(11) **EP 0 995 895 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: **09.08.2000 Bulletin 2000/32**

(51) Int Cl.⁷: **F02M 35/10**

(43) Date of publication A2: **26.04.2000 Bulletin 2000/17**

(21) Application number: 99308188.4

(22) Date of filing: 18.10.1999

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU

MC NL PT SE

Designated Extension States:

AL LT LV MK RO SI

(30) Priority: 22.10.1998 US 177458

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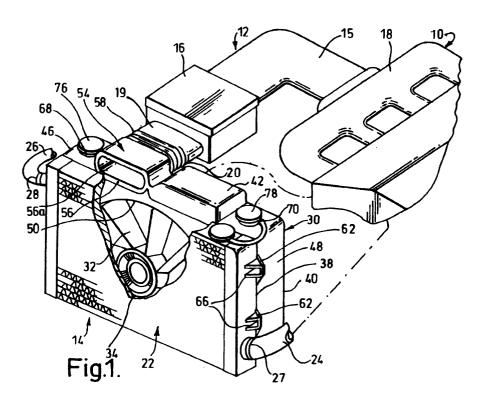
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(54) Fan shroud and air intake arrangement

(57) A far shroud and air intake arrangement for use adjacent a vehicle radiator and around an engine cooling far has a rectangularly shaped hollow body of a predetermined depth and a front face, a rear face, a top wall, a bottom wall, oppositely disposed side walls, at

least one opening formed through the body with a cylindrical wall therearound defining a primary air flow passage for directing cooling air across the vehicle radiator and an engine air conduit formed within the hollow body between the front and rear faces to direct air from the atmosphere to an air induction system for the engine.





EUROPEAN SEARCH REPORT

Application Number EP 99 30 8188

	DOCUMENTS CONSIDERE					
Category	Citation of document with indicati of relevant passages	tion of document with indication, where appropriate, of relevant passages			CLASSIFICATION OF THE APPLICATION (Int.CI.7)	
Х	US 2 197 503 A (T.E. MARTIN) 16 April 1940 (1940-04-16) * the whole document *		1,6,7	7 F02M35	/10	
D,A	US 5 649 587 A (PLANT WILLIAM DAVID) 22 July 1997 (1997-07-22) * the whole document *		1,12			
Α	US 5 427 502 A (HUDSON 27 June 1995 (1995-06-2 column 1, line 21 -	27)	1,12 re 1 *			
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 660 (M-1722), 14 December 1994 (1994-12-14) & JP 06 257524 A (NISSAN MOTOR CO LTD), 13 September 1994 (1994-09-13) * abstract *		1,12 -D),			
A	DE 86 20 190 U (W. WENG 18 September 1986 (1986 * figure 1 *		1,12	FO2M FO1P	CAL FIELDS HED (Int.Cl.7)	
	The present search report has been o	drawn up for all claims				
	Place of search	Date of completion of	the search	Examiner		
	THE HAGUE	15 June 20	000	Alconchel	y Ungria,J	
X : part Y : part docr A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with another ument of the same category inological background —written disclosure rmediate document	E : ear afte D : doc L : doc & : me	ony or principle underlying ier patent document, but the filing date ument cited in the applitument cited for other resonance of the same paten ument.	ut published on, or cation asons		

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 30 8188

This annex lists the patent family members relating to the patent documents cited in the above–mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

15-06-2000

Patent documen cited in search rep		Publication date	Patent family member(s)	Publication date
US 2197503	Α	16-04-1940	NONE	
US 5649587	Α	22-07-1997	CA 2247153 A EP 0882177 A WO 9731182 A	28-08-19 09-12-19 28-08-19
US 5427502	A	27-06-1995	BR 9501226 A CA 2143475 A,C DE 59500246 D EP 0675268 A JP 8100720 A	14-11-19 29-09-19 26-06-19 04-10-19 16-04-19
JP 06257524	Α	13-09-1994	NONE	
DE 8620190	U	18-09-1986	NONE	

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82