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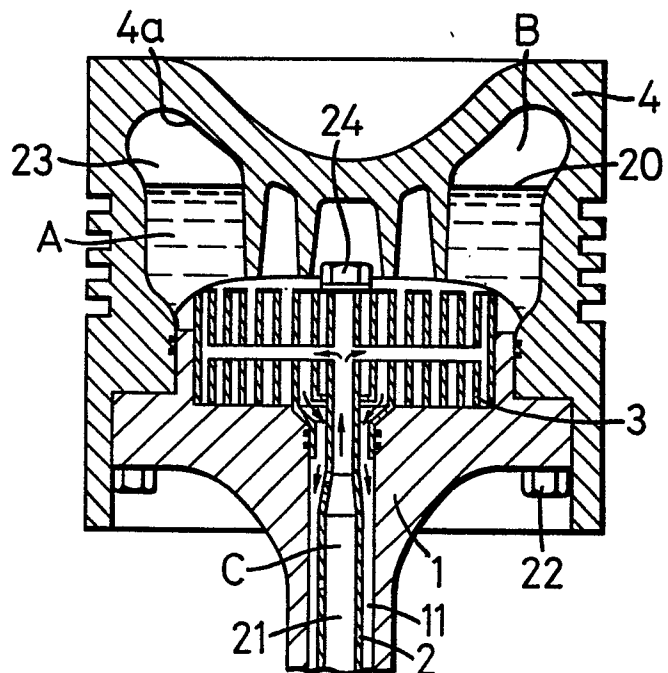
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54 **Piston in an internal combustion engine.**

57 The disclosure concerns pistons of the liquid-cooled type, and provides an advantageous alternative to the known types of oil or water-cooled pistons.

The piston is characterised in that the liquid (A) is sealingly enclosed within a sealed cooling space or chamber provided within the piston (4) so as to form a free surface, in that a heat-exchanger (3) for effecting heat transfer between said liquid and oil (C) supplied to the heat exchanger is associated with said sealed space, and in that the oil within said heat-exchanger is arranged to be fed and discharged through oil passageways (21, 11) connected to the exterior of the piston.

Preferably, the liquid (A) is a liquid having a boiling point of 200 °C or lower at atmospheric pressure, and air, on an inert gas is sealingly enclosed within said sealed space.





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EUROPEAN SEARCH REPORT

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Application Number

EP 82 30 1515

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. ³)
X	CH-A- 262 378 (GEBR. SULZER) * Whole document *	1-4	F 02 F 3/22
A	CH-A- 127 857 (O. PHILIPP) * Principal claim and subclaims 5, 6; page 2, left-hand column, lines 4-26; figure 3 *	1	
A	US-A-2 153 501 (W. HARPER) * Page 1, right-hand column, lines 26-33 *	3	
A	US-A-1 678 957 (O. PHILIPP)		
A	FR-A-2 022 607 (N.V. INDUSTRIEELE HANDELSCOMBINATIE HOLLAND)		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
			F 01 P 3/10 F 02 F 3/00
Place of search BERLIN		Date of completion of the search 14-10-1983	Examiner CANNICI B.S.E.

CATEGORY OF CITED DOCUMENTS

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
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& : member of the same patent family, corresponding document