

Title (en)  
DRAWING APPARATUS FOR PRESSES

Publication  
**EP 0192115 A3 19870916 (DE)**

Application  
**EP 86101399 A 19860204**

Priority  
DE 3505984 A 19850221

Abstract (en)  
[origin: ES8704094A1] A drawing apparatus, by means of which the different individual functions such as control of the sheet metal holder pressure, control of the sheet metal holder upward movement, control of the ejector movement and of the end position abutment are adjustable, respectively, controllable independently of one another. In a drawing apparatus with pressure cylinders (8) for the sheet metal retention during the drawing and with pressure cylinders (9) for the ejection of the workpieces, with a pressure cheek (1) guided in the press table and movable and supported by the pressure cylinders (8, 9) and with a follower control installation (48) acting in the lower dead-center position on a pressure cylinder (8) effecting the sheet metal retention during the drawing operation, the pressure cylinders (8, 9) are thereby held fixed at the press the piston rods (6) of the pressure cylinders (8, 9) effecting the sheet metal retention are adapted to be placed in the direction (14) of the sheet metal retaining pressure against the pressure cheek (1) and one follower control installation (48, 49) is coordinated to each pressure cylinder (8) effecting the sheet metal retention and to each pressure cylinder (9) effecting the ejection with the use of several pressure cylinders (9) for the ejections, one follower control installation each is connected thereto, possibly one follower control installation common to all such pressure cylinders may be used.

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IPC 8 full level  
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CPC (source: EP US)  
**B21D 24/08** (2013.01 - EP US); **B21D 24/14** (2013.01 - EP US)

Citation (search report)  
• [AD] DE 2742405 A1 19790322 - KRUPP GMBH  
• [AD] DE 3202134 C1 19830707 - MUELLER WEINGARTEN MASCHF  
• [A] GB 1092869 A 19671129 - DRO ENGINEERING CO DI

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EP0268894A3; EP0268893A3; EP0278897A3; DE3718159A1; GB2197813A; FR2607416A1; GB2197813B; WO2012104442A1

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