

Title (en)

A method for the reconstruction of wells through the removal of the old casing by using a single reverse-circulation perforation and relative device

Title (de)

Verfahren zur Rekonstruktion von Brunnen durch Entfernung der alten Verkleidung mittels einer einzigen Gegenstromperforation und zugehörige Vorrichtung

Title (fr)

Procédé de reconstruction de puits par le retrait de l'ancien bâti par une perforation unique en circulation inverse et dispositif correspondant

Publication

EP 2378055 A1 20111019 (EN)

Application

EP 10425119 A 20100414

Priority

EP 10425119 A 20100414

Abstract (en)

The present invention refers to an innovative method for the maintenance/reconstruction of a well (1) through only one fluid reverse-circulation perforation and the relative device. In accordance with the method, a drilling device (3) is arranged on a well driller machine (20) comprising a perforating tube (4) provided with one or more cutting utensils (6, 6'). The perforation of the ground is then carried out in such a way as to dig a circular crown (11) substantially concentric to the well. At the same time, the descending of a delivery flow by gravity into the circular crown (11) in formation takes place with the contemporary aspiration along the tube (4) in such a way as to aspirate all the detritus existing around the old pipeline. The cutting utensils are arranged in such a way that, during all the perforation, the circular crown dug has such a diameter D as to entirely contain inside it the aggregate material (16, 17) arranged around the old well casing. It is therefore possible to realize in this way the perforation in a single sinking.

IPC 8 full level

E21B 7/20 (2006.01); **E21B 7/28** (2006.01); **E21B 10/02** (2006.01)

CPC (source: EP)

E21B 7/20 (2013.01); **E21B 7/28** (2013.01); **E21B 10/02** (2013.01)

Citation (search report)

- [X] JP 2004132035 A 20040430 - JUKANKYO SEKKEISHITSU KK
- [Y] US 5823275 A 19981020 - KU CHUN-YI [TW], et al
- [Y] US 2827264 A 19580318 - SITTON HUGH W, et al
- [A] US 3169590 A 19650216 - THATCHER ORRIN C
- [A] FR 2504168 A1 19821022 - FONDEDILE SPA [IT]
- [A] US 3217816 A 19651116 - BOYER LOUIS B
- [A] US 3910361 A 19751007 - HASEWEND FLORIAN

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA ME RS

DOCDB simple family (publication)

EP 2378055 A1 20111019

DOCDB simple family (application)

EP 10425119 A 20100414