

Title (en)

METHOD AND DEVICE FOR CONTROLLING AND REGULATING SERVO-ELECTRIC DIE CUSHIONS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR STEUERUNG UND REGELUNG VON SERVO-ELEKTRISCHEN ZIEHKISSEN

Title (fr)

PROCEDE ET DISPOSITIF POUR COMMANDER ET REGLER DES COUSSINS DE SERRE-FLAN SERVO-ELECTRIQUES

Publication

EP 1861214 B1 20081210 (DE)

Application

EP 06722642 A 20060317

Priority

- DE 2006000486 W 20060317
- DE 102005012876 A 20050319

Abstract (en)

[origin: WO2006099845A1] The invention relates to a method for controlling and regulating servo-electric die cushions (8, 9) on forming presses and to a device for carrying out said method. A stable and precise operation in the phase of the force-regulated (15) drawing process and in all phases of the charge-regulated displacement (14, 16) of the cushion are possible due to the simple structure of the control and regulation and a reduced number of steps in the control and/or regulation operation. The conductive wave-regulated electronic curve disk regulation principle is combined with the force regulation in order to control and regulate the die cushion (8, 9), such that all displacement phases (14, 15, 16) of the die cushion, which are not in mechanical contact with the press slide, are controlled by electronic position-curve slides (12) during which the movements are in contact with the press slide due to force regulation with a path-dependent controlled force desired value profile.

IPC 8 full level

B21D 24/10 (2006.01); **G05B 19/18** (2006.01)

CPC (source: EP)

B21D 24/10 (2013.01)

Cited by

CN108750653A; US10870251B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102005012876 A1 20060921; AT E416859 T1 20081215; CN 101146630 A 20080319; CN 101146630 B 20121024; DE 502006002334 D1 20090122; EP 1861214 A1 20071205; EP 1861214 B1 20081210; ES 2317509 T3 20090416; JP 2008532777 A 20080821; JP 5185809 B2 20130417; WO 2006099845 A1 20060928

DOCDB simple family (application)

DE 102005012876 A 20050319; AT 06722642 T 20060317; CN 200680008952 A 20060317; DE 2006000486 W 20060317; DE 502006002334 T 20060317; EP 06722642 A 20060317; ES 06722642 T 20060317; JP 2008502240 A 20060317