

Title (en)

HYDROSTATIC PISTON ENGINE BASED ON THE FLOATING CUP PRINCIPLE

Title (de)

HYDROSTATISCHE KOLBENMASCHINE NACH DEM FLOATING-CUP-KONZEPT

Title (fr)

MACHINE HYDROSTATIQUE A PISTONS FONCTIONNANT SELON LE PRINCIPE DES COUPELLES FLOTTANTES

Publication

EP 1883743 A1 20080206 (DE)

Application

EP 06753713 A 20060518

Priority

- EP 2006004729 W 20060518
- DE 102005023423 A 20050520
- DE 102005037618 A 20050809

Abstract (en)

[origin: WO2006122808A1] The invention relates to a hydrostatic piston engine (1) which is based on the floating cup principle and comprises a first swash plate (16) and as well as a second swash plate (17). A first cylinder drum unit (11, 14) rests against the first swash plate while a second cylinder drum unit (12, 15) leans on the second swash plate (17). A first group of pistons (10) and a second group of pistons (12) are connected in a fixed manner to a drive shaft (5) of the hydrostatic piston engine (1). The first group of pistons (10) engages into the cylinder cavities of the first cylinder drum unit (11, 14) while the pistons (12) of the second group engage into cylinder cavities of the second cylinder drum unit (12, 15). The first and second cylinder chambers embodied by the pistons (10; 12) and the cylinder drum units (11, 14; 12, 15) can be connected to a first hydraulic circuit and a second hydraulic circuit, respectively. The axis of rotation of the first cylinder drum units (11, 14) and/or the axis of rotation of the second cylinder drum unit (12, 15) can be adjusted independently of the axis of rotation of the other cylinder drum unit.

IPC 8 full level

F01B 3/10 (2006.01)

CPC (source: EP KR US)

F01B 3/00 (2013.01 - KR); **F01B 3/10** (2013.01 - KR); **F04B 1/2078** (2013.01 - EP US); **F04B 1/22** (2013.01 - EP US)

Citation (search report)

See references of WO 2006122808A1

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 LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102005037618 A1 20061123; EP 1883743 A1 20080206; JP 2008540924 A 20081120; KR 20080009056 A 20080124; US 2009031892 A1 20090205; WO 2006122808 A1 20061123

DOCDB simple family (application)

DE 102005037618 A 20050809; EP 06753713 A 20060518; EP 2006004729 W 20060518; JP 2008511641 A 20060518; KR 20077020632 A 20070910; US 92065906 A 20060518