

Title (en)

FIXED CUTTER DRILL BIT HAVING ROLLING CUTTERS

Title (de)

SCHNEIDBOHRMEISSEL MIT FESTEN SCHNEIDELEMENTEN UND ROLLENSCHNEIDERN

Title (fr)

TRÉPAN À ÉLÉMENTS DE COUPE FIXES PRÉSENTANT DES COUTEAUX ROTATIFS

Publication

**EP 3282084 A1 20180214 (EN)**

Application

**EP 16306042 A 20160809**

Priority

EP 16306042 A 20160809

Abstract (en)

A bit for drilling a wellbore includes: a shank (3) having a coupling formed at an upper end thereof; a bit body (2) mounted to a lower end of the shank; a gage section (5) forming an outer portion of the drill bit; and a cutting face (4) forming a lower end of the drill bit. The cutting face (4) includes: a plurality of blades (7p, 7s) protruding from the bit body, each blade extending from a center of the cutting face to the gage section; a plurality of shear cutters (8a, 8b) mounted along each blade; and a plurality of rolling cutters (9). Each rolling cutter includes: a housing (13) mounted to a respective blade; a seat (14) mounted in the housing; and a ball (12) kept between the housing and the seat and having a portion protruding from the housing.

IPC 8 full level

**E21B 10/43 (2006.01)**

CPC (source: EP US)

**E21B 10/43 (2013.01 - EP US)**

Citation (applicant)

- US 6935441 B2 20050830 - DYKSTRA MARK W [US], et al
- US 8794356 B2 20140805 - LYONS NICHOLAS J [US], et al

Citation (search report)

[A] EP 3000959 A1 20160330 - SHEAR BITS LTD [CA]

Cited by

US10844667B2

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3282084 A1 20180214; EP 3282084 B1 20190710; WO 2018029130 A1 20180215**

DOCDB simple family (application)

**EP 16306042 A 20160809; EP 2017069897 W 20170807**