

Title (en)
DIE CHUCK FOR MULTIPLE-CORNERED ENDS OF TOOL SPINDLES.

Title (de)
SPANNFUTTER FÜR MEHRKANTIGE SCHAFTENDEN VON WERKZEUGEN.

Title (fr)
MANDRIN DE SERRAGE POUR DES EXTREMITES POLYGONALES DE TIGES D'OUTILS.

Publication
EP 0462257 B1 19940608

Application
EP 91902176 A 19910111

Priority
• DE 9000245 U 19900111
• EP 9100033 W 19910111

Abstract (en)
[origin: WO9110541A1] A die chuck for multiple-cornered ends of tool spindles comprises a bushing (5) for transmitting the driving force, the cavity (8) of which matches the multiple-cornered cross-section of the end (32) of the spindle. A pressure piece in the form of a ball (22) which acts on the spindle is lodged in a window-shaped perforation in the bushing (5). Behind the ball (22) is a spring-loaded actuating socket (11) with an inclined clamping surface (19) which presses on the ball and which is located in front of supporting shoulders in the region of the internal peripheral edge of the perforation (23). To obtain an optimal standard shape, the ball (22) is arranged in a cavity (8) which passes through one of the multiple corners (24) and is in two-point contact with the prismatically disposed surfaces of a corner recess (31) at the end (32) of the spindle of the tool (29).

IPC 1-7
B25B 23/00; **B25G 3/18**

IPC 8 full level
B25B 21/00 (2006.01); **B25B 23/00** (2006.01); **B25D 17/08** (2006.01); **B25G 3/18** (2006.01)

CPC (source: EP US)
B25B 23/0035 (2013.01 - EP US); **B25D 17/088** (2013.01 - EP US); **B25D 2217/0003** (2013.01 - EP US); **B25D 2217/0038** (2013.01 - EP US); **B25D 2217/0042** (2013.01 - EP US); **Y10S 279/905** (2013.01 - EP US); **Y10T 279/17145** (2015.01 - EP US); **Y10T 279/17752** (2015.01 - EP US); **Y10T 279/17811** (2015.01 - EP US)

Cited by
US8622401B2; WO2013113847A1; WO2013113849A1; DE102010003842A1; WO2011124604A1; US9067266B2

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

DOCDB simple family (publication)
DE 9000245 U1 19910516; DE 59101830 D1 19940714; DE 9116606 U1 19930401; DK 0462257 T3 19941107; EP 0462257 A1 19911227; EP 0462257 B1 19940608; ES 2054489 T3 19940801; JP H04504825 A 19920827; US 5188378 A 19930223; WO 9110541 A1 19910725

DOCDB simple family (application)
DE 9000245 U 19900111; DE 59101830 T 19910111; DE 9116606 U 19910111; DK 91902176 T 19910111; EP 9100033 W 19910111; EP 91902176 A 19910111; ES 91902176 T 19910111; JP 50242991 A 19910111; US 75266091 A 19910821