

Title (en)

Electrical starter motor for a motor vehicle internal combustion engine

Title (de)

Elektrischer Anlasser für einen Verbrennungsmotor eines Kraftfahrzeugs

Title (fr)

Démarreur électrique pour un moteur à combustion de véhicule automobile

Publication

EP 0708239 B1 19980902 (FR)

Application

EP 95116261 A 19951016

Priority

FR 9412513 A 19941018

Abstract (en)

[origin: EP0708239A1] The electric starter motor includes a base plate (12) serving as a support for a thrower, controlled by a lever which is mounted on a hinge support (36) for the base plate (12). The support is formed by a moulding plastic material onto the base plate. The structure includes a ring (52) which is internally toothed and this also is made from a moulded plastic material. Both the ring and the hinged support may be formed simultaneously by the moulding process, although the two components are separate and use two distinct supplies of the plastic material during moulding.

IPC 1-7

F02N 15/06

IPC 8 full level

F02N 15/04 (2006.01)

CPC (source: EP US)

F02N 15/046 (2013.01 - EP US); **Y10T 74/132** (2015.01 - EP US); **Y10T 74/137** (2015.01 - EP US)

Citation (examination)

"Plastics Engineering Handbook" Fifth Edition, M.L.Berins, Chapman & Hall 1991.

Cited by

US6134977A; FR2770589A1; FR3050240A1; FR3049985A1; WO2017178759A1; EP3440339B1

Designated contracting state (EPC)

DE ES GB IT

DOCDB simple family (publication)

EP 0708239 A1 19960424; **EP 0708239 B1 19980902**; BR 9504398 A 19970902; CN 1073210 C 20011017; CN 1130720 A 19960911; DE 69504450 D1 19981008; DE 69504450 T2 19990114; ES 2124485 T3 19990201; FR 2725758 A1 19960419; FR 2725758 B1 19970110; US 5718147 A 19980217

DOCDB simple family (application)

EP 95116261 A 19951016; BR 9504398 A 19951013; CN 95118405 A 19951016; DE 69504450 T 19951016; ES 95116261 T 19951016; FR 9412513 A 19941018; US 54767595 A 19951018