

Title (en)
RADIAL PISTON PUMP

Title (de)
RADIALKOLBENPUMPE

Title (fr)
POMPE A PISTONS RADIAUX

Publication
EP 1144866 A2 20011017 (DE)

Application
EP 99922070 A 19990324

Priority
• DE 9900862 W 19990324
• DE 19829546 A 19980702

Abstract (en)
[origin: DE19829546A1] The invention relates to a radial piston pump, comprising a drive shaft which is mounted in a pump housing and configured eccentrically or in its direction of circumference has cam-like raised areas, and preferably several pistons which are positioned radially in relation to the drive shaft and are each housed in an element hole. When the drive shaft is rotated the pistons are displaced radially backwards and forwards in their element holes, a plate being held at the ends of the pistons facing the drive shaft. A first variation of the invention is characterized in that in the surface of the plate facing the pistons one or more recesses are provided for in which in the assembled state snap hooks engage which are embodied on a plate support attached to the corresponding piston. A second variation of the invention is characterized in that in the middle of the surface of the plate facing the piston a blind hole having a circumferential groove is configured in which a snap ring engages which is held in a groove in the piston. A third variation of the piston is characterized in that in the middle of the surface of the plate facing the piston a blind hole and two parallel holes are configured which run parallel to the blind hole in such a way that the center lines of the holes are tangential to the lateral area of the blind hole. The holes serve to house two pins which when inserted engage a groove embodied at the level of the piston.

IPC 1-7
F04B 1/04

IPC 8 full level
F02M 59/06 (2006.01); **F02M 59/10** (2006.01); **F04B 1/04** (2006.01); **F04B 1/047** (2006.01); **F04B 1/053** (2006.01); **F04B 9/04** (2006.01); **F04B 53/14** (2006.01)

CPC (source: EP US)
F02M 59/102 (2013.01 - EP US); **F04B 1/0426** (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 19829546 A1 20000113; EP 1144866 A2 20011017; EP 1144866 A3 20020227; JP 2002526704 A 20020820; US 6523524 B1 20030225; WO 0001948 A2 20000113; WO 0001948 A3 20011108

DOCDB simple family (application)
DE 19829546 A 19980702; DE 9900862 W 19990324; EP 99922070 A 19990324; JP 2000558313 A 19990324; US 72011701 A 20010227