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Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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(54) Title: AN ELECTROMAGNETIC GENERATOR

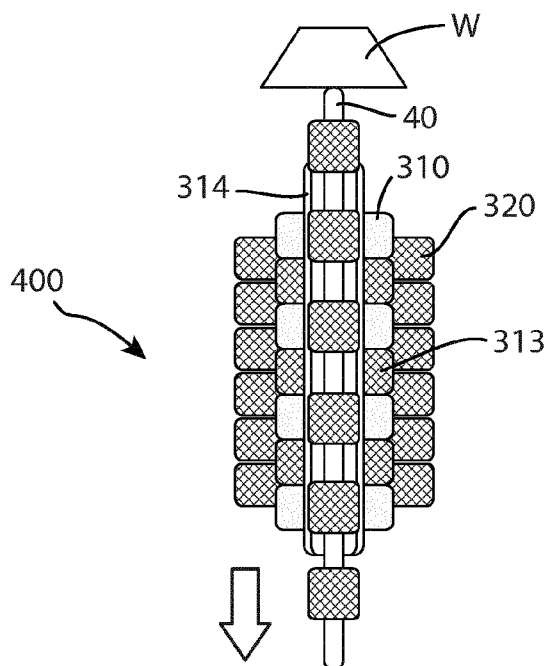


Fig. 2f

(57) Abstract: The present invention relates to an electromagnetic generator for generating electricity comprising: an exciter having a first magnetic flux, an electrical conductor operable to generate a second magnetic flux when moved relative to the first magnetic flux, means for causing relative motion between the first magnetic flux and the conductor such that the second magnetic flux generated at the conductor opposes the motion of the first magnetic flux relative to the conductor to simultaneously generate an electromotive force (EMF) and a potential energy that is stored in the second magnetic flux, means for controlling the relative motion between the first magnetic flux and the conductor so that the potential energy stored in the conductor is released by allowing the second magnetic flux to collapse unimpeded by the first magnetic flux, and means for converting the released potential energy to an electromotive force (EMF) across the conductor. The invention further relates to a transformer and to an electric motor.

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2015/057634

A. CLASSIFICATION OF SUBJECT MATTER

INV. H02K53/00 H02K35/02 H02K7/18 F03B17/04
ADD.

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)

H02K F03B

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 practicable, search terms used)

EPO-Internal , WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 2 503 677 A2 (YANG TAI -HER [TW]) 26 September 2012 (2012-09-26) figures 1-5 -----	1-27
A	US 2013/056984 A1 (TOSI LUIS PHI LLI PE [US]) 7 March 2013 (2013-03-07) paragraph [0020] ; figure 2 -----	1-17
A	CN 101 183 840 A (TIANCHI WEN [CN]) 21 May 2008 (2008-05-21) abstract; figures 1,2 -----	1-27
A	US 2010/219709 A1 (RAGHUPRASAD PUTHALATH KOROTH [US]) 2 September 2010 (2010-09-02) paragraph [0057] ; figures 12a-16 -----	1-27
A	CN 101 577 478 A (CHENGHUA ZHANG [CN]) 11 November 2009 (2009-11-11) page 9 -----	1-27



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 application or patent 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

5 October 2015

Date of mailing of the international search report

16/10/2015

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2015/057634

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: **28-33**
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/21Q

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos. : 28-33

The formulation of claims 28-33, which is contrary to Rule 6.2 (a) PCT, fails to comply with the requirements of the PCT to such an extent that no meaningful search for the subject-matter claimed can be carried out (Article 17(2) (b) in conjunction with Article 17(2) (a) (ii) PCT). No opinion needs to be given for these claims.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guidelines C-IV, 7.2), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2015/057634

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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