

Title (en)
DRILLING DEVICE

Title (de)
BOHRVORRICHTUNG

Title (fr)
DISPOSITIF DE FORAGE

Publication
EP 3563036 A1 20191106 (DE)

Application
EP 17829595 A 20171227

Priority
• DE 102016125916 A 20161230
• DE 2017101106 W 20171227

Abstract (en)
[origin: WO2018121815A1] The invention relates to a drilling device (1) for hard rock using a fluid, having at least one drill head (2) with a pre-chamber (8) and a mixing chamber (3) where at least one front-facing nozzle (4) and at least one rear-facing nozzle (7) are provided. The fluid is mixed with abrasives in the mixing chamber, and the fluid together with the abrasives exits from the front-facing nozzle or an opening. The fluid flow is separated in the region of the pre-chamber, abrasive-free fluid exits the rear-facing nozzles, abrasives and the abrasive-free fluid are mixed in the mixing chamber, and the fluid mixed with the abrasives exits from the front-facing nozzle or an opening.

IPC 8 full level
E21B 43/29 (2006.01); **E21B 7/14** (2006.01); **E21B 7/16** (2006.01); **E21B 7/18** (2006.01); **E21B 10/60** (2006.01)

CPC (source: EP US)
E21B 7/18 (2013.01 - EP US); **E21B 10/60** (2013.01 - EP US); **E21B 23/001** (2020.05 - EP); **E21B 10/61** (2013.01 - US);
E21B 23/001 (2020.05 - US)

Citation (search report)
See references of WO 2018121815A1

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 2018121815 A1 20180705; DE 102016125916 A1 20180705; EP 3563036 A1 20191106; US 2019338598 A1 20191107

DOCDB simple family (application)
DE 2017101106 W 20171227; DE 102016125916 A 20161230; EP 17829595 A 20171227; US 201716475240 A 20171227