

## **Prior Art declaration**

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**A NEW COMPONENT FOR USE IN THE EXTRACTION OF AMBIENT ELECTRICAL ENERGY, THE STEAP CAPACITOR, WHICH USES DISPLACEMENT CHARGE IN A SPECIAL WAY TO EXTRACT THIS ENERGY.**

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### **ABSTRACT**

Disclosed is a new component in the form of an unusual capacitor. This capacitor has three plates, two of which form the the core for the third plate which is wound as a coil over the other two. When used with external switching electronics, unique charge-transfer and balancing can take place causing additional charge to be extracted from it's surroundings. The name of STEAP (space time energy absorption pump) has been given to this special capacitive component.

### **FIELD OF THE INVENTION**

[0001] This disclosure relates to a type of capacitor which is capable of extracting ambient energy in the form of charge. This capacitor is the centre of a greater electronic unit, which without this component the unit will not work. This external unit uses phase differential of certain frequencies in conjunction with the unique STEAP capacitor.

### **BACKGROUND**

[0002] The ambient air around us has a constant ionic charge. The movement of charge between the Earth's surface, the atmosphere, and the ionosphere is known as the global atmospheric electrical circuit.

[0003] By disclosing here this new capacitive component, the possibilities of extracting this atmospheric energy becomes a reality, a renewable energy which will work twenty four hours a day.

### **SUMMARY**

[0004] In accordance with the purpose(s) of the invention, as embodied and broadly described herein, the invention, in one aspect relates to a system of capacitive charge and it's displacement.

[0005] In another aspect, the present disclosure provides the means of collecting charge from a charge-transfer complex at one or more electrodes of the capacitor.

[0006] In another aspect, the present disclosure provides for storage of charge.

[0007] In another aspect, the present invention provides for reuse of stored charge.

[0008] In another aspect, the present disclosure provides for more than one set of collection electrodes.

[0009] In another aspect, the present disclosure provides for different types of electrode design.

[0010] In another aspect, the present disclosure provides for different types of electrode symmetry.

[0011] In another aspect, the present disclosure provides for different dielectrics.

[0012] In another aspect, the present disclosure provides for an external system of control.

[0013] In another aspect, the present disclosure provides for an excited electronic state and or resonance in the special capacitor.

[0014] In another aspect, the present disclosure provides for a plating of an electrode.

[0015] In another aspect, the present disclosure provides for an external circuit of control of the system in relation to the special capacitor.

[0016] Yet another aspect, the present disclosure provides a method of ongoing extraction of ambient charge.

[0017] While aspects of the disclosed invention can be described and claimed in a particular statutory class, such as the system statutory class, this is for convenience only and one of skill in the art will understand that each aspect of the disclosed invention can be described and claimed in any statutory class.

[0018] Unless by otherwise expressly stated, it is in no way intended that any method or aspect placed herein be construed as requiring that it's steps be performed in a specific order. Accordingly, where a method claim does not specifically state in the claims or descriptions that the steps are to be limited to a specific order, it is in no way intended that an order be inferred, in any respect. This holds for any possible non-express basis for interpretation, including matters of logic with respect to arrangement of steps or operational flow, plain meaning derived from grammatical organization or punctuation, or number or type of aspects described in the specification.

## **BRIEF DESCRIPTION OF THE FIGURES**

[0019] The accompanying figures, incorporated in and constitute part of this specification, illustrates several aspects, and together with the description serve to explain the principles of the invention.

[0020] Fig. 1 Schematic illustration of the special three plate capacitor.

[0021] Fig. 2 Example of external connections to the special capacitor.

[0022] Fig. 3 Example of a schematic of an embodiment within a functional unit.

[0023] Additional advantages of the invention will be partly set out in the detailed description which follows, and in part will be obvious from the description, or can be learned by use of the invention. The advantages of the invention will be realized and gained by means of the elements and combinations particularly pointed out in the appended claims. It is to be understood that both the foregoing general description and the following detailed description are exemplary and explanatory only and are not restrictive of the invention, as claimed.

## DETAILED DESCRIPTION

[0024] Here in is given a detailed description, to be read with reference to the accompanying figures 1, 2, 3, but must be understood that the present compounds, reagents, compositions, articles, systems, devices and or methods are not limited to specific methods unless specified otherwise, as they may be in due course, varied without taking away the true intention of the invention. Also it should be understood that the terminology used is for the purpose of describing particular aspects only and is not deemed to be limiting.

[0025] In Fig:1 of the present disclosure of the STEAP capacitor, the A and B core is made up of a twin insulated wire of multi stranded tinned copper. The insulation, dielectric, of each should have a heat resistance of at least 200°C, such as silicon rubber. A typical length but not fixed to this length, is 300cm of this twin wire, this should be folded back twice on itself to give a final length of 100cm. At each fold back the twin wire is twisted 180° and laid together with the preceding wire. Those in the art of capacitor making will know that maximum capacitance is created this way.

[0026] In Fig:1 coil b,b1 (centre tapped) is made of the same wire as the A and or B core. This is wound in the form of a solenoid, tightly around the AB core. Testing of the capacitance A/b,b1 and B/b,b1 should show the same capacitance. These capacitances should have a 4:5 ratio to the capacitance of A/B making up the core.

[0027] Fig:2 shows the normal connections to the external circuit. The STEAP capacitor is depicted in it's schematic form, connected to two charge chokes and circuit ground.

[0028] Fig:3 shows in this disclosure, a typical schematic incorporating the STEAP capacitor for extracting ambient electrical charge from the Earths electrical circuit. This external circuit is such that it conforms to the working needs of the STEAP capacitor, such as multi phasing two related resonating frequencies, not covered by this application.

### System operation

[0029] When the capacitor is incorporated within a resonant external circuit as in Fig:3, part of the special capacitance of this capacitor makes up part of the LC resonator. The other part makes up for charge acceptance from the ambient charge, different charge voltages on the plates try to equalise themselves by balancing the charges of either side within this special capacitor.

[0030] With the system running the frequency of change (duty cycle) over of each cycle can be set to give a specific extraction time within the STEAP capacitor. This is a period of no input from an external source, only an input from the ambient charge. This charge adds to the balancing taking place within the special capacitor within the cycle. The resulting higher charge is used as the input for the next start cycle. The input does not see the output, they are out of phase with one another.

[0031] Those of the art will see with an oscilloscope that energy recuperated from the system, is added to the ambient energy collected, resulting in a net positive return back into the system.

## **CLAIMS**

- 1.** A special capacitor with multiple plates.
- 2.** A capacitor or capacitors which form part of a resonant circuit..
- 3.** A capacitor or capacitors which automatically balance their internal charges at specific times within a high frequency multi phase LC resonance.
- 4.** A capacitor or capacitors which have an external solenoid coil encasing and forming a third plate.
- 5.** An external solenoid coil which is wound over and perpendicular to the other plates, thus forming the third plate.
- 6.** Two parallel wires forming a capacitor.
- 7.** Two parallel wires forming a core internal to the outer solenoid coil.
- 8.** An outer solenoid coil forming a power output connection.
- 9.** A coil and capacitor or capacitors forming a tuned circuit.
- 10.** An internal method of charge movement and balancing.
- 11.** A coil and capacitor or capacitors forming a wide band receiver.

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STEAP capacitor

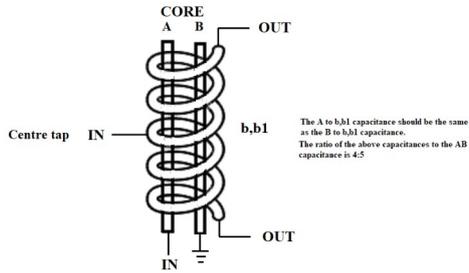


Fig: 1

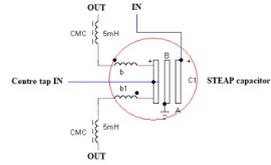
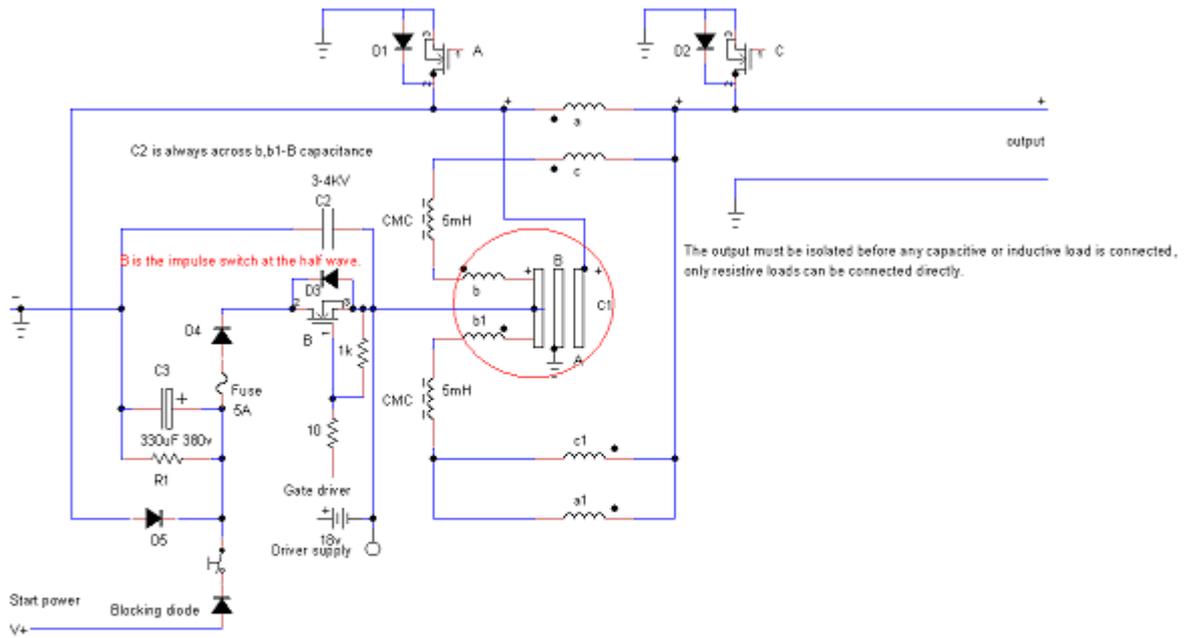


Fig:2



The following are build figures, ONLY AS AN EXAMPLE.

- a= 0.024mH      a1=0.024mH      Core A-B capacitance = 0.362nF
- b= 0.010mH      b1=0.010mH      Core B-b/b1 capacitance = 0.290nF
- c= 0.016mH      c1=0.016mH
- a1,c1 combined inductance = 0.0096mH

Fig: 3

# Typical switching sequence for Fig:3

