

Title (en)

METHOD FOR PROCESSING GEOREFERENCED ELECTRICAL RESISTIVITY MEASUREMENTS FOR THE REAL-TIME ELECTRICAL MAPPING OF SOIL

Title (de)

VERFAHREN ZUR VERARBEITUNG DER GEOREFERENZIERTEN, ELEKTRISCHEN WIDERSTANDSMESSUNGEN FÜR DIE ELEKTRISCHE KARTIERUNG VON BÖDEN IN ECHTZEIT

Title (fr)

METHODE DE TRAITEMENT DES MESURES DE RESISTIVITE ELECTRIQUE GEOREFERENCEES POUR LA CARTOGRAPHIE ELECTRIQUE DES SOLS EN TEMPS REEL

Publication

**EP 1360526 A1 20031112 (FR)**

Application

**EP 02701409 A 20020206**

Priority

- FR 0200465 W 20020206
- FR 0101655 A 20010207

Abstract (en)

[origin: FR2820509A1] The invention relates to a method for the georeferenced measuring of electrical resistivity for the electrical mapping of soil. The area of soil to be mapped is divided up into a fine network of points. According to the invention, measuring means are used to obtain n parameters (n being at least equal to 3) characterising the electrical resistivity at a given point at n different depths. In addition, an absolute position measurement and k relative displacement measurements are obtained using positioning means for a number k of points measured. The three measurements obtained are subsequently sent to a microcontroller which synchronises the acquisitions. The data sent by the microcontroller are digitally processed in real time on a computer. Furthermore, two different display windows are used to view, simultaneously and in real time, a profile showing the sequential variations for a given depth in the resistivity of the soil across the area studied and a map showing the position of the measuring means. The invention is suitable for use in precision farming and for prospecting archaeological sites.

IPC 1-7

**G01V 3/38**

IPC 8 full level

**A01B 79/00** (2006.01); **G01V 3/38** (2006.01)

CPC (source: EP US)

**A01B 79/005** (2013.01 - EP US); **G01V 3/38** (2013.01 - EP US); **Y02A 40/10** (2017.12 - EP US)

Citation (search report)

See references of WO 02063344A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**FR 2820509 A1 20020809**; **FR 2820509 B1 20040514**; CA 2437625 A1 20020815; EP 1360526 A1 20031112; US 2004158403 A1 20040812; WO 02063344 A1 20020815

DOCDB simple family (application)

**FR 0101655 A 20010207**; CA 2437625 A 20020206; EP 02701409 A 20020206; FR 0200465 W 20020206; US 47026904 A 20040331