

Title (en)
ROTARY INTERNAL COMBUSTION ENGINE OR PUMP

Title (de)
DREHKOLBENVERBRENNUNGSMOTOR ODER -PUMPE

Title (fr)
MOTEUR À COMBUSTION INTERNE ROTATIF OU POMPE

Publication
EP 2198126 A1 20100623 (EN)

Application
EP 08806984 A 20080828

Priority
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• GB 0717617 A 20070910

Abstract (en)
[origin: WO2009034430A1] A rotary internal combustion engine comprises a chamber, a cam member (8), within said chamber, a rotor (3) surrounding said cam member and mounted for rotation with respect to said cam member about a fixed axis in the chamber, fuel and air inlet means (10) to the chamber, an ignition device (12) and exhaust outlet means (9) from the chamber angularly spaced about said axis, and a plurality of radially displaceable sealing members (5) angularly spaced with respect to said axis and each passing through said rotor radially, portions of the sealing members contacting the rotor and the chamber wall and to divide the chamber into compartments, inward portions of the sealing members contacting the rotor and the cam member forming interior compartments. The sealing members are divided into radially inner and radially outer portions and means (34) is provided urging said portions radially apart. Lubricating fluid is pumped from the interior compartments for cooling and/or filtering upon rotation of said rotor and said sealing members. The cross section of the chamber perpendicular to said axis is a continuous circular curve with two diametrically opposed arc shaped bulges each defining a space between the rotor and the chamber, and the shape of the cam member follows that of the chamber so that the radial distance between the cam surface of the cam member and the interior wall of the chamber is substantially constant, and such that the rotation of the rotor is accompanied by radial displacement of the sealing members through said rotor by the cam member to maintain contact between the sealing members and the chamber wall. A pump or compressor may be similarly constructed.

IPC 8 full level
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CPC (source: EP)
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Citation (search report)
See references of WO 2009034430A1

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