

Calculation of the Effect of Many-Cavity Structures (Cell Structures)

Comments on Professor Zolotariov's article
by Alexander V. Frolov

Professor Zolotariov V.F. gave this article to me in 1992 together with the other unpublished materials on studying and development in this direction. The article is devoted to **the discovery by V.S. Grebennikov and V.F. Zolotariov "Phenomenon of the interaction of many-cavity structures with the living systems", Russian priority reference on the discovery #32-OT-11170 from 3.09.1985.** Works by V.S. Grebennikov are examined in details on the site <http://www.sinor.ru/~che/grebennikov.htm>

This effect is an example of the interaction between de Broglie waves and biological systems. In the opinion of Professor Zolotariov, the group movement of the electrons in the solid body generates de Broglie waves. Cavities within the body become resonators to the de Broglie waves, and hence, source of standing de Broglie waves. **The field is produced by the cavities situated in space rhythmically that lead to a resonance reinforcement of the effect** (*Editor's note: in this case we mean not a rhythm in the time, but a rhythm in the space, in a similar case they say, that the architecture is a frozen music*)

"As a result, the energies of a different character appear, for example from an array of paper tubes, bee's honeycombs and so on. The organism reacts to the different energies with the result that changes in physiologic condition can occur." (V.S. Grebennikov, "Pchelovodstvo" #12, 1984, p. 28).

Professor Zolotariov supposes that since only related nature categories can interact with themselves, so the origin of physical mechanism of nervous impulses has a common nature with de Broglie material waves. It may be presumed that these waves are the longitudinal waves.

Technical realization of the effect can be made possible by various methods. "The walls of many-cavity structures ... are usually considered as the boundaries of the potential electron's box. This is generally true for dielectrics as well as metals. The group movement of electrons leads to a system of standing de Broglie waves in the potential space, which have **classic frequencies** (B.N. Rodimov, *Autofluctuational quantum mechanics*, Tomsk, TGU, 1976).

The classic frequencies are

$$f_{\text{classic}} = n h / 4 m L^2 \quad [1]$$

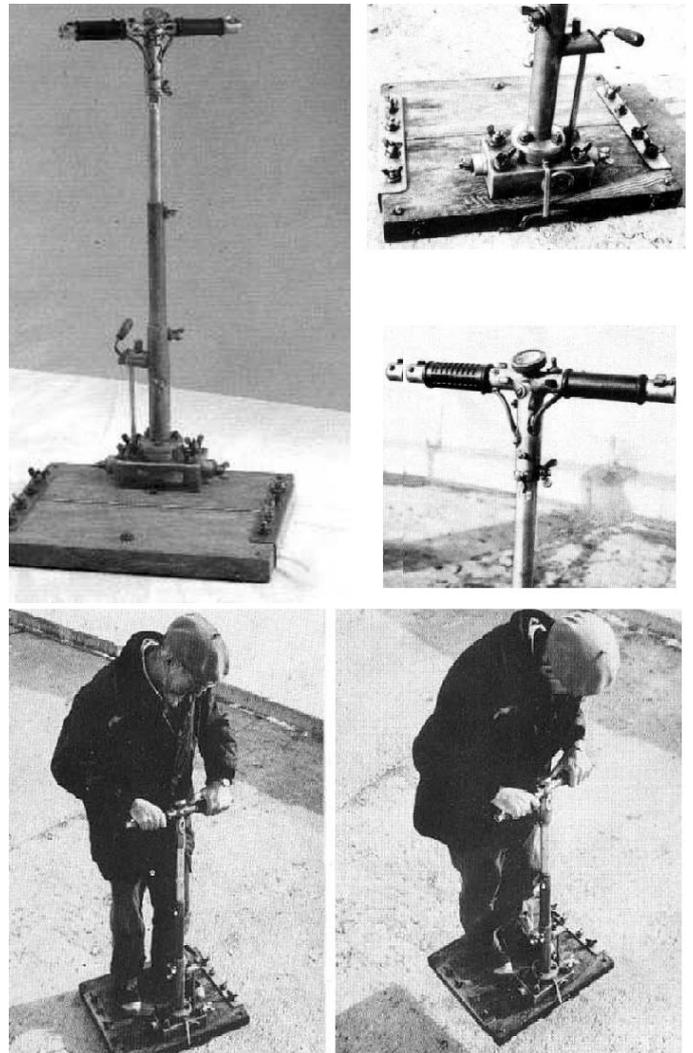


Fig 1 V.S.Grebennikov's flying system
(photo from his book "My World")

and quantum frequencies are following:

$$f_{\text{quantum}} = n f_{\text{classic}} \quad [2]$$

where n is an integer number, L is the size of potential hole in centimeters, m is the effective mass of the electron".

Further, Professor Zolotariov writes that the length of the standing wave is more than double L, the size of the potential hole. An example of the calculation: for n=1 and L=1cm, the frequency f will be approximately equal to 2 Hz. This is near the frequencies of consequence for the central nervous system impulses, i.e. it is dangerous for health. That is why work should be done with constructive parameters that will not affect the organism.

Application of the effect for new kind telecommunication systems is possible because of its unique property since the effect cannot be screened!

"Since the effect of cavity structures propagates passively through the quantum fields in the conjugate world (vacuum), then we should not observe a screening of the Cavity Structural Effect (CSE). This was checked in experiments with iron sheets, clothe, plastics, cardboard, wood, brick walls. According to our theoretical conclusions we could not find any screening." (text by Professor Zolotariov).

Further, Professor Zolotariov gives a calculation formula for location of the wave maximums. "The regularity of location of de Broglie wave maximums on the distance D from the tube structure shall be calculated with the formula:

$$D = 2L (N+1) 2^K,$$

where N,K=0,1,2... L is the circumference length of the tube, N is the harmonic number of the standing de

Broglie waves, K is the number of maximum".

The conclusion of these articles was to make an association with the "golden section" and the effect studied: **"...the hologram of human memory is situated in the vacuum field and exists in the space after the human death" (Maneev A.K., Movement, contradiction, development. Minsk, "Technique and Science", 1982).**

All this brings us to the thought that the organism interacts with the de Broglie waves going through it. The resonance character of interaction supposes the multiplicity of lengths of the waves and frequencies, which are determined by the geometric sizes of the interacting structures. Hence, the importance of the geometric proportions appears, i.e. "golden section". That is why the appearance of the "golden section" in nature is not accidental, because the basis of it lies in the de Broglie waves. In practice, it should be recommended to all inventors of the CSE-effect systems.

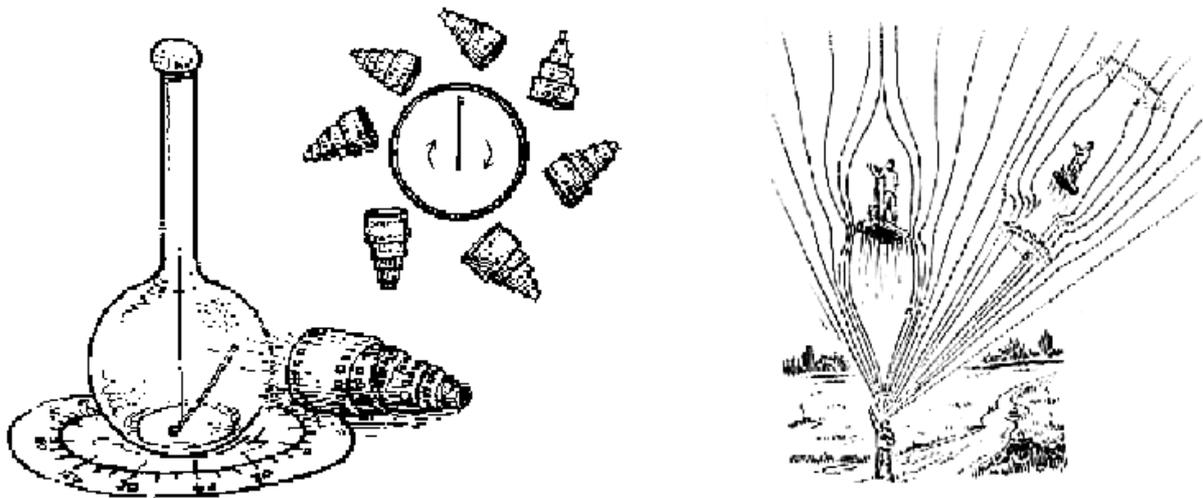


Fig 2

This picture from Grebennikov's book "My World" provides us with some ideas on simplest experiments with rolls of films (left side) and possible amazing antigravitation "warp drive" technology (right side). In 1996 Prof. Zolotarev also demonstrated similar experiments for participants of International Scientific Congress "New Ideas in Natural Science", for example, he used small fiber-optic coil suspended in glass container. The dielectrical coil can react (it is rotating) with permanent magnet or with hands. In both cases the coil is operating as a kind of de Broglie's waves detector.

Power Output can be More than Power Input

Patent of 1877 by Pavel N. Yablotchkov

by Alexander V. Frolov

Pavel N. Yablotchkov was born in 1847 near Saratov, Russia. He graduated as a Military Engineer in 1866 and spent several years in the Russian Army.



Pavel N. Yablotchkov