

Title (en)

Method and control arrangement for interrupting and continuing of the drawing process in double acting presses, in particular hydraulic presses

Title (de)

Verfahren und Schaltungsanordnung zum Unterbrechen und Fortführen des Ziehprozesses an zweifachwirkenden Pressen, insbesondere hydraulischen Pressen

Title (fr)

Procédé et arrangement de réglage pour interrompre et continuer l'emboutissage à presses à deux étages, en particulier à presses hydrauliques

Publication

EP 0673695 B1 19990107 (DE)

Application

EP 95101964 A 19950214

Priority

DE 4405909 A 19940224

Abstract (en)

[origin: EP0673695A1] The command "stop" is followed by immediate braking of the ram(8). At the same time, the instantaneous values of forces and moments (e.g. the ram force, the moment necessary for keeping it parallel) involved in the drawing process are measured and stored in an operation sequence control unit (30). This is followed by a series of steps including force and moment alternations and activation of the clamping/locking mechanism. After examination of the workpiece and possible alteration of some stored values, the drawing process (after de-activation of the clamping/locking mechanism) is restarted under control of the unit (30). The system further incorporates units (14,15,29,27,21) controlling respectively the ram motion, the press force, the safety clamping, the cushion force and the holding-up system.

IPC 1-7

B21D 24/14

IPC 8 full level

B21D 22/26 (2006.01); **B21D 22/22** (2006.01); **B21D 24/14** (2006.01); **B30B 15/16** (2006.01); **B30B 15/26** (2006.01)

CPC (source: EP)

B21D 22/22 (2013.01); **B21D 24/12** (2013.01); **B21D 24/14** (2013.01); **B30B 15/16** (2013.01); **B30B 15/163** (2013.01)

Cited by

CN109513797A; EP0887127A1; US6089073A; US7832331B2; WO2005021253A3

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

DE 4405909 A1 19950831; DE 59504711 D1 19990218; EP 0673695 A1 19950927; EP 0673695 B1 19990107; JP H07256499 A 19951009

DOCDB simple family (application)

DE 4405909 A 19940224; DE 59504711 T 19950214; EP 95101964 A 19950214; JP 3662595 A 19950224