

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>P-07022</b>	<b>FOR FURTHER ACTION</b>	See Form PCT/PEA/416
International application No. <b>PCT/TR2007/000062</b>	International filing date ( <i>day/month/year</i> ) <b>03.07.2007</b>	Priority date ( <i>day/month/year</i> ) <b>22.02.2007</b>
International Patent Classification (IPC) or national classification and IPC <b>INV. H02M11/00</b>		
Applicant <b>Kapanadze, Tariel</b>		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>8</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> <i>sent to the applicant and to the International Bureau</i> a total of <u>6</u> sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I    Basis of the report</p> <p><input type="checkbox"/> Box No. II    Priority</p> <p><input checked="" type="checkbox"/> Box No. III    Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV    Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V    Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI    Certain documents cited</p> <p><input type="checkbox"/> Box No. VII    Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII    Certain observations on the international application</p>		
Date of submission of the demand  <b>2008-12-19</b>	Date of completion of this report  <b>29.05.2009</b>	
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Fax: +49 89 2399 - 4465	Authorized officer  <b>von Rauch, Marianne</b>  Telephone No. +49 89 2399-2291	



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/TR2007/000062

**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on
- the international application in the language in which it was filed
  - a translation of the international application into , which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3(a) and 23.1(b))
    - publication of the international application (under Rule 12.4(a))
    - international preliminary examination (under Rules 55.2(a) and/or 55.3(a))
2. With regard to the **elements\*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

**Description, Pages**

1-4 received on 22.12.2008 with letter of 19.12.2008

**Claims, Numbers**

1-13 received on 22.12.2008 with letter of 19.12.2008

**Drawings, Sheets**

1/1 as originally filed

- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3.  The amendments have resulted in the cancellation of:
- the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):
5.  This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 70.2 (e)).
6.  Supplementary international search report(s) from Authority(ies) have been received and taken into account in drawing up this report (Rule 45bis.8(b) and (c)).

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**Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

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1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

- the entire international application,
- claims Nos.

because:

- the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):
- the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 1-13 are so unclear that no meaningful opinion could be formed (*specify*):

**see separate sheet**

- the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed (*specify*).
- no international search report has been established for the said claims Nos.
- a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:
  - furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Preliminary Examining Authority in a form and manner acceptable to it.
  - furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Preliminary Examining Authority in a form and manner acceptable to it.
  - pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rules 13ter.1(a) or (b) and 13ter.2.
- a meaningful opinion could not be formed without the tables related to the sequence listings; the applicant did not, within the prescribed time limit, furnish such tables in electronic form complying with the technical requirements provided for in Annex C-bis of the Administrative Instructions, and such tables were not available to the International Preliminary Examining Authority in a form and manner acceptable to it.
- the tables related to the nucleotide and/or amino acid sequence listing, if in electronic form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.
- See separate sheet for further details

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/TR2007/000062

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	<u>1-13</u>
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	<u>1-13</u>
Industrial applicability (IA)	Yes: Claims	
	No: Claims	<u>1-13</u>

2. Citations and explanations (Rule 70.7):

see separate sheet

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

1 Reference is made to following documents:

- D1: EP-A2-0 758 159 (NIPPON ELECTRIC CO [JP]) 12 February 1997 (1997-02-12)
- D2: GEORGAKIS D ET AL: "Operation of a prototype Microgrid 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
- D3: US 2003/038612 A1 (KUTKUT NASSER H [US]) 27 February 2003 (2003-02-27)
- D4: 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
- D5: 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

**Re Items III and VIII**

**Reasoned statement with to the non examination of the claims due to mayor clarity problems (Art. 5, 6 PCT)**

2 The application as a whole does not meet the requirements of Article 5, PCT, moreover claims are not clear (Art. 6 and Rules 6 and 11.13(m), PCT).

The application documents are not sufficiently clear and complete, as required by Articles 5, to enable a skilled person to carry out the invention. The applicant seems to try to define a perpetuum mobile whereby electric energy is generated (with no known source):

- 2.1 The cables (14,15) should feed back electric energy from the second coil (8) to the first coil (7). Whereby a certain amount of electric energy is transmitted from first coil (7) to second coil (8) and part of this electricity flowing through the second coil (8) is used to drive a load (13). Due to the fed-back cables (14,15) the system (including: power switch 3, main board 4, capacitor 5, filter 6, coil 7, coil 8, current amplifier 9, filter 10, "frequency adjuster" 11, "stabilizer" 12) should be not only able to continue running and but also able to fed said load (13). Whereby the sum of all losses in the components and the amount of energy fed to said load (13) have to be generated somehow within the system. A skilled person knows only how to carry out inventions based on conservation of energy. Therefore, the disclosed system is working as a perpetuum mobile and is against Art. 5, PCT.
- 2.2 The same argumentation applies to the subject-matter defined in claims 8, 10-13. Concerning claim 8, a skilled person does not know how a current amplifier (9) could "increase energy". He knows that such an amplifier could increase the current while respecting the law of energy conservation ( $P=U \cdot I$ ). Concerning claim 10 and 11, a skilled person does not know what is meant by the expression "stabilize energy" and how a "frequency adjuster 11" and a "stabilizer 12" should work (Articles 5 and 6, PCT). Concerning claims 12 and 13, see explanation of energy generation in paragraph 2.1 (Art. 5, PCT).
- 2.3 The capacitor (5) is defined to be in series with the "main board (4)" and a first filter (6) and the first coil (7). Whereby the components (4,5,6,7) should have the same high frequency. The "high frequency could be only above than 60Hz or more than 3MHz, which is not clearly disclosed. Nevertheless a skilled person does not know how a capacitor being connected in series with a frequency generating component could generate electric energy ("give electric") to the system (cf. p.3, l.23). Therefore, Article 5 PCT is not fulfilled.
- 2.4 "Main board (4)" is not defined in the entire application and could therefore include any wiring on a circuit board. Therefore, this expression is unclear (Art. 6, PCT). On the other hand, it seems that the applicant wanted to define a kind of frequency generator (cf. page 3, line 24) which could create a "high frequency" out

of a DC- or AC-feeding (as 230V, 50Hz or 110V, 60Hz) or be able to cope with AC as well as with DC.

- 2.5 The expression "starting to operate with the initial energy received from the power supply (1, 2, 2a), transferring the electro-magnetic field occurred at the first coil (7) to the second coil (8), rhythmically stabilizing the (electro-) magnetic field occurred between the coils with help of the current amplifier (9), afterwards increasing the initial energy via the second coil (8), generating ready to use electric energy" makes claim 1 unclear. It is unclear if a device or a method (containing a first step and at least a second step introduced with "afterwards") is tried to define contrary to Rule 6, PCT;

The expression "rhythmically stabilizing the (electro-)magnetic field occurred between the coils" is unclear (Art.6, PCT). It seems as if the applicant wanted to define an AC waveform.

- 2.6 Claim 3 is defining that the main board (4) should transfer "energy occurred within itself" to the capacitor. It is highly unclear, how said main board works and how electric energy can occur. The intended limitations are therefore not clear, contrary to the requirements of Article 6, PCT.

It is clear from the description that box (4) should work as a kind of frequency generator; a frequency generator is generally known as a circuit creating an alternating current (AC) from a direct one (DC). Otherwise inverters (frequency changer) are known as electric components which are transforming a first AC with a first frequency to a second AC having a second frequency.

- 2.7 In claim 6, the expression "the first coil to transfer electric received from first filter through the field occurred within inside to second coil" is unclear and leaves the reader in doubt as to the meaning of the technical features to which it refers, thereby rendering the definition of the subject-matter of claim 6 unclear, Article 6, PCT.

It seems that the applicant wanted to define that the electric energy is transferred from the primary coil (7) to the secondary coil (8) of a coreless transformer in a known way.

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability**

- 3 The above-mentioned lack of clarity is that important that a complete examination does not seem to be possible.  
From what could be understood, it seems that the subject-matter of claims 1-13 does not involve an inventive step over the cited prior art (D1-D3).

**ECONOMICAL ENERGY TRANSFORMER (corrected)**

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**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 coils to other coil, rhythmically stabilizing the magnetic  
field between the coils with the help of amplifier immobilizes the energy voltage in both coils,  
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 coil

8- Second coil

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.

**DESCRIPTION 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 coil (7).

Third part consists of second coil (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 coil (7)- to the second coil (8).

An at the third part, due to the high magnetic field received from the first coil (7) there occurs a difference between the coils and this difference occurred between the second coil (8) and first coil (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.

15 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 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.

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

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

30 Subsequently, following the system, the high frequency passing from the first coil (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.

5

22. 12. 2008

## CLAIMS

(65)

- 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 coil (7) to second coil (8), rhythmically stabilizing the magnetic field occurred between the coils (7, 8) with the help of current amplifier (9), afterwards increasing the initial energy via second coil (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 coil (7).
  - Third part consists of second coil (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 coil (7).
- 6- An economic energy transformer as claimed in Claim 1 characterized by including the first coil (7) creating a magnetic field around itself with the high frequency regularly

received from the first filter (6) to transfer the electric received from the first filter (6) through the field occurred within inside to second coil (8).

- 5
- 7- An economic energy transformer as claimed in Claim 1 characterized by including the second coil (8) to order and transfer the high frequency received from the first coil (7) to the current amplifier (9).
- 8- An economic energy transformer as claimed in Claim 1 characterized by including current amplifier (9) to increase the energy received from the second coil (8) in accordance with the demand and transfer to the second filter (10).
- 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.
- 15
- 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.
- 20
- 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).
- 25