

Title (en)

A HORIZONTAL DIRECTIONAL DRILLING SYSTEM

Title (de)

HORIZONTALES DIREKTIONALES BOHRSYSTEM

Title (fr)

SYSTÈME DE FORAGE DIRECTIONNEL HORIZONTAL

Publication

**EP 2247814 A1 20101110 (EN)**

Application

**EP 09717703 A 20090306**

Priority

- SE 2009050240 W 20090306
- SE 0800545 A 20080307

Abstract (en)

[origin: WO2009110847A1] The invention relates to a horizontal directional drilling system, comprising a dual string (1), said dual string (1) comprising an inner string (2), and an outer string (3), said inner string (2) is rotatable independently of said outer string (3), a first rotary drive system (4) to drive said inner string (2), a second rotary drive system (5) to drive said outer string (3), a frame (11) to movably support said rotary drive systems (4, 5), a front casing (7) fitted to a distal end of said outer string (3), a drive shaft (8) coaxially positioned into said front casing (7) and connected with said inner string (2) and a hammer (9) connected to said front casing (7) and operable in response to rotation of said drive shaft (8), said hammer (9) comprising a drill head (90) and a drill bit (91) wherein said drill head (90) generating percussive energy using pressurized fluid, e.g. pressurized air, supplied through an annular passage between said outer string (3) and said inner string (2).

IPC 8 full level

**E21B 7/04** (2006.01); **E21B 4/14** (2006.01)

CPC (source: EP SE US)

**E21B 4/14** (2013.01 - EP SE US); **E21B 7/002** (2013.01 - EP US); **E21B 7/046** (2013.01 - EP SE US); **E21B 17/18** (2013.01 - EP US)

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 TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**WO 2009110847 A1 20090911**; CA 2716909 A1 20090911; EP 2247814 A1 20101110; SE 0800545 L 20090908; SE 532841 C2 20100420; US 2011005838 A1 20110113

DOCDB simple family (application)

**SE 2009050240 W 20090306**; CA 2716909 A 20090306; EP 09717703 A 20090306; SE 0800545 A 20080307; US 91950009 A 20090306