

Preliminary Patent Specifications and Claims

ELECTROGRAVITATIONAL COMMUNICATION SYSTEM

(Section II)

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ELECTROGRAVITATIONAL COMMUNICATION SYSTEM

DESCRIPTION

This invention relates to a method and means of transmitting radiant energy through space. It is contemplated that its special field of usefulness lies in the transmission of intelligence, such as with radio and television, and to a certain extent also in radar and remote control. The system employs the interaction between electrostatics and gravitation, and the radiant energy referred to is believed to be gravitational or "electro-gravitic" in nature. Such radiation is extremely penetrating and is known to pass readily through barriers or shields impenetrable to electromagnetic radiation and is, therefore, readily distinguished by this quality.

Starting with an average radio communication system, the present invention consists essentially of the replacement of the usual antennae with large insulated masses. The balance of the electronic circuits may remain virtually unchanged. A new component of radiation is produced, and it is only that component of radiation which passes through electromagnetic shields that is of interest in the present specifications and claims. The circuits and systems described herein represent additions to and improvements upon my previously described invention - "Electrogravitational Communication System".

In the earlier specifications and claims the use of capacitors, in influencing the gravitational field was described at length. It was pointed out that, under certain circumstances, associated masses (particularly of the heavier metals) were beneficial in achieving the results desired. The use of large capacitors at high frequencies is fraught with almost insurmountable technical difficulties, so that it becomes necessary to reduce the capacitance to a minimum for all high-frequency applications. In the final analysis there is a basic similarity between capacitance and mass, in that both represent the storage of electrical energy in space. The use of a heavy conducting mass - rather than a capacitor - makes possible an electrical situation (especially when the mass is in the form of a sphere) which offers minimum external capacitance, hence definite advantages at high frequencies.

SPECIFICATIONS

In the attached drawings, for the sake of clarity, the simplest aspects of the present invention are set forth. In Fig. 1, the transmitter is enclosed in a shielded metal case (1) which is grounded. Within this case, a large mass (2) - preferably of heavy metal (such as lead and spherical in shape) is suitably supported on insulators (not shown) and electrically connected to inductor (3) which is coupled to and energized by oscillator (4).

Mass (2), by virtue of its external capacitance and the inductance (3), is set in electrical resonance and is continuously energized by oscillator (4) at high frequency. Inasmuch as the electro-gravitic effect is a function of the peak voltages reached, as well as the rate of change of voltage, inductor (3) must be such as to permit peak voltages of the order of 100 KV or more to be impressed on mass (2). The modulator circuits, not shown in the present diagram, control the amplitude of the oscillator output and hence the voltage swings of mass (2) when amplitude modulation is used.

The rapid alternations of voltage (at radio frequency) on the heavy mass (2) is believed to induce an electro-gravitic effect and cause the propagation of gravitational waves of the same frequency. These waves appear to radiate from the center of gravity of mass (2) and penetrate the surrounding electrically-grounded shield (1). Passing outward, as a succession of concentric spherical fronts, and being attenuated as the square of the distance, these gravitational waves penetrate shield (5) of the receiver and induce an alternating voltage upon mass (6). The alternating voltage induced is a function of the amplitude of the gravitational waves (carrier) received at this point. When the circuit is tuned by inductor (7) so as to be in resonance with the carrier, maximum energy is fed to receiver (8) and converted into audible sound in accordance

with the modulated signal of the transmitter.

In Fig. 2, an underground high power transmitter is shown. The purpose of installing the transmitter in an underground location is partly for convenience in supporting and insulating the required heavy mass, partly for ease in electrically shielding such an installation and partly to eliminate all wires above the surface of the earth. In such an installation the underground vault may be lined with sheet metal (1) and thoroughly grounded electrically. Mass (2) in the form of lead bricks can be built in any desired shape or size. The total mass is supported upon insulating columns (7) of sufficient size to permit operating voltages of 100 KV or more. For larger stations it is suggested that the total weight of such an electro-gravitic antenna system may reach 10 to 30 tons. Various metals may be used depending upon the economic and engineering factors involved. From an electro-gravitic standpoint the only factors which are important are the density of the metal and the electrical capacitance (external) of the mass as a whole. Since iron is relatively inexpensive, cast iron blocks may be used instead of lead blocks. However, because of the lower density of iron, the total volume must be greater to equal the equivalent weight of lead. Iron blocks, therefore, may be used if the resulting larger surface of the total installation does not increase the electrical capacitance of the system beyond the tolerable limits for the frequency employed.

An electrical conductor connects mass (2) through bushing (3) (through the wall separating the antenna vault from the rest of the electrical equipment) to inductor (4). This comprises the resonance system (tank circuit) which is continuously fed by oscillator (5). The amplitude of the carrier is controlled by modulator (6).

In Fig. 3, a device is shown which will convert any electro-magnetic (radio) receiver into an electro-gravitic receiver. It consists essentially of a lead ball (1) which is 12" in diameter more or less, suitably supported on insulators (6), within an electrically-grounded shield (2). The space between the lead ball and the shield may be adjustable or adapted to be filled with a dielectric liquid or gas under pressure, so that the capacitance may be adjusted to approach that of the outside antenna which it replaces. The electrical conductor from the lead ball (1) passes through a suitable insulated bushing in the base of shield (2) and thence by shielded cable (3) to the antenna terminal of any conventional radio receiver (4) and loudspeaker (5). Such a receiver using a lead ball, adequately shielded electro-magnetically, as an antenna will presumably not pick up the electromagnetic component of a broadcasting station but will receive only the electro-gravitic component.

It will be recognized that any broadcasting station will transmit an electro-gravitic component which will depend largely upon the mass of the energized antenna system plus the effective mass of air immediately adjacent to the antenna. The electro-

gravitic component will not be subject to ionospheric variables, disturbances, phase interference or shadows, as is the electro-magnetic component, but will pass directly from transmitter to receiver subject only to the inverse square law (no shielding being known). The average broadcasting station may be converted to an electro-gravitic transmitting station as in Fig. 2. This would result in the complete elimination of the electro-magnetic component and a corresponding increase in the electro-gravitic component of the transmitted energy.

In the foregoing broad specifications, the use of ultra high frequencies, such as those used in television and radar, have not been specifically mentioned, but it will be clear to anyone skilled in the art that the same basic principles apply.

CLAIMS

1. In a communication, television, radar or remote control system, the substitution of a heavy mass, which may be electro-magnetically shielded, for the antenna normally employed.
2. In communication systems or the like the use of heavy insulated masses, which may be entirely surrounded by electro-magnetic shielding, in place of the unshielded antennae normally used.

3. The method of transmitting intelligence through space consisting in adapting a heavy mass capable of being electrically charged, insulating said mass so as to retain said charge, conveying to or receiving from said mass a varying electric charge and utilizing said mass to generate or intercept a form of radiant energy which will penetrate electro-magnetic shielding.
4. Method of transmitting and receiving intelligence consisting in utilizing the interaction and influence at a distance between one heavy mass at the transmitting end and one heavy mass at the receiving end, by altering the electrical potential of the transmitting mass and amplifying and interpreting the electrical potential induced in the receiving mass, said influence penetrating electro-magnetic shielding.
5. Method and means for transmitting intelligence comprising a system of two or more insulated masses, means for altering the electrical charge on one mass and means for detecting and interpreting the induced electrical charge on the distant mass or masses, the interaction of said masses being capable of penetrating electro-magnetic shielding.
6. In a communication system as described, a ball of lead or other heavy metal, serving as an antenna, insulated and supported within a grounded metal shield.

7. In a communication system as described, an antenna composed of blocks of iron, lead or other heavy electrically conducting solids, suitably insulated from the ground and shielded against electromagnetic radiation.

8. In a communication system as described, an antenna consisting of a tank of water, mercury, or other conducting fluid, suitably insulated from the ground and shielded against electromagnetic radiation.

Inventor

Thomas Townsend Brown

Read and witnessed this _____ day of September, 1953
at Cleveland, Ohio.

Thomas Townsend Brown, being duly sworn, deposes and says that he believes himself to be the original, first and sole inventor of the foregoing "Electrogravitational Communication System" (total of 3 pages) substantially as set forth and has subscribed to the same in my presence this _____ day of September, 1953 at Cleveland, Ohio.

Notary Public