

Title (en)
DIE-CUSHION DEVICE AND PRESS MACHINE

Title (de)
STEMPELKISSENVORRICHTUNG UND PRESSMASCHINE

Title (fr)
DISPOSITIF COUSSIN PNEUMATIQUE ET PRESSE

Publication
EP 3885058 A1 20210929 (EN)

Application
EP 19902428 A 20190918

Priority
• JP 2018243620 A 20181226
• JP 2019036506 W 20190918

Abstract (en)
A die cushion apparatus (200) includes: a double-acting hydraulic cylinder (210) configured to move a cushion pad (140) up and down; a first hydraulic pump (P1) configured to supply a hydraulic oil from an oil tank (T) to a first port (210a) of the hydraulic cylinder (210) and to drive a piston (212) of the hydraulic cylinder (210) upward; a second hydraulic pump (P2) configured to supply the hydraulic oil from the oil tank (T) to a second port (210b) of the hydraulic cylinder (210) and to drive the piston (212) of the hydraulic cylinder (210) downward; and a control unit (260) configured to control a rotation speed of the first hydraulic pump (P1) and a rotation speed of the second hydraulic pump (P2) and to control a flow rate and a pressure of the hydraulic oil which the first hydraulic pump (P1) supplies to the hydraulic cylinder (210) and a flow rate and a pressure of the hydraulic oil which the second hydraulic pump (P2) supplies to the hydraulic cylinder (210).

IPC 8 full level
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CPC (source: EP)
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