

Title (en)

PRESS-DRIVEN TOOL MODULE, IN PARTICULAR PRESS-DRIVEN CROSS-PUNCHING OR BENDING UNIT

Title (de)

PRESSENGETRIEBENES WERKZEUGMODUL, INSbesondere EINE PRESSENGETRIEBENE QUERSTANZ- ODER BIEGEEINHEIT

Title (fr)

MODULE PORTE-OUTILS ENTRAINE PAR UNE PRESSE, NOTAMMENT UNITE DE DECOUPAGE TRANSVERSAL OU DE PLIAGE ENTRAINEE PAR UNE PRESSE

Publication

EP 0696960 A1 19960221 (DE)

Application

EP 93908821 A 19930426

Priority

DE 9300370 W 19930426

Abstract (en)

[origin: WO9425260A1] In a press-driven tool module, in particular press-driven cross-punching or bending unit, a tool (18) mountable on a slide (9) is movable in any direction against the action of a restoring, integrated pneumatic spring, and the tool (18) carrying slide (9) may be actuated by a vertically movable press slide (17). For that purpose, a vertically guided plunger (23) arranged in a power cylinder (K) may be actuated by the press slide (17) by means of a piston rod (3) and acts upon a hydraulic medium (M) in an underlying displacement chamber (24). The displacement chamber (24) is connected by a high pressure pipe (25) to the work chamber (22) of a working cylinder (A) whose piston rod (9) bears the tool. In a preferred embodiment, the power cylinder (K) and the working cylinder (A) may be mounted apart from each other and linked to each other by a flexible high pressure pipe.

IPC 1-7

B30B 1/00; B21D 28/20

IPC 8 full level

B21D 28/20 (2006.01); **B21D 5/02** (2006.01); **B21D 28/00** (2006.01); **B30B 1/00** (2006.01); **B30B 1/32** (2006.01)

CPC (source: EP KR US)

B21D 28/002 (2013.01 - EP US); **B30B 1/00** (2013.01 - KR); **B30B 1/007** (2013.01 - EP US); **B30B 1/32** (2013.01 - EP US);
Y10T 83/8785 (2015.04 - EP US)

Citation (search report)

See references of WO 9425260A1

Cited by

AT505440B1; AT505160B1

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

DE 9405764 U1 19940601; DE 59306000 D1 19970430; EP 0696960 A1 19960221; EP 0696960 B1 19970326; ES 2100530 T3 19970616;
FR 2704478 A3 19941104; FR 2704478 B3 19950324; JP H08508681 A 19960917; KR 960701740 A 19960328; US 5606910 A 19970304;
WO 9425260 A1 19941110

DOCDB simple family (application)

DE 9405764 U 19940407; DE 59306000 T 19930426; DE 9300370 W 19930426; EP 93908821 A 19930426; ES 93908821 T 19930426;
FR 9404959 A 19940425; JP 52372294 A 19930426; KR 19950704666 A 19951025; US 41670395 A 19951211