

Title (en)
A cushioning arrangement for presses

Title (de)
Ziehkissenanordnung für Pressen

Title (fr)
Agencement de coussins pour presses

Publication
EP 2428290 A1 20120314 (EN)

Application
EP 11180851 A 20110912

Priority
TR 201007501 A 20100913

Abstract (en)
The present invention is a press cushioning arrangement (20) which is embodied in the cushioning housing (11) of a press lower group (10) and which provides support to the blank holder through the rods (13) during the pressing process, characterized by comprising a cylinder body (21) positioned in said cushioning housing (11), and a plurality of pistons (22) whose lower ends are inside the cylinder chamber (211) defined by said cylinder body (21) and whose upper ends contact with the rods (13) corresponding to them during the cushioning process so that equal force is applied to each one by means of the hydraulic oil applied to said cylinder body (21).

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CPC (source: EP)
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Citation (applicant)

- JP H0557363 B2 19930823 - KUBOTA KK
- JP H11114700 A 19990427 - ISHIKAWAJIMA HARIMA HEAVY IND
- JP H02192829 A 19900730 - NHK SPRING CO LTD

Citation (search report)

- [X] DE 19541721 A1 19970515 - ERFURT UMFORMTECHNIK GMBH [DE]
- [AD] JP H0557363 A 19930309 - TOYOTA MOTOR CORP

Cited by
CN107442635A; JP2016532563A; US11833565B2

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