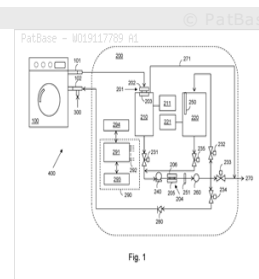
11) Family number: 74789104 (WO19117789 A1)

A RECYCLING DEVICE AND A METHOD THEREIN FOR RECYCLING USED WATER FROM A USED WATER SOURCE

Abstract: Source: WO19117789 A1 A recycling device (200) for recycling used water from at least one used water source (100, 101) is provided. The recycling device (200) comprises a first water tank (210) arranged to receive used water from the at least one water source (100), and sensor means (211) arranged to measure the water quality of used water in the first water tank (210). The recycling device (200) is characterized in that it comprises a second water tank (220) arranged to store used water within the recycling device (200), and a water pump (240) and one or more valves (231, 232, 233, 234, 235; 301). The pump (240) and one or more valves (231, 232, 233, 234, 235; 301) arranged in the recycling device (200) such that used water is able to be stored in the second water tank (220), or recycled out of the recycling device (200) from the first water tank (210) or from the second water tank (220), when the water quality of the used water is above a determined threshold level. Also, a method and a computer program performed and executed in the recycling device (200) for recycling used water from at least one used water source (100, 101) are also provided. Furthermore, a recycling system (400) comprising a recycling device (200) and at least one used water source (100, 101) and a recycling system (400) comprising a recycling device (200), at least one used water source (100, 101) and at least one water consumption device (100, 102) are also provided.

Probable Assignee: MIMBLY AB

Earliest Publication Date: 20190615



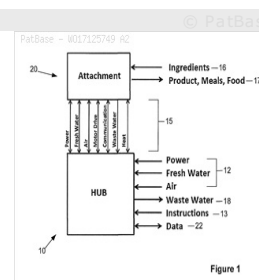
12) Family number: 62000891 (WO17125749 A2)

FOOD PROCESSING HUB

Abstract: Source: WO17125749 A2 A food processing hub (10) comprising an attachment connector (15) for connecting to a food processing attachment (20); wherein the hub (10) is adapted to supply a fluid to the attachment (20) via the attachment connector (15).

Probable Assignee: KENWOOD LTD

Earliest Publication Date: 20170726



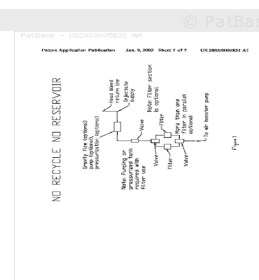
13) Family number: 27985952 (US2003005831 AA)

MACHINE FOR INJECTING LIQUIDS

Abstract: Source: US2003005831 AA A machine for injecting liquids. An air booster pump is adapted to receive injectate. The air booster pump is in fluid communication with one or more heads having apertures for nozzles. A hollow tube is preferably, but not necessarily, located within each head and is in fluid communication with the air booster pump. Injectate flows from the air booster pump into the head, preferably through the apertures in the wall of the hollow tube. Preferably, but not necessarily, the head is designed so that upon installation one point of the inside of the head will be at the highest elevation. Near such point the head has an escape aperture so that any gas within the injectate that enters the head will tend to flow to and through such escape aperture. Furthermore, a return line preferably, but not necessarily, takes injectate that flows through the escape aperture to the low-pressure side of the air booster pump. And also, a drain, in a work surface to which the head is preferably, but not necessarily, mounted, preferably, but not necessarily, reclaims injectate and transports it to the low-pressure side of the air booster pump. Filters exist for the injectate; a main injectate filter can preferably be replaced while the Machine is operating. And the Machine preferably includes a computer device for controlling its components and operation.

Probable Assignee: LARED HANSEN

Earliest Publication Date: 20030109



14) Family number: 44034190 (CA2629555 AA)

RELATED/OVERLAPPING INNOVATIONS IN HEALTH/ENERGY/TRANSPORT/FARMING AND INFRASTRUCTURE

Abstract: Source: CA2629555 AA (Claim 1) 1.) tissue culture of the stem cells and then differentiating them into desired cells (fruits and/or vegetables, kernels),

Probable Assignee: VOON GERARD

Earliest Publication Date: 20091114

15) Family number: 28880177 (US2003143308 AA)

NIXTAMALIZED CORN FLOUR PROCESS AND APPARATUS IMPROVEMENT FOR RECOVERING HEAT AND REDUCING PARTICULATE EMISSION FROM WASTE HOT AIR

Earliest Publication Date: 20030731

EUKARYOTIC MICROORGANISMS FOR PRODUCING LIPIDS AND ANTIOXIDANTS

PartBase - US2009171294 A4

Chemical reaction scheme showing the synthesis of various poly(arylene ether)s from 4,4'-dichlorodiphenyl ether and 4,4'-dichlorodiphenyl sulfone. The scheme includes reactions with diamines (ethylenediamine, 4,4'-diaminodiphenyl ether, 4,4'-diaminodiphenyl sulfone) to form poly(arylene ether)s, and reactions with diols (1,4-bis(hydroxymethyl)benzene, 1,4-bis(hydroxymethyl)benzene sulfone) to form poly(arylene ether)s. The scheme also shows the reaction of 4,4'-dichlorodiphenyl ether with 4,4'-diaminodiphenyl ether to form poly(arylene ether)s.

Earliest Publication Date: 20070621