Title (en)

ELECTROMOTIVE CLAMPING DEVICE FOR WORK PIECES

Publication

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Application

EP 87116504 A 19871109

Priority

DE 3638526 A 19861111

Abstract (en)

[origin: EP0268176A1] The work-piece clamping device is provided with a clamping lever (14) which is pivotally mounted in a holder and is connected, in articulated manner, via an intermediate member (13) to an actuating member (7) which is secured against rotation and can be moved axially by a drive. The rotary drive consists, in this case, of a threaded spindle (3), rotatably mounted on the holder and driveable by a reversing motor (1), with a self-locking thread pitch which is in engagement with the moveable actuating member (7) provided with an internal thread, and of an axial spring (19) which becomes active in between actuating member and spindle when the clamping end position is reached and prevents wedging of the thread. The reversing motor (1) is connected to the threaded spindle (3) with interposition of an axial coupling (2). The threaded spindle (3) is mounted, on the coupling side, so as to be axially displaceable in a limited manner in a bearing (20) arranged axially displaceably in the holder (H) and provided with the axial spring (19). The coupling-side end of the threaded spindle (3) is arranged so as to be fixed in terms of rotation but axially displaceable in the axial coupling (2). Lastly, the axial spring (19) is arranged between the bearing (20) and a coupling-side support (20') on the holder (H). As a result of this design according to the invention, self-wedging of the thread is prevented, independently of the position in which the lever (14) assumes the actual clamping end position. <IMAGE>

IPC 1-7

B23Q 3/06; B25B 5/06; B66F 3/44

IPC 8 full level

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CPC (source: EP)

B25B 5/12 (2013.01)

Cited by

DE10052857A1; CN113977994A; EP1350591A1; EP0764076A4; EP0919338A3; EP0982099A3; US6739587B2; US9281775B2; WO0234473A1; US6812428B2

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