

Title (en)
ROTARY PISTON ENGINE

Title (de)
KREISKOLBENMOTOR

Title (fr)
MOTEUR À PISTONS ROTATIFS

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Application
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Abstract (en)
[origin: WO2009013110A1] The invention relates to a rotary piston engine (1), comprising engine shafts (2, 3) which are mounted in an engine housing (4) and which are rotatable about two rotational axes (14, 15) and which drive a drive shaft (13), wherein in each case one compressor piston (7a, 7b) and one working piston (8a, 8b) is mounted so as to be rotatable about each of the rotational axes (14, 15), wherein the compressor pistons (7a, 7b) and working pistons (8a, 8b) are substantially ring-shaped and wherein the compressor piston tracks (11a, 11b) and the working piston tracks (12a, 12b) are ring-shaped grooves. In order to obtain a high level of compression efficiency and engine efficiency, in each case one sealing edge (63) is provided on the piston heads (34), wherein the curvature of the piston heads (34) corresponds to the profile of a rolling curve which cuts the sealing edge (63) of a compressor/working piston (7a, 7b, 8a, 8b) in the track intersection region (62, 62') out of the cross section of the counterrotating compressor/working piston (7a, 7b, 8a, 8b), and wherein the sealing edge (63) of the one compressor/working piston continuously scrapes, as it passes the track intersection region (62, 62'), against the piston head (34) of the respectively opposite compressor/working piston.

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