

Title (en)
DIE CUSHION DEVICE

Title (de)
STEMPELKISSENVORRICHTUNG

Title (fr)
COUSSIN

Publication
EP 3845324 B1 20230308 (EN)

Application
EP 19854535 A 20190823

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Abstract (en)
[origin: EP3845324A1] A die cushion device includes: a hydraulic cylinder (10) that vertically moves a cushion pad (14); a hydraulic pump (P) that supplies hydraulic oil from an oil tank (T) to the hydraulic cylinder (10); a relief valve (20) that returns hydraulic oil discharged from the hydraulic cylinder (10), to the oil tank (T); a pressure sensor (PS) that detects a hydraulic oil pressure, which is a die cushion pressure of the hydraulic cylinder (10); and a control device (40) that controls a flow rate and a pressure of hydraulic oil supplied from the hydraulic pump (P) to the hydraulic cylinder (10). The control device controls the number of rotations of the hydraulic pump (P) such that the hydraulic oil pressure detected by the pressure sensor (PS) reaches a die cushion pressure command value, and when a hydraulic oil pressure detected by the pressure sensor is equal to or higher than a set pressure of the relief valve (20), the control device (40) reversely rotates the hydraulic pump (P).

IPC 8 full level
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