

Title (en)  
CLAMPING DEVICE

Publication  
**EP 0313767 B1 19910424 (DE)**

Application  
**EP 88114394 A 19880903**

Priority  
• DE 8714390 U 19871029  
• DE 8804990 U 19880415

Abstract (en)  
[origin: EP0313767A1] The clamping device, in particular toggle lever clamping device, is intended for fixing work pieces and consists of an actuating cylinder (3) with a head piece (23) placed in front on the side of the piston rod, on and in which head piece the adjusting mechanism for the clamping arm (24) articulated on the head piece is arranged, and furthermore of two pressure medium supply lines and end-position sensors with connection lines. Arranged at the free end (1) of the piston rod (2), parallel thereto and pointing in the direction of the actuating cylinder (3), is an adjusting rod (5) which is provided, at the free end, with position indicators (4). The adjustment path (W) of the position indicators (4) extends in the region of the actuating cylinder (3). At least two end-position sensors (6, 6`) are arranged in the region of the adjustment path (W). The two pressure medium supply connections (7, 8) are arranged at the free end (9) of the actuating cylinder (3) and the line outlets (10) of the end-position sensors (6) are likewise arranged at the free end (9) of the actuating cylinder (3), departing in an axial direction with respect to the longitudinal axis (11) of the actuating cylinder (3). <IMAGE>

IPC 1-7  
**B25B 11/00**

IPC 8 full level  
**B23Q 3/06** (2006.01); **B25B 5/06** (2006.01); **B25B 5/12** (2006.01); **B25B 5/16** (2006.01); **B25B 11/00** (2006.01)

CPC (source: EP US)  
**B25B 5/06** (2013.01 - EP US); **B25B 5/122** (2013.01 - EP US); **B25B 5/16** (2013.01 - EP US)

Cited by  
EP0636449A1; US6076816A; EP0406530A1; EP0849047A1; EP0842741A1; DE102012003918C5; CN101973001A; EP1068932A3; EP0803331A1; CN105382728A; EP4296001A1; US6557452B1; DE202008009702U1

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**EP 88114394 A 19880903**; DE 3862562 T 19880903; ES 88114394 T 19880903; JP 14005888 U 19881028; US 26253388 A 19881025