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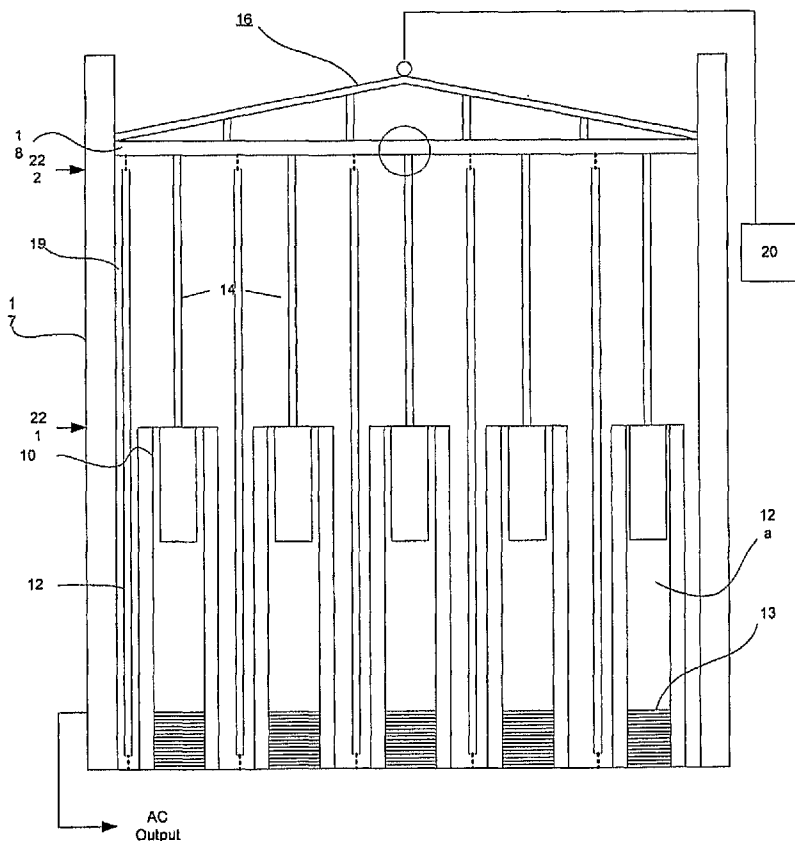
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[Continued on next page]

(54) Title: LINEAR GENERATOR



(57) Abstract: A linear generator which generates electric energy by reciprocal movement of magnets with inductive coils is provided. The linear generator has a plurality of elongate inductive coils, a plurality of magnets inserted into the respective inductive coils and slidable between two opposing ends of the inductive coils, a pulley assembly connected to top ends of the magnets, and an elevating motor generating and applying a lifting force to the magnets through the pulley assembly. The pulley assembly is operative to provide 1:N mechanical advantage, where N is preferably an even integer larger than 1. The pulley assembly is connected to the magnets by a plurality of rigid cables, rods, or strings, and a cable connected to the elevating motor is reeved through the pulley assembly, so as to exert a lifting force to the magnets via the pulleys.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - F02B 63/04 (2007.01)

USPC - 290/10

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)

IPC(8) - F02B 63/04 (2007.01)

USPC - 290/1R

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)

MicroPatent, IP.com, DialogPro

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	BAKER "Linear Generators for Direct Drive Marine Renewable Energy Converters" University of Durham 31 December 2003 (31.12.2003) entire document	1-14, 18-19, and 21-31 ----- 15-17, and 20
Y	US 6,354,224 B1 (DEVNANI et al) 12 March 2002 (12.03.2002) entire document	15-17, and 20

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"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

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