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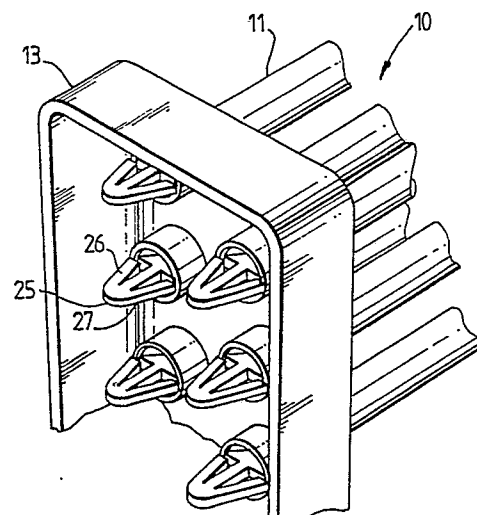
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54 **Vehicle radiator turbulator.**

57 A turbulator for a vehicle radiator tube 11 comprises an elongate element which is inserted into the tube and is provided with a flow deflecting vane or vanes orientated to enhance turbulence in water flowing through the tube. Locking means 25 comprising two resilient tongues 26, 27 are provided at a leading end of the element. These tongues deflect inwardly to allow insertion of the turbulator into the tube and spring outwardly to lock behind the end of the tube after insertion.

Fig.4.





European Patent
Office

EUROPEAN SEARCH REPORT

Application number
EP 88 30 0449

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.4)												
X	US-A-1 606 739 (AVERILL) * Whole document *	1,2,3	F 28 F 13/12												
Y	--	4,5, 10,11													
Y	FR-A-2 248 481 (BEHR) * Whole document *	4,5, 10,11													
Y	--														
Y	US-A-2 691 991 (SCHUTT) * Whole document *	4,5 10,11													
Y	--														
A	US-A-1 989 340 (SHEPHERD)		TECHNICAL FIELDS SEARCHED (Int. Cl.4)												
A	FR-A-2 070 042 (CHAUSSE)														
A	FR-A-2 244 149 (FERODO)														
-----			F 28 F F 24 H												
The present search report has been drawn up for all claims.															
Place of search The Hague		Date of completion of the search 30-03-1988	Examiner SMETS												
<table border="0"><tr><td>CATEGORY OF CITED DOCUMENTS</td><td>T : theory or principle underlying the invention</td></tr><tr><td>X : particularly relevant taken alone</td><td>E : earlier patent document, but published on, or after the filing date</td></tr><tr><td>Y : particularly relevant if combined with another document of the same category</td><td>D : document cited in the application</td></tr><tr><td>A : technological background</td><td>L : document cited for other reasons</td></tr><tr><td>C : non-written disclosure</td><td>& : member of the same patent family, corresponding document</td></tr><tr><td>P : intermediate document</td><td></td></tr></table>				CATEGORY OF CITED DOCUMENTS	T : theory or principle underlying the invention	X : particularly relevant taken alone	E : earlier patent document, but published on, or after the filing date	Y : particularly relevant if combined with another document of the same category	D : document cited in the application	A : technological background	L : document cited for other reasons	C : non-written disclosure	& : member of the same patent family, corresponding document	P : intermediate document	
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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

X LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions,

namely:

1. Claims 1,2,3,4,5,10,11: Locking device for turbulator
2. Claims 1,6,7,8,9: Elongate element, in the form of a flat strip, for turbulator

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims: 1-5,10,11