

Title (en)  
TOOL GRINDING MACHINE

Title (de)  
WERKZEUGSCHLEIFMASCHINE

Title (fr)  
MACHINE DE MEULAGE D'OUTIL

Publication  
**EP 2480374 B1 20130501 (EN)**

Application  
**EP 10768104 A 20100923**

Priority  
• US 24530909 P 20090924  
• US 2010049963 W 20100923

Abstract (en)  
[origin: WO2011038093A1] A multi-axis computer controlled machine tool for relief grinding of single and multiple start threaded hobs (46). The machine comprises an angular oriented spindle (65) that can be angularly (swivel) positioned thereby providing the flexibility to utilize both cup- shaped grinding wheels (55) and pencil-shaped grinding wheels (52) for grinding of hob and milling cutter relieved tooth geometry without exchanging grinding spindles assemblies or modifying the machine construction to accommodate two types of grinding methods or utilizing an additional machine axis for the spindle re-orientation.

IPC 8 full level  
**B24B 3/02** (2006.01); **B24B 41/04** (2006.01)

CPC (source: EP US)  
**B24B 3/022** (2013.01 - EP US); **B24B 3/024** (2013.01 - EP US); **B24B 41/04** (2013.01 - EP US); **Y10T 29/5109** (2015.01 - EP US)

Cited by  
EP4079434A1

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DOCDB simple family (publication)  
**WO 2011038093 A1 20110331**; **WO 2011038093 A8 20110616**; CN 102596497 A 20120718; CN 102596497 B 20150325; EP 2480374 A1 20120801; EP 2480374 B1 20130501; ES 2406430 T3 20130607; JP 2013505843 A 20130221; JP 5785552 B2 20150930; KR 101544449 B1 20150813; KR 20120085779 A 20120801; US 2012129434 A1 20120524

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**US 2010049963 W 20100923**; CN 201080043258 A 20100923; EP 10768104 A 20100923; ES 10768104 T 20100923; JP 2012531023 A 20100923; KR 20127010031 A 20100923; US 201013388530 A 20100923