

Title (en)
DIAGNOSTICS FOR A START SYSTEM

Title (de)
DIAGNOSTIK FÜR EIN STARTSYSTEM

Title (fr)
DIAGNOSTIC POUR UN SYSTÈME DE DÉMARRAGE

Publication
EP 2875234 A4 20160713 (EN)

Application
EP 13806278 A 20130612

Priority
• SE 1250655 A 20120619
• SE 2013050677 W 20130612

Abstract (en)
[origin: WO2013191617A1] A combustion engine (120) in a vehicle is started by means of a start system including an electric starter motor (110). The function of the start system is evaluated by means of a test system comprising measuring elements, a starter motor analyzer (160) and a control unit (170). The measuring elements measure a supply voltage to the electric starter motor (110) and an rpm of the combustion engine (120) when the starter motor (110) is activated. The starter motor analyzer (160) defines, based on the supply voltage and the rpm, a preliminary status (S) of the start system. Based on the preliminary status (S), the control unit (170) evaluates whether information in addition to the supply voltage and the rpm is needed. If such is the case, an interactive communication process is executed wherein an operator (OP) is called upon to input information (OPInp) to the control unit (170) in at least one process step. An expanded status message (TR) that defines a functional status for the start system is generated by the control unit (170) on the basis of the interactive communication process.

IPC 8 full level
B60W 50/14 (2012.01); **F02N 11/10** (2006.01); **G01R 31/34** (2006.01)

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Citation (search report)
• [X] US 2008277188 A1 20081113 - HAUSER RAYMOND [US], et al
• [X] US 2012143440 A1 20120607 - YU JIYONG [KR], et al
• [I] WO 2004018249 A1 20040304 - BIANCHELLI SAURO [IT]
• [I] EP 2127599 A1 20091202 - LIFESAFAER INTERLOCK INC [US]
• [A] US 2012017618 A1 20120126 - PRICE DANIEL L [US], et al
• [A] US 2011295459 A1 20111201 - SHIN KWANG KEUN [US], et al
• [XP] WO 2013062568 A1 20130502 - HUSQVARNA CONSUMER OUTDOOR PRODUCTS NA INC [US], et al
• [XP] WO 2013062574 A1 20130502 - HUSQVARNA CONSUMER OUTDOOR PRODUCTS NA INC [US], et al
• See references of WO 2013191617A1

Cited by
US11892369B2

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