

Title (en)
UNDERREAMER WITH RADIAL EXPANDABLE CUTTING BLOCKS

Title (de)
NACHRÄUMER MIT RADIAL AUFWEITBAREN SCHNEIDBLÖCKEN

Title (fr)
ÉLARGISSEUR COMPORTANT DES BLOCS DE COUPE A EXPANSION RADIALE

Publication
EP 3167145 A4 20170809 (EN)

Application
EP 15819749 A 20150707

Priority

- DK PA201470422 A 20140707
- DK 2015050205 W 20150707

Abstract (en)
[origin: US2017159365A1] A cutting tool (1) for widening the diameter of a borehole and method thereof is disclosed. The cutting tool (1) comprises a housing (2) having cavity (10) in which a moveable activation element (6) is arranged. The activation element (6) is moved in an axial direction and is connected to one or more cutting blocks via a mechanical coupling (15). The mechanical coupling (15) transfers the axial movement of the action element into a radial movement of the cutting blocks. An activation unit (24) pushes the activation element (6) towards a stopping position which in turn causes the cutting blocks (11) to move out of the housing. The activation unit (24) further pulls the activation element back towards its starting position which in turn causes the cutting blocks to move back into the housing. The cutting blocks (11) extend into one or more cavities formed in the activation element, thereby increasing the travel-to-expansion ratio. The cutting blocks can be replaced by stabiliser blades (20) which are used to stabilise the drilling in the expanded borehole.

IPC 8 full level
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E21B 10/325 (2013.01 - EP US); **E21B 17/1014** (2013.01 - EP US); **E21B 44/00** (2013.01 - US); **E21B 47/12** (2013.01 - EP US)

Citation (search report)

- [XYI] US 2014131109 A1 20140515 - MAHAJAN MANOJ D [US], et al
- [XAY] US 2012186823 A1 20120726 - XU YING QING [US]
- [XI] US 2003079913 A1 20030501 - EPPINK JAY M [US], et al
- See also references of WO 2016004954A1

Designated contracting state (EPC)
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DOCDB simple family (application)
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