STEAP©2023

an atmospheric power unit

by
M.J.Nunnerley

A child on a swing can manipulate the height that they swing simply by moving their centre of gravity, this is about as close as a description that I can make as to how STEAP works. It is a parametric type oscillator which gains sufficient energy input from the ambient to create this change. The child created the energy input to gain height, but the power of the swing comes from gravity. STEAP does not use gravity, it uses the ionic charge that is all around us, by ion electron exchange.

STEAP might be seen as a rechargeable battery where there is ionic exchange when charging or discharging a battery, references have also been made to electrolysis cells, Steven Mark for example, he also commented that he found that oxidised wire worked better in his TPU. That is not true, he was referencing to the ion exchange that takes place when metals oxidise and create a current.

I have another invention which I call SMD, it is a system of electrolysis of water which is very efficient as it uses the oxygen created to oxidise a metal electrode which in turn creates a current to produce more hydrogen. Naturally the metal is converted, but it can be a waste metal.

SMD helped me to see how STEAP works, and now I am working on linking the two together to produce hydrogen from sea water.

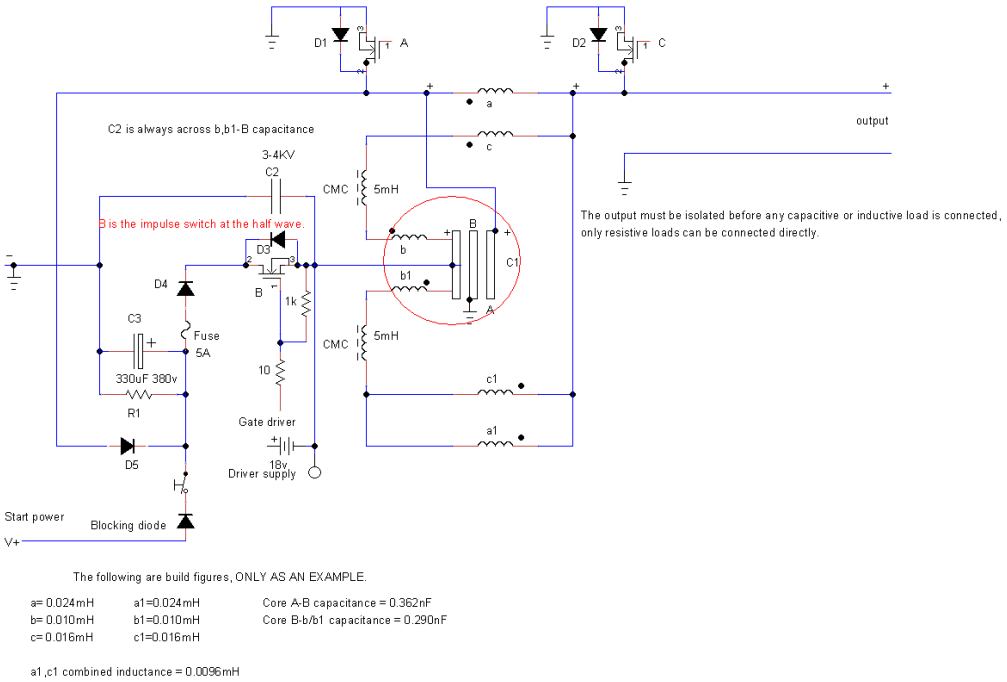
STEAP is predominantly capacitive, the charge around us is also capacitive, it is as stated a CHARGE. This is our free energy we need to extract to make it all work, the Sun supplies that energy, so as long as the sun does not die, STEAP will work 24hrs a day. The usable energy from one unit is around 350-450w, bigger units do not supply more power, the voltage increases but the current does not. To increase power you have to connect units in the same way as batteries, though the drive electronics can be the same for as many units that you connect together. In parallel will increase current, in series will increase voltage.

The way STEAP functions is through two basic frequencies which are related, together with multi phasing. The multi phasing creates very high peak frequencies, that is, positive to positive peaks. The related frequencies are resonant frequencies of the unit, and found either side of the coil "a", these frequencies are not high, but cannot be found using an oscilloscope and signal generator, or other equipment means. This is because of the multi phasing design, this fools the equipment used, the Fr's can only be found using the inductance and capacitance measured in each unit and then using the formula for the resonant frequency of an LC circuit.

Most Fr's are around multiples of 5KHz, for example my units are either just under or just over 15KHz and 25KHz. With these frequencies you would use a clock frequency of 5KHz. The inductance for each is measured from the center of the "b" coils to either side of the "a" coil. The capacitance is measured from the "b" coils center to ground including your C2 capacitor (my case is 4uF @ 3.5kv). Either side of my "a" coil measures 0.027mH and 0.010mH. By adjusting a turn more or less of the "a" coil will align the two Fr's. Your clock frequency will need to be adjusted when tuning if you can't get an exact two frequency relation. The STEAP is all to do with ratios as in 25kHz and 15kHz and so a clock of 5kHz.

The fine tuning is with the 2.1 and 3.2 duty tuning of “A” and “C” switching.

The “B” mosfet switch is A REAL SWITCH supplying the needed push at the half wave clock frequency, it will supply only if the voltage in C2 is less than the voltage in C3. The C2 is in the circuit AT ALL TIMES along with the system capacitance of the 3 plates of C1, this is the “collector”.



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

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Author: M.J.Nunnerley, Centraflow Systems		
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Revision: 1.0	Date: 14/11/2021	Sheets: 1 of 1

With C2 always connected, the unit is always in resonance. When “C” and “A” are ON the chokes charge from the C2/C1 HV and there after from C3 if the voltage is higher than C2/C1. This is how power is collected from the C1, A to B and B to b,b1 capacitor by charge stabilisation, it seems charge is pulled in from the ambient capacitive charge at a particular timing between A and C pulses (this has to be tuned).

Extreme care must be taken with the charge in C3, this is why R1 is across the terminals to stop over run and Mosfet failure due to excess voltage. I try to keep the voltage below 300v, the minimum start voltage here should be 70v DC.

The charge generated within the C1 capacitance is manipulated by the electromagnetic field which surrounds this capacitor. It is believed but not yet confirmed, that this reduces the charge needed to create a barrier plasma (DBD), this can take place below 600v where as normally kVs are required. It is also believed that the extremely high resulting pulse frequency also aids in this actuation, when using a reduced voltage.

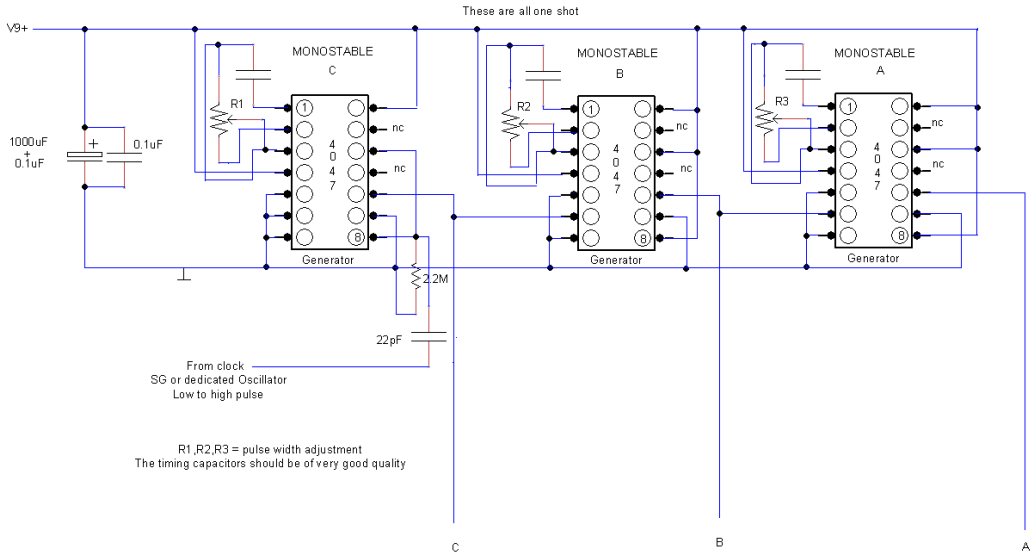
The C1 capacitor is like two capacitors back to back all in one, but this capacitor has it’s own magnetic field, the “b” coils which are perpendicular wound over A and B loops, so creating a longitude field around the loops. Due to the centre feed of the “b” coils, the centre is of the same polarity ++ but changing depending on whether the chokes are charging or

discharging to --. This is when positive and negative charges move to balance either side of the C1 capacitor, in doing so atmospheric charge “seems” to be pulled in to fill any deficit created by resistance, either in the circuit in the form of heat, or any load that is connected.

I here present C1 as a new component in the quest for energy extraction from a sustainable source, I call this the STEAP CAPACITOR,©2023. This is the centre of the whole principle of the unit, without this it will not work. The basic building of this component is simple, but the principle of operation is far more complicated.

What is built around the STEAP capacitor is the control of what goes on inside the capacitor. I am sure that there are more than one way to control it, but that does not take away the unique function of this component, and why I am protecting this component from patent abuse. I hold the prior art of the function of this capacitor, I wish it to be free for use in any power generator that maybe patented as a control but not as a whole to include the STEAP capacitor.

BASIC ELECTRONIC DRIVE



The 22pF cap along with the 2.2M resistor forms a positive going spike to trigger C,
The pulse width for C, B and A is controlled by the RC at 1, 2 and 3.
The formula for the pulse width out of C,A and B is:-

Width out = 2.48*R*C
C in Farads and R in ohms

Title STEAP TPU drive, 3 IC's		
Author M.J.Nunnerley Centraflow systems		
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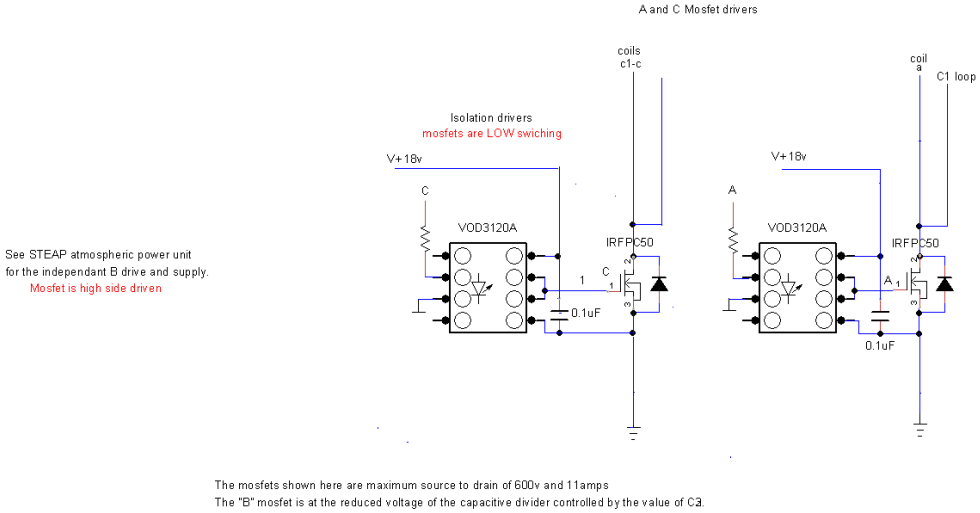

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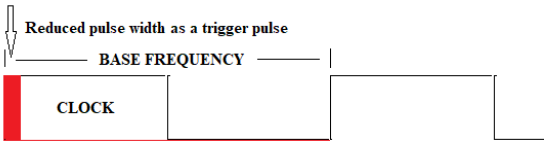
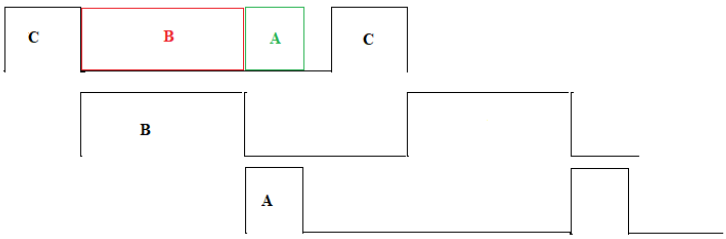
CLOCK; PULSE and SEQUENCE





The gap between “A” and “C” is the tuning area for maximum output, increase “C” will move “B” to the right, further increasing “A” will close the gap more. This area is not closed completely and has to be done bit by bit until the maximum kick is obtained, producing the maximum power output.