

Title (en)  
Handheld tool apparatus

Title (de)  
Handwerkzeugvorrichtung

Title (fr)  
Dispositif d'outil manuel

Publication  
**EP 2803447 B1 20221102 (DE)**

Application  
**EP 14161634 A 20140326**

Priority  
DE 102013208882 A 20130514

Abstract (en)  
[origin: CN104148702A] A hand tool device has a tool spindle (40) and a hammer mechanism (22) which includes a hammer (58) and at least one curve guide (72) driving the hammer (58) at least during a hammer drilling operation. The tool spindle (40) has at least one bearing surface (68) on which the hammer (58) is movably supported in at least one operating state.

IPC 8 full level  
**B25D 11/10** (2006.01); **B25D 11/02** (2006.01); **B25D 16/00** (2006.01); **B25D 17/06** (2006.01)

CPC (source: CN EP US)  
**B25D 11/02** (2013.01 - CN EP US); **B25D 11/104** (2013.01 - CN EP US); **B25D 16/00** (2013.01 - CN EP US); **B25D 16/003** (2013.01 - EP US); **B25D 17/00** (2013.01 - US); **B25D 17/06** (2013.01 - CN EP US); **B25D 2216/0023** (2013.01 - CN EP US); **B25D 2216/0038** (2013.01 - CN EP US); **B25D 2250/165** (2013.01 - EP US); **B25D 2250/371** (2013.01 - CN EP US)

Citation (examination)  
US 2160150 A 19390530 - JIMERSON FRANCIS A, et al

Cited by  
EP3053708A1; EP3539725A1

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 2803447 A1 20141119; EP 2803447 B1 20221102**; CN 104148702 A 20141119; CN 104148702 B 20200303;  
DE 102013208882 A1 20141120; US 10046449 B2 20180814; US 10780562 B2 20200922; US 2014338944 A1 20141120;  
US 2018318997 A1 20181108

DOCDB simple family (application)  
**EP 14161634 A 20140326**; CN 201410200710 A 20140513; DE 102013208882 A 20130514; US 201414273176 A 20140508;  
US 201816036284 A 20180716