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**(54) Title:** ENERGY TRANSFORMER

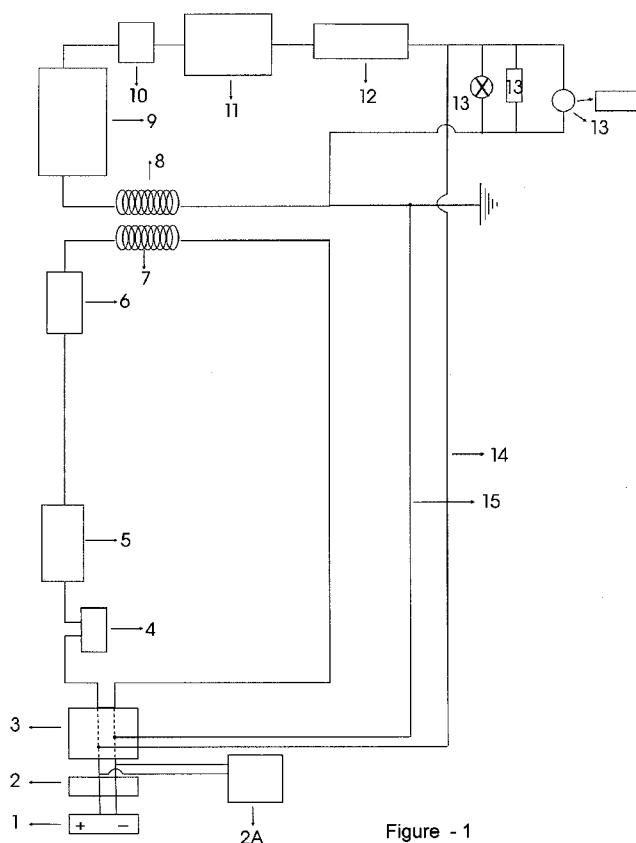


Figure - 1

**(57) Abstract:** Energy transformer being improved with this invention, transforms the initial electric energy received from an independent power supply (1, 2, 2A) and comprises the following parts: - First part consists of an accumulator or chargeable battery, or an inverter or network or any other power supply (1, 2 and 2A) to provide the input energy to the system, - Second part consists of power switch (3), frequency generator (4), capacitor (5), first filter (6), and primary coil (7), - Third part consists of secondary coil (8), current amplifier (9), second filter (10), frequency adjuster (11) and phase stabilizer (12) and load (13), and - The cables (14 and 15) which connect the output (13) on the secondary side to the power switch (3).



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GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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## ENERGY TRANSFORMER

### BACKGROUND OF THE INVENTION

The present invention is related with an economic energy transformer, which primes  
5 the constant electric energy received from any power supply via transferring the electro  
magnetic field occurred at one of the bobbins to other bobbin, rhythmically stabilizing the  
magnetic field between the bobbins with the help of amplifier immobilizes the energy voltage  
in both bobbins, increasing the current with respect to the input current.

### PRIOR ART ABOUT THE INVENTION

10 There is not encountered any application in prior art related with the invention  
improved with this invention.

### AIMS FOR DEVELOPMENT OF THE INVENTION

The economical energy transformer improved with this invention aims to receive a  
constant energy and fixing the voltage of this energy, increase the current value, in other  
15 words to produce more amount of energy than the received energy.

### GENERAL DESCRIPTION OF THE INVENTION

The key feature of the economical energy transformer improved with this invention is  
to receive the electric energy having constant voltage and current value and emit this energy  
with constant voltage but higher current value. This device can also feed the initial power  
20 supply.

The economical energy transformer improved with this invention has to receive  
energy from a power supply constantly. This mentioned energy can be easily generated from a  
small accumulator or chargeable battery or an inverter or a network or any similar power  
supply.

25 The economical energy transformer improved with this invention increasingly emits  
the energy that is received constantly.

### DESCRIPTION OF THE FIGURES

The figures prepared for a better explanation of the economical energy transformer  
improved with this invention are enclosed. Description of the figures is as follows;

30 Figure - 1 The view of circuit chart of the economical energy transformer

**DEFINITION OF THE COMPONENTS (PARTS-FEATURES) ON THE FIGURES**

The parts shown on the figures are numbered individually for a better explanation of the economical energy transformer improved with this invention. Explanation of each part (feature) numbered is given as follows;

- 5     1, 2 and 2A- Initial energy (Battery, inverter, city network, accumulator etc.. depending on the initial power supply.)
- 3- Power switch
- 4- Main Board
- 5- Capacitor
- 10    6- First filter
- 7- First bobbin
- 8- Second bobbin
- 9- Current Amplifier
- 10- Second filter
- 15    11- Frequency Adjuster
- 12- Stabilizer (phase)
- 13- Output (load)
- 14 and 15- Energy cables to feed the first circuit with the energy generated.

**DESACRIPTION OF THE INVENTION**

- 20     The economical energy transformer improved with this invention includes 4 main part inside;

First Part consists of an accumulator or chargeable battery, or an inverter or network or any other power supply (1, 2 and 2A) to provide the input energy to the system.

- 25     Second part consists of power switch (3), main board (4), capacitor (5), first filter (6), and first bobbin (7).

Third part consists of second bobbin (8), current amplifier (9), second filter (10), frequency adjuster (11) and stabilizer (phase) (12) and output (load) adjuster (13).

And the fourth part consists of the cables (14 and 15) which provide the energy generated to be transferred to the first part and by this way feeds the input power supply where necessary.

5 Second part is designed to transfer the electric energy -which is received from the independent power supply at the first part- and electro magnetic field -which is occurred at the first bobbin (7)- to the second bobbin (8).

An at the third part, due to the high magnetic field received from the first bobbin (7) there occurs a difference between the bobbins and this difference occurred between the second bobbin (8) and first bobbin (7) is increased by the current amplifier (9) at his part.

10 Through the energy cables (14 and 15) connected to the output (load) (13) of the economical energy transformer improved with this invention and feeding the first circuit, the device feeds itself by using some part of the energy it generated.

The present invention is designed as single phase and it is possible to increase the number of the phases at maximum 3 phase. It is possible to generate energy at any desired  
15 power value. Depending on the electric energy value (power), the capacities of the parts used in the device shall be increased symmetrically.

The energy to feed the system is received from an accumulator or chargeable battery, or an inverter or network or any other power supply (1, 2 and 2A). This energy input has a constant voltage and current value.

20 Opening the power switch (3), the user gives the electric energy received from the initial energy supply (1, 2, 2A) to the first second part. Being loaded with the electric energy received from the energy supply (1, 2, 2A) the capacitor (5) serves as a pump, and provides the main board (4) to give electric to the system.

Main Board (4) transfers the high amount of frequency it generated to the first filter  
25 (6). First filter (6) stabilizes the frequency received from the main board (4) and regularly transfers to the first bobbin (7).

Creating a magnetic field around itself with the high frequency regularly received from the first filter (6); first bobbin (7) transfers it to the second bobbin (8).

Subsequently, following the system, the high frequency passing from the first bobbin  
30 (7) passes to the current amplifier (9). Second filter (10) transfers the high frequency received to the high frequency adjuster (11). The energy emitted from this part passes to the stabilizer

(12) and the relevant unit stabilizes the received high frequency in accordance with the need and arranges without causing any harm to the parts at its exit. Some part of the energy generated by the device is used to feed the energy cables (14 and 15) feeding the first circuit and the power supply where this power supply is need to be recharged.

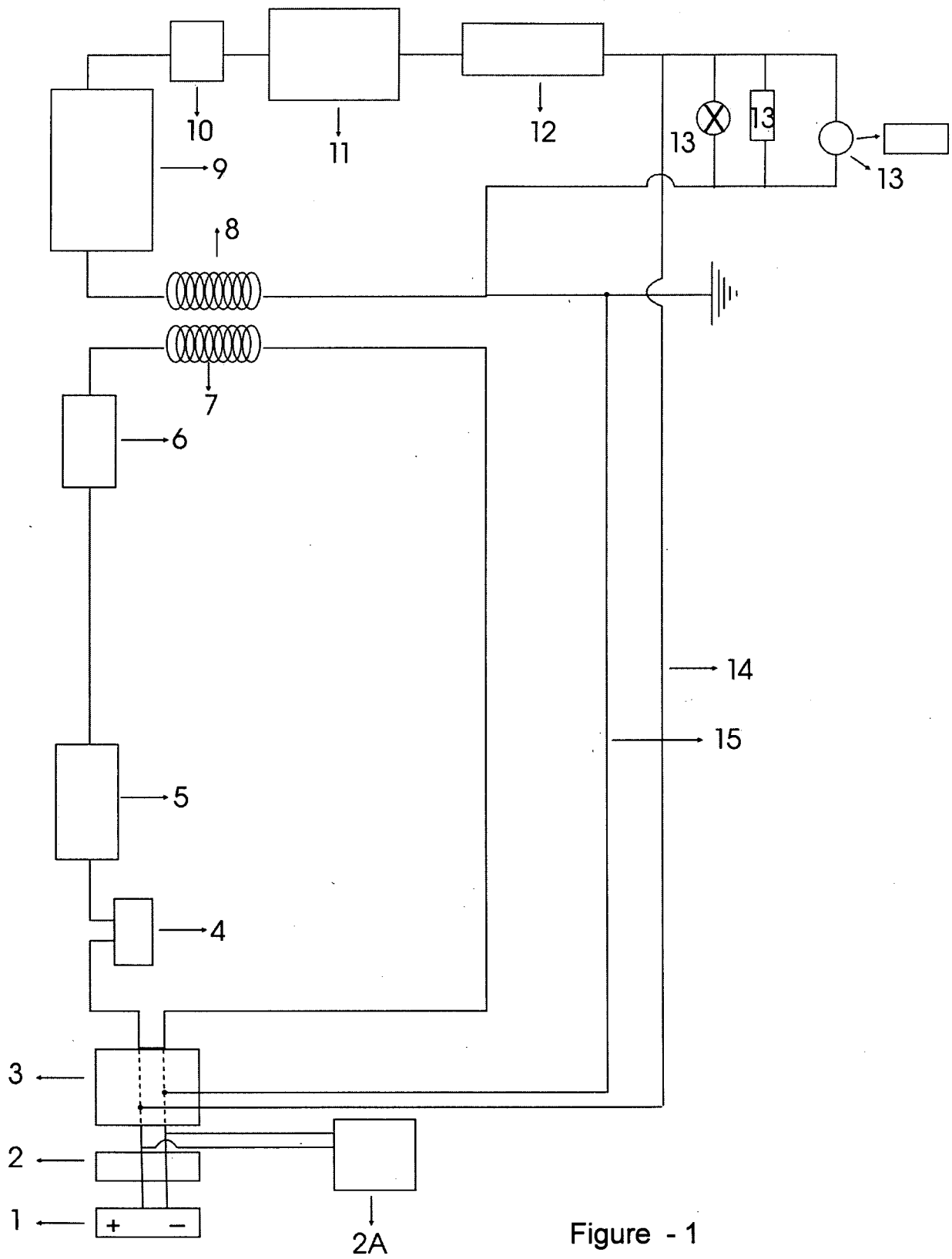
## CLAIMS

- 1- An economical energy transformer, starting to operate with the initial energy received from an independent energy device (1, 2, 2A), transferring the electro magnetic field occurred at the first bobbin (7) to second bobbin (8), rhythmically stabilizing the magnetic field occurred between the bobbins (7, 8) with the help of frequency stabilizer (9), afterwards increasing the initial energy via second bobbin (8), generating ready to use electric energy; comprising the following parts;
- First Part consists of an accumulator or chargeable battery, or an inverter or network or any other power supply (1, 2 and 2A) to provide the input energy to the system.
  - Second part consists of power switch (3), main board (4), capacitor (5), first filter (6), and first bobbin (7).
  - Third part consists of second bobbin (8), current amplifier (9), second filter (10), frequency adjuster (11) and stabilizer (phase) (12) and output (load) adjuster (13).
  - The cables (14 and 15) which provide the energy generated to be transferred to the first part and by this way feeds the input power supply where necessary.
- 2- An economic energy transformer as claimed in Claim 1 characterized by including power switch (3) to provide the transfer of the initial energy received from an accumulator or chargeable battery, or an inverter or network or any other power supply to the main board (4).
- 3- An economic energy transformer as claimed in Claim 1 characterized by including the main board (4) to transfer the energy occurred within itself to the capacitor (5).
- 4- An economic energy transformer as claimed in Claim 1 characterized by including a capacitor (5) to store and transfer the energy received from the main board (4) to the first filter.
- 5- An economic energy transformer as claimed in Claim 1 characterized by including the first filter (6) to filter the energy received from the capacitor (5) and transfer to the first bobbin (7).
- 6- An economic energy transformer as claimed in Claim 1 characterized by including the first bobbin (7) to transfer the electric received from the first filter (6) through the field occurred within inside to second bobbin (8).

- 7- An economic energy transformer as claimed in Claim 1 characterized by including the second bobbin (8) to order and transfer the high frequency received from the first bobbin (7) to the current amplifier box (9).
- 8- An economic energy transformer as claimed in Claim 1 characterized by including  
5 current amplifier box (9) to increase the energy received from the second bobbin (8) in accordance with the demand and transfer to the second filter (10).
- 9- An economic energy transformer as claimed in Claim 1 characterized by including second filter (10) to transfer the energy received from the current amplifier (9) to the frequency adjuster (11).
- 10 10- An economic energy transformer as claimed in Claim 1 characterized by including frequency adjuster (11) to stabilize the energy received from the second filter (10) in accordance with the needs to be used.
- 11- An economic energy transformer as claimed in Claim 1 characterized by including  
15 stabilizer (12) to stabilize the energy received from the frequency adjuster (11) in accordance with the need and maintains the energy to be ready to be used.
- 12- An economic energy transformer as claimed in Claim 1 characterized by including the cables (14 and 15) to provide the device to use the energy generated both for feeding itself and being used under load.
- 13- An economic energy transformer as claimed in Claim 1 characterized by including cables  
20 (14 and 15) which transfers some part of the energy generated by the device to feed the power supply (1, 2, 2A).



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# INTERNATIONAL SEARCH REPORT

International application No  
PCT/TR2007/000062

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. H02M11/00 H02N11/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
H02N H02K H02M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 758 159 A2 (NIPPON ELECTRIC CO [JP]) 12 February 1997 (1997-02-12) page 5, line 21 - page 6, line 39; figures 5,11	1-12
X	GEORGAKIS D ET AL: "Operation of a prototype nucrogrid system based on micro-sources equipped with fast-acting power electronics interfaces" POWER ELECTRONICS SPECIALISTS CONFERENCE, 2004. PESC 04. 2004 IEEE 35TH ANNUAL AACHEN, GERMANY 20-25 JUNE 2004, PISCATAWAY, NJ, USA, IEEE, US, 20 June 2004 (2004-06-20), pages 3521-3526, XP010739478 ISBN: 0-7803-8399-0 the whole document	1-12

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

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Name and mailing address of the ISA/

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## INTERNATIONAL SEARCH REPORT

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## C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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X	ANGRIST S W: "PERPETUAL MOTION MACHINES" SCIENTIFIC AMERICAN, SCIENTIFIC AMERICAN INC., NEW YORK, NY, US, vol. 218, no. 1, January 1968 (1968-01), pages 114-122, XP002036811 ISSN: 0036-8733 the whole document -----	1-14
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/TR2007/000062

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			US 5739622 A 14-04-1998
US 2003038612	A1	27-02-2003	NONE