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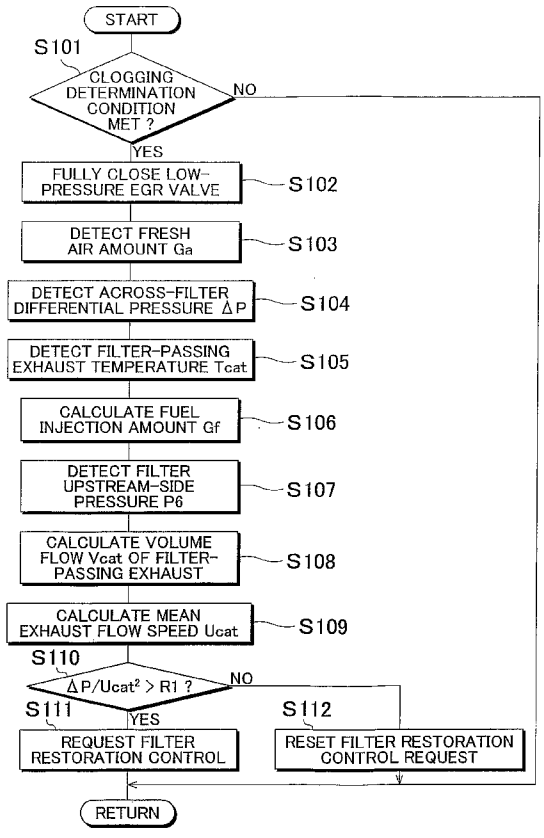
(54) **Title:** EXHAUST PURIFICATION DEVICE OF INTERNAL COMBUSTION ENGINE, AND CONTROL METHOD THEREOF



(57) **Abstract:** An exhaust purification device includes a particulate filter (10), an air flow meter (7) that detects the amount of fresh air flowing in an intake passageway (3), and an EGR device (30) that supplies gas to a site in the intake passageway (3) between the air flow meter (7) and the particulate filter (10). The exhaust purification device detects the amount of flow of exhaust passing through the particulate filter on the basis of the amount of gas supplied by the EGR device (30), and the intake air amount detected by the air flow meter (S108), and detects the differential pressure between the upstream side and the downstream side of the particulate filter, and determines whether the particulate filter is clogged on the basis of the amount of flow and the differential pressure of exhaust (S110).

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
F01N F02D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	US 2005/217250 A1 (KUBOSHIMA TSUKASA [JP] ET AL) 6 October 2005 (2005-10-06) paragraphs [0026] - [0042]; figures 1-4,7	1-3,6, 9-12,14 4,5,13 8
X Y A	EP 1 382 812 A1 (MAZDA MOTOR [JP]) 21 January 2004 (2004-01-21) paragraphs [0041] - [0076]; figures 1,4	1-3,6,7, 9-12,14 4,5,13 8
Y	JP 2005 069207 A (NISSAN MOTOR) 17 March 2005 (2005-03-17) the whole document	4,5,13

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☒ See patent family annex.

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Name and mailing address of the ISA/	Authorized officer
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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