

Title (en)
HYDROMECHANICAL MANDREL

Title (de)
HYDROMECHANISCHES FUTTER

Title (fr)
MANDRIN HYDROMECHANIQUE

Publication
EP 0956176 A2 19991117 (EN)

Application
EP 97951416 A 19971219

Priority
• SE 9702197 W 19971219
• SE 9700238 A 19970128

Abstract (en)
[origin: WO9832560A1] A hydromechanical mandrel, preferably intended to be mounted, with one end (2) thereof, in a rotary machine tool, and to releasably carry, with the opposite end (3) thereof, one or more tools (4) of the type having an axial central bore, and in which apparatus said opposite end, named the mandrel pin (3), is formed with a smooth outer surface and so that one or more tools (4) can be slid onto same, and can be secured, on the outer surface of the mandrel, and whereby the mandrel pin (3) is formed as a hydromechanical clamp bushing comprising a sleeve (8) which is formed integral with the mandrel and which has a relatively thin, radially expandable wall and an inner surface (11) which is slightly widened in the direction towards the free end of the sleeve (8), and a piston (9) which is axially displaceable in said sleeve (8) and which has the same conical shape (12) as that of the inner surface (11) of the sleeve (8), and in which the mandrel further comprises means for hydraulic pressurization of a pressure chamber (13) at the outer end of the sleeve (8) thereby forcing the piston (9) inwards in the sleeve (8) by means of a hydraulic pressure medium, and means at the opposite end for pressurization of a release pressure chamber (15) thereby forcing the piston (9) back to its initial position.

IPC 1-7
B23B 31/30

IPC 8 full level
B23B 31/40 (2006.01); **B23B 31/30** (2006.01)

CPC (source: EP)
B23B 31/305 (2013.01)

Designated contracting state (EPC)
CH DE FI FR GB IT LI

DOCDB simple family (publication)
WO 9832560 A1 19980730; EP 0956176 A2 19991117; JP 2001509091 A 20010710; SE 511097 C2 19990802; SE 9700238 D0 19970128; SE 9700238 L 19980729

DOCDB simple family (application)
SE 9702197 W 19971219; EP 97951416 A 19971219; JP 53189398 A 19971219; SE 9700238 A 19970128