

Title (en)

CATALYST TEMPERATURE MODELLING DURING EXOTHERMIC OPERATION

Title (de)

KATALYSATORTEMPERATUR-MODELLIERUNG BEI EXOTHERMEN BETRIEB

Title (fr)

MODELISATION DE LA TEMPERATURE D'UN CATALYSEUR EN CAS DE FONCTIONNEMENT EN MODE EXOTHERMIQUE

Publication

**EP 1576269 A1 20050921 (DE)**

Application

**EP 03813071 A 20030725**

Priority

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- DE 10258278 A 20021213

Abstract (en)

[origin: WO2004055346A1] A method and a calculating device for modelling the temperature ( $T_{kat}$ ) of a catalyst (34) in the exhaust of an internal combustion engine (10) are disclosed. The heat input into the catalyst (34) from exothermic reactions is considered. The method is characterised in that a first correction value ( $\Delta_T1$ ) and a second correction value ( $\Delta_T2$ ) are generated, which each concern heat input into the catalyst (34) from exothermic reactions, whereby ( $\Delta_T1$ ) is dependent on the relationship (AF) of the amount of fuel (S) to the air mass, which is burnt in the internal combustion engine (10), together with said air mass and ( $\Delta_T2$ ) is dependent on a heat input resulting from an exothermic reaction of a second fuel mass which is dosed for the regeneration of the catalyst (34), as a supplement to the fuel proportion dosed and burnt as a fuel/air mixture in the internal combustion engine (10).

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Citation (search report)

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