

Title (en)

Starter for a combustion engine

Title (de)

Startvorrichtung für eine Brennkraftmaschine

Title (fr)

Dispositif de démarrage pour moteur à combustion interne

Publication

EP 2722519 B1 20190828 (DE)

Application

EP 13183672 A 20130910

Priority

DE 102012219044 A 20121018

Abstract (en)

[origin: EP2722519A2] The starter has a starter pinion (2) adjustable between an inoperative position and an engaged position with a tooth rim (3) of an internal combustion engine (4). A drive movement of a starter motor (11) is transferred on the starter pinion through a gearbox (12). Damping elements support a gear element of the gearbox. The damping elements are directly arranged on axial end faces of the gear element. The gear element is supported in axially adjacent components along a circumferential direction. The damping elements comprise an elastomer.

IPC 8 full level

F02N 15/04 (2006.01)

CPC (source: EP)

F02N 15/046 (2013.01); **F02N 11/00** (2013.01); **F02N 15/063** (2013.01); **F02N 15/067** (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2722519 A2 20140423; **EP 2722519 A3 20180314**; **EP 2722519 B1 20190828**; CN 103775266 A 20140507; CN 103775266 B 20160608; DE 102012219044 A1 20140424; HU E046224 T2 20200228

DOCDB simple family (application)

EP 13183672 A 20130910; CN 201310757042 A 20131016; DE 102012219044 A 20121018; HU E13183672 A 20130910