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Harnessing Earth's Electric Field and Transmission of Electricity

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Abstract : Energy in this Universe is the most basic characteristic of every particle. Since the birth of life on this planet, there has been a quest undertaken by the living beings to analyze, understand and harness the precious natural facts of the nature. In this quest, one of the greatest undertaken is the process of harnessing the naturally available energy. Scientists around the globe have discovered many ways to harness the freely available energy. But even today we speak of “Power Crisis”. Nikola Tesla once said “Nature has stored up in this universe infinite energy”. Energy is everywhere around us in unlimited quantities; all of it waiting to be harnessed by us. Here in this paper a method has been proposed to harness earth's electric field and transmit the stored electric energy using strong magnetic fields and electric fields. In this paper a new technique has been proposed to harness earth's electric field which is everywhere around the world in infinite quantities. Near the surface of the earth there is an electric field of about 120V/m. This electric field is used to charge a capacitor with high capacitance. Later the energy stored is allowed to pass through a device which converts the DC stored into AC. The AC so produced is then passed through a step down transformer to magnify the incoming current. Later the current passes through the RLC circuit. Later the current can be transmitted wirelessly using the principle of resonant inductive coupling. The proposed apparatus can be placed in most of the required places and any circuit tuned to the frequency of the transmitted current can receive the energy. The new source of renewable energy is of great importance if implemented since the apparatus is not costly and can be situated in most of the required places. And also the receiver which receives the transmitted energy is just an RLC circuit tuned to the resonant frequency of the transmitted energy. By using the proposed apparatus the energy losses can be reduced to a very large extent.

Keywords : capacitor, inductive resonant coupling, RLC circuit, transmission of electricity
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