

Title (en)
TARGET-DIRECTED DRILLING ROD

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EP 0486750 A3 19921028 (DE)

Application
EP 91106101 A 19910417

Priority
DE 4037262 A 19901123

Abstract (en)
[origin: EP0486750A2] In the case of a target-directed drilling rod having at least one pair of inclination controllers for controlling hydraulic corrective drives, in which a measuring system establishes the controlled variable as angle of inclination of the target-directed drilling rod in a plane against the predetermined drilling axis in both directions and the control system converts the measured values into manipulated variables for the oppositely acting corrective drives arranged in the plane, the invention provides that, in the measuring system (31, 32), the inclination sensor (29, 30) is designed as an accelerometer, which delivers a permanent, electronic measuring signal to a filter (33), which suppresses the oscillations of the target-directed drilling rod and supplies the controlled variable, which has been corrected by the temperature-dependent offset drift of the inclination sensor (29, 30) and passes via a signal amplifier (34) to a window discriminator (35), which emits the controlled variable through a control window, designed according to angular minutes of the inclination and as a three-step controller, to power output stages (36, 37), which pass on electrical manipulated variables to solenoid valves (38, 39). <IMAGE>

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IPC 8 full level
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CPC (source: EP)
E21B 7/062 (2013.01); **E21B 47/022** (2013.01)

Citation (search report)
• [AD] DE 3000239 A1 19810716 - BERGWERKSVERBAND GMBH [DE]
• [A] DE 3325962 A1 19850131 - BERGWERKSVERBAND GMBH [DE], et al
• [A] US 3870101 A 19750311 - HELMUS SYDNEY S
• [A] ELEKTROTECHNIK. Bd. 53, Nr. 1/2, 20. Januar 1971, WURZBURG DE Seiten 18 - 21; KÜNZEL: 'Regelkreise mit Zweipunktreglern'
• [A] BBC-NACHRICHTEN Bd. 55, Nr. 1/2, 1973, MANNHEIM Seiten 3 - 9; ROSENBERG: 'Schaltende Regler'

Cited by
CN114233194A; GB2478634A; GB2478634B

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