

Title (en)

Multi-discharge hydraulic vane pump

Title (de)

Hydraulische Flügelpumpe mit mehrfachem Austritt

Title (fr)

Pompe hydraulique à palettes à écoulements multiples

Publication

EP 2604790 A2 20130619 (EN)

Application

EP 12250181 A 20121214

Priority

US 201113328060 A 20111216

Abstract (en)

Disclosed is a hydraulic vane pump that includes a pump body that defines an interior pumping chamber and an inlet port for allowing fluid to be provided to the interior pumping chamber and at least one discharge port for allowing pressurized fluid to be discharged from the interior pumping chamber. A cam ring that is disposed within the interior pumping chamber and defines a continuous peripheral cam surface; and a rotor is mounted for axial rotation within the interior pumping chamber. A plurality of vanes are mounted for radial movement within slots formed in the rotor. The pump also includes axially opposed first and second wear disks disposed within the interior pumping chamber. The first wear disk is a floating wear disk and has an outer periphery which is positioned radially inward of the cam surface and is adapted and configured to slide axially with respect to the cam surface, so as to provide for thermal expansion of the rotor and vanes. The second wear disk is positioned adjacent to a second end surface of the rotor.

IPC 8 full level

F01C 21/08 (2006.01); **F04C 2/344** (2006.01); **F04C 11/00** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP US)

F01C 21/0863 (2013.01 - EP US); **F04C 2/3446** (2013.01 - EP US); **F04C 11/001** (2013.01 - EP US); **F04C 15/0026** (2013.01 - EP US); **F04C 15/0096** (2013.01 - EP US); **F04C 2220/24** (2013.01 - EP US); **F04C 2240/801** (2013.01 - EP US)

Citation (applicant)

- US 4274817 A 19810623 - SAKAMAKI HIROSHI, et al
- US 5064362 A 19911112 - HANSEN LOWELL D [US]
- US 2010316507 A1 20101216 - PALUSZEWSKI PAUL J [US], et al

Cited by

CN106014965A

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 2604790 A2 20130619; JP 2013127249 A 20130627; US 2013156564 A1 20130620

DOCDB simple family (application)

EP 12250181 A 20121214; JP 2012273893 A 20121214; US 201113328060 A 20111216