

Title (en)
PRECISION CUTTING PRESS

Title (de)
FEINSCHNEIDPRESSE

Title (fr)
PRESSE POUR DECOUPAGE FIN

Publication
EP 3115120 B1 20180905 (DE)

Application
EP 15002021 A 20150706

Priority
EP 15002021 A 20150706

Abstract (en)
[origin: US2017008062A1] This object is achieved by providing that the knife-edged ring cylinder (32) is designed as a one-piece core member (16), a separate stripping/pushing cylinder (31) with stripping/pushing piston (35) in line with the stroke axis (HU) being disposed on the core member, and that an ejector piston (76) is associated with the counterstay piston (75) in the main piston (2), wherein the stripping/pushing piston (35) and the ejector piston (76) each have associated working chambers (36a, 36b; 79) that are independent of one another and are mutually connected hydraulically, and at least two diametrically opposite pre-loading pistons (59) and piston rods (60) disposed at the top (4) are associated with the stripping/pushing cylinder/core member (31/16), each of said pre-loading pistons being guided in a pre-loading cylinder chamber (58a, 58b) in the top (4) perpendicular to, and in line with, an adjusting nut (25), the cylinder being pressurized with fluid from the hydraulic system (39), wherein the piston rods (60) are connected together by way of an adjusting cross member (62) such that an adjustment motion of the pre-loading piston and the piston rods (59, 60) applies an external vertical adjusting force (F) to the stripping/pushing cylinder/core member (31/16), locking or releasing the internal threading (24) of the adjusting nut (25) at the external threading (23) of the core member (16) axially, and the main piston (2) comprises protruding discus-shaped working surfaces (68a, 68b) that subdivide working chambers (69a, 69b) disposed one atop the other vertically with minimal travel (H) in the cylinder chamber (65) of the base (5).

IPC 8 full level
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CPC (source: CN EP KR US)
B21D 28/16 (2013.01 - EP KR US); **B21D 37/10** (2013.01 - KR); **B21D 43/02** (2013.01 - KR); **B30B 1/32** (2013.01 - CN); **B30B 1/323** (2013.01 - EP US); **B30B 1/34** (2013.01 - EP US); **B30B 15/0035** (2013.01 - EP US); **B30B 15/026** (2013.01 - EP US); **B30B 15/042** (2013.01 - CN); **B30B 15/045** (2013.01 - CN); **B21D 28/002** (2013.01 - EP US)

Cited by
CN115464029A; CN114770658A; CN117463885A

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