

Title (en)
Systems and Methods for Directional Pulsed Electric Drilling

Title (de)
Systeme und Verfahren für direktionales Impuls-Elektrobohren

Title (fr)
Systèmes et procédés de forage électrique pulsé directionnel

Publication
EP 2554778 A2 20130206 (EN)

Application
EP 12179100 A 20120802

Priority
US 201161514304 P 20110802

Abstract (en)
Pulsed-electric drilling systems can be augmented with a steering mechanism that shifts at least a portion of a bit relative to a borehole centerline. Illustrative mechanisms include ball-and-socket joints(82), pivot-and-hinge joints, rotary steerable systems, and bent subs. As the bit (26) detaches formation material using electric pulses, the detached material being flushed away by a flow of drilling fluid, the shifting of the bit from the centerline causes the borehole to turn in the direction of the bit.

IPC 8 full level
E21B 7/06 (2006.01); **E21B 7/15** (2006.01)

CPC (source: EP US)
E21B 7/067 (2013.01 - EP US); **E21B 7/15** (2013.01 - EP US)

Citation (applicant)
• US 4741405 A 19880503 - MOENY WILLIAM M [US], et al
• WO 2008003092 A2 20080103 - TETRA CORP [US], et al
• WO 2010027866 A2 20100311 - TETRA CORP [US], et al

Cited by
US9181754B2; US10539012B2

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 2554778 A2 20130206; **EP 2554778 A3 20151202**; US 2013032399 A1 20130207

DOCDB simple family (application)
EP 12179100 A 20120802; US 201213564252 A 20120801