

Title (en)
Hydraulic clamp

Title (de)
Hydraulische Spannvorrichtung

Title (fr)
Tendeur hydraulique

Publication
EP 1236542 A3 20070606 (DE)

Application
EP 02450018 A 20020130

Priority
AT 2252001 A 20010214

Abstract (en)
[origin: EP1236542A2] The hydraulic clamping system, e.g. to clamp a workpiece at a machine tool, has a piston (4) at the clamping cylinder (5), with a smaller diameter rapid cylinder (16) at the end of the cylinder away from the clamp (6) with its piston (15). The clamping and rapid cylinders are supplied by parallel hydraulic lines (8,9) from the pressure supply (10). A change-over valve (18) in the hydraulic line to the clamping cylinder is opened when the rapid cylinder pressure reaches a given level on bearing against the clamp, to release the hydraulic flow into the clamping cylinder. An extraction valve (13) holds the extraction line (12) open to the pressure medium tank (14) until it closes automatically when the change-over valve opens. The hydraulic pressure pump (10) has small dimensions, to handle the low volume flows.

IPC 8 full level
B25B 5/06 (2006.01); **B25B 1/18** (2006.01); **F15B 11/02** (2006.01); **F15B 15/14** (2006.01); **F15B 15/18** (2006.01); **F15B 15/20** (2006.01)

CPC (source: EP)
B25B 1/18 (2013.01); **B25B 5/061** (2013.01); **F15B 11/022** (2013.01); **F15B 15/1409** (2013.01); **F15B 15/204** (2013.01)

Citation (search report)
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CH700207A1; EP1262285A3; CN102322456A

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Designated extension state (EPC)
AL LT LV MK RO SI

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