

Title (en)

LIQUID COOLING SYSTEM AND ROTARY PUMP FOR AN ENGINE

Publication

EP 0071807 A3 19830831 (DE)

Application

EP 82106465 A 19820717

Priority

US 28954381 A 19810803

Abstract (en)

[origin: US4385594A] A two-circuit cooling system for an internal combustion engine including first and second fluid circuits. The first fluid circuit includes a radiator and a liquid cooled heat source while the second circuit includes a radiator and an air-to-liquid heat exchanger. A fluid pump is connected across the two circuits and facilitates independent movement of the coolant through the two separate circuits. The pump accomplishes this by using an impeller member having multiple vanes on two opposite surfaces which are of different configuration and which are divided by a wall which cooperates with the housing to form two separate fluid chambers.

IPC 1-7

F01P 3/20; **F01P 5/10**; **F04D 13/14**

IPC 8 full level

F02B 29/04 (2006.01); **F01P 3/20** (2006.01); **F01P 5/10** (2006.01); **F01P 3/18** (2006.01)

CPC (source: EP US)

F01P 3/20 (2013.01 - EP US); **F01P 5/10** (2013.01 - EP US); **F04D 1/00** (2013.01 - EP); **F04D 5/002** (2013.01 - EP); **F04D 13/14** (2013.01 - EP US); **F01P 2003/187** (2013.01 - EP US)

Citation (search report)

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- [X] DE 871659 C 19530521 - MASCHF AUGSBURG NUERNBERG AG
- [A] FR 2194395 A1 19740301 - BOSCH HAUSGERAETE GMBH [DE]
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- [A] FR 2349731 A1 19771125 - CUMMINS ENGINE CO INC [US]

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Designated contracting state (EPC)

AT BE CH DE FR GB IT LI SE

DOCDB simple family (publication)

EP 0071807 A2 19830216; **EP 0071807 A3 19830831**; BR 8204437 A 19830719; CA 1179907 A 19841227; ES 514653 A0 19840116; ES 8402389 A1 19840116; JP S5827810 A 19830218; US 4385594 A 19830531; ZA 825547 B 19840328

DOCDB simple family (application)

EP 82106465 A 19820717; BR 8204437 A 19820729; CA 407532 A 19820719; ES 514653 A 19820802; JP 13362682 A 19820730; US 28954381 A 19810803; ZA 825547 A 19820802