

Title (en)

Near-bit borehole opener tool and method of reaming

Title (de)

Bohrlochöffnungswerkzeug in Bitnähe und Erweiterungsverfahren

Title (fr)

Outil d'ouverture de trou de forage près d'un trépan et procédé d'alésage

Publication

EP 2692982 A2 20140205 (EN)

Application

EP 13155472 A 20130215

Priority

- EP 12305953 A 20120801
- EP 13155472 A 20130215

Abstract (en)

The present disclosure relates to a near-bit borehole opener (reamer) tool and a method of drilling a wellbore comprising: (a) disposing in the wellbore a tool string; (b) lowering and rotating the tool string and drilling a first portion of the wellbore having a first diameter with the drill bit, wherein at least one cutter assembly of a first borehole reamer is in a closed position; (c) reaming with a second borehole reamer a portion of the wellbore to a second diameter larger than the first diameter, wherein a rat hole portion of the wellbore is not reamed with the second borehole reamer, said rat hole portion of the wellbore having the first diameter; (d) extending the at least one cutter assembly of the first borehole reamer; and (e) concurrently rotating and moving the first borehole reamer up or down in the rat hole portion of the wellbore with the first diameter and abrading and cutting away the wellbore wall contacted by the at least one cutter assembly of the first borehole reamer assembly, thereby enlarging the diameter of a portion of the rat hole portion of the wellbore.

IPC 8 full level

E21B 10/32 (2006.01)

CPC (source: EP US)

E21B 7/064 (2013.01 - US); **E21B 10/32** (2013.01 - EP US); **E21B 10/42** (2013.01 - EP US)

Cited by

GB2548023A; GB2548023B; US11414942B2; US10544648B2; US10378339B2; US10612362B2; US11396789B2; US10487604B2; WO2016108854A1; US10689914B2; US11299968B2; US9523241B2; US10316619B2; US10794170B2; US11268369B2; US10378298B2; US10597962B2; US10920517B2; US11624265B1; US9121226B2; US9810025B2; US10557330B2; US10689913B2

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 2692982 A2 20140205; **EP 2692982 A3 20170726**; **EP 2692982 A8 20140409**; US 2015226009 A1 20150813; WO 2014022025 A1 20140206

DOCDB simple family (application)

EP 13155472 A 20130215; US 2013047558 W 20130625; US 201314417490 A 20130625