

Title (en)

HYDRAULIC DRIVE SYSTEM FOR FORGING PRESS OR FORGING MACHINE SLIDES

Title (de)

HYDRAULISCHES ANTRIEBSSYSTEM FÜR STÖSSEL VON SCHMIEDEPRESSSEN ODER SCHMIEDEMASCHINEN

Title (fr)

SYSTEME D'ENTRAINEMENT HYDRAULIQUE POUR PRESSE A FORGER OU COULISSEaux DE MACHINE A FORGER

Publication

EP 1023132 B1 20011219 (DE)

Application

EP 98955381 A 19981008

Priority

- DE 9802975 W 19981008
- DE 19745505 A 19971015

Abstract (en)

[origin: WO9919096A1] The invention relates to a hydraulic drive system for the tool-bearing slide of a forging press or a forging machine. The slide (6) is configured as a piston (6) and is provided with a valve seat (19) at the opposite end to the tool, that is, the end which is impinged upon by pressure means. Together with a valve lifter (18) driven by an actuator (26), said valve seat (19) forms a valve which is able to connect the cylinder chamber to a pressureless discharge pipe (17) and therefore control the stroke of the piston (6). In order to reduce the mass and the axial construction length of the inventive drive system, the piston (6) is hollow over a portion of its length from the end which is impinged upon, and is provided with the valve seat (19) at the base of the hollow. The valve lifter (18) which can be axially displaced in the cylinder lid (11) is tubular in shape and is provided with side channels (25) connecting its inner cavity to a pressureless discharge pipe (17) for the pressure means.

IPC 1-7

B21J 7/28; **B21J 7/14**

IPC 8 full level

B21J 7/14 (2006.01); **B21J 7/28** (2006.01); **B30B 1/32** (2006.01)

CPC (source: EP KR US)

B21J 7/14 (2013.01 - EP US); **B21J 7/28** (2013.01 - EP US); **B21J 9/10** (2013.01 - KR)

Designated contracting state (EPC)

AT DE FR IT

DOCDB simple family (publication)

WO 9919096 A1 19990422; AT E211036 T1 20020115; DE 19846348 A1 19990422; DE 29817969 U1 19990218; DE 59802571 D1 20020131; EP 1023132 A1 20000802; EP 1023132 B1 20011219; JP 2001519241 A 20011023; JP 3345400 B2 20021118; KR 100562188 B1 20060320; KR 20010023161 A 20010326; US 6401516 B1 20020611

DOCDB simple family (application)

DE 9802975 W 19981008; AT 98955381 T 19981008; DE 19846348 A 19981008; DE 29817969 U 19981008; DE 59802571 T 19981008; EP 98955381 A 19981008; JP 2000515713 A 19981008; KR 20007001787 A 20000222; US 48691500 A 20000301