

Title (en)  
DRAWING DEVICE IN A PRESS

Publication  
**EP 0276672 B1 19920520 (DE)**

Application  
**EP 88100276 A 19880112**

Priority  
DE 3702069 A 19870124

Abstract (en)  
[origin: US4840055A] A drawing apparatus in a press for holding the sheet metal part during the drawing and for the ejection thereof. Additionally, blocking devices are provided which prevent the ejection of the sheet metal draw part at the same time with the upward movement of the press ram. Each blocking device is thereby to be rendered selectively operable or inoperable. A continuous flow of the hydraulic liquid is to be precluded during the inoperative condition of the blocking device. The blocking device consists of a pressure cylinder, of a pressure piston which is displaceably movable on the piston rod displaceable by the draw cushion, and of a compression spring for the displacement of the pressure piston in the ejection direction. The pressure space formed above the pressure piston is selectively pressureless for the inoperative condition, respectively, adapted to be acted upon with controlled pressure for the operative condition of the blocking device. The arrangement enables, on the one hand, the operation of a press and especially of a transfer press with large stroke numbers; with the latter without the operation of the transfer device effecting the transfer movement of the sheet metal draw parts, on the other, the operation with reduced stroke number of the press under utilization of the blocking device.

IPC 1-7  
**B21D 24/08**

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

CPC (source: EP US)  
**B21D 24/08** (2013.01 - EP US)

Cited by  
CN110947859A

Designated contracting state (EPC)  
DE ES FR GB IT SE

DOCDB simple family (publication)  
**EP 0276672 A2 19880803; EP 0276672 A3 19900613; EP 0276672 B1 19920520**; CA 1289417 C 19910924; DE 3702069 A1 19880804; DE 3871161 D1 19920625; ES 2032872 T3 19930301; US 4840055 A 19890620

DOCDB simple family (application)  
**EP 88100276 A 19880112**; CA 557103 A 19880122; DE 3702069 A 19870124; DE 3871161 T 19880112; ES 88100276 T 19880112; US 14789388 A 19880125