

Title (en)

Coaxial engine starter.

Title (de)

Koaxialer Anlasser für einen Verbrennungsmotor.

Title (fr)

Démarreur coaxial pour moteur à combustion interne.

Publication

**EP 0385726 A1 19900905 (EN)**

Application

**EP 90302081 A 19900227**

Priority

JP 4752689 A 19890227

Abstract (en)

A coaxial engine starter comprises an electric motor having an armature winding (1) of a single turn and a hollow armature rotary shaft (3) for generating a rotational force for starting an engine. The starter also comprises an over-running clutch mechanism (17) disposed within the hollow armature rotary shaft for preventing the occurrence of an excessive-speed of the armature (1) and having a pinion (20) having a gear teeth number equal to or less than seven for engaging with a ring gear of an engine upon starting of the electric motor. A solenoid switch (24) is also disposed behind the electric motor for moving a pinion shaft (20,26) forward and supplying an electric power to the electric motor.

IPC 1-7

**F02N 15/06**

IPC 8 full level

**F02N 11/00** (2006.01); **F02N 15/06** (2006.01)

CPC (source: EP KR)

**F02N 11/00** (2013.01 - KR); **F02N 15/066** (2013.01 - EP)

Citation (search report)

- [Y] US 1435101 A 19221107 - ODILON BRISBOIS
- [Y] FR 2310009 A1 19761126 - N I EXPERIMENT AVTOMOBILNOGO [SU]
- [AD] EP 0277566 A1 19880810 - MITSUBISHI ELECTRIC CORP [JP]

Designated contracting state (EPC)

DE FR GB

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DOCDB simple family (application)

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