

Title (en)
PUMP HOUSING

Title (de)
PUMPENGHÄUSE

Title (fr)
CORPS DE POMPE

Publication
EP 1917441 B1 20160713 (FR)

Application
EP 05787010 A 20050825

Priority
EP 2005054194 W 20050825

Abstract (en)
[origin: WO2007022798A1] The invention relates to a pump housing (2) comprising a dual-wall casing (3) which enables a first fluid (4) to flow at least partially around a compression chamber (5) for compressing a second fluid (6), said compression being performed with at least two elongated rotors (7, 8). The dual-wall casing (3) comprises: (i) a first wall (10) which defines the volume of the compression chamber (5), and (ii) a second wall (11) which extends around the first wall (10) at a distance (12) from same such as to enable the first fluid (4) to flow therethrough. The pump housing (2) consists of two subassemblies (13, 14), namely a first subassembly (13) and a second subassembly (14), which are assembled along a sealing surface (15) that is essentially orthogonal to the longitudinal axes (70, 80) of the rotors (7, 8). Both the first subassembly (13) and the second subassembly (14) are characterised in that they consist of a rigid element (16) which is moulded from a first thermally-conductive material and which comprise two opposing faces, namely a first face (18) and a second face (19). According to the invention, the above-mentioned first wall (10), which is moulded with the rigid element (16), is disposed beyond the first face (18) such as to extend essentially orthogonally thereto, while the second wall (11) is also disposed beyond the first face (18) such as to extend essentially orthogonally thereto, but in parallel to a fourth face (21) of the first wall (10) without being joined to same. In addition, cut-outs (23) are recessed into the first face (18) such that each cut-out forms at least one housing for a first member (9) that is used to guide the rotation of one of the opposing ends (71, 72, 81, 82) of one of the rotors (7, 8).

IPC 8 full level
F04C 2/08 (2006.01); **F04C 18/16** (2006.01)

CPC (source: EP KR US)
F04C 2/08 (2013.01 - KR); **F04C 2/086** (2013.01 - EP US); **F04C 18/16** (2013.01 - KR); **F04C 18/086** (2013.01 - EP US);
F04C 18/16 (2013.01 - EP US); **F04C 2230/21** (2013.01 - EP US); **F04C 2230/60** (2013.01 - EP US); **F04C 2240/30** (2013.01 - EP US);
F05C 2251/044 (2013.01 - EP US); **F05C 2251/046** (2013.01 - EP US)

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 NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007022798 A1 20070301; AU 2005335899 A1 20070301; AU 2005335899 B2 20110609; CA 2618729 A1 20070301;
CA 2618729 C 20130813; CN 101248275 A 20080820; DK 1917441 T3 20161031; EP 1917441 A1 20080507; EP 1917441 B1 20160713;
ES 2597380 T3 20170118; JP 2009506245 A 20090212; JP 5011297 B2 20120829; KR 101210400 B1 20121210; KR 20080037685 A 20080430;
PL 1917441 T3 20161230; PT 1917441 T 20161012; TW 200708665 A 20070301; US 2010135837 A1 20100603

DOCDB simple family (application)
EP 2005054194 W 20050825; AU 2005335899 A 20050825; CA 2618729 A 20050825; CN 200580051405 A 20050825;
DK 05787010 T 20050825; EP 05787010 A 20050825; ES 05787010 T 20050825; JP 2008527314 A 20050825; KR 20087004386 A 20050825;
PL 05787010 T 20050825; PT 05787010 T 20050825; TW 95108495 A 20060314; US 99013505 A 20050825