

Title (en)

STARTING AND DRIVING UNIT FOR AN INTERNAL COMBUSTION ENGINE OF A MOTOR VEHICLE

Title (de)

START-/ANTRIEBSEINHEIT FÜR EINE BRENNKRAFTMASCHINE EINES KRAFTFAHRZEUGES

Title (fr)

UNITE DE DEMARRAGE ET D'ENTRAINEMENT POUR MOTEUR A COMBUSTION INTERNE D'UN VEHICULE

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Application

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Abstract (en)

[origin: US6250270B1] The invention relates to a starting/driving unit for an internal combustion engine (VM) of a motor vehicle with at least two starting methods, which has a clutch (K) between the crankshaft (KW), the engine (VM), and the vehicle transmission (FG) as well as an electric machine which is connected to the engine (VM) by way of the clutch (K). With the electric machine, the two starting methods can be executed in an optimal fashion solely by virtue of the fact that through rotation of the crankshaft by means of the electric machine, each starting method is preceded by a start clearing phase in which the starting conditions are detected when the clutch is engaged, a decision is made as to the subsequent operating phases (direct start phase, positioning phase, preinjection phase, impulse start phase) and their starting parameters are determined.

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