Apparatus for the emission of a flow of electronic radiations and large spectrum electromagnetic radiations

Vorrichtung für die Emission von Elektronenstrahlen und von elektromagnetischen Strahlungen mit breiter spektraler Verteilung

Dispositif pour l’émission d’un courant d’électrons et de radiations électromagnétiques à large spectre

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- DATABASE WPI Section Ch, Week 8616 Derwent Publications Ltd., London, GB; Class B04, AN 86-105771 XP002013287 & SU-A-1 183 110 (KHARK NEUROLOGY PSY), 7 October 1985

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Apparatus for the emission of a combined flow of electrons and electromagnetic radiations comprising two electric circuits (2, 2') having opposite polarities, positive (+) and negative (-).

Each circuit (2, 2') comprises an electric or electronic device (7, 7'), suitable to supply a direct current whose voltage is comprised between 4000 and 80,000 V, and whose intensity is comprised between 0.05 and 0.5 mA, and a plate-like end conductor (9, 9') provided with one or more bundles of carbon fibres which act as pointed conductors, which terminal is connected to the outlet (8, 8') of said electric or electronic device.

When the two plates (9, 9') provided with bundles of carbon fibres (11, 11') are positioned and approached one in front of the other, a combined flow of electrons and electromagnetic waves circulating from pole (-) to pole (+) is obtained.

This invention relates to an apparatus for the emission of a combined flow of electrons and electromagnetic radiations.

The apparatus of this invention has a specific application in the medical sector for the therapeutic treatment of stimulation and revitalization of living cells and in particular human cells.

In fact, it is known that when a continuous flow of electrons is directed against a human body, a current forms which passes, more or less completely, through the body, according to a complicated exchange operation between the atoms that make up the cells, causing in this way an energy exchange between the cells and the generation in their inside of electrochemical phenomena such as to create oxygenation and revitalization conditions.

It is also known that, because of their structure, living cells are animated by vibrations produced by the continuous action of external electromagnetic radiations (cosmic rays). When a cell, thanks to the conformation of its nucleus, and in particular to the precise length and structure of its filament, which is different from cell to cell, even of the same type, is excited by a vibratory action produced by the electromagnetic radiations, starts vibrating and resonating with an own specific frequency.

Namely, as a consequence of its shape and the size of its filament, each cell vibrates according to an own wavelength. It ensues from this that all the cells that form an organ or a body as a whole, vibrate according to different wavelengths, even though their magnitude order differs only to a minimum extent and comprises rather limited frequency bands.

The cells, following lasting intensity variations of the above external electromagnetic radiations, undergo vibratory alterations and modifications of the intracellular energy system, and consequently they lose their original oscillatory capacities.

Due to this effect, the cells lose their functional capacity, reducing the intensity and the coordination of the metabolic processes. The cells that are in such state are usually called “depressed cells”.

However, based on studies and researches carried out on said cell behaviour, it is possible to regenerate the “depressed” cells by exciting them with a flow of large spectrum artificial electromagnetic radiations, such as to comprise the frequencies of all the cells of the human body.

With reference to humans, it can be assumed that many of the conditions of psychophysical imbalance, such as asthenia, fatigue, depression, etc., may arise from imbalances of the cellular biologic system, caused either by variations of the electromagnetic intensity which humans are usually submitted to in their environment, or by oxygenation deficit in the inside of the cells.

It is known that said functional anomalies of the human cells can be overcome by means of a treatment with a combined flow of electrons and electromagnetic radiations, as living cells are characterized in that they always tend to resynchronize on their original resonances.

GB-A-2 181 059 discloses an electrical medical instrument for increasing the metabolic activity of desired cells by inducing electrical current flow through the cells to be treated. The disclosed instrument comprises a source of direct electrical energy, a pair of output terminals connected to a pair of electrodes which are adapted to be placed in contact with healthy tissue opposite one another across damaged tissue, and means for generating from the energy source a voltage wave and impressing it across the output terminals.

SU-A-1 183 110 - Database WPI, Section Ch, week 8516 - Derwent Publications, discloses a depression treatment by polarising brain with direct current. The therapy involves polarisation of the structure of the brain by direct current by placing two pairs of electrodes with polar voltage in positions diametrically opposed on the surface of the skin on the head.

Apparatuses are known that allow to emit combined electronic and electromagnetic currents, utilizable for the aforementioned treatment. Such apparatuses comprise basically an electric circuit formed by an electric or electronic device, such as for instance, a transformer which, fed by alternated current from the mains, can supply at the outlet a positive or negative direct current of high voltage and very low intensity, which is conveyed to a conductor with pointed ends. Such pointed ends are directed towards the concerned part of the body which is therefore swept over by the bundles of electronic and electromagnetic radiations coming from said points.

However, these apparatuses have some drawbacks which reduce their effectiveness, as will be precised in the following.

A first serious drawback ensues from the fact that, as the direct current available from the transformer has one only polarity, negative or positive, the radiation
flow emitted by the partly pointed ends of the conductor, disperses, tending to circulate at the epidermic level and groundwards, flowing in this way outside the body part instead of penetrating in depth, as the system formed by the pointed ends of the conductor and the patient's body has a certain electric resistivity.

[0019] A further serious drawback is due to the fact that the pointed ends of the conductor allow to have rather limited radiation flow capacities and therefore such apparatuses provide very low performances.

[0020] Object of this invention is to overcome the aforementioned drawbacks.

[0021] In its more general aspects, this invention allows to achieve this and further objects thanks to an apparatus which comprises two electric circuits, provided each with an electric or electronic device, such as for instance a transformer with rectifying diodes, capable of providing at the outlet a direct current of polarity opposite from one another, high voltage (4000-80,000 V) and very low intensity (0.05-0.5 mA).

[0022] The electric or electronic devices of the two circuits supply direct currents of opposite polarity, one positive (+) and one negative (-), to two plate-like conductors equipped with at least a bundle of carbon fibres which act as pointed ends.

[0023] The subject matter of the present invention is, therefore, an apparatus for the emission of a combined flow of electrons and electromagnetic radiations fed by an alternating current distribution, comprising two electric circuits having opposite polarity, one circuit having a positive polarity (+) and the other circuit having a negative polarity (-), each electric circuit comprising an electric or electronic device transforming the alternating current into direct current and delivering a direct current having a voltage comprised between 4,000 and 80,000 V and an intensity comprised between 0.05 and 0.5 mA, and a plate-like end conductor connected to each outlet of said electric or electronic device and provided with at least one bundle of pointed conductors.

[0024] Preferred embodiments of the invention are set out in dependent claims 2 to 9.

[0025] A further subject matter of the present invention is the above apparatus for use in therapeutic/medical treatment for activating the cellular bioclectric system and in a process of regeneration and revitalization of depressed cells of parts of a body as set out in claims 10 and 11.

[0026] The apparatus of this invention allows to realize a combined flow of electrons and of electromagnetic radiations, said flow being all the more consistent and better distributed the higher is the number of bundles provided.

[0027] The arrangement of the plates with the carbon fibre bundles one in front of the other allows to obtain a strong circulation of combined radiations from plate (-) to plate (+). If a part or the whole body of a patient kept insulated from the ground is interposed between said plates, said radiations pass through him, reaching also the innermost organs.

[0028] The characteristics of the apparatus of this invention will be better understood from the following detailed description, wherein reference is made to Fig. 1 which shows the diagram of a preferred embodiment, supplied by ways of non-limitative example of said apparatus.

[0029] With reference to the aforementioned Fig. 1, the apparatus of this invention comprises two electric circuits (2, 2'), fed by a same network of alternated current (for instance, 220 V a.c.) through a tap (3), a plug (5) and a switch (1).

[0030] Each electric circuit (2, 2') comprises an electric or electronic device (7, 7'), such as for instance a transformer with rectifying diodes, which can supply each at the outlet a direct current of opposite polarity relatively to one another, high voltage and very low intensity.

[0031] In particular, said electric or electronic devices supply at the outlets (5, 5') direct currents with a voltage of 4000-80,000 V and an intensity of 0.05-0.5 mA, one of which has a (+) polarity in device (7), and the other one a (-) polarity in device (7').

[0032] The above outlets are respectively connected to two plate-like conductors (9, 9'). Each plate (9, 9') is provided with one or more carbon fibre bundles (11, 11') (three in Fig. 1), which act as pointed conductors. When these plate-like conductors (9, 9') are positioned and approached one in the face of the other, a circulation of electronic and large range electromagnetic radiations is obtained in the direction of arrow F from pole (-) to pole (+). If a part of a body (15) or the whole body, insulated from the ground by means of a dielectric element (13), is placed between said plate-like conductors (9, 9'), said part is passed through by said radiations, concerning in this way all the cells that are present along the path of said radiations, even in depth, which cells, as a consequence, are regenerated and revitalized.

[0033] The plate-like conductors (9, 9') are made from conductive materials, such as copper, aluminium, etc.

[0034] The plate-like conductors (9, 9') may have any shape, such as square, rectangular, triangular, polygonal or circular. The surface of the plate-like conductors (9, 9') is not critical and depends on the surface of the body to be submitted to the radiations.

[0035] The number of carbon fibre bundles (11, 11') on each plate-like conductor (9, 9') may range from 1 to 100 and more, based on the surface of the plate-like conductor (9, 9'). Each carbon fibre bundle (11, 11') may have a surface of its cross-section comprised between 0.001 and 10 mm², preferably between 0.1 and 2 mm², and is formed by a number of carbon fibres comprised between 50 and 10,000.

[0036] The dielectric element (13) may be a chair, an armchair or a bed with feet from insulating plastic material. The plate-like conductors (9, 9') with the carbon fibre bundles (11, 11') have generally the shape of mobile brushes, supported by articulated or flexible arms,
to make their application to the various parts of the human body easier, placing them near the body and not in touch with the same.

[0037] The use of carbon fibres allows also to eliminate and to prevent possible electrostatic shocks.

[0038] The apparatus of this invention is characterized also by the absence of harmful stimulations and by a complete analgesia, as it activates the cellular bioelectric system without contraindications, independently on the clinical conditions of the patient when he is submitted to the action of the apparatus.

[0039] The cells that at the time of the application of the radiations are already in balanced conditions, i.e. not "depressed", are not electrically modified, but remain in their ideal balanced conditions.

[0040] While this invention has been described with reference to a specific realization, many changes may be obviously made by those skilled in the art, in the light of the above description.

Claims

1. An apparatus for the emission of a combined flow of electrons and electromagnetic radiations fed by an alternating current distribution, characterized in that it comprises two electric circuits (2, 2') having opposite polarity, one circuit having a positive polarity (+) and the other circuit having a negative polarity (-), each electric circuit (2, 2') comprising an electric or electronic device (7, 7') transforming the alternating current into direct current and delivering a direct current having a voltage comprised between 4,000 and 80,000 V and an intensity comprised between 0.05 and 0.5 mA and a plate-like conductor (9, 9') connected to each outlet (8, 8') of said electric or electronic device (7, 7') and provided with at least one bundle of pointed conductors (11, 11').

2. The apparatus according to claim 1, characterized in that the at least one bundle of pointed conductors (11, 11') are up to 100.

3. The apparatus according to claim 1 or 2, characterized in that the pointed conductors are carbon fibres.

4. The apparatus according to anyone of the preceding claims, characterized in that the plate-like end conductors (9, 9') are positioned and approached one in front of the other.

5. The apparatus according to anyone of the preceding claim, characterized in that the electric or electronic device (7, 7') for the transformation of the alternating current into direct current is a transformer with rectifying diodes.

6. The apparatus according to anyone of the preceding claims, characterized in that the plate-like and conductors (9, 9') are made from copper or aluminium.

7. The apparatus according to anyone of the preceding claims, characterized in that the plate-like and conductors (9, 9') have the shape of mobile brushes supported on articulated or flexible arms.

8. The apparatus according to anyone of the preceding claims, characterized in that each bundle (11, 11') of pointed conductors has a surface of its cross-section comprised between 0.001 and 10 mm and is formed by a number of pointed conductors comprised between 50 and 10,000.

9. The apparatus according to claim 8, characterized in that each bundle (11, 11') of pointed conductors has a surface of its cross-section comprised between 0.1 and 2 mm.

10. The apparatus according to anyone of claims 1 to 9 for use in therapeutic/medical treatment for activating the cellular bioelectric system of a body consisting in interposing said body, insulated from the ground, between the two plate-like end conductors (9, 9') and delivering between said plate-like end conductors (9, 9') a direct current having a voltage comprised between 4,000 and 80,000 V and an intensity comprised between 0.05 and 0.5 mA.

11. The apparatus according to anyone of claims 1 to 9 for use in a process of regeneration and revitalization of depressed cells of parts of a body consisting in interposing said parts of the body, insulated from the ground, between the two plate-like end conductors (9, 9') and delivering between said plate-like end conductors (9, 9') a direct current having a voltage comprised between 4,000 and 80,000 V and an intensity comprised between 0.05 and 0.5 mA.

Patentansprüche

1. Vorrichtung zur Emission eines kombinierten Stroms aus Elektronen und elektromagnetischen Strahlen, die durch eine Wechselstromverteilung zugeführt werden, dadurch gekennzeichnet, daß sie zwei Stromkreise (2, 2') entgegengesetzter Polarität aufweist, von denen ein Kreis positive Polarität (+) und der andere Kreis negative Polarität (-) aufweist, wobei jeder Stromkreis (2, 2') eine elektrische oder elektronische Vorrichtung (7, 7') umfaßt, welche den Wechselstrom in Gleichstrom umsetzt und einen Gleichstrom einer Spannung zwischen 4.000 und 80.000 V und einer Stärke zwischen 0.05
und 0,5 mA liefert, und einen plattenartigen Endleiter (9, 9''), der mit jedes Auslaß (8, 8') der elektrischen oder elektronischen Einrichtung (7, 7') verbunden und mit zumindest einem Bündel von zugespitzt verlaufenden Leitern (11, 11') versehen ist.

2. Vorrichtung nach Anspruch 1, dadurch gekennzeichnet, daß das zumindest eine Bündel zugespitzt verlaufender Leiter (11, 11') bis zu 100 derartige Leiter aufweist.

3. Vorrichtung nach Anspruch 1 oder 2, dadurch gekennzeichnet, daß die zugespitzt verlaufenden Leiter Kohlenstofffasern sind.

4. Vorrichtung nach einem der vorangehenden Ansprüche, dadurch gekennzeichnet, daß die plattenartigen Endleiter (9, 9') einer vor dem anderen angeordnet sind und nahe zueinander liegen.

5. Vorrichtung nach einem der vorangehenden Ansprüche, dadurch gekennzeichnet, daß die elektrische oder elektronische Einrichtung (7, 7') zum Umsetzen des Wechselstroms in Gleichstrom ein Transformator mit Gleichrichterdioden ist.

6. Vorrichtung nach einem der vorangehenden Ansprüche, dadurch gekennzeichnet, daß die plattenartigen Endleiter (9, 9') aus Kupfer oder Aluminium hergestellt sind.

7. Vorrichtung nach einem der vorangehenden Ansprüche, dadurch gekennzeichnet, daß die plattenartigen Endleiter (9, 9') die Form beweglicher Bürsten aufweisen, die auf Gelenkarmen oder flexiblen Armen getragen sind.

8. Vorrichtung nach einem der vorangehenden Ansprüche, dadurch gekennzeichnet, daß jedes Bündel (11, 11') der zugespitzt verlaufenden Leiter eine Querschnittfläche bzw. einen Durchmesser zwischen 0,001 und 10 mm aufweist und gebildet ist durch eine Anzahl von zugespitzt verlaufenden Leitern in einer Anzahl zwischen 50 und 10.000 aufweist.

9. Vorrichtung nach Anspruch 8, dadurch gekennzeichnet, daß jedes Bündel (11, 11') von gespitzt verlaufenden Leitern eine Querschnittfläche bzw. einen Durchmesser zwischen 0,1 und 2 mm aufweist.

10. Vorrichtung nach einem der Ansprüche 1 bis 9 zur Verwendung bei therapeutischer/medizinischer Behandlung zur Aktivierung des bioelektrischen Zellsystems eines Körpers, dem nach der vom Boden bzw. der Masse isolierte Körper zwischen den zwei plattenartigen Endleitern (9, 9') angeordnet wird und zwischen den plattenartigen Endleitern (9, 9') ein Gleichstrom mit einer Spannung zwischen 4.000 und 80.000 V und einer Stärke zwischen 0,05 und 0,5 mA zugeführt wird.

11. Vorrichtung nach einem der Ansprüche 1 bis 9 zur Verwendung in einem Prozeß zum Regenerieren und Revitalisieren eingedrückter Zellen von Teilen des Körpers, dem nach die vom Boden bzw. der Masse isolierten Teile des Körpers zwischen den zwei plattenartigen Endleitern (9, 9') angeordnet wird und zwischen den plattenartigen Endleitern (9, 9') ein Gleichstrom mit einer Spannung zwischen 4.000 und 80.000 V und einer Stärke zwischen 0,05 und 0,5 mA zugeführt wird.

**Revendications**

1. Dispositif pour l'émission d'un flux combiné d'électrons et de rayonnements électromagnétiques fourni par une distribution de courant alternatif, caractérisé en ce qu'il comprend deux circuits électriques (2, 2') ayant une polarité opposée, un circuit ayant une polarité positive (+) et l'autre circuit ayant une polarité négative (-), chaque circuit électricité (2, 2') comprenant un dispositif électrique ou électronique (7, 7') transformant le courant alternatif en courant continu et délivrant un courant continu ayant une tension comprise entre 4000 et 80 000 V et une intensité comprise entre 0,05 et 0,5 mA, et un conducteur (9, 9') à extrémité de type lame connecté à chaque sortie (6, 6') dudit dispositif électrique ou électronique (7, 7') et pourvu d'eau moins un faisceau de conducteurs points (11, 11')

2. Dispositif selon la revendication 1, caractérisé en ce que le au moins un faisceau de conducteurs points (11, 11') comporte jusqu'à 100 conducteurs.

3. Dispositif selon la revendication 1 ou 2, caractérisé en ce que les conducteurs points sont des fibres de carbone.

4. Dispositif selon l'une quelconque des revendications précédentes, caractérisé en ce que les conducteurs (9, 9') à extrémité de type lame sont placés l'un devant l'autre et à proximité l'un de l'autre.

5. Dispositif selon l'une quelconque des revendications précédentes, caractérisé en ce que le dispositif électrique ou électronique (7, 7') destiné à la transformation du courant alternatif en courant continu est un transformateur à diodes de redressement.

6. Dispositif selon l'une quelconque des revendications précédentes, caractérisé en ce que les con-
ducteurs (9, 9’) à extrémité de type lame sont constitués de cuivre ou d’aluminium.

7. Dispositif selon l’une quelconque des revendications précédentes, caractérisé en ce que les conducteurs (9, 9’) à extrémité de type lame ont la forme de brosses mobiles supportées sur des bras articulés ou souples.

8. Dispositif selon l’une quelconque des revendications précédentes, caractérisé en ce que chaque faisceau (11, 11’) de conducteurs pointus a une surface de section transversale comprise entre 0,001 et 10 mm² et est formé d’un certain nombre de conducteurs pointus compris entre 50 et 10 000.

9. Dispositif selon la revendication 8, caractérisé en ce que chaque faisceau (11, 11’) de conducteurs pointus a une surface de section transversale comprise entre 0,1 et 2 mm.

10. Dispositif selon l’une quelconque des revendications 1 à 9, destiné à être utilisé lors d’un traitement thérapeutique médical pour activer le système bioélectrique cellulaire d’un corps consistant à interposer l’édit corps, isolé du sol, entre deux conducteurs (9, 9’) à extrémité de type lame et à délivrer, entre lesdits conducteurs (9, 9’) à extrémité de type lame, un courant continu ayant une tension comprise entre 4000 et 80 000 V et une intensité comprise entre 0,05 et 0,5 mA.

11. Dispositif selon l’une quelconque des revendications 1 à 9, destiné à être utilisé lors d’un traitement de régénération et de revitalisation de cellules déprimées de parties d’un corps consistant à interposer lesdites parties du corps, isolé du sol, entre les deux conducteurs (9, 9’) à extrémité de type lame et à délivrer, entre lesdits conducteurs (9, 9’) à extrémité de type lame, un courant continu ayant une tension comprise entre 4000 et 80 000 V et une intensité comprise entre 0,05 et 0,5 mA.