Jurij KRAVCHENKO, *et al*
Biological Anomaly Detectors

http://www.sott.net/article/270676-Unconventional-research-in-USSR-and-Russia
http://www.unconv-association.org/sites/unconventional/files/publications/kernbach-IJUS13-en.pdf
http://cybertronica.co/sites/default/files/publications/kernbach-IJUS13-en.pdf

Long and Super-Long Range device-device and operator-device Interactions
Serge Kernbach, Vitaliy Zamsha, Yuri Kravchenko

Abstract - This work describes performed device-device and operator-device experiments at long and super-long distances of >1 km, >100 km and >10000 km. Experimental setup uses two types of sensors, based on electric double layers and IGA-1 device, and two types of LED and laser generators. We analyzed the construction of the setup, establishing a connection between receiver and emitter, and multiple effects appeared. A common character of operator- and device- interactions is assumed. This approach can be considered as a novel communication system as well as a system for operator training with an objective feedback from devices...

(b) (c)

Figure 6. **(a)** Structure and **(b)** images of the LED and laser emitters without polymer cover; **(c)** polyspectral LED emitter.

Reference to :

http://psiterror.ru/download.php?view.179

Long Instrumental nonlocal interactions in the formation of the concept of "teleportation of information"

A.Yu.Smirnov

Description The aim is to study the long-range "nonlocal interactions" (HB) and their physical mechanisms. The results of HB on living beings using their images created by physical methods (for negatives). The role of the state (and content) of the consciousness of the experimenter in the implementation of HB.

Formulated epistemological paradox "psychophysics" (GLP) consists in the fact that in the framework of a consistent application of the methods and approaches of classical science obtained information contrary to its theoretical grounds (in the form of the phenomena of "psychophysics"). The ways of the permission of GLP by forming appropriate for the "psychophysics" symbolic languages, codes and methods of coding - decoding the information.

It is assumed and discussed the existence of a universal physical factor determining the existence of long-range nonlocal effects (DNV).

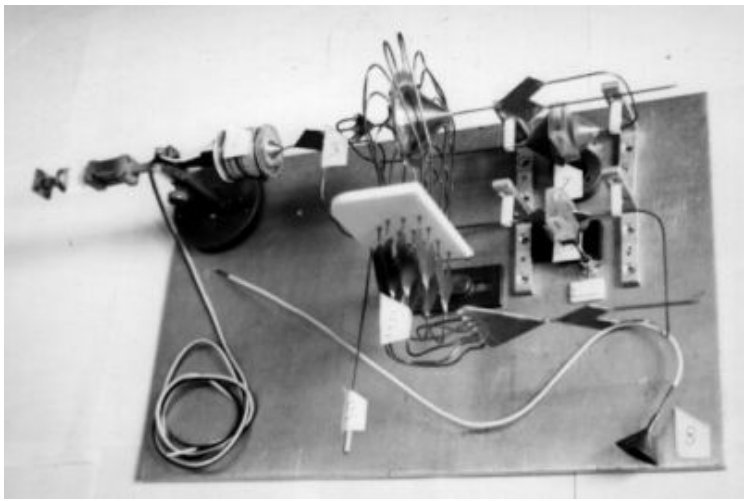
Man-made device "generators" are modified, and the operators that have consciousness, "design"

appearance. The data on "generators" and "Registrar" DNV.

It is assumed that "energy information" (EI) system to compensate (through adaptation) changes its state from the individual "point" EI impacts. Formulated the principle of the system 'of Energy "effects, providing a more efficient DNV.

Experimental studies were carried out on the basis of the Group of Non-Ionizing Radiation Biophysics Research Institute Edith RCRC RAMS c 1980 to 2004 ..

"Teleporter" with the possibility of local and nonlocal (distant) Impact (2002). From left to see the input waveguide exciting "TI" EHF EMR.



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http://people.uta.fi/~kamiah/Ahonen_Sarja_Hanninen_Tallinn_Final_2012.pdf

Variability of Hartmann lines and copper net effects

Researcher, PhD Mikko Ahonen

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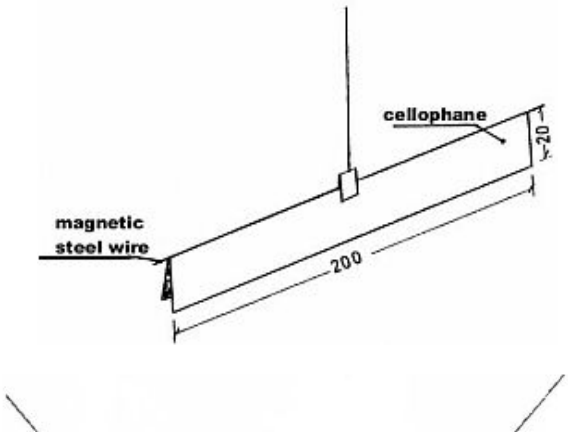
Researches on Human Aura

Carlo Splendore

Clairvoyant Investigation / Simple Do-It-Yourself Devices / Photo of the Aura by Digital Process for Psycho-Physical Diagnosis



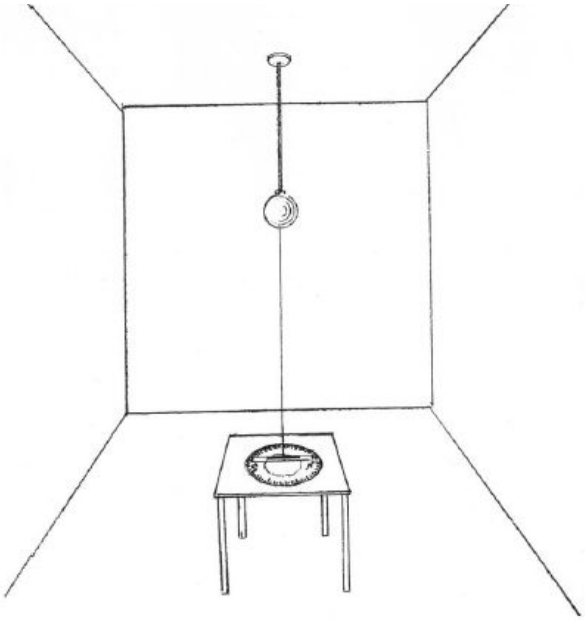


Figure 7 – The wire Bioradiometer reveals the presence of a life force energy field generated by the human body and measured through the deviation angle of a magnetic needle from the direction of the magnetic meridian.

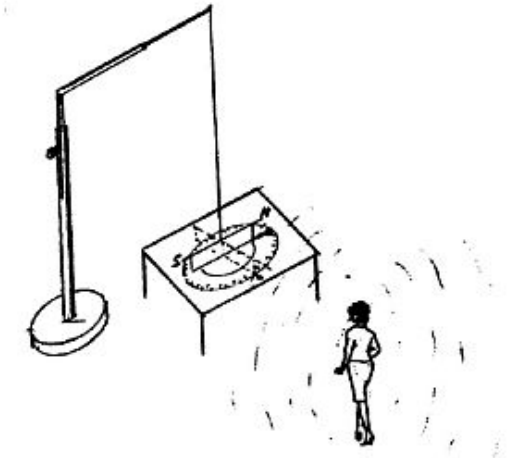
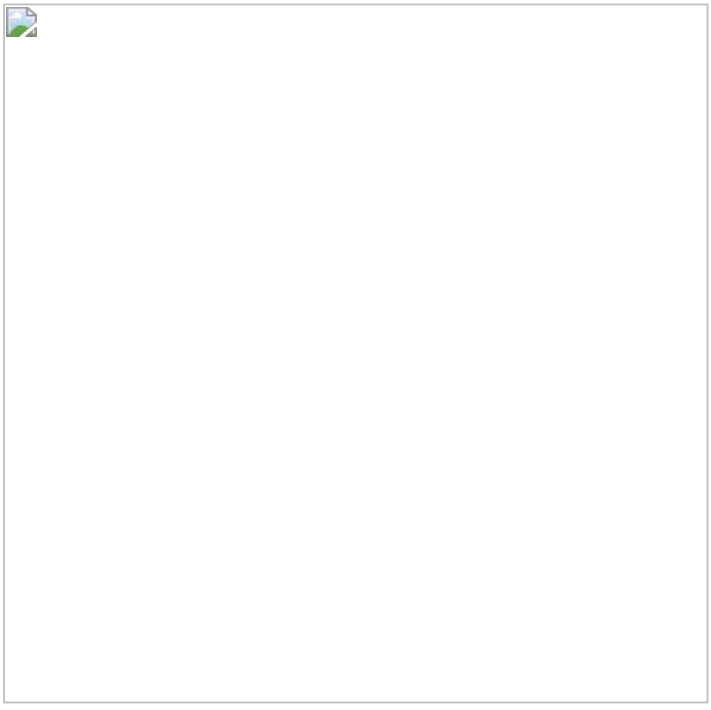


Figure 8 – The deviation of the magnetised index reveals the presence of the observer even at distance of 1.5-2 metre.



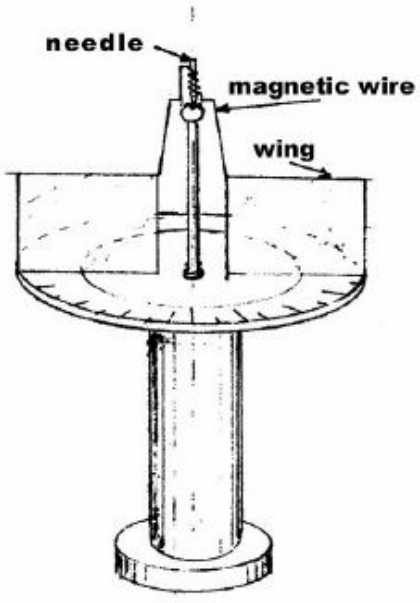


Figure 11 - Bioradiometer on a pivot

Bioradiometer on pivot with wings

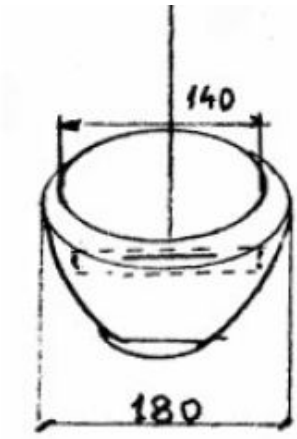
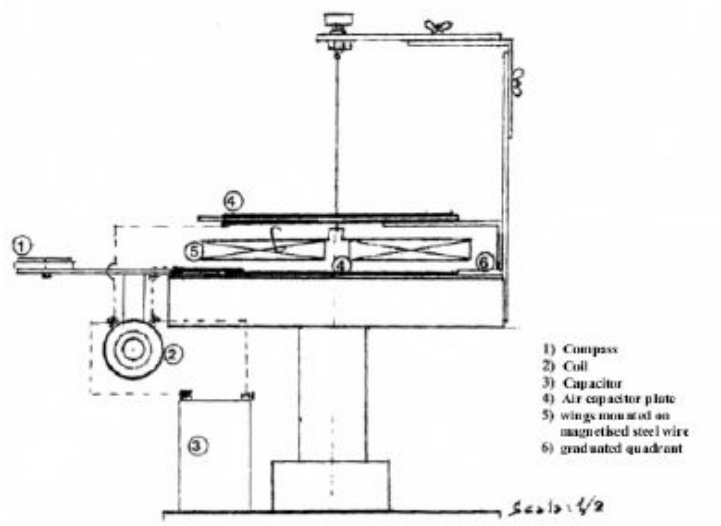
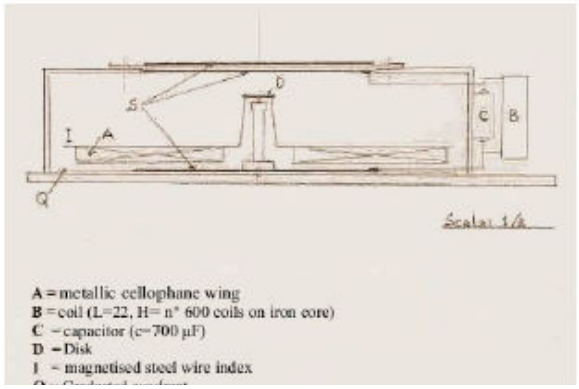
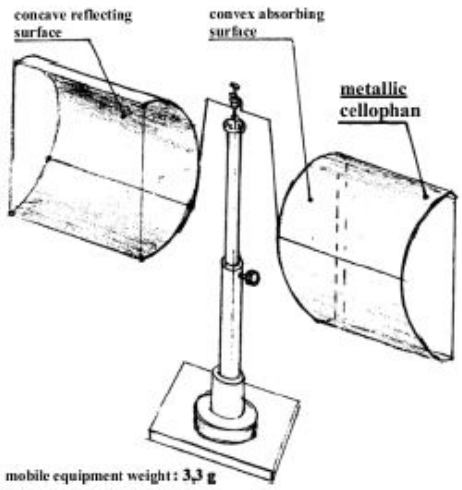


Figure 10 – If the small band (sensor) is contained inside an open glass pot the rotations are laboured (reduced in number and slow). If the opening of the pot is close the movements of the sensor do not occur anymore and it remains immobile.







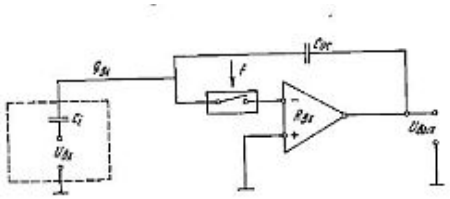
Q = Graduated quadrant
S = silver paper glued on cardboard

Figure 15 – Auradetector

Patents

RU2080605
METHOD OF EXAMINATION OF ELECTROMAGNETIC FIELDS OF SURFACES

Inventor:
BOROVSKIJ SERGEJ // KRAVCHENKO YURIJ



[0001]
The invention relates to the study of physical parameters of a condition of objects of metal, biological, and others.) Are in different states, such as those associated with processing, aimed at improving the quality of products.

The practical application of the technology of aviation and space engine and Apparatus (instrumental and primary production), medical diagnosis of the human condition, and others.
[0002]

A method is known studieseletrophysiological surface conditions comprising that the material, one face of which was examined fixed with macroscopic gap relative to the receiving electrode, the receiving electrode connected to the input of the operational amplifier as a first stage and a differential amplifier as the second stage is isolated and reinforcing only varying part of the signal, an operational amplifier span feedback through a RC-circuit of a capacitor and a resistor, the free edge of the material is connected through a resistor to the free input of the operational amplifier having connections to the body of the device and the measurement of the signal produced at the output of the differential amplifier [1] Disadvantages of existing method associated with leakage of the charge through the input amplifier circuit at the time of measurement, and consequently,introducing systematic error, firstly, and low accuracy in the measurement of weak electrostatic parameters, and secondly, (since the signal gain can be achieved only by measuring the current through the receiving electrode when it approaches the surface when there is a change in capacitance between the surface and the electrode) does not allow the use of a method for identifying a substance and a category of state of the object.
[0003]

A method is known studies of electrostatic fields surfaces, preferably after the various processing aimed at improving the quality of products comprising that material one of whose surfaces examined, fixed with a uniform gap relative to the plate of the receiving electrode, with a receiving electrode connected to an input of electrometer amplifier , the latter operate on the differential amplifier, the outputs of which the signals applied to the inputs of the operational amplifier and the electrometer amplifier span parallel negative feedback via a capacitor, in which the receiving electrode with induced charge without first modulating the electric field at the moment it approaches the surface under investigation,and measure the voltage at the output [2] The disadvantages of the method: the leakage of charge through the amplifier; low precision in the study of weak fields; one-parameter study does not allow the identification of the substance or category of object state.
[0004]

By identifying realize establishment of the fact whether the test substance or the state of the object to one of the known which on the basis of preliminary experimental data produced by the corresponding rank (systematization) the spectrum recorded characteristics (e.g., x-ray analysis for the presence of a particular line in the spectrum of the secondary X-ray judge about the object of its composition or state, for example,

the allocation of the various chemical components of phase).
[0005]

The closest technical solution chosen as the closest analog is a method of investigation of the electromagnetic fields surfaces consists in the fact that the object of investigation and the plate receiving electrode is placed in a shielded insulated chamber research facility is connected to the ground bus meter test surface has a fixedly on the fixed distance relative to the receiving electrode, the receiving electrode connected to the input of the operational amplifier through an electronic switch voltage amplifier span parallel negative feedback via a capacitor, on which a receiving electrode induces a charge, sets a predetermined switching frequency, produce at the amplifier output pulses of input current and a pulse current through capacity "investigated surface receiving electrode"increase induced on the capacitor negative feedback charge by integrating the pulsed increment of the input current of the amplifier within a predetermined period of time and measure the output voltage [3] The disadvantage of the closest analog-parameter study, does not allow identification of the substance or category of state of an object, including taking into account the presence of local Places outages in the composition of matter and the state of the object.

Specific dimensions of local inhomogeneities could be identified with traditional scanning the surface of the object.

Another disadvantage of narrow functionality due to lack of measuring the phase shift between the various frequency components of the electromagnetic spectrum.
[0006]

The goal is achieved by a method for the study of electromagnetic fields surfaces, lies in the fact that the object of study and a plate - a receiving electrode placed in a shielded insulated chamber, the object of investigation is connected to the ground bus meter piemny electrode is connected to the input of the operational amplifier via the electronic switch voltage operational amplifier span parallel negative feedback via a capacitor, in which the receiving electrode is induced with a charge, a predetermined set switching frequency, to provide input operational amplifier input current pulses and a pulse current through the capacitance "investigated surface receiving electrode"increase induced by the capacitor negative feedback charge by integrating the pulse increment input current amplifier for a predetermined period of time, measured the output voltage, unlike the prototype produces a change of the switching frequency in a predetermined range is determined corresponding to each value of the frequency of the output voltage and is plotted switching frequency output voltage, then built the spectral dependence determine the value of the switching frequency, the corresponding line of extreme output voltage and use the presence of this line and its intensity for identification.
[0007]

The drawing shows an equivalent circuit of the method of investigation of the electromagnetic field as the object surfaces prior art method and the proposed method.
[0008]

It is evident that a change in the input voltage is equal to where f is the switching frequency, & omega; & Pi = 2; f input resistance Rin of the operational amplifier.
[0009]

Through capacitance Ci flowing pulse current proportional to the input voltage Vin equal to Vin + & Delta; Ui use of electronic switch voltage, connect it directly to the input of the operational amplifier; setting the switching frequency f, creating at the amplifier input pulses of the input current, and generates a pulsed current through the capacitance investigated surface receiving electrode integration pulsed increment of the input current of the amplifier within a predetermined period of time to increase the induced capacitor feedback charge investigated metal surface enable together exactly make measurement of weak electrostatic fields surfaces.
[0010]

Additionally, the switching frequency is changed in a predetermined range, the output voltage is determined for each new value of the frequency is plotted "switching frequency output voltage" is determined according to the maximum spectral constructed and used the presence of the line (maximum) and its intensity for identification.

RU2118181
METHOD OF PROTECTION AGAINST ELECTROMAGNETIC ANOMALIES AT EARTH SURFACE

FIELD: medicine; medical engineering. SUBSTANCE: method may be used to protect living organisms against detrimental effects of earth radiation anomalies. Method allows higher accuracy due to objectivization of determination of geopathogenic zone localizing boundaries and classification of anomalies. Method guarantees protection against other components of earth radiation of other nature. It also provides for protection against volumetric distribution of earth radiation anomalies. Method includes determination of objective noise phase-frequency characteristics of earth radiation electrical component within range of section being examined. Map of nonuniformities of field characteristic distribution over space located above section being examined is drawn up, and objects to be protected are arranged at places corresponding to those in map with the least values of field characteristics.;
EFFECT: higher accuracy, enhanced reliability

[0001]

The invention relates to the field of medicine and medical equipment and can be used to protect living organisms from harmful effects of the anomalies of terrestrial radiation, including electromagnetic, in the so-called geopathogenic zones, such as the placement of beds, planning jobs, the construction of houses, the choice , broken down and seeding garden and vegetable plots.
[0002]

There is a method to compensate for the geomagnetic field, which consists in the fact that they create an additional magnetic field with the help of independent auxiliary windings powered by power sources, which are controlled by signals from the magnetometers, proportional to the measured or the fluctuations of the geomagnetic field of the measurement of the current in the main compensating windings [1].
[0003]

The disadvantages of this method are the high complexity, low accuracy due to the impossibility of compensating all the irregularities of the field by a finite set of sources, low functionality for failure to compensate the volume distribution of the anomalies of the field, as well as the low reliability of the protection due compensation only part of the electromagnetic radiation of the earth.
[0004]

Known method of protection against terrestrial radiation, comprising the steps of determining the characteristics of the field distribution characteristics map a field and place the objects to be protected, at locations corresponding to the lowest values ??of the characteristics.
In addition, characteristics of the field is determined indirectly on the subjective feelings of the operator, and a map of the projections constitute a subjective sensation of the operator on the surface of the test site.

In addition, an indication of subjective sensations of the operator is carried out by a spontaneous motion of a pendulum or a frame that keeps the operator in the handles and moves at a constant height above the surface of the investigated area [2].
[0005]

The disadvantages of the known method is the low accuracy and repeatability due to the placement of objects on the basis of the maps, which is a reflection of the subjective feelings of the operator moving across the survey area, which is largely dependent on the individual operator, its individual sensitivity, emotional and physical condition, the impact of external psychophysiological factors etc.

In addition, the drawbacks of the method are also low functionality, not allowing to protect objects from bulk geopathic formations.
[0006]

The aim of the invention is to improve the accuracy by objectification delimitation localization of geopathic zones and classification anomalies, simplifying, improving the reliability due to the fact that the invention makes it possible to guarantee the protection of the other components of the terrestrial radiation of a different nature, as well as enhanced functionality through the definition and protection of the surround distribution of

anomalies of terrestrial radiation, as well as increased sensitivity and reproducibility of measurements.
[0007]

To achieve this goal in the known method of protection against terrestrial radiation is the fact that determine the characteristics of the field, up map of the characteristics of the field and place the objects to be protected in the positions corresponding to the lowest values ??of the characteristics as the characteristics of the field is determined by objective phase-frequency characteristics of the noise electric component of terrestrial radiation map of the characteristics of the field up in space over the study area, and securable objects are placed on the map of the objective characteristics of the field, and the accommodations are spatial regions.

In addition, phase response terrestrial radiation is determined by the fact that they take a receiving antenna noise signal electric component of the earth radiation, convert it to a noise electric signal from which is isolated by at least one harmonic component at a fixed frequency in the range of super-long wave is measured and indicates the amount of shift in phase between this component and the reference signal of the same frequency within the dead zone and the integral of the phase shift outside the deadband.

In addition, the map distribution characteristics of the field constituted by the fact that moved at a constant speed receiver antenna parallel to the ground in the proposed direction of searching and reading the phase shift, or integral, before each motion compensated interfering background aligning the phase shift of the received signal and the reference and set the zero initial conditions of integration, and with the appearance of phase shift movement of the antenna is produced in the opposite direction and reversible changes indicator record the exact boundary of the anomalous zone, and by a sharp irreversible changes of the indicator fixed entry into the abnormal area and the degree of its intensity on the rate of increase of readings indicator.

Furthermore, the noise signal electric component terrestrial radiation take due to the fact that they form electrical capacitance between the receiving antenna and the ground, the size of the antenna selected in a range far from resonance at the operating frequencies, and conversion into an electrical signal is produced by the fact that the measured change in charge formed capacity.

In addition, characteristics of the field is determined by the volume of the sample portion by the fact that the determined characteristics of the field over the entire surface of the portion at different levels in three mutually perpendicular planes.
[0008]

Figure 1 shows graphs measuring the phase shift and integral along the path passing through geopathic zone (GPP), and the process of determining its precise borders.
[0009]

Figure 2 shows a graph of the magnitude of the phase shift and integral in determining the approximate boundaries of the GEA.
[0010]

Figure 3 shows a three-dimensional structure and its sectional ILI in three planes.
[0011]

FIG. 4 shows the valid and invalid placement workplace person with respect to GPP.
[0012]

FIG. 5 shows a vertical section through the stacked apartment house for a specific example of the method of (example, N 1).
[0013]

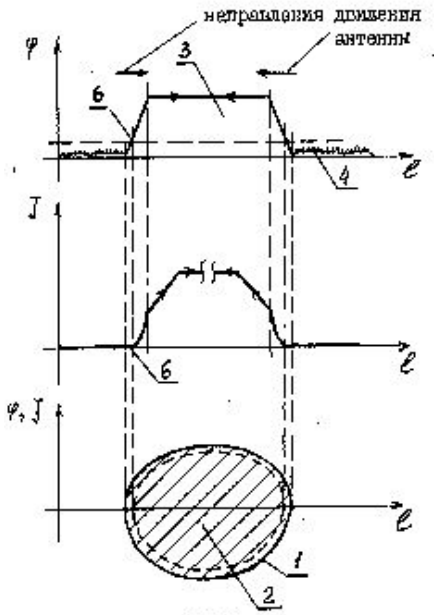
FIG. 6 shows the layout of jobs to use the proposed method in Example N 2.
[0014]

FIG. 7 shows the same as Figure 6, after application of the proposed method.
[0015]

8 shows a layout jobs to use the proposed method in Example N 3.
[0016]

FIG. 9 shows the same as Figure 8, after applying the proposed method.
[0017]

FIG. 10 shows a volume of geopathogenic zones of residential apartments for example the N 4.
[0018]



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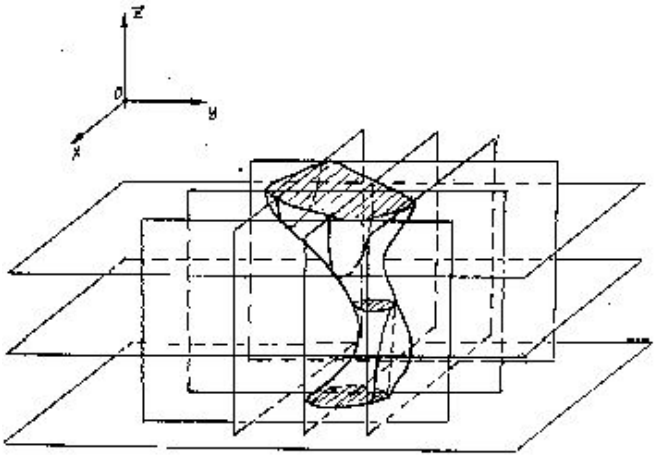

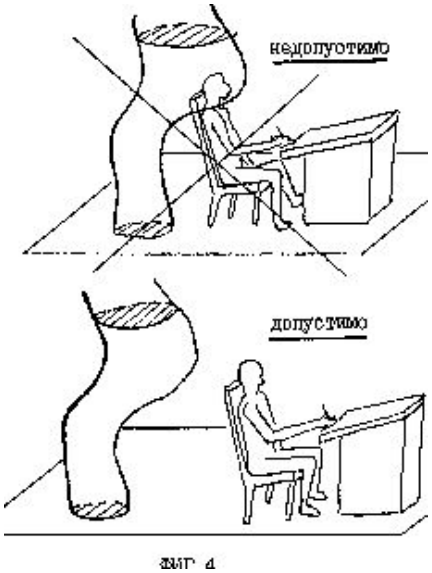

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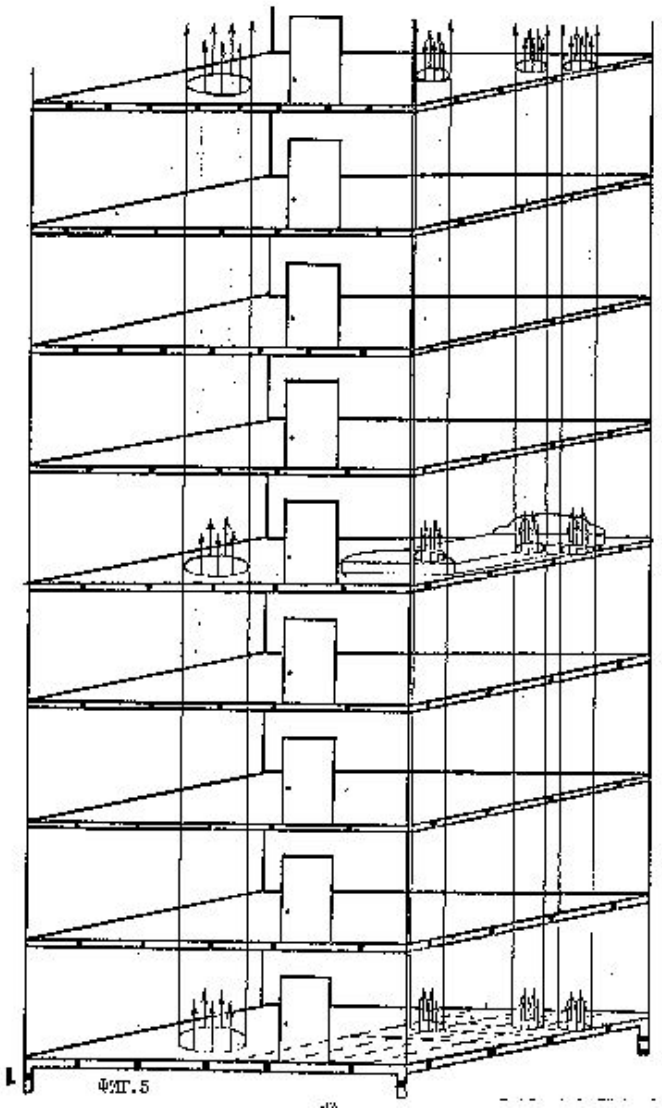
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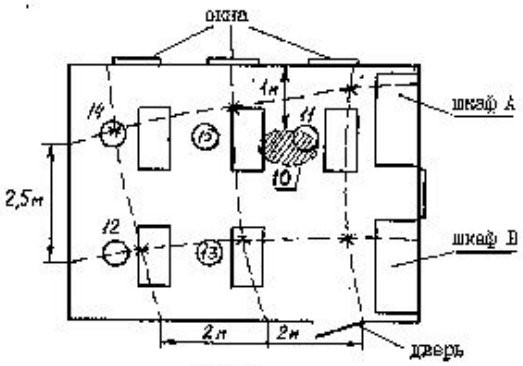

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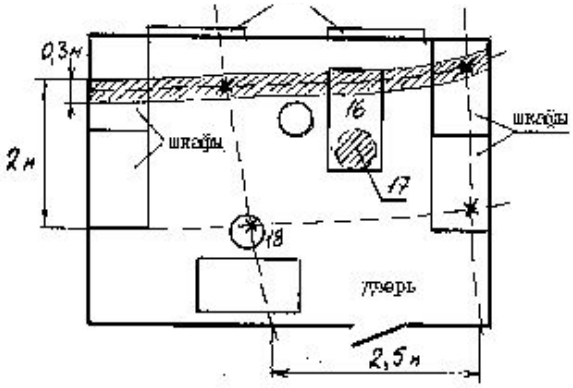

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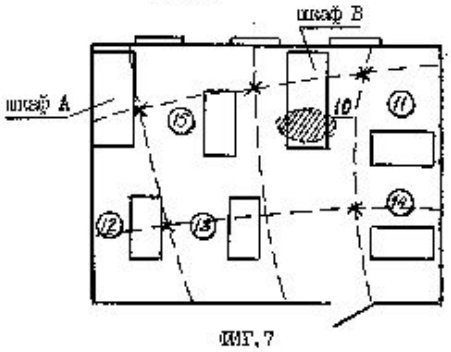

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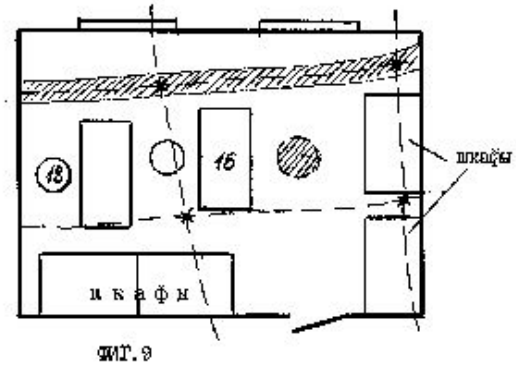

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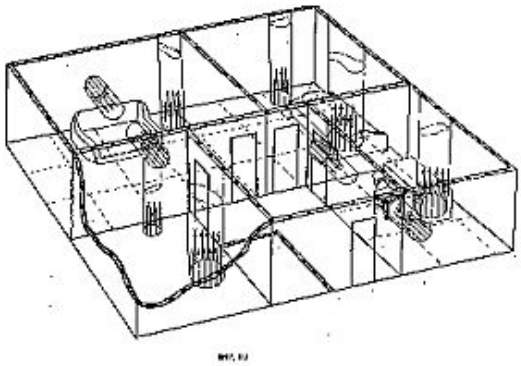

The method of protection against electromagnetic anomalies at the surface of the Earth is based on the objectification determine the exact boundaries of geopathic anomalies fixing distortion field, determined by the nature of change in phase-frequency characteristics of the noise component of the electromagnetic field of super-long radio frequency waves, while moving the antenna above the sample surface.

Reading phase field parameters can significantly improve the noise immunity of determining geopathogenic zones and therefore the accuracy of the method, as interference are mostly amplitude character.
A background noise component of the electromagnetic field produced by the electric component of the background radiation over the survey area by measuring fluctuations of the charge receiving antenna, which can significantly weaken the magnetic component of noise having a frequency band used in precedence, for example in the form of radiation stations.

The method uses the most informative signal noise components in a useful signal, which is achieved in combination with an additional operation input using ultrashort untuned wideband antenna whose dimensions are much smaller than the resonance at the frequencies that also provides attenuation of radio signals, aligns thereby gain characteristics received noise signals, which eliminates the need for gain control.

All these operations are further in combination allow so increase the gain when detecting geopathic zones, making possible their objective localization with high accuracy, unlike the known existing methods, including the prototype, which significantly improves the reliability of the protection.

The method of protection against electromagnetic anomalies in the Earth's surface is also based on the redistribution of protected sites in the most secure areas of the re-created the spatial pattern of the field.

This takes into account the presence of not only the projection of the field inhomogeneities on the earth's surface (or the surface of the floor in a residential area) in the form of networks Hartman [3] Kurri [4] and geopathogenic spots [5], but also the spatial structure of the networks and spots topology with which a change in the height range of the human growth may largely differ from the cross section near the surface under study, which is usually the only way and taken into account in the known methods.

This in turn imposes more stringent restrictions on the placement of objects to be protected than in the prior art, t. E. The operation of accommodation due to it is performed differently.

In addition, identification of hazards in the spatial field pattern of the study area and the redistribution of protected sites effectively guarantees their protection from the harmful effects of the electromagnetic component, and on the components of a different nature, which is not true of the known methods of protection, based on the screening because they allow protects the lens only by a particular component of the radiation, such as electromagnetic.
To. It is known that in geopathogenic zones has a match in the topology status abnormalities fields of different nature (magnetic [6], the electromagnetic radio spectrum [7], the ultraviolet range [8], increased background radiation [9], climate anomalies [10] and may still unknown nature), then the best choice is the radical protection safe place for one of the most easily detected radiation components corresponding to the object arrangement and protection as is done in the proposed method.
[0019]

The method of protection against electromagnetic anomalies in the Earth's surface is as follows.
[0020]

By scanning the test area define the characteristics of the electromagnetic field at a constant height from the surface of the land and map the characteristics of the field inhomogeneities.
[0021]

Features field determined by the fact that a portion of the surface parallel to the receiving antenna in the form of a conductive disc diameter of 2 - 10 cm, which forms the surface portion of electrical capacitance, the magnitude of charge which does not depend on the distance from the surface portion and an electrical signal proportional to the noise component of the radiophone.

Since the reception is performed in the range of super-long wave (1 - 10 kHz), and the dimensions of the antenna are the super small compared to the operating wavelength, the antenna is tuned away from the resonance in this range, resulting in not performed amplification at a single frequency, and are received noise signals over a wide range.
Since such an antenna is not resonant, then it ensures uniform amplitude-frequency characteristic around the operating frequency range, resulting in no need to adjust the gain in the search process, which greatly simplifies the method.

Because of the noise signal that is proportional to the charge of the antenna component is isolated by filtering the frequency narrow-band filter with a bandwidth equal shares of Hertz and determine its phase shift relative to the reference signal whose frequency is equal to the average frequency notch filter settings.

This value of phase difference and is used as a characteristic of the field plot.

Since the change of phase shift, a diverse field in geopathogenic zones are small, are calculated and displayed the integral of the phase shift.

Before driving the antenna at any reference point sample portion compensates the interfering background alignment phase shift between the received and the reference signal by adjusting the phase of the reference signal.

Further, the antenna is moved at a constant velocity at a height of 0.8 - 1 m above the test site or at a predetermined level, and the appearance and sharp increase in the signal integral of the phase shift is judged to join the geopathic zone.

Fixing the integral of the phase shift can significantly improve the accuracy of recording the presence of small phase shifts, since the appearance of even small quantities of the phase shift is a continuous growth of its integral, until reaching the saturation value of the integral over a finite time, it is easy to find on the

display.

The speed of this growth at a constant rate of movement of the antenna can judge the intensity of geopathic anomalies.

The exact definition of the boundaries 1 geopathic zones (GPZ) 2 (1) produced by the appearance of a small reversible phase-shift, smaller dead zone and integrator immediately preceding integration.

Since the intervals between geopathogenic zones 2, i.e. Zones sharply pronounced change in phase shift 3 present his small fluctuations 4, the presence of a dead zone 5 integrator to avoid integrating them (Figure 1).

The exact boundaries of GPP 2 is determined while fixing the position since the start of integration 6 and subsequent fixation of the position immediately preceding the date the integration resetting the integrator 7, which is the exact boundary of 1 ILI 2.

Position the start of integration 6 is determined by the fact that immediately after the sharp increase of the indicator come back for a short distance, set the zero initial conditions of integration and continue to move forward at a constant speed, but oscillating 8 amplitude of several centimeters back and forth by the receiving antenna 9 (Figure 1).

The position is determined by the beginning of the integration between the last swing of the antenna 9 in which a reversible change of the indicator, and the first swing, which while advancing backwards indicator is not reduced.

The distance between the exact boundaries of GPP 1 and the start of integration 6 is typically a few centimeters.

If this accuracy is not required, it can be considered the beginning of ILI starting position of integration 6, and the display indicate only signals exceeding the dead zone of the integrator 5 (2).
[0022]

In order to avoid the accumulation of hardware drift before and during measurements periodically set the initial conditions of the integrator to zero.
[0023]

After identifying the topology of the borders of geopathogenic zones characterized by the presence of a phase shift greater than the dead zone integrator and mapping projection irregularities electromagnetic field on the surface of the entire study area, producing movement of objects to be protected (plants, places of permanent residence of people, for example, sleeping, working and etc.) in place with the minimum values ??of the characteristics of the field, ie, with zero phase shift (with a constant phase shift without sudden changes).
[0024]

In drawing up the three-dimensional map of the field inhomogeneities of the investigated area by moving the antenna parallel to the three mutually perpendicular planes at different levels and for each level up my card section for measuring time integral of the phase shift.
Map of the distribution of bulk inhomogeneities field reconstructed by combining the received card sections.

In order to expedite the more detailed measurement is carried out in areas identified ILI (3).
[0025]

Redistribution protection objects is carried out in accordance with their size and shape in three dimensions so that no part of the object does not reach the place of his permanent residence in any part of the GEA. For example, no part of the body of a man sitting behind a desk or standing at the workplace should not fall into the GEA throughout the growth (Figure 4). The inadmissibility of stay in the workplace 4 can only be determined by the proposed method, t. To. The known methods show that the spot (GPP projection on the floor) is located outside the workplace.
[0026]

The proposed method of protection against electromagnetic anomalies in the Earth's surface has been applied at the request of the family Filatov living on the sixth floor of a nine houses, due to their suspicions about the

impact of accommodation on the health of her husband. Filatov, 53 years old, sick with arthritis, myocardial infarction transfer. He believes that the state of his health affects berth. Complaints of feeling unwell after sleeping on the couch.
[0027]

Determination geopathic zones produced by the inventive method by detecting the presence of the phase shift between the selected frequency component of the received noise signal and the reference signal for evaluating the presence and the growth rate of the integral of the phase shift.

Payment interfering background made at the left door jamb in point A (5). Locations borders of geopathogenic zones moves at a constant speed of the antenna parallel to the floor at a distance of about 1 meter away. Simultaneously geopathogenic zones to control were determined by dowsing bioperator Goriukhino AS
[0028]

In the hall, where there was a bed owner, discovered the network Hartman reduced size (1,2 & bull; 1,3 m), units that come to bed. In addition, on a bunk it was recorded three energy spot diameter of 20 - 30 cm (perceived by dowsing as one large spot) and pull the spot size of about 30 x 50 cm.

The rest of the testimony on the proposed method and the method of dowsing almost identical.
[0029]

Further, according to the proposed method produced moving bed in a safe place with zero phase shift. Filatov noted evidence of improved health occur within a week after moving bed. Act on the implementation of the proposed method is applied.
[0030]

Example 2.

Manufactures application of the proposed method of protection against electromagnetic anomalies in order to protect employees experienced track machine station N 61 (FDIS-61) at the station Dema (Mr. Ufa) from the harmful effects of geopathogenic zones of intense radiation.
[0031]

In the offices FDIS-61 detected a standard network Hartman (2,5 & bull; 2 m), and recommendations for changes in the location of jobs. The accounting office (FIG. 6) in addition to the specified network Hartman discovered anomalous zone as a spot 10 high intensity radiation with a high growth rate of the integral of the measured phase shift. The operator moving speed is about 0.5 m / sec. The size of the detected spots 40 & bull; 60 cm, located between the windows of accounting at a distance of 1 m from the wall (Figure 6). The measurements have coincided with the testimony of the operator of dowsing. Noted complaints staff unexplained deterioration of health and health status. After the measurements according to the proposed method in the cabinet reshuffle accounts were produced (7) so that jobs do not end up on the network nodes and Hartman were possible within 10 abnormal spots. Two days later, two of the four were in the anomalous zones accounting officer (11 and 12) reported an improvement in well-being, a significant decrease in fatigue after a working day and reducing irritability at work and at home. The workplace of one of these 11 employees were directly over the zone of intense radiation 10. 13 Employee workplace which is next to the network node Hartman, also reported an improvement in health status after 2.5 weeks. Messages about any changes from the staff of 14 and 15 have been received.
[0032]

Example 3.

Under the agreement, the state environmental inspection of premises of the hospital of the N 4 Ufa, the proposed method has been applied to improve the environmental situation in these chambers and offices of three prenatal chamber on the fifth floor, a total area of ??150 square meters, five delivery rooms and doctors' offices on the south side of the fifth floor of the building with total area of ??about 200 square meters; children's intensive care unit, three delivery room, operating room, children's wards and detention centers, the Chamber of the west wing on the fourth floor, a total area of ??about 1,400 square meters; pharmacy room on the first floor, an area of ??about 100 square meters.

FIG. 8 is a plan for the preparation of pharmaceutical drugs boxing with the layout of jobs before applying

the proposed method. As was explained in the application of the method in the area of ??the table 16, where the final dosage forms, passes a broad band of intense radiation width of 30 cm and is 17 intense radiation spot diameter of about 60 cm. The same spot was found in the House and 413 on the fourth floor, located on the premises of pharmaceutical boxing. Above the bed was a blur of a woman lying after childbirth. The woman said she had constant headaches, and her baby is not gaining weight. In addition, the room box is detected Hartman standard net with a mesh size of about 2 & bull; 2.5 m, one of the nodes of which goes to the workplace 18 (8).
[0033]

After application of the method in all areas relevant permutations were performed so that the sleeping and jobs, as well as the storage and preparation of medicines do not fall into the zone of increased radiation intensity. Floor Plan pharmacy boxing after application of the method is shown in Figure 9. It can be seen that the tables employees and jobs are out geopathogenic discovered bands of intense radiation and stains, as well as outside the nodes of the network Hartman. Appropriate rearrangements were performed in 413 ward located on the pharmacy box, and then the next day there were reports on the improvement of health and disappearance of headaches in women located there. Information from the pharmacy staff, there are 16 local and 18, have been received.
[0034]

Example 4.

The proposed method was applied to protect the residents of apartment residential building N 42 from the harmful effects of terrestrial radiation at the request of the tenant Ahmadullina RN The family consists of two people - a mother and daughter. Akhmadullin moved into this apartment recently and feels well. Indications for use of the method as a preventive measure was the large number of cancer tenants living in flats below (the apartment is located on the top floor), and the previous tenants. The apartment is full-length, two-bedroom with a lounge and kitchen on the fifth floor of the five-story building, oriented with respect to the cardinal. One wall of the blind and out into the yard, where it is adjacent to the tallest tree. Control definition of the topology of geopathogenic zones of the proposed method was carried out by the operator of dowsing Goriukhino AS
[0035]

The application method the following was revealed. The room (10) detected a network Hartman reduced-size (130 x 150 cm) and three energy "pillar" - one vertical and two horizontal. The vertical column of 19 cm diameter of about 80 was near the piano. Horizontal poles - 20 ellipsoids and 21 to 90 cm in diameter at a height of 180 cm from the wall and were 80 cm. One of the outer walls of the hall is (blank wall). Under the existing arrangement of sofas place of permanent residence of people do not fall into the detected power poles and nodes Hartmann, therefore, the movement of the sofa in the room is not required. The bedroom found two vertical energy pillar 22 diameter of 70 cm and a diameter of 23 to 90 cm. The projection column 23 falls on the bed, causing it recommended moving to a safe place.
[0036]

In the study found a single vertical column 24 and two horizontal ellipsoid 25 and 26. The projection of the vertical column 24 was placed on a desk, and a horizontal ellipsoid 26 a diameter of about 80 cm was at a height of 1.25 meters, served by 170 cm, and passed through the chest and head sitting at a desk person. In accordance with this it was identified safe places for the desk and receive detailed instructions on moving according to the proposed method.
[0037]

The kitchen also found two vertical posts 27 and 28; and post 27 small diameter causes a positive reaction to a long stay in it. Identify safe places and recommendations for moving their permanent residence. Control determination GEA conducted the famous subjective dowsing method, showed the presence of only a projection of vertical columns 19, 22, 23, 24, 27, 28. Horizontal ellipsoids 20, 21, 25, 26, and changing the configuration of the cross sections of said vertical columns with a height dowsing method were not detected, indicating the high accuracy and high functionality of the method in determining the volumetric topology GPP.
[0038]

For half of the year (1992) of the proposed method of protection against electromagnetic anomalies in the Earth's surface have been surveyed about 1,000 sites, of which 10 per cent are garden plots. The total area of ??all objects was not less than 25,000 square meters. We were given the relevant scheme of permutations

that are in 80 percent of cases. A significant improvement in well-being, health, sleep, interpersonal relationships reported about 54 percent of people whose sleeping and jobs were geopathogenic zones before applying the method. There are cases of severe changes in course of disease and cure infertility.
[0039]

Prepared to release new building codes, taking into account the placement of geopathic zones on the ground during the planning of residential and industrial buildings.
[0040]

The proposed method for protecting against electromagnetic anomaly in the earth's surface has the following advantages over known methods, including the prior art: - a high accuracy by objectification of a method including the steps of determining the boundaries and classification geopathic zones, and also by use of the phase method and the method,allows to realize high sensitivity due to the display of the integral of the phase shift; - Low probability of error due to the high noise immunity operation locate geopathic zones and their mapping from the use of phase measurements, coupled with the natural noise of the electric component of the electromagnetic field as a useful signal; - Significantly enhanced functionality at the expense of the protection of the volume distribution of geopathic zones around the living space above the test site; - Significantly higher reliability of protection, because by further introduction of the operation is carried out keeping the bulk configuration of geopathic zones, which differ in general by their projection on a horizontal surface,which alone is taken into consideration in the prior art, thereby realizing tighter security requirements geopathogenic; - Significantly higher reliability of protection, since the proposed method, in contrast to the known can guarantee protection against all types of terrestrial radiation component not only of electromagnetic nature; - Simplicity and accessibility implementation due to lack of need for any special protective equipment such as screens, pyramids, pastes, special clothing, etc.
[0041]

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RU2118124
METHOD OF ESTIMATION OF BIOLOGICAL OBJECT ELECTROMAGNETIC FIELD AND DEVICE DESIGNED FOR ITS REALIZATION

FIELD: medicine; medical engineering. SUBSTANCE: method may be used for noninvasive remote diagnostics of pathologic and prepatologic conditions. It may be used as means for preliminary diagnostics, topological diagnostics of organ diseases in dynamics, as well as for checking the dynamics of treatment process. Method includes estimation of topology of equipotential surfaces of biological object magnetic field by phase shift parameter, topological diagnostics of organs and tissues, use of super-long-wave range and phase-frequency analysis, as well as use of noise as useful signal.; Topological analysis of configuration of equipotential field surfaces allows estimation of total potential of organism protective forces by relative dimensions of equipotential surfaces and localizing of pathologic foci by position of concavities and convexities in picture of equipotential surface relative to biological object body. Deviation of received signal phase from reference signal phase is checked by recording the signal equal to integral of received and reference signal difference. Equipotential curve may be plotted by great number of points with any preset discreteness which is expedient in automation of measurements and plotting of topograms. When tracking system is used continuous scanning of equipotential curve with controlled movement of receiving electrode may be provided. EFFECT: enlarged functional and diagnostic capabilities.

[0001]

The invention relates to the field of medicine and medical equipment and can be used for non-invasive diagnosis of pathological and remote prepathological states, as a means of pre-diagnostic for the diagnosis of diseases of the topological dynamics, as well as to control the dynamics of the process of treatment.
[0002]

There is a method for remote monitoring of internal physiological processes of a person due to the fact that the measured electromagnetic signals emanating from the body over time in the range of 0.3-0.4 Hz 40 ... and share the signals on the ECG, EEG, EMG, EOG and respiratory wave due to the fact that a distance of up to 12 feet. from the body supercooled superconducting complex antenna, the temperature of which is maintained at approximately 3,7 K, produce optimal filtering the received signal thereby maximize the signal / noise ratio, received signal is converted to digital form, is transmitted to a digital processor which divides the received signal into components that characterize the physiological processes in the body, namely, ECG, EEG, EMG, EOG and breath wave and display it on the display [1].
[0003]

The disadvantages of this method are the limited functionality of the diagnosis since it is possible to observe only the instantaneous values ??fleeting electrophysiologic processor organism and does not allow to evaluate the characteristics and condition of nearly constant field electromagnetic envelope around the body, and also allows for topology diagnosis of organs and tissues due to registering a total instantaneous amplitude intensity of the electromagnetic field of the patient.
[0004]

The closest to the proposed method is known for mapping the electrical comprising that above the surface of bioobject measured spatial distribution of the electric charge, and the measurement is carried out by the fact that at a distance above the bioobject a receiving electrode and measure its charge. Furthermore, the other side of the bioobject symmetrically to the first receiving electrode located at a distance above the bioobject second receiving electrode and form electrical capacitance with the first receiving electrode, and the biological object is placed in the interelectrode space, whereupon before measuring the charge of the first receiving electrode produce charge bioobject high-frequency electric field [2].
[0005]

The disadvantages of this method are low functional and diagnostic capabilities, and low diagnostic accuracy. This is because the known method allows to obtain the card only fast processes, namely insensible perspiration, reflecting thermoregulatory response of the organism, as well as mechanical vibrations of a charged surface of the body associated with the mechanical functioning of the internal organs. In view of the rapid dynamics of these processes, its connection with the disease is extremely difficult because of the high unsteadiness, stochasticity and large individual variation. In addition, the conclusion of any abnormalities shall be made regarding the status of that developed in a patient over an extended period of time calculated

in months or more, that is. E. Observability is commensurate with this period. This is a clear disproportion between the temporal organization of the disease and informative signs, taken as a diagnosis in the known method, greatly complicates the diagnosis and reduces the accuracy of the diagnosis, and, moreover, does not allow to identify the underlying causes of the disease, allowing the judge only on its external manifestations. The known method eliminates the need for cryogenic technology, which makes it relatively simple and affordable, but at the same time it requires a preliminary charge of skin outside a sufficiently strong high-frequency electric field is created on the surface of the body of a regular electric charge that makes the known method of actively using rough external influences on a person negatively affects its bio-energy and introducing distortion in the measurement.
[0006]

Known cryogenic physiographer comprising a receiving antenna triangular shape, consisting of three identical metal plates and supercooled superconducting three identical supercooled analog blocks, each of which is connected to a respective plate; analog block containing circuitry noise reduction, the input of which is the input of the analog block, and is connected to the outputs of the three supercooled analog blocks antennas, fiber optic link having an input coupled to the output of the circuit noise reduction low-pass filter having an input connected to the output fiber optic line connection, and the output is an analog output unit; analog-to-digital converter having an input connected to the output of the analog block; Four-memory blockinputs connected to the outputs of the analog-to-digital converter; four Fourier processor and four correlators whose inputs are connected to the respective outputs of the four channels of the storage unit; a mini-computer with a display having inputs connected to the outputs of the correlators and Fourier processors, and four outputs connected to four digital-analog converter to the inputs of four-recorder [3].
[0007]

The disadvantages of the known device is the high degree of complexity and low performance, including by reason of the application of cryogenic technology, as well as low functional and diagnostic capabilities for failure to assess the stationary states of the body, inability to conduct topologichnskoy diagnostics, as well as due to control only the instantaneous values ??of physiological parameters having a very complex and difficult relationship with the general condition of the patient.
[0008]

The closest to the proposed device is to measure the electrical charge bioobject comprising measuring a receiving electrode and the recording device having an input electrically coupled to the receiving electrode. Furthermore, the device comprises a grounded shield configured in the form of two connected telescopically, hollow cylinders, the inner cylinder is arranged plugged end, and the outer is provided with a flat annular fifth fixed at its end opposite the anechoic end of the inner cylinder, in the cavity which is situated measuring a receiving electrode and secured at a fixed distance from the open end [4].
[0009]

The disadvantages of the known device is the low functionality and diagnostic capabilities for failure to assess the configuration of the field, low accuracy and noise immunity due to the measurement of the surface of a static field, which is highly variable and dependent on external conditions, but because of low information content, particularly on the state of internal organs.
[0010]

The aim of the invention is to expand the functional and diagnostic capabilities through the implementation of the possibility of assessing the topology of the equipotential surfaces of the electromagnetic field biological object to a parameter of the phase shift of the topological diagnostics of organs and tissues, increase diagnostic accuracy and noise immunity due to the use superlong range and phase analysis as well as through the use of noise as the useful signal.
[0011]

To achieve this goal in the known method the electric mapping comprising that above the surface of bioobject measured spatial distribution of the electric charge measurements are made due to the fact that at a distance above the bioobject a receiving electrode and measure the battery charge, an additional range of super-long radio waves on the noise component of the electric charge receiving electrode due to the fact that they take the noise signal from the receiving electrode separated frequency component at a fixed frequency of the noise signal fluktatsy charge receiving electrode, and as a parameter to estimate the field using the phase shift amount between the selected frequency component and the reference signal of the same frequency, configuration, location and shape of the curve with respect to the biological object parameter estimation of a field trial, the extent and localization In addition, measurements are made loft space around

the biological object, with each section building curve equipotential surface of the measured parameter field.

Furthermore, the receiving electrode is moved parallel to the surface of the biological object at the same distance from it, wherein before moving align the phase of the reference and the received signal by adjusting the reference signal, and during the movement of the seating area on the bioobject, above which there is a phase change which is judged on the localization processes and pathological changes.

In addition, the curve of equipotential surface evaluation of fields in each section bioobject building due to the fact that every time aligned interfering background because the set receiving the electrode at the same distance from the biological object, by adjusting the phase of a reference signal aligned phase of the reference and the received signal is then transferred to the constant velocity along a straight receiving electrode toward bioobject and determine the distance from the receiving electrode to the biological object from which recorded a non-zero value, or the excess of the prescribed constant phase difference between the received and reference signals.

In addition, each time changing the frequency of the reference signal within a range of super-long radio waves, and for each frequency corresponding curve build equipotential surface measured parameter field.

In addition, the phase deviation of the received signal from the reference register by the fact that the determined value of the integral of the phase difference of the received and reference signals, by its presence and change judging the phase deviation of the received signal from the phase reference signal, and the slew rate - of the magnitude of the phase difference and every time you install a new dimension zero initial conditions of integration.

In addition, the curve of the equipotential surface of the field in the section are building due to the fact that carry automatic movement of the receiving electrode directly on a curve equipotential surface around bioobject within each section due to the fact that they produce the movement of the receiving electrode around the circumference of the biological object in the plane of the section, determine the amount of deviation of the phase difference of the reference and the received signals from the preassigned value to control the radial movement of the receiving electrode from the deviation of the phase difference from the target value and determining the distance and configuration of equipotential curve to the bioobject.

In addition, the obtained sections bioelectromagnetic fields produce three-dimensional reconstruction of the equipotential surfaces of the field for each frequency.

In addition, the change of sections bioelectromagnetic field bioobject automatically generate pre-programmed so that the exercise continuous scanning receiver electrode equipotential surface field parameter biological object, such as a helical path. In addition, simultaneously with the measurement of the surface configuration of the field determines the biological object or a major proportion and combine them into one scale derived from the equipotential surface of the field.

In addition, in determining the configuration of the equipotential surfaces to reduce the size of the judge lowered the general defenses, and localization of local depressions and bulges equipotential surface is judged on the localization of pathological morphological and functional changes in the relevant field of tissues and organs bioobject.

In addition, the section of the equipotential surface is arranged so as to extend through the centers of the autonomic nerve plexus and subcortical structures, and the localization of deformation of the equipotential surface in the respective centers are judged on the pathology of managed these centers.

In addition, measurements are made periodically during the course of medication, physiotherapy, reflex, manual, or other types of therapy and form the feedback parameters therapeutic effect due to the fact that the dynamics of change in the configuration of the equipotential surfaces in the course of therapy is judged on its effectiveness and accuracy and if necessary, make the correction circuits doses and treatments.
[0012]

To achieve this goal in the known device for measuring electric charge bioobject comprising a receiving electrode connected to the input of the measuring unit, the output of which is connected to the input of the indication unit further measuring unit comprises a series connection pre-amplifier, pulse filter ac amplifier, the phase detector, smoothing LPF and DC amplifier, and also comprises a signal generator a reference frequency and phase, the output of which is connected to the second input of the pulse filter and a second

input of the phase detector unit compensating for an interfering background, whose output is connected to a second input of the DC amplifier whose output is the output of the measuring unit, the input preamplifier is input to the measuring unit.

In addition, the display unit comprises an integrator whose input is the input of the display unit, the output of the integrator is connected to the input of the display element, a reset input connected to the output of the integrator element of the integrator reset.

In addition, the display unit includes a nonlinear type element "dead zone" with variable area, whose input is the input of the display unit, a setting item dead zone, the output of which is connected to the control input of the nonlinear element, an integrator whose input is connected to the output of the nonlinear element, the element resetting the integrator, the output of which is connected to the reset input of the integrator, the indicator element having an input connected to the output of the integrator.

Furthermore, it is entered rangefinder, for example optical, infrared or ultrasound, the input of which is situated near the receiving electrode at one him level and located in a direction perpendicular to the plane of the electrode, and the display unit put the second indicator element whose input is the second input and a display unit coupled to an output rangefinder.

In addition, it introduced three independent electromechanical drive receiving electrode connected thereto, the program-controlling unit, three outputs of which are connected to the inputs of three actuators, the fourth output program-controlled unit is connected to the control input of the measuring unit, the output of which is connected to a first input program-controlled unit, put a control input unit compensating for an interfering background, which is the control input of the measuring unit.

Furthermore, it is entered patient position sensor unit and its proportions, the output of the sensor is connected to the second input of the program-controlled unit.

Furthermore, it is entered rangefinder input of which is flush with the receiving electrode, and an output coupled to the second input of the program-controlled unit.

In addition, it introduced a fourth electromechanical drive moving electrode receiving an input coupled to the fifth output of the program-controlling unit, and an output coupled to the receiving electrode.

In addition, the electromechanical drive moving the receiving electrode made in the form of electric stepper motors.

In addition, program-control unit comprises a microcomputer with a keyboard and a display connected to the inputs of the microcomputer, two analog-to-digital and digital to analogue converters connected to the parallel IO ports microcomputer inputs of analog-digital converters are first and second inputs of a program-controlled unit Exit DAC output is the fourth program-control unit, the first, second, third and fifth inputs are software-control unit are serial ports IO microcomputer.
[0013]

FIG. 1 is a diagram of the method of evaluation of the electromagnetic field biobektov.
[0014]

FIG. 2-8 shows the equipotential surface of the phase of individual patients.
[0015]

FIG. 9 is a diagram of the process at a rapid diagnosis.
[0016]

FIG. 10 shows the localization of the detected phase distortion surface for a particular patient at a rapid diagnosis.
[0017]

FIG. 11 is a functional diagram of the device for evaluating the electromagnetic field of biological objects.
[0018]

FIG. 12 is a functional block diagram of the display device.
[0019]

FIG. 13 shows the characteristic of "input-output" nonlinear element and its regulation.
[0020]

FIG. 14 is a structural diagram of a device with manual measurement.
[0021]

FIG. 15 is a structural diagram of the device in stand-alone embodiment, including rapid diagnosis.
[0022]

FIG. 16-17 is a functional block diagram of embodiments of the indicator with a range finder.
[0023]

FIG. 18 is a functional diagram of an automated embodiment of the device.
[0024]

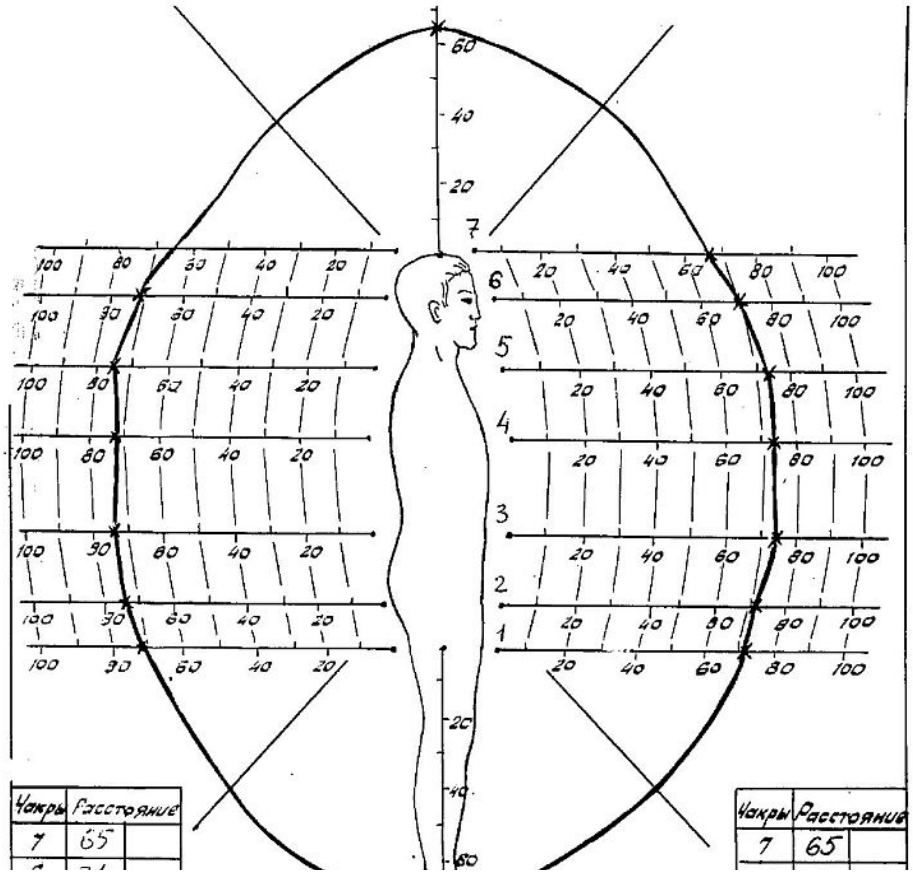
FIG. 19 shows a circuit compensating for an interfering background.
[0025]

FIG. 20 is a diagram of a constructive embodiment of the automated performance of the device.
[0026]

FIG. 21 is a functional diagram of an automated embodiment of the device with an additional degree of freedom of the receiving electrode.
[0027]

FIG. 22 shows a flowchart of the program miroEVM automated embodiment of the device.
[0028]

FIG. 23 is a structural diagram of an automated embodiment of the device implementation with an additional degree of freedom of the receiving electrode.
[0029]



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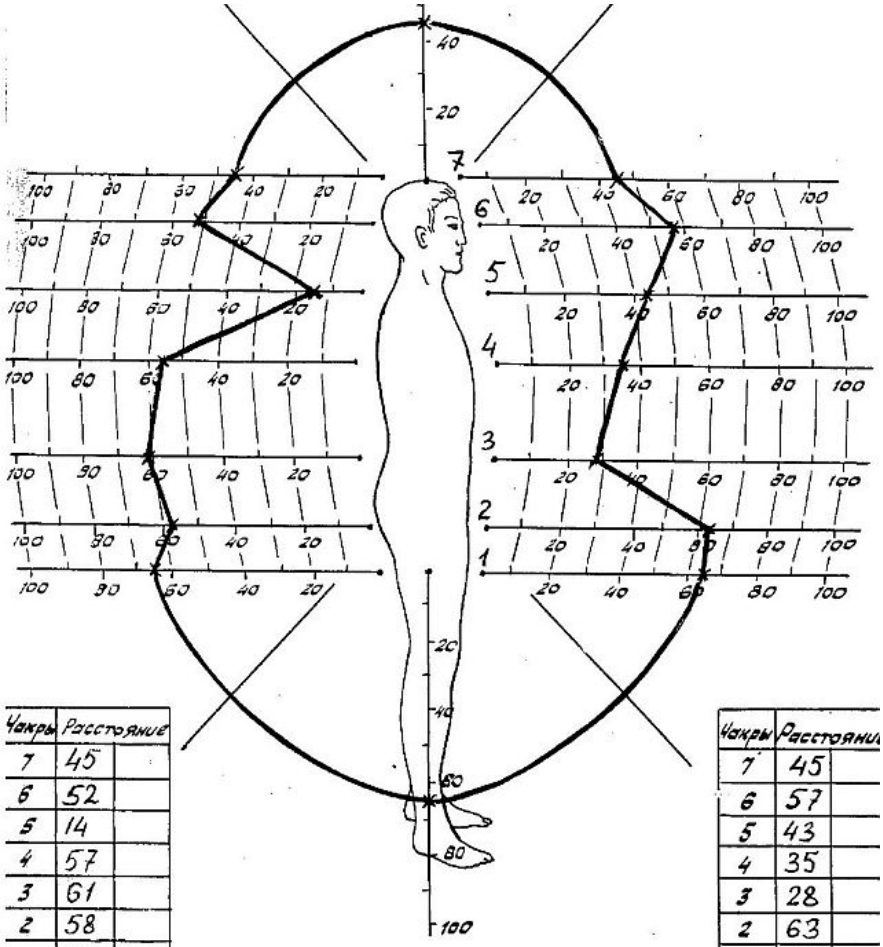
Пациент: З.
Возраст: 45 лет
Диагноз: практически здоров
Дата: 3.08.94 г.

МЕТОД ДИАГНОСТИКИ БИОЭЛЕКТРОМАГНИТНОГО ПОЛЯ ЧЕЛОВЕКА

ФИГ.2



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1	65

Чакры	Расстояние
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6	57
5	43
4	35
3	28
2	63
1	65

Пациент: Д.
Возраст: 44 года.
Диагноз: Бронхиальная астма.
Дата: 1.02.94г.

МЕТОД ДИАГНОСТИКИ БИОЭЛЕКТРОМАГНИТНОГО ПОЛЯ ЧЕЛОВЕКА

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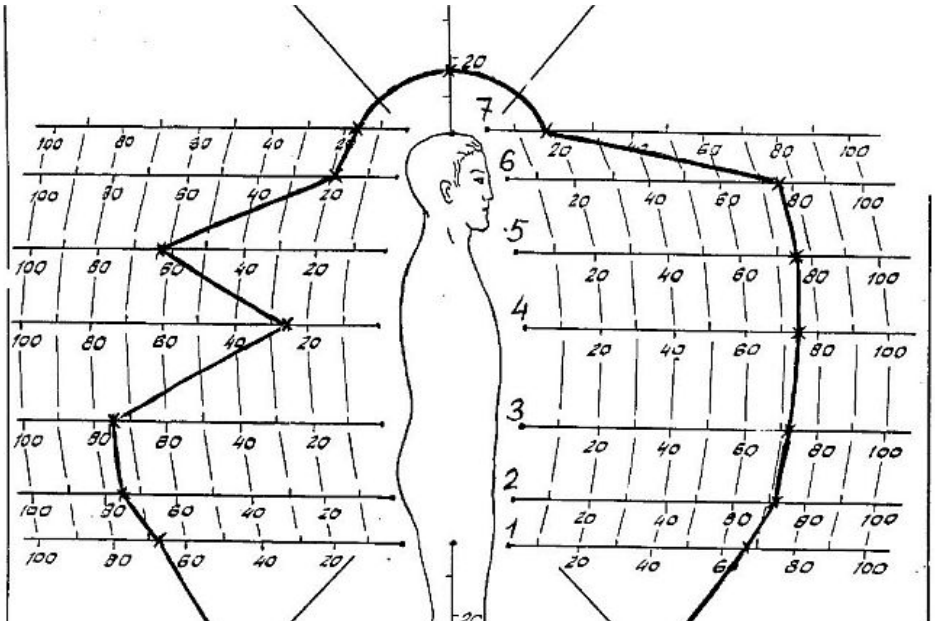

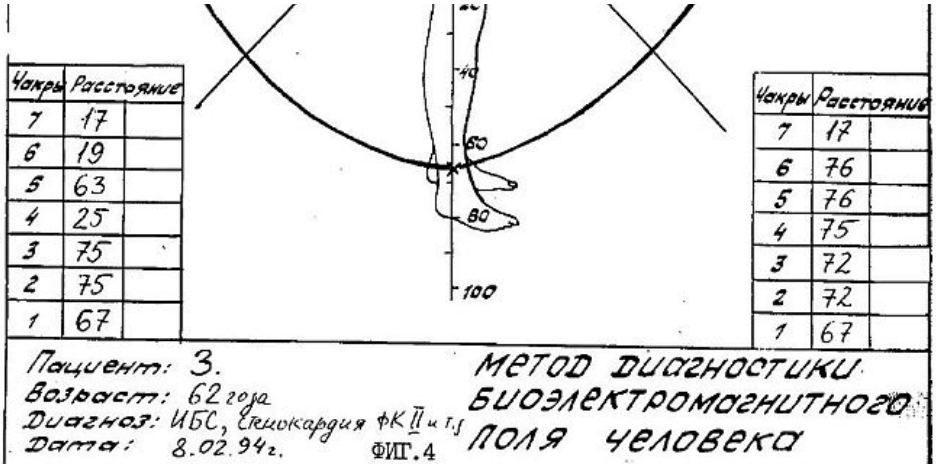

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2	75	
1	67	

Чакры	Расстояние	
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5	76	
4	75	
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Пациент: З.
Возраст: 62 года
Диагноз: ИБС, стенокардия ФК II и т.д.
Дата: 8.02.94г.

МЕТОД ДИАГНОСТИКИ БИОЭЛЕКТРОМАГНИТНОГО ПОЛЯ ЧЕЛОВЕКА

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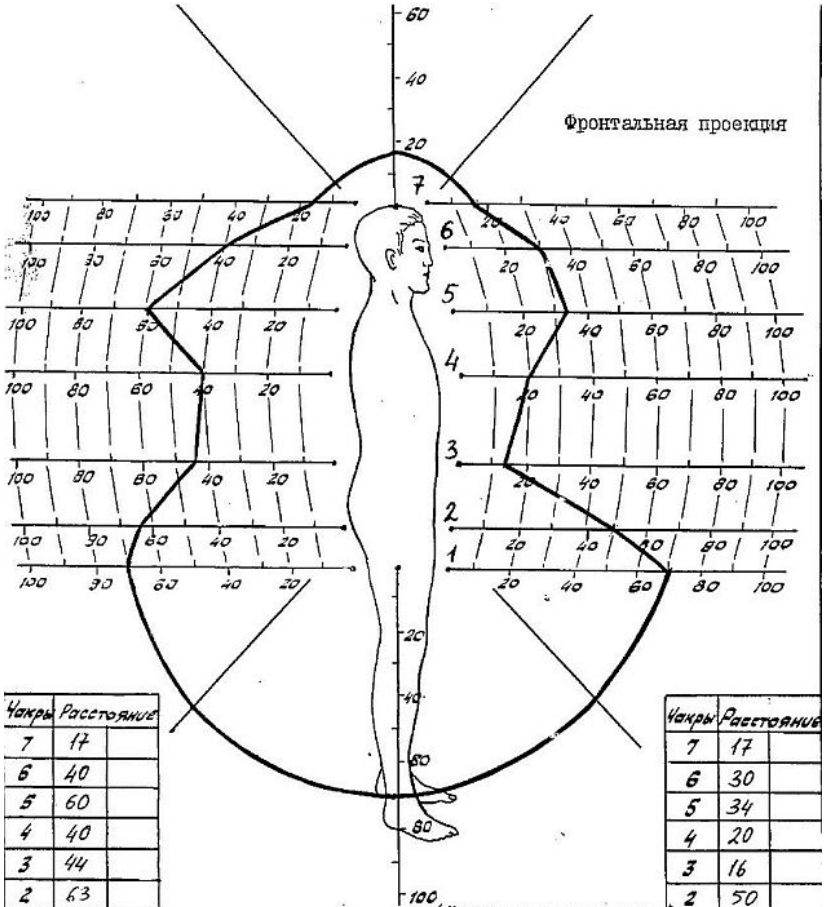

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4	40	
3	44	
2	63	
1	70	

Чакры	Расстояние	
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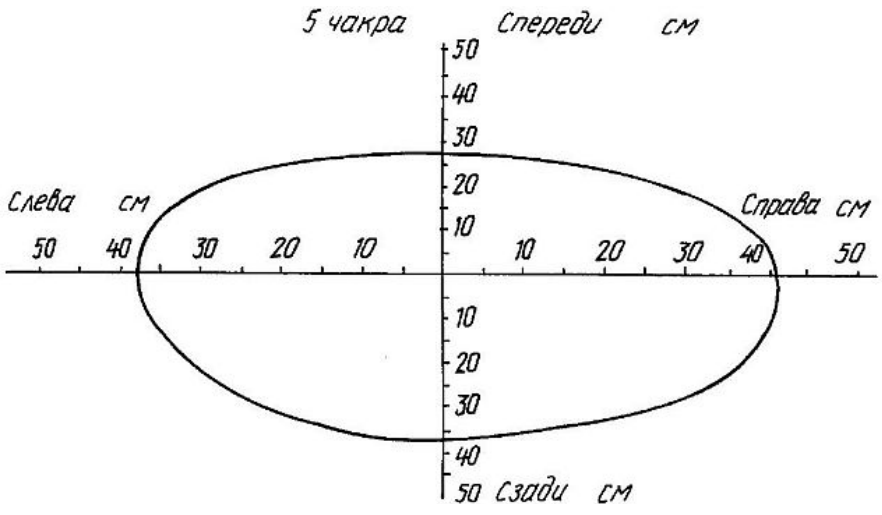
6	30	
5	34	
4	20	
3	16	
2	50	
1	70	

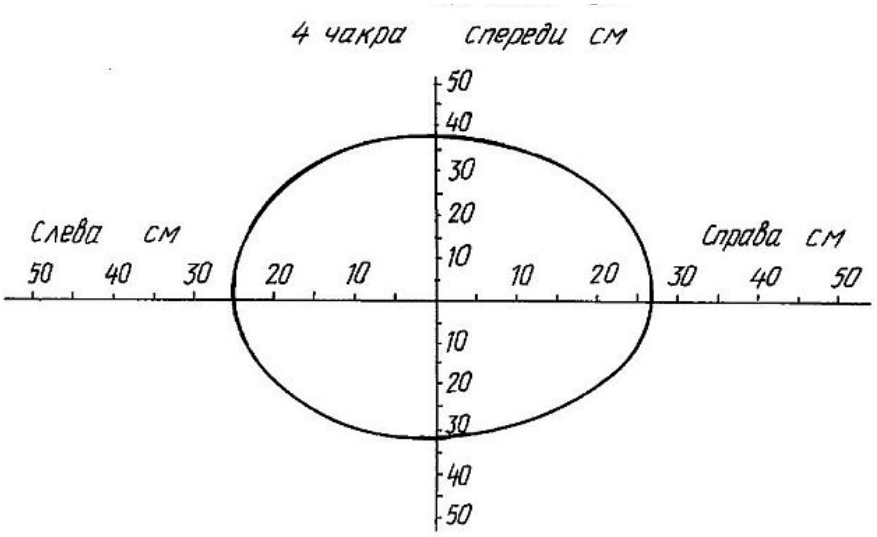
(фронтальная проекция)

Пациент: З.
Возраст: 62 года
Диагноз: ИБС, стенокардия ФК II и др.
Дата: 8.02.94г.
(фронтальная проекция)

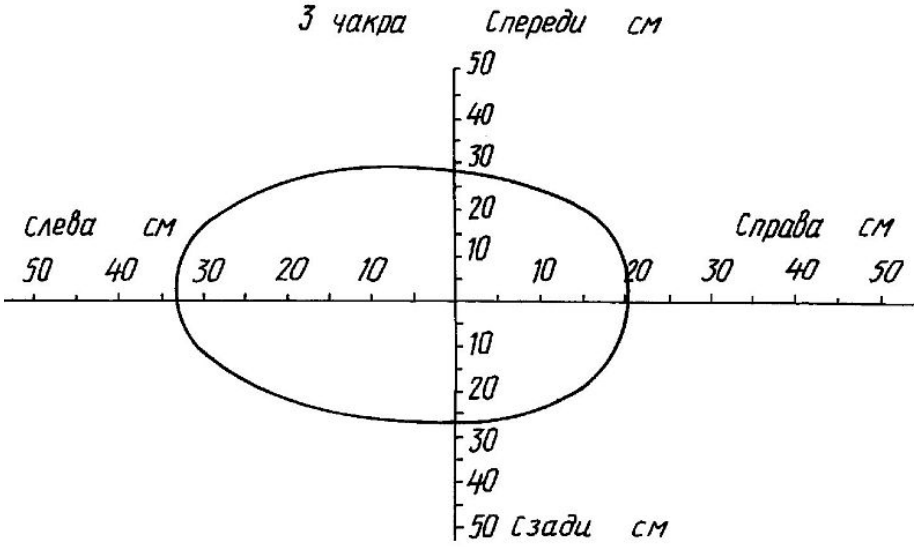
МЕТОД ДИАГНОСТИКИ БИОЭЛЕКТРОМАГНИТНОГО ПОЛЯ ЧЕЛОВЕКА

ФИГ.5





Фиг. 6а



Медицинское заключение : Фиброзно-кавернозный туберкулез правого легкого

Врач _____

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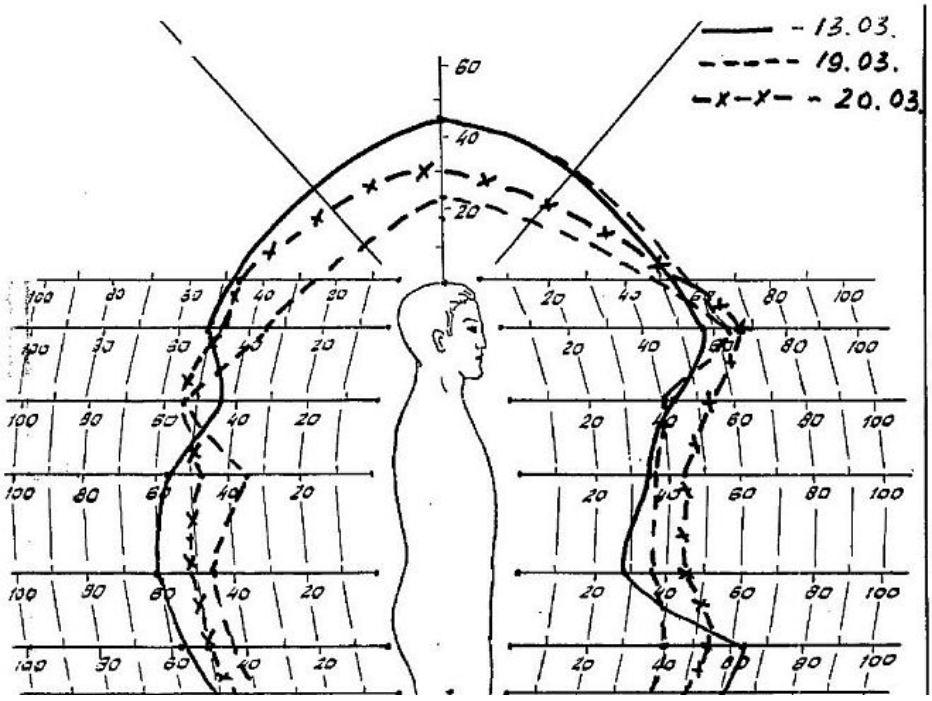

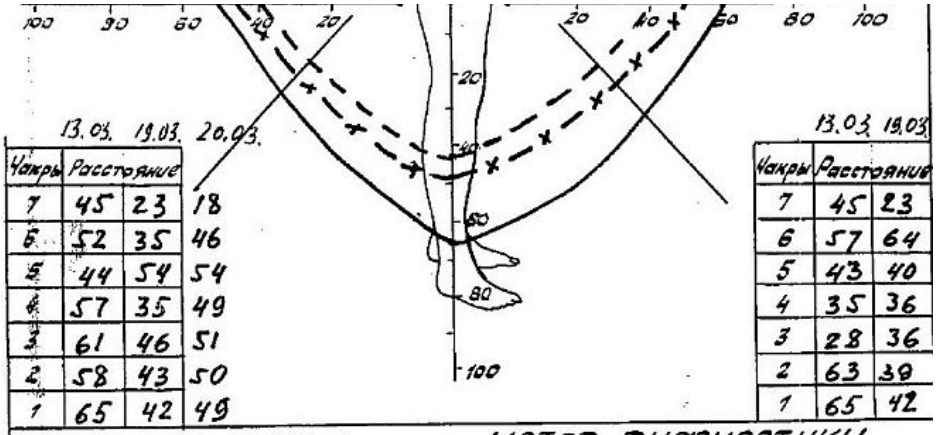

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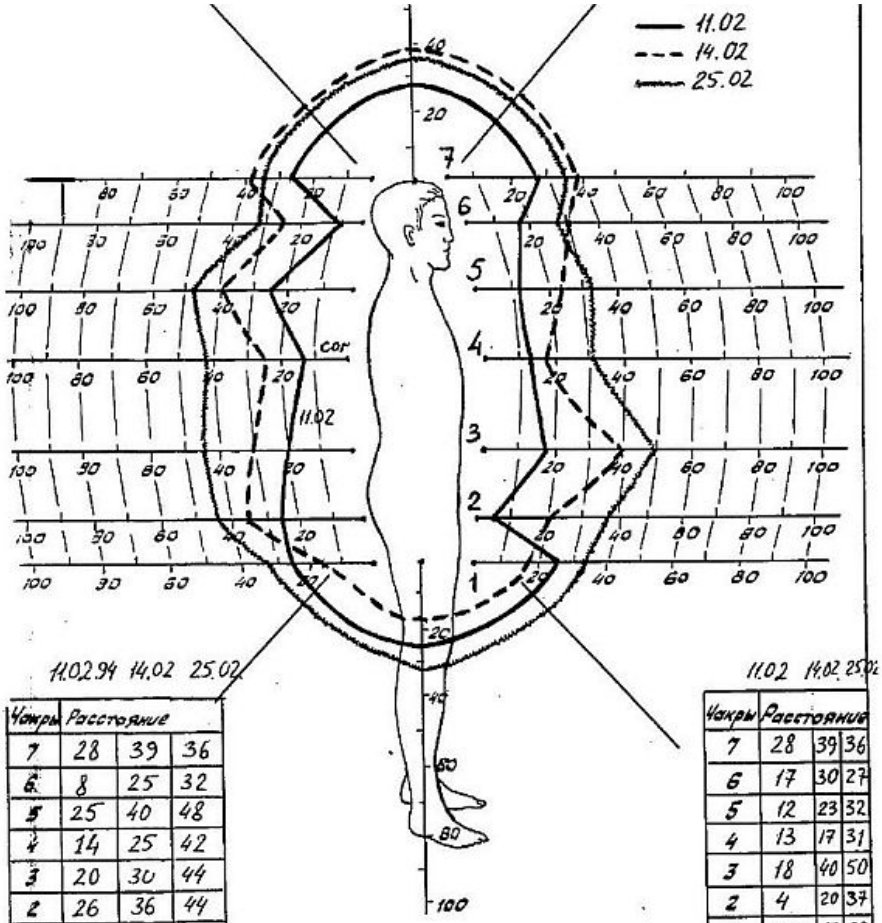
1	65	42	

Пациент: Д-сов Д. А.
Возраст: 44 г.
Диагноз: Бронхиальная астма
Дата: 13.03. - 20.03.92

МЕТОД ДИАГНОСТИКИ БИОЭЛЕКТРОМАГНИТНОГО ПОЛЯ ЧЕЛОВЕКА



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Чакры	Расстояние		11.02 14.02 25.02
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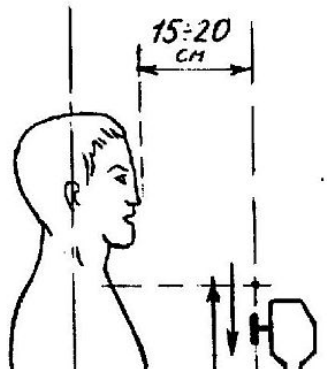
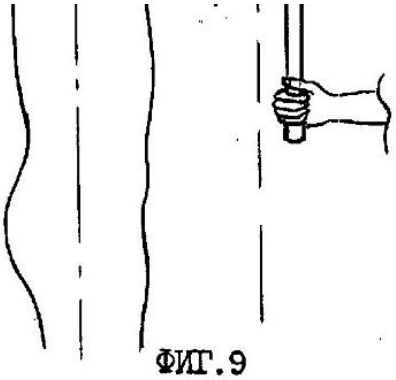
Пациент: П.К.О.
Возраст: 45 лет
Диагноз: вегето-сосудистая дистония
Дата: 11.02.94 - 25.02.94 г.г.

МЕТОД ДИАГНОСТИКИ БИОЭЛЕКТРОМАГНИТНОГО ПОЛЯ ЧЕЛОВЕКА





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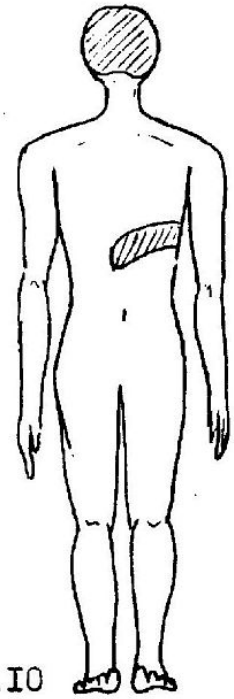

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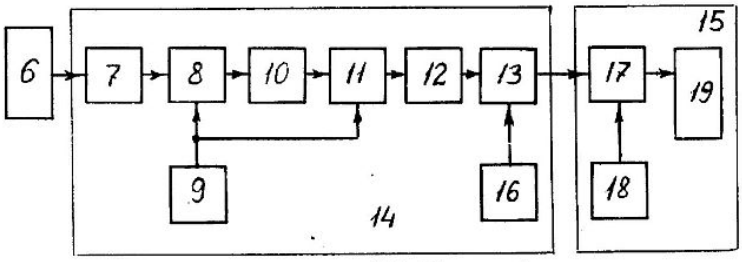

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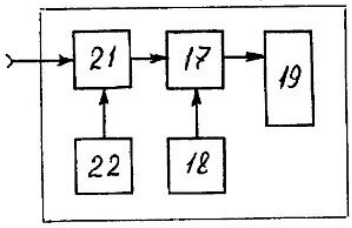

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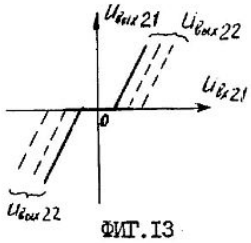

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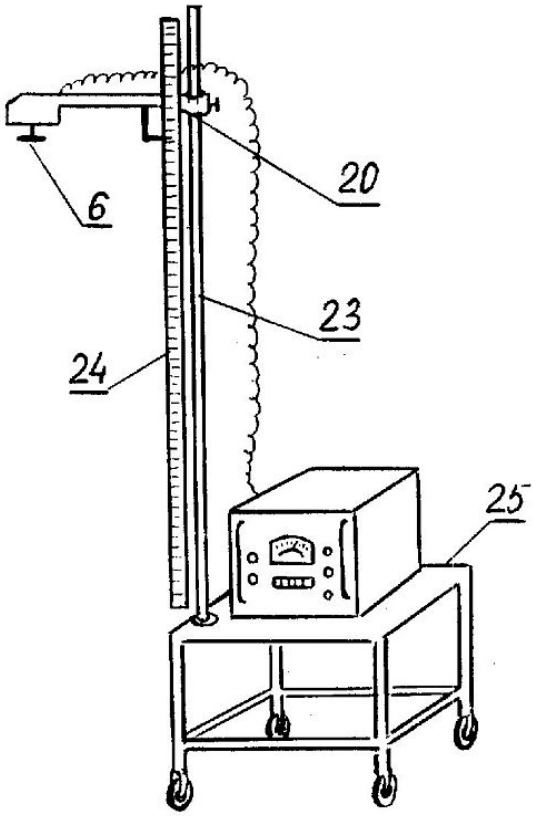

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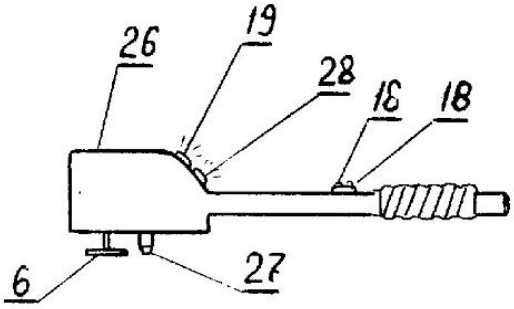

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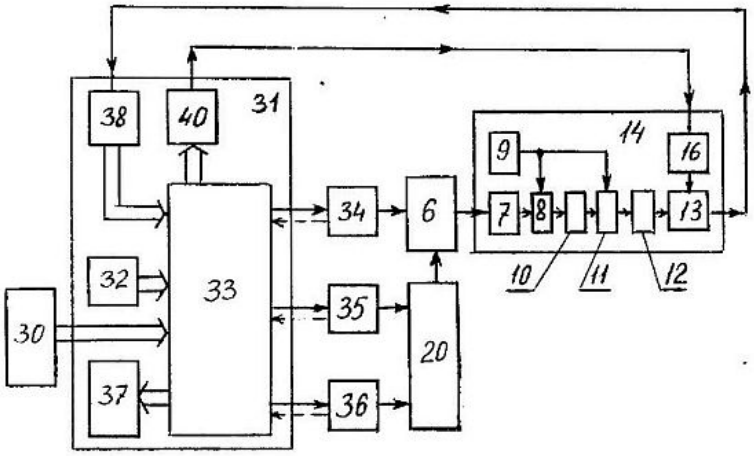

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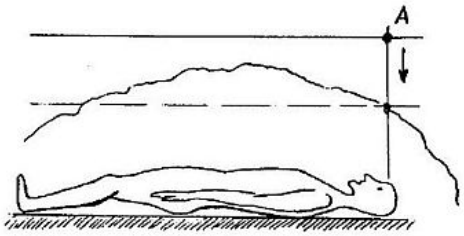

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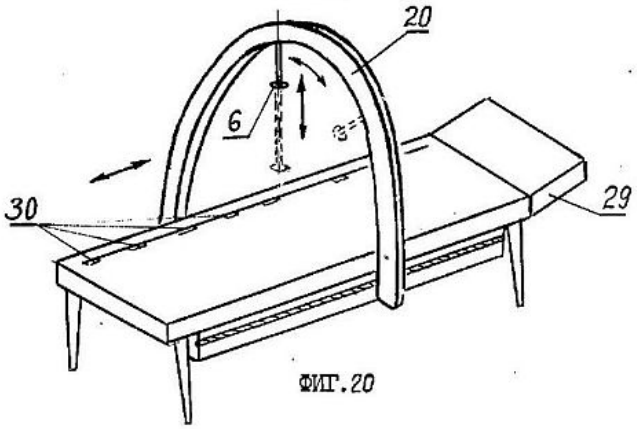

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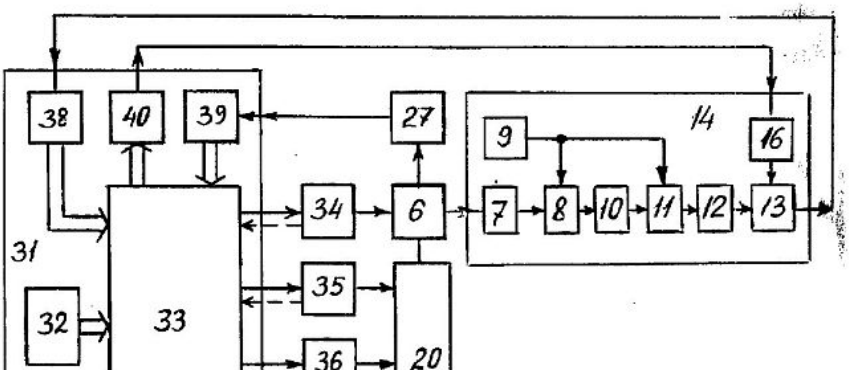
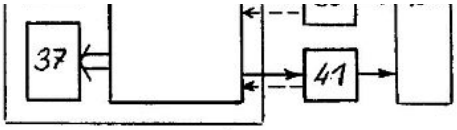
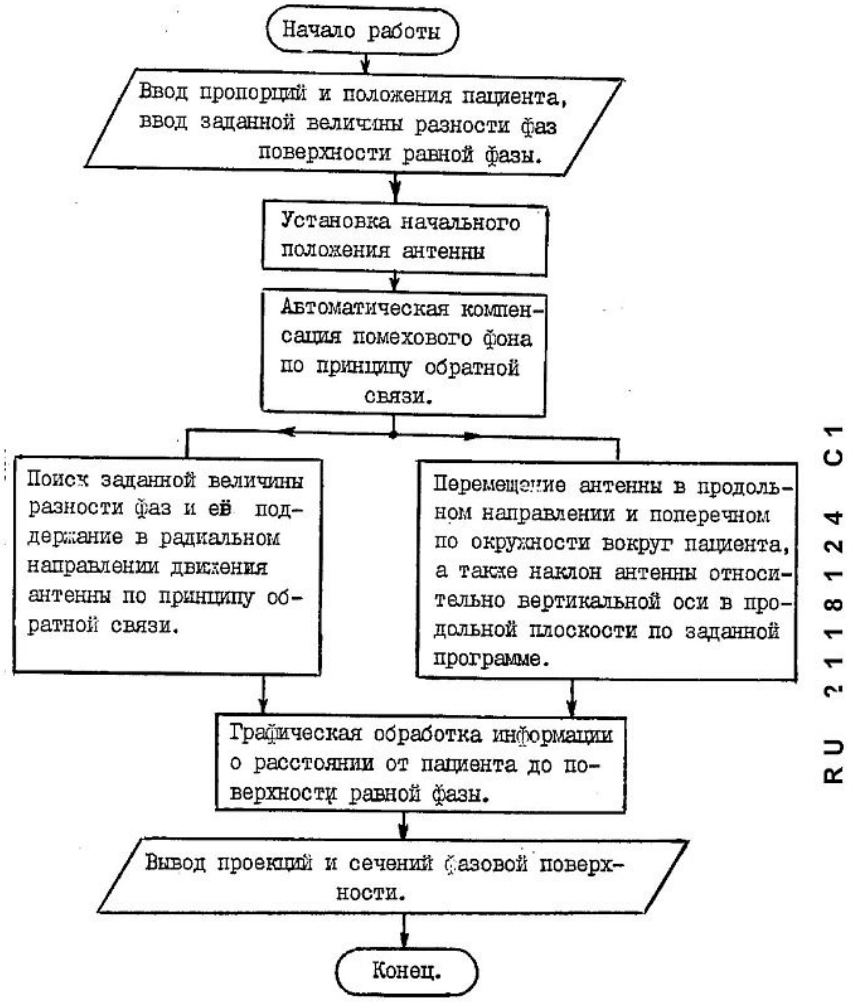




ФИГ. 21



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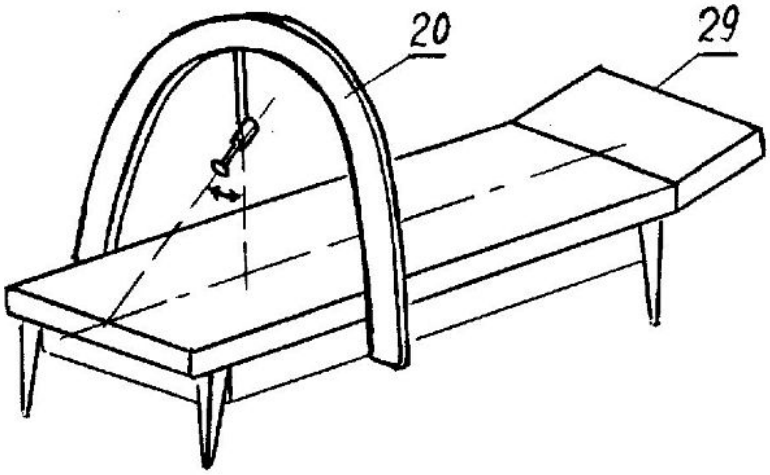


ФИГ.23

A method for evaluating the electromagnetic field biological object based on the topological analysis of the equipotential surfaces of a stationary electromagnetic field surrounding biological object.
As an option, which is being built on equipotential surfaces, used in contrast to all the known literary sources, the magnitude of the phase shift between the reference signal of fixed frequency and the harmonic

component of the received noise signal.

Thus, the noise signal held about the biological object is useful, and use as a working range of super-long radio waves from 1 to 10 kHz allows tune out fast rhythmic physiological processes (such as ECG, EEG, KRG, EMG, circadian rhythm and etc.) and judge slowly changing stationary field, bearing the imprint of the total functional and morphological state organs, tissues and systems of the body, and responds to medication and other types of treatment modalities.

At the same topological analysis of the configuration of the equipotential surfaces of the field allows us to estimate how common the potential of the body's defenses in the relative size of the equipotential surfaces, and localization of lesions on the location of cavities and protuberances on the film surface with respect to the equipotential body bioobject.
[0030]

Due to the fact that the change in phase of the received signals represent a relatively small value to increase the overall sensitivity and noise immunity of the process control of the phase deviation of the received signal from the reference produced by the fact that the recorded signal is equal to the integral of the phase difference of the received and reference signals.

It is sufficient, even minor deviations phase to the phase difference signal integrator began to grow continuously and for a finite time interval peaked, which is easily detected by conventional instrumentation.

Estimates of the rate of increase of the integral of the phase difference at a constant speed of the receiving antenna (receiving electrode) or the evaluation of its value over a fixed period of time to judge the magnitude of the phase jump.

To fix the next phase jump over another portion of the patient's body, previously set zero initial conditions of integration.
[0031]

A method for evaluating the electromagnetic field biological object is as follows.

Patient 1 (FIG. 1) is placed in the supine position on a reel 2. To reduce non-automated diagnostic procedures of the electromagnetic field evaluation of a person made in the spatial orientation of the receiving electrode (antenna) 3 on each of the seven main energy points of the human channel along the spine.

Points 4 front and rear surface of the body of the patient 1, broadly in line with the projections on the skin autonomic nerve plexus and subcortical structures.

Accepted point measurements (conventional and literature data on vegetology [5]) were as follows (see. Table).
[0032]

It was assumed that the measurement of the electromagnetic field of the respective vegetative plexus allow to interpret functional or organic changes in organs and systems, adjusts these tangles.
[0033]

The antenna 3 is located above the selected point 4 on a permanent (for all 4 points) a height of 1.5 mm, and compensates by adjusting the value of background interfering signal phase reference generator for the value of the phase of the harmonic component of the signal received by the antenna 3 background noise fluctuations of the charge capacity of the antenna.

Thus, at a distance of 1.5 m are installing a zero phase difference between the received and reference signals.

Further, by moving the antenna 3 at a constant velocity along a straight line connecting the antenna 3 and the selected point 4 of the patient 1 in the direction of the patient 1, with simultaneous observation of the magnitude of the phase difference, or to increase the sensitivity of its integral.
[0034]

Moving the antenna 3 is performed along the line, such as a rod (FIG. 1), or manually by rapid diagnosis holding the antenna with the device in the hand or automatically by means of a servomechanism.

[0035]

At the time of the non-zero phase difference (or an abrupt change of the integral of the phase difference) or exceeding their preassigned threshold measure distances to a selected point 4 at the appropriate place on the skin of the patient.

These distances over each point used to construct the curve of equipotential surfaces of equal phase in a given combination (Fig.
2 - 8).

Building equipotential curve in the required section can be produced on a large number of points with any desired degree of discreteness that it is appropriate to do in the automation of measurement and construction topograms.

By using the tracking system may continuously scan the equipotential curve to control the movement of the antenna 3 to the phase deviation of the received signal from the phase of a reference signal.

At the same time, according to the experimental data, the projection of defects (cavities or bulges) equipotential surface on the skin, usually coincides with the localization of lesions (Fig. 2-8), which confirms the known clinical methods.

Measuring the distance from the skin to the position of the antenna 3, which recorded a non-zero predetermined value of the phase difference in the case of a simplified assessment of the field for seven major points on a scale of distances 5, along which the antenna 3.

Thus before the measurement at each point was performed four positioning antenna 3 to contact with a given point at a distance of 4 or 2-3 mm away from the initial distance and the mark on the scale 5 that is subtracted from the distance mark on a scale of 5, which was recorded on the phase shift.
[0036]

If automation of a method by increasing the number of measurement points, determination of distances can be made by known electronic methods using rangefinders (e.g., via radio waves, optical, infrared or ultrasound, etc.) or by means of contact sensors, and stepper motors which allow a continuous scanning topogram field and output for print and display.
[0037]

In the case of rapid diagnosis (perhaps in field or field conditions, rescue operations, emergency situations, etc.) receiving electrode - antenna 3 arranged parallel to any part of the body of the patient 1 (Fig. 9) at a distance of 0 2 - 0.3 m and produce background interference alignment installation phase reference signal equal to the phase of the received and the installation of zero initial conditions for integration, and then the receiving antenna is moved parallel to the surface 3 of the body at the same distance from it. In this fixed place on the body surface over which there is a sharp change in the signal integral of the phase difference of the received and reference signals.

After locking the phase jump every time again set zero initial conditions of integration and continue to move the antenna 3 to the new sharp change in the integral of the phase difference, etc.
The receiving antenna 3 is moved so as to fix the border start integration and thus mark at the surface portions of the body where the phase difference is not zero.

These sites are supposedly projections of lesions within the body or damage.
[0038]

Example 1.

Patient Z., 45 years old, entered the clinic for checkups. No complaints. Clinical examination confirmed the good state of health. According to the survey field configuration in the sagittal plane of the flat, elliptical, indicating that the normal functioning of the patient (Fig. 2). In this and the following examples, measurements were taken at a frequency of 7.4 kHz.
[0039]

Example 2.

Patient D., 44 years old, was treated at the pulmonology department of the Republican Clinical Hospital. Kuvatova with a diagnosis of asthma with frequent attacks. In the measurement of the electromagnetic field detected, in that the V of the rear and in the area V, IV, III front attaching points with abrupt deformation scallops, constrictions. Based on these data (Fig. 3) could be assumed that the electromagnetic field of the patient is not only misshapen due to lung diseases, but also include changes in the heart and gastrointestinal tract, which was confirmed in further clinical studies further.
[0040]

Example 3.

Patient Z., 52 years old. Clinical diagnosis: coronary artery disease, angina FC II, chronic gastritis, urolithiasis, chronic pyelonephritis, a cyst of the right kidney. Upon registration of the field in the sagittal plane (Fig. 4) revealed a substantial deformation field at the points II and IV behind. In the frontal plane (Fig. 5) changes in the field are registered in the area IV and III points, a significant reduction of the distance - in terms VII. After 5 months after discharge, the patient re-admitted to hospital with ischemic attacks, indicating that the high diagnostic accuracy of the method in the early stages of the disease and stages predzabolevany.
[0041]

Example 4.

F.R.T patient, 38 years old, was treated at a tuberculosis clinic with a diagnosis of fibro-cavernous tuberculosis of the right lung. The survey was conducted by the proposed method. Results constructing equipotential curves of equal phase on the transverse sections, extending through III, IV and V the point shown in Figure 6, respectively. One can see a significant narrowing of the equipotential surface of the field at point IV (cardiopulmonary plexus) compared to the V point and an asymmetrical restriction on a section through III point (solar plexus), mainly on the right, which fully meets the clinical diagnosis.
[0042]

Example 5.

D. Patient D., 44 years old, clinical diagnosis: asthma. During the course of treatment in the hospital there were three of the proposed method of measurement - the second after 6 days after the first, third in 7 days after the first. The measurement data (7) show partial alignment of the phase defects the equipotential surfaces, but with a simultaneous decrease in the area covered by the curve in the sagittal section.
[0043]

Example 6.
P.K.O. patient, 45 years old. Clinical diagnosis: dystonia. At the first examination shows a strong decrease of the phase with dips in the surface region II, IV and VI and bulging points in region III and V of points (8). During the course of treatment with repeated measurements made after 3 days, and the third measurement performed after another 11 days, it was revealed expansion phase surface area increases, by the curve in the cross section, but preserving the nature of deformations, in particular depressions in the region IV point and bulging in the area III and V pixels.
[0044]

Example 7.

Has rapid diagnosis athlete boxer-K immediately after the competition. Alignment of background interference produced at a distance of 20 cm from the surface of the skin in the area under the right collarbone.
When moving the receiving electrode at a constant speed of about 0.1 m / s parallel to the surface of the body along parallel vertical lines were found two zones substantial phase deviation shown in Figure 10. Later, during the clinical studies were found concussion and fracture of the left edge, ie were obtained confirming found topographical zones damage.
[0045]

Examination of the proposed method was conducted in 270 patients with different pathologies, including 82 with ischemic heart disease, 61 with hypertension, 22 with asthma, 40 with cholecystitis, 25 with gastric ulcer and 40 with pulmonary tuberculosis. The control group consisted of 30 healthy individuals.

In the group of healthy subjects research has shown that equipotential surface is a phase in 18 individual geometry of an ellipsoid at a distance of 40 - 70 cm from the skin, 12 persons equipotential surface located at a distance in the same range, but had a slight deviation from the oval.

In patients with pathology observed explicit equipotential deformation phase surface, significant deviations from its ellipsoidal shape in the form of depressions, constrictions, bumps, etc., the location of which largely coincide with the locations of the affected organs and tissues.

Furthermore, there was a reduction phase surface area compared with those of the control group.

In the course of patient treatment and improve clinical parameters for repeated measures proposed method revealed an increase in the surface area of ??the phase to 35 - 50 cm in 91 percent of patients, however, strain it remained in 62 percent of cases.
[0046]

Thus, in almost all cases there was a coincidence of clinical data with the evaluation of the electromagnetic field, which allows to conclude that a sufficiently high information content of the proposed method.
[0047]

An apparatus for evaluating the electromagnetic field (11) comprises a receiving antenna electrode 6 serially connected pre-amplifier 7, pulse filter 8, the AC amplifier 10, a phase detector 11, lowpass filter 12, current amplifier 13 constituting the measuring unit 14 whose input is the input of the preamplifier 7, and is connected to the output of the receiving electrode 6; in the measuring unit 14 also includes a generator 9, the reference frequency and phase, the output of which is connected to the second input of the pulse filter 8 and the second input of the phase detector 11 and unit 16 compensating for an interfering background, whose output is connected to the second input of the amplifier 13, the DC output of which It is the output of the measuring unit 14 and is connected to the input of the indicating unit 15 which comprises an integrator 17, whose input is the input unit 15, a reset button 18, an integrator 17,whose output is connected to the second reset input of the integrator 17 and the display element 19, whose input is connected to the output of the integrator 17.
[0048]

Unit 15 display (Fig. 12) may further comprise a non-linear element 21, such as "dead zone", the value of the zone which regulates the voltage and the element 22, setting the dead zone, the output of which is connected to the control input of the nonlinear element 21, whose input is the input unit 15 display and the output connected to the input of the integrator 17.
[0049]

An apparatus for evaluating the electromagnetic fields constructively be executed (14), such as a mobile system 20 comprising a vertically disposed rod 23 on which freely fixable moves upward - downward receiving electrode 6, the distance scale 24 disposed parallel to the rod 23 and mounted on the lower ends of the stretcher 25, on which the measuring unit 14 and display unit 15.
[0050]

An embodiment of the device as a hand tool (15) may comprise a housing 26 with a handle, which is located inside the measuring unit 14 and the display unit 15 together with the autonomous power supply; on the outer surface of the housing 26 is a receiving electrode 6, flush with the plane which is situated rangefinder 27; the outer surface of the housing 26 also is the management body section 16 of compensation button 18 resetting the integrator 17, the indicator member 19 is phase deviation and display element 28 distance rangefinder 27.
[0051]

An automated version of the apparatus for evaluating the electromagnetic field bio-object (18) comprises a position sensor 30, the patient and his proportions, program control unit 31 comprising a data entry keyboard 32 and a microcomputer 33 with a display 37, keyboard 32 and display 37 are connected to the inputs of the microcomputer 33, the first input unit 31 connected to the output of the measuring unit 14 and sensor unit 30 - the second input unit 31; also includes three drive: 34 of the radial displacement of the receiving electrode 6, corner 35 of transverse displacement of the receiving electrode 6 on the circumference of the moving system 20 which may be in the form of half-rings 20 located in the transverse plane of the couch 29 (Figure 20) and the reciprocating drive 36 -postupatelnogo motion of the moving system 20 along the couch 29;

electrical inputs of the drive 34 - 36 connected to the first three outputs of 31,a fourth output is connected to an additional control input of the measuring unit 14 which is a control input unit 16 compensating for an interfering background; mechanical outputs 34 - 36 are connected to the receiving electrode 6 and the movable system 20; Sensors 30, 29 are located along the couch.

Instead, the position sensor 30, and the proportions of the patient device 27 may comprise a rangefinder (21), whose output is connected to a second input of the unit 31.

To coordinate the presentation of the first and second information input unit 31 is connected to the microcomputer 33 through analog-to-digital converters 38 and 39, and fourth output block 31 is the output of the digital to analog converter 40 whose input is connected to the output 33 of the microcomputer.
[0052]

An automated version of the apparatus may also comprise a fourth actuator (21, 23) 41 controlling an inclination of the receiving electrode 6 with respect to the vertical axis in the longitudinal plane, power input coupled to the fifth output block 31, which may also be a serial input - output of the microcomputer 33 .
[0053]

An apparatus for evaluating the electromagnetic field bio-object (11) realizing the proposed method works as follows.
[0054]

When placing the antenna receiving electrode 6 parallel to the surface formed bioobject electric capacity, one of the plates which is a biological object, and the other - the receiving antenna 6.

At the last induced electrical charge proportional to the electric component of the electromagnetic field surrounding the biological object at the point of placement of the antenna 6, and fluctuating in the form of "white noise".

Since the antenna 6 is electrically small, ie, its dimensions are negligible compared to the operating wavelength range, the resonant amplification of a single frequency does not occur and the antenna 6 receives the noise signal with a uniform frequency response, whereby the adjustment is not required, and gain control.

Noise electrical signal proportional to the charge antenna capacitance is amplified by the head amplifier 7, which is a charge amplifier and to a first input to pulse bandpass filter 8 with a narrow bandwidth allocated from the noise signal one spectral line at a frequency equal to the frequency generator 9 of the reference signal, specifies the voltage which is supplied to the second input pulse filter 8.

Dedicated harmonic frequency component of the noise signal output from the pulse filter 8 into ac amplifier 10 with high gain, which is amplified to saturation of amplifier 10 and to a first input of the phase detector 11, the second input of which receives the voltage reference signal of the reference frequency and phase generator 9.

In the phase detector output pulse signal 11 appears, the pulse area is proportional to the phase difference of the selected frequency component of the received noise signal and the reference signal generator 9.

This voltage is smoothed by a filter 12 with a lowpass long time constant, whereby the output of the last there is a steady voltage proportional to the average value of the pulse voltage output from the phase detector 11, i.e. proportional to the magnitude of the phase difference, the output voltage of the filter 12 is amplified by the DC (DCA) 13 whose output is the output of the measuring unit 14, and is input to the display unit 15.

When placing a receiving antenna 6 at alignment interfering background (see. Mode) obtained at the output DCA 13 voltage proportional to the phase shift at a given point offset selection balancing voltage output unit 16 compensating for an interfering background, which enters the DCA 13 and subtracted from the voltage phase difference.

The output voltage of the block 16 is selected so that the output voltage DCA 13 was zero at the point of placement of the antenna 6.
Thus since output voltage of the integrator 17, the display unit 15 is zero, and the integrator 17 is set to zero initial conditions 18 pressing integration reset, the voltage at its output is also zero, indicating that the element 19 is shown.

When moving the antenna 6 along a straight line towards the bioobject on moving system 20 or parallel to the surface of bioobject's hands of the operator (see. Mode) occurs when the phase difference between the received signal and the reference oscillator 9 is different from the value of the offset voltage from the output 16 of compensation, with the result that the output signal appears TF 13, which is proportional to the voltage difference between the output of the filter 12 and the lowpass output unit 16.

This signal is input to the display unit 15, the input of which is the input of the integrator 17, causing the latter begins to integrate, that is indicated by 19, the input of which receives the output signal of the integrator 17.

If the imbalance is stored and the phase difference signal continues to differ from the offset voltages from the block 16, the integrator 17 continues to integrate the voltage saturation regardless of how small this mismatch.

In this case, the speed of integration is proportional to the error, ie, is proportional to the increment of the phase shift of the received signal at a given point in space, whereby the speed of integration can judge the magnitude of the phase jump.

If you want to register the value of the phase discontinuity in excess of preassigned constant, display unit 15 may comprise a non-linear element 21, such as "dead zone" area with controlled variable voltage output adjustment member 22 (12, 13).

Since the nonlinear element 21 is connected to the input of the integrator 17, the latter begins to integrate the error signal output from the DCA 13 only when it exceeds in magnitude the magnitude of the deadband, which is determined by the voltage from the element 22 and the configuration can be tuned.
[0055]

The device may be formed in the stationary embodiment (FIG. 14) with manual movement of the receiving electrode 6 and the rod antenna 23 provided with a distance scale 24.

In this case, the whole device can be placed on a trolley 25, and measurements are performed with the patient lying on the couch (FIG. 1), or sitting on a chair (1) according to the measurement point. Distance to the equipotential surface of the parietal region of the patient is measured in a sitting position.

Alignment of background interference is produced whenever a new position stretcher 25 relative to the patient 1 in the upper position of the antenna 6 on the rod 23, i.e. for each new measurement point. The measured quantity is the distance from the skin to the surface of equal phase, measured by the distance scale 24 and the LED 19 allows to fix the distance reference point.
[0056]

An embodiment of the device for rapid assessment of the biological object electromagnetic field may be configured as a hand-held device with a self-powered, located in the hands of the operator and used according to the method of (9), with manual movement of the receiver antenna electrode 6 is rigidly mounted on the housing 26 and moves together with the unit parallel to the biological object 1.
[0057]

For fast (but less accurate), the phase of construction of the equipotential surface of the field with the biological object via the manual device, the latter may comprise a range-finder 27, for example, optical, infrared or ultrasonic type indicator 28, the distances (15, 16, 17).

In this case the displacement of the receiving antenna 6, along with the device along a straight line towards bioobject is carried hands of the operator, and the count distances by range finder 27 with its indicator member 28 on the investigated point is produced in the time integrator 17 starts integrating observing indications of the first display element 19.
[0058]

An embodiment of the device may provide automatic movement of the receiving antenna, as well as automatic construction and reconstruction phase equipotential surfaces.

This arrangement enables the evaluation of the electromagnetic field bioobject most accurate view of the

automatic execution of all procedures, as well as by carrying out measurements with any degree is discrete to continuous scanning phase equipotential surfaces.
[0059]

An automated version of the apparatus for evaluating the electromagnetic field bioobject operates as follows.
[0060]

The patient is placed on a couch 29 (18 - 21) on the back or stomach and make the installation of sensors 30 of the patient with his height, proportions, location of the vegetative centers, etc. by moving them along the couch 29 and opposite the respective fixing points of the patient.

Thereafter, a switch unit and is introduced into the program-controlled unit 31, for example, from the keyboard 32, when it is implemented on the basis of the microcomputer 33, the starting point coordinate A compensating for an interfering background (19), the magnitude of the phase difference of the surface equal to the phase (in particular case zero) and enter the command started.

In this program, the control unit 31 (the microcomputer 33, for example, serial port) by controlling the output electrical signals drive 34 - 36, generates control signals from the first three output unit 31 inputs drive 34 - 36, carrying out the movement of the receiving electrode 6 and the mobile system 20 so that the electrode 6 is established at the point A. After this the program-controlling unit 31 includes a first control circuit, formed by a fourth output unit 31 connected to the control input of the measuring unit 14 which is a control input of the compensation unit 16, and the compound output measuring unit 14 to the first input of the unit 31.

Wherein the fourth output of unit 31 to the control input of the measuring unit 14 begins to receive the control signal on the control input unit 16, correction and changes its output voltage to decrease to zero error voltage output from the measuring unit 14, ie. E. Output from DCA 13 proportional to the phase difference of the reference oscillator 9 and the received signal is an interfering background to point A. The output voltage setting unit 16 is continued until complete compensation of an interfering background, then unit 31 disconnects the first control loop and comprises a second control circuit consisting of a third output section 31 connected to the input drive 34 from the radial movement of the antenna 6 connected to the input of the measuring unit 14, the output of the measuring unit 14 connected to the first input of the unit 31.

Thus, the block 31 produces a signal in the second control circuit applied to an actuator 34, causing it to move the antenna 6 towards the patient 1 on a couch 29 and until the output of the measuring unit 14 starts to differ from zero and equals modulo a predetermined phase difference value inputted from the keyboard 32.

Thereafter, the second control circuit 6 by moving the antenna radially monitors this value until the end of the device.

Along with the inclusion of the second control circuit and software control unit 31 produces the first and second output control signals applied to the input drive 35 and 36 of the movable system 20 with its antenna located at 6.

As a result, the antenna 6 with moving system 20 moves laterally relative to the patient over the semicircle around and longitudinally along the body along embedded in the program unit 31 need move the antenna 6.

All the movements of the antenna 6 and the storage unit 31 constitute a release surface equal phase (phase equipotential surface) or a projection section which are displayed on the display element 19, which may serve, in particular, the display screen 37 at block 31 the microprocessor implementation.

If the device has a range finder 27 instead of position sensor 30, the parallel movement of the antenna 6 is measured by the distance from it to the patient's body surface and a signal proportional to the distance to the second input unit 31, which is stored and displayed on the display 37 in the form of profiles projections or body surface, superimposed on the corresponding profiles or projections phase surface.
When implementing the block 31 using the computer 33 signals outputted from the measuring unit 14 and the range finder 27 are fed through the first and second inputs of the block 31 to the microcomputer 33 through analog-to-digital converters 38 and 39, and a control signal compensating for an interfering background is transmitted from the output of the microcomputer 33 in the fourth the output of the DAC 31 through 40.
[0061]

If there are more degrees of freedom motion system 20, performing the angular movement of the antenna 6 in the longitudinal plane (21), the drive control signal of the angular displacement of the longitudinal supplied at its input with the output of the fifth unit 31 embodied in accordance with a control program (FIG. 22), similarly drives 34 - 36. At the same time with other movements of the antenna 6 (radial, circular in a transverse plane along the longitudinal couch 29) rotates the antenna 6 in the longitudinal vertical plane (23).

This ensures that the orientation axis of the antenna 6 on a normal phase along the entire equipotential surface having any complexity of shape, in any section.
[0062]

Electromechanical actuators 34 - 36, 41 may be implemented in the form of electric motors, such as stepper type.

Actuators 34 - 36, 41 may also be made in the form of servos with local feedback connected to the program-controlling unit 31.
[0063]

Compared with the conventional counterpart, including a prototype of the proposed method for evaluating the electromagnetic field biological object has the following advantages: - much greater functionality and diagnostic capabilities, as due to inputs of operations carried out in the proposed manner and on the terms offered, allowing typological localize lesion, to detect functional and morphological disorders of organs and tissues of the body, to carry out non-specific diagnosis of abnormalities of patients overall health, etc .; - Neinvazitivnostyu, non-contact measurements and a high degree of environmental friendliness, as in the evaluation of the field is not used any effects on the patient, including electromagnetic; - High speed surveyease of detection of infectious diseases and high security; - A high degree of accuracy of the estimate of the electromagnetic field, allows fine diagnostics by offering state estimation researched biological object by analyzing the geometry of the surface of equal phase; - High noise immunity and allows the study without special shielded chamber, and in order to express diagnostics - manually by the use of noise as a source of useful information, as well as by the use of phase method; - Increased functionality, allowing the use of a method for evaluating the effectiveness of the treatment process and focused management.
[0064]

As compared with known devices, including the prototype, the apparatus for evaluating the electromagnetic field bioobject following advantages: - considerably broader functionality as by additionally introduced elements connected proposed manner allows the fine estimation of the spatial configuration of the electromagnetic field around the biological object to distance from them; - Precisely evaluate the electromagnetic field in order to detect its dependence on the state and functioning of the internal organs, tissues and fluids of the body; - High noise immunity devices,allowing to realize considerably higher overall gain value; - Pretty simple design and a high degree of adaptability and a wide range of implementation in different versions; - High performance, because it allows you to do without a shielded chamber, without any special ground biological object under study, has a high ease of operation and maintenance, high reliability and does not require any special training of medical personnel; - Wide possibilities of automation of processes of measurement, interpretation of results and formulation of general diagnosis.
[0065]

Sources of information: 1. US Patent N 4940058, cl.A 61 B 5/00, 1990 (pp 6 - 9 claims).
[0066]

2. Radiotekhnika, N 8, 1991 c. 71-72.
[0067]

3. US Patent N 4940058, cl. A 61 B 5/00, 1990 (pp 1-6 claims).
[0068]

4. Copyright certificate USSR N 1297800 cl.A 61 B 5/05, 1987.
[0069]

5. Haulica I. The autonomic nervous system. Anatomy and physiology, - Bucharest, 1978, pp 17-61.

RU95107736
METHOD AND APPARATUS FOR EVALUATING ELECTROMAGNETIC FIELD OF BIOLOGICAL OBJECT

FIELD: medicine, medical engineering, non-invasive remote diagnostics of pathologic and prepathologic conditions. SUBSTANCE: proposed method and apparatus are based upon topological analysis of configuration of equipotential surfaces of electromagnetic field for estimating pith total potential of protective forces of human body judging by relative dimensions of equipotential surfaces, and also estimating localization of pathologic foci judging by location of recesses and convexities on equipotential surface image with respect to patient's body. Received signal phase shift in relation to reference signal phase is detected and controlled by recording signal equal to integral of phase difference between received signal and reference signal.; In this manner, great number of points with any in advance predetermined discreteness can be obtained for plotting equipotential curve in any required cross-section. Advantageously, this can be done by automating measurements and topograms plotting procedure. If tracking system is used, it is possible to organize continuous scanning of equipotential curve for controlling movements of receiving electrode on basis of deviation of received signal phase from reference signal phase. With this approach, noise is used as useful signal. Invention can be used for preliminary diagnostics, for topological diagnostics of diseases as viewed in dynamic aspect, and for control of treatment process dynamics.

EFFECT: broader functional and diagnostic possibilities by evaluating topology of equipotential surfaces of patient's electromagnetic field judging by phase shift parameter.

RU2089235
METHOD OF AURAL CORRECTION

[0001]

The invention relates to medicine and medical equipment, namely, physical therapy, and can be used for nonspecific obscheozdoravlivayuschego stimulating and reducing non-drug actions on the human body, as well as to treat and prevent a number of diseases associated with disorders of bioenergy is reflected in the distortion of the electromagnetic field around the person .
[0002]

A method of treating patients with hypertension I-II degree and vascular dystonia, based on the interaction of electromagnetic fields the operator and patient and including the impact on the patient while the infrared radiation of 8-14 microns, microwave radiation in the range of 8-30 cm and alternating electric field frequency up to 10 Hz, while the radiation source used the hands of the operator [1] The disadvantage of this method is the low efficiency of the impact and long-term treatment because of the impact of randomly without exact knowledge of an objective picture of the electromagnetic field of the patient, and also because of the instability effects because it depends on the subjective state of the operator.
[0003]

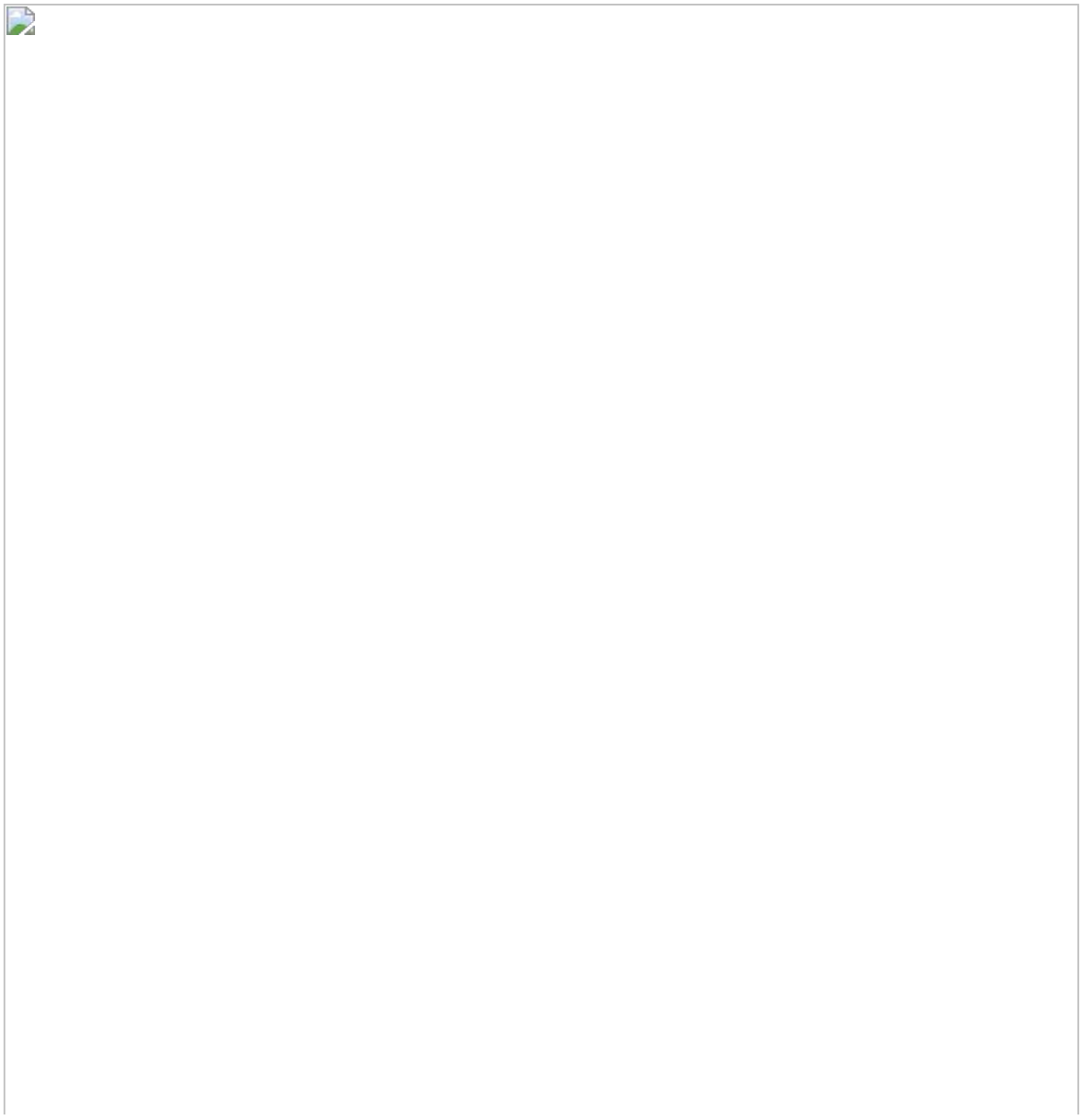
There is a method aural correction, including the measurement of electromagnetic fields and the construction of aurotopogrammy bioobject followed by exposure, aimed at leveling aurotopogrammy to its closest approach to the normal, and the second measurement and the construction aurotopogrammy.
In addition, the alignment aurotopogrammy produced by psychic effects of the operator, and the construction aurotopogrammy performed using ESP [2] The disadvantages of this method are long-term treatment due to low accuracy due to the high degree of subjectivity measurements and influences that determine high dependence of the condition and operator skill and low reproducibility.
[0004]

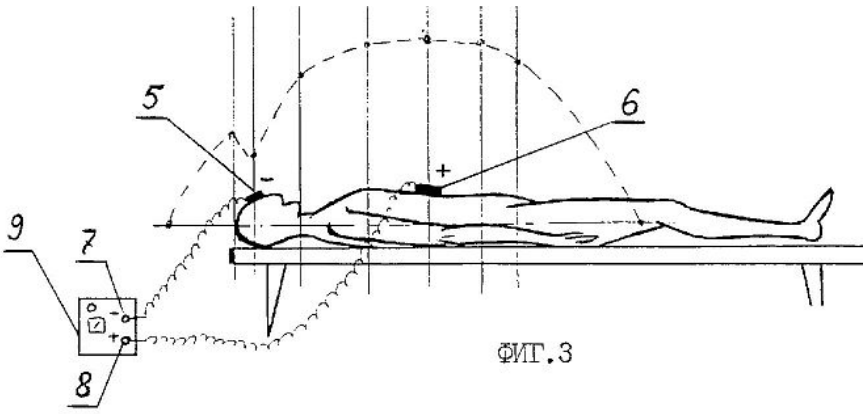
The aim of the invention is to reduce the duration of treatment due to the implementation of the possibility of targeting, resulting in normal configuration and size of external electromagnetic fields and biological objects by the full objectification of diagnostic and therapeutic processes.
[0005]

To achieve this goal in the known method aural correction measurement of the electromagnetic field of the bioobject is carried out at one or several frequencies, for example, using the meter of the phase shift in the

spatial orientation of its movable receiving electrode with respect to each of the seven points of main power channel bioobject and construction fazoaurotopogrammy for each frequency measurement and exposure is carried out by applying to the skin at the site of localization of the electromagnetic field defects bioobject one or more pairs of electrodes of a conductive material with different electrochemical potentials, in pairs, in the chain between which include a generator of electrical oscillations corresponding to the oscillation frequency equal to the frequency measurement.
Furthermore, the electrodes with a negative electrochemical potential is placed on the skin at positions corresponding fazoaurotopogrammy failures and the positive electrode electrochemical potential at the positions corresponding bulges fazoaurotopogrammy.
In addition, generators simultaneously tuned to one or successively or simultaneously at several frequencies, corresponding to frequencies fazoaurotopogrammy measurement.
In addition, if necessary, spend several sessions repeated leveling and control measurement and building fazoaurotopogramm to achieve sustainable alignment fazoaurotopogrammy and restore its normal size.
[0006]

FIG. 1 shows an equivalent circuit diagram of the operation alignment fazoaurotopogrammy and restore its size; FIG. 2 - measuring circuit fazoaurotopogrammy; FIG. 3 The framework for the alignment operation fazoaurotopogrammy in unilateral imposition of electrodes; FIG. 4 is a schematic of the operation at the bilateral alignment fazoaurotopogrammy applying electrodes; FIG. 5 a diagram of the operation alignment fazoaurotopogrammy simultaneously on multiple frequencies using the appropriate number of generators configured on the removal frequency (measured) fazoaurotopogrammy, while the image of the family of curves original aurotopogrammy for these frequencies; FIG. 6-11 - fazoaurotopogrammy specific patients before and after the correction.
[0007]

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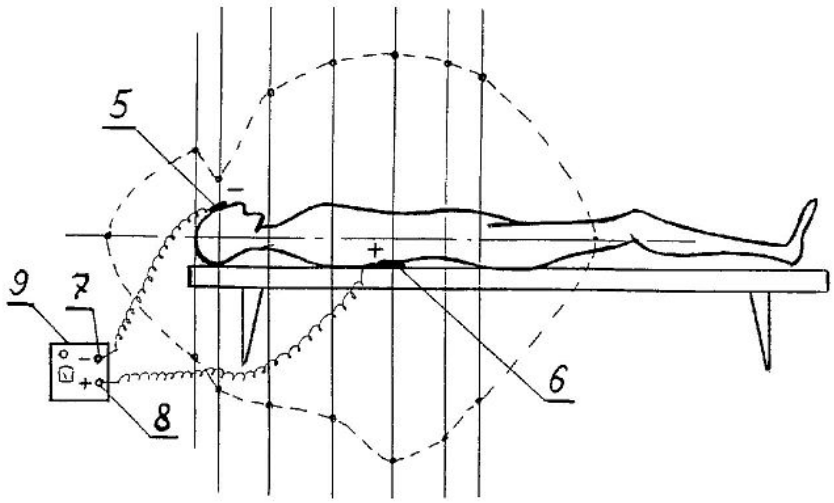
ФИГ.3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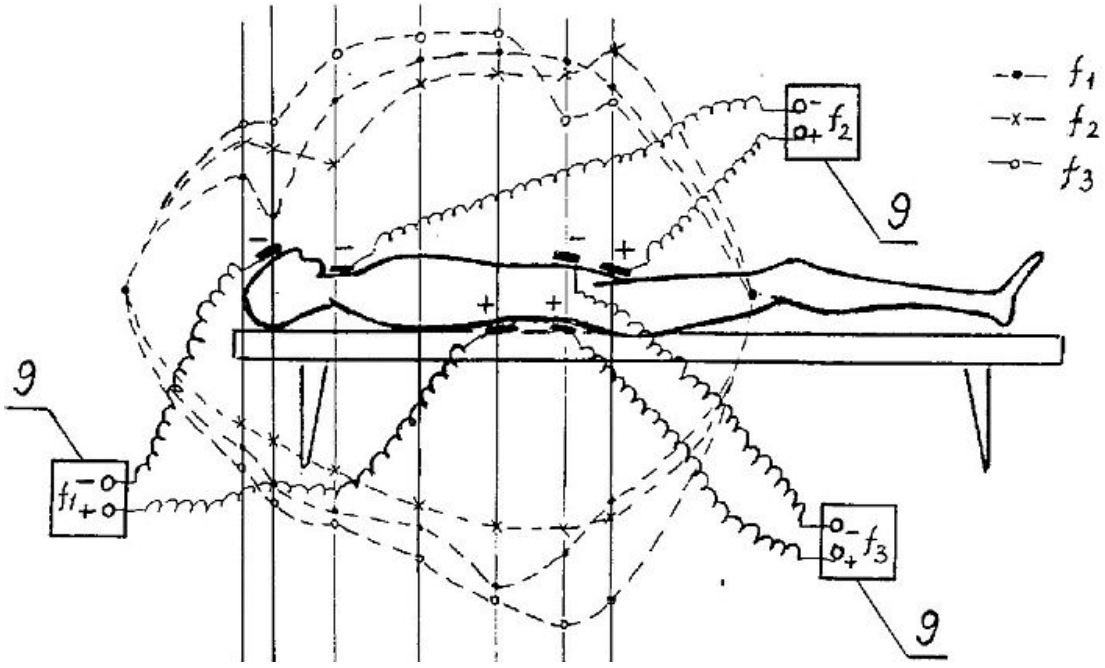
f_1
f_2
f_3
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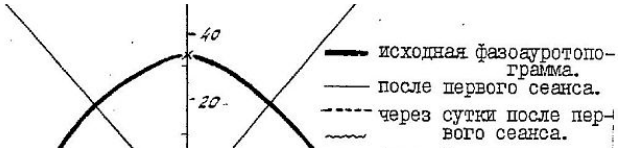
9
9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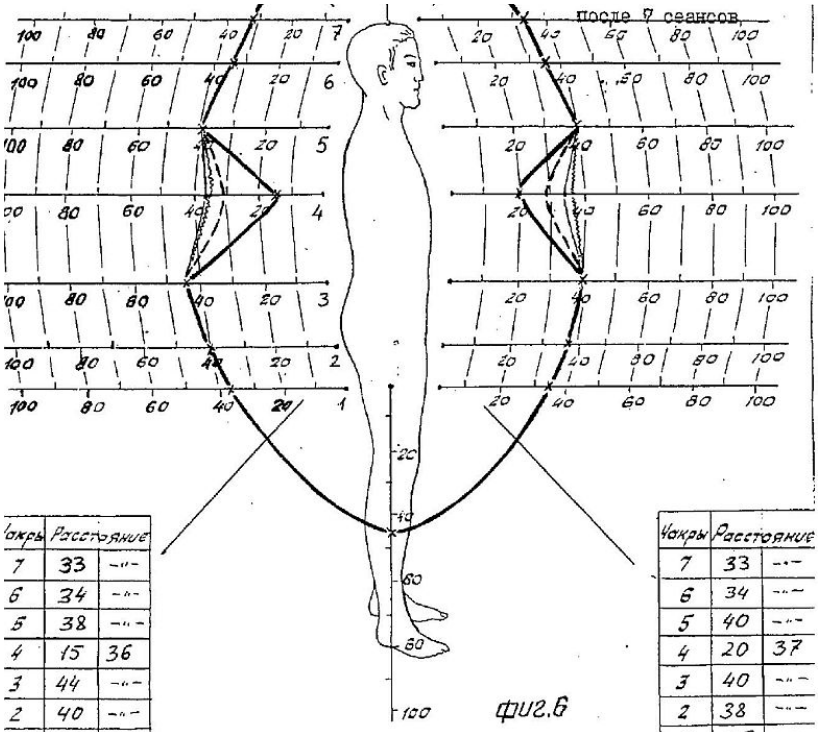
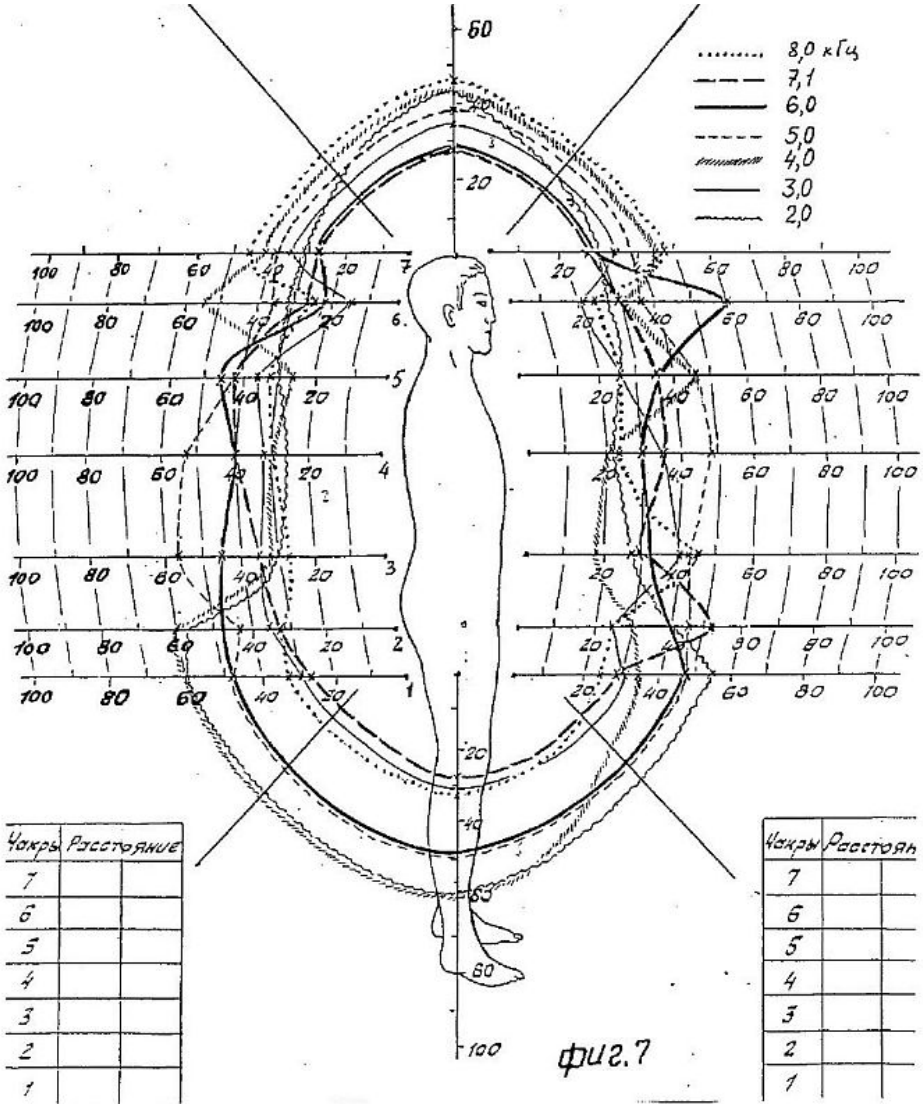
20
исходная фазоауротопограмма.
после первого сеанса.
через сутки после первого сеанса.



Чакры	Расстояние	
7	33	-"-
6	34	-"-
5	38	-"-
4	15	36
3	44	-"-
2	40	-"-
1	45	-"-

Чакры	Расстояние	
7	33	-"-
6	34	-"-
5	40	-"-
4	20	37
3	40	-"-
2	38	-"-
1	45	-"-

фиг.6



Чакры	Расстояние	
7		
6		
5		
4		
3		
2		
1		

Чакры	Расстоян
7	
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4	
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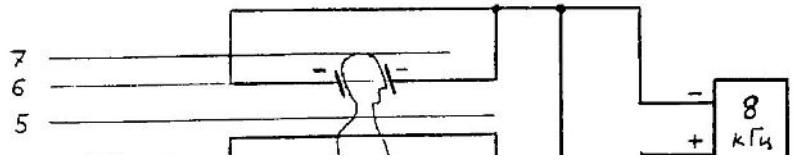
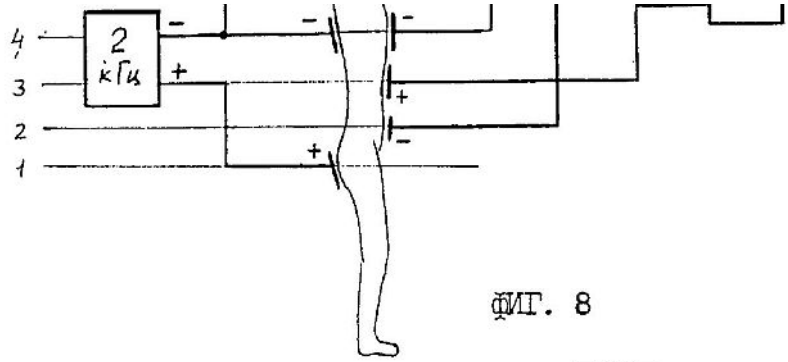
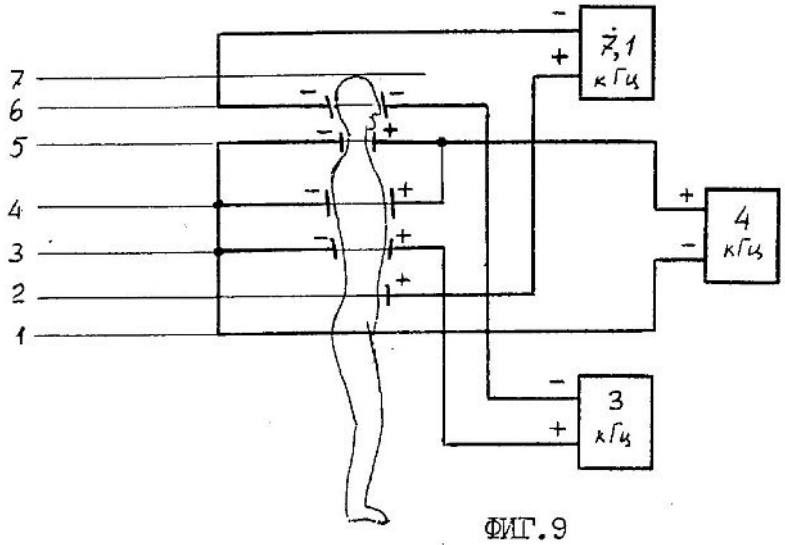
фиг.7

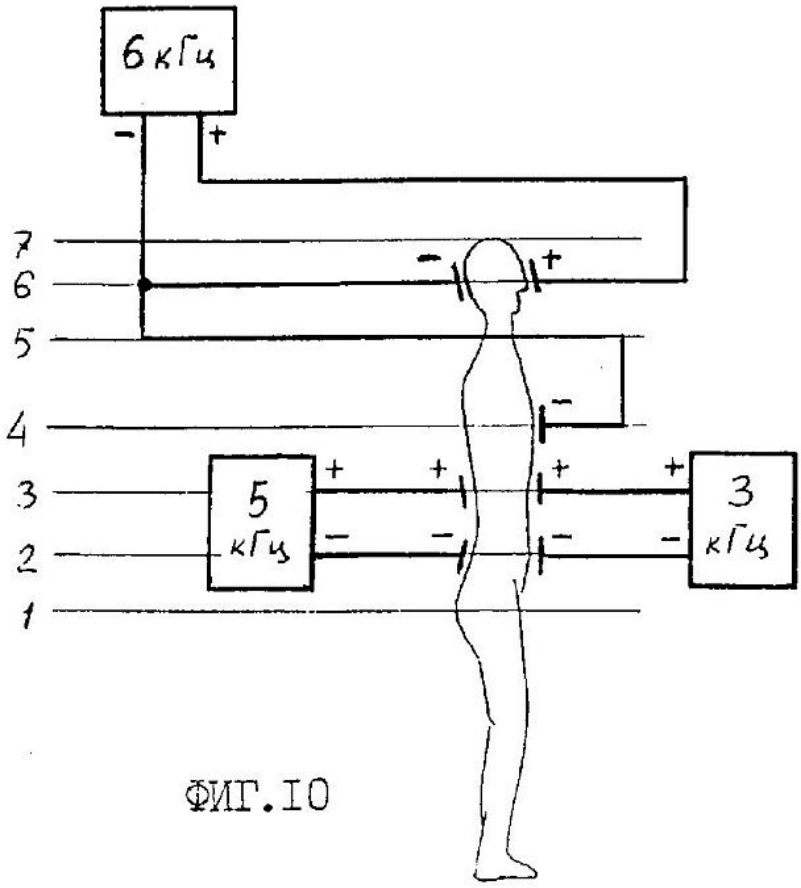




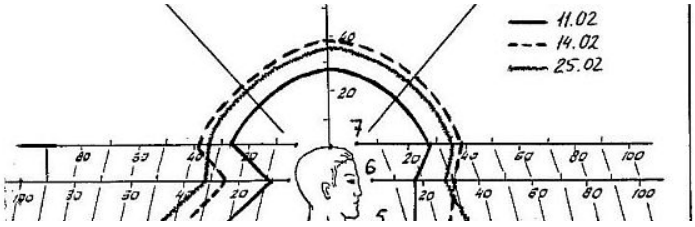
ФИГ. 8

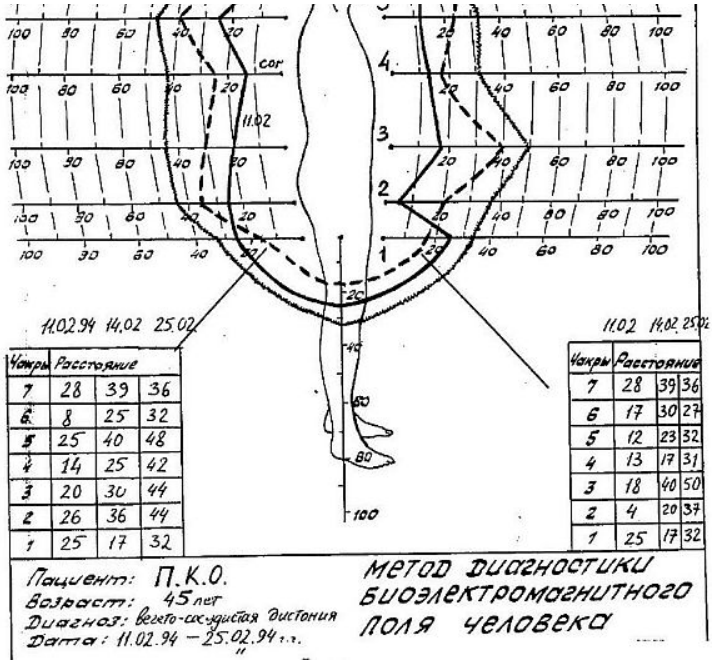


ФИГ.9



ФИГ.IO





The method is based on the aural correction autoaktivizatsii electrolyte metabolism and redistribution of ions and electrolytes in body tissues due to its own generated his own electrical and electromagnetic energy without any external energy sources.
Exposure is carried out purposefully through a defect phase potential pattern of the electromagnetic field around the patient aurotopogrammy, ie through areas of the skin, corresponding to the most topographically pronounced deviations field pattern of the patient from the picture of the field of a healthy person.
Superimposed on the skin electrodes made of dissimilar metal (for example, the positive copper, zinc negative) form a galvanic cell, the role of the electrolyte which operate tissue and internal environment of the body.
Since the latter have a much more active and reactive electrical resistance, in connection with such an electrochemical cell bus low-voltage power generator of electrical oscillations and the latter, on the resistances of the body tissues and fluids is allocated a significant portion of the variable component of the oscillator (Fig.
1).
As a result, the electrode is formed with a variable voltage and constant component of the tissues of the body between the electrodes an alternating current (20-100 mA) generated by itself without any external power supply, and therefore completely eliminates unwanted side effects.
Electrodes placed on the skin in places, is a projection of the spatial pattern of defects of the electromagnetic field surrounding the patient and the pre-measured and constructed to cause general and local stimulation of the electron-ion exchange of the whole body, as well as a favorable stable distribution of dipoles persists after removing the electrode.
This distribution produces a displacement of electric dipoles domestic media and tissues of the body, aligning the data field defects causing a change in its pattern and sizes approaching normal, healthy state of the body accordingly.
In turn, the alignment of the electromagnetic fields and keeping them in this state has a causal inverse effect on the patient health-improving effect and helps to eliminate the causes of change in the field [3] The process is carried out as follows.
[0008]

For remote examination of the patient in the prone position on the couch using fazoaurometrii.
Measurement fazoaurotopogrammy produce, for example, using the meter of the phase shift in the spatial orientation of its movable receiving electrode with respect to each of the seven points of main power channel person along the backbone [4] points (front and rear surfaces of the patient) to substantially correspond to the projections on the skin autonomic nerve plexus and subcortical structures.
Accepted point measurements (suspended and literature data on vegetology) distributed as follows (see Table 1).
[0009]

Next, a movable electrode 1 (Fig. 2) the meter phase shift 2 located on the rod 3 is fixed along lines 4 passing through each of the seven points (Table. 1), defects deflection field pattern from the normal

corresponding healthy man (dips, low values ??of the distances from the equipotential surface fazoaurotopogrammy phase to the surface of the patient's body, local or general wears off of the field). Measurements were carried out on the same frequency f1 and values ??for a number of fixed frequencies f1, f2, f3, fn.
[0010]

Then the overlay therapeutic pairs of electrodes 5, 6 made of dissimilar conductive materials, wherein the negative electrode 5 is applied to the skin, preferably in places fazoaurotopogrammy failures and the positive electrode 6 in a position corresponding normal areas fazoaurotopogrammy or convexity.
With this arrangement, the pair of electrodes in pairs can be either one-way (front or rear, for example, FIG. 3) and double-sided (positive electrodes 6 on one side of the body of the patient, and negative on the other hand 5 (FIG.
4)).
The electrodes are secured, for example, plaster, connected respectively to a negative 7 and positive 8 supply rails of one or more generators 9, electromagnetic waves, the tuning frequency of which is (are) equal to f1 frequency detachably fazoaurotopogrammy and left in that position on a patient for an extended time Tlech.
[0011]

After Tlech electrodes are removed and re-produce the control fazoaurogrammy build on the frequency f1, fixing the dynamics of the normalization of the topography of the electromagnetic field in the form of reduced failures and restore a healthy state dimensions, respectively.
If necessary, the measurement is repeated exposure session.
To achieve a sustainable pattern of normalization effect of the electromagnetic field produced a course of several repeated sessions with simultaneous control of the field at intervals of 1-7 days between sessions.
[0012]

If necessary analogously produce building family fazoaurotopogramm for a number of frequencies f1, f2, fn and corresponding correction field at each frequency separately, sequentially rearranging generator 9 for these vibrational frequencies, either simultaneously using multiple generators 9 are configured, each on a different frequency f1, f2, fn and several corresponding pairs of generators electrodes 5 and 6 (Fig.
5).
[0013]

Example 1.
Patient P. 52 years.
Clinical diagnosis: coronary artery disease, angina FC III. Experience periodic bouts of tightness in the chest at rest, sometimes passing into a strong chest pain that occurs usually during physical exertion.
Seizures are removed by nitroglycerine.
During the attack there is an increase in blood pressure, in areas Zakharyin-Ged noted hyperalgesia skin.
Electrocardiography in the application of dosed physical load of 50 W indicates the offset segment STV3-5 below contours to 1.5 mm, sometimes - go to STV4-5 (-).
Sick for five years, it has repeatedly held hospital treatment.
Before hospitalization observed acceleration and intensification of attacks, which was assessed as a progressive form of angina.
[0014]

Fazoaurogramm measurement at a frequency of 7.4 kHz showed the presence of significant bilateral failures field in the 4th point along the spine (see. Table. 1 and Fig.
6).
[0015]

The patient is in the supine position at rest were placed two pairs of electrodes as follows: the negative electrodes in the front and rear skin of the 4-th point; positive one in front in the 2nd point, the other behind in the 3rd point.
Electrodes were fixed plaster and joined the positive and negative supply rails generator electrical sinusoidal wave tuned to the frequency of 7.4 kHz, which begins to generate immediately after joining the electrode.
The duration of the procedure was 30 minutes, after which the electrodes were removed and the field measurements were repeated.
Building fazoaurotopogrammy after exposure showed a significant alignment of the failures of the electromagnetic field of the patient (Fig.
6).

[0016]

The next day was a repeat measurement fazoaurotopogrammy that showed the effect of preserving the alignment of the field with some decrease in adjusted areas (approximately half).
After that, the repeated session with the same electrode placement and exposure time and then adjusted topography plots approximately returned to the state after the first exposure.
Sessions lasting 30 minutes were performed daily (all held 7 sessions), after which he was made persistent effect of leveling the field, which confirmed a control measurement of topography of the field in 7 days after the end of sessions.
[0017]

Clinical examination and observation showed that after treatment significantly reduced the intensity and frequency of angina attacks, dosed physical load increased to 100 W, the dose of a drug used in the treatment of decreased three times.
All of this allowed us to estimate the second angina.
[0018]

Control measurement fazoaurotopogrammy 30 days after discharge, conducted on an outpatient basis showed stabilization of the clinical status of the patient at the level of angina FC II without symptoms of its progression.
[0019]

Example 2.
Patient K. 45 years old, passed medical examinations of 26.02.93
About a year ago I suffered sinusitis with several subsequent relapses accompanying colds.
There were also complaints of episodic pain that occurs sometimes in the lumbosacral and cervical regions of the motion under load, is often a stiff neck and neck.
[0020]

A dimension and construct a family fazoaurotopogramm different frequencies ranging from 2.0 kHz to 8.0 in increments of 1 KHz (FIG.
7).
The study showed the presence of a number of defects in the form of the dips and bumps equipotential phase surface frontal-sagittal section bioelectromagnetic field, especially in the 6th point (between the eyebrows. See Table. 1) front and rear and in the 2nd and 3rd points (hypogastric and solar plexus), front and rear.
[0021]

A 5 sessions bioelectromagnetic field correction by the proposed method, a duration of 60 minutes.
Each session consisted of three similar consecutive procedures of 20 minutes each with a different arrangement of electrodes.
The circuit arrangement of the electrodes for each point are given in Table Overlay.
2.
[0022]

In the first procedure of each session shall adjust at the same time two independent generators for the frequency of 2 kHz and 8 (Fig. 8), for example, for a frequency of 2 kHz on the table. 2 electrodes are applied as follows: in the 4th point 4P front, rear 4h for the negative electrode, the positive electrode is applied in the 1 st point: 1h back; in the second procedure for three generators 3 kHz, 4 kHz, 7.1 kHz (Fig. 9); the third three generators at frequencies 3, 5, 6 kHz (Fig.
10).
[0023]

Sessions correction carried out 2 times a week at regular intervals (4 days).
By the fifth session was achieved sustained correction fazoaurogrammy (Fig. 11), repeatability with virtually remained a month after the end of the session.
[0024]

The results of correction: the well-being has improved significantly, pain and cervical spine stopped; increased non-specific resistance of the organism.
[0025]

Proposed method aural correction human electromagnetic field was applied in the treatment of 74 patients in the clinic cardiac diseases concurrently with the assigned medication.
The results of treatment were compared with a control group of 15 people. with similar diagnoses who received only medical treatment.
It was found that the use of the method in conjunction with known treatments reduced the time average of 1.5 times and reduce the incidence of disease progression, particularly in the subsequent application of additional ambulatory fashion.
[0026]

The proposed method was also used in the treatment of various types of degenerative disc disease of the spine (cervical, thoracic and lumbar), and 52 patients in the clinic of chronic gastroenterological diseases (23 pers.).
Comparison with two control groups of 10 patients with similar diagnoses showed a high efficiency of the method as in combination with conventional treatments, and for self-application, shortening of treatment an average of 2-2.5.
[0027]

Application of the method on an outpatient basis at a dispensary examination of 100 people led to the reduction in average 3-5 times the total incidence after prophylactic correction bioelectromagnetic field.
[0028]

Method aural correction in comparison with the known methods of physical therapy, including the prototype has the following advantages: much shorter period of treatment due to the high precision exposure in accordance with the needs of the organism, because by introducing additional operations constitute a single interconnected on the proposed scheme complex operations prototype method is carried possibility of purposeful corrective action directly on parts of the body, generating defective areas bioelectromagnetic field the patient and the possibility of visual inspection of the alignment of the field; high compatibility with other treatments, such as medication,which significantly reduces the treatment by enhancing the effectiveness of the medications by 1.5-2 times; high accuracy and a high degree of exposure reproducibility, as well as the lack of any dependency on the state of the operator, the external environment impact on the level of training and skill of the operator because of the large objectification of a method; high physiological because through the use of optional operations introduced, providing a targeted stimulation of the body he himself used the currents and voltages do not differ from the internal voltages and currents of the body and has the same nature as generated by himself according to his needs without any external energy sources,whereby there is practically no negative side effects of the treatment; high resistance of the resulting effect of the correction of the field, continuing the weeks and months that allows the impact of the weak for a long time, allowing, in turn, carry sparing regimen and also contributes to the lack of side effects and contraindications; reduction of terms of treatment by improving the efficiency of preventive actions of a method that allows to work towards the cessation of the disease at an early stage and at the stage of predzabolevaniya manifested so far only at the field level; high electrical safety and security of patients from infection, since it does not use external sources of energy and by the introduction of the operations,and therefore it needs only the simplest of disinfection; small time of procedures and the high ease of operation and ease of training of medical personnel; high economic efficiency due to a lack of supplies and drugs.