

Title (en)

METHOD FOR POWERTRAIN MODELLING AND CONTROLLING OF THE MODELLED POWERTRAIN

Title (de)

VERFAHREN ZUR ANTRIEBSSTRANGMODELLIERUNG UND STEUERUNG DES MODELLIERTEN ANTRIEBSSTRANGS

Title (fr)

PROCEDE DE MODELISATION DE GROUPE MOTOPROPULSEUR ET DE COMMANDE DU GROUPE MOTOPROPULSEUR MODELISE

Publication

EP 4144977 A1 20230308 (EN)

Application

EP 22187490 A 20220728

Priority

IT 202100020744 A 20210802

Abstract (en)

Method for controlling a powertrain including an internal combustion engine and a relating After Treatment System (ATS), the method including an engine pre-optimization identifying feasible and Pareto optimal engine operation in such a way as to minimize fuel consumption and engine-out NO_x emissions and to maximize the enthalpy provided to the ATS, and an on-line controlling of the power-train on the basis of said pre-optimization.

IPC 8 full level

F02D 41/14 (2006.01)

CPC (source: EP)

F02D 41/1406 (2013.01); **F02D 41/1462** (2013.01); **F02D 2041/1412** (2013.01); **F02D 2041/1434** (2013.01); **F02D 2200/0625** (2013.01); **F02D 2200/0804** (2013.01)

Citation (applicant)

VARUN PANDEYSTIJN VAN DOORENJOHANNES RITZMANNBENJAMIN PLACHRISTOPHER ONDER: "Variable smoothing of optimal Diesel engine calibration for improved performance and drivability during transient operation", INTERNATIONAL JOURNAL OF ENGINE RESEARCH, 2020

Citation (search report)

- [YA] US 2016160787 A1 20160609 - ALLAIN MARC C [US], et al
- [YA] US 2014344320 A1 20141120 - WALLNER KLEMENS [AT], et al
- [YA] US 2019085780 A1 20190321 - LIAO-MCPHERSON DOMINIC M [US], et al
- [YA] US 2017248091 A1 20170831 - SEGTRUP BENJAMIN [DE], et al

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4144977 A1 20230308; IT 202100020744 A1 20230202

DOCDB simple family (application)

EP 22187490 A 20220728; IT 202100020744 A 20210802