

Title (en)  
PORTABLE POWER TOOL

Title (de)  
HANDWERKZEUGMASCHINE

Title (fr)  
MACHINE-OUTIL PORTATIVE

Publication  
**EP 1663574 A1 20060607 (DE)**

Application  
**EP 04738803 A 20040626**

Priority  
• DE 2004001357 W 20040626  
• DE 10337853 A 20030818

Abstract (en)  
[origin: WO2005016594A1] The invention relates to a motor-driven portable power tool, particularly an angle grinder (10), comprising a housing (15) that houses a working spindle (17) having a spindle brake (21), on which a disc-shaped tool (43) having a central borehole (49) that overlaps the working spindle (17) with play can be tightened between an inner flange (39) and an outer flange (41). As the rotating working spindle (17) is braked, the tightening pressure exerted onto the tool (43) can be automatically increased so that, in the event of inertia-related residual rotation of the tool (43), wedge means (53, 55) can rotate therewith and can slide against one another, and it is attempted to reduce the axial distance of the inner flange (39) from the tool (43) or from the outer flange (41). The aim of the invention is to provide a portable power tool of the aforementioned type that can be manufactured in a functionally reliable and cost-effective manner. To this end, the working spindle (17), itself, supports, at least in part, first wedge means (53), and the inner flange (39) can, with corresponding second wedge means (55), be supported on the first wedge means (53) of the working spindle (17), and can be captively fixed thereto with axial play and torsional backlash.

IPC 1-7  
**B24B 23/02**; **B24B 45/00**

IPC 8 full level  
**B24B 23/02** (2006.01); **B24B 45/00** (2006.01)

CPC (source: EP)  
**B24B 23/022** (2013.01); **B24B 23/028** (2013.01); **B24B 45/00** (2013.01)

Citation (search report)  
See references of WO 2005016594A1

Cited by  
EP2502704A1; CN102689293A; US11806857B2

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**WO 2005016594 A1 20050224**; DE 10337853 A1 20050317; DE 502004003492 D1 20070524; EP 1663574 A1 20060607; EP 1663574 B1 20070411

DOCDB simple family (application)  
**DE 2004001357 W 20040626**; DE 10337853 A 20030818; DE 502004003492 T 20040626; EP 04738803 A 20040626