Title (en)
   PIVOTING PISTON ENGINE

Title (de)
   SCHWENKKOLBENSMASCHINE

Title (fr)
   MACHINE A PISTON OSCILLANT

Publication
   EP 1704302 A1 20060927 (DE)

Application
   EP 04804143 A 20041221

Priority
   • EP 2004014546 W 20041221
   • DE 10361566 A 20031223

Abstract (en)
   [origin: US2005135950A1] The invention relates to an oscillating piston machine, comprising a housing which has an essentially spherical housing inner wall, four pistons which rotate together about an axis of rotation which is approximately in the center of the housing being arranged in the housing in which case, of the four pistons in each case two pistons which are approximately diametrically opposite one another with respect to the center of the housing form a rigid piston pair the two piston pairs being capable of pivoting to and fro in opposite directions about a common pivot axis (42) which runs approximately perpendicularly with respect to the axis (40) of rotation, the two piston pairs being arranged in criss-cross fashion with respect to the pivot axis (42) in such a way that in each case two pistons of the two piston pairs have their piston working faces opposite one another in order to form a working chamber between them, each piston pair having a bearing section for mounting the piston pair on the pivot axis and in each case a side wall section for both pistons of the piston pair, for laterally delimiting one of the working chambers in each case. The bearing section and the side wall sections are constructed integrally with one another and are arranged on the same side of the respective piston pair.

IPC 8 full level
   F01C 9/00 (2006.01); **F01C 21/08** (2006.01)

CPC (source: EP US)
   F01C 9/005 (2013.01 - EP US); **F01C 21/0809** (2013.01 - EP US); **F01C 21/0836** (2013.01 - EP US)

Citation (search report)
   See references of WO 2005064119A1

Designated contracting state (EPC)
   AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
   US 2005135950 A1 20050623; **US 7435064 B2 20081014**; CN 1329628 C 20070801; CN 1637233 A 20050713; DE 10361566 A1 20050728; DE 10361566 B4 20060907; EP 1704302 A1 20060927; JP 2007515593 A 20070614; JP 5004589 B2 20120822; TW 200523456 A 20050716; TW I252274 B 20060401; WO 2005064119 A1 20050714

DOCDB simple family (application)
   US 82599704 A 20040415; CN 200410003689 A 20040206; DE 10361566 A 20031223; EP 04804143 A 20041221; EP 2004014546 W 20041221; JP 2006546042 A 20041221; TW 93133251 A 20041101