



rexresearch.com

Light Water

<http://www.russia-ic.com/news/show/2107/>

http://www.vor.ru/science/science_rus.html#3

21.04.2006

Light Water Production Launched

Russian Institute for Biological Medicine launched production of light water, differing from ordinary water by stimulating all human systems' activities through data-flow level. Institute's vice-president claims such developments are unique and cannot be found anywhere else in the world.

Natural light water is found in mountain rivers and melting glaciers. Scientists designed rectifying columns for water fractional distillation and derived water free from its heavy components.

Light water normalizes any pathology found in an organism. It also improves body resistance to harmful effects of physical, chemical and biological origin. Clinical trials revealed light water's ability to dissolve higher concentrations of various substances and to penetrate membranes easier than ordinary water. Light water showed anti-inflammatory effect and eliminated tissue puffiness.

Recently developed "Langway" water is already available at the US market. Tests proved its potential to refine cell metabolic processes through accumulating energy inside a cell. Light water is highly recommended for skin regeneration stimulation. "Langway" tones the skin, reduces its greasiness, narrows skin pores, slows ageing and helps skin to resist negative environmental impact. Light water also regulates excretion of toxins, salts of heavy metals, cellular debris and infectious germs. Another positive aspect is that such water lowers blood sugar and cholesterol, thus it can be recommended for patients, suffering from diabetes, atherosclerosis, obesity and hypertension.

<http://www.russia-ic.com>

30.11.2005

Russia developed "live water" with rejuvenating effect

Russian scientists developed and began to produce "live water" – light water that removes harmful substances from body and produces rejuvenating effect. "“Langway-IBMED-50” purifies and removes toxic products from body, salts of heavy metals and other harmful substances”, - informed “Interfax” Chief Medical Doctor - Director of the Institute of Biological Medicine (IBMED), Academician Y. Bloshansky. According to him, natural water is one of the factors of our body's imperceptible poisoning. “It contains heavy isotopes of hydrogen (deuterium) and oxygen in quantities that considerably slow energy processes in cells, harm body's vitality and damage genic apparatus.” It is caused by its dissociation with terrestrial organisms due to space origin.

“Light water that has been purified of heavy isotopes acts on all body cells and results in a healthy

glow and skin”, said Y. Bloshansky.

The academician is sure that usage of light water with low contents of deuterium can prolong life of every organism both unicellular and multicellular one.

<http://www.biolider.com/catalog/3/>

Cosmetic Light Water "Langway-IBMED"

For the first time mountain freshness for your skin! Unique properties of light cosmetic water "Langway-IBMED" – keep your youth! Unique properties of light cosmetic water "Langway-IBMED" keep your youth!

- can be applied to all skin types, even for hypersensitive skin - Light water contains nothing which can cause an allergic reaction
- can be applied on make up for daily skin moisture
- stimulates processes of skin cells natural renewal, slows ageing
- renews skin moisture
- increases skin tonus
- reduces inflammation
- reduces the adverse affects of heating systems, conditioners, computers
- has a soothing action in case of sun burns

Clinical Tests:

Clinical tests showed that light cosmetic water "Langway-IBMED" intensifies epithelization, increases skin moisture, has anti-inflammatory action, removes edemas. Clinical tests showed that light cosmetic water "Langway-IBMED" intensifies epithelization, increases skin moisture, has anti-inflammatory action, removes edemas. Light cosmetic water "Langway-IBMED" tones up, cleanses skin and increases the effect of cosmetic products. Light cosmetic water "Langway-IBMED" tones up, cleanses skin and increases the effect of cosmetic products. Solubility of different substances in light water is higher than in traditional water. Solubility of different substances in light water is higher than in traditional water. Light water "Langway-IBMED" has lower viscosity than usual water that allows it to penetrate through cellular membranes. Light water "Langway-IBMED" has lower viscosity than usual water that allows it to penetrate through cellular membranes. Application of these properties can significantly increase effectiveness of active components of the "Celletelle" cosmetic products in complex face skin care by application of different creams in combination with light water. Application of these properties can significantly increase effectiveness of active components of the "Celletelle" cosmetic products in complex face skin care by application of different creams in combination with light water. Clinical tests in Cosmetology Clinic "Institute of Beauty" (Moscow) showed high effectiveness of light water. Clinical tests in Cosmetology Clinic Institute of Beauty "(Moscow) showed high effectiveness of light water.

Application:

- before make-up or after removal
- golf before or after removal
- in case of skin irritation after shave
- after cosmetic procedures (epilation, peelings, etc.)
- during sports
- during traveling
- after sun

Additionally, for complex body rejuvenation it is recommended to drink superlight biologically active medicinal water "Langway-IBMED-50". Additionally, for complex body rejuvenation it is

recommended to drink superlight biologically active medicinal water "Langway-IBMED-50." Medicinal water "Langway-IBMED-50" has a wide spectrum of biological activity, in particular: increases immunity, has detoxifying action, stimulates regeneration of cells and tissues. Medicinal water "Langway-IBMED-50" has a wide spectrum of biological activity, in particular : increases immunity, has detoxifying action, stimulates regeneration of cells and tissues.

Producer: "MTK Iceberg Ltd" Producer : "MTK Iceberg Ltd
Package: Bottle 210 ml Package : Bottle 210 ml
EUR 5.88

Restores youth and longevity!

- stimulates processes of self-renewal – regeneration of cells and tissues
- improves water metabolism, removes disorders of fatty metabolism, obesity and edemas
- purifies and removes metabolism products from the body, removes salt of heavy metals, toxins and other harmful substances;
- increases speed of water-lipidic metabolism and normalizes metabolism processes in body;
- increases body energy resources increases and immunity, prevents inflammation, in particular on skin surface – pustules, acne, eczema, etc.
- has rejuvenating effect
- increases viability and quality of sex cells
- prevents body from accumulation and affection of radionuclids; inhibits growth of several tumors, including – lungs carcinoma, uterine sarcoma, cervical carcinoma
- normalizes condition of hair, nails, skin turgor and provides healthy glow
- reduces sugar content, triglycerides and cholesterol in blood; is applied in case of diabetes 1 and 2, atherosclerosis, obesity
- stabilizes cellular membranes and vessels permeability
- has hypotensive action; is applied in case of arterial hypertension and neurocirculatory dystonia
- reduces alcohol withdrawal syndrome
- with longer use – improves sleep, memory, mental and physical activity
- is recommended in case of diets, during fasting days

Clinical Tests:

Tests of light water (in vitro) at the A. P.P. Hertsen Moscow Scientific Research Oncological Institute and the Scientific-Research Institute of Carcerogenesis of N.N.Hertsen Moscow Scientific Research Oncological Institute and the Scientific-Research Institute of Carcerogenesis of N. Blochin and the Russian Oncological Scientific Centre in cooperation with State Scientific Centre of the Russian Federation "Institute of medical-biological problems" confirmed inhibiting action of light water on multiplication of tumorous cells and growth of tumors. Blochin and the Russian Oncological Scientific Centre in cooperation with State Scientific Centre of the Russian Federation "Institute of medical-biological problems "confirmed inhibiting action of light on water multiplication of tumorous cells and growth of tumors.

Clinical tests in N.N. Blochin Scientific Centre showed that application of light water in complex treatment of patients suffering from breast cancer removes consequences of toxics (vomiting, pain, hair shedding) caused by chemotherapy. Blochin Scientific Centre showed that application of light water in complex treatment of patients suffering from breast cancer removes consequences of toxics (vomiting, pain, hair shedding) caused by chemotherapy.

Tests carried out in laboratories of Scientific Centre of Children Health of the Russian Academy of Medical Sciences showed that application of light water significantly increases (by 30%) energy resources in cells as well as level of cells protection from penetration of different toxins. Tests carried out in laboratories of Scientific Centre of Children Health of the Russian Academy of Medical Sciences showed that application of light water increases significantly (by 30%) energy

resources in cells as well as level of protection cells from penetration of different toxins.

The effect of light drinking water on patients with different metabolic disorders (arterial hypertension, obesity, carbohydrate metabolism disorders, dislipidemia, diabetes 1 and 2) was examined by the Endocrinology Department of the Russian Scientific Centre of Renewing Medicine and Balneology of the Ministry of Health of the Russian Federation. The effect of light drinking water on patients with different metabolic disorders (arterial hypertension, obesity, carbohydrate metabolism disorders, dislipidemia, diabetes 1 and 2) was examined by the Endocrinology Department of the Russian Scientific Centre of Renewing Medicine and Balneology of the Ministry of Health of the Russian Federation. After the course of application of light water, patients with increased level of beta — lipoproteins and coefficient of atherogeneity showed marked reduction of indices. After the course of application of light water, patients with increased level of beta - lipoproteins and coefficient of atherogeneity showed marked reduction of indices. In this group beta — lipoproteins index reduced by 52% and coefficient of atherogeneity – by 113%. In this group beta-lipoproteins index reduced by 52% and coefficient of atherogeneity-by 113%. In the control group reduction of indices made 43% and 35%. In the control group reduction of indices made 43% and 35%. Results of tests confirm that light water has effective hypoglycemic, hypolipidemic and hypotensive action on the body of patients with different metabolic disorders, it improves metabolism processes and increases body immunity. Results of tests confirm that light water has effective hypoglycemic, hypolipidemic and hypotensive action on the body of patients with different metabolic disorders, it improves metabolism processes and increases body immunity.

On the basis of results of these tests light drinking water is recommended by Russian Scientific Centre of Renewing Medicine and Balneology of the Ministry of Health of the Russian Federation in complex treatment of diabetes 2 and different metabolic disorders as well as in program of weight correction. On the basis of results of these tests light drinking water is recommended by Russian Scientific Centre of Renewing Medicine Balneology and of the Ministry of Health of the Russian Federation in complex treatment of diabetes 2 and different metabolic disorders as well as in program of weight correction.

Application:

Daily dose – 1 liter. Daily dose-1 liter judges. First glass of water on empty stomach in the morning. First glass of water on empty stomach in the morning. Optimal course – from 2 months of application. Optimal course-from two months of application.

It is not recommended to apply superlight biologically active medicinal water "Langway-IBMED-50" later than 2 hours before sleep since it has expressed tonic action. It is not recommended to apply superlight biologically active medicinal water "Langway-IBMED-50" later than two hours before sleep since it has expressed tonic action.

Constant application of medicinal water can significantly prolong life of any body. Constant application of medicinal water can significantly prolong life of any body.

For convenience of application in cosmetology light water is produced as aerosol. For convenience of application in cosmetology light water is produced as aerosol. Due to its unique structure and properties this water stimulates skin regeneration, reduces inflammations, slows skin ageing and has rejuvenating and moistening action. Due to its unique structure and properties this water stimulates skin regeneration, reduces inflammations, slows skin ageing and has rejuvenating and moistening action.

Certificate of registration of the Ministry of Health of the Russian Federation N 77.99.15.6.U.918.2.05. dated 03.02.2005. dated February 3, 2005.

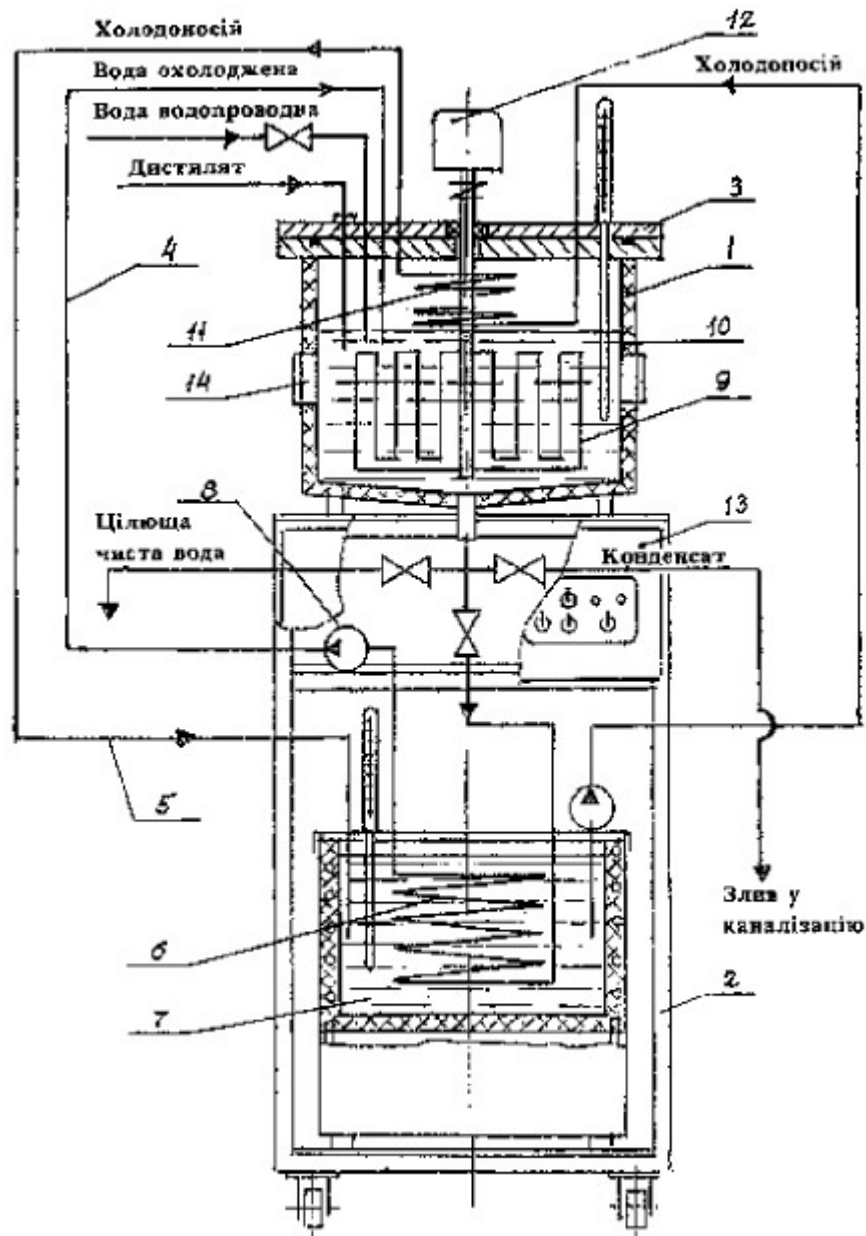
Term of storage 12 months

Producer: "MTK Iceberg Ltd"

UA66109

**METHOD FOR THE PREPARATION OF PURIFIED BIOLOGICALLY ACTIVE
HEALING WATER AT A LOW CONTENT OF HEAVY HYDROGEN ISOTOPES
AND "VIN-KOLO", A PLANT FOR REALIZING THE SAME**

2004-04-15



Фіг. 1

Inventor: PRYLYPENKO VADYM DMYTROVYCH, et al.

Applicant: VARNAVSKYI IVAN MYKOLAIOVYCH (UA)

Classification: - international: C02F9/00; C02F9/00; (IPC1-7): C02F9/00

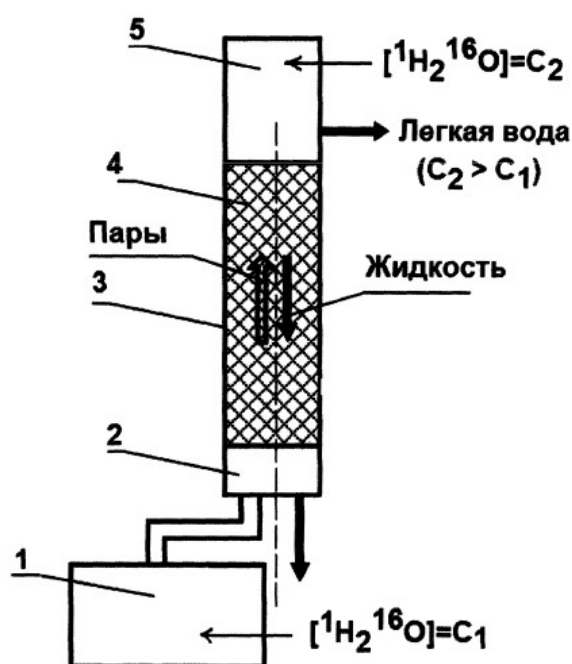
Abstract --- A method for the preparation of biologically active healing water at a low content of heavy hydrogen isotopes involves operations of preliminary purification of original water from hazardous and poisonous substances, water cooling and subsequent removing heavy hydrogen isotopes - deuterium and radioactive tritium from water in the water flow by an optionally solid condensation of these heavy isotopes in two stages. Upon obtaining the required icethickness the crystallization process is stopped and simultaneously heavy oxygen isotopes Ä_{17} and Ä_{18} is

removed. Thereafter the light water with a low content of heavy hydrogen and oxygen isotopes is collected, thawing and pouring of condensate is performed, obtained water is activated by an optimization of mineral composition and structure thereof. Before removal of heavy hydrogen isotopes from water the original water is overcooled to the temperature of $-0.5...-10^{\circ}\text{C}$ with an intensive agitation thereof. A plant for realizing the method contains a unit of preliminary cooling the original water, condensation apparatus, apparatus of overcooling below 0°C and intensive agitation of the original water. The condensation apparatus is made in the form of closed vertical disposed hollow water conduit of U-like form, which has heat-exchangers installed, which are connected to the refrigerating fluid and heat carrier sources, and straight flow pump with flow regulator. The upper branch of the water conduit is connected to the unit of preliminary cooling original water and to the apparatus of preliminary purification and decontamination of water, and the lower one is connected to the apparatus for optimization of mineral composition and structure of water. The heat exchangers are made in the form of tubular multi-row spiral having space between the coils filled with heat-conducting material and noble minerals. The apparatus of overcooling and intensive agitation of the original water contains processing chamber of cylindrical form with conical bottom and cover. The system of water condensation is disposed under cover, and above the cover the apparatus for reciprocal rotation of heavy water isotopes is disposed which is made in the form of tubular multi-row spiral.

RU2270590

DRINKING WATER WITH INCREASED CONTENT OF ^2H AND ^{18}O AND FOODSTUFFS CONTAINING THE SAME

2006-02-10



Inventor: SOLOV EV SERGEJ PAVLOVICH

Classification: - international: A23L2/38

Abstract --- FIELD: food processing industry. ^ SUBSTANCE: drinking water with increased content of represents industrially obtained light water containing at least 997.13 g/kg (or at least 997.36 g/kg, or at least 997.51 g/kg) based on total water amount, wherein sum amount of $^1\text{H}_2^{16}\text{O}$, $^1\text{H}^1\text{D}^{17}\text{O}$, $^1\text{H}^1\text{D}^{18}\text{O}$, and is at most 2.87 g/kg (or at most 2.64 g/kg, or at most 2.49 g/kg) based on total water amount. Drinking water with increased content of is useful in production of dairy, confectionary, bakery, fat-and-oil products, soups, fish and meat products, pasta, chewing gum, soy products, vinegar, vodka, brandy, tincture, balsam, liquor, alcohol cocktail, soft drink, mineralized water, functional products animal feed supplement. ^ EFFECT: water for optimization of isotopic composition in human body, foodstuffs and beverages of high technological characteristics.

RO120454

GERONTOLOGICAL AND ANTITUMORAL METHOD OF TREATMENT

2006-02-28

Inventor: DRAGOMIRESCU SILVIU

Classification: - international: A61K33/00; A61K33/00;

Abstract --- The invention relates to a gerontological and antitumoral method of treatment, by means of deuterium depleted water, which consists in administering light water, respectively superlight SU1 and SU2 RDW-type, having a deuterium content of 120 ppm D₂O, as beverage or concentrated beverage, in two successive 30- day stages, separated from each other by a period of 90 ... 180 days.

RU2270017

METHOD FOR TREATMENT OF PATIENTS WITH DIABETES MELLITUS

2006-01-10

Inventor: TIMAKOV ALEKSANDR ALEKSEEVICH, et al.

Classification: - international: A61K33/00; A61P3/10; A61K33/00; A61P3/00;

Application number: RU20040120854 20040708

Priority number(s): RU20040120854 20040708

Also published as: RU2004120854 (A)

Abstract --- Treatment involves prescription to patient light water as drinking water with the total mineralization 200-500 mg/l, the deuterium content 100 ppm, not above, and the oxygen-18 content 1800 ppm, not above, on the background of dietetic therapy and insulin therapy or intake of hypoglycemic preparations in the daily dose 1000-1500 ml. The first intake is carried out before eating in the morning in the dose 200-250 ml and the remaining amount for a day, 30-40 min before eating or in breaks of eating every day. The curative course is from 28 to 45 days. Method provides declining the blood glucose content and to improve metabolic processes. ^ EFFECT: improved treatment method.

RU2287318

INDIVIDUAL'S SKIN, HAIR, NAILS, MOUTH CAVITY CARE MEANS FOR IMPROVING STATE AND APPEARANCE OF THE SAME

2005-11-10

Inventor: SOLOV EV SERGEJ PAVLOVICH (RU)

Classification: - international: A61K8/19; A61P17/04

Abstract --- Individual's skin, hair, nails, mouth cavity care means for improving state and appearance thereof is selected from the group consisting of perfume means, cosmetic means, hygienic means containing light cleared water in the form of component or base, with content of 1H₂ 16O in light cleared water making at least 997.13 g/kg of total amount of H₂O, and acceptable perfume components and/or base, and/or cosmetic components, and/or base, and/or hygienic components, and/or base, and/or active substances. Utilization of light water with increased content of 1H₂ 16O as best solvent and/or diluent, and/or carrier of other active components in receipt of said means is more effective in comparison with similar means prepared with the use of water with standard content of 1H₂ 16O. ^ EFFECT: increased efficiency in utilization of said means for improving state and appearance of individual's skin, hair, nails and mouth cavity.

JP2005218426

METHOD FOR PRODUCING RICE GRUEL, CREAM AND CURRY OF RETORT PACK USING DEUTERIUM-DEPLETED WATER (SUPER LIGHT WATER), AND EFFECT THROUGH TAKING THE SAME

2005-08-18

Inventor: SEKI KUNIHIRO; USUI TATSUO

Applicant: USUI TATSUO; SEKI KUNIHIRO

Classification: - international: A23L1/30

Abstract --- PROBLEM TO BE SOLVED: To provide a method for maintaining health by solving the following problem: usually retort foods such as rice gruel, cream, curry and the like are produced by using water, but they are impossible to more surely maintain human health by taking the same. SOLUTION: The retort pack foods such as rice gruel, cream, curry and the like are produced by using deuterium-depleted water (super light water). By taking the retort foods, one's health is possible to be maintained.

JP2004357678

TREATMENT OF CANCER, DIABETES MELLITUS, LEUKEMIA, APLASTIC ANEMIA AND INSOMNIA, TREATMENT AND PREVENTION OF SEVERE ACUTE RESPIRATORY SYNDROME (SARS), REJUVENATION, ACTIVATION OF CELL AND PROMOTION OF INCREASE OF IMMUNE CELL BY SOY SAUCE PREPARED BY USING DEUTERIUM-ATTRITED WATER (SUPER LIGHT WATER) AS RAW MATERIAL, AND METHOD FOR PRODUCING THE SAME

2004-12-24

Inventor: USUI TATSUO; SEKI KUNIHIRO

Applicant: INTERNATL SCIENT KK

Classification: - international: A23L1/238;

Abstract --- PROBLEM TO BE SOLVED: To provide a method for treating and preventing the following diseases and performing the rejuvenation, activation of cells and promotion of the increase of immune cells by solving problems such that, conventional, the treatments of cancer, diabetes mellitus, leukemia, aplastic anemia and insomnia are usually coped with surgery, radiation treatments, medicinal treatments, and the like, and in these cases, patients visit directly to hospitals or clinics and receive treatments, but in the case of SARS, there is no treating method found. SOLUTION: This soy sauce produced by using deuterium attrited water (super light water) as the raw material can be used for the treatment and prevention of the cancer, diabetes mellitus, aplastic anemia, insomnia and SARS, rejuvenation, the activation of the cells and promotion of increase of the immune cells.

JP2004315490

THERAPY FOR APLASTIC ANEMIA (MYELODYSPLASTIC SYNDROME) WITH PHYSIOLOGICAL SALINE SOLUTION OF DEUTERIUM-REDUCED WATER (SUPER LIGHT WATER)

2004-11-11

Inventor: USUI TATSUO

Applicant: INTERNATL SCIENT KK

EC: IPC: A61K33/00; A61P7/06; A61K33/00 (+3)

JP2004315489

TREATMENT FOR PRESBYOPIA AND CATARACT, AND ACTIVATION OF CRYSTALLINE LENS WITH EYE LOTION OF DEUTERIUM-REDUCED WATER (SUPER LIGHT WATER)

2004-11-11

Inventor: USUI TATSUO

Applicant: INTERNATL SCIENT KK

EC: IPC: A61K35/02; A61P27/02; A61P27/12 (+5)

JP2004315488

TREATMENT OF CANCER, DIABETES, LEUKEMIA AND INSOMNIA AND REJUVENATION, ACTIVATION OF CELL AND PROMOTION OF IMMUNOCYTE INCREASE BY USING BEER BREWED IN DEUTERIUM-REDUCED WATER (SUPER LIGHT WATER) AS RAW MATERIAL

2004-11-11

Inventor: USUI TATSUO

Applicant: INTERNATL SCIENT KK

EC: IPC: C12C5/00; A61K9/08; A61K33/00 (+20)

JP2004315487

MUSCLAR ENFORCEMENT BY TAKING SPORT DRINK CONTAINING DEUTERIUM-REDUCED WATER (SUPER LIGHT WATER) AS RAW MATERIAL, AND METHOD FOR PRODUCING THE SPORT DRINK

2004-11-11

Inventor: USUI TATSUO

Applicant: INTERNATL SCIENT KK

EC: IPC: A23L2/38; A23L1/30; A23L2/00 (+18)

JP2004315486

THERAPY FOR APLASTIC ANEMIA (MYELOYDYSPLASTIC SYNDROME) WITH DEUTERIUM-REDUCED WATER (SUPER LIGHT WATER)

2004-11-11

Inventor: USUI TATSUO

Applicant: INTERNATL SCIENT KK

EC: IPC: A61K35/02; A61P7/00; A61P7/06 (+5)

JP2004275658

SMALL DAMP TOWEL PREPARED USING DEUTERIUM DEPLETED WATER (SUPER LIGHT WATER)

2004-10-07

Inventor: USUI TATSUO

Applicant: INTERNATL SCIENT KK

EC: IPC: A47K7/00; A47K7/00; (IPC1-7): A47K7/00

JP2004277391

TREATMENT OF CANCER, DIABETES, LEUKEMIA AND INSOMNIA WITH SAKE BREWED USING DEUTERIUM-REDUCED WATER AND ITS USE FOR REJUVENATION, ACTIVATION OF CELLS, AND ACCELERATION OF INCREASE OF IMMUNOCYTE, AND PRODUCTION METHOD THEREOF

2004-10-07

Inventor: USUI TATSUO Applicant: INTERNATL SCIENT KK

EC: IPC: C12G3/02; A61K31/045; A61K35/02 (+30)

JP2004231627

POULTICE UTILIZING DEUTERIUM-ATTRITED WATER (SUPER LIGHT WATER),

METHOD FOR TREATING WRINKLE, DARKENED SPOT, WART, SKIN CANCER AND RED BLOTCH WITH PACK

2004-08-19

Inventor: USUI TATSUO

Applicant: INTERNATL SCIENT KK

EC: IPC: A61K9/08; A61K8/00; A61K8/19

JP2004217610

TREATMENT OF CANCER, DIABETES, LEUKEMIA AND INSOMNIA, AND PROMOTION OF REJUVENATION, CELL ACTIVATION AND IMMUNOCYTE PROLIFERATION BY PHYSIOLOGICAL SALINE COMPRIZING DEUTERIUM-DEPLETED WATER

2004-08-05

Inventor: USUI TATSUO

Applicant: INTERNATL SCIENT KK

EC: IPC: A61K35/02; A61P3/10; A61P25/20 (+11)

JP2004175776

METHOD FOR PREVENTING JET LAG BY USING DEUTERIUM-DIMINISHED WATER (SUPER LIGHT WATER)

2004-06-24

Inventor: USUI TATSUO

Applicant: INTERNATL SCIENT KK

EC: IPC: A61K33/00; A61P25/02; A61K33/00 (+3)

JP2004175775

BATH USING DEUTERIUM-DIMINISHED WATER (SUPER LIGHT WATER) AS BATH WATER AND METHOD FOR PRODUCING DEUTERIUM-DIMINISHED WATER (SUPER LIGHT WATER)

2004-06-24

Inventor: USUI TATSUO

Applicant: INTERNATL SCIENT KK

EC: IPC: A61K8/00; A61K33/00; A61K35/02 (+17)

JP2004091460

METHOD FOR REJUVENATION AND HEALTH MAINTENANCE BY DEUTRIUM-REDUCED WATER (SUPER LIGHT WATER) AND METHOD FOR PRODUCING THE WATER

2004-03-25

Inventor: USUI TATSUO

Applicant: INTERNATL SCIENT KK

EC: IPC: A23L2/52; A61K35/02; A61P43/00 (+9)

JP2004075654

METHOD FOR TREATING OSTEOPOROSIS AND PROSTATOMEGALY BY DEUTERIUM-REDUCED WATER (SUPER LIGHT WATER)

2004-03-11

Inventor: USUI TATSUO
Applicant: INTERNATL SCIENT KK
EC: IPC: A61K35/02; A61P13/08; A61P19/10 (+6)

JP2004067654
METHOD FOR MEDICAL TREATMENT WITH WATER HAVING DECREASED
DEUTERIUM CONTENT (SUPER-LIGHT WATER)
2004-03-04

Inventor: USUI TATSUO
Applicant: INTERNATL SCIENT KK
EC: IPC: A61K33/00; A61P1/04; A61P3/10 (+15)

US2006016681
Apparatus and Method for Separating Tritiated and Heavy Water from Light Water via a
Conical Configuration
2006-01-26

Inventor: MUCHNIK BORIS J (US)
Classification: - international: C02F1/04; C01B5/00; B01D3/14; C01B5/00; C02F1/04; B01D3/14;
- European: B01D59/08; C01B5/00; C02F1/22
Abstract --- An system for separating tritiated water from common water, using gravity and the freezing point of tritiated water to cause tritiated water to freeze along the inside of a conically-shaped collection chamber. The common water and liquid tritiated water that pass out the bottom of the conically-shaped collection chamber are pumped back to the top of the conically-shaped collection chamber for repeated runs until sufficient tritiated water has frozen to the inside of the conically-shaped collection chamber. A water wheel is positioned to assist in powering the pump that drives water through repeated runs.

US6984327
System and Method for Separating Heavy Isotopes of Hydrogen Oxide from Water
2006-01-10

PATTERSON JAMES A
Classification: - international: B01D61/20; C02F1/42; B01D61/20; C02F1/42; - European:
B01D61/00; B01D61/36; B01D63/02; B01D65/08B10B; C02F1/44
Abstract --- An apparatus and method for separating heavy isotopes of hydrogen from contaminated water. The apparatus includes a treatment chamber with an elongated hollow core fiber (HCF) extending within the chamber. A reservoir holds contaminated water mixed with beads formed of an exchange resin, the mixture of contaminated water and beads forming a flowable slurry. The slurry is continuously circulated through the hollow core fiber and the reservoir preferably by a pulsating peristaltic pump. The beads absorb a portion of the heavy isotopes from the slurry by exchange with waters of hydration of the beads while the hollow core fiber allows permeation of only light water from said slurry outwardly through the HCF wall as a permeate.
