

Title (en)

Electrical starting motor for internal combustion engines, particularly for automotive vehicles.

Title (de)

Elektrischer Anlasser für Brennkraftmaschinen, insbesondere für Kraftfahrzeuge.

Title (fr)

Démarreur électrique pour moteurs à combustion interne, notamment de véhicules automobiles.

Publication

EP 0012046 A1 19800611 (FR)

Application

EP 79400763 A 19791018

Priority

FR 7833657 A 19781129

Abstract (en)

1. An electric starter for internal combustion engines, particularly for motor vehicles, the starter being of the type comprising an electromagnetic braking device constituted by a fixed inductor circuit (12, 12a, 13, 14), supplied simultaneously with the electrical circuit of the starter, and a movable armature element (7) fixed to an engagement element (5), said electromagnetic braking device causing, on the one hand, the axial displacement of the engagement element (5) between a rest position and an operative position, and on the other hand, the axial retention of said engagement element (5) in its operative position as long as the electrical circuit of the starter is supplied, characterised in that the movable armature element (7) has a peripheral portion turned back parallel to the axis of rotation of said armature element, which peripheral portion includes a first cylindrical zone (7a) constituted by pole teeth (7b) adapted to produce a magnetic rotational braking permitting an axial displacement of the engagement element (5) and a second cylindrical zone (7c) forming a continuous integral ring, such that the engagement element (5) is retained axially in its operative position as long as the starter is supplied.

Abstract (fr)

démarreurs du type comportant un dispositif de freinage électromagnétique provoquant le déplacement axial d'un élément d'engrènement (5) dans la couronne dentée du moteur, caractérisé en ce que l'élément mobile (7) du dispositif de freinage comporte une partie périphérique rabattue parallèlement à l'axe de rotation dudit élément, laquelle partie périphérique compte une première zone (7a) munie de dents polaires (7b) aptes à produire un déplacement axial de l'élément d'engrènement (5) et une seconde zone (7c) formant une couronne continue de matière pour maintenir l'élément d'engrènement dans sa position de travail tant que le démarreur est alimenté.

IPC 1-7

F02N 15/06; **F02N 11/00**

IPC 8 full level

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

CPC (source: EP)

F02N 11/00 (2013.01); **F02N 15/066** (2013.01)

Citation (search report)

- FR 2207529 A5 19740614 - PARIS & DU RHONE [FR]
- GB 1249847 A 19711013 - BENDIX CORP [US]
- GB 818595 A 19590819 - SIMMS MOTOR UNITS LTD
- FR 2010287 A1 19700213 - BENDIX CORP

Cited by

FR2841941A1; CN104500305A; FR2858366A1; EP1378661A1; CN104500304A; WO2005015005A1

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