

Title (en)  
Installation for three-dimensional actuation of gripper bars

Title (de)  
Einrichtung zum dreidimensionalen Antrieb von Greiferschienen

Title (fr)  
Installation d'entraînement à trois dimensions de barres porteuses

Publication  
**EP 0701872 B1 19991013 (DE)**

Application  
**EP 95112134 A 19950802**

Priority  
DE 4428772 A 19940813

Abstract (en)  
[origin: EP0701872A1] The drive is incorporated into a press with horizontal and vertical guides (4) for the movement of the gripper rails (3) in the change over direction (27) movably mounted in transverse carriages (7) in the raising and lowering direction (28). The carriages are movably mounted in the tightening and release direction (29) in a frame (6). A servo-motor (18) reversible in its direction of rotation is fixed to the frame and the shafts (23) act as spindles on both sides. The motor is supported by locking nuts located in lateral slots.

IPC 1-7  
**B21D 43/05**; **B65G 25/02**

IPC 8 full level  
**B21D 43/05** (2006.01); **B65G 25/02** (2006.01)

CPC (source: EP US)  
**B21D 43/05** (2013.01 - EP US)

Cited by  
EP0985467A3; DE102011118216A1; DE102011118216B4; US9199297B2

Designated contracting state (EPC)  
DE ES FR GB IT SE

DOCDB simple family (publication)  
**DE 4428772 A1 19960215**; CZ 206795 A3 19960214; CZ 287265 B6 20001011; DE 59507035 D1 19991118; EP 0701872 A1 19960320; EP 0701872 B1 19991013; ES 2138690 T3 20000116; US 5779025 A 19980714

DOCDB simple family (application)  
**DE 4428772 A 19940813**; CZ 206795 A 19950811; DE 59507035 T 19950802; EP 95112134 A 19950802; ES 95112134 T 19950802; US 51498595 A 19950814