The oscillations of the field of free electrical particles occur either by means of the reciprocating (cyclical) displacement of a concentrated electrical charge in space, or by means of a periodical change in density (and/or polarity) of the free electrical charges on a particular surface (in a particular volume).

According to a second aspect of the present invention there is provided an apparatus for the implementation of the above method of supplying power to one or more electrical devices, the apparatus providing an initial source of electrical energy, a transforming device, a transmission line and a receiving device, the apparatus being characterised by the provision of a variable density generator of free electrical charges as the displacement current or longitudinal wave of an electrical field, an output of which is connected by means of: a conductor of a transmission line which does not form a closed circuit to a receiving device, either directly or via a blocking capacitor, and further to any conductive body possessing an equivalent (natural) capacity adequate to ensure the normal functioning of the receiving device.

Thus, the invention provides a variable (alternating) density generator of free electrical charges, which flow under the influence of coulomb forces along a conductor of the transmission line which does not form a closed circuit to the site of a device which consumes electrical energy.

A possible variant of the generator is a generator at the outlet of which not only the density of the free electrical charges, but also their polarity, may be varied.

The outlet of the generator is connected to a conductor of the transmission line which does not form a closed circuit line either directly or via a blocking capacitor.

In addition, the generator of oscillations of the electrical field of free charges may be constructed in a similar fashion to a generator of displacement current (travelling longitudinal waves of an electrical field), by using a sequential resonance circuit in the form of two interconnected inductors such that the equivalent inductivity of the resonance circuit is provided by their resultant inductivity, and the equivalent capacity of the resonance circuit is provided by the equivalent (natural) capacity of the interconnected inductors.

To supply power to electrical devices which consume alternating current, the output of the conductor of the transmission line which does not form a closed circuit may be connected:

a) to one of the input terminals of the receiving devices, while the device's other input terminal is either grounded or connected to any conductor possessing a natural (equivalent) capacity adequate to provide for the normal working of the receiving (consuming) device.

b) to an accommodating device employing a conversion circuit consisting of two interconnected inductors, such that the receiving device (load) is connected to the two ends of the first inductor, the output of the conductor of the transmission line which does not form a closed circuit is connected to one end of the second inductor, and the other end of the second inductor connected to any conductor with an equivalent (natural) capacity and inductance selected in order to provide for the nominal power consumption of the receiving device (load).

To supply power to devices consuming direct current, the conductor of the transmission line which does not form a closed circuit may be connected to an adjustment circuit in the form of:

c) a diode system, such that the output of the conductor of the transmission line which does not fort a closed circuit is connected to the common point of the anode of the first diode and the cathode of the second diode, while the cathode of the first diode and the anode of the second diode are the output points for connection to the receiving device, either directly or with a capacitor connected in parallel.

d) a transformer circuit consisting of two interconnected inductors such as to rectify alternating current (voltage) directed to the receiving device from the first inductor.

BRIEF DESCRIPTION OF THE DRAWINGS

In order to provide a better understanding of the invention, there follow specific examples of its construction with references to the drawings attached, in which:

FIG. **1** shows a block diagram of a first embodiment of an apparatus according to the present invention;

FIG. **2** shows a schematic diagram of a second embodiment of an apparatus according to the present invention, employing a sequential resonance circuit;

FIG. **3** shows a power supply diagram for receiving devices operating on alternating current;

FIG. **4** shows a power supply diagram for receiving devices operating on direct current.

DESCRIPTION OF FIRST EMBODIMENT

The first embodiment of the invention provides apparatus adapted for use in a method of supplying power to electrical devices, including the generation and transformation of electrical energy with its subsequent transmission to a receiving device via a transmission line, the method being distinguished by the fact that the electrical energy generated is transformed into the energy of oscillation of a field of free electrical charges (the displacement current or longitudinal wave of an electrical field), the density of which charges varies in time, and this energy is transmitted via a conductor of the transmission line which does not form a closed circuit and, where necessary, transformed into the electromagnetic energy of conductive currents.

Referring to FIG. **1**, there is illustrated an apparatus for initial source of electrical energy **1**, a transformer (of current, voltage or frequency) **2**, an alternating density generator of free electrical charges **3**, which charges flow under the influence of coulomb forces along a transmission line or conductor **4**, through a consuming device **5**, to any conductive body **6**, which has an equivalent (natural) capacity sufficient to provide for the normal working of the consuming device **5**.

DESCRIPTION OF SECOND EMBODIMENT

Referring to FIG. **2**, in addition, the apparatus may be constructed on the basis of a generator of displacement current (longitudinal wave of an electrical field), using a sequential resonance circuit (FIG. **2**) in the form of two interconnected inductors L**1** and L**2** such that an equivalent inductivity Leg of the resonance circuit is provided, in the simplest case of idle running, by the resultant inductivity L**1** and L**2**, and the equivalent capacity is provided by the resultant (natural) capacity of the resonance circuit.

To supply power to electrical devices operating on alternating (variable) current, the output of the conductor of the transmission line which does not form a closed circuit **4** is connected either:

to one of the input terminals Bx**1** of the receiving device **5** (FIG. **3**), and the other input terminal Bx**3** of the