



(19)

Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 837 238 A3

(12)

## EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
28.10.1998 Bulletin 1998/44

(51) Int. Cl.<sup>6</sup>: F02M 35/14

(43) Date of publication A2:  
22.04.1998 Bulletin 1998/17

(21) Application number: 97304416.7

(22) Date of filing: 24.06.1997

(84) Designated Contracting States:  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC  
NL PT SE  
Designated Extension States:  
AL LT LV RO SI

(30) Priority: 24.06.1996 BR 9602968  
01.07.1996 BR 9603046

(71) Applicant:  
Westaflex Tubos Flexiveis Ltda.  
Araucaria, Parana 702-210, CEP 83 (BR)

(72) Inventor:  
Lepoutre, Edmond Pol Jean  
Curitiba Parana (BR)

(74) Representative:  
Davies, Gregory Mark  
Urquhart-Dykes & Lord  
Alexandra House  
1 Alexandra Road  
Wales  
Swansea, Wales SA1 5ED (GB)

### (54) Mouldable acoustic devices

(57) Mouldable acoustic devices internally coupled to a vehicle engine's air filter relates to a mouldable acoustic box (5), comprised of a plate of porous acoustic absorbing material or a set of plates of porous acoustic materials, superimposed and glued to each other, having its shape predetermined pursuant to the internal and acoustic characteristics of the conventional air filter to which it will be internally coupled, the device (5) being essentially an acoustic internal lining having the purpose of absorbing acoustic waves generated by inlet noises, that is coupled inside the air filter's upper compartment (1) and/or lower compartment (2), the device (5) being optionally removable from the relevant compartments.

EP 0 837 238 A3



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	WO 93 19291 A (ILLBRUCK GMBH) 30 September 1993 * page 2, line 62 - page 4, line 115; figures * ---	1,4-7	F02M35/14
X	EP 0 435 588 A (CADILLAC RUBBER & PLASTICS INC) 3 July 1991 * column 3, line 54 - column 6, line 11; claims 1-29; figures * ---	1-4,8-11	
X	PATENT ABSTRACTS OF JAPAN vol. 012, no. 014 (M-659), 16 January 1988 & JP 62 174560 A (MAZDA MOTOR CORP), 31 July 1987 * abstract * ---	1-3,8-11	
X	PATENT ABSTRACTS OF JAPAN vol. 011, no. 339 (M-639), 6 November 1987 & JP 62 121859 A (YAMAHA MOTOR CO LTD), 3 June 1987 * abstract * ---	1,5	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
X	PATENT ABSTRACTS OF JAPAN vol. 009, no. 149 (M-390), 25 June 1985 & JP 60 026157 A (NISSAN JIDOSHA KK), 9 February 1985 * abstract * ---	1,5	F02M
A	EP 0 195 121 A (PORSCHE AG) 24 September 1986 * abstract * -----	1	
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	9 September 1998	Alconchel y Ungria, J	
CATEGORY OF CITED DOCUMENTS		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	
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			