<u>Patent No NL1032043</u> by Arie DeGues

Version Date 2006-06-27

Translated by Overunityresearch.com June 2014

Electric energy from bi-element pairs with 'electrets', in between, optionally with electron-"polarization" and/or a "primary" permanent magnetic field added thereto.

Extract.

A method and system, in which bi-element pairs, which exhibit an electrical potential difference (emf), are "sandwiched" with
"electrets in such a manner that the negative ends of the fixed atomic, or molecular di-poles of, or in, said "electrets", are located in the border area with the electro-negative portions of said bi-element pairs, where an excess of free electrons is, whereto said free electrons will move thyself with increased speed because of the mini-electrostatic fields, which are constituted by said di-poles, causing a continuous usable electric current to be generated, whose origin the 'Zero point' energy, as well as the Internal (ambient-thermal) energy is.

Subject

A method and system, in which with the aid of "stacks" of certain bi-element-pairs together with layers "electret" material in between, a continuous electric potential and a continuous electric current are being generated which eventually can be amplified with the aid of "electron-polarization" and/or also with the aid of a permanent-magnetic field.
The energy sources in support of said power generation are: the "zero point" energy, as well as the ambient thermal (internal) energy.

Introduction.

For more than a century it has been known that adjacent elements/metals, which have an intimate contact with each other, have an electric potential.
This, due to the fact that the energy required for the withdrawal of a "free" electron, from a matrix, varies from element to element.
A well-known application of this we find in: so-called 'Thermocouples', which have been widely in use, for measuring the temperature.
Practical applications for the purpose of electrical power generation, to date, has remained behind.
Reason: a) "energy-yield-density" is relatively small, and b) energy of oil products still to cheap.
An exception is the use of a lamp, which was used in Russia and Siberia in the 20th century, which burned using a multiple of series-arranged thermocouples, which were heated by, for example a fire).
Without thermal energy addition thermocouples can not support electric current. However this will change if layers "electret" are added between the bi-element/metal layers; these added layers must also have intimate contact with said bi-component/metal layers.
The discovery of the "electrets" may first be attributed to Guiseppe Zamboni, but also many others have had knowledge about the "electric effect" which combinations of materials can exhibit.
The naming 'electret' was done by Oliver Heaviside. Research in the 18-th and 19-th century was mostly observations belonging to the "battery"-class.

Definition: "Electrets" are characterized by "polarization" of molecular structures, within a compact material constitution, which display positive- and negative charge on opposite sides/ends of these molecular structures.
There are different types of "electrets": the material can be 100% of the "electret" material, or "electret" molecular structures may be included into a base-material.

Mentioned 'polarization' must lie in the direction of the potentials created by the bi-element/metal pairs.
The researcher: Mototaro Eguchi has performed many meritorious work on the preparation and manufacture of "electrets" for applications in the medical field.
The researcher Oleg Jefimenko has also done a lot of work on "electrets" but mostly applications in the field of electro-static motors.

Description.

a) Theory.
The "electret" has in the "Electro-Statics" the same meaning and elaboration, as 'permanent magnetism' has in the 'Magnetics'.
A material constitution is called an "electret", when, (a) a part of the atoms, isotopes, or molecules therein, are permanently oriented and (b) wherein said atoms, isotopes or molecules at the same time exhibit an "electric charge-difference", in the direction of the orientation, in other words, that the latter are di-poles.
In the organic chemistry there are many molecular structures to denote which will focus them self in a strong electrostatic field, ie if these structures firstly can move in the material constitution of which they are part of.
This can be easily brought about if the "electret" material, or the material in which the "adjustable molecular structures" are included, can be made thick-liquid till liquid, at not significantly high temperatures.
If under this condition a strong electrostatic field is set, then the di-poles can orient them self parallel to said field.
This field must be maintained for up to after the cooling period, so that eventually after removal thereof, said atoms, isotopes, or molecules will show continuously a fixed orientation and a focused electro-static potential without decreasing over a longer period.

Such material has to be cut in thin layers such that the field direction of the electro-static field is now fixed at right angles
to the plane of the "electret" layers.
To date, there have been a limited number of materials shown as being suitable for applications as long-term "electret": organic-chemical molecules, or complex inorganic-organic molecules, but only half a dozen of inorganic molecules are being used commercially.
For the purpose of electric power generation by means of 'bi-elements/metal together with "electrets" accumulation and especially for electric power generation, wherein also participates as an energy source heat of considerable temperature, the number of suitable molecular structures is still low.
Some, nowadays, classical examples: For applications at temperatures: (a) below 55 Degree C, are a number of wax types meritorious to be used as 'electret' material: eg Carnauba-wax and bees-wax; (mixtures of these are in use).
Cellulose molecules function properly till 80 C; (arrangements must be made that the water level does not change, which is achieved by hermetically sealing the entire stack bi-el./met. plus 'electrets').
Various synthetics (fluoro-polymers, polypropylene, polypropylene-terephthalate) exhibit molecules which are "directional" in a strong electrostatic field.
For all 'electret' materials goes that the ohmic resistance should be low and remain so after the 'polarization' has taken place.
The best materials to date are: (organic): Teflon; this appears to stay directed stable for many years. (Inorganic molecules): Quartz (SiO_2), (MnO_2), TiO_2) also show "electret" properties.
The negative charge section in these molecules is located at the O atoms. It should be noted: Atoms, in the transitional area, such as Cr, Mn and to a lesser extent Si and Ti are not strong positive or

even negative, but with respect to the two O atoms in their oxides, which are strongly negative, is there indeed bipolarity.
For the organic "waxes" and with cellulose their di-polarity shows from the fact that concentrations of O atoms, respectively, of OH groups, at one end of these longer molecules exist.

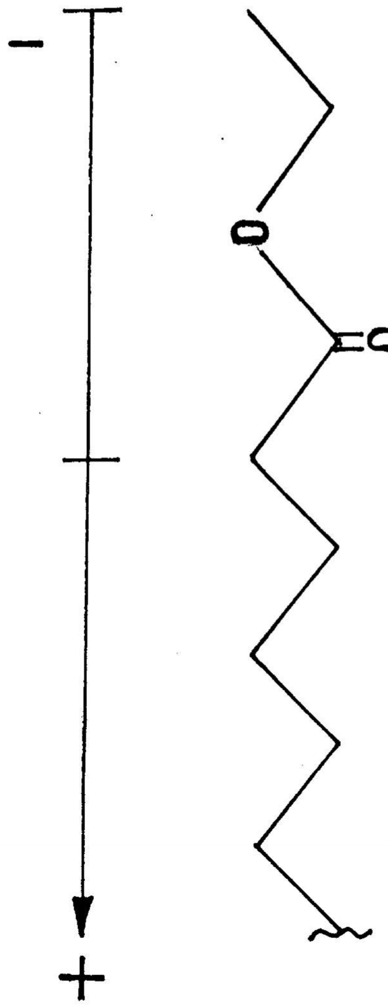


FIG. 1a

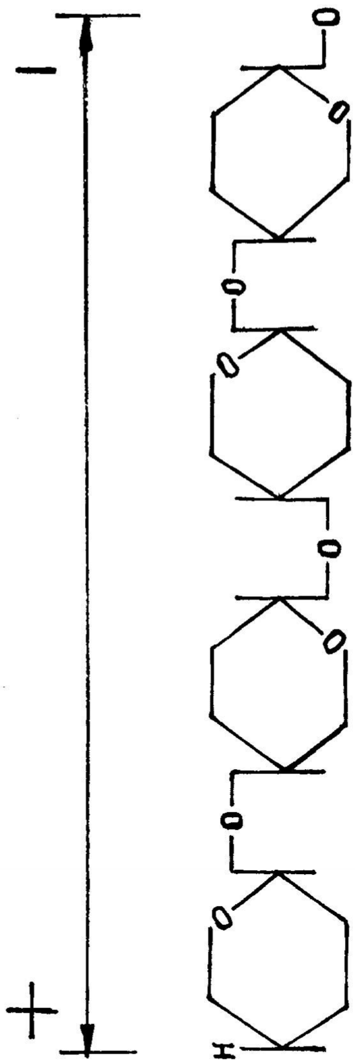
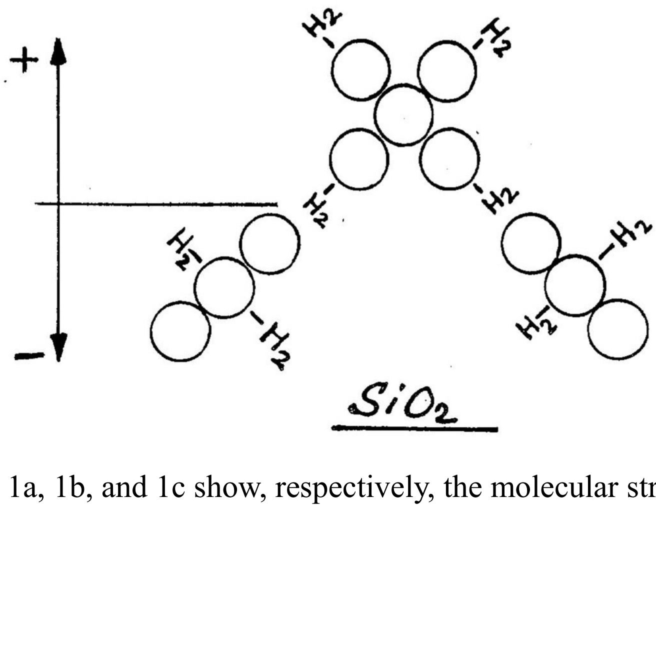


FIG. 1b



SiO_2

FIG. 1c

Figures 1a, 1b, and 1c show, respectively, the molecular structures of: a "wax", of cellulose and of quartz.

Analysis of physics within a 'electret'; or as pure 'electret' material, or as part of a "base"-material:

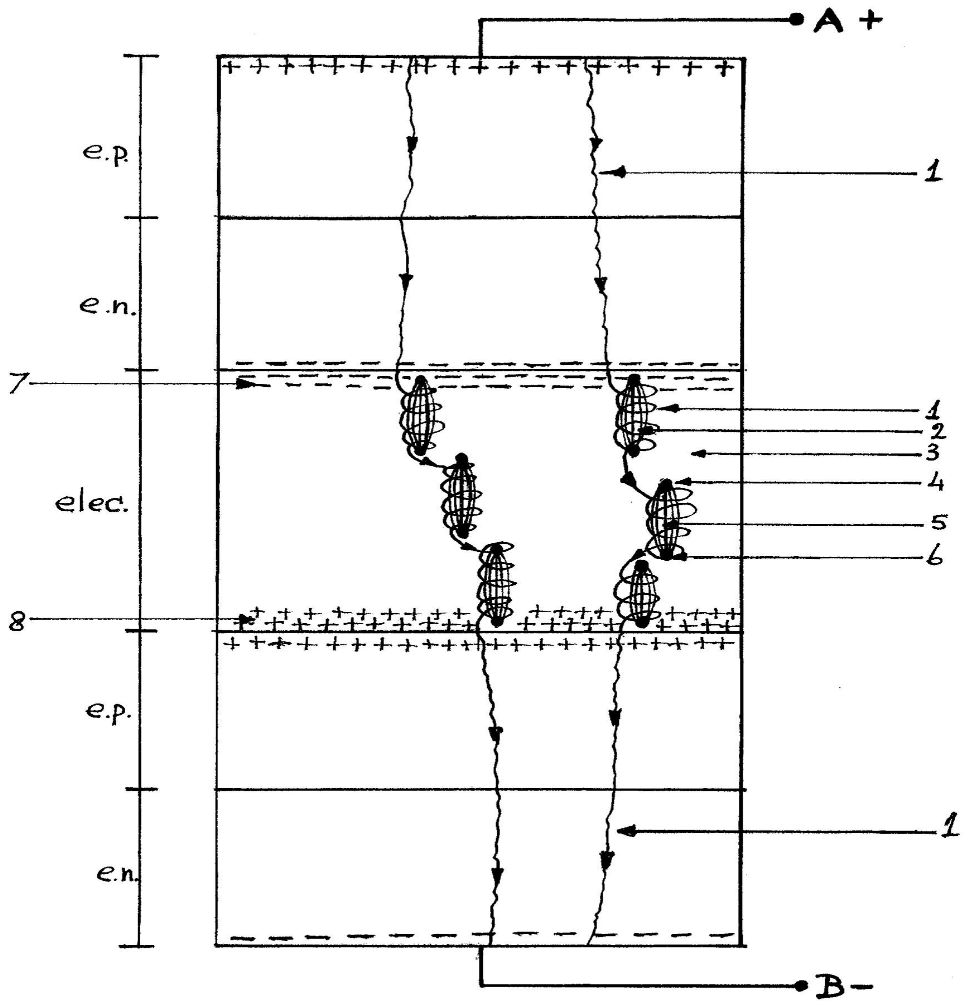


FIG. 2

Fig. 2 shows the sandwich: bi-element/metal pair, "electret", bi-element/metal with oriented, bi-polar molecules therein.
The trajectory of a free electron is also shown.
The "electret" material should be positioned against the bi-element/metal pair so that this bi-element/metal has an excess of free electrons in the border area with the "electret", wherein the oriented molecules with their negative end are inserted into this region with an excess of free electron, so that free electrons in the immediate vicinity of the negative ends of the oriented molecules will undergo the electro-static field force and will move with an increased speed in this mini-electro-static field, either to one side of the oriented molecule, or around it in spirals.
As such, the many mini electro-static fields produce 'Labour'.
Thereby distorting these fields.
These distortions are lifted immediately because of the fact that the law of Bernoulli is acting in the Aether.
Field distortions create density gradients in the Aether, so that some Aether can flow in and this inflowing Aether brings along its own energy, kinetic, as well as potential; this energy is the "zero point" energy.

Mentioned physical mechanism in the Aether gives the free electrons 'flow-energy' which comes from the "zero point" energy.

Summing: In the system of this invention which describes the cooperation of bi-element/metal combinations with "electrets", the bi-metal supplies the emf (electro-motor force) and the "electret" the current.
It is of great importance that the Ohmic resistance "over" the "electret' is minimal; both: the "electret" material, if used pure, or in a "base" material, including the "base" material itself must comply with this.

The theoretical description of the 'Zero point' energy absorption mechanism through field distortion, for both, electro-static, electro-magnetic, and also for permanent magnetic fields is elaborated in "Fluidum Continuum Universalis", Part II, Chapters 7 and 8; Inventor is the author.
In recent years, the inventor also has proved that when free electrons are forced to flow through very thin conductive films,
(Thickness <15 micron), these electrons are being forced to loose their normal spiral movement in the matrix and will descibe a single attenuated sinusoidal motion in the plane of the film.

The result then is that such electrons can very easily move through some matrices; the ohmic resistance often is decreased by a factor of >500 x.
If, in front of the entrance of the electrons in the first bi-element/metal pair, a "thin-film" trajectory, as referred to herein,
is incorporated into the circuit, then the free electrons will undergo less ohmic resistance during the subsequent movement through the stack of bi-elements/metal with "electrets" there between, at least in large amounts, depending upon the "height" of said stack, because there is dissipation in the direction of the more resistive spiral movement.
Figure 3 shows an electrical circuit of this system with "electron-polarization" there in included.
It should be noted, that development to better, more powerful and continuous stable "electrets" is in full swing.

The number of di-poles per unit volume is an important parameter.
The smallest material di-pole is the neutron. (Eg if it was possible to have a matrix of neutrons and if these were oriented,
then massive amounts of "zero point" energy could be converted into electric energy within a very small volume).

Some atoms also show di-polarity per single atom. The possibility to orient in a matrix is usually almost impossible, except then that elements which exhibit permanent magnetism are here not covered.
Permanent magnetism differs fundamentally much with electro-statics; the electro-static field has virtually no back-running field.
Permanent magnetism, if only the 'primary' field is provided through a "stack" of bi-elements and "electrets" in between, also can contributing more to propel and accelerate free electrons in said 'stack'.
The precondition is that magnetizable metals are present in the "stack" (for carrying the field) tin-plate being 'zinc-iron-zinc' lends itself very well for this.
Practice shows that the permanent magnetic field must be very strong to achieve a reasonable advantage.
Inventor makes use of this plenty.
b) Description of the figures.
Figures 1a and 1b show the basic configurations of the 'wax' ("-ester" not translatable) and of standard cellulose; the flow of the load over the length of the molecule indicates the di-polarity.

Figure 1c shows the fluid-mechanical structure of Si with 2 O atoms attached to them.
See "Nuclear Structure" 2006, inventor being the author.
Si herein is double positive and the two O atoms each negative.
Figure 2 shows a "sandwich" of 2 bi-element pairs, with in between an "electret" (here with oriented molecules embedded in a conductive base material); herein are (1) the path of a free electron, (2) a mini-electrostatic field, (3) base-material, (4) negative end of the di-pole molecule, (5) di-polar molecule previously permanently oriented, (6) positive end of di-polar molecule, (7) boundary layer of "electret" with excess of free electrons, (8) boundary layer of 'electret' with lack of free electrons.
Between A and B an e.m.k.is present and there is a continuous flow of free electrons, if there is circuit-closing between A and B.

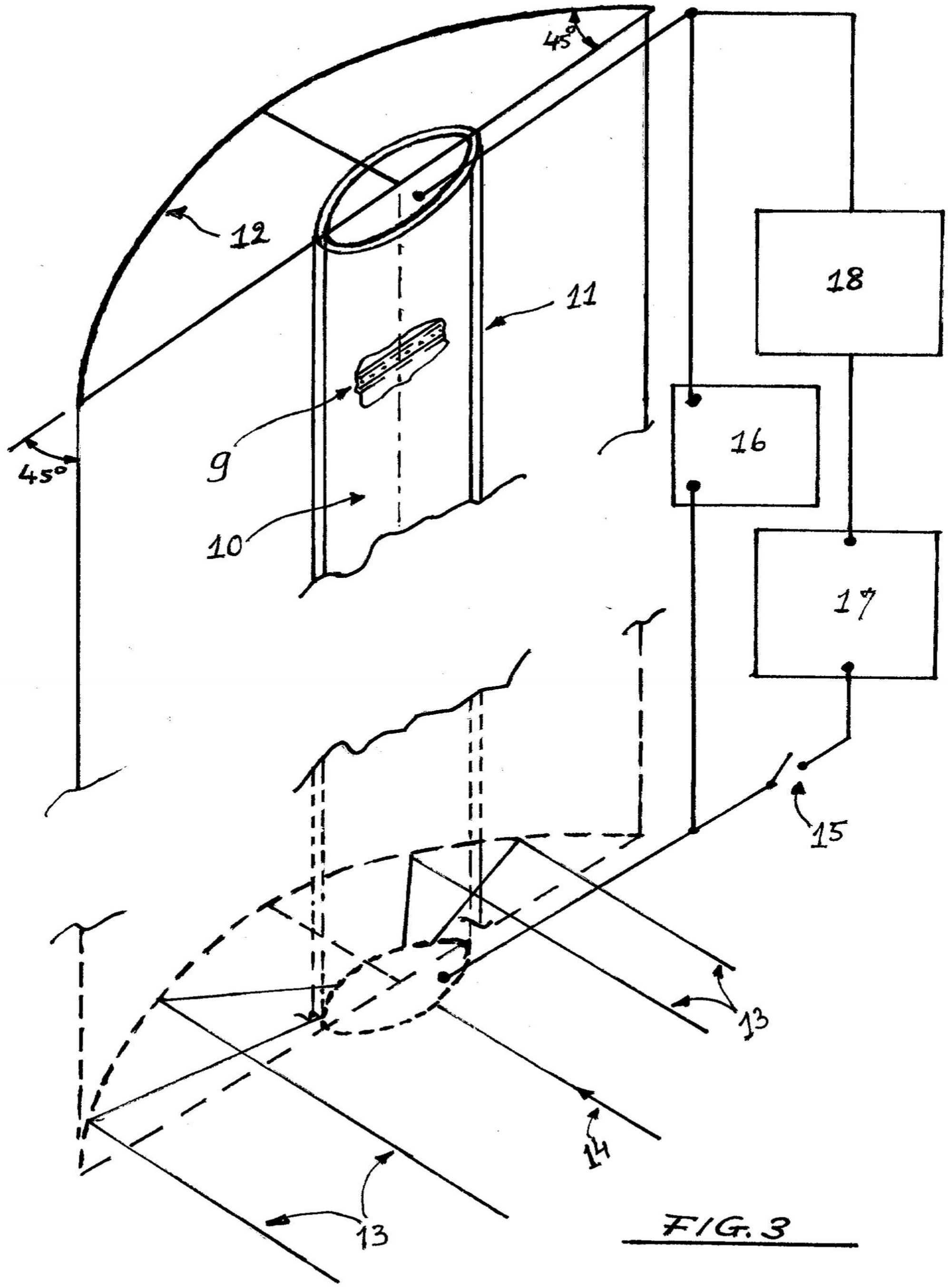


FIG. 3

Figure 3 (isometric sketch) shows a "stack" in the focal region of a parabolic reflector.
Herein is: (9) a cross-section of a 'sandwich', (10) is 'stack' (500/3 m), (11) borosilicate tube, (12) reflector (10/1 concentrator), (13) sun via reflector, (14) sun directly, (15) switch, (16) battery, (17) "usefull load", (18) "electron-polarization.

Conclusions.

1. A method and system in which bi-element pairs, which exhibit an electrical potential difference (emf), are "sandwiched" with "electrets" in such a manner that the negative ends of the fixed atomic, or molecular di-poles of, or in, the said "electrets", are located in the border area with the electro-negative portions of said bi-element pairs, where an excess of free electrons is, allowing said free electrons to move with increasing speed because of the mini-electrostatic fields that are constituted by said di-poles, generating a continuous usable electric current, whose origin the "Zero point - as well as the Internal (ambient thermal) energies are.

2. A Method and System, as in (1), wherein said bi-element pairs comprise of two elements in between which a fairly high contact potential occurs and which appear in the following 'electro-contact-potential' series: Zn, Cd, Sn, Pb, Al, W, Fe, Cu, Bi, Ag, C (graphite), Au, Ur, Mn, Te, Pt, Pd. (Zn is max. pos.; Pb is max. neg.)

3. A Method and System, as in (1) and (2), wherein additionally a "Primary" permanent magnetic field is placed across "stacks" of bi-element pairs with "electrets", where the field lines run parallel with and in the direction of the electro-static potential, which is generated by the pairs of bi-component.

4. A Method and System, as in (1), (2) and (3), wherein the South-North direction of said permanent-magnetic field lies in the direction positive to negative of the electro-static field.

5. A Method and System, as in (1) through (4), wherein a magnetizable layer is included within a layer of the same element, that is part of a bi-element pair forming together with an "electret" layer a "sandwich".

6. A Method and System, as in (5), wherein the magnetizable layer is comprised of an element from the following series: Fe, Ni, Co, Nd, Sm.

7. A Method and System, as in (5) and (6), wherein the magnetizable Fe, iron-layer within two Zn, zinc layers is located; this is in NL known as 'tin-plated'

8. A Method and System, as in (1) and (2), wherein in the electric circuit, in which the "electrical-power-source" of the present invention, as well as a 'usefull load' is included, also a so-called 'electron-polarizer' is included, which functions to reduce the ohmic resistance in all parts of said circuit and which is placed between the "usefull load" and the most outward positive plate of the said 'stack(s)' of said sandwiches'.

9. **Missing from Original Document.**

10. A Method and System, as in (1), (2) and (9), wherein said 'electron-polarizer' consists of a thin film of one of the elements: Au, Ag, Cu or Al, or of a very thin tube of C (carbon nano-tube).

11. A Method and System, as in (1), (2), (9) and (10), wherein the thickness of said film, or the wall-thickness of said nano-tube is <20 microns.

12. A method and system, as in (1) and (2), in which in addition to the energy absorption in said 'electret' portion of said "sandwiches, which of 'zero point' energy or Internal (ambient thermal)-energy origin is, heat energy is added to said 'stacks' of said "sandwiches" either in the form of radiation, or in the form of convection, forced or free.

13. A Method and System, as in (1), (2) and (12), wherein said "stacks" of said 'sandwiches' are located in a solar collector system.

14. A Method and System, as in (1), (2), (12) and (13), wherein said "Stacks" of said "sandwiches" are located in/nearby the focal line of a radiation concentrating collector system.

15. A Method and System, as in (1), (2) and (12), wherein said "stacks" of said 'sandwiches' have been positioned in a channel where warm/hot gas, or hot air passes through, in which a part of this heat energy is converted into electrical energy by means of the process of this invention.

16. A method and system, as in any of the preceding claims, wherein said "electret" base material also contains a low concentration of Mg or La, or Fe.

17. A method and system, as in any of the preceding claims, wherein the "electret" material a metal-oxide is and wherein said metal has a longer core structure.

18. A method and system, as in any of the preceding claims, wherein said 'stacks' of said 'sandwiches' are locked in, for example, in a tube, so that the air humidity can not cause electron-leakage (and hence reduction in voltage) and, if cellulose is used as "electret", the humidity within the "electret' layers remains the same.

19. A method and system, as in any of the preceding claims, wherein said 'stacks' of said 'sandwiches' are embedded into a non electron-conductive fluid, which creates the possibility of using other metals, which could produce higher potential differences, for example, Na