

Creation of electromagnetic structure-creating spaces to improve the restoration of some types of cells and albumins.

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Abstract — There are given different constructions of electromagnetic coils for using in biomedicine. There are developed constructions of space directed coils for increasing and decreasing the growth of cells in biology and medicine.

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Index Terms—About four key words or phrases in alphabetical order, separated by commas.

I. INTRODUCTION

The target of present work is creation of new constructions of magnet coils for increasing and decreasing the growth of cells in biology and medicine.

There are exist magnet coils which don't take into account space directed cell forms. In the best-selling book "Bioelectromagnetic healing" by Thomas Valone, Ph.D. [1], the healing by electromagnetic or radiation space isn't reproduced practically. Working instruments of Prof. Panos Pappas [2] in loop type and of Georges LAKHOVSKY in Multiple-wave Oscillator [3] type don't produce the standing electromagnetic space wave. In the book "Energy Dynamics for Bioelectromagnetic medicine" by Edward F. Block Ph. D. [4], all organismal life begins with zygotic union of sperm and egg. As the Earth is in essence a giant electromagnet, it possesses a geomagnetic field with various components. The magnetic field flux is toroidal in shape are also given (Dr. Magnus Lou, personal communication) The Governor Vessel is a converging pathway of magnetic flux on the scalp and also a separatrix which divides the surface magnetic field into two symmetrical domains of different flow directions. A separatrix is a trajectory or boundary between spatial domains in which other trajectories have different behaviour.

However, in this book and referees about space electromagnetic radiation of cells, albumins, organs, body

parts aren't wrote nothing.

Also in the famous book "Qi and Bioelectromagnetic Energy" by Randall L. Waechter [5] and her referees about space electromagnetic radiation of cells, albumins, organs, body parts aren't written.

Though, it was specified that at the crossing of energetic meridians in corporeal and sudjok reflexology there are generated pyramidal and conical forms in energetic centers.

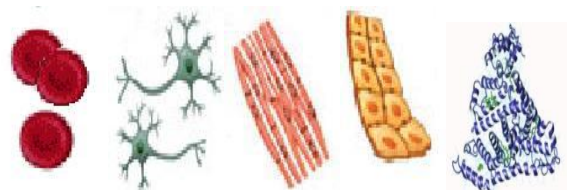
In last work "The Human Body Field" of Edward F. Block, Ph. D., [6] II. Wave Phenomena, the standard 3 axes electromagnetic waves propagation is showed. In part III. "The Human Condition", the application of this theory for body "Chakras" distribution is suggested, interested and deserve attention. But, the equipment and devices for generation this waves aren't suggested. Also, the methodology, experimental arrangement and date analysis aren't resulted. In other words, how to make space electromagnetic radiation of cells, albumins, organs and body parts?

It is known that the transverse waves need to be visualized in three dimensions and the expansion of the waves visualized in a cone or spiral form and the transverse waves become three dimensional as a spiral or cone resulting in an endless unit without a boundary in time [7], <http://www.eurojournals.com/ejsr.htm>. This is important for biology too. In other words, a technical possibility of creation growth or suppression cells exists. The works of Garayaev P.P. and Hans. A. [8, 9] about fantom genome and "Energy of a gravitational field converter on basis of an electrical equivalent of mebius tape" confirm this too.

In other words, on the one hand there are data about energetic radiation of DNA, cells, albumins, organs and body parts [8], and on the other hand [2, 3, 8, 9] there are instruments for its creation.

II. PROBLEM FORMULATION

For electromagnetic fields creation of spiral conical, pyramidal forms there must be used electromagnetic coils with form of winding that are spirally coiled on cone, pyramid. The DNA and many cells have exactly such forms.



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These cells have forms of disc (erythrocyte cell), "spider" (nervous cell), conical (muscular cells), pyramidal (cells of epithelium); muscular cells, albumin type. For increase and decrease the growth of pyramidal and conical cells the Vlastopulo coils can be used. For problem solution we've developed space directed Vlastopulo coils for biological objectives for growth of, cells, albumins, organs and body parts.

III. PROBLEM SOLUTION

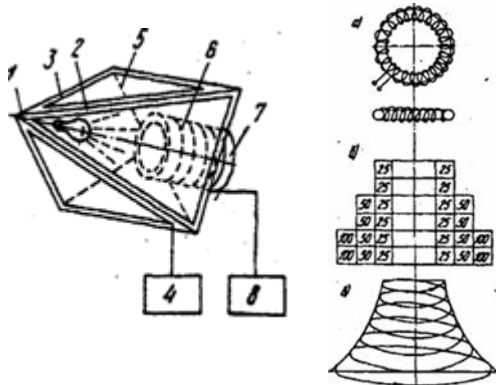


Fig.1 Electromagnetic apparatus. Fig.2 Scheme of threads location on the toroid rubber.

The proposed electromagnetic device [10-12] (Fig.1,2) consists of the battery 1 that is performed as a pyramid-shaped raster with the angle of divergence in the faces of 60°, light source 2, located in bio energy raster focus, the axis of the source coincides with the axis-pyramidal raster, sources of magnetic field 3 arranged on the outer side of each face battery 1 in the form of coils, the winding turns of which are laid along the sides of the verge and connected to the first generator 4 with amplitude-phase modulation, and the second 5 generators with amplitude-phase modulation, toroid 6 of six rubber ring 7 with additional sources of magnetic fields 8 made in the form of additional coils with no more than three windings, each wound uniformly on the corresponding rubber ring of toroid and connected in parallel to the second generator of amplitude-phase modulation, and at the base of the raster with the axis of a toroid, coincides with the axis of the raster. Number of coils, comprises 1-4. Additional coils while removal from the raster have respectively one, two and three coils and the number of coils in the first there are 25 coils, at the second 50 coils, and in third 100 coils.

The sample. Bioenergetic radiation technique accumulates (French patent number 2264406, cl. H 01 G 11/00, 1975) and forms (see the analogue, prototype) by the appliances of radiestestic radiation. Radiestezic radiation is called radiation, causing biolokation effect, or, otherwise, the reaction of the body operator at changes of the parameters of this radiation in the course of search (J.L. Valdamanis, J.A. Dolatsis, T. K. Kalpin "Dowsing as a century-old mystery", Riga.: Zinatne, 1979, p. 10, 70; S. Stoev). Causes of distrust to radiesthesia among the scientific community, and means to overcome them. Bulgarian Scientific Journal «Radiesteziya and Science», 1985, № 5, Sochevanov N. N., Matveev V. S.

Electromagnetic fields as the cause of the biophysical effect. Physical and mathematical. Biological of the actions problem of air ionization. V. 2. M.: Science, 1975). By N. N. Sochevanov. Radiestezic-rays, or, otherwise, bio energy radiation has the field electromagnetic nature. Bioenergy radiation shows up inside the geometric bodies with correct shapes (pyramids, cones, spheres), and produces a therapeutic effect on humans and wildlife (see the analogue France patent number 2301941, cl. IBA 20/02, K. Gausco, 1975; FRG patent number 3530841, cl. A 61 N 1 / 04, K. Ochme, 1985). Bioenergy radiation also is formed under the influence of the two radiations (electromagnetic, visual, acoustic) (prototype, patent number 2105195 England, cl. A 61 N 15/06, M. Fenyé, 1982; the patent of France № 2421531, cl. N 05 C 3 / 00, I. Ravatin, 1978).

Thus, bio energy rays inside the pyramid produces health, therapeutic effect. Creation of a good bio energetic radiation is based on the principle of increasing the effect of the shape of geometric body due to interactions within the body of light and electromagnetic radiation. With this purpose, inside the pyramid battery 1 the lamp 2 is located in bio energy focus of the pyramid (point lying on the axis of the pyramid, and dividing it in half the volume) and on its faces are magnet turns 3 located in the form of triangle: the output of them is connected with the first generator 4 with the amplitude-frequency modulation. While their turning on rolling electromagnetic field of magnetic coils 3 within the pyramid interacts with light electromagnetic radiation lamp 2 and a powerful bio energetic radiation is formed as a result of the interaction. To enhance and selectivity, on the length wave of bio energy there introduced - toroid 6 (scheme of rubber rings 7 winding is shown in Fig. 2; winding by a conductor of rubber ring-torus is also shown in Fig.2) and which forms while turning on the second generator 8 with amplitude-frequency modulation electromagnetic field of a spiral.

Thus inside the pyramid whilst interactions of running electromagnetic fields of magnetic coils with the light radiation of lamp 2 and running electromagnetic field of toroid there appears a powerful wave of bio energetic radiation. Pyramidal battery is made of polyester fibreglass with copper foil outside and length facets 22 mm tube 2 was mounted on a metal tube with a collet gripper for adjustment at the top of the pyramid. Cross arm 5 is made from the epoxy fibreglass with collet gripper for toroid 6, also of the structural plastic glass. The rubber rings 7 have the sizes: internal diameter 50 mm, the outer 60 mm.

Running electromagnetic field of magnetic coils 3 has the characteristics: frequency of 300 Hz, voltage up to 5, due to the current 1 mA, the number of turns 4. Light radiation of metal halogen lamp has 2 characteristics: voltage 18 V, output 70 W. Spiral magnetic field of toroid 6 has the characteristics: the frequency of 1 MHz, tension of up to 10 V, current strength 100 mA.

3.1 Space directed Vlastopulo coils calculation

The calculation of the electromagnetic field's characteristics is made with usage of the book "Electromagnetic Wave Propagation" of Prof. David Jenn [13].

3.1.1. There is a terrain diffraction (Fig. 3 a, b) takes place at interaction of the electromagnetic field with pyramidal form.

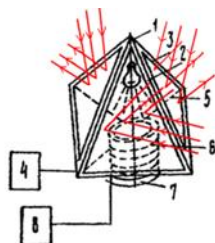
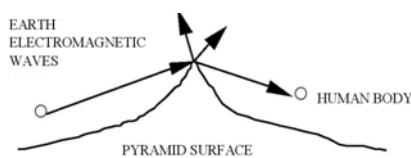


Fig. 3. Terrain diffraction of Vlastopulo coils.
a – scheme; b – Vlastopulo coil.

Fresnel reflection coefficients hold when:

- the Earth's surface is locally flat in the vicinity of the reflection point
- the surface is smooth (height of irregularities $\ll l$)

Traditional notation:

- grazing angle, $\gamma = 90^\circ - \theta_i$, and the grazing angle is usually very small ($\gamma < 1^\circ$)

- complex dielectric constant, $\epsilon_c = \epsilon_r \epsilon_0 - j \frac{\sigma}{\omega} = \epsilon_0 (\epsilon_r - j \frac{\sigma}{\epsilon_0 \omega}) \equiv \epsilon_0 (\epsilon_r - j\chi)$, where $\chi = \frac{\sigma}{\omega \epsilon_0}$

- horizontal and vertical polarization reference is used

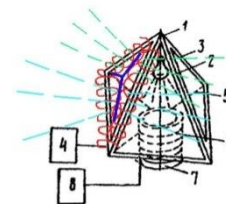
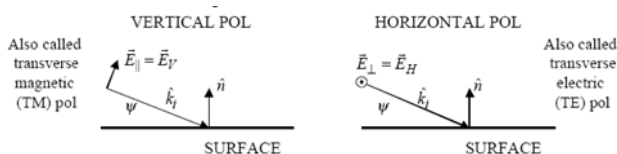


Fig. 4. Troposphere diffraction of Vlastopulo coils.
a – scheme; b – Vlastopulo coil.

Reflection coefficients for horizontal and vertical polarizations:

$$-\Gamma_{\parallel} \equiv R_V = \frac{(\epsilon_r - j\chi) \sin \psi - \sqrt{(\epsilon_r - j\chi) - \cos^2 \psi}}{(\epsilon_r - j\chi) \sin \psi + \sqrt{(\epsilon_r - j\chi) - \cos^2 \psi}}$$

$$\Gamma_{\perp} \equiv R_H = \frac{\sin \psi - \sqrt{(\epsilon_r - j\chi) - \cos^2 \psi}}{\sin \psi + \sqrt{(\epsilon_r - j\chi) - \cos^2 \psi}}$$

For vertical polarization the phenomenon of total reflection can occur. This yields a surface guided wave called a ground wave. From Snell's law, assuming $\mu_r = 1$ for the Earth,

$$\sin \theta_i = \sin \theta_r = \sqrt{(\epsilon_r - j\chi) \mu_r} \sin \theta_t$$

$$\xrightarrow{\mu_r=1} \sin \theta_t = \frac{\sin \theta_i}{\sqrt{(\epsilon_r - j\chi)}}$$

Let θ_t be complex, $\theta_t = \frac{\pi}{2} + j\theta$, where θ is real.

$$\text{Using } \theta_t = \frac{\pi}{2} + j\theta: \sin\left(\frac{\pi}{2} + j\theta\right) = \cos(j\theta) = \cosh \theta$$

$$\cos \theta_t = \sin\left(\frac{\pi}{2} + j\theta\right) = -j \sinh \theta$$

$$\text{Snell's law becomes } \sin \theta_t = \cosh \theta = \frac{\sin \theta_i}{\sqrt{(\epsilon_r - j\chi)}}$$

$$\cos \theta_t = \sqrt{1 - \sin^2 \theta_t} = \sqrt{1 - \cosh^2 \theta} = \sinh \theta$$

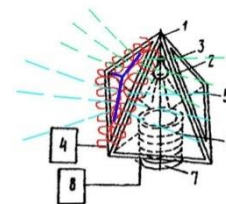
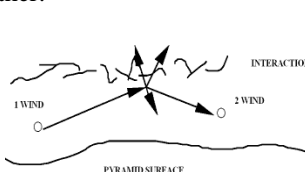
Reflection coefficient for vertical polarization:

$$\Gamma_{\parallel} \equiv -R_V = \frac{j\eta \sinh \theta + \eta_0 \cos \theta_i}{j\eta \sinh \theta - \eta_0 \cos \theta_i}$$

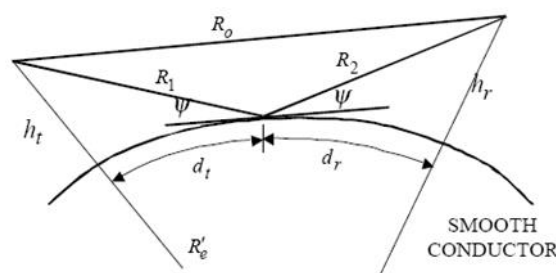
where $\eta = \sqrt{\frac{\mu_0}{\epsilon_0(\epsilon_r - j\chi)}}$. Note that $|\Gamma_{\parallel}| = 1$ and therefore all

of the power flow is along the surface. The wave decays exponentially with distance into the Earth.

3.1.2. There is the terrain diffraction takes place at interaction of the triangular electromagnetic coil with pyramidal macro-forms of Vlastopulo coils. It was given above. Also there is a troposphere diffraction (Fig. 4 a, b, c) mechanism takes place at interaction of the electromagnetic field of sides of the triangular electromagnetic coil with each other.



3.2 Interference region formulas



The path-gain factor is given by

$$|F| = |1 + \rho e^{j\phi\Gamma} e^{-jk\Delta R} \sqrt{D}|$$

where D is the divergence factor (power) and $\Delta R = (R_1 + R_2) - R_0$.

Approximate formulas for the interference region:

$$|F| = \left\{ (1 + |\Gamma| \sqrt{D})^2 - 4|\Gamma| \sqrt{D} \sin^2 \left[\frac{\phi\Gamma - k\Delta R}{2} \right] \right\}^{\frac{1}{2}}$$

where

$$\Delta R = \frac{2h_1h_2}{d} J(S, T), \tan \psi = \frac{h_1 + h_2}{d} K(S, T), D$$

$$= \left[1 + \frac{4S_1S_2^2T}{S(1-S_2^2)(1+T)} \right]^{-1} \text{ (power)}$$

$$S_1 = \frac{d_1}{\sqrt{2R_e'h_1}},$$

$$S_2 = \frac{d_2}{\sqrt{2R_e'h_2}} \text{ where } h_1 \text{ is the smallest of either } h_t \text{ or } h_r$$

$$S = \frac{d}{\sqrt{2R_e'h_1} + \sqrt{2R_e'h_2}} = \frac{S_1T + S_2}{1+T}, T$$

$$= \sqrt{h_1/h_2} (<1 \text{ since } h_1 < h_2)$$

$$J(S, T) = (1 - S_1^2)(1 - S_2^2), \text{ and } K(S, T)$$

IV. CONCLUSION

1. There was made an analysis of different forms of the electromagnetic coils for increase and decrease the growth of cells.
2. There were suggested constructions of space directed Vlastopulo coils for increase and decrease the growth of pyramidal and conical cells.
3. There were suggested calculations of the electromagnetic characteristics of Vlastopulo coils for biological objectives: terrain and troposphere diffraction mechanisms.

REFERENCES

- [1] Valone T., Ph.D. Bioelectromagnetic Healing. A Rationale for its Use, Revised edition, Integrity Research Institute, 2007.
- [2] Pappas P., PAP Ion Magnetic Inductor, www.papimi.com
- [3] Lakhovsky G., Multi-wave Oscillator, http://www.zephyrtechnology.com/html/multi-wave_oscillator.html
- [4] Block E.F., Ph.D., Energy Dynamics for Bioelectromagnetic Medicine, Update March 2007, <http://www.diamondhead.net/edfbem.htm>
- [5] Waechter R.L., Qi & Bioelectromagnetic Energy, link.
- [6] Block E.F., Ph.D., The Human Body Field, <http://www.diamondhead.net/p21.htm>
- [7] O'Sullivan J.L. Electromagnetic and Gravitational Field, European Journal of Scientific Research, ISSN 1450-216X Vol.26 No.2 (2009), pp.204-208, © EuroJournals Publishing, Inc. 2009. <http://www.eurojournals.com/ejsr.htm>
- [8] Garayev P.P., Power phenomenon of vacuum - 2, <http://zpenegy.com/downloads/PPV-2.doc>
- [9] Niper, Hans. A. Gravitational Field Energy Research in Japan, p.68-71 Revolution in Technik, Medizin, Gesellschaft, 1983.
- [10] Vlastopulo V. I. The Opto-magnetic device. The patent of Ukraine № 3081.
- [11] Vlastopulo V. I., Electromagnetic device. The patent of Russian Federation № 2068270., 1996
- [12] Vlastopulo V.I., Nikolaev V.G., Bioenergetic fields of the human brain rhythmus. The using in video, audio products for the creating attracted bioenergetic advertisement, article №9B1840, materials of conference EBSA2009, conducted since 11 to 15 July in Genoa, Italy, 2009
- [13] Jenn D. Electromagnetic wave propagation, Lecture notes, V.5