

Title (en)
HYBRID DRILL BIT

Title (de)
HYBRIDBOHRMEISSEL

Title (fr)
TRÉPAN HYBRIDE

Publication
EP 3555410 A4 20200826 (EN)

Application
EP 17883635 A 20171219

Priority
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• IB 2017058089 W 20171219

Abstract (en)
[origin: WO2018116140A1] A drill bit for coupling in use downhole drilling apparatus, the drill bit comprising: an annular coring drill bit that is rotatable to cut a formation bore face to create a core plug, a concentric drill bit that can be repeatedly axially moved (such as by oscillation (such as a vibration) and/or impact) to break the core plug.

IPC 8 full level
E21B 7/24 (2006.01); **E21B 10/02** (2006.01); **E21B 10/04** (2006.01); **E21B 10/26** (2006.01); **E21B 10/36** (2006.01); **E21B 10/46** (2006.01)

CPC (source: EP US)
E21B 10/02 (2013.01 - EP US); **E21B 10/04** (2013.01 - EP US); **E21B 10/26** (2013.01 - US); **E21B 10/36** (2013.01 - EP US)

Citation (search report)
• [X] US 2006196699 A1 20060907 - ESTES ROY [US], et al
• [X] US 2013228382 A1 20130905 - SAUVAGEAU RICHARD J [US]
• [X] US 2016281435 A1 20160929 - GYLLING KAI [FI]
• [X] US 2006237234 A1 20061026 - DENNIS MAHLON D [US], et al
• See references of WO 2018116140A1

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

DOCDB simple family (publication)
WO 2018116140 A1 20180628; AU 2017381740 A1 20190711; CA 3047509 A1 20180628; CL 2019001666 A1 20191115;
EP 3555410 A1 20191023; EP 3555410 A4 20200826; US 2020149349 A1 20200514; US 2021246731 A1 20210812; ZA 201903585 B 20220428

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US 201716471359 A 20171219; US 202117243130 A 20210428; ZA 201903585 A 20190604