Title (en)

ELECTROMECHANICAL CLAMPING DEVICE

Title (de)

ELEKTROMECHANISCHE SPANNVORRICHTUNG

Title (fr)

DISPOSITIF DE SERRAGE ELECTROMECANIQUE

Publication

EP 1423249 A2 20040602 (DE)

Application

EP 02704750 A 20020313

Priority

- DE 10113808 A 20010321
- DE 10118823 A 20010417
- DE 10146800 A 20010922
- EP 0202727 W 20020313

Abstract (en)

[origin: US2004081722A1] An electromechanical clamping device with hydraulic assistance is described. A thrust mechanism driven by an electric motor displaces two clamping jaws with respect to each other along a guide device. One clamping jaw is divided into two mutually displaceable part jaws. A chamber to hold pressure medium is formed between the part jaws. The first part jaw can be displaced along the guide device and locked with respect to the latter. One part jaw is provided with a first cylinder coupled to the output of the thrust mechanism. In order to close the clamping device, in a first step the thrust mechanism pulls the part jaws against the other clamping jaw, in a second step the thrust mechanism delivers pressure medium from the first cylinder into the chamber between the two part jaws, with the first part jaw locked with respect to the guide device. To open the clamping device, in a first step a second cylinder arranged between the two part jaws pulls the part jaws against each other, with the first part jaw locked with respect to the guide device, and then in a second step the thrust mechanism forces the part jaw coupled to it in the opening direction, forcing the other part jaw with it, with the first part jaw unlocked from the guide device. The clamping device is provided for production machines, in particular for injection molding machines.

IPC 1-7

B29C 45/68; B29C 45/67

IPC 8 full level

B29C 45/40 (2006.01); **B29C 45/50** (2006.01); **B29C 45/67** (2006.01); **B29C 45/68** (2006.01); **B29C 45/82** (2006.01)

CPC (source: EP US)

B29C 45/4005 (2013.01 - EP US); **B29C 45/5008** (2013.01 - EP US); **B29C 45/67** (2013.01 - EP US); **B29C 45/68** (2013.01 - EP US); **B29C 45/82** (2013.01 - EP US); B29C 2045/1793 (2013.01 - EP US); B29C 2045/1794 (2013.01 - EP US); B29C 2045/685 (2013.01 - EP US); B29C 2945/76006 (2013.01 - EP US); B29C 2945/76013 (2013.01 - EP US); B29C 2945/76033 (2013.01 - EP US); B29C 2945/76498 (2013.01 - EP US); B29C 2945/76505 (2013.01 - EP US); B29C 2945/76545 (2013.01 - EP US); B29C 2945/76568 (2013.01 - EP US); B29C 2945/76581 (2013.01 - EP US); B29C 2945/76702 (2013.01 - EP US); B29C 2945/76785 (2013.01 - EP US); B29C 2945/76812 (2013.01 - EP US); B29C 2945/76933 (2013.01 - EP US); B29C 2945/76943 (2013.01 - EP US)

Citation (search report)

See references of WO 02076703A2

Designated contracting state (EPC)

AT CH DE IT LI

DOCDB simple family (publication)

US 2004081722 A1 20040429; **US 6884057 B2 20050426**; EP 1423249 A2 20040602; WO 02076703 A2 20021003; WO 02076703 A3 20040311

DOCDB simple family (application)

US 46963403 A 20030830; EP 0202727 W 20020313; EP 02704750 A 20020313