Title (en)

Oscillation mass damper for hand tools

Title (de)

Schwingungstilger für Handwerkzeugmaschine

Title (fr)

Réducteur de vibrations pour machine-outil manuelle

Publication

EP 1952952 A2 20080806 (DE)

Application

EP 08100762 A 20080122

Priority

DE 102007000057 A 20070131

Abstract (en)

The damper has a spring (5) located completely within an oscillating damping mass (4) with respect to an axial length of the spring. The spring is provided for axial compressive preloading of the damping mass against housing of a hand-held rotary-percussion power tool e.g. hammer drill. The damper is formed of a mirror symmetrical element. A damper housing (9) is secured on the power tool housing, where major portion of the mass is located within the damper housing. The mass is fixed axially displaceable within the damper housing. The damping housing has housing stops (12) for the spring.

Abstract (de)

Ein Schwingungstilger zur Montage an einem Gehäuse einer Handwerkzeugmaschine mit einer schwingbaren Tilgermasse (4), welche über zumindest eine Feder (5) zum Gehäuse (2) axial druckvorspannbar ist, wobei die Feder (5) bezüglich ihrer axialen Federlänge vollständig innerhalb der Tilgermasse (4) angeordnet ist.

IPC 8 full level

B25D 17/24 (2006.01)

CPC (source: EP US)

B25D 17/24 (2013.01 - EP US); B25D 2217/0092 (2013.01 - EP US); B25D 2250/245 (2013.01 - EP US)

Citation (applicant)

- FR 2237734 A1 19750214 - INST NAL RECH SECURITE [FR]
- US 4478293 A 19841023 - WEILENMANN WALTER [LI], et al
- EP 1710052 A1 20061011 - BLACK & DECKER INC [US]
- WO 2006022345 A1 20060302 - MAKITA CORP [JP], et al
- EP 1415768 A1 20040506 - ATLAS COPCO ELECTRIC TOOLS [DE]
- DE 815179 C 19511001 - BOLLENRATH FRANZ DR-ING

Cited by

EP2159008A3; EP2018939A3; US7806201B2; US7967078B2; WO2011072910A1; DE102010041928A1; WO2012045504A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 1952952 A2 20080806; **EP 1952952 A3 20121024**; **EP 1952952 B1 20140312**; CN 101235870 A 20080806; CN 101235870 B 20120418; DE 102007000057 A1 20080814; DE 102007000057 B4 20100708; JP 2008188759 A 20080821; JP 5192246 B2 20130508; US 2008179797 A1 20080731; US 8356702 B2 20130122

DOCDB simple family (application)

EP 08100762 A 20080122; CN 200810004914 A 20080129; DE 102007000057 A 20070131; JP 2008017518 A 20080129; US 1205608 A 20080130