

Title (en)

Multidirectional wellbore penetration system and methods of use

Title (de)

Multidirektionales Bohrlocheindringssystem und Verwendungsverfahren

Title (fr)

Système de pénétration de forage multidirectionnel et procédés d'utilisation

Publication

**EP 2682561 A2 20140108 (EN)**

Application

**EP 13175427 A 20130705**

Priority

US 201261668713 P 20120706

Abstract (en)

A drilling assembly (100) includes a hydraulic jet (102) disposed on a downhole end of a fluid line (108), and one or more adjustable jet nozzles (104, 106) on the hydraulic jet (102) in multiple angular orientations relative to a central axis of the hydraulic jet (102). The one or more adjustable jet nozzles (104, 106) provide fluid pressure to penetrate a formation (5) and cut one or more angular channels (12).

IPC 8 full level

**E21B 7/18** (2006.01)

CPC (source: EP US)

**E21B 7/065** (2013.01 - US); **E21B 7/18** (2013.01 - EP US); **E21B 29/002** (2013.01 - US)

Cited by

CN104863506A

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 2682561 A2 20140108**; EA 201300677 A1 20140331; US 2014008129 A1 20140109

DOCDB simple family (application)

**EP 13175427 A 20130705**; EA 201300677 A 20130705; US 201313935618 A 20130705