

Title (en)
Coolant pump

Title (de)
Kühlmittelpumpe

Title (fr)
Pompe à réfrigérant

Publication
EP 1988293 A3 20151104 (EN)

Application
EP 08103647 A 20080422

Priority
• US 91530007 P 20070501
• US 78136607 A 20070723

Abstract (en)
[origin: EP1988293A2] A coolant pump (90) includes a housing (95) having an internal axis; a bearing (100) disposed on an outside surface of the housing (95); a shaft (120) disposed along the internal axis of the housing (95), wherein the shaft (120) is journaled by the bearing (100) so as to be rotatable; an impeller (130) disposed on the shaft (120) so as to rotate with the shaft (120); and a seal (140) disposed on the shaft (120) at least partially inside of the bearing (100) so that the bearing (100) overlaps the seal (140) along the internal axis of the housing (95), wherein the bearing (100) has an inner diameter, the seal (140) has an outer diameter, and the inner diameter of the bearing (100) is greater than the outer diameter of the seal.

IPC 8 full level
F01P 5/10 (2006.01); **F04D 29/049** (2006.01); **F04D 29/10** (2006.01); **F04D 29/12** (2006.01)

CPC (source: EP US)
F04D 29/049 (2013.01 - EP US); **F04D 29/106** (2013.01 - EP US); **F04D 29/126** (2013.01 - EP US)

Citation (search report)
• [X1] EP 1437518 A1 20040714 - GERAETE UND PUMPENBAU GMBH [DE]
• [X1] EP 1188931 A2 20020320 - AISIN SEIKI [JP]
• [X1] US 3934966 A 19760127 - ASBERG STURE LENNART
• [X1] DE 3716028 A1 19881124 - SKF GMBH [DE]
• [X1] JP 2004232507 A 20040819 - KOYO SEIKO CO
• [X1] US 5217350 A 19930608 - KIMURA KENJI [JP], et al
• [X1] WO 2006035552 A1 20060406 - TBK CO LTD [JP], et al
• [X1] US 4388040 A 19830614 - SAKAMAKI HIROSHI [JP]

Designated contracting state (EPC)
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