

Title (en)

BORING APPARATUS, PARTICULARLY GALLERY BORING APPARATUS, AND PROCESS FOR CONTROLLING BORING APPARATUSES

Publication

EP 0064969 B1 19851106 (DE)

Application

EP 82890065 A 19820505

Priority

AT 202781 A 19810507

Abstract (en)

[origin: EP0064969A2] 1. Drilling apparatus, in particular drift drilling apparatus, in which the position of the arm parts or the parts of the drill mounting can be altered and set by means of cylinders which are controlled via electrical valves and which can be acted upon by pressure medium, electrical position sensors (3a, 4a) being provided at the connection points, in particular joints (3, 4) of the parts, characterised in that at the connection points, in particular at the joints (5, 6), of a model (2) which corresponds in its function to the arm of the drilling apparatus (1), there are arranged electrical position sensors (5a, 6a), preferably electrical rotary and/or slide resistance sensors, which determine the position of the arm parts or the parts of the drill mounting, and which are connected via at least one comparator or compensating circuit (12), preferably a bridge circuit, to preferably similarly designed electrical position sensors (3a, 4a) which are arranged at the connection points, in particular joints (3, 4), analogous to the model, of the arm parts or parts of the drill mounting (1), and when the position of the parts of the model is altered, the electrical valves (9, 10) can be acted upon by means of the comparator circuit (12) in each case by pressure medium to control the cylinders (7, 8), preferably in succession, until measured variables, preferably resistance values, which are identical to the measured variables determined by the position sensors (5a, 6a) of the model (2), are obtained at all position sensors (3a, 4a), preferably rotary and/or slide resistance sensors, arranged at the connection points, preferably joints (3, 4), of the drilling apparatus (1).

IPC 1-7

E21C 11/00

IPC 8 full level

E21B 15/04 (2006.01)

CPC (source: EP)

E21B 15/006 (2013.01)

Citation (examination)

AT 286209 B 19701125 - ATLAS COPCO AB [SE]

Cited by

CN108331526A; AT388415B

Designated contracting state (EPC)

CH DE FR GB LI SE

DOCDB simple family (publication)

EP 0064969 A2 19821117; EP 0064969 A3 19830504; EP 0064969 B1 19851106; AT 375148 B 19840710; AT A202781 A 19831115; DE 3267251 D1 19851212

DOCDB simple family (application)

EP 82890065 A 19820505; AT 202781 A 19810507; DE 3267251 T 19820505