

Title (en)

A PERCUSSION DEVICE AND A METHOD FOR CONTROLLING A PERCUSSION MECHANISM OF A PERCUSSION DEVICE

Title (de)

SCHLAGVORRICHTUNG UND VERFAHREN ZUR STEUERUNG DES SCHLAGWERKS EINER SCHLAGVORRICHTUNG

Title (fr)

DISPOSITIF DE PERCUSSION ET PROCÉDÉ DE COMMANDE DE MÉCANISME DE PERCUSSION D'UN DISPOSITIF DE PERCUSSION

Publication

EP 3775484 B1 20230927 (EN)

Application

EP 19775902 A 20190326

Priority

- SE 1850350 A 20180328
- SE 2019050270 W 20190326

Abstract (en)

[origin: WO2019190381A1] Herein is described a percussion device (1) adapted for rock drilling comprising a controller (3), a percussion mechanism (5), a percussion means (7) and a drill bit (9). The percussion mechanism (5) is adapted to provide the percussion means (7) with a motion. The controller (3) is arranged to control the percussion mechanism (5) such that it imparts the percussion means (7) with a force causing the motion, whereby the percussion means (7) during drilling impacts the drill bit (9), or a drill string (11) connected to the drill bit (9), with an impact force having a specific magnitude. The controller (3) is furthermore arranged to continuously during drilling determine a desired magnitude of the impact force of the percussion means (7) and control the percussion mechanism (5) such that the impact force of the percussion means (7) is changed according to the desired magnitude. A method for controlling a percussion mechanism (5) of a percussion device (1) is also described.

IPC 8 full level

E21B 44/00 (2006.01); **E21B 1/00** (2006.01)

CPC (source: EP SE US)

E21B 44/00 (2013.01 - EP SE US)

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 2019190381 A1 20191003; EP 3775484 A1 20210217; EP 3775484 A4 20211201; EP 3775484 B1 20230927; EP 3775484 C0 20230927;
SE 1850350 A1 20190929; SE 542131 C2 20200303

DOCDB simple family (application)

SE 2019050270 W 20190326; EP 19775902 A 20190326; SE 1850350 A 20180328