

Title (en)

Exhaust gas purifying system of internal combustion engine

Title (de)

Abgasreinigungssystem für eine Brennkraftmaschine

Title (fr)

Système de purification de gaz d'échappement d'un moteur à combustion interne

Publication

EP 1061245 A3 20011128 (EN)

Application

EP 00112088 A 20000605

Priority

JP 16670199 A 19990614

Abstract (en)

[origin: EP1061245A2] A catalyst is installed in an exhaust passage of an internal combustion engine. The catalyst is of a type that traps and stores NOx in the exhaust gas when the air/fuel ratio of the exhaust gas is higher than the stoichiometric ratio and reduces the stored NOx with the aid of reducing components in the exhaust gas when the air/fuel ratio of the exhaust gas is equal to or lower than the stoichiometric ratio. A detector detects operation load of the engine. A control unit includes a microprocessor that is programmed to carry out calculating the amount of the stored NOx when the air/fuel ratio of the exhaust gas is higher than the stoichiometric ratio; judging whether or not the catalyst needs recovering of the NOx-storing ability thereof in accordance with the calculated amount of the stored NOx; determining the amount of NOx to be reduced in accordance with the engine load detected by the detector; and carrying out a catalyst recovering control when the need of recovering the NOx-storing ability is judged. The catalyst recovering control is a control to keep the air/fuel ratio of the exhaust gas at a predetermined lower ratio for a predetermined period. <IMAGE>

IPC 1-7

F02D 41/14; F02D 41/02; F01N 3/20

IPC 8 full level

F01N 3/20 (2006.01); **F01N 3/08** (2006.01); **F01N 3/24** (2006.01); **F01N 3/28** (2006.01); **F02D 41/02** (2006.01); **F02D 41/04** (2006.01)

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F01N 3/0842 (2013.01); **F02D 41/0275** (2013.01); **F02D 2200/0806** (2013.01); **F02D 2200/0811** (2013.01)

Citation (search report)

- [A] US 5564283 A 19961015 - YANO TORU [JP], et al
- [A] WO 9855742 A1 19981210 - SIEMENS AG [DE], et al
- [A] EP 0898067 A2 19990224 - NISSAN MOTOR [JP]
- [AD] PATENT ABSTRACTS OF JAPAN vol. 018, no. 212 (M - 1593) 15 April 1994 (1994-04-15)

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DOCDB simple family (application)

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