

Title (en)
PERCUSSIVE HANDHELD MACHINE TOOL

Title (de)
SCHLAGENDE HANDWERKZEUGMASCHINE

Title (fr)
MACHINE-OUTIL PORTATIVE À PERCUSSION

Publication
EP 3389933 A1 20181024 (DE)

Application
EP 16809719 A 20161206

Priority
• EP 15200149 A 20151215
• EP 2016079871 W 20161206

Abstract (en)
[origin: WO2017102431A1] The invention relates to a hand-held machine tool (1) having a tool holder (2) for holding a striking tool (4) on a work shaft (3), having an electric motor (8), and having an impact mechanism (5). The impact mechanism (5) has an exciter (13) moved by the electric motor (8), a hammer (14), which is coupled to the exciter (13) via a pneumatic chamber (16) arranged between the exciter (13) and the hammer (14), and a striker (15) arranged in front of the hammer (14) in the striking direction (6). In a working position counter to the striking direction (6), the striker (15) bears on a stop (22), in a starting position the striker (15) is offset in the striking direction (6) relative to the working position, and in a rest position the striker (15) is offset in the striking direction (6) relative to the starting position. A spool valve (24) is formed by a first radial opening (24) of the pneumatic chamber (16) and the hammer (14), wherein, in the starting position, the hammer (14) bearing on the striker (15) closes the spool valve (25) and, in the rest position, the hammer (14) bearing on the striker (15) opens the spool valve (25). A shut-off valve (28) is closed in the working position, actuated by the striker (15), and is opened automatically in the starting position. A non-return valve (29) is connected on the inlet side to the shut-off valve (28) and is connected on the outlet side to the second radial opening (30) of the pneumatic chamber (16).

IPC 8 full level
B25D 11/00 (2006.01); **B25D 11/12** (2006.01); **B25D 17/06** (2006.01)

CPC (source: EP US)
B25D 11/005 (2013.01 - EP US); **B25D 11/125** (2013.01 - EP US); **B25D 17/06** (2013.01 - EP US); **B25D 2217/0019** (2013.01 - EP US); **B25D 2250/035** (2013.01 - EP US); **B25D 2250/131** (2013.01 - EP US); **B25D 2250/185** (2013.01 - EP US); **B25D 2250/231** (2013.01 - EP US); **B25D 2250/345** (2013.01 - EP US); **B25D 2250/365** (2013.01 - EP US)

Citation (search report)
See references of WO 2017102431A1

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 3181301 A1 20170621; EP 3389933 A1 20181024; EP 3389933 B1 20190925; US 10821590 B2 20201103; US 2018361551 A1 20181220; WO 2017102431 A1 20170622

DOCDB simple family (application)
EP 15200149 A 20151215; EP 16809719 A 20161206; EP 2016079871 W 20161206; US 201616061387 A 20161206