

Title (en)  
AN ASSYMETRIC DRILL TOOTH

Title (de)  
ASSYMETRISCHER BOHRZAHN

Title (fr)  
DENT D'UN FORER ASSYMETRIQUE

Publication  
**EP 3854942 A1 20210728 (EN)**

Application  
**EP 21162151 A 20200306**

Priority  

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- NZ 75231519 A 20190403
- IB 2020051936 W 20200306

Abstract (en)  
An asymmetric drill tooth (130) for a stone column drill (21), where the drill (21) includes a drill flight (24), in use said asymmetric tooth (130) is attached to a keeper (120) located at a terminal end (121,122) of said drill flight (24).

IPC 8 full level  
**E02D 3/08** (2006.01); **E02D 7/22** (2006.01); **E21B 10/32** (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);  
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**E02D 2300/0018** (2013.01 - AU US); **E02D 2300/0079** (2013.01 - US); **E21B 10/44** (2013.01 - US)

Citation (applicant)  
WO 2014091395 A1 20140619 - MCMILLAN JARON LYELL [NZ]

Citation (search report)  

- [X] JP S5685087 A 19810710 - WATANABE HIROSHI
- [X] JP H06146765 A 19940527 - ISHIOKA KENSETSU KK
- [X] EP 2246479 A1 20101103 - SOILMEC SPA [IT]
- [XA] US 2016230469 A1 20160811 - FROST ROBERT L [US], et al

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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;  
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