

Title (en)

METHOD AND DEVICE FOR OPERATING A HYBRID DRIVE

Title (de)

VERFAHREN UND VORRICHTUNG ZUM BETRIEB EINES HYBRIDFAHRZEUGES

Title (fr)

PROCÉDÉ ET DISPOSITIF PERMETTANT DE FAIRE FONCTIONNER UN VÉHICULE HYBRIDE

Publication

EP 2222527 A2 20100901 (DE)

Application

EP 08861639 A 20081202

Priority

- EP 2008066598 W 20081202
- DE 102007055828 A 20071217

Abstract (en)

[origin: WO2009077320A2] The invention relates to a method and a device for operating a hybrid vehicle, comprising a parallel hybrid drive train (2, 2') having an internal combustion engine (3), at least one electrical machine (5), at least one shift element (4), by means of which the at least one electrical machine (5) and the internal combustion engine (3) can be frictionally connected, a transmission (7) and a power take-off (26), the internal combustion engine (3) being startable from an electromotive driving operation. The aim of the invention is to allow an efficient and reliable driving operation, especially during starting of an internal combustion engine (3) from an electromotive travel, and to meet the requirements of travel comfort and driving dynamics of a person driving such a vehicle as far as possible. The method according to the invention is characterized by variably selecting, once a start demand for starting the internal combustion (3) is given, a starting mode from a group of available starting modes, using an evaluation of defined selection criteria depending on the current operating situation, and by initiating the respective starting mode. The device for carrying out said method comprises operating state detection and storage means (25) that communicate with a operating strategy unit (22) which is used to evaluate a current operating situation when the starting demand for starting the internal combustion engine (3) from an electromotive driving operation is received, and to select a start mode for starting the internal combustion engine from a group of stored starting modes and to initiate it.

IPC 8 full level

B60W 20/00 (2006.01); **B60K 6/365** (2007.10); **B60K 6/48** (2007.10); **B60K 6/547** (2007.10); **B60L 50/16** (2019.01); **B60W 10/02** (2006.01); **B60W 10/06** (2006.01); **B60W 10/08** (2006.01); **B60W 10/10** (2012.01)

CPC (source: EP US)

B60K 6/365 (2013.01 - EP US); **B60K 6/48** (2013.01 - EP US); **B60K 6/547** (2013.01 - EP US); **B60W 10/02** (2013.01 - EP US); **B60W 10/06** (2013.01 - EP US); **B60W 10/08** (2013.01 - EP US); **B60W 10/11** (2013.01 - EP US); **B60W 10/113** (2013.01 - US); **B60W 10/115** (2013.01 - US); **B60W 20/00** (2013.01 - EP); **B60W 20/40** (2013.01 - US); **B60W 30/18027** (2013.01 - EP); **F02N 5/04** (2013.01 - EP); **F02N 11/0866** (2013.01 - EP US); **B60K 2006/268** (2013.01 - EP); **B60L 2240/421** (2013.01 - EP US); **B60L 2240/423** (2013.01 - EP US); **B60L 2240/486** (2013.01 - EP US); **B60W 2510/0241** (2013.01 - EP US); **B60W 2510/081** (2013.01 - EP US); **B60W 2510/083** (2013.01 - EP US); **B60W 2510/1005** (2013.01 - EP US); **B60W 2510/244** (2013.01 - EP US); **B60W 2520/10** (2013.01 - EP US); **B60W 2540/10** (2013.01 - EP US); **B60W 2540/16** (2013.01 - EP US); **B60W 2710/025** (2013.01 - EP US); **B60W 2710/081** (2013.01 - EP US); **B60Y 2400/428** (2013.01 - EP US); **F02N 11/00** (2013.01 - EP); **F02N 11/0814** (2013.01 - EP US); **F02N 2011/0885** (2013.01 - EP US); **F02N 2011/0888** (2013.01 - EP US); **F02N 2011/0896** (2013.01 - EP US); **F02N 2200/0802** (2013.01 - EP US); **F02N 2200/101** (2013.01 - EP US); **F02N 2300/104** (2013.01 - EP US); **F02N 2300/2002** (2013.01 - EP US); **Y02T 10/62** (2013.01 - EP US); **Y02T 10/64** (2013.01 - EP US); **Y02T 90/16** (2013.01 - EP US)

Citation (search report)

See references of WO 2009077320A2

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 MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102007055828 A1 20090618; CN 101896391 A 20101124; EP 2222527 A2 20100901; JP 2011508695 A 20110317; US 2011040432 A1 20110217; WO 2009077320 A2 20090625; WO 2009077320 A3 20091029

DOCDB simple family (application)

DE 102007055828 A 20071217; CN 200880120379 A 20081202; EP 08861639 A 20081202; EP 2008066598 W 20081202; JP 2010538546 A 20081202; US 80863908 A 20081202