

Title (en)
Machine with hydraulically controlled counterpressure holding element

Title (de)
Vorrichtung mit druckmittelbetätigtem Gegendrückhaltelement

Title (fr)
Dispositif à contrôle hydraulique pour élément de tenue à contrepression

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Application
EP 99850120 A 19990709

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SE 9802566 A 19980717

Abstract (en)
[origin: EP0974410A2] 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. <IMAGE>

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Citation (search report)
• [X] EP 0565347 A2 19931013 - TOYOTA MOTOR CO LTD [JP]
• [X] DE 4035005 A1 19920507 - ERFURT UMFORMTECHNIK GMBH [DE]
• [X] EP 0806256 A2 19971112 - MUELLER WEINGARTEN MASCHF [DE]
• [X] EP 0692323 A2 19960117 - TOYOTA MOTOR CO LTD [JP]

Cited by
US11292047B2; WO2004005044A3

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