

Title (en)

STARTER FOR CRANKING AN INTERNAL COMBUSTION ENGINE HAVING A PINION SHAFT SUPPORT

Title (de)

STARTER ZUM ANDREHEN EINER BRENNKRAFTMASCHINE MIT RITZELWELLENABSTÜTZUNG

Title (fr)

DÉMARREUR POUR METTRE EN MARCHÉ UN MOTEUR À COMBUSTION INTERNE, AVEC SOUTIEN DE L'ARBRE DE PIGNON

Publication

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Application

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Abstract (en)

[origin: WO2008052822A1] The invention relates to a starter (2) for cranking an internal combustion engine, in particular a cantilevered starter (2), having an electric starter motor (6) which has a drive shaft (10) which is provided with an external toothing system (42, 44), a pinion shaft (16) which carries a pinion (20), and a clutch part (28) of a roller freewheel clutch (12) which is arranged between the drive shaft (10) and the pinion shaft (16), has an internal toothing system (46) which meshes with the external toothing system (42, 44) of the drive shaft (10) and can be displaced together with the pinion shaft (16) away from the starter motor (6) in the axial direction of the drive shaft (10) into a starter pinion position (Fig. 2), in which the pinion (20) meshes with a gearwheel or crown gear of the internal combustion engine. In order to load the roller raceways (52, 54) of the roller freewheel clutch (12) to a less pronounced extent as a result of the radial forces which act on the pinion shaft (16) in the region of the pinion (20) during cranking of the internal combustion engine, a device (60; 64) is provided for supporting the pinion shaft (16) directly on a section (42), facing away from the starter motor (6), of the external toothing system (42, 44) of the drive shaft (10).

IPC 8 full level

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