

Title (en)
NO VIBRATION STONE COLUMN DRILL

Title (de)
VIBRATIONSLOSE GESTEINSBOHRER

Title (fr)
PERFORATRICE MONTÉE SUR COLONNE À PIERRES SANS VIBRATION

Publication
EP 3830345 A4 20211222 (EN)

Application
EP 20785232 A 20200306

Priority
• NZ 75231519 A 20190403
• IB 2020051936 W 20200306

Abstract (en)
[origin: WO2020201854A1] A drill including a drill flight where the drill flight changes angle from a primary flight angle (A1) to a secondary flight angle (A2).

IPC 8 full level
E02D 3/08 (2006.01); **E02D 5/56** (2006.01); **E02D 7/22** (2006.01); **E21B 10/44** (2006.01)

CPC (source: AU EP US)
E02D 3/08 (2013.01 - AU EP US); **E02D 3/126** (2013.01 - AU US); **E02D 5/46** (2013.01 - AU US); **E02D 5/56** (2013.01 - AU); **E02D 27/12** (2013.01 - AU US); **E21B 10/44** (2013.01 - AU EP); **E21B 17/22** (2013.01 - AU US); **E02D 3/02** (2013.01 - AU); **E02D 5/56** (2013.01 - EP); **E02D 5/62** (2013.01 - AU); **E02D 7/22** (2013.01 - EP); **E02D 2250/0038** (2013.01 - AU US); **E02D 2300/0018** (2013.01 - AU US); **E02D 2300/0079** (2013.01 - US); **E21B 10/44** (2013.01 - US)

Citation (search report)
• [XYI] JP 2003129476 A 20030508 - GEOTOP CORP
• [XYI] CN 104878746 A 20150902 - KONG CHAO
• [XI] US 6033152 A 20000307 - BLUM KENNETH J [US]
• [A] JP 2016065366 A 20160428 - JAPAN INSPECTION ORGANIZATION, et al
• See references of WO 2020201854A1

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)
WO 2020201854 A1 20201008; AU 2020255345 A1 20211028; AU 2020255345 B2 20230713; CA 3133031 A1 20201008; EP 3830345 A1 20210609; EP 3830345 A4 20211222; EP 3830345 B1 20230118; EP 3854942 A1 20210728; EP 3904602 A1 20211103; EP 3904602 B1 20231220; EP 3904602 C0 20231220; SI 3830345 T1 20230428; US 2022136199 A1 20220505

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IB 2020051936 W 20200306; AU 2020255345 A 20200306; CA 3133031 A 20200306; EP 20785232 A 20200306; EP 21162063 A 20200306; EP 21162151 A 20200306; SI 202030174 T 20200306; US 202017436156 A 20200306