

Title (en)

Clamping device for clamping workpieces

Title (de)

Spannvorrichtung zum Spannen von Werkstücken

Title (fr)

Dispositif de serrage pour la fixation de pièces de travail

Publication

**EP 0620084 B1 19971001 (DE)**

Application

**EP 94103740 A 19940311**

Priority

DE 4311857 A 19930410

Abstract (en)

[origin: EP0620084A1] The invention relates to a clamping device for clamping workpieces on machine tables, apparatus or pallets with a hydraulically or pneumatically actuated clamping force-holding element (14) in which the holding force is produced via holding elements (14). The clamping device and the clamping force-holding element (14) are combined, either in a housing (1) or in the case of separate housings are interconnected. The clamping piston (3) of the clamping device and the adjusting piston (6,7) of the holding element (14) are situated, however, approximately perpendicular to one another. The clamping piston (3) is connected in the lower part fixedly to a push rod (4) which terminates in the shape of a wedge (5). The holding element (14) has two pistons (6,7), between which a piston rod (8) is arranged. The piston rod (8) is likewise formed in the shape of a wedge in the region (15) below the push rod (4), so that both wedge faces (10,11) slide on one another. In addition, a wedge groove (10) is formed in the piston rod. The push rod (4) is provided in the region of its wedge face (15) with a wedge bevel (11) adapted to the wedge groove (10). If the piston rod (8) slides under the push rod (4), the push rod (4) penetrates by way of its wedge bevel (11) into the wedge groove (10) of the piston rod (8), thus resulting in a large friction area between these elements. <IMAGE>

IPC 1-7

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CPC (source: EP)

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Cited by

CN105108541A; EP1473110A1; CN113618573A; EP1180603A3; AU596116B2; CN106181500A; DE19918770A1; EP1046468A3; CN102865269A; AT520914A5; US6308943B1

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