

Title (en)

METHOD AND APPARATUS FOR A START-STOP CONTROL FOR AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN UND VORRICHTUNG EINER START-STOPP-STEUERUNG FÜR EINE BRENNKRAFTMASCHINE

Title (fr)

PROCÉDÉ ET DISPOSITIF DE COMMANDE ARRÊT-MARCHE POUR UN MOTEUR À COMBUSTION INTERNE

Publication

EP 2337946 A1 20110629 (DE)

Application

EP 09782229 A 20090826

Priority

- EP 2009061013 W 20090826
- DE 102008042946 A 20081020

Abstract (en)

[origin: WO2010046164A1] A method is described for controlling of start-stop operation of an internal combustion engine (1) in a motor vehicle, wherein the controller controls a starting apparatus (7) with a starter motor (8) and a meshing device (10) in order to start the internal combustion engine (1) and to implement a start-stop operation, wherein the rotational speed and the position of a crankshaft (2) of the internal combustion engine (1) are detected by means of a detector apparatus (4). In order to improve vehicle comfort in start-stop operation and to implement a meshing of a starter pinion (9) in the annular gear (6) with coasting rotational speed with reduced noise and wear, after switching off the internal combustion engine (1), a time point is defined for meshing in the annular gear (6) of a coasting internal combustion engine (1).

IPC 8 full level

F02N 11/08 (2006.01)

CPC (source: EP US)

F02N 11/0855 (2013.01 - EP US); **F02N 11/0814** (2013.01 - EP US); **F02N 15/067** (2013.01 - EP US); **F02N 2200/021** (2013.01 - EP US); **F02N 2200/022** (2013.01 - EP US); **F02N 2200/041** (2013.01 - EP US); **F02N 2300/102** (2013.01 - EP US)

Citation (search report)

See references of WO 2010046164A1

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

DE 102008042946 A1 20100429; CN 102187083 A 20110914; CN 102187083 B 20140507; EP 2337946 A1 20110629; EP 2337946 B1 20190501; HU E045509 T2 20191230; JP 2012505998 A 20120308; JP 5335093 B2 20131106; US 2011246050 A1 20111006; US 8825346 B2 20140902; WO 2010046164 A1 20100429

DOCDB simple family (application)

DE 102008042946 A 20081020; CN 200980141398 A 20090826; EP 09782229 A 20090826; EP 2009061013 W 20090826; HU E09782229 A 20090826; JP 2011532552 A 20090826; US 99835909 A 20090826