

Title (en)
Water pump having a reservoir

Title (de)
Wasserpumpe mit einem Behälter

Title (fr)
Pompe à eau munie d'un réservoir

Publication
EP 2063128 B1 20121031 (EN)

Application
EP 07121504 A 20071126

Priority
EP 07121504 A 20071126

Abstract (en)
[origin: EP2063128A1] In a water pump for the cooling system of an IC-engine, a small amount of fluid leaking through a seal is drained into a weep reservoir. The latter is heated by the engine heat and/or by friction heat, which allows the leakage fluid to evaporate. According to prior art, the reservoir is usually formed integrally in the pump housing. Here, the reservoir is made of two parts: The first part is integrally formed in the pump housing (as usual) and the second part is separate. The second part is located below the first part, so the liquid falls mainly into the second part. This construction allows to design the second part with a lower heat capacity than the pump housing, e.g. by making it out of plastic or sheet metal. The main advantage is that the liquid will be heated more quickly, which improves the evaporation process. A second advantage is the modularity: The size of the second part may be easily adapted to any evaporation capacity requirement.

IPC 8 full level
F04D 29/10 (2006.01); **F04D 29/12** (2006.01); **F04D 29/42** (2006.01)

CPC (source: EP US)
F04D 29/106 (2013.01 - EP US); **F04D 29/426** (2013.01 - EP US); **F05B 2260/603** (2013.01 - US); **F05D 2260/6022** (2013.01 - EP)

Cited by
DE102015117126A1; US10100710B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2063128 A1 20090527; **EP 2063128 B1 20121031**; US 2010294216 A1 20101125; WO 2009068562 A1 20090604

DOCDB simple family (application)
EP 07121504 A 20071126; EP 2008066233 W 20081126; US 74472408 A 20081126