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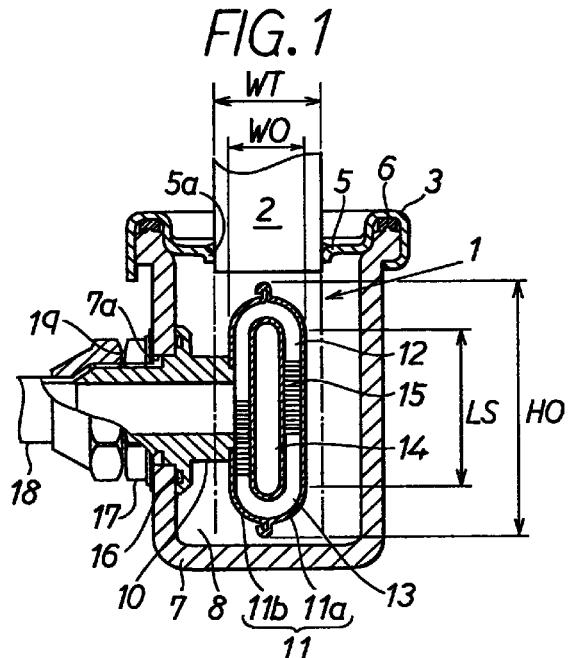
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(54) Heat exchanger having a double pipe construction

(57) An outer cylindrical pipe (11) forming a double pipe type oil cooler (1) is disposed within lines extending from both outer surfaces of each tube (2), which defines the width dimension of the tube (2). That is, the double pipe type oil cooler (1) is located at a position where the flow speed of cooling water is maximum. Thereby, as the cooling water flows from the tube (2) is used efficiently for cooling, the cooling performance of the oil cooler (1) is further improved. Further, the double pipe type oil cooler (1) is formed into flat shaped double pipe in which the longitudinal axis thereof is more than twice as long as the latitudinal axis thereof, and the latitudinal axis of the oil cooler (1) is smaller than the width dimension of the tube (2).





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EUROPEAN SEARCH REPORT

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EP 98 11 2413

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							
A	PATENT ABSTRACTS OF JAPAN vol. 096, no. 011, 29 November 1996 & JP 08 177493 A (NIPPONDENSO CO LTD), 9 July 1996 * abstract *	1-7	F28F9/02 F28D7/10						
A	US 5 186 245 A (PETERS TIMOTHY J) 16 February 1993 * column 2, line 53 - column 3, line 3; figures *	1-7							
A	FR 2 521 277 A (VALEO) 12 August 1983 * page 9, line 25 - page 10, line 10; figures 4-7 *	1-7							
A	GB 1 167 318 A (MARSTON RADIATORS LIMITED) 15 October 1969 * page 3, line 19 - line 41; claim 1; figures 1-5 *	1-7							
A	US 5 067 561 A (JOSHI SHRIKANT M ET AL) 26 November 1991 * column 2, line 38 - line 48; figures *	1-7	TECHNICAL FIELDS SEARCHED (Int.Cl.6) F28F F28D F01P						
<p>The present search report has been drawn up for all claims</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Place of search</td> <td style="width: 33%;">Date of completion of the search</td> <td style="width: 34%;">Examiner</td> </tr> <tr> <td>THE HAGUE</td> <td>11 December 1998</td> <td>Mootz, F</td> </tr> </table> <p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>				Place of search	Date of completion of the search	Examiner	THE HAGUE	11 December 1998	Mootz, F
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