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[Continued on next page]

(54) Title: DOWNLINK WHILE PUMPS ARE OFF

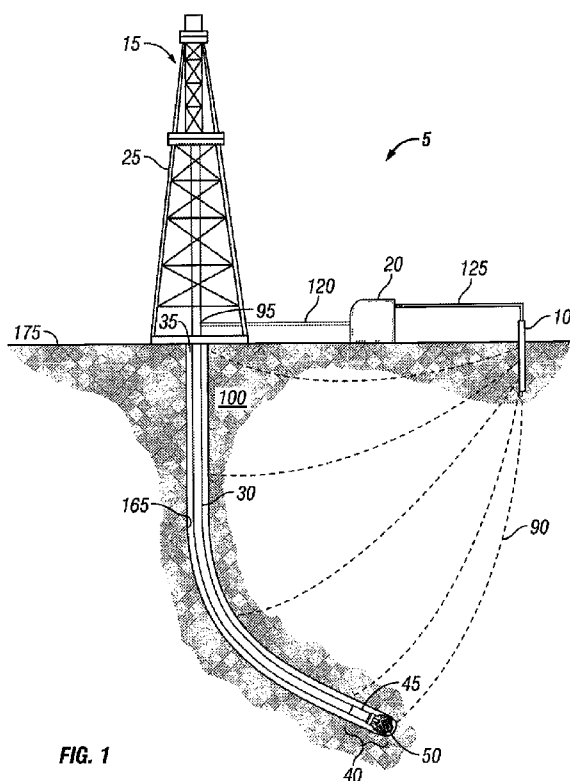


FIG. 1

(57) Abstract: A system and method for communicating with a downhole tool is disclosed. In one embodiment, a telemetry system for communicating with a downhole tool in a wellbore includes a first electrode. A modulated electric current flows from the first electrode through a formation to the downhole tool. The telemetry system also includes a downlink box, which provides the modulated electric current to the first electrode. The downhole tool comprises a sensor unit, which detects the modulated electric current. The telemetry system includes a second electrode that allows the modulated electric current to return to the downlink box. The telemetry system also includes an uplink telemetry, wherein the uplink telemetry does not comprise electromagnetic telemetry. In some embodiments, the downlink may be operated while mud pumps are turned off. The downlink may also be operated while the downhole tool is sending uplink telemetry by a method other than electromagnetic current.



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**A. CLASSIFICATION OF SUBJECT MATTER*****E21B 47/12(2006.01)i, G01V 3/34(2006.01)i***

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

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IPC E21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility Model and Applications for Utility Model since 1975 : IPC as above

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KOMPASS(KIPO internal) "Keywords : communication, link, current, voltage, electrode and similar terms"

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 06-260952 A (SEKIYU KODAN) 16. Sep. 1994 See pages 2-4 and figures 1-4	1-21
A	EP 0987401 A2 (CRYOTON LTD.) 22. Mar. 2000 See the abstract and figures 1-7	1-21
A	US 6105690 A (BIGLIN Jr., D. P. et al.) 22. Aug. 2000 See the abstract and figures 1-6	1-21
A	KR 10-2002-0085795 A (SCHLUMBERGER TECHNOLOGY BV) 16. Nov. 2002 See pages 3-6 and figures 1-8	1-21
A	JP 11-224395 A (OYO CORP. ) 17. Aug. 1999 See pages 2-3 and figures 1-4	1-21



Further documents are listed in the continuation of Box C.



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"&amp;" document member of the same patent family

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Information on patent family members

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