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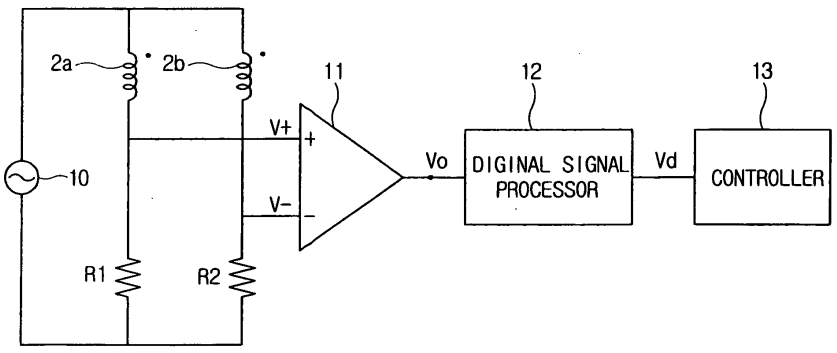
(54) Linear compressor and control method thereof

(57) Disclosed is a linear compressor having a core (4) combined to one end of a piston to detect a position of the piston reciprocally moving up and down. A first sensor coil (2a) and a second sensor coil (2b) detect the position of the core (4). The core has an upper core (4a) having a length shorter than one half of the length of the first sensor coil and a lower core (4b) having a length shorter than one half of the length of the second sensor coil in series. Also disclosed is a method of controlling the operation of the linear compressor including timing the upper core and the lower core driven by the piston through a stroke cycle, receiving the time and calculating a top dead center position based on the time or an offset value respectively, and controlling a piston stroke by varying the power driving the linear compressor according to the calculated top dead center or offset value.

FIG. 5



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EUROPEAN SEARCH REPORT

Application Number
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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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F04B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
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CATEGORY OF CITED DOCUMENTS

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