

Title (en)
VIBRATION-DAMPENED HAND-HELD MACHINE TOOL

Title (de)
VIBRATIONSGEDÄMPFTE HANDWERKZEUGMASCHINE

Title (fr)
MACHINE-OUTIL PORTATIVE À VIBRATIONS AMORTIES

Publication
EP 3501750 A1 20190626 (DE)

Application
EP 17208325 A 20171219

Priority
EP 17208325 A 20171219

Abstract (en)
[origin: WO2019120837A1] The invention relates to an electric hand-held power tool (100), in particular a drill or chisel hammer, comprising a percussion assembly (10) which vibrates along a vibration axis (A) and a handle assembly (20) which is vibration-decoupled via an anti-vibration unit (30). The anti-vibration unit (30) has a coil spring (35) which is oriented along the vibration axis (A) and which comprises multiple windings, wherein the coil spring (35) is designed as a cylindrically progressive compression spring (36) with two rigidity regions (S1, S2) with different degrees of rigidity.

Abstract (de)
Elektrische Handwerkzeugmaschine (100), insbesondere Bohr- oder Meisselhammer, mit einer längs einer Vibrationsachse (A) vibrierenden Schlagwerksbaugruppe (10) und einer Handgriffbaugruppe (20), die über eine Antivibrationseinheit (30) schwingungsentkoppelt ist, wobei die Antivibrationseinheit (30) eine längs der Vibrationsachse (A) orientierte Federdrahtwendel (35) mit mehreren Windungen aufweist, wobei die Federdrahtwendel (35) als zylindrisch progressive Druckfeder (36) mit zwei Steifigkeitsbereichen (S1, S2) unterschiedlich hoher Steifigkeit ausgebildet ist.

IPC 8 full level
B25D 17/24 (2006.01); **B25F 5/00** (2006.01)

CPC (source: EP US)
B25D 17/24 (2013.01 - EP US); **B25F 5/006** (2013.01 - EP US); **B25D 2250/371** (2013.01 - EP US)

Citation (applicant)
DE 102007000270 A1 20081120 - HILTI AG [LI]

Citation (search report)
• [XY] DE 202004013670 U1 20041104 - WACKER CONSTRUCTION EQUIPMENT [DE]
• [Y] DE 10334906 A1 20040226 - STIHL AG & CO KG ANDREAS [DE]
• [A] US 2007277992 A1 20071206 - FUENFER JOSEF [DE]
• [A] EP 2848370 A1 20150318 - HILTI AG [LI]

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 3501750 A1 20190626; EP 3727762 A1 20201028; EP 3727762 B1 20231018; US 11518017 B2 20221206; US 2021187721 A1 20210624; WO 2019120837 A1 20190627

DOCDB simple family (application)
EP 17208325 A 20171219; EP 18801003 A 20181121; EP 2018082028 W 20181121; US 201816757737 A 20181121