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**(54) Apparatus and method for removing particulate matter from the exhaust gases of an internal combustion engine.**

(57) The apparatus for removing particulate matter from exhaust gases includes a filter 6 for trapping particulate matter carried by the gases. A microwave generator 8 is arranged to irradiate the upstream face 10 of the filter 6, heating and oxidising particulate matter trapped in only a region adjacent that face. The heated zone then travels through the filter 6, regenerating the whole filter.

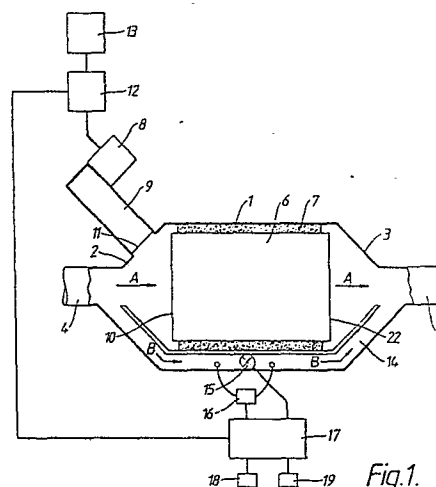


Fig.1.



EP 89 30 7864

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	PATENT ABSTRACTS OF JAPAN vol. 8, no. 270 (M-344)(1707) 11 December 1984, & JP-A-59 141708 (NIPPON DENSO K.K.) 14 August 1984, * the whole document *	1, 2, 4-7, 13, 16, 19	F01N3/02
A,D	GB-A-2080140 (FILTERWERK MANN & HUMMEL) * the whole document *	1, 13	
A	EP-A-266932 (FORD MOTOR COMPANY) * claims 1, 13, 16 *	1-5, 13, 16-20	
A	US-A-4662911 (T.HIRAYAMA ET AL.) * the whole document *	1	
A	EP-A1-0244061 (POROUS ELEMENT HEATING LTD) * claims 1-7 *	1-3, 9-11	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			F01N
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 13 DECEMBER 1989	Examiner BERTRAM H.E.H.
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			