

Title (en)
Guiding device for machine tools

Title (de)
Führungsvorrichtung für Werkzeugmaschinen

Title (fr)
Dispositif de guidage pour machine-outils

Publication
EP 1247596 A3 20030730 (DE)

Application
EP 02005170 A 20020308

Priority
DE 10116917 A 20010405

Abstract (en)
[origin: EP1247596A2] Guide device for machine tools, especially punching tools, comprises at least one guide column (11) positioned in a guide bushing (5) so that it moves in an axial direction. An axially extending toothed arrangement (8) is connected in parallel to the position of the guide column in the guide bushing and is formed by parts of the guide column and bushing themselves. The parts forming the toothed arrangement are arranged coaxially next to the position of the guide column in the bushing. Preferred Features: The guide column has an extension in a partial region which forms the toothed arrangement together with a part of the guide bushing.

IPC 1-7
B21D 37/12; **B30B 15/04**

IPC 8 full level
B21D 37/10 (2006.01); **B21D 37/12** (2006.01); **B30B 15/04** (2006.01)

CPC (source: EP US)
B21D 37/12 (2013.01 - EP US); **B30B 15/041** (2013.01 - EP US); **Y10T 83/8821** (2015.04 - EP US); **Y10T 83/8878** (2015.04 - EP US)

Citation (search report)
[A] US 3029110 A 19620410 - HUGHES WILLIAM J

Cited by
CN103464617A; CN107413958A; CN103084489A; CN107052158A; CN102728727A; FR2984190A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

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EP 1247596 A2 20021009; **EP 1247596 A3 20030730**; DE 10116917 A1 20021010; JP 2002337000 A 20021126; US 2002144583 A1 20021010

DOCDB simple family (application)
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