

Title (en)

Internal gear pump and hydraulic circuit for a motor vehicle drive train

Title (de)

Innenzahnradpumpe und Hydraulikkreis für Kraftfahrzeugantriebsstrang

Title (fr)

Pompe à engrenages intérieurs et circuit hydraulique pour entraînement d'un véhicule automobile

Publication

EP 2851566 B1 20180321 (DE)

Application

EP 14182191 A 20140826

Priority

DE 102013110400 A 20130920

Abstract (en)

[origin: US2015086403A1] An internal-gear pump has a housing which has a first fluid port and a second fluid port. An inner rotor is mounted in the housing so as to be rotatable about an inner rotor axis and has an external toothing. An outer rotor is rotatable in the housing about an outer rotor axis and has an internal toothing which, to generate a pump action, engages with the external toothing of the inner rotor. The internal-gear pump furthermore has a ring element which is mounted movably in the housing so as to be pivotable between a first position and a second position. At least a third fluid port is formed on the housing. The third fluid port is arranged relative to the ring element such that, in the first position of the ring element, the third fluid port is connected to the second fluid port. In the second position, said third fluid port is separated from the second fluid port.

IPC 8 full level

F04C 2/10 (2006.01); **F04C 2/08** (2006.01); **F04C 14/04** (2006.01); **F04C 14/12** (2006.01); **F04C 15/06** (2006.01)

CPC (source: CN EP US)

F04C 2/102 (2013.01 - CN EP US); **F04C 2/105** (2013.01 - CN EP US); **F04C 14/04** (2013.01 - CN EP US); **F04C 14/12** (2013.01 - CN EP US); **F04C 15/06** (2013.01 - CN EP US); **F04C 2/086** (2013.01 - CN EP US)

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

DOCDB simple family (publication)

EP 2851566 A2 20150325; **EP 2851566 A3 20150603**; **EP 2851566 B1 20180321**; CN 104514711 A 20150415; CN 104514711 B 20170412; DE 102013110400 A1 20150326; US 10119539 B2 20181106; US 2015086403 A1 20150326

DOCDB simple family (application)

EP 14182191 A 20140826; CN 201410483216 A 20140919; DE 102013110400 A 20130920; US 201414484682 A 20140912