Title (en)
METHOD FOR CONTROLLING A PRESS WITH A VARIABLE GEAR RATIO

Title (de)
VERFAHREN ZUR STEUERUNG EINER PRESSE MIT VARIABLER GETRIEBEÜBERSETZUNG

Title (fr)
PROCÉDÉ PERMETTANT DE COMMANDER UNE PRESSE À DÉMULTIPLICATION VARIABLE DE LA TRANSMISSION

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Application
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Abstract (en)
[origin: WO2014191285A1] The invention relates to a method for controlling a press (10). The press (10) has an electric drive motor (21) and a press transmission (22) with a variable gear ratio (Ü). A tappet (12) of the press (10) is mounted in a movable manner in a stroke direction (R) and is connected to the electric drive motor (21) via the press transmission (22). The gear ratio (Ü) continuously increases and to a high degree as the tappet moves from an upper reversal point (OT) to a lower reversal point (UT). In order to prevent the press (10) from exceeding a specified maximum pressing force (Fmax), a position-dependent maximum torque (Mmax) is specified for the electric drive motor (21). The control device compares each applied drive torque (M) with the position-dependent maximum torque (Mmax). As soon as the drive torque (M) exceeds the position-dependent maximum torque (Mmax), the danger of the force applied by the tappet (12) exceeding the maximum pressing force (Fmax) during an ongoing forming movement is detected. The control device (12) then reduces the drive torque (M) in order to prevent damage to the press (10).

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