

Title (en)

RADIAL PISTON PUMP FOR SUPPLYING FUEL AT HIGH PRESSURE TO AN INTERNAL COMBUSTION ENGINE

Title (de)

RADIALKOLBENPUMPE ZUR KRAFTSTOFF-HOCHDRUCKVERSORGUNG BEI EINER BRENNKRAFTMASCHINE

Title (fr)

POMPE À PISTON RADIAL POUR L'ALIMENTATION HAUTE PRESSION EN CARBURANT D'UN MOTEUR À COMBUSTION INTERNE

Publication

**EP 2007986 A1 20081231 (DE)**

Application

**EP 07727914 A 20070410**

Priority

- EP 2007053446 W 20070410
- DE 102006017036 A 20060411

Abstract (en)

[origin: WO2007116048A1] The invention relates to a radial piston pump (1) for supplying fuel at high-pressure to an internal combustion engine, comprising a displacement housing (3) equipped with a compression chamber (4), a reciprocating piston which is arranged in a cylinder chamber (5) of a cylinder (30), a suction valve (10) which is connected to a fuel supply line (8) and a pressure valve (12) which is connected to a fuel outlet line (14). Said suction valve (10) and the pressure valve (12) comprise, respectively, a closing head (16, 16'), a valve seat (18, 18'), a cylinder section (20, 20') and springs (22, 22'). The suction valve (10) and the pressure valve (12) are identical components and the pressure valve (12) is incorporated into the radial piston pump (1) in the direction of flow counter to the suction valve (10).

IPC 8 full level

**F04B 1/04** (2006.01); **F02M 59/06** (2006.01); **F02M 59/46** (2006.01)

CPC (source: EP US)

**F02M 59/06** (2013.01 - EP US); **F02M 59/462** (2013.01 - EP US); **F02M 59/464** (2013.01 - EP US); **F04B 1/0452** (2013.01 - EP US); **F04B 53/1032** (2013.01 - EP US)

Citation (search report)

See references of WO 2007116048A1

Citation (examination)

- DE 10136925 C1 20021212 - ORANGE GMBH [DE]
- US 3412931 A 19681126 - PALMER HARRY E
- DE 2403588 A1 19750731 - AMERICAN AERO IND

Cited by

KR101226051B1

Designated contracting state (EPC)

DE ES FR GB IT

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**DE 102006017036 A1 20071018**; EP 2007986 A1 20081231; JP 2009533593 A 20090917; JP 4976484 B2 20120718; US 2009272364 A1 20091105; US 7748966 B2 20100706; WO 2007116048 A1 20071018

DOCDB simple family (application)

**DE 102006017036 A 20060411**; EP 07727914 A 20070410; EP 2007053446 W 20070410; JP 2009504714 A 20070410; US 29577407 A 20070410