

Title (en)

Diesel engine with a control system comprising electronic modules

Title (de)

Dieselmachine mit einem elektronischen Modul umfassenden Steuerungssystem

Title (fr)

Moteur diesel avec un système de commande comportant des modules électroniques

Publication

EP 1591649 B1 20070321 (DE)

Application

EP 05405272 A 20050329

Priority

- EP 04405255 A 20040426
- EP 05405272 A 20050329

Abstract (en)

[origin: EP1591649A1] The diesel engine has electronic modules (10) and a control system (1) with an inter modular communication bus arranged between them for transferring information. The bus system has a connection point (150) for replacement modules (100) to be attached. The control system automatically conditions the modules with a specific operating program and actualization of operating parameters such that replacement module apart from the actively running control system is in a no-load operation. During failure of an active module the replacement module is immediately operationally substituted for the malfunctioning module. Each connection point of the module at the inter modular bus system can be substituted, before-conditioned replacement module has begun. Cylinders of the engine are controlled such as the functions and environmental settings and each cylinder is assigned to a module of the control system, and each control module covers an identically trained logic circuit of two functional parts. The first functional part is the controlling of an assigned cylinder such as environmental functions, and the second controls redundancy such that part of the engine performance remains in case of an error due to the redundancy. An INDEPENDENT CLAIM is included for a method.

IPC 8 full level

F02D 41/26 (2006.01); **F02D 45/00** (2006.01); **F01L 9/10** (2021.01); **F02D 41/22** (2006.01)

CPC (source: EP KR)

F02D 41/22 (2013.01 - KR); **F02D 41/26** (2013.01 - KR); **F02D 41/266** (2013.01 - EP); **F02D 41/22** (2013.01 - EP)

Cited by

CN113202629A; CN102472190A; CN106232967A; WO2011015198A1; WO2015162332A1

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