

Title (en)
COMPACT STARTER DEVICE.

Title (de)
ANDREHVORRICHTUNG IN KOMPAKTBAUWEISE.

Title (fr)
APPAREIL DE DEMARRAGE COMPACT.

Publication
EP 0518877 B1 19941005

Application
EP 91903881 A 19910222

Priority
• DE 4006795 A 19900303
• DE 9100144 W 19910222

Abstract (en)
[origin: DE4006795A1] A starter device, in particular a freely disengaging starter device, has an electric motor the rotor of which drives a drive shaft with a pinion for driving a crown gear of an internal combustion engine through a free-wheeling reduction gearing. The pinion-carrying end region of the drive shaft is mounted in a front wall of the housing. To obtain a compact, in particular short, structure, the other end (23) of the drive shaft (6) is mounted on a first bearing (needle bearing (37)) in a central opening (166) of a free-wheeling outer ring (35) the outer surface (164) of which abuts on the housing (2) of the starter device through a second bearing (deep groove ball bearing (38)), and the associated end (25) of a rotor shaft (17) of the starter rotor (5) is mounted on a third bearing (needle bearing (31)) at the end region of the drive shaft (6) located inside the housing (2).

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IPC 8 full level
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