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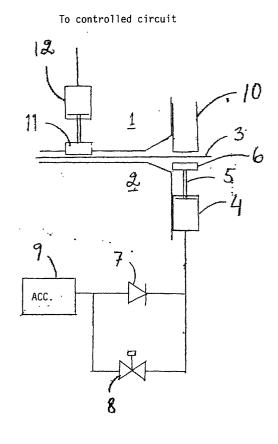
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(54) Machine with hydraulically controlled counterpressure holding element

(57)The invention relates to a machine with a hydraulically controlled counterpressure element. The machine comprises a frame and top and lower machine parts (1, 2) in a conventional way for performing the embossing. According to the invention the counterpressure element (6, 11) is connected to a hydraulic cylinder (4, 12), said counterpressure element engaging the plate (3). The hydraulic cylinder (4, 12) is connected to a hydraulic circuit having a controllable hydraulic pressure, so that the counterpressure element is pressed back at the controlled pressure during an embossing operation. The counterpressure element may be included in a holding means to hold the plate securely during the embossing. According to the invention a machine part (1) is then connected to a positive counterpressure element (10) and another machine part (2) is connected to a hydraulic cylinder (4), said hydraulic cylinder (4) having a plunger and a stem (5) connected to a gripping means (6) holding the plate (3) together with the positive counterpressure element (10), such that the plunger during an embossing operation is pressed back at a controlled pressure. The holding means provides a secure holding through the whole press operation. The counterpressure element may also be included in an embossing counterpressure element, in which the counterpressure may be set in order to achieve a pre-embossing or a pressure controlled embossing. The invention may be applied to all types of machines in which counterpressure elements are required.



FIG



EUROPEAN SEARCH REPORT

Application Number EP 99 85 0120

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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