

Title (en)

SPARK IGNITION ENGINE INCLUDING THREE-WAY CATALYST WITH NOX STORAGE COMPONENT

Title (de)

FREMDGEZÜNDENTE BRENNKRAFTMASCHINE MIT DREIWEGEKATALYSATOR MIT NOX-SPEICHERKOMPONENTE

Title (fr)

MOTEUR A EXPLOSION POSSEDEANT UN CATALYSEUR A TROIS VOIES AVEC COMPOSANT DE STOCKAGE D'OXYDE D'AZOTE

Publication

**EP 1507964 A1 20050223 (EN)**

Application

**EP 03725426 A 20030521**

Priority

- GB 0302200 W 20030521
- GB 0211971 A 20020524

Abstract (en)

[origin: WO03100228A1] A spark engine comprises an exhaust system comprising a catalyst comprising a three-way catalyst (TWC) including a NOx storage component and an engine control unit programmed to control the air-to-fuel ratio of the engine to run at the stoichiometric air-to-fuel ratio during normal running conditions and to run lean of the stoichiometric air-to-fuel ratio during a defined portion of an engine speed/load and to determine the amount of NOx contacting the TWC during lean running operation in response to data input from sensor means, thereby to determine the remaining NOx storage capacity of the TWC and to return the air-to-fuel ratio to stoichiometry when the remaining NOx storage capacity is below a pre-determined value, the arrangement being such as to substantially prevent passing more NOx to atmosphere during an engine cycle compared with a spark ignition engine run continuously in stoichiometric mode.

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**F01N 3/08; F02D 41/02**

IPC 8 full level

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CPC (source: EP KR US)

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