

Title (en)

METHOD AND PUMPING OUT MEANS FOR IMPROVING THE SUPPLY OF WATER TO A SOURCE OR A WATER PROCUREMENT WELL

Title (de)

VERFAHREN UND ABPUMPMITTEL ZUR VERBESSERUNG DER WASSERZUFUHR ZU EINER QUELLE ODER EINEM
WASSERGEWINNUNGSBRUNNEN

Title (fr)

PROCEDE ET MOYENS DE POMPAGE POUR AMELIORER L'ADDUCTION D'EAU VERS UNE SOURCE OU UN PUITS D'EAU

Publication

EP 1327053 B1 20051214 (DE)

Application

EP 01988816 A 20011009

Priority

- EP 0111671 W 20011009
- NL 1016358 A 20001009

Abstract (en)

[origin: WO0235061A2] The invention relates to a method for improving the supply of water from a layer in the earth to a source which is located in the ground or a well, especially a water procurement well, said source or well consisting of a drill hole extending as far as the above-mentioned earth layer or groundwater. The well or part of the well is initially sealed by cutting off means which include an inflow pipe, whereby the lower part of the well is sealed in an airtight manner in an upward direction and can be pressurized by supplying a gas, liquid or a solid. According to the invention, the well is initially filled with gaseous carbon dioxide below the outflow opening of the inflow pipe. The carbon dioxide is subsequently guided through the inflow pipe, whereby the water located close to the end of the pipe and the earth layer is frozen at a specific distance from the outflow opening of the pipe. After a specific time period during which the well re-thaws, the fine particles of the deposits which are dissolved as a result of the inventive method are removed from the well, along with the pump water, with the aid of the pumping out means.

IPC 1-7

E21B 43/25

IPC 8 full level

E21B 36/00 (2006.01); **E21B 37/08** (2006.01); **E21B 43/25** (2006.01)

CPC (source: EP)

E21B 36/001 (2013.01); **E21B 37/08** (2013.01); **E21B 43/255** (2013.01)

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)

WO 0235061 A2 20020502; WO 0235061 A3 20020906; AT E313002 T1 20051215; AU 2060602 A 20020506; DE 50108403 D1 20060119;
EP 1327053 A2 20030716; EP 1327053 B1 20051214; NL 1016358 C2 20020416

DOCDB simple family (application)

EP 0111671 W 20011009; AT 01988816 T 20011009; AU 2060602 A 20011009; DE 50108403 T 20011009; EP 01988816 A 20011009;
NL 1016358 A 20001009