Title (en)

HYBRID MODULE HAVING A SEPARATING CLUTCH AND ACTUATION UNIT WITHOUT COMPENSATION, AND DRIVE TRAIN

Title (de)

HYBRIDMODUL MIT TRENNKUPPLUNG UND BETÄTIGUNGSEINHEIT OHNE KOMPENSATION; SOWIE ANTRIEBSSTRANG

Title (fr)

MODULE HYBRIDE AVEC EMBRAYAGE DE COUPURE ET UNITÉ D'ACTIONNEMENT SANS COMPENSATION ; AINSI QUE CHAÎNE CINÉMATIQUE

Publication

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Application

EP 20705882 A 20200120

Priority

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Abstract (en)

[origin: WO2020177798A1] The invention relates to a hybrid module (1) for a drive train (2) of a motor vehicle, comprising a housing (3), an input shaft (4) which can be rotated relative to the housing (3) and can be connected to an internal combustion engine, an electric machine (5), a carrier (7) rotationally coupled to a rotor (6) of the electric machine (5), a separating clutch (8) operatively introduced between the input shaft (4) and the carrier (7), and a hydraulic actuation unit (9) designed for adjusting the separating clutch (8) between a closed position and an open position, wherein the actuation unit (9) has a sliding element (11) shiftingly acting on multiple friction elements (10a, 10b) of the separating clutch (8), which sliding element (11) encloses a hydraulic pressure chamber (13) towards its first axial side (12a) together with the carrier (7) and is applied with an axial restoring force towards its second axial side (12b) by a restoring spring unit (14), wherein the restoring spring unit (14) and the pressure chamber (13) are designed and coordinated in such a way that, during operation of the hybrid module (1), with the carrier (7) rotating up to a rotational speed of at least 3000 U/min, the restoring force generated by the restoring spring unit (14) is greater than an axial adjustment force of the pressure chamber (13) generated by a centrifugal force in the pressure chamber (13) and acting axially opposite the restoring force, on the sliding element (11) in the direction of the closed position. The invention also relates to a drive train (2) comprising said hybrid module (1).

IPC 8 full level

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See references of WO 2020177798A1

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