

Title (en)  
Vehicle starter and transmission mechanism for the same

Title (de)  
Fahrzeuganlasser und Getriebemechanismus dafür

Title (fr)  
Démarreur de véhicule et mécanisme de transmission

Publication  
**EP 2664785 A3 20171206 (EN)**

Application  
**EP 13168353 A 20130517**

Priority  
• CN 201210154249 A 20120517  
• CN 201220223807 U 20120517

Abstract (en)  
[origin: EP2664785A2] The present invention relates to a transmission mechanism for a vehicle starter, comprising: a speed reducer connected to an output shaft of an electric motor of the vehicle starter ; an overrunning clutch connected to the speed reducer, the overrunning clutch having a driving part, a driven part and a movement transmitting element provided between the driving and driven parts for achieving transmission of a one-way movement therebetween; and an output shaft connected to the overrunning clutch, wherein the transmission mechanism further comprises a transmission carrier, the overrunning clutch is connected to the speed reducer via the transmission carrier in such a way that rotational movement is able to transmit only from the speed reducer to the overrunning clutch, the driving part of the overrunning clutch is mounted in the transmission carrier with play, and the transmission carrier is mounted on the output shaft of the electric motor. The present invention also relates to a vehicle starter comprising said transmission mechanism. The transmission mechanism can be manufactured simply and its coaxiality can be ensured.

IPC 8 full level  
**F02N 15/02** (2006.01); **F02N 15/04** (2006.01)

CPC (source: EP)  
**F02N 15/023** (2013.01); **F02N 15/043** (2013.01); **F02N 11/00** (2013.01); **F02N 15/025** (2013.01); **F02N 15/026** (2013.01); **F02N 15/046** (2013.01); **F02N 15/063** (2013.01); **F02N 15/067** (2013.01)

Citation (search report)  
• [XYI] US 4899604 A 19900213 - MORISHITA AKIRA [JP], et al  
• [XYI] US 5115689 A 19920526 - ISOZUMI SHUZOU [JP], et al  
• [XP] DE 102010062999 A1 20120614 - BOSCH GMBH ROBERT [DE]  
• [YA] FR 2515271 A1 19830429 - MITSUBISHI ELECTRIC CORP [JP]  
• [A] US 5154090 A 19921013 - KONISHI KEIICHI [JP]

Cited by  
US11686374B2; US10900454B1; US10948054B2; US11719209B2; US10920730B2; US10933731B2; US10975938B2; US11866910B2; US10920733B2; US11761515B2; US11326570B1; US11624170B2; US10821820B1; US11156270B2; US11193560B1; US11415199B2; US10968985B2; US10975937B2; US11060496B2

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2664785 A2 20131120; EP 2664785 A3 20171206; EP 2664785 B1 20200408; HU E049689 T2 20201130**

DOCDB simple family (application)  
**EP 13168353 A 20130517; HU E13168353 A 20130517**