Title (en)
Pneumatically-operated cooling pump

Title (de)
Pneumatisch betätigte Kühlpumpe

Title (fr)
Pompe de refroidissement à commande pneumatique

Publication
EP 2551484 A1 20130130 (EN)

Application
EP 12005234 A 20120713

Priority
IT MI20111379 A 20110725

Abstract (en)
A pneumatically-operated cooling pump (10), especially suitable for conveying and circulating coolants in internal combustion engines, comprising a containment body (12) positioned above an underlying volute inside which is placed a shutter which surrounds an impeller keyed on a rotation shaft, immersed in a fluid of water and glycol and suitable for setting in motion said fluid, the pump comprising pneumatically-operated mechanical means with axial movement to operate the shutter defined by an actuator unit comprising a ring (42) and at least three rods (44) sliding axially with respect to the containment body (12) and static seal means defined by shaped diaphragms (52), stabilized to the rods (44) and to the containment body (12), positioned to separate between the containment body (12) and the underlying coolant and cooperating with the actuator unit for the movement of the shutter.

IPC 8 full level
F01P 5/12 (2006.01); F04D 15/00 (2006.01)

CPC (source: EP)
F01P 5/12 (2013.01); F04D 15/0022 (2013.01); F04D 15/0038 (2013.01); F01P 2007/146 (2013.01); F05D 2270/65 (2013.01)

Citation (applicant)
DE 102005062200 B3 20070222 - GERAETE & PUMPENBAU GMBH [DE]

Citation (search report)
• [A] DE 102005062200 B3 20070222 - GERAETE & PUMPENBAU GMBH [DE]
• [A] DE 102007022189 A1 20081127 - GERAETE & PUMPENBAU GMBH [DE]
• [A] EP 2299084 A1 20110323 - PIERBURG PUMP TECHNOLOGY GMBH [DE]

Cited by
EP2902631A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2551484 A1 20130130; EP 2551484 B1 20141210; ES 2531162 T3 20150311; IT MI20111379 A1 20130126

DOCDB simple family (application)
EP 12005234 A 20120713; ES 12005234 T 20120713; IT MI20111379 A 20110725