

RITM OKB ZAO

PATENT OF THE RUSSIAN FEDERATION

No. 2155614

PATENT OF THE RUSSIAN FEDERATION

No. 2211712

PATENT OF THE RUSSIAN FEDERATION

No. 90989

PATENT OF THE RUSSIAN FEDERATION

No. 2325929

PATENT OF THE RUSSIAN FEDERATION

No. 2113249

PATENT OF THE RUSSIAN FEDERATION

No. 77924

PATENT OF THE RUSSIAN FEDERATION

No. 41421

PATENT OF THE RUSSIAN FEDERATION

No. 55290

PATENT OF THE RUSSIAN FEDERATION

No. 41419





PATENT OF THE RUSSIAN FEDERATION No. 2155614

Application No. 98112665/14

Date of Receipt: 26.06.1998

Date of Registration: 10.09.2000

Applicant(s):

Nadtochiy Aleksandr Ivanovich

Author(s) of Invention:

Gorfinkel Yuriy Viktorovich, Grinberg

Yakov Zalmanovich, Nadtochiy Aleksandr

Ivanovich, Revenko Aleksandr Nikolaevich,

Unakafov Mikhail Anatolyevich

Former patent owner(s):

Nadtochiy Aleksandr Ivanovich

Patent Owner(s): RITM OKB ZAO (RU)

*Agreement № RD0013169, registered 16.10.2006

ADAPTIVE ELECTROSTIMULATOR

- Summary:

The invention refers to medical technology and, in particular, to electronic devices intended to provide electric stimulation of the human body; its purpose is to stimulate skin areas with electric pulses in order to provide general regulatory influence on the body's physiological systems and to obtain analgesic effect. The technical result: functional capabilities of the adaptive electrostimulator are extended and such result is obtained by using feedback subject to local, physiological reaction based on analysis of half-waves of free oscillations of stimulation pulses, and also subject to individual setting by a doctor of stimulation pulse parameters that provide improvement of analgesic effect. The electrostimulator includes a rectangular pulse unit, control unit, energy stimulation control unit, output unit, passive and active electrodes, pulse burst formation unit, feedback unit, memory unit for individual rates and unit for sounding signal parameter recording. 9 dep. cl., 25 ill.

РОССИЙСКАЯ ФЕДЕРАЦИЯ



ПАТЕНТ

НА ИЗОБРЕТЕНИЕ

№ 2211712

Российским агентством по патентам и товарным знакам на основании Патентного закона Российской Федерации, введенного в действие 14 октября 1992 года, выдан настоящий патент на изобретение

АДАПТИВНЫЙ ЭЛЕКТРОСТИМУЛЯТОР

Патентообладатель(ли):

Надточий Александр Иванович

по заявке № 2001123470, дата поступления: 23.08.2001

Приоритет от 23.08.2001

Автор(ы) изобретения:

см. на обороте

Патент действует на всей территории Российской Федерации в течение 20 лет с **23 августа 2001 г.** при условии своевременной уплаты пошлины за поддержание патента в силе

Зарегистрирован в Государственном реестре изобретений Российской Федерации

г. Москва, **10 сентября 2003 г.**

Генеральный директор

А.Д. Корсакин

PATENT OF THE RUSSIAN FEDERATION

No. 2211712

Application No. 2001123470/14,

Date of Receipt: 23.08.2001,

Date of Registration: 10.09.2003

Applicant(s):

Nadtochiy Aleksandr Ivanovich

Author(s) of Invention:

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Yakov Zalmanovich,

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Former patent owner(s):

Nadtochiy Aleksandr Ivanovich

Patent Owner(s): RITM OKB ZAO (RU)

*Agreement № RD0027229, registered 01.10.2007

List of documents referred to in the

search report: RU 2155614 C2,

10.09.2000. RU 2068277 C1, 27.10.1996.

ADAPTIVE ELECTROSTIMULATOR

(57) Summary:

- The invention refers to medical technology and, in particular, to electronic devices intended to provide electric stimulation of the human body. The device is intended to provide therapeutic non-invasive stimulation of skin surface of a patient with electric pulses in order to give general regulatory influence on the body's physiological systems in treatment of a large range of pathologies and to obtain analgesic effect. The device includes active and passive electrodes, and a unit for feedback signal analysis, output unit, power supply unit and control unit, and power supply control unit, control key unit, light indication unit and sound indication unit, output signal indication unit and computer interface unit. The control unit is made as a processor module. Such form provides improvement of therapeutic effect, extension of its functional capabilities. 5 dep. cl., 5 ill.

РОССИЙСКАЯ ФЕДЕРАЦИЯ



ПАТЕНТ

НА ПОЛЕЗНУЮ МОДЕЛЬ

№ 90989

**УСТРОЙСТВО ЭЛЕКТРОВЗДЕЙСТВИЯ НА ЖИВОЙ
ОРГАНИЗМ**

Патентообладатель(ли): *ЗАО "ОКБ "РИТМ" (RU)*

Автор(ы): *Гринберг Яков Зальманович (RU), Унакафов Михаил
Анатольевич (RU)*

Заявка № 2008137476

Приоритет полезной модели 18 сентября 2008 г.

Зарегистрировано в Государственном реестре полезных
моделей Российской Федерации 27 января 2010 г.

Срок действия патента истекает 18 сентября 2018 г.

Руководитель Федеральной службы по интеллектуальной
собственности, патентам и товарным знакам



Б.П. Симонов

PATENT OF THE RUSSIAN FEDERATION No. 90989

Application No. 2008137476/22, Priority
Date: 18.09.2008

Date of Registration: 27.01.2010

Applicant(s): RITM OKB ZAO (RU)

Patent Owner(s): RITM OKB ZAO

Author(s):

Grinberg Yakov Zalmanovich (RU),

Unakafov Mikhail Anatolyevich (RU)

DEVICE FOR ELECTRIC STIMULATION OF LIVING ORGANISM

- (57) Summary:
- The utility model refers to medicine and medical technology and, in particular, to methods of electric stimulation of a living organism, and can be applied for therapeutic, rehabilitation, prophylaxis purposes, and also for investigations aimed to analyze how different factors can influence a living organism.
- The purpose of the applied invention is to extend functional capabilities of devices providing electric stimulation by applying special (music) modulations, and also by applying electric and sound stimulation at the same time.
- The device provides electric stimulation of a living organism, includes a passive electrode connected to the “common” wire of the device, consequently connected unit for control pulse parameter setting, a micro-computer and an indication unit, high-voltage amplifier with the input connected to the second output of a micro-computer and with the output connected to the active electrode, and it differs with a unit for music fragment storing and such unit is made either in the internal memory of a micro-computer or in the form of an external storage unit but the external storage unit output is connected to the second input of the micro-computer.
- The device may additionally include a sound source. 1 ind.cl., 1 dep.cl., 2 ill.

РОССИЙСКАЯ ФЕДЕРАЦИЯ



ПАТЕНТ

НА ИЗОБРЕТЕНИЕ

№ 2325929

**СПОСОБ ЭЛЕКТРОВОЗДЕЙСТВИЯ НА ЖИВОЙ
ОРГАНИЗМ И УСТРОЙСТВО ДЛЯ ЕГО
ОСУЩЕСТВЛЕНИЯ**

Патентообладатель(и): *Закрытое акционерное общество
Особое Конструкторское Бюро "Ритм" (RU)*

Автор(ы): *Гринберг Яков Зальманович (RU), Унакафов
Михаил Анатольевич (RU)*

Заявка № 2005133535

Приоритет изобретения 31 октября 2005 г.

Зарегистрировано в Государственном реестре
изобретений Российской Федерации 10 июня 2008 г.

Срок действия патента истекает 31 октября 2025 г.

Руководитель Федеральной службы по интеллектуальной
собственности, патентам и товарным знакам



Б.П. Симонов

PATENT OF THE RUSSIAN FEDERATION No.2325929

Application No. 2005133535/14

Priority Date: 31.10.2005

Date of Registration: 10.06.2008

Patent Owner(s): RITM OKB ZAO

Author(s):

Grinberg Yakov Zalmanovich (RU),

Unakafov Mikhail Anatolyevich (RU)

List of documents referred to in the search
report:

WO 90/10472 A1, 20.09.1990, the whole
document. RU 2161904 C2, 20.01.2001,
Summary. RU 5524 U1, 16.12.1997,
formula. RU 18353 U1, 20.06.2001, formula.
SU 1011130 A, 15.04.1983, summary, fig.1.
Control Methods. Biological and
Microbiological Factors. Application of
Method of Electric Resistance Measurement
(impedance).

METHOD OF ELECTRIC STIMULATION OF LIVING ORGANISM AND DEVICE INTENDED TO PROVIDE IT

- Summary:

Group of devices refers to medicine and is intended to provide electric stimulation of a living organism. Electrodes are to be set on skin and/or mucous surfaces, and an electric signal is to be passed through them. The signal control depends on course of electrochemical processes on skin and/or mucous surfaces as a result of interaction between the electrodes and electric signal with skin and/or mucous surfaces. At this, the electric signal is to be passed through the electrodes from the inductance coil. The control of duration of electric stimulation and/or electric signal shape change depends on duration of formation or change of double-layer capacity, or on duration of formation or change of double-layer capacity and active skin resistance change. The device providing electric stimulation of an organism includes active and passive electrodes, an inductance coil with the first output connected to the passive electrode, a power source, and unit for regulatory pulse parameter setting, micro-computer and indication unit consequently connected. The indication unit includes a unit for determination of electrochemical processes duration, unit for electric signal shape parameter control, unit for pumping formation. The second input of the micro-computer is connected to the output of the unit for determination of electrochemical processes duration with the input connected to the active electrode and to the second output of the inductance coil. The inductance coil input is connected to the output of the unit for pumping formation with the input connected to the first output of the microcomputer. The power source output is connected to the unit for control pulse parameter setting, to the second inputs of the units for determination of electrochemical processes duration, pumping formation unit, unit for electrical signal shape parameter control and indication unit, and to the third input of the micro-computer. The unit for electric signal shape parameter control is connected to the third output of the micro-computer and electrodes. The proposed group of inventions allows to optimize duration of stimulation with electric current on a living organism. 2 ind.. and 6 dep.cl., 12 ill

PATENT OF THE RUSSIAN FEDERATION

No.2113249

Application No. 97108359/14, 02.06.1997

Date of Publication: 20.06.1998

Applicant(s): Limited Liability Partnership «OKB «RITM»

Author(s): Gorfinkel Yuriy Viktorovich, Grinberg Yakov Zalmanovich,
Nadtochiy Aleksandr Ivanovich, Revenko Aleksandr Nikolaevich and
Unakafov Mikhail Anatolyevich.

Patent Owner(s): Limited Liability Partnership «OKB«RITM»

ELECTROSTIMULATOR

- (57) Summary:

The invention refers to medical technology, to electronic devices intended to provide electric stimulation of the human body, and its purpose is to provide therapeutic non-invasive stimulation of skin surface of a patient with electric pulses in order to give general regulatory influence on the body's physiological systems and to obtain analgesic effect. The technical result: the functional capabilities of the adaptive electrostimulator are extended and such result is obtained by setting by a doctor of stimulation pulse parameters that provide improvement of therapeutic effect. The electrostimulator includes a rectangular pulse unit 2, power amplifier 5 and two electrodes 10 and 11. The first sawtooth voltage unit, power setting unit 5, trapezoidal generator 6, indicator 12, pulse shape control unit 11 and the second sawtooth voltage unit 16 are supplementary added. 6 dep.cl., 14 ill

PATENT OF THE RUSSIAN FEDERATION
No. 77924



Application No.
2009501341
Date of Registration:
16.03.2011
Patent Owner(s):
RITM OKB ZAO
Author(s): Zryatchikov
Vladimir Modestovich (RU);
Istratov Vladimir Grigoryevich (RU);
Zenkin Maksim Vitalyevich (RU)
ELECTROSTIMULATOR



PRODUCTION PROTOTYPE

- *characteristics:*

- an elongate parallelepiped is taken as a basis for the case;
- its controls are located on the face surface;
- the working parts – electrodes are provided on the bottom surface;
- the controls and indication units are located at the top of the face surface with clearly determined functional areas;

- *Differences:*

- the case edges are made with rounded corners;
- the face surface of its case is subject to the composition and includes the controls as four buttons (marked with icons) of oval shape located at the front and at the same level, and an indication unit – a liquid-crystal display, at the rear - area for holding by a hand;
- the electrodes are made as a rectangular coaxial and located on the chamfered nose on the bottom surface below the controls and indication units, and a socket required to connect a remote electrode is located on the case side;
- the control buttons are located symmetrically on the face surface of its case;
- the indication unit is made with the ratio of length and width: appr. 2:1;

РОССИЙСКАЯ ФЕДЕРАЦИЯ



ПАТЕНТ

НА ПОЛЕЗНУЮ МОДЕЛЬ

№ 41421

ЭЛЕКТРОДНОЕ УСТРОЙСТВО

Патентообладатель(ли): *Закрытое акционерное общество
Особое конструкторское бюро "РИТМ" (RU)*

Автор(ы): *с.м. на обороте*

Заявка № 2004110141

Приоритет полезной модели 02 апреля 2004 г.

Зарегистрировано в Государственном реестре полезных
моделей Российской Федерации 27 октября 2004 г.

Срок действия патента истекает 02 апреля 2009 г.

Руководитель Федеральной службы по интеллектуальной
собственности, патентам и товарным знакам

Б.П. Симонов

PATENT OF THE RUSSIAN FEDERATION No. 41421

Application №: 2004110141/22, 02.04.2004

Date of Registration: 27.10.2004

Patent Owner(s): RITM OKB ZAO (RU)

Author(s):

Grinberg Yakov Zalmanovich (RU),

Nadtochiy Aleksandr Ivanovich,

Koretskiy Yuriy Anatolyevich,

Starovoytov Yuriy Yuryevich,

Revenko Aleksandr Nikolaevich.

ELECTRODE ASSEMBLY

(57) Summary:

The utility model refers to medical technology, in particular, to devices intended for electric stimulation, and it can be also used in SCENAR-therapy for stimulation of body areas covered with the hair. The technical result obtained: improvement of the SCENAR-therapy efficacy while stimulating body areas covered with the hair. The electrode assembly includes a pyramidal case 1, electroconductive pins 2 fixed in the electroconductive foundation. The electroconductive foundation includes at least two parts 3 and 4, each of which is connected with a corresponding contact of connector 6 to plug in an electroneuroadaptive stimulator through a current carrying cable (is not shown on drawings). The electroconductive pins 2 fixed on part 3 of the electroconductive foundation serve as a passive electrode, and those fixed on part 4 of the electroconductive foundation serve as an active electrode.

РОССИЙСКАЯ ФЕДЕРАЦИЯ



ПАТЕНТ

НА ПОЛЕЗНУЮ МОДЕЛЬ

№ 55290

ЭЛЕКТРОДНОЕ УСТРОЙСТВО

Патентообладатель(ли): *Закрытое акционерное общество
"Особое Конструкторское Бюро "РИТМ" (RU)*

Автор(ы): *с.м. на обороте*

Заявка № 2006101302

Приоритет полезной модели 16 января 2006 г.

Зарегистрировано в Государственном реестре полезных
моделей Российской Федерации 10 августа 2006 г.

Срок действия патента истекает 16 января 2011 г.

Руководитель Федеральной службы по интеллектуальной
собственности, патентам и товарным знакам



Б.И. Симонов

PATENT OF THE RUSSIAN FEDERATION No. 55290

Application No. 2006101302/22, 16.01.2006

Date of Registration 10.08.2006

Patent Owner(s): RITM OKB ZAO (RU)

Author (s):

Grinberg Yakov Zalmanovich (RU),
Zryatchikov Vladimir Modestovich (RU),
Istratov Vladimir Grigoryevich (RU),
Konopelkin Vasiliy Vladimirovich (RU)

ELECTRODE ASSEMBLY

(57) Summary:

The utility model refers to medical technology and, in particular, to devices intended to provide electric stimulation, it can be used in SCENAR-therapy for stimulation of various skin surface areas. The technical result obtained: improvement of the SCENAR-therapy efficacy while stimulating body areas of “challenging relief” (e.g. the nose, eyes, etc.).

The explanation of this technical result : the electrode assembly includes a case, supports for electrodes, active and passive electrodes, input leads, and, moreover , electrode supports are made of conducting material with firmly fixed on them spherical active and passive electrodes seal off from each other and are wired in the one end of a tubular case, input leads are lined to the electrodes on the other end of the case.

PATENT OF THE RUSSIAN FEDERATION
No. 41419



Application No. 2004110143/22,
02.04.2004

Date of Registration: 27.10.2004

Patent Owner(s): RITM OKB ZAO (RU)

Author(s):

Grinberg Yakov Zalmanovich (RU),
Nadtochiy Aleksandr Ivanovich,
Koretskiy Yuriy Anatolyevich,
Revenko Aleksandr Nikolaevich.

ELECTRODE ASSEMBLY

(57) Summary:

The utility model refers to medical technology and, in particular, to devices intended to provide electric stimulation, it can be used in the SCENAR-therapy for stimulation of biologically active points. The technical result obtained: improvement of the SCENAR-therapy efficacy while stimulating biologically active points. The electrode assembly includes a tubular case 1 with an electrode unit (containing active 2 and passive 3 electrodes and a dielectric plug separating them) fixed on one of its end. On the other end of the case 1, a two wire input lead 5 is lined to electrodes 2 and 3, and one of the wires is connected to active electrode 2 and the other one – to passive electrode 3. Two wire input lead 5 is ended with a connector 6 to plug in an electroneuroadaptive stimulator. To prevent the conductor being broken, input lead 5 is pulled through a shock absorbing bushing 7.