

Title (en)  
HYDRAULIC COLD-FORGING PRESS

Publication  
**EP 0280056 B1 19920415 (DE)**

Application  
**EP 88101156 A 19880127**

Priority  
DE 3706193 A 19870226

Abstract (en)  
[origin: US4831861A] A cold-extrusion press wherein a platen (4) carries a die part (31) and is capable of being moved towards and away from a stationary table (2) by piston/cylinder devices (5, 6), working piston/cylinder device (7) acts upon extrusion mandrel (11) to exert a deforming pressure, control means (41) activates an adjustable main valve (12, 28) adjustable for different values of travel and speed of the extrusion mandrel (11), platen (4) entrains the extrusion mandrel (11) by spaced stops (22, 23) to an initial position before the extruding stroke, the working piston/cylinder device (7) is subdivided into two working units (8, 9) arranged in tandem and acting upon the same piston rod (10), and only part of the pressure fluid supplied by the working piston/cylinder device (7) is delivered through the main valve (12) to the one working unit (8), whereas the other part of the pressure fluid is delivered to the other working unit (9) without a controlled main valve. Straightforward selection of different values of extrusion travel and speed is afforded by the main valve and the allied control device in a hydraulic press.

IPC 1-7  
**B21J 9/06; B21J 9/12; B21J 9/20**

IPC 8 full level  
**B21J 9/06** (2006.01); **B21J 9/12** (2006.01); **B21J 9/20** (2006.01)

CPC (source: EP US)  
**B21J 9/027** (2013.01 - EP US); **B21J 9/06** (2013.01 - EP US); **B21J 9/12** (2013.01 - EP US); **B21J 9/20** (2013.01 - EP US)

Cited by  
CN103042147A; CN101890467A; CN103111484A; ITBS20090179A1; CN103394623A; CN103240294A; EP0642918A1; EP0549793A4; WO2011042859A3

Designated contracting state (EPC)  
CH FR GB IT LI

DOCDB simple family (publication)  
**EP 0280056 A2 19880831; EP 0280056 A3 19900523; EP 0280056 B1 19920415**; DE 3706193 A1 19880908; DE 3706193 C2 19901220; JP H0677785 B2 19941005; JP S63230243 A 19880926; US 4831861 A 19890523

DOCDB simple family (application)  
**EP 88101156 A 19880127**; DE 3706193 A 19870226; JP 3877988 A 19880223; US 15502888 A 19880211