

Title (en)
Manual tool machine

Title (de)
Handwerkzeugmaschine

Title (fr)
Machine-outil manuelle

Publication
EP 2452784 B1 20150408 (DE)

Application
EP 11185226 A 20111014

Priority
DE 102010044011 A 20101116

Abstract (en)
[origin: EP2452784A1] The tool has a guide for an impact body, and impact absorbers (20, 50) limiting motion of the impact body along an operating axle. Each impact absorber comprises a flexible damping ring (28). The damping ring comprises grooves, which run radially, at a front side (29) of the ring, and/or grooves, which run at circumference along the operating axle. The guide comprises a sleeve moved along the operating axle, where the sleeve is pre-stressed along the operating axle by the damping ring. Sealing rings are provided at radial inner and outer surfaces of the sleeve.

IPC 8 full level
B25D 17/24 (2006.01); **B25D 17/00** (2006.01); **B25D 17/26** (2006.01)

CPC (source: EP US)
B25D 17/06 (2013.01 - EP US); **B25D 17/24** (2013.01 - EP US); **B25D 17/26** (2013.01 - EP US); **B25D 2217/0019** (2013.01 - EP US); **B25D 2222/57** (2013.01 - EP US); **B25D 2250/345** (2013.01 - EP US)

Citation (examination)
US 3969989 A 19760720 - MAURER WERNER, et al

Cited by
EP2674257A1; EP3335838A1; US11697198B2; WO2018108654A1; EP2254732A1

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)
EP 2452784 A1 20120516; EP 2452784 B1 20150408; CN 102554877 A 20120711; DE 102010044011 A1 20120516; US 2012125650 A1 20120524; US 9272408 B2 20160301

DOCDB simple family (application)
EP 11185226 A 20111014; CN 201110370653 A 20111114; DE 102010044011 A 20101116; US 201113297782 A 20111116