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(54) Title: ELECTRICAL CONTROL FOR A DOWNHOLE SYSTEM

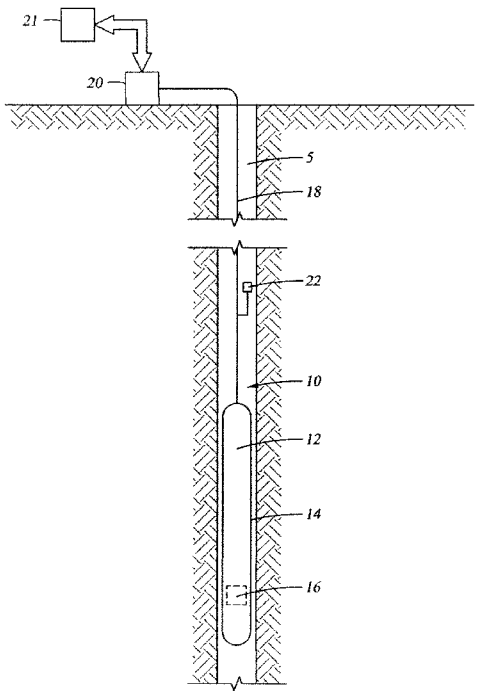

Fig. 1

(57) Abstract: A method for controlling the electrical power delivered to a downhole system. The downhole system may include a power supply, a downhole tool, and a wire or cable connecting the downhole tool to the power supply. A resistive load, such as a motor, is included with the downhole tool. The power supplied to the downhole tool is dynamically adjustable to match the resistive load voltage and power rating. Dynamically adjusting power is accomplished by varying voltage from the power supply, varying the resistive load requirements, or a combination of both.

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

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

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Korean utility models and applications for utility models
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(Chinese Patents and application for patent)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: control, adjust, electricity

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 7152680 B2 (Paul Wilson et al.) 26 December 2006 See the whole document.	1-21
A	US 4624136 A1 (DELATORRE; LEROY C. et al.) 25 November 1986 See the whole document.	1-21
A	US 6868901 B2 (GUY HARVEY MASON et al.) 22 March 2005 See the whole document.	1-21

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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