

Title (en)

CONTROLLER, STARTING DEVICE, AND METHOD FOR OPERATING THE CONTROLLER

Title (de)

STEUERUNG, STARTVORRICHTUNG UND VERFAHREN ZUM BETREIBEN DER STEUERUNG

Title (fr)

COMMANDE, DISPOSITIF DE DÉMARRAGE ET PROCÉDÉ POUR FAIRE FONCTIONNER LA COMMANDE

Publication

**EP 2521854 A1 20121114 (DE)**

Application

**EP 10798132 A 20101228**

Priority

- DE 102010000709 A 20100107
- EP 2010070812 W 20101228

Abstract (en)

[origin: WO2011083064A1] The invention relates to a method for operating a controller (5) for a starting device (1) of an internal combustion engine (2), wherein the starting device (1) comprises an electric motor (3), in particular a starter motor (3), and a coupling device (4), in particular having a starter pinion (7) for engaging in a crown gear (8) of the internal combustion engine (2), and wherein the electric motor (3) and the coupling device (4) are actuated separately and the electric motor (3) is coupled to the rotating, in particular coasting down, internal combustion engine (2). In order to bring the internal combustion engine (2) into a startable state as quickly and safely as possible, a time curve of an actuation of the electric motor (3) and the coupling device (4) is determined and carried out according to a selected operating strategy.

IPC 8 full level

**F02N 11/08** (2006.01)

CPC (source: EP)

**F02N 11/0855** (2013.01); **F02N 15/067** (2013.01); **F02N 2011/0874** (2013.01); **F02N 2200/022** (2013.01); **F02N 2200/041** (2013.01);  
**F02N 2200/045** (2013.01); **F02N 2200/14** (2013.01); **F02N 2300/2006** (2013.01); **F02N 2300/2011** (2013.01)

Citation (search report)

See references of WO 2011083064A1

Cited by

GB2553976A; CN107850031A; GB2553976B; US10519918B2; WO2016166770A1

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)

**WO 2011083064 A1 20110714**; CN 102753814 A 20121024; DE 102010000709 A1 20110714; EP 2521854 A1 20121114

DOCDB simple family (application)

**EP 2010070812 W 20101228**; CN 201080060833 A 20101228; DE 102010000709 A 20100107; EP 10798132 A 20101228