

Title (en)
METHOD AND DEVICE FOR DETERMINING THE WATER CONTENT AND CONDUCTIVITY IN THE GROUND AND IN BULK MATERIALS

Title (de)
VERFAHREN UND VORRICHTUNG ZUR BESTIMMUNG DES WASSERGEHALTS UND DER LEITF HIGKEIT IN B DEN UND SCH TTG TERN

Title (fr)
PROCEDE ET DISPOSITIF POUR DETERMINER LA TENEUR EN EAU ET LA CONDUCTIVITE DANS DES SOLS ET DANS DES PRODUITS EN VRAC

Publication
EP 1565735 A1 20050824 (DE)

Application
EP 03772275 A 20031030

Priority

- DE 10256064 A 20021130
- EP 0312040 W 20031030

Abstract (en)
[origin: WO2004051248A1] The invention relates to a method and device for determining the water content and conductivity in the ground and in bulk materials. The aim is to disclose a method for the above, characterised by little technical complexity. Said aim is achieved with a method comprising an introduction of a capacitive sensor (4) into the ground or the bulk material, charging the sensor with a constant external voltage supply with a given initial current from a given first voltage threshold value to a given second voltage value and either determination of a voltage/time diagram, or measurement of the first charging time between both voltage threshold values necessary for the above and charging the sensor with the constant external voltage supply for determination of a second charging time, whereby either the initial current and/or at least one of the both voltage threshold values are altered and a determination of the water content and the conductivity by verification of the both charging times or of the voltage/time diagram.

IPC 1-7
G01N 27/22; G01N 33/24

IPC 8 full level
G01N 27/22 (2006.01); G01N 33/24 (2006.01); G01R 27/26 (2006.01)

CPC (source: EP US)
G01N 27/223 (2013.01 - EP US); G01N 33/246 (2013.01 - EP US)

Citation (search report)
See references of WO 2004051248A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2004051248 A1 20040617; AU 2003279330 A1 20040623; DE 10256064 A1 20040617; DE 10256064 B4 20041028;
EP 1565735 A1 20050824; US 2005212532 A1 20050929; US 7126352 B2 20061024

DOCDB simple family (application)
EP 0312040 W 20031030; AU 2003279330 A 20031030; DE 10256064 A 20021130; EP 03772275 A 20031030; US 13578005 A 20050524