Title (en)

SEALING SYSTEM FOR AN INTERNAL COMBUSTION ENGINE WITH A DIVIDED CAST IRON CRANKCASE

Title (de)

DICHTUNGSSYSTEM FÜR EINE BRENNKRAFTMASCHINE MIT GETEILTEM GUSSGEHÄUSE

Title (fr)

SYSTEME D'ETANCHEITE POUR UN MOTEUR A COMBUSTION INTERNE A CARTER EN FONTE EN DEUX PARTIES

Publication

EP 1763646 A1 20070321 (DE)

Application

EP 05763421 A 20050707

Priority

• EP 2005007362 W 20050707
• DE 102004032904 A 20040707

Abstract (en)

[origin: WO2006003019A1] The invention relates to a sealing system for sealing a cylinder head (2) against a cylinder sleeve (1) of a single- or multi-cylinder internal combustion engine, notably a four-stroke diesel engine, with a divided cast iron crankcase consisting of two half-shells (3) connected to each other by screws, and wherein the joint plane runs in the direction of the crankshaft and the cylinder axis. The half-shells (3) comprise recesses for housing separate cylinder sleeves (1) and separate cylinder heads (2) are provided for each cylinder. The inventive sealing system comprises an annular sealing element. An annular groove (7), being open towards the combustion chamber, is provided in the cylinder head (2) and arranged in such a way that at least part of the prolongation of the cylinder sleeve (1) configured as sealing unit (5) is housed thereby forming a press fit. The annular sealing element is configured as a separate annular seal (4) which is supported on a sealing surface of the cylinder head (2) and radially supported on a sealing surface of the half-shells (3). Said annular seal thereby seals an annular gap (16) between the radially outer peripheral surface of the cylinder head (2) and the recesses of the half-shells.

IPC 8 full level

F16J 10/00 (2006.01); **F02F 11/00** (2006.01)

CPC (source: EP)

F16J 15/062 (2013.01)

Citation (search report)

See references of WO 2006003019A1

Designated contracting state (EPC)

DE GB IT

DOCDB simple family (publication)

DE 102004032904 A1 20060209; **DE 102004032904 B4 20060614**; CN 1985111 A 20070620; EP 1763646 A1 20070321; WO 2006003019 A1 20060112

DOCDB simple family (application)

DE 102004032904 A 20040707; CN 200580022322 A 20050707; EP 05763421 A 20050707; EP 2005007362 W 20050707