

Title (en)
Motor-driven hand tool.

Title (de)
Motorisch betriebenes Handwerkzeug.

Title (fr)
Outil manuel à moteur.

Publication
EP 0199883 A2 19861105 (DE)

Application
EP 85810591 A 19851212

Priority
DE 3511437 A 19850329

Abstract (en)
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.

Abstract (de)
Das motorisch betriebene Handwerkzeug weist einen im Gehäuse (1) schwenkbar gelagerten Lagerbock (9) auf, in dem eine Getriebewelle (11) über ein Schrägkugellager (12) gelagert ist. Der Lagerbock (9) ist im Gehäuse (1) über elektrische Kraftmesselemente (23) abgestützt, mittels deren die bei der Drehmomentübertragung auftretenden Reaktionskräfte erfasst und als Signal zur Erzeugung von Steuerfunktionen des Handwerkzeuges verwendet werden können.

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

Designated contracting state (EPC)
CH DE GB LI NL

DOCDB simple family (publication)
EP 0199883 A2 19861105; **EP 0199883 A3 19880420**; **EP 0199883 B1 19900808**; DE 3511437 A1 19861002; DE 3579160 D1 19900913; JP S61226278 A 19861008

DOCDB simple family (application)
EP 85810591 A 19851212; DE 3511437 A 19850329; DE 3579160 T 19851212; JP 2916986 A 19860214