

Low-frequency pulser, Converter. (DC - AC >>)

Extract.

A method and system, in order to obtain some low-frequency electric alternating voltages from a DC source, with the aid of a circuit, which consists of a mechanical relay, which is connected in an unusual manner with at least two in-series-connected electric capacitors, which, after the first capacitor pair is charged, it is possible that the mechanical relay is energized, what the immediate discharge of the capacitor duo has caused, which in turn instantaneous voltage and current reduction through the coil causes of the said relay, so that it falls back to the original position.

As a result, can be from between the positive pole of the DC voltage source and the said "normal" of said relay an AC voltage can be decreased.

Subject.

The conversion of direct current to alternating current with a 'reasonable' time job quality, with a continuously vary in frequency in a relatively low-frequency region, while extremely small ascending energy loss.

The equipment of this technology is extremely reliable operation; it is composed of a small number of electrical parts, thus leading to empty 'per unit' production costs.

Summary.

The object of the present invention are: to achieve a conversion of DC voltage to a pulsed alternating voltage, without the need of a plurality of electronic components and so that a minimum of energy loss.

The famous * inverter / converter techniques, including non clean AC voltages, exhibit definitely more than 150 components: ohmic resistors, condensntors, inductors, IC 's (integrated circuits, which contain many transistors).

Losses are so large in the standard inverter equipment, an energy plurality of "heat sinks", fans and ribbed housings are needed in constructive versions to drain the heat generated Lose energy by 10% -40 typically occur at various makes, especially in smaller units.

Description.

Method and System (the "layout" of the electrical components), in which this invention is based, at least show only three components, namely: two capacitor-s, one of which, a variable-and a relay that playing together in an unusual manner with said electrical components.

The operational energy losses are below 1% and usually below 0.25%!, Which is extremely important for applications in the new alternative energy technologies.

However, the applications of the techniques of this invention are, however, limited to a maximum frequency of about 30 Hz. in the mechanical-relay portion of the system of this invention.

This upper limit of achievable frequency in the 'first stage' of this system depends directly on the current state of technology regarding "mechanical relay" equipment hours.

By yet to be placed with the non-variable capacitor and a diode in parallel by one or more "frequency-enhancing" circuits (with diodes and capacitors therein) allows higher frequencies to be achieved.

For example, with 3 extra adjustable capacitors with different capacity areas, and additional diodes 3 was inventors lab made a circuit, which could produce an alternating current with a frequency of

from 1600 Hz. and 6 x higher voltage.

There are many practical applications for the technology of the present invention, in this relatively low-frequency range: for example, lighting systems, which consist of a plurality of LED's (light emitting diodes); these consume much less electrical energy using this technology. (at 30 Hz is in fact already experienced by humans constancy of light emission).

Also, the durability of LEDs greatly extended by this technology, because of the fact that they need to dissipate the energy as compared with LEDs which have a constant supply of direct current (DC). The technique of this invention also lends itself for the operation of so-called "power transistors", making it possible to provide larger capacities with a pulsating character

Oscillator circuits can be energized with pulses obtained by the technique of this invention.

By the use of oscillators, together with 1 or 2 "filters", even free clean AC can be obtained, if this is desired.

At the time of this application, there is research going on with regard to the feeding of DC motors with pulsed current, and hence extremely high efficiencies were achieved.

In two cases, one in the USA and one from Turkey, reported that electro-motors were built the "energy overunity" exhibit.

If a permanently magnetic rotor and a 'wounded' stator to be applied, this will be understood, if in adjacent windings, the currents therein direction-wise against each other-in-oscillate possible.

One must first realize that here now alternating currents in thin conductors propagate as longitudinal wave-pulses of free electrons.

With pulsed flow of the free electrons will be "zero" of energy are able to absorb in the section of the "cycle", in which the electrons move in the plane against each other in adjacent wires.

This absorbed "zero" - (ether) energy increases the potential energy of the electrons, as the density of the ether increases in the electron-constitution.

This energy is directly released into that portion of the "cycle", in which the free electrons in adjacent wires out and move away from each other, in the form of increased kinetic energy, which translates into higher current.

The System of this invention is particularly suited to energize these motors so that close to 100% or even above 100% may be! Efficient permanent magnetic DC-motors pulsed (seen above reports from the USA and Turkey, a number of experts and professors gave positive testimony on this note).

Said motors require:

(a) non-conventional stator windings, (b) two capacitors in series, (which is a 180 ° phase-difference cause) in the exact center of the windings, with which optimal "zero-point" energy absorption is achieved by using against each other in the oscillating electrons, which are located in adjoining yarns located.

That additional energy can be obtained using against each oscillating electro-magnetic fields has been observed in 1900 by Nikola Tesla; however, that this "zero-point" energy was and example the relationship between "zero-point" energy absorption and frequency in a circuit it was not yet known.

The latter may also only if one understands the 'Primary (Aether) Physics.

Its development began just before World War II and continues to this day.

Also, there is an important application field for low-frequency pulsed voltage, myocytes (high-voltage), for electron-discharges in plasma, for the purpose of effecting, eg fusion reactions.

Therein these applications there is movement of charged particles (between cathodes and anodes), which is in a class of roughly 10^5 x are so heavy compared to the 'mass' of electrons, have higher frequencies while no place, or phrase in these process-liners.

In the Dutch patent applications Nos. 1030781 and 1030908 and in an application yet to deposit the title "Nuclear Transmutations" will be applications of low-frequency pulse systems / equipment hours used.

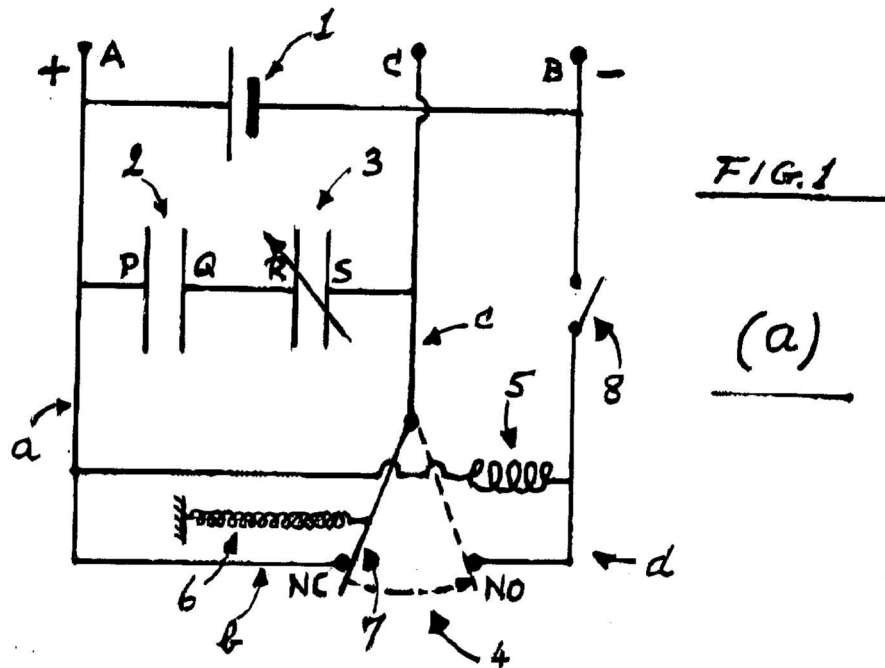
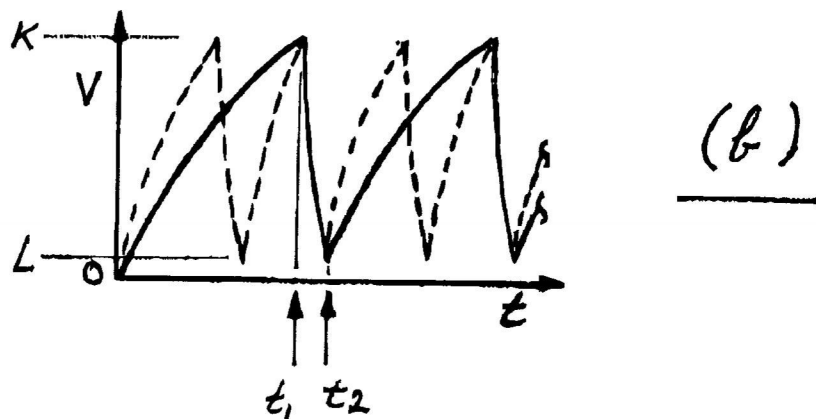


Figure Description and Operation.

Figure 1a shows the basic circuit of the system of the present invention, in which a mechanical relay is incorporated. The direct current source (1); a capacitor (2); a controllable capacitor in series is (3); (4) is the mechanical-relay; the induction coil is herein (5); spring (6) is: switching element (7); NC is standard language closed; NO is normally open; System excitation-switch is provided (8). Operation: By closing (8), winds electrons sucked the capacitors (2) and (3), spot respectively. locations: P and S, to give (2) and (3) can be loaded (stream passes through wires (a), (b) and (c)); the current decreases as the voltage across the capacitors is closer to the voltage between A and B. In the meantime, the tension on the "coil" (5) Accessory; However, since there are 90 °-phase difference between voltage and current at induction-coils, first starts the current through (5) to increase substantially as the capacitors already, are highly charged. add At the time, t , (see Figure 1b) is moving due to the electro-magnetic attraction of tspoel '(5), switching element (7) away from the NC to the NO position.



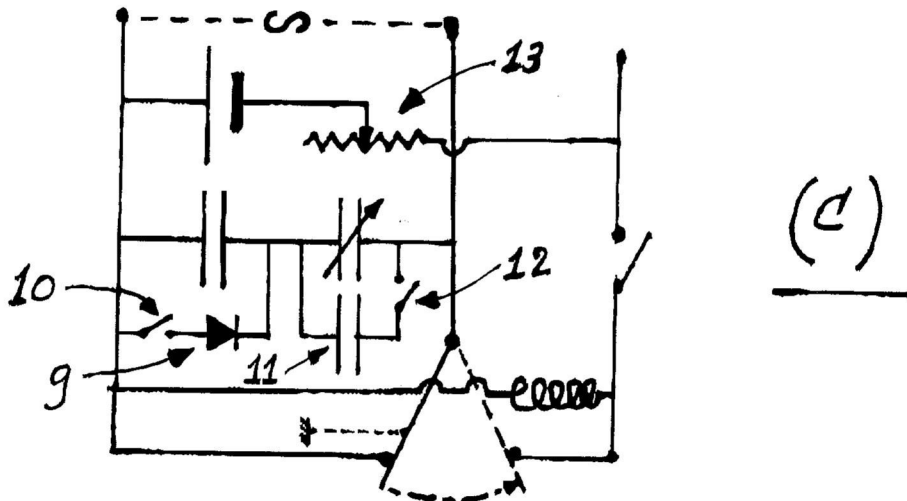
The result is a pulse of current of electrons, by wires (D), and (C); Capacitors (2) and (3) are relieved, and then also the voltage directly greatly less positive is in P, reduces the voltage drop across "coil" (5) at the same time, with the result that the appeal of (5) becomes less than the appeal of spring (6), with the result that switching element (7) moves back to the NC position; this is done in time, I 2 (see Figure 1b).

Example: With a voltage of 12 V between A and B, capacity (2): 500 uF and (3) set to 220, uF is a resultant sawtooth voltage of 7.5 V (AV between K and L) obtained a frequency of 10 Hz.

With sufficient adjustability of (3) frequencies between 5 to 20 Hz can be obtained. At the lower end of the frequency scale, the resulting alternating voltage is higher than at the higher end. 30 Hz, the maximum of the mechanical relay; inventor recommends, the upper limit at 15 Hz, or what to keep in designing lower to have. durability up to 10 'oscillations Besides, the currents must remain within the limits, as indicated by the manufacturer.

Initially, it is strange that if one increases the input voltage that the frequency is not far, but decreases! * However, the amplitude of the AC voltage increases with increasing the input DC voltage. *) This is especially true if one has higher capacity capacitors.

It comes with charging further in the more horizontal part of the (exponential) charging curves and thus passes relatively more time until the current intensity by (5) is high enough so that (7) can be drawn from the NC positie.



In Figure 1c, we see the addition of diode (9), which implies a frequency-doubling with it, ie, if switch (10) is closed; Parallel capacitor (11) can be switch (12) and delayed;

(11) extends the frequency range to the low side. By the use of both of them (9) and (11), the frequency may range from 1/2 to 30 Hz. M.b.v. control resistor (13), the input voltage is still to be adjusted; This determines mainly the maximum amplitude of the alternating current.

In Figure 2, there is a "triple voltage and frequency of 'circuit being coupled to the system (circuit design) of Figure 1c. In 'electronics jargon' is the name of the attached circuit: charge-pump 'in Figure 2 are both capacitors (14) and (15) adjustable. Using such a reasonable "reasonably clean sawtooth-like is" tension be 'tuned' and by 48-60 V AC can be obtained. Capacitor (16) eliminates the influence of DC to the input coil of a transformer (17), in which, depending upon the design, voltages of 120, 240 AC and may be obtained, at frequencies of 30 higher - 300 Hz, or higher '. Figure 2 shows a power station, as well as at the end of voltage supply points (18) and (19). A device as described here is ideal for laboratory purposes.

Certain fixed values for all capacitors, except for one, but even without (9) and (11) can be an "inverter" / inverter from DC to build alternating voltage with a DC input of 12 V and optionally output voltages of about 120 and 240 V with a choice of 50 or 60 Hz! Such equipment is widely used on all continents and as described in this invention has been described, produce beneficial.

Figure 3 shows the same system as in Figure 2, but with replacement of the transformator (17) by a

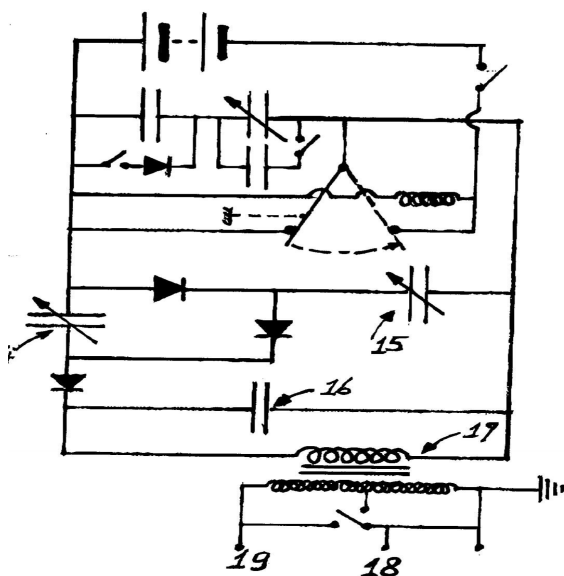


FIG. 2

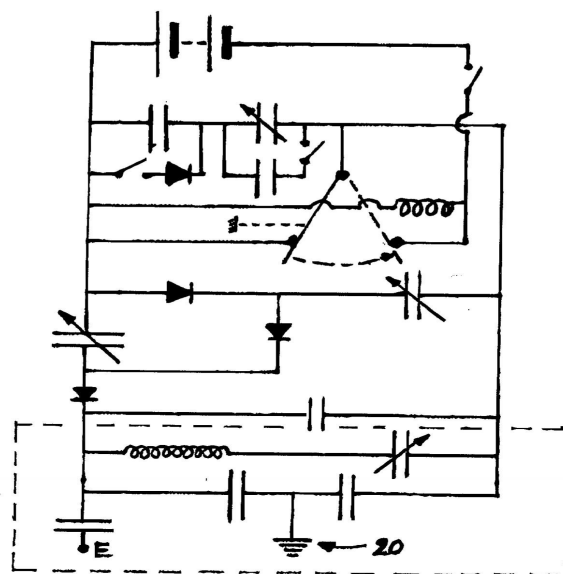


FIG. 3

so-called "Tank circuit" of an oscillator system. In Figure 3, a z.g.n. 'Clapp' oscillator 'driven' by the system of this invention. Oscillators with other embodiments, such as, e.g. the "Hartley" or the "Colpitts" oscillators can also be "driven". The oscillator in figure 3 is located within the dashed-line rectangle. (20) is a ground connection. A fairly decent AC voltage can be expected at point E, where the appropriate values for the circuit components are used.

The reason for using two capacitors in series has nothing to do with controllability or reducing overall capacity, but is only done for dual polarity reversal. This is the core of this invention. The system works only with due regard to the need for dual polarity reversal.

Conclusions.

1. To a method and system, with which electrical DC voltage can be converted into alternating current of relatively low frequency, will include at least one mechanical-relay switch, two in-series-arranged electric capacitors in order to inversion of the charge-signal as well as a direct current source.
2. A Method and System, as in (1), wherein one or two of the said capacitors a variably pressure, variable capacitance (s) has / have.
- 3 A Method and System, as in (1) and (2), wherein the positive pole of said direct current source is connected to: (A) the "normal-closed * terminal of said DC source. (b) one side of the induction coil of said mechanical-relay.
- . 4 A Method and System, as in (1), (2) and (3), wherein the negative pole of said direct current source, via an on-off switch is connected into: (a) the "normally open" terminal of said dc power source. (b) one side of the induction coil, other than the above (3), of the said mechanical relays.
5. To a method and system, as in any of the preceding claims, in which the 'normal' terminal of said mechanical relay is connected to the in-series pair of capacitors on the other side. then where the positive pole of said dc power source is fixed.
6. To a method and system, as in any of the preceding claims, wherein said alternating voltage is obtained between the "normal" tenninaal of said mechanical-relay and the positive terminal of said DC voltage source.

7. To a method and system, as in any of the preceding claims, wherein said one gelijkspanningsbron VARIABLE resistor in series has, for setting the desired amplitude of the AC voltage.
8. To a method and system, as in any of the preceding claims, wherein a diode, is placed through a switch, which may be in parallel with one of said capacitors, for doubling the frequency of said alternating voltage.
9. A method and system, as in any of the preceding claims, wherein an additional capacitor in parallel with one of said capacitors may be switched on, in order to possible widening of the frequency range to lower values thereof.
10. A method and system, as in any of the preceding claims, in which a so-called "charge-pump 'circuit is connected between the" normal-terminal of the said mechanical-relay and the positive pole of said dc power source, with the aim of obtaining of higher frequencies, as well as of higher voltages, for alternating said.
11. A system, as in (10), wherein said charge-pump 'lock consists of diode in series with a capacitor, between which the wire coming together of the said positive terminal of the dc power source and the wire connection with said' normal 'are terminal posted from the mechanical-relay, in parallel with a capacitor between the same wires in order to obtain an approximate doubling of voltage, as well as of the frequency of said alternating voltage.
12. A system, as in (10) and (11), wherein said first capacitor has an adjustable capacity, in order to improve any of the "signal-to-form."
13. A system, as in (10), (11) and (12), wherein said charge-pump circuit * includes 3 capacitors and three diodes in order to obtain approximately a tripling of voltage and of frequency of the said alternating current
14. A system, as in (10) and (13), wherein an additional capacitor is placed on the 'output wires' from among said (13) 'charge pump' circuitry in parallel.
15. A system, as in (10) and (14), wherein two capacitors, which are placed closest to the 'input' of said charge-pump 'circuit, are adjustable.
16. A system, as in (10) and (15), in which a transformer is connected to the "output wires" of said "charge-pump 'circuitry, for obtaining desired higher voltages, at the same time a VARIABLE frequency, of said alternating current potential to have.
17. To a method and system, as defined in (1) and (9), wherein an LC circuit oscillator is connected between said positive terminal of the dc power source and the wire, coming from the "normal" non-recovery of the said mechanical-relays, in order to obtain an improved alternating current signal.
18. A Method and System, as in (1) and (15), wherein an LC oscillator circuit is connected to the "output wires" of said "charge pump 'circuitry, in order to obtain an improved alternating current signal, with already, increased voltage and frequency.
19. A system, as in (18), wherein said LC oscillator circuit of the type: Hartley, Colpitts or Clapp circuit.