

Title (en)
PISTON IN AN INTERNAL COMBUSTION ENGINE

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Application
EP 82301515 A 19820323

Priority
JP 13924681 A 19810905

Abstract (en)
[origin: EP0074156A2] The invention concerns pistons of the liquid-cooled type, and provides an advantageous alternative to the known types of oil or water-cooled pistons. The invention 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 head 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 DEG C or lower at atmospheric pressure, and air, or an inert gas (B) is sealingly enclosed within said sealed space.

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Citation (search report)
• [X] CH 262378 A 19490630 - SULZER AG [CH]
• [A] CH 127857 A 19280917 - PHILIPP OTTO [CH]
• [A] US 2153501 A 19390404 - HARPER JR WILLIAM
• [A] US 1678957 A 19280731 - OTTO PHILIPP
• [A] FR 2022607 A1 19700731 - IHC HOLLAND NV

Cited by
FR2962169A1; DE102004038945A1; DE19712090C1; DE102004056769A1; DE102009027148A1; DE102009027148B4; US7735462B2; EP0745181B1

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