

Title (en)  
Hydraulically operated ratchet spanner with a double-acting hydraulic cylinder/piston drive

Title (de)  
Hydraulik-Ratschenschrauber mit einem doppeltwirkenden Hydraulik-Zylinder-Kolben-Antrieb

Title (fr)  
Clé à cliquet hydraulique avec entraînement hydraulique à piston-cylindre à double effet

Publication  
**EP 1400313 B1 20050727 (DE)**

Application  
**EP 02020916 A 20020919**

Priority  
EP 02020916 A 20020919

Abstract (en)  
[origin: EP1400313A1] The ratchet screwdriver (12) is operated by the piston rod (15) of a double-action hydraulic piston-cylinder drive, the hydraulic oil supplied via a hydraulic pump unit (1) with cogwheel pump (20) and a radial piston pump (21) operated by a pump motor (4), the cogwheel pump providing a relatively large feed quantity for each motor rotation and the piston pump providing a relatively small feed quantity for each motor rotation. The working stroke and the return stroke of the piston rod are effected by reversing the rotation direction of the pump motor via a pump motor control (22), with automatic adjustment of the volumetric flow.

IPC 1-7  
**B25B 21/00; F15B 7/04**

IPC 8 full level  
**B25B 21/00** (2006.01); **F15B 7/00** (2006.01); **F15B 7/04** (2006.01)

CPC (source: EP US)  
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**F15B 7/04** (2013.01 - EP US)

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