

Title (en)
Hand tool, especially screwdriver

Title (de)
Handwerkzeugmaschine, beispielsweise Schrauber

Title (fr)
Outil à main, notamment tournevis

Publication
EP 1391269 A3 20060510 (DE)

Application
EP 03013591 A 20030614

Priority
DE 10239483 A 20020821

Abstract (en)
[origin: EP1391269A2] A central shaft (9) holds a sunwheel which meshes with planet wheels in mesh with the internal teeth (7) of the ring gear (8). Balls (15) engage with sloping faces (20,21) on a spring-loaded (27) support ring (19), and are accommodated in apertures (14) in a bearing ring (13). The balls project inside the bearing ring and engage in cutouts (16) in the outer rim of the ring gear.

IPC 8 full level
B25B 23/14 (2006.01)

CPC (source: EP)
B25B 23/141 (2013.01)

Citation (search report)
• [A] DE 3636301 A1 19880428 - STEINEL GMBH & CO KG [DE]
• [A] US 4448098 A 19840515 - TOTSU KATSUYUKI [JP]

Cited by
EP1787757A1; CN102748443A; US7537540B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1391269 A2 20040225; EP 1391269 A3 20060510; EP 1391269 B1 20070314; DE 10239483 B3 20040304; DE 50306785 D1 20070426

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EP 03013591 A 20030614; DE 10239483 A 20020821; DE 50306785 T 20030614