Title (en)

METHOD FOR THE MEASUREMENT OF HYDROSTATIC AND GAS PRESSURE IN A SEALED BORE HOLE

Publication

EP 0184013 B1 19900207 (DE)

Application

EP 85114119 A 19851106

Priority

CH 555684 A 19841121

Abstract (en)

[origin: US4643024A] A measuring tube is inserted into a bore hole for measuring underground fluid pressure and is sealed against the bore hole wall for limiting the areas or regions in which the pressure measurement is to occur. A measuring cell is inserted into the measuring tube wall in each of these areas or regions and includes a mobile pressure sensing element against which acts the pressure of the medium surrounding the measuring tube. An end of the pressure sensing element projects into the inner space of the measuring tube and, for measurement, a measuring wheel of a measuring probe is brought into position underneath the end of the pressure sensing element such that the latter is moved radially outwards against the pressure exerted on it. The force which thus acts on the measuring wheel is determined by a measuring device for measuring the pressure. The medium to be measured does not enter or leak into the measuring tube since the measuring cell is sealingly inserted into the measuring tube. The measuring wheel is brought very accurately into the measuring position by the rotation of a central portion of the measuring probe relative to the end portions, which are guided on wheels, and the movement of the probe until it makes contact with stops. This is a prerequisite for high precision pressure measurement.

IPC 1-7

E21B 33/124; E21B 34/14; E21B 47/06

IPC 8 full level

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CPC (source: EP US)

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