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receiving device is either earthed or connected to any conductive body 6 possessing an equivalent (natural) capacity adequate to ensure the normal working of the receiving device 5; or

to an accommodating device, employing a transformer circuit (FIG. 3) consisting of two interconnected inductors L3 and L4, such that the two ends Bx3 and Bx4 of the inductor L3 are connected to the receiving device 5, while one end of the ends Bx5 of the second inductor L4 is connected to the output of the conductor of the transmission line which does not form a closed circuit 4, and the other end Bx6 of the inductor L4 is connected to any conductive body 6, with an equivalent (natural) capacity selected in order to provide the nominal power consumption of the receiving device 5.

To supply power to electrical devices operating on direct current, the output of the conductor of the transmission line which does not form a closed circuit 4 is connected to an accommodation circuit in the form of either:

- a diode circuit (FIG. 4) such that output of the conductor 4 is connected to the common point of the anode of the first diode VD1 and the cathode of the second diode VD2, while the cathode of the first diode VD1 and the anode of the second diode VD2 are the outlets 01 and 02 to be connected to the receiving device 5, either directly or with a capacitor connected in parallel;
- a transformer circuit (FIG. 4) employing two interconnected inductors L5, L6, such that the receiving device 5 is connected to the inductor L5 via the rectifying circuit.

The method for supply of power to electrical devices and the apparatus for the implementation of this method, according to the invention, possess a high degree of reliability due to the absence of complex electronic or mechanical assemblies. They permit the use of inexpensive mass-produced radio-electronic components and their working cycle is automatically regulated to a high degree.

Use of the invention will make possible a sharp reduction in the costs involved in transmitting electrical energy over long distances, and a sharp reduction in the losses of Joulean heat from transmission lines.

The invention is intended for the creation of a highly efficient means for the transformation and transmission of electrical energy, and also for the creation of both permanent and mobile devices for the transmission of electrical energy from an initial source to a consuming device via a transmission line which does not form a closed circuit, i.e. a single-wire transmission line.

The invention may be used conjointly with various power-engineering and technological processes which involve the use of super-high voltage electrical and electromagnetic fields, electron beams and super-long wave radio communications, when it will make possible a sharp reduction in the dimensions and weight of equipment as compared with the means traditionally employed.

The proposed apparatus, which may be termed a "monovibrator", may consist of two inductively connected much layered coils in accordance with the scheme of a consecutive resonance circuit. As a rule, the secondary coil consists of up to some tens of thousands of turns of thin isolated wire with the turns wound one to another in many layers on a dialectic core. Disposition of the primary coil in respect to the secondary one doesn't matter much. What does matter is an inductive link which determines potential transmitted from the primary to the secondary coil. The monovibrator may or may not have a ferromagnetic core. The ferromagnetic core influences the width of the working frequency bandwidth—it broadens it.

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High working outcoming voltage is the result of a high coefficient of transformation, as the primary coil usually contains a couple of dozens of winds for working frequencies ranging from 1 kHz to a couple of hundred kHz. A preferred working frequency is 5 kHz.

With a sequential resonance circuit including two interconnected inductors having inductance L1 and L2, and an equivalent inductance of the resonance circuit being provided by the resultant inductivity L1+L2, the load of the monovibrator when running idle acquires capacitance character that means which it is reactive. The magnitude of an active constituent of a monoconductive line with the consecutive resonance is rather low and its incoming resistance is approaching zero. That is why with rather a powerful primary source the consecutive resonance makes it possible to transmit more power through the monoconductive line in case there is an outtake of this power at the other line terminal, which is opposite to the primary source of power.

Reaction of the monoconductive line of any length can always be compensated by regulating the frequency of the primary source (generator, converting devices), thus providing consecutive resonance in the line itself with all the magnitudes of incoming and outgoing characteristics arising therefrom.

Currently there are different schemes of automatic frequency regulation of generators of alternating electromotive power depending on changing inductive-capacitance parameters of conductive lines.

The method and apparatus of the present invention does not have the drawbacks of previously known single line systems.

What is claimed is:

1. A method of supplying power to at least one receiving electrical device, comprising the steps of:
 - (a) generating electrical energy;
 - (b) transforming the electrical energy generated in said step (a) into the oscillation energy of a field of free electrical charges, the density of which varies in time;
 - (c) transmitting the electrical energy transformed in said step (b) to a receiving electrical device via a single-wire transmission line.
2. The method of claim 1, wherein in said step (b), the oscillation energy of a field of free electrical charges comprises a displacement current of an electrical field.
3. The method of claim 2, further comprising the step of:
 - (d) following said step (b) and prior to said step (c), transforming the displacement current into a conduction current for use by an electrical device powered by conduction current.
4. Apparatus for supplying power to at least one electrical device, comprising:
 - an initial source of electrical energy,
 - a transformer operatively connected to said initial source to receive electrical energy therefrom; an alternating density generator for transforming the electrical energy from said transformer into an aggregate of free electrical charges, the density of which varies in time;
 - a single-wire transmission line, said transmission line including a conductor connecting the output of said alternating density generator to a receiving device; and
 - a conductive body electrically connected to the receiving device, said conductive body having a charge storage capacity of a magnitude adequate to ensure normal functioning of the receiving device.
5. The apparatus of claim 4, further comprising a blocking capacitor interposed between said transmission line and the receiving device.