Title (en)

MULTIPART PISTON FOR AN INTERNAL-COMBUSTION ENGINE

Publication

EP 0166109 B1 19890426 (DE)

Application

EP 85105072 A 19850426

Priority

DE 3423559 A 19840627

Abstract (en)

[origin: US4603617A] A multi-part plunger piston for internal combustion engines, comprises a piston upper part and lower part which engage one on the other through coinciding annular abutment surfaces. The parts are connected with one another by screws which pass through the annular surfaces. At least one of the annular abutment surfaces is domed in the circumferential direction in such a way that the annular surfaces are more strongly resiliently braced in the region between the screws in the finally assembled piston than in the regions around the screws. Due to the elastic initial stressing of the regions of the annular abutment surfaces between the screws it is intended reliably to avoid lifting away of the annular abutment surfaces in these regions during engine operation. When the finally assembled piston is in the cold condition the annular surfaces lie uniformly against one another over the entire circumference, admittedly with locally differing initial stresses.

IPC 1-7

F02F 3/00

IPC 8 full level

F02F 3/00 (2006.01)

CPC (source: EP US) F02F 3/0023 (2013.01 - EP US)

Citation (examination) DE 1269414 B 19680530 - MAHLE KG

Designated contracting state (EPC) FR GB IT

DOCDB simple family (publication)

DE 3423559 C1 19850926; EP 0166109 A2 19860102; EP 0166109 A3 19861230; EP 0166109 B1 19890426; JP H0660595 B2 19940810; JP S6116251 A 19860124; US 4603617 A 19860805

DOCDB simple family (application)

DE 3423559 A 19840627; EP 85105072 A 19850426; JP 13923085 A 19850627; US 74606885 A 19850618