

Title (en)

DEVICE WITH CAPACITIVE ELECTRODES FOR MEASURING SUBSURFACE ELECTRIC CHARACTERISTICS

Title (de)

VORRICHTUNG ZUM MESSEN VON UNTERIRDISCHEN ELEKTRISCHEN CHARAKTERISTIKEN MIT KAPAZITIVEN ELEKTRODEN

Title (fr)

DISPOSITIF DE MESURE DES CARACTERISTIQUES ELECTRIQUES DANS LE SOUS-SOL A ELECTRODES CAPACITIVES

Publication

EP 1103008 A1 20010530 (FR)

Application

EP 99936711 A 19990809

Priority

- FR 9901958 W 19990809
- FR 9810198 A 19980807

Abstract (en)

[origin: FR2782170A1] The invention concerns a electrical prospecting device in a borehole with capacitive electrodes comprising at least two injection electrodes (16, 20), at least two measuring electrodes (28, 34) and a current generator (22) for applying an electric current between the two injection electrodes. The current generator (22) delivers an alternating current whereof the frequency ranges from 5 kHz to 100 kHz under a voltage less than 1000 volts. At least one of the measuring or injection electrodes (16, 28) is arranged in a borehole (12, 14) and has an electricity conducting cylindrical outer surface. The device further comprises means (24) for measuring the intensity of the current passing through said injection electrodes, means for measuring the difference of potential between the two measuring electrodes (36, 36b), and means for processing the intensity measurements and the potential difference to deduce therefrom the characteristics of the subsurface where the borehole is located.

IPC 1-7

G01V 3/24

IPC 8 full level

G01V 3/06 (2006.01); **G01V 3/24** (2006.01)

CPC (source: EP US)

G01V 3/24 (2013.01 - EP US)

Citation (search report)

See references of WO 0008492A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

FR 2782170 A1 20000211; **FR 2782170 B1 20001110**; AU 5170799 A 20000228; AU 770988 B2 20040311; CA 2346911 A1 20000217; EP 1103008 A1 20010530; JP 2002522775 A 20020723; US 6731114 B1 20040504; WO 0008492 A1 20000217

DOCDB simple family (application)

FR 9810198 A 19980807; AU 5170799 A 19990809; CA 2346911 A 19990809; EP 99936711 A 19990809; FR 9901958 W 19990809; JP 2000564071 A 19990809; US 76213601 A 20010131