

Title (en)
LIGHT-METAL TRUNK PISTON FOR INTERNAL COMBUSTION ENGINES

Publication
EP 0356457 B1 19910227 (DE)

Application
EP 88903796 A 19880415

Priority
DE 3713242 A 19870418

Abstract (en)
[origin: WO8808078A1] The external profile of a piston rod employed in the engines of passenger cars ensures smoother piston travel on start-up and during partial loading. In these operating ranges, piston ring parts may impact on the sliding surface of the cylinder on the counter-pressure side and give rise, amongst others things, to undesirable noise. To obviate such impacts, the piston rod tapers at the end facing the crankshaft space on the counter-pressure side, and has a transversal slit (3) at its junction with the piston head and an adjustment strip (4) in the vicinity of the said slit. An additional adjustable strip (5) may also be provided in the lower part of the rod, on the pressure side. As a result of the position of the adjustment strips, the special design of the piston and the special shape of the rod casing, the piston head aligns itself at a slight angle to the counter-pressure side, with increasing play between the piston head and the sliding surface of the cylinder, in the said operating ranges. When the engine is running at full load, the piston head realigns itself in the direction of its axis.

IPC 1-7
F02F 3/02; **F02F 3/04**

IPC 8 full level
F02F 3/02 (2006.01); **F02F 3/04** (2006.01); **F16J 1/01** (2006.01); **F16J 1/04** (2006.01)

CPC (source: EP US)
F02F 3/022 (2013.01 - EP US); **F02F 3/042** (2013.01 - EP US); **F05C 2201/021** (2013.01 - EP US); **F05C 2201/0448** (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 3713242 C1 19881020; BR 8807471 A 19900522; DE 3861855 D1 19910404; EP 0356457 A1 19900307; EP 0356457 B1 19910227; JP 2690340 B2 19971210; JP H02503104 A 19900927; US 5000078 A 19910319; WO 8808078 A1 19881020

DOCDB simple family (application)
DE 3713242 A 19870418; BR 8807471 A 19880415; DE 3861855 T 19880415; EP 8800321 W 19880415; EP 88903796 A 19880415; JP 50365988 A 19880415; US 42424389 A 19891002