QUANTUM CONNECTED TESLA COIL ACTION
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A Tesla coil can be considered as 1/2 of a transmission line where another Tesla coil of the exact same length of winding can be considered the other 1/2 of that same transmission line. The two transmission line legs are connected via the medium of energy space. Energy space can be considered as being geometrically equivalent to a waveguide but having non-directional properties in the energy sense and directional properties in the momentum and therefore in the force sense.

The resonant nature of the Tesla coil depends only on its having a 1/4 wavelength of the desired fundamental frequency of operation in its secondary, and not primarily on the inductive or capacitive properties, such as for an ordinary inductive-capacitive tuned circuit or for an ordinary open ended 1/4 wave transmission line. In addition, the turns ratio from primary to secondary is not the sole determining factor in the secondary voltage, as for an ordinary transformer. The high voltage in the secondary of the Tesla coil arises from the natural rise of voltage at the end of a nearly perfect quarter wave line, which in the case of the Tesla coil is 1/2 of an ordinary transmission line. The counterpoise or opposite leg 'medium' is in energy space and as such forms a connection to non-local space. Therefore, a Tesla coil is a quantum action device and the action between two coils in sympathetic resonance can be expected to be nearly instantaneous.

The tuned action also occurs at odd multiples of a quarter wavelength, such as 3/4, 5/4, etc. multiples of a quarter wavelength. Its resonant action also does not depend on a characteristic inductance or capacitance per unit length as for a conventional transmission line but only on its actual length of winding referenced to the speed of light in free space.

A standard transmission line has parameters that are based on the limiting velocity of the speed of light in local space. However, if we consider a Tesla coil as being 1/2 of a transmission line that is independent of the parameters of a standard transmission line, the phase velocity is not determined by those same parameters either. Intuitively, the velocity associated with the action between two sympathetic Tesla coils may be taken to be nearly infinite since the independence from inductive and capacitive control parameters sets no limit on the relative phase velocity as for a standard transmission line. Further, if the group velocity

is very low, then the phase velocity will be very high, as demonstrated in a waveguide geometry and for quantum particles in general.

Therefore, not only can we consider a Tesla coil transfer of energy to a counterpoise coil as being nearly instantaneous, but the energy reduction due to distance will be insignificant in a properly matched set of coils. This is by reason that if time is not a constraint in the action than neither is distance. It is of interest that the same condition exists for quantum particles wherein the momentum can be affected by the vector magnetic potential but not the energy since momentum is a vector quantity while energy is a scalar.
Thus, the vector magnetic potential is a likely carrier of the transfer of force between two electrogravitational 'systems' of energy and also between two sympathetically tuned Tesla coils, each of which can be considered to be a system of energy and capable of energy per unit distance, which is force. The energy by itself has no direction and is a scalar, the center of which is in the center of the Tesla coil. Then non-local action is likely between the centers of sympathetically tuned coils and the amount of energy is independent of distance between the centers of the coils.

A standing wave (a condition satisfied by Tesla coil action) has no net forward or reverse velocity and it is known that in quantum physics, a nearly zero group or phase velocity results in a nearly infinite phase or group velocity respectively. Further, I might add that these can be taken as being spatially 90 degrees to each other.

A simple analogy is the self organization of an ocean wave wherein its forward velocity is slow and the organizing velocity, 90 degrees to its motion, aligns the water molecules to form the wave parallel to the beach and does so with a velocity much higher than the forward wave velocity. In particle accelerators, plasma is known to organize in such a fashion and is likely due to the same mechanics as described for the ocean waves approaching a beach. The slow forward velocity may be said to be group velocity while the fast velocity 90 degrees to the group velocity may be said to be the phase velocity.

Recent experiments in Europe have found that if the phase of a 'split' quantum particle (such as a photon) is changed, its conjugate partner instantly knows that this phase change has occurred, and this effect is independent of separation of distance between the partnered particles. This occurs as described above for Tesla coil action wherein the phase wave information is nearly instantaneous and is 90 degrees to the particle motion which forms the group wave information. For a Tesla coil, the group wave is along the axis of the center of the coil while the phase wave is 90 degrees to that axis.

Geometrically, two Tesla coils satisfy my basic electrogravitational equation statement wherein the force is dependent on a two system interaction in its most basic quantum form. That is, energy per unit distance in one system times the permeability of free space times energy per unit distance in a second system. The energy can be expressed in all of the known forms that energy can be expressed in and is not limited to just electrical field energy.

Since the group velocity of a standing wave of electrons is nearly zero, the phase velocity is nearly infinite. Thus, the communication action between two sympathetic Tesla coils is nearly infinitely fast and the reduction of transferred energy by distance of separation does not apply as for the standard antenna which has its counterpoise element local to the transmission point. This implies that if we set a condition that requires a non-local vector magnetic potential connection between elements, a non-local action may occur as a result. It has been noted that the electron geometry appears to be 'pointy' and it is my conjecture that this may be due to a standing wave Tesla coil-like construct.

The above described action between two frequency-sympathetic Tesla coils fits the electrogravitational two-system action I present online at my web site titled "Electrogravitational Mechanics" at http://www.electrogravity.com. Thus, a sympathetic frequency Tesla coil experiment may also directly demonstrate the action of Electrogravitation as described in my theory. The force engendered by the sympathetic action of the Tesla Coils is based on the interaction of the respective vector magnetic potential products and as a result, the force falls off proportional to the inverse of the square of the distance between the coils while the energy may be expected to not fall off with distance.

Perhaps there is a length and geometry of a Tesla coil that is able to connect to the energy space that drives all of creation. (It is a part of my theory that all of creation is refreshed from one instant to the next from energy space, the same space that created the initial big bang.) It is interesting that the geometry of the power transmitting Tesla coil was of a flat spiral secondary with the L-C resonant primary wound around the circumference and having the secondary high voltage point in the center of the spiral with a vertical rod rising to a sphere or torus.

The action of the partial transmission line standing wave of the Tesla coil, may be acting as an interface between the free space resistance of local space and the quantum ohm of non-local space. The free space resistance divided by twice the quantum ohm is equal to the fine structure constant. Further, the decaying field energy represents a changing quantum frequency which is lowering as it loses energy. Looking around the spiral, as the radius increases, the frequency of

angular rotation must decrease, holding the angular velocity a constant. This is the action of Electrogravitation that I have also proposed in my theory where it is the entropy loss of energy per unit time that drives the electrogravitational action force.

Further, in my theory, the energy lost to creating the electrogravitational force is replenished from energy space in regular refresh intervals. Ergo, the energy that created the big bang is quite likely a potent source that is still in existence. This causes particle and atomic level jitter even at the lowest energy levels near zero degrees Kelvin. It may also be responsible for the so-called Casimer force and can also explain where dark matter and energy comes from. Therefore, if we can cause a more pronounced frequency shift during Tesla coil action, we may be able to induce great amounts of energy directly from energy space and solve the world's energy shortage problem even in the most remote of locations. This pronounced frequency downshift is also expected to cause a stronger electrogravitational force between the coil and our own Earth as well as sympathetic resonant Tesla coils.

Finally, not only superluminal energy transmission and energy induction may be possible, but superluminal communication as well, which is independent of the distance between the coils involved. Marconi style antennae fall far short of the Tesla method of energy transmission and communication, as history does attest.   --- END

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