

(11) **EP 2 642 096 A8**

(12) CORRECTED EUROPEAN PATENT APPLICATION

published in accordance with Art. 153(4) EPC

(15) Correction information:

Corrected version no 1 (W1 A1) Corrections, see

Bibliography INID code(s) 72

(48) Corrigendum issued on: **15.01.2014 Bulletin 2014/03**

(43) Date of publication: **25.09.2013 Bulletin 2013/39**

(21) Application number: 12732944.9

(22) Date of filing: 30.01.2012

(51) Int CI.:

F01N 3/08 (2006.01) F01N 3/36 (2006.01)

F02D 41/04 (2006.01)

(86) International application number: PCT/JP2012/051981

(87) International publication number:

WO 2013/114533 (08.08.2013 Gazette 2013/32)

(84) Designated Contracting States:

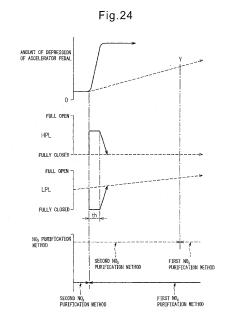
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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(54) EXHAUST PURIFICATION DEVICE OF INTERNAL COMBUSTION ENGINE

(57)An internal combustion engine wherein an exhaust purification catalyst (13) and a hydrocarbon feed valve (15) are arranged downstream of an exhaust turbine (7b) in an engine exhaust passage. A first NO_x purification method which removes NO_x by making a concentration of hydrocarbons which flows into the exhaust purification catalyst (13) vibrate by within predetermined ranges of amplitude and period and a second NO_x purification method which utilizes an adsorption action of NO_x to the exhaust purification catalyst (13) are used. A high pressure exhaust gas recirculation system (HPL) which causes recirculation of high pressure exhaust gas and a low pressure exhaust gas recirculation system (LPL) which causes recirculation of low pressure exhaust gas are provided. When performing an exhaust gas recirculation action by the low pressure exhaust gas recirculation system (LPL) while performing an NO_x purification action by the second NO_x purification method, if an acceleration operation is performed, the NO_x purification action is switched to the NO_x purification action by the first NO_v purification method and the exhaust gas recirculation action is temporarily switched to the exhaust gas recirculation action by the high pressure exhaust gas recirculation system (HPL).



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