

Title (en)  
MOTOR-DRIVEN HAND TOOL

Publication  
**EP 0199883 B1 19900808 (DE)**

Application  
**EP 85810591 A 19851212**

Priority  
DE 3511437 A 19850329

Abstract (en)  
[origin: EP0199883A2] 1. A motor-operated hand tool with a housing (1), a motor (5) arranged therein, a driving shaft (14) which is set rotating by the motor (5) and a gearing with torque measuring device arranged between the motor (5) and the driving shaft (14), characterised in that the torque measuring device comprises a gear shaft (11), a toothed wheel (6, 7a) which meshes with the gear shaft (11) and which is connected securely to a crankshaft (7) and a bearing block (9) which is mounted rotatably about the crankshaft which extends parallel to the gear shaft (11) as well as stands coaxially with the axis of rotation of the toothed wheel (6, 7a) and meshes with a motor pinion (5a), the gear shaft (11) and the crankshaft (7) being mounted in the bearing block (9) and the bearing block (9) being supported on the housing (1) by way of electrical force-measuring elements (23) made of piezoceramics.

IPC 1-7  
**B25B 23/147**

IPC 8 full level  
**B25D 11/12** (2006.01); **B23B 45/16** (2006.01); **B25B 23/147** (2006.01); **B25F 5/00** (2006.01)

CPC (source: EP)  
**B25B 23/147** (2013.01); **B25F 5/00** (2013.01)

Cited by  
FR2647978A1; DE10316844A1; US5401124A; EP2669061A1; FR2767737A1; DE102010041313A1; CN102398254A; US11697200B2; DE102010041313B4; US10160049B2; US8727941B2; WO9218291A1; US9505097B2; US7938194B2; US8555997B2; US8316958B2; US10589413B2; US11192232B2

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