

Title (en)

METHOD FOR OPERATING A MACHINE TOOL, AND MACHINE TOOL OPERABLE BY THE METHOD

Title (de)

VERFAHREN ZUM BETREIBEN EINER WERKZEUGMASCHINE UND WERKZEUGMASCHINE BETREIBBAR MIT DEM VEFAREN

Title (fr)

PROCÉDÉ DE FONCTIONNEMENT D'UNE MACHINE-OUTIL ET MACHINE-OUTIL POUVANT ÊTRE ACTIONNÉE PAR LE PROCÉDÉ

Publication

EP 3429788 A1 20190123 (DE)

Application

EP 17709703 A 20170313

Priority

- EP 16160122 A 20160314
- EP 2017055766 W 20170313

Abstract (en)

[origin: CA3015145A1] The invention relates to a method for operating a machine tool (1), in particular a core drill, comprising an electric motor for driving a drilling tool, in particular a core drill bit (9), and comprising an open- and closed-loop controller for open- and closed loop control of the motor power by means of the motor current of the electric motor, characterized by the method steps: operating the machine tool (1) in a tapping mode at a first rotational speed value, wherein the first rotational speed value is lower than a predetermined idling speed value of the electric motor; detecting a predetermined first threshold value for the motor current; reducing the motor current to a predetermined second threshold value (I₀) when the first threshold value for the motor current is exceeded; operating the machine tool (1) at a second rotational speed value, wherein the second rotational speed value is lower than the first rotational speed value; operating the electric motor at a predetermined motor current value; and operating the open- and closed-loop controller for closed loop control of the motor power by means of the motor current with an oscillating action. The invention further relates to a machine tool operable by the method.

IPC 8 full level

B23B 35/00 (2006.01); **B23B 45/02** (2006.01); **B28D 1/14** (2006.01)

CPC (source: EP US)

B23B 35/00 (2013.01 - EP US); **B23B 45/02** (2013.01 - EP US); **B28D 1/14** (2013.01 - EP US); **B28D 7/005** (2013.01 - US);
B23B 2226/75 (2013.01 - EP US); **B23B 2260/128** (2013.01 - US); **B23B 2270/48** (2013.01 - EP 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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3219422 A1 20170920; BR 112018015088 A2 20181211; BR 112018015088 B1 20240312; CA 3015145 A1 20170921;
CA 3015145 C 20220913; EP 3429788 A1 20190123; RU 2018136067 A 20200415; RU 2018136067 A3 20200603; US 11000971 B2 20210511;
US 2019077046 A1 20190314; WO 2017157815 A1 20170921

DOCDB simple family (application)

EP 16160122 A 20160314; BR 112018015088 A 20170313; CA 3015145 A 20170313; EP 17709703 A 20170313; EP 2017055766 W 20170313;
RU 2018136067 A 20170313; US 201716084748 A 20170313