

Title (en)

METHOD AND APPARATUS FOR SEALING A WELL

Title (de)

VERFAHREN UND VORRICHTUNG ZUM VERSCHLIESSEN EINES ERDBOHRLOCHS

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR FERMER UN TROU DE FORAGE DANS LE SOL

Publication

**EP 2635767 B1 20140903 (DE)**

Application

**EP 11776713 A 20111028**

Priority

- DE 102010050368 A 20101103
- EP 2011005459 W 20111028

Abstract (en)

[origin: CA2816761A1] The invention relates to a method and an apparatus for sealing a well (1). An extensible sealing member (6) is introduced into the well, and the diameter thereof is extended for sealing purposes. According to the invention, the sealing member is guided at least in part out of the lower end of the well and is extended in the underground chamber (3) below the well, and an axial sealing face (13) of the sealing member is guided from below against the ceiling (12) of the underground chamber, said ceiling (12) surrounding the well. To this end, the sealing member of the disclosed apparatus has an axial sealing face in an extensible section, the diameter of said sealing face being significantly larger than the diameter of the well in the extended state of the sealing member. A reversible feeding drive is provided in order to be able to pull back the sealing member after extending the same in the underground chamber and pull the axial sealing face of the sealing member against the ceiling of the chamber. The fact that the well is sealed from below and the sealing member is supported on the ceiling of the chamber eliminates the risk of leaks caused by blowouts in the well and solves the problem of axially securing the sealing member. In addition, the sealing force and pressure causing the sealing seat automatically increase as the pressure in the underground chamber rises since the liquid and/or gas pressure in the underground chamber is/are used to press the sealing member sitting over the lower mouth of the well against the ceiling of the chamber.

IPC 8 full level

**E21B 33/12** (2006.01); **E21B 33/136** (2006.01)

CPC (source: EP US)

**E21B 4/18** (2013.01 - EP US); **E21B 33/1208** (2013.01 - EP US); **E21B 33/13** (2013.01 - US); **E21B 33/136** (2013.01 - EP US)

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

**DE 102010050368 A1 20120503**; CA 2816761 A1 20120510; EP 2635767 A2 20130911; EP 2635767 B1 20140903; RU 2013125474 A 20141210; US 2013269939 A1 20131017; WO 2012059202 A2 20120510; WO 2012059202 A3 20130328

DOCDB simple family (application)

**DE 102010050368 A 20101103**; CA 2816761 A 20111028; EP 11776713 A 20111028; EP 2011005459 W 20111028; RU 2013125474 A 20111028; US 201113882549 A 20111028