

Title (en)

Control device of an engine starter of a vehicle

Title (de)

Vorrichtung zur Steuerung eines Anlassers eines Kraftfahrzeuges

Title (fr)

Dispositif de commande d'un démarreur d'un véhicules automobiles

Publication

**EP 1462645 B1 20060118 (FR)**

Application

**EP 04290803 A 20040325**

Priority

FR 0303883 A 20030328

Abstract (en)

[origin: EP1462645A1] The control has an electronic control unit (10) to control a closing of a contactor (21) with a control key and to open the contactor after starting a heat engine. The control unit is connected to an engine control computer (7) and has an inverter relay (12) that cuts off a supply of the contactor after a start phase of the heat engine and switches non current carrying pulse width modulation (PWM) signal towards equipment.

IPC 8 full level

**F02N 11/08** (2006.01)

CPC (source: EP)

**F02N 11/0851** (2013.01); **F02N 11/087** (2013.01); **F02N 11/10** (2013.01); **F02N 2300/108** (2013.01); **F02N 2300/302** (2013.01)

Cited by

WO2013014385A2; DE102018009455A1

Designated contracting state (EPC)

DE ES FR IT

DOCDB simple family (publication)

**EP 1462645 A1 20040929**; **EP 1462645 B1 20060118**; DE 602004000337 D1 20060406; DE 602004000337 T2 20060713;  
ES 2256826 T3 20060716; FR 2853018 A1 20041001; FR 2853018 B1 20050513

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