

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 August 2008 (28.08.2008)

PCT

(10) International Publication Number
WO 2008/103130 A1

(51) International Patent Classification:
H02M 11/00 (2006.01) *H02N 11/00* (2006.01)

(21) International Application Number:
PCT/TR2007/000062

(22) International Filing Date: 3 July 2007 (03.07.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2007/01076 22 February 2007 (22.02.2007) TR

(71) Applicant (for all designated States except US): **TURK, Metin** [TR/TR]; Ayten Sokak 30/4 Mebusevleri, Tandoğan, 06510 Ankara (TR).

(71) Applicant and

(72) Inventor: **KAPANADZE, Taniel** [GE/GE]; Tzkalutubo Sokak, No:9, Tbilisi (GE).

(74) Agent: **YALCINER, Ugur, G. (YALCINER DANIS-MANLIK VE DIS TICARET LTD. STI.)**; Tunus Caddesi No:85/8, Kavaklıdere, 06680 Ankara (TR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,

[Continued on next page]

(54) Title: ENERGY TRANSFORMER

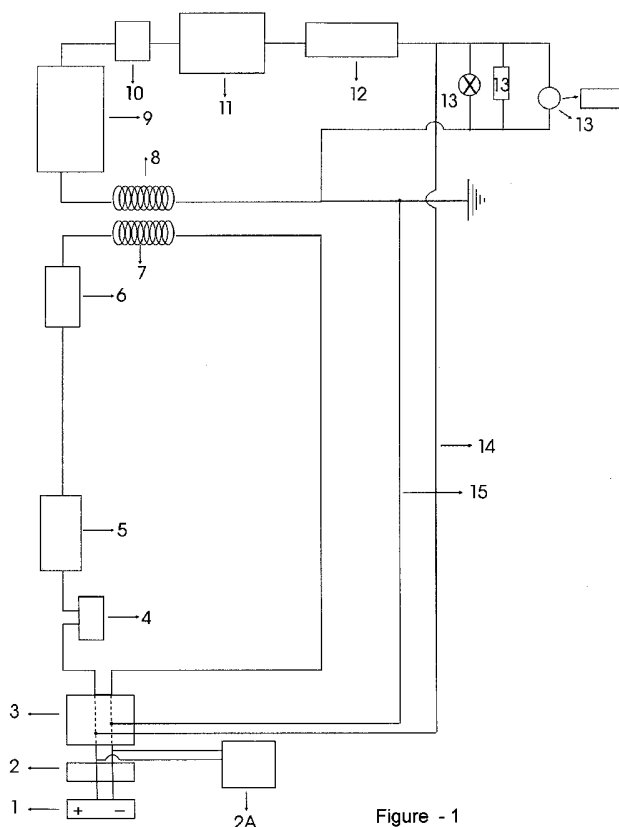


Figure - 1

(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).



PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

ENERGY TRANSFORMER

BACKGROUND OF THE INVENTION

5 The present invention is related with an economic energy transformer, which primes 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 words to produce more amount of energy than the received energy.

GENERAL DESCRIPTION OF THE INVENTION

20 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 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

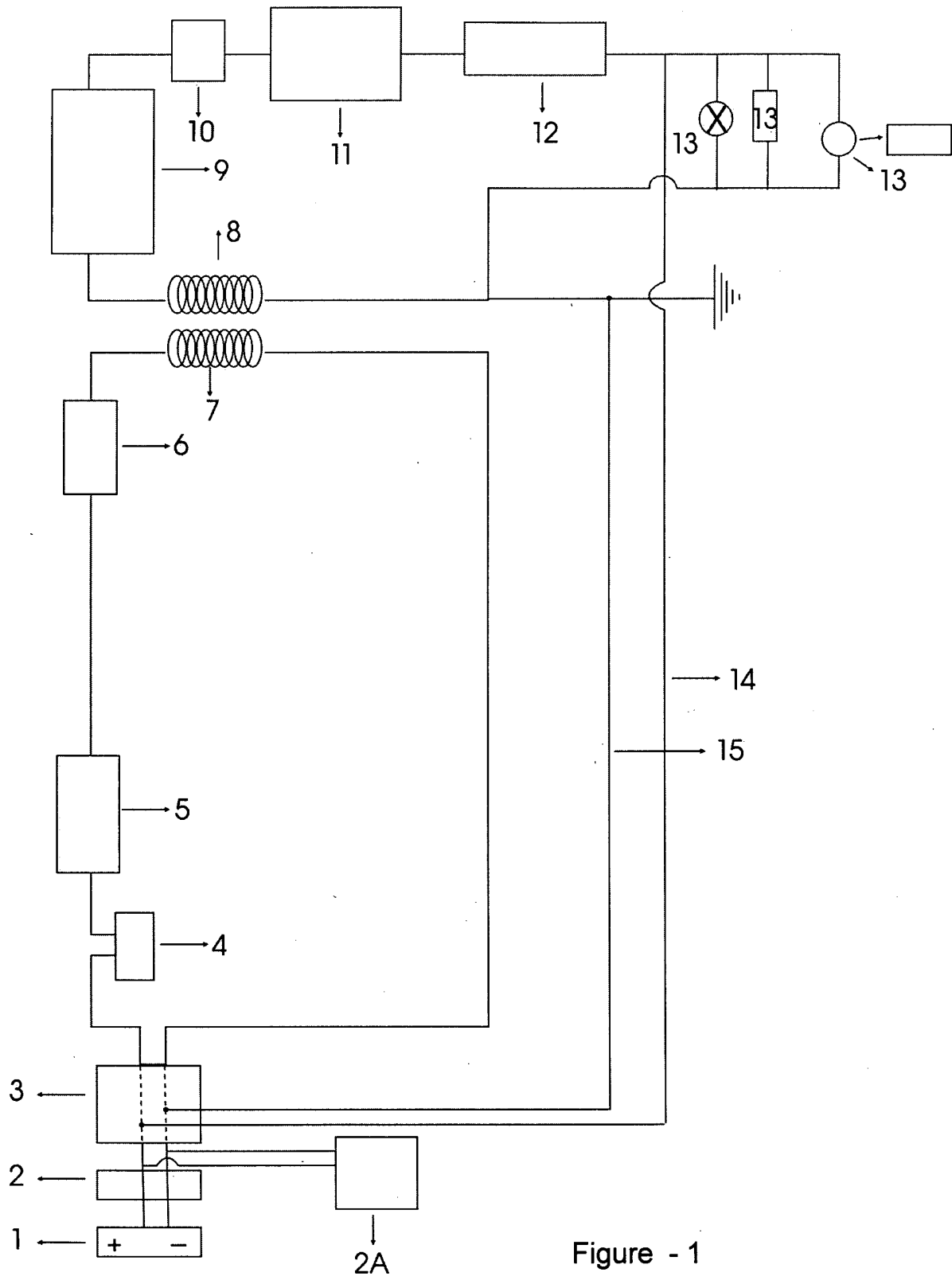
(12) and the relevant unit stabilizes the received high frequency in accordance with the need and arranges without causing any harm to the parts at its exit. Some part of the energy generated by the device is used to feed the energy cables (14 and 15) feeding the first circuit and the power supply where 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 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- 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 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 (14 and 15) which transfers some part of the energy generated by the device to feed the power supply (1, 2, 2A).

1 / 1



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.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *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

Date of the actual completion of the international search

2 November 2007

Date of mailing of the international search report

15/11/2007

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

von Rauch, Marianne

INTERNATIONAL SEARCH REPORT

International application No

PCT/TR2007/000062

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/038612 A1 (KUTKUT NASSER H [US]) 27 February 2003 (2003-02-27) page 4, paragraph 44 - page 6, paragraph 56 -----	1-12
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
X	BEDINI J C ED - INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS: "THE BEDINI FREE ENERGY GENERATOR" PROCEEDINGS OF THE INTERSOCIETY ENERGY CONVERSION ENGINEERING CONFERENCE (IECEC). BOSTON, AUG. 4 - 9, 1991, NEW YORK, IEEE, US, vol. VOL. 4 CONF. 26, 4 August 1991 (1991-08-04), pages 451-456, XP000312844 ISBN: 0-89448-163-0 the whole document -----	1-14

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/TR2007/000062

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0758159	A2	12-02-1997	DE 69620517 D1	16-05-2002
			DE 69620517 T2	07-11-2002
			US 5739622 A	14-04-1998
<hr/>				
US 2003038612	A1	27-02-2003	NONE	
<hr/>				