

## 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 A1 20040324 (DE)**

## Application

**EP 02020916 A 20020919**

## Priority

EP 02020916 A 20020919

## Abstract (en)

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.

## Abstract (de)

Die Erfindung betrifft einen Hydraulik-Ratschenschrauber mit einem doppeltwirkenden Hydraulik-Zylinder-Kolben-Antrieb mit einer Zahnradpumpe (20) und einer Kolbenpumpe (21). Erfindungsgemäß wird ein Arbeitshub und ein Rückhub über eine Drehrichtungsumkehr eines Pumpenmotors (4) gesteuert, wobei sich die erforderlichen Volumenströme selbsttätig über die eingesetzten Ventile ohne zusätzliche Ventilansteuerungen einstellen. <IMAGE>

## 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)

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## Citation (search report)

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## Cited by

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## Designated contracting state (EPC)

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## DOCDB simple family (application)

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