

Title (en)
ROTARY PISTON ENGINE

Title (de)
ROTATIONSKOLBENMOTOR

Title (fr)
MOTEUR A PISTON ROTATIF

Publication
EP 1272738 B1 20040714 (DE)

Application
EP 01911339 A 20010111

Priority
• DE 0100083 W 20010111
• DE 10015388 A 20000328

Abstract (en)
[origin: WO0177498A1] The invention relates to a rotary piston engine with at least two rotary pistons configured as toothed wheels that are rotatably received in a housing at a right angle to the axis thereof, said housing sealing them laterally and across their periphery. In a specific point, these toothed wheels mesh in a gliding and tight manner. The novel engine system is further characterized by the following features: the at least two rotary pistons have different diameters; the teeth forming individual pistons are pitched by 45 DEG and have slightly helicoidal flanks; the spaces between the teeth form preparation, compression and working chambers and have internal contours that precisely correspond to the tooth shape; every tooth is associated with a throughbore provided in the rotary piston and forming a combustion chamber; in the housing walls exhaust openings and intake openings are provided each upstream and downstream of a point of meshing. The intake opening is disposed opposite the exhaust opening and is linked with an air or fuel supply. Both openings are successively flow-connected to the respective tooth space moving past.

IPC 1-7
F01C 3/02

IPC 8 full level
F01C 3/02 (2006.01)

CPC (source: EP US)
F01C 3/025 (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0177498 A1 20011018; AT E271184 T1 20040715; AU 4041801 A 20011023; DE 10015388 A1 20011018; DE 10015388 C2 20030522; DE 50102854 D1 20040819; EP 1272738 A1 20030108; EP 1272738 B1 20040714; JP 2003535249 A 20031125; JP 3831254 B2 20061011; US 2003111040 A1 20030619; US 6729295 B2 20040504

DOCDB simple family (application)
DE 0100083 W 20010111; AT 01911339 T 20010111; AU 4041801 A 20010111; DE 10015388 A 20000328; DE 50102854 T 20010111; EP 01911339 A 20010111; JP 2001574733 A 20010111; US 23988702 A 20021227