

Title (en)  
Power tool

Title (de)  
Werkzeugmaschine

Title (fr)  
Outil électrique

Publication  
**EP 2384859 A2 20111109 (EN)**

Application  
**EP 11163668 A 20110426**

Priority  
KR 20100041276 A 20100503

Abstract (en)  
Disclosed therein is a power tool, which can effectively reduce vibration of high intensity and vibration of low intensity. The power tool includes: first and second vibration reducing means (100,200) disposed within a tool body (10) and a hand-grip part (12) in order to reduce vibration generated when crushing work or perforating work is carried out while a striking motion and a rotating motion are performed simultaneously or while only the striking motion is performed. The first vibration reducing means (100) is disposed on at least one side of the tool body (10), and includes: a guide pin (120); elastic members (130) resiliently mounted on the outer circumferential surface of the guide pin (120) and expanding and contracting along a vibration direction; and a counter weight (140) that the elastic members (130) are inserted and supported into both sides thereof and the guide pin (120) passes therethrough, the counter weight (140) moving along the guide pin (120) while expanding and contracting the elastic members (130) in order to reduce the vibration. The second vibration reducing means (200) is disposed inside the upper portion of the power tool where the tool body (10) and the hand-grip part (12) are in contact with each other and are joined with each other in a slidably movable manner, and includes a vibration damping part (220) disposed between the tool body (10) and the hand-grip part (12) for absorbing the vibration.

IPC 8 full level  
**B25D 17/04** (2006.01); **B25D 17/24** (2006.01); **B25F 5/00** (2006.01)

CPC (source: EP)  
**B25D 17/043** (2013.01); **B25D 17/24** (2013.01); **B25F 5/006** (2013.01); **B25D 2211/003** (2013.01); **B25D 2211/068** (2013.01); **B25D 2217/0092** (2013.01); **B25D 2250/245** (2013.01)

Citation (applicant)  
• US 7252157 B2 20070807 - AOKI YONOSUKE [JP]  
• US 2006219418 A1 20061005 - ARAKAWA TAKUO [JP], et al

Cited by  
JP2015217470A; US2023415321A1; CN118106912A; US10040184B2; US10022852B2; US10137562B2; US9993915B2; US10046451B2; WO2014028150A1; WO2015145912A1

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 2384859 A2 20111109**; **EP 2384859 A3 20111123**; **EP 2384859 B1 20131030**; ES 2453955 T3 20140409; KR 101006002 B1 20110105; PL 2384859 T3 20140530

DOCDB simple family (application)  
**EP 11163668 A 20110426**; ES 11163668 T 20110426; KR 20100041276 A 20100503; PL 11163668 T 20110426