

Title (en)
DRAWING DEVICE FOR A PRESS

Publication
EP 0268894 B1 19920812 (DE)

Application
EP 87116280 A 19871105

Priority
DE 3640787 A 19861128

Abstract (en)
[origin: US4821552A] A drawing installation for a press which must produce the holding force during the drawing operation. The drawing ram displaces the sheet metal part and the sheet metal holder against the holding force and additionally must overcome at the beginning of the sheet metal deformation the inertia forces of the accelerated parts of the drawing installation. In order to avoid the forces which occur thereby in an impact-like manner, the piston rods transmitting the holding force and the ejector piston rods are pre-accelerated prior to the drawing ram. The piston rods each include an operating surface adapted to be acted upon in the drawing direction. The pressure spaces coordinated thereto are connected with a pressure quantity space each of a pre-acceleration cylinder and by way of a refill control with a pressure source. The control of the pre-acceleration cylinder and of the refill from the pressure source takes place in dependence on the movement of the drawing ram. The drawing installation can be used in presses with mechanically driven drawing rams and sheet metal holders retaining the sheet metal part whereby the functions of holding and ejection are carried out by separate pressure cylinders.

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B21D 24/08

IPC 8 full level
B21D 24/08 (2006.01); **B21D 24/14** (2006.01)

CPC (source: EP US)
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Cited by
US5457980A; US5471861A; EP0573830A1; EP0773075A3; EP0596696A1

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